A pattern we can see on the map showing poor water access is a high concentration in Northern Africa. Less than 50% of people living in Northern Africa, especially around the Sahara have access to safe drinking water. Poor access to safe water is also concentrated around the Central Africa ... (1)

A characteristic of many of the countries in this concentration are the low rainfalls so this pattern is clearly influenced by climate. For example Morocco which is located in a hot dry climate has a high concentration of poor water availability... The northern African countries bordering on the Sahara desert experience semi-arid desert conditions leading to extreme water shortages... people in these areas rely heavily on wells, but due to droughts and pressure on these resources the deeper the well the poorer the quality of water (2)...

These semi desert areas often only receive 250-500mm of rain annually and without infrastructure to supply and store water these two issues (low rainfall/no infrastructure) clearly contribute to the concentration pattern in Northern Africa.

On the map there are also a dispersed pattern for countries with access to safe water including countries such as Japan, Australia and N.Z (3)...

The level of poverty or wealth in a region contributes to the concentrated pattern of areas with or with our access to safe water... (4) Poverty stricken countries in Africa have low levels of safe water and are more likely to get water borne disease. These diseases can impact on life expectancy and child mortality...In some African countries most people source their water from wells or ponds...

Poorer nations that cannot afford to develop the necessary infrastructure often experience poor health among the people and food shortages as crops cannot be grown reliably due to unreliable supplies of water...(5)

In periods of drought crops die and people rely on aid. This is common in some countries in the North African concentration like Sudan. This leads to the country as a whole having less money and unable to provide safe water through safe storage and distribution pipes (6).

The level of development of a country could be based on whether its population have access to safe water e.g. Chad where only 4% of the households are connected to piped water...