

Name _____

Countries Are Building Economic Empires by Controlling the Worlds Water Supply

What factor do you think contributes the most to the rise and fall of civilizations? Is it war? The economy? Maybe its disease?

Well, those are all wrong.

The largest contributing factor that has determined which countries are superpowers, and which countries fade into darkness, is the access to Water.

And this is something that most people may not think about, as nowadays...you simply turn on a tap, and water comes out. But how it gets to your tap in the first place, is one of the best indicators in determining the success of a country. And in fact, we might be seeing the creation of some water empires, right before our very eyes.

Why are cities located where they are? Some factors that determined where people settled in the past were things like access to trade routes, nearby valuable resources, and the fertility of the land.

But by far the biggest factor was the proximity of the city to a freshwater source. That is why today roughly 90% of the world's population lives within 10 kilometres of a freshwater source. Even if many of those water sources are running dry. But we will get to that in a second.

Right now the 18 largest cities in Europe are located on or near a major water source.

And this same pattern has been shown throughout most of history.

For example, Uruk was a city located in present day Iraq. In 3500 BC, it was the largest city in the world with 40 000 inhabitants. And for thousands of years, it was an economic and cultural powerhouse of the world. That was until its key water source, the Euphrates River, began to shift. Around 100 AD the river began to flow away from Uruk, and by 700AD, the river had moved so far away... that the once massive city... was completely abandoned. Ironically, the remains of the city, are now located right next to the new Euphrates river, which supplies many cities in modern day Iraq with freshwater.

And a similar story can be told for the once great Mayan empire. From the year 200AD to 900AD. The Mayans had built up a sprawling civilization that had 40 cities, and reached a population of about 2 million people. But then, the Yucatan peninsula, which is where the Mayans were located, went through a series of droughts. Many historians believe that these droughts were the largest reason why the Mayan empire collapsed, and left behind ancient cities, temples, and wonders.

And lastly, it is theorized that a lack of water supply contributed to the downfall of other civilizations. Like the Khmer Empire in the 1400's... the Ancient Egyptians around 30 BCE... Parts of Europe in the 1500's... and the megadrought that occurred nearly 100 000 years ago which forced humans to migrate out of Africa, and settle in Europe and Asia.

What I am trying to say is that a lack of freshwater supply tends to be correlated with the rise and fall of civilizations.

But then a strange thing happened. Once the technology of human civilization advanced, we began creating new ways to access fresh water. The most important one today is ground water. You see, when you look at the earth, roughly 97% of the water is salt water which is undrinkable for humans. Roughly 2% of the earth's water is frozen in ice. And only 1% of the water on earth is freshwater that humans find useful. But even that is a misleading number. Because only 30% of the freshwater on earth is located on the surface with things like lakes and rivers. 70% of the freshwater on earth is actually located underground, which is called ground water.

But humans for millennia did not have the technology to extract large quantities of water from the ground. Even though small wells were used to extract groundwater, back in 8000 BC, the population was still largely reliant upon being close to a river or lake.

But that was then, and this is now. In the world today, there are 34 countries and territories, without any rivers. The most notable on this list is Saudi Arabia.

In fact, if you were to look at Saudia Arabia using satellite imagery, you will see that there are no major sources of freshwater at all, as most of the country seems to be covered in mountains, dunes, and deserts. And the same can be said for other countries like Yemen, Libya, The United Arab Emirates, and Qatar.

You are going to look at your area where you stay and give a description of how you would go to build a water city, town in your area by just monitoring the water that is available in that area.

You need to include the following in your discussion.

- 1. Area photo's**
- 2. Ground observation for water**
- 3. Detailed sketch of your findings on how you would manipulate the water for a town, city**
- 4. Your findings must staff your opinion.**