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Malta: Natural Freshwater Resources

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1. Background

The Maltese are an indigenous group to Malta, which is a small country in Europe home to roughly "419,000 people" (Malta Population). It is considered a high income country, who has a Democratic Republic government with a unicameral House of Representatives. Maltesians also practice Roman Catholicism. Some challenges that Malta faces is poor air quality, decreased protection of habitats and species, and the main challenge that will be focused on, limited natural freshwater resources. Malta is a popular tourist attraction. With the country being so heavily populated, that would imply a large use of transportation. The use of cars, busses, etc. pollutes the air, decreasing the air quality. Due to poor air quality, Malta's ecosystem in being affected as well.

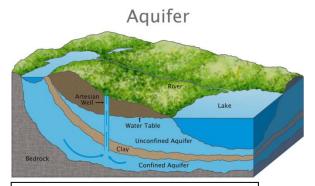
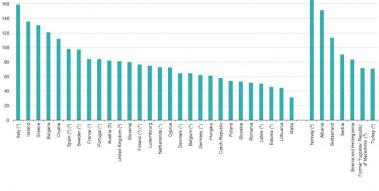


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2. Limited Natural Freshwater Resources

A vital issue Malta has been facing for over a decade is limited natural freshwater resources. Currently, Malta uses aquifers to obtain freshwater. The aquifers used to provide sufficient amounts of freshwater, but within the last few decades,

"aquifers are under pressure from overabstraction" (Malta: Confronting Water). For those of you who are unsure, an aquifer is "any geological formation containing or conducting ground water, especially one that supplies the water for wells, springs, etc" (Dictionary.com). Because of this issue, all of Malta is affected, as well as neighboring countries where Malta is trying to retrieve freshwater from. Due to over-abstraction, it leads to the risk of, "destroying Malta's capacity to store freshwater. Overabstraction is slowly reducing the volume of freshwater in the lenses" (2). In other words, the volume of freshwater that is being obtained is shrinking, resulting in less freshwater. In Figure 2, the graph represents the total water abstraction for public water supply in multiple countries in 2015. As you can see, Malta obtains the least amount of water compared to countries such as Italy or Norway.



(*) 2012 (*) 2014 (*) Estimate (*) 2013 (*) 2010

3. Attempted Interventions

Malta has made countless attempts to establish some type of intervention. In these attempts, it is important to note that "approaches to water management planning need to be flexible and able to adapt or respond to uncertain future challenges" (2). So far, this has not been the case. What seems like a simple approach has actually proved to be one of the biggest challenges Malta faces in its attempt for intervention. In Malta: Water Resources Review it explains, "Misconceptions have had a major impact on decision-making and behavior at all levels. In the main, they have led to a mistaken belief that Malta's groundwater resources are unlimited" (3). Due to this misconception, the government in unable to recognize the need for flexibility and the ability to respond to future challenges. If the government does not understand the basic facts of the situation, it is definite that Malta will not overcome having limited freshwater resources.

4. Possible Solutions

As mentioned in the previous paragraph, the Maltese government not being knowledgeable about basic facts of the issue is hindering Malta's intervention attempts. An effort to make progress might include having environmental specialists become knowledgeable about Malta's issue. The specialists must know how freshwater is becoming limited, how similar issues are managed in other thriving countries, etc. Once those specialists understand the issue at hand, have them discuss the situation at length with the government. If this is successful, the government is more knowledgeable about the issue, have no misconceptions, and can attempt some kind of intervention that allows for flexibility and adaptation.

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