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Cayman Islands, Factor 2: Water Scarcity

Cayman Islands: What needs to be done

“We never know the worth of water, till the well is dry.” This quote by Thomas Fuller is a reality of what the Cayman Islands are soon to face. The Cayman Islands are a United Kingdom territory under the monarchy of Queen Elizabeth II. The Queen appoints a governor of the nation who today is Helen Kilpatrick. The Cayman Islands seem stable and secure right now but this could change quickly if not dealt with soon and orderly. The water scarcity in the Cayman Islands is not only affecting the citizens of today, but the future generations soon to come.

The Cayman Islands population is growing substantially, more than 20,000 new citizens in the past 10 years alone. The Cayman Islands consists of three small islands, Cayman Brac, Grand Cayman, and Little Cayman. Grand Cayman is the largest of the three with approximately 55,000 inhabitants. Cayman Brac is the second largest island holding 1,200 of the Caymans inhabitants, and the smallest of the three being Little Cayman with only about 120 inhabitants. The Cayman Islands are very diverse with the population being 40% mixed, 20% black, 20% white, and 20% other. The Cayman Islands cannot supply nearly enough water for the citizens it has now, and will not be able to sustain the needs of the growing population if precautions are not taken to stop this significant problem.

The Cayman Island is heavily reliant on Tourism and Financial services, as it makes up about 80% of their entire economy. The Cayman Island’s agricultural industry makes up approximately 1.4% of the economy. The percentage of the agriculture production is not nearly enough to sustain the population of about 57,000 residents.

The Cayman Islands is a huge financial centre of the world. The Cayman Islands is the fifth largest financial centre in the world. It holds 40 of the 50 largest banks in the world and has about 1.5 trillion dollars in banking liabilities. Caymanians also don’t have to pay taxes; this landed them the number two most significant tax haven on the globe.

The average household can range from single parent families, single persons, to extended family units. The average diet of the Caymanian individual is mainly seafood given its location. A problem the Cayman Islands do not have to deal with would be the education sector; every Caymanian child is required to attend at least 13 years of schooling.

Health care is mandatory as well in the Cayman Islands; health facilities include a state of the art hospital, a government healthcare complex, and a medical clinic. The Cayman Islands have the highest standard of living in the Caribbean with the average income of 47,000 KYD, a wonderful school system, and a great healthcare program but they don’t realize the significance of the water scarcity. The Caymanians will face the devastating outcomes that will occur if the necessary precautions are not taken to improve this issue.

Water scarcity is not just a problem to the citizens of the Cayman Islands, but also a major problem for agricultural practices on the Cayman Islands. The water scarcity of the Cayman Islands decreases the amount of food that can be produced on the island which is a problem within a problem. Water scarcity means that the Cayman Islands cannot produce enough food to feed all its inhabitants or supply them enough water for businesses, and personal use.

The economy is based mainly around Tourism and financial services, and the businesses that provide the financial services and the businesses that provide the tourism attractions all require water to function. Water scarcity could mean not enough water to provide for these businesses, thus the businesses would not be able to function due to their lack of water. A domino effect then occurs. Businesses start shutting down, and then more follow their lead. And just like that, 80% of the Cayman Islands economy is gone. The new standard of living will decrease as well as the amount of GDP the Cayman Islands receive. The Cayman Islands is now possibly facing poverty, as well as the possible loss of the health care and education systems. The Cayman Islands is now in chaos due to the water scarcity which was not properly dealt with in the previous years.

The amount of freshwater in the Cayman Islands is approximately 1%. The total land area of the Cayman Islands is approximately 102 square miles. The Cayman Islands only containing 1% of freshwater isn't enough to sustain its approximately 57,000 inhabitants. The water scarcity is a major problem the Cayman Islands have to deal with, if they don't want the severity of this situation getting any worse. The Cayman Islands need to understand the severity of this problem and what horrific outcomes could take place, if they don't resolve this issue now.

The amount of arable land in the Cayman Islands is approximately 11.3%, and this arable land is not being degraded. The amount of arable land that is actually being used for agricultural purposes is only 3.85% of the whole 11.3%. The Caymanians aren't maximizing the full potential of the arable land but is difficult due to the water scarcity across the islands.

The women of the Cayman Islands are not at any disadvantage in the state they're in now, which are equal to the men is living in the Cayman Islands. Women mainly take care of the household while the men work. The same cannot be said for other women in other developing countries. Women can be denied the right to own property, and have lack of legal protection. A horrifying example of women being disadvantaged in other developing countries is Nepal. Nepal has a major problem of exploitation of underage girls, 7% of girls are married by age ten and 40% by age fifteen. Most women in developing countries are at a disadvantage, the Cayman Islands are fortunate enough to not have to deal with these types of issues.

The present status of water scarcity is improving slightly however, thanks to a process called desalination. Desalination is the process of removing the salt and other minerals from salt water. This process makes the salt water purified enough for human consumption and irrigation purposes. The process of desalination can significantly help the water scarcity issue they are facing. Desalination is a very costly process, but should not be a problem for the Cayman Islands. The cost should not be a problem because

the Cayman Islands are the wealthiest country throughout the Caribbean, due to the amount of tourism throughout the Islands.

The trends on water scarcity are measured through the FAO (Food and Agriculture Administration), using maps representing the amount of water scarcity of each region, tables that show the amount of water availability across the globe, and using maps that show the vulnerabilities of water scarcity across the globe. Though desalination is helping to improve the problem, it is not helping due to the huge population growth of world. Current predictions are that the population of the earth will increase by 1.7 billion people, making it difficult to say that water scarcity is improving. The population increasing as much as it is only makes the water scarcity issue more severe, and the advances made in water scarcity can amount to nothing compared to the rising population of the world.

The Cayman Islands are improving the trends on their water scarcity issue, but I don't believe that enough desalination or conservation is occurring to meet the demanding needs of the increasing population. The improving of available freshwater is allowing more water to be put towards irrigation of the crops and, meeting the needs of the livestock.

Improving the problem of water scarcity in the Cayman Islands would provide water security for the citizens of the Cayman Islands and the future generations to come. The new access to more amounts of freshwater will increase the amount of agricultural productivity within the Cayman Islands. More agricultural production means more food being produced in the Cayman Islands which will in turn help reduce the amount of imports the Cayman Islands acquire every year. The amount of food increasing will also increase the options you can choose from to purchase, which means that the quality of the food being produced will also increase. The new abundant amount of freshwater will also be used to ensure that the tourism businesses and financial service buildings will remain in service, protecting such a large part of the Cayman Islands economy.

The arable land will not have the risk of ever losing its crops because the new amount of water will sustain the demand of water for the crops. The economy will be able to increase in the field of agriculture. The land not being used will now have enough water to sustain new crops being planted in those areas. The local farmers of the Cayman Islands will have less pressure on their products, compared to the recent years.

Other major problems the Cayman Islands are facing today include growing population and the lack of agricultural farms. The increasing population could mean that in future years some families may not eat every day. The population increase isn't something we can control, but it is something we can adapt to. The wellbeing of families in the Cayman Islands could be at risk if this problem is not dealt with now. The Cayman Islands imports about 90% of all the food they consume. The country could go bankrupt in the blink of an eye with water scarcity in play which could mean that many families could starve. The wellbeing of communities needs to be maintained by preventing all of these problems from getting any worse than what they already are.

Based on the research I have done, I can tell that the Cayman Islands are not exceeding their full potential. The Cayman Islands are only using 3.5% of the available, arable land. The Cayman Islands are

not producing enough food to sustain 25% of what the Cayman Islands consume. Every last bit of the arable land should be used in the production of crops or raising livestock. The full potential of the arable land being used will allow the Cayman Islands to reduce the amount of imports they need on food, which is 90% I remind you, cutting down on the amount of imports will only further the financial security across the Cayman Islands. The Cayman Islands using all of the arable land will create jobs for new farmers to move in, and food production to be significantly increased. The increasing of desalination is also vital to the Cayman Islands maintaining its stability. The increase in desalination will increase the amount of freshwater that is available in the Cayman Islands. This water can be used for businesses, consumption or farm use. The Cayman Islands need to conserve this water they are now obtaining.

Promotion should be put in local television ads, newspapers, and other media that is available, stressing that water conservation cannot be taken lightly considering the situation the Cayman Islands are currently in. The Cayman Islands used to rely on rainfall as a big part of their water source, using buckets to catch the rainfall. I recommend that this still be a process the Cayman Islands use in obtaining water. The way I see the water scarcity issue is that all the water that is available in the Cayman Islands should be used and conserved. The rainfall will only add on to the amount of water the Cayman Islands will possess, which is the way to improve and resolve the water scarcity problem. These methods will not only improve the water scarcity issue but will improve the food security to Caymanian families in the small communities within the islands.

To solve this situation by 2015 I recommend the use of rainwater systems to help obtain amounts of water during the wet season. I suggest investing in rain sensors, the rain sensors detect when rainfall in the Cayman Islands. I also recommend investing in more desalination systems. The increase in systems will allow much more water to be converted into freshwater. The investments that I recommend will help achieve the eradication of water scarcity in the Cayman Islands by 2015.

A local project that can significantly help can be water conservation in every home. Turning the water off while brushing your teeth, reducing the amount of times you wash your car every week, and scaling back on the length of your showers. These simple tasks can go a long ways to helping eliminate the water scarcity problem. Scaling up the amount of homes that participate in the water conservation will significantly increase the amount of freshwater that is being saved.

The communities of the Cayman Islands play a huge role in the success of eliminating water scarcity. The communities are the only ones that can increase the amount of conservation by reducing the amount of water they use daily. The World Bank should provide a grant for aid in scaling up the amount of desalination systems being installed throughout the Cayman Islands. The World Food Bank is an organization that realizes the severity of water and food scarcity and strives to fix these problems in countries that are in need of help through multiple projects across the globe. This grant would help in implementing my recommendation of desalination being scaled up successfully.

The rural farmer will be involved as a key player by using the rain sensors I have recommended, the rain sensors will shut off the irrigation systems used by the farmers, conserving large amounts of water. Urban families can simply reduce the amount of water they are using on a daily basis. The amount of water

conserved by these methods will be a huge leap to eradicating the water scarcity issue the Cayman Islands face.

The government in the Cayman Islands does realize the issue at hand. The government created an initiative to build more pipes to transport more water to Cayman Brac. This initiative was run by the water authority and was named the East End and North Side piped water initiative. The government has also stressed water conservation to the public. They suggest sweeping off driveways rather than hosing them down along with a lot of other good ideas, which are headed in the right direction towards water security.

I do recommend that the government starts to take bigger steps, just because these little suggestions are helping doesn't mean it is solving the problem completely. Bigger steps will ultimately lead to water security throughout the Cayman Islands. The "Bigger" steps I'm referring too are things such as campaigns, television ads, and articles that will be read all over the Cayman Islands. Notable people in the Cayman Islands are Jason Gilbert, McKeeva Bush, and Tigerlily Hill, having a celebrity from the Cayman Islands do an ad or campaign on water scarcity and how severe of an issue it is, may help Caymanians open their eyes to the big issue. Public figures have big impacts on society and having an ad or campaign would impact the way that all Caymanians think and how they see the issue.

Making sure that the Caymanians know truly how big of a problem water scarcity is in their own country will lead to a larger impact among the citizens. Putting a little fear of how disastrous the outcomes could be from the water scarcity, will make the Caymanians take this a lot more seriously than they are today.

In 2007 there was a national bill of conservation that was put into effect. The Bill is an awakening to the Cayman Islands it puts limitations and fees on abuse of some natural resources. Having this bill put into place is a huge advancement to water security throughout the Cayman Islands.

The Cayman Islands will be able to have water sustainability, taking the necessary precautions. The communities of the Cayman Islands as well as the rural farmers doing their part in the effort to increase conservation of water will play a major role towards water scarcity being eliminated. The water scarcity issue can be resolved with the recommendations I have suggested.

The suggestions are necessary for the water security in the Cayman Islands. The severity of the situation could easily get out of hand. As I said before, the water scarcity could affect the banking businesses and tourism businesses, putting their economy at risk. The risk could lead to an economic depression putting the Cayman Islands into chaos. Preventing this is essential for the Cayman Islands to sustain their current and future well-being. Being the wealthiest country in all of the Caribbean to poverty stricken is a big possibility for the Cayman Islands if they don't face this problem head on and strive to fix the problem of water scarcity.

Water Scarcity as I have said is not an issue that needs to be taken lightly. I honestly believe that if the Cayman Islands take some of the suggestions that I have given it will provide them with a safe and secure future in multiple aspects. Water Security being the largest, but allowing my suggestions of eradicating water scarcity in the Cayman Islands will help ensure that the financial and tourism centers function and

increasing the amount of agricultural production decreasing the amount of imports throughout the Cayman Islands, this will help decrease the amount of money being spent every year. This will make the Cayman Islands wealthier than it already is and stabilize the economy status the Cayman Islands already hold.

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