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HORT 315
Assignment 8

The Importance of Water

The world relies on water for many important processes, especially in the agricultural aspect. Humans also rely on the consumption of water for survival. With more people becoming environmentally conscious, water conservation is something of high global importance. Many people believe that "water is the next oil". Oil is an un renewable, precious resource, much like fresh water could be in the years to come. The most important factors which affect the horticulture division of agriculture (more specifically floral design) include, but are not limited to, the long term availability of water, and the quality of water. Furthermore, the effects that these factors bring to the floral design industry are just as important.

Similar to climate change, the availability of water is something of utmost importance to keep crops consistent and healthy. According to the article, "Charting our Water Future", 25% of river runoff and ground water is available for consumption. 40% of that is used just for humans. The rest is divided up, much of it put into the agriculture industry. Water availability stems from the concept of water security, that there is a constant reliable source of water for a lifetime (McKinsey). Access to fresh water has been determined to be limited as the years pass. The McKinsey article states that, by 2030, water will be a scarce global resource that will have to be strictly conserved. McKinsey & Company shares their plan for strict water conservation, including bridging the gap between water supply and demand.

Additionally, climate change contributes greatly to the long term availability of water. Above average temperatures lead to below average rainfall, especially in the most fertile lands of the United States (the "Breadbasket") (Shideler). These exceptional drought areas make it difficult to produce crops. Because of a shortage of crop production, the prices of these products rise drastically. As stated, climate change may be the underlying issue, but it affects so many areas of crop production at every level from the supplier down to the consumer.

Climate change plays a huge factor in not only the availability of water but in the quality of water as well. The temperature changes, precipitation decreases, and this is likely to causes poor quality water. Droughts are more intense and rainfall can reach extreme levels in northeast regions. This leads to the erosion and sedimentation, leaving dirt particles in fresh, available water. To add to that, storms become more intense which mean flooding, and the loss of fresh water in reservoirs and dams. It can damage wetlands, and flood water treatment plants (Hall).

As the sea level rises, quality of water tends to decrease as well. The biggest factor of higher sea levels is the tainting of salt water in drinking water supplies. It causes water treatment plants to overflow, much like extreme precipitation conditions. If water cannot be treated, it cannot be used for human and plant consumption. Salt water is not something that plants should be watered with.

The availability and quality of water are two topics of high importance in any aspect of agriculture. The floral design industry very obviously needs crops to thrive. If water becomes too scarce for human consumption, ornamental plants will be the first to face water restrictions. An important point to think about is that if climate change leads to droughts and droughts lead to decreased crop yield, decreased crop yield leads to more expensive products. This means that florists will see a rise in the cost of their products which will cause an increase in the amount that they charge their consumers. The demand for ornamental crops will more than likely decrease in a society where water is scarce and restrictions for water usage are high. The future for the floral design industry with restricted amounts of water could be a bleak one.

Similar happenings could be seen in the food production industry as well. Without the utilization of certain practices, growing crops will become so scarce that not many will be able to survive. Interestingly enough, all the topics discussed in this course thus far have created a chain of interrelatedness that can be applied to every aspect of the horticulture industry. First, we discussed the technologies utilized in horticulture, then sustainability, climate change, and last, the importance of water. Without the proper use of technology, a business cannot be sustainable, and without sustainability, a business cannot combat against the dark future of climate change, and, most importantly, climate change goes hand in hand with the availability and quality of the water used to grow the crops which make the horticulture industry what it is.

To say that water is the next oil is probably a bit of an exaggeration. Water is a renewable source, unlike oil. However, the demand of water could potentially overpower the supply of it, and that is where it is similar to oil. Much like oil, people may try to find substitutes for water when they begin to fear that the supply will diminish. According to research, this could happen as early as 2030. Long term availability and the quality of water contribute greatly to the success of any business, especially one in the horticulture industry.

Works Cited

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