Climate Change is impacting all aspects of our lives. Even if majority indicators of changes in our life due to climate change might have been subtle so far, the impacts are going to be more pronounced in the upcoming decades in the form of a possible food crisis, if not tackled effectively. The term climate change is a broad blanket of various indicators and it is necessary to examine these specific indicators and their impacts on a global scale that is beyond just the surface level. Examining these indicators through various ML models would provide insight into the interplay for example, between factors such as change in temperature, crop yield and harmful gas emissions. Analyzing past data could help with determining certain trends which can then be used to come up with key steps to tackle the problem at hand. It is imperative for us to determine not just the factors but the extent to which these factors have impacted crop production over the years. Using ML models this project hopes to break down the problem to examine the underlying intricacies of crop yield change and make inferences with regards to the steps that could be taken in the direction towards tackling it.