

CLIMATE CHANGE AND CROP PRODUCTION

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Abstract : Changes in climate can be expected to have significant impacts on crop yields through changes in green house gases (CO₂, methane, nitrous oxide, chlorofluorocarbons etc.), temperature and water availability. Scientific evidence about the seriousness of the climate threat to agriculture is now unambiguous, but the exact magnitude is uncertain because of complex interactions and feedback processes in the ecosystem and the economy. The increasing CO₂ concentration is posing a serious threat as it leads an increase in the average global temperature but the same has been positively correlated with increased biomass and yield particularly in C₃ plants. The purpose of mitigation is therefore to attempt a gradual reversal of the effects by the climate change and sustainable development. There are several mitigation and adaptation practices that can be effectively put to use to overcome the effects of climate change with desirable results.

Keywords: Bio-diversity, Climate change, Crop production, Greenhouse effect, Mitigation

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