

reducing in the global warming potential. Crop diversification can be done by growing non-paddy crops in rain fed uplands to perform better under prolonged soil moisture stress in Kharif.

12. Develop a long land use plan for ensuring food security and climate resilience.
13. National grain storage at the household/community level to the district level must be established to ensure local food security and stabilize prices.
14. Provide incentives to the farmers for resource conservation and efficiency by providing credit to the farmers for transition to adaptation technologies.
15. Provide technical, institutional and financial support for establishment of community banks of food, forage and seed.
16. Provide more funds to strengthen research for enhancing adaptation and mitigation capacity of agriculture.

Conclusion:

Climate change, the outcome of “global warming” has now started showing its impact worldwide. Climate is the primary determinant of agricultural productivity which directly impacts on food production across the globe. Agriculture sector is the most sensitive sector to the climate change because of the climate of a region/ country determines the nature and characteristics of vegetation and crops. Increasing in mean seasonal temperature can reduce the duration of many crops and hence reduce final yield. Food production system is extremely sensitive to climate change like changes in temperature and precipitation, which may lead to outbreaks of pests and diseases, thereby reducing the harvest ultimately affecting the food security of the country. The net impact of food security will depend on the exposure to global environmental change and the capacity to cope with and recover from global environmental change.

Coping with the impact of climate change on agriculture will require careful management of resources like soil, water, and biodiversity. To cope with the impact of climate change on agricultural and food production, India will need to act at the global, regional, national, and local levels.