Agriculture is affected by climate change. As a result we need to adapt our food production system to cope with climate change, reduce Greenhouse Gas Emission as well as improve carbon sequestration.

**Impacts on the crop sector**

- Higher temperatures affect flowering and fruiting, growing seasons, cropping calendars, crop cycle and bulking in vegetable crops
- High temperatures and mild winters favour higher pest and disease incidence
- Water scarcity and droughts affect production and yield
- Extreme weather events (torrential rains, cyclones) destroy crops and degrade soil, for example through flooding, erosion and sedimentation
- Coastal land are affected by storm surge (destroy crops and affect soil quality)

**Emission from Agriculture**

Main GHG emitted from agricultural activities are:

- Nitrous Oxide (N2O) - from the use of organic and mineral nitrogenous fertilisers
- Methane (CH4) - from livestock digestion processes and animal manure
- Agricultural practices in Mauritius (both crop and livestock sector) emitted 127,000 tonnes CO₂ eq in 2013 (TNC report, 2016)
- Sugarcane cultivation alone emits an average of 83000 tonnes of CO₂ eq yearly

**How can agriculture adapt to climate change?**

- Using efficient irrigation systems (drip, micro-sprinkler)
- Promoting sustainable agricultural practices (soil and water conservation, composting, minimum tillage, mulching and so on)
- Introducing locally adapted varieties (e.g. drought and heat tolerance, disease resistance)
- Crop production under protected culture, such as shade house, greenhouse and mini-tunnel
- Adjusting farm operations (planting dates, treatments, irrigation schedule etc)
- Optimising the use of fertilizers to minimize leaching and N2O emissions
- Using Integrated Pest Management or chemicals free pest control methods
- Adopting bio farming systems