TEA RESEARCH INSTITUTE OF SRI LANKA
TALAWAKELLE

Cautionary Note on
Preparing for El Niño-related Climatic Conditions

El Niño is a naturally occurring climate phenomenon caused by the unusual warming of sea surface temperatures in the central and eastern Pacific Ocean. This warming alters global weather patterns and significantly influences the rainfall and temperature patterns in many parts of the world, including Sri Lanka. A strong El Niño event has been forecasted for 2026, by the global and local meteorological agencies. According to the National Oceanic and Atmospheric Administration (NOAA) June - August 2026, El Niño is likely to emerge and persist through at least the end of 2026 or February 2027.

During an El Niño year, Sri Lanka could experience reduced rainfall, higher temperatures, and prolonged dry periods. These adverse conditions could reduce soil moisture and increase ambient temperature causing reduced plant growth, low tea yields (slow shoot growth and shoot initiation) as well as increased incidence of some pests and diseases and in severe cases plants death. A combination of these impacts could reduce long-term land and crop productivity and total production.

Adoption of the following good agricultural practices is recommended to minimize the adverse impacts described above and ensure sustainable tea production before, during and after experiencing the adverse conditions.

➢ Before the Onset of Drought

- Prioritizing drought vulnerable fields and take action to mitigate stress condition
- Identification and restoration of existing water resources for future needs
- Developing rainwater harvesting systems in the field
- Application of mulch, especially for the new clearings (organic material such as mana or Guatemala grass lopping, artificial mulch such as silver- black polythene or any suitable plant materials such as leaves, straw)
- Temporary shading of young plants in new clearings
- De-siltation of the lateral drains to store runoff water as a moisture conservation practice
- Adding organic matter
- Maintaining recommended shade tree density per hectare and balance shade level, avoiding excessive shade (moisture competition) and low shade (heat stress)
- Controlling weeds early to reduce competition for water
- Application of 2% SOP (Sulphate of Potash) or MOP (Muriate of Potash) can be carried out as a foliar spry at least one month prior to the onset of drought conditions

- **During the dry weather**
  - Installation of irrigation systems such as drip or sprinkler if resources are available
  - Application of 2% SOP (Sulphate of Potash) or MOP (Muriate of Potash) can be continued as a foliar spray at 2-4 week intervals depending on the severity of the drought
  - Application of Salicylic acid can be carried out as a foliar spray
    - For immature tea - 1st year - 15 g/ha in 100 L of water
      - 2nd year - 30 g/ha in 200 L of water
      - 3rd year – 60 g/ha in 400 L of water
  - Be vigilant for pest and disease outbreaks and monitor their dynamics and take early control measures
  - Adjust plucking interval and severity to reduce stress and remove tender shoots exclusively under severe drought.
  - Avoid mechanical harvesting during dry period
  - Applications of fertilizer should be avoided during severe drought
  - Avoid pruning during severe drought period
  - If replanting and infilling have already started, irrigate plants if water resources are available

Growers are advised to stay informed about weather predictions and Agro-met Advisories issued by the Department of Meteorology. Refer to the Advisory Circular PA 2 (Drought Mitigation in Tea Plantation) or contact TRISL call center (081-2244777) for more details.

Director
Tea Research Institute of Sri Lanka
Talawakelle

22 June, 2026