To mitigate the effects of climate change on maize in Cameroon, farmers can adopt climate-resilient planting and management strategies such as using heat-tolerant varieties, practicing conservation agriculture to improve soil water, and planting early to avoid pests and weeds. These methods help offset yield losses caused by increased temperatures, drought, and erratic rainfall. Long-term solutions also require support for infrastructure, policy, and research to ensure sustainable growth in the agricultural sector.

Planting strategies

- **Plant early**: Planting before the rains begin can lead to better germination in warm soil and give the maize a competitive advantage over weeds, which reduces the need for labor-intensive weeding later.
- **Use improved varieties**: Planting heat-tolerant varieties can provide more stable yields and better resistance to increased temperatures.
- **Pre-germinate seeds**: Soaking seeds overnight before planting can accelerate germination, helping to get the crop off to a faster start.
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Land and soil management

- **Conservation agriculture**: Practices like minimum tillage, residue retention, and crop rotation improve soil water infiltration, reduce water loss through evaporation, and increase soil moisture content, which can lead to higher yields during dry periods.
- **Crop rotation**: This can improve soil health and help manage pests and diseases.
- **Soil organic matter**: Some farming practices have been shown to increase soil organic carbon and nitrogen levels, which improves soil fertility and water retention.
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Climate adaptation and resilience

- **Early harvesting**: Harvesting crops earlier can allow farmers to access better market prices before the market is saturated.
- **Pest and disease management**: Planting early can help escape some pests and diseases that affect later-planted crops.
- **Diversification**: Expanding beyond maize into more climate-resilient crops like cassava could also help diversify risk.
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Broader strategies

- **Research and development**: Investing in research for more improved and adapted varieties is crucial.

- **Infrastructure and policy**: Building infrastructure and implementing supportive policies can help farmers adapt to changing conditions.
- **Farmer education**: Providing farmers with training on best practices for adaptation, including modern agricultural techniques, is essential.