## CLIMATE'S Connection to FOOD

**WEATHER** is the short-term (day-to-day or minuteto-minute) state of the atmosphere. It is generally described using a combination of the temperature, humidity, precipitation (rain or snow), cloudiness, and wind.

> **CLIMATE** is the average weather of a given region over a long term, generally 30 years. Climate is impacted by various factors such as latitude (how close a place is to the equator), elevation (how many feet above sea level), terrain (mountains), and ocean or wind currents. Visit the Climate Types interactive map to see the 12 climates throughout the world and to learn more about the plants and animals that live in each climate.



## How does CLIMATE impact our food supply?

Some climates are too cold or too dry to grow food. On another hand, other climates may be too wet to grow most of the foods we eat. Luckily, there are climates throughout the world that are ideal for the growth of many crops and to raise livestock, allowing us to consume a variety of fruits, vegetables, grains, meats, and other proteins. Does weather also impact our food supply? Yes! Even after choosing a good climate for the location of a farm, farmers are still dependent on suitable weather conditions. An abnormally late frost in a fruit orchard can diminish or destroy an entire year's crop. Rain in the spring can help seeds germinate, but too much rain and the seeds might rot in the ground. An early snow storm could destroy an entire crop right before harvesting.

## **CROP FORECAST**

CLIMATE and WEATHER

are tightly correlated to our food supply. The average diet in the United

States contains a variety of foods that were grown in a variety of climates. The successful growth of any food crop relies on specific climate and weather conditions.



Apple trees need a certain number of winter days between 32°F and 45°F to properly set fruit the following spring. This process is called vernalization.



Citrus fruit trees cannot tolerate cold. They need warm winters and hot summers.



Potatoes prefer cooler summers. They can even be planted before the last frost in the spring.



Rice can be grown where nighttime temperatures stay above 60°F and where there is plenty of water. The roots should never dry out.



Pea seeds can be planted before the last frost. Pea plants stop growing and producing peas when the summer temperatures reach 70°F.