

Input:

Day 1 - Temperature: 35°C; Pressure: 1008 millibars; Humidity: 50%; Wind Bearing: 220 degrees; Wind Speed: 15 km/h; Solar Radiation: 90%;

Day 2 - Temperature: 28°C; Pressure: 1015 millibars; Humidity: 80%; Wind Bearing: 270 degrees; Wind Speed: 8 km/h; Solar Radiation: 70%;

Day 3 - Temperature: 20°C; Pressure: 1022 millibars; Humidity: 65%; Wind Bearing: 180 degrees; Wind Speed: 20 km/h; Solar Radiation: 60%

Output:

"Over the past 3 days, solar radiation has decreased by 30%, and your soil at the coordinates (picture below) is at risk of insufficient sunlight for crops. It is recommended to consider alternative sources of light or relocate crops to sunnier areas. Based on your data for the past years, a heavy downpour is expected this year around the end of March-early April, so it is recommended to start sowing the crop around the middle of April to avoid waterlogging. Additionally, the soil temperature has fluctuated significantly, with a decrease of 15% on Day 3. To stabilize the temperature and enhance crop growth, it is advised to implement shading techniques and monitor soil moisture closely. Moreover, the high wind speed observed on Day 3 may result in water evaporation. To conserve water, consider implementing windbreaks and mulching. It is also recommended to increase the volume of fertilizers such as nitrogen, phosphorus, and potassium by 20% to counter nutrient depletion caused by excessive rainfall and evaporation."

Input:

Day 1 - Temperature: 15°C; Pressure: 1025 millibars; Humidity: 85%; Wind Bearing: 90 degrees; Wind Speed: 5 km/h; Solar Radiation: 40%;

Day 2 - Temperature: 18°C; Pressure: 1020 millibars; Humidity: 78%; Wind Bearing: 120 degrees; Wind Speed: 7 km/h; Solar Radiation: 50%;

Day 3 - Temperature: 12°C; Pressure: 1030 millibars; Humidity: 92%; Wind Bearing: 70 degrees; Wind Speed: 3 km/h; Solar Radiation: 35%;

Output:

"Over the past 3 days, solar radiation has decreased by 5%, and your soil at the coordinates (picture below) is at risk of insufficient sunlight for healthy crop growth. It is recommended to invest in artificial lighting solutions or consider selecting shade-tolerant crops for this area. Based on your data for the past years, a heavy downpour is expected this year around the end of March-early April. To prepare for this, it is recommended to enhance soil drainage and implement raised bed gardening techniques. Additionally, the soil temperature has dropped significantly by 20% on Day 3. To counter this, consider using season-extending techniques such as row covers or tunnels to provide a warmer environment for your crops. Moreover, the high humidity levels observed throughout the period can lead to fungal diseases. Proper ventilation and disease-resistant crop varieties are advised. It is also recommended to increase the volume of organic matter in the soil by 25% to improve its structure and drainage, ensuring optimal conditions for your crops."

Input:

Day 1 - Temperature: 30°C; Pressure: 1012 millibars; Humidity: 40%; Wind Bearing: 270 degrees; Wind Speed: 20 km/h; Solar Radiation: 95%;
Day 2 - Temperature: 32°C; Pressure: 1008 millibars; Humidity: 35%; Wind Bearing: 250 degrees; Wind Speed: 25 km/h; Solar Radiation: 90%;
Day 3 - Temperature: 28°C; Pressure: 1015 millibars; Humidity: 42%; Wind Bearing: 280 degrees; Wind Speed: 18 km/h; Solar Radiation: 92%;

Output:

"Over the past 3 days, solar radiation has remained high, indicating optimal sunlight for crop growth. However, the combination of high temperatures, low humidity, and strong winds has increased the risk of water evaporation from the soil. It is recommended to implement efficient irrigation methods such as drip irrigation or soaker hoses to conserve water and ensure adequate moisture for your crops. Based on your data for the past years, a heavy downpour is expected this year around the end of March-early April. To prepare for this, it is advisable to enhance soil drainage to prevent waterlogging and root rot. Additionally, the constant high temperatures can lead to soil nutrient depletion. Regular soil testing and timely application of balanced fertilizers are essential to maintain soil fertility. Considering the windy conditions, windbreaks and shelterbelts are recommended to protect young and delicate crops. It is also crucial to monitor for signs of heat stress in plants, such as wilting or leaf curling, and provide shade if necessary to prevent heat-related damage."

Input:

Day 1 - Temperature: 22°C; Pressure: 1010 millibars; Humidity: 60%; Wind Bearing: 180 degrees; Wind Speed: 15 km/h; Solar Radiation: 70%;
Day 2 - Temperature: 26°C; Pressure: 1005 millibars; Humidity: 55%; Wind Bearing: 190 degrees; Wind Speed: 18 km/h; Solar Radiation: 75%;
Day 3 - Temperature: 20°C; Pressure: 1012 millibars; Humidity: 65%; Wind Bearing: 170 degrees; Wind Speed: 12 km/h; Solar Radiation: 68%;

Output:

"Over the past 3 days, solar radiation has slightly increased by 3%, indicating good sunlight for crop growth. However, the fluctuating temperatures and humidity levels, combined with moderate winds, pose challenges for crop health. It is recommended to monitor the weather closely and adjust irrigation practices accordingly to maintain consistent soil moisture. Based on your data for the past years, a moderate rainfall is expected in the upcoming weeks. To capitalize on this, consider implementing rainwater harvesting systems to conserve water for irrigation during drier periods. Additionally, the varying weather conditions can lead to nutrient leaching in the soil. Regular soil testing and targeted fertilization are essential to replenish lost nutrients and sustain healthy crop growth. Considering the moderate winds, using windbreaks and mulching techniques can help retain soil moisture and prevent erosion. It is also advisable to select crop varieties that are well-suited for the local climate and weather patterns to enhance overall resilience."