



CLIMATE CHANGE AND APPLE FARMING IN HIMACHAL PRADESH

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Himachal Pradesh is known as the Apple State of India. Thousands of farmers living in the hilly area of the state are dependent on apple farming which is their source of income. Famous high-quality production occurs in districts like Shimla, Kullu, Kinnaur, Chamba, Mandi and parts of Sirmour. Apple production contributes significantly to the state's economy and provides employment to many people. In recent years, changing rainfall patterns leads to many challenges for apple growers.

Rainfall is one of the most important natural resources for agriculture. Trees of apple needs the right amount of water at the right time for healthy growth, flowering, fruit setting and fruit development. Nowadays situation is going worse related to rainfall. Rainfall has become irregular, with long dry periods followed by sudden heavy rain. This changing weather is making apple farming more difficult every year.

July and August are very important months for apple farming. During this time, apples are growing in size and slowly becoming ready for harvesting. The fruit needs sunshine, proper air circulation and only the required amount of moisture. But because of climate change, these months are now seeing continuous rainfall, cloudbursts and high humidity. Instead of helping the crop, this weather is damaging it. Heavy rain also causes apples to crack or fall before they are fully ripe.

Climate change is also affecting the roads and villages of apple-growing areas. During July and August, landslides have become more common because of heavy rainfall. Roads connecting villages to markets are blocked for several days. Delayed transportation reduces their quality and forces many farmers to sell at lower prices. Delayed transportation reduces their quality and forces many farmers to sell at lower

prices.

The first step is to improve orchard management. Farmers should regularly prune apple trees so that sunlight and fresh air can reach every branch. This helps reduce fungal diseases that spread during the rainy months of July and August. Fallen leaves and infected fruits should be removed from the orchard because they can spread diseases to healthy trees.

Proper drainage systems are also very important. During heavy rainfall, water should not remain around the roots of apple trees. Small drainage channels can safely carry excess rainwater out of the orchard. This protects the roots from rotting and prevents fruits from cracking due to excess moisture.

For more information get attached regularly with the agricultural related government department for solution. They provide timely weather updates, expert advice on disease and pest management, information about new apple varieties and training on climate-smart farming practices. Farmers can also benefit from government schemes, crop insurance, subsidies and technical support, which can help reduce losses and improve orchard productivity even under changing climate conditions.

Farmers should harvest mature crops before heavy rain whenever possible and avoid working in orchards during thunderstorms or strong winds. People living near rivers, streams, or landslide-prone areas should shift to safer places if warnings are issued. Keep an emergency kit with essential medicines, drinking water, food, flashlight and important documents ready.

CONCLUSION

Climate change is creating new challenges for apple farming in Himachal Pradesh, but timely

action can reduce its impact. Farmers should adopt better farming practices and follow weather advisories to protect their orchards. Support from the government and agricultural experts will help farmers face these changing conditions.

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