

## **Abstract**

This twofold study firstly analyses weather derivatives as an effective weather risk management tool, and shows how this is an advancement over the traditional methods. Traditional methods used were various types of weather and crop insurance programs. The study looks into the reasons why these traditional tools have not been able to make a considerable impact in safeguarding the productivity of various sectors in India. Then, the different pricing and Modeling techniques of weather derivatives are reviewed. Secondly, we try to find out how much impact weather surprises actually make to the output of the major sectors. We take the agricultural sector of Maharashtra and find the impact of weather fluctuations on its output by a simple ordinary least squares approach. Combining both the steps, we can infer about how much impact weather derivatives can make to the GDP, if introduced in India. Results found are mixed, but encouraging. It provides further scope of research into the impact of weather fluctuations on all the sectors of India.