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(57) Abstract :

All operations pertaining to crop cultivation, animal rearing, and the production of fibre, food, and various other agricultural goods are included in the agricultural industry. It is vital to the world economy since it supplies raw materials for many sectors, jobs, and food security. The agriculture industry is totally based on change in climatic conditions due to which the crops dependent parameters like temperature, pressure, humidity, PH is also affected. It is very difficult to measure all these parameters. In our research, we have taken sample of 5 crops for which above mentioned parameters have to be estimated. This is accomplished by forming the objective functions in terms of the performance parameters like temperature, pressure, humidity, PH. Further, the objective functions will be trained by using machine learning algorithm. This algorithm is a combination of CNN and RNN topologies. After the implementation of machine learning algorithm, it is observed that the suitable value of temperature, pressure, humidity, PH of five crops have been estimated which suits the sustainability and ecological balance of the environment. In addition to this, variation in the performance parameters of various crops have been monitored with the support of machine learning.

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