Big Data and Data Analytics in Agricultural Space: Towards Sustainable and Intelligent Agro Sector Development

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Abstract

Agriculture has become important for each and everyone for its importance in the daily lives. Cultivation and farming is most important and valuable in our life as it is needed for all of us. Furthermore it is essential to have better healthy agricultural systems and in this context Agricultural Informatics play a leading role. Here proper mechanism is very important in healthy and modern agricultural systems and development and for this various initiatives and methods are useful and enhancing. There are rapid changes and growth in respect of the support of various technologies which help in modernizing agricultural production and systems like genetic engineering and technologies, computing
and information technology, nano-science and technology, Management Science etc. The combination of Information Technology and Agricultural Sciences has led to the developed the Agricultural Informatics. Agricultural Informatics is simply IT applications in Agriculture and allied areas with its various components. Though in recent past more emerging technologies of IT are enhancing the traditional growth of the Agricultural Informatics and among the technologies important are Big Data and Analytics, AI & Robotics, Cloud Computing & Virtualization, Internet of Things etc. And among these, Big Data and Analytics is emerging and changing the entire arena of the Agricultural Informatics with its periphery and functioning. As the data is changing and rapidly growing therefore, Big Data and Analytics is the solution for managing data effectively with large amount and also the complex data. This paper is theoretical and various aspects of Agricultural Informatics are mentioned such as features, applications and specially the impact of Big Data and Analytics. The Paper is also focused on possibilities of Big Data and Analytics in Agricultural Informatics with challenges, issues etc.

**Keywords:** Agricultural Informatics, Agricultural Information Technology, Emerging Technologies, Big Data and Analytics, Data Science.

**Objectives:**

The present work ‘Big Data and Data Analytics in Agricultural Space: Towards Sustainable and Intelligent
Analytics. Big Data is an emerging topic and it needs joint efforts from the various professional associations, societies, council, and government department and so on. Furthermore, ministries such as agriculture, Information Technology, education and human resources, social welfare can also take important imitative for the integration of the Big Data in Agricultural Systems and also other allied areas. Skilling, Training etc. are also important and valuable of big data in agriculture and allied areas for the solid, intelligent, sustainable agricultural development.

References


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