

Editor's Note

Special Publication on Agriculture

Indian Economy is largely depended on Agriculture. India ranks second worldwide in farm output. As per the 2010 FAO world Agriculture Statistics, India is the world's largest producer of many fresh fruits and vegetables, milk, major spices, select fibrous crops such as jute, staples such as millets and castor oil seed. India is the second largest producer of wheat and rice, the world's major food staples. Contribution of Agriculture sector in Indian economy is much higher than world's average (6.1%) and is declining today. This sector provides maximum employment for rural people of India. The Agriculture sector is facing major threats, such as, conversion of agricultural lands for other purposes; low productivity, changes in climate and so on. These are serious concerns and interactive discussions on these aspects are taking place throughout the India.

The *Green Revolution*, which is often characterised by the introduction of high-yielding varieties of seeds and fertilisers, undoubtedly increased the productivity of land considerably. But the growth in the productivity has been stagnant in recent years, resulting in a significant decline in the income of farmers. There have also been negative environmental effects in the form of depleting water table, emission of greenhouse gases, and the contamination of surface and ground water. The climatic change experiencing in recent years further aggravated the agricultural problems. Needless to say, the agriculture sector is in a state of distress, which is severely affecting peasants and marginal farmers, and urgent policy interventions are required to protect their interests.

The increasing population pressure in India demands the increased food production through innovative methods of sustainable green revolution, which is now an ecological, social and environmental necessity in India. This involves new agricultural technologies and management systems providing increased productivity per unit of land without compromising on environment. For a bigger harvest in coming years, different initiatives have to be taken to jump-start the stagnant agricultural sector in a sustainable way.

Sustainability in agriculture is the “soul of nature” and hence the present trend is to do eco-friendly practices for better yield which will protect the nature. The *Swadeshi Science Congress* is a discussion forum of scientists, academician, teachers, research fellows, farmers and general public to share their ideas, knowledge, resources and skills which will help us to chalk out strategies and action plans to safeguard our natural resources for a better world and living. The special session on Agricultural Sciences of 27th Swadeshi Science Congress held at Amritha Vishwa Vidyapeetham, Amrithapuri Campus from 7th to 9th October 2017 discussed varied aspects of present situation of agriculture from which 21 research papers have been chosen for publication. As science and technology are the key drivers to development, the

research on Agricultural Sciences with particular emphasis in the present scenario on *climate resilient agricultural research* in a sustainable mode will lead to sustainable agricultural development in India. The session on Agriculture motivated the researchers to chalk out research models for agricultural yield enhancement through a sustainable approach. The research output through the publication will be highly beneficial for future studies as well as planning process.

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