

# Organic Seed:

## Traditional Varieties and Technologies

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*Published by:*

Scientific Publishers (India)  
5-A, New Pali Road, P.O. Box 91,  
Jodhpur – 342 001 (India)

E-mail: [info@scientificpub.com](mailto:info@scientificpub.com)

Website: [www.scientificpub.com](http://www.scientificpub.com)

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ISBN: 978-81-7233-700-1

eISBN: 978-93-87307-80-3

| [Typeset by Rajesh Ojha](#)

Printed in India

## PREFACE

Growing awareness of health and environmental issues associated with the intensive use of chemical inputs has led to interest in alternate form of agriculture in the world. After the successful launching of Green Revolution in India, substantial increase in the production of food grains was achieved through the use of improved crop varieties and higher levels of inputs namely fertilizers inorganic and plant protection chemicals. But, it has now been realized that the increase in production was achieved at the cost of soil health. Modern intensive agroecosystem that rely on monoculture and genetic homogeneity have become more susceptible to diseases and pests and to eliminate variations.

Organic agriculture is one among the broad spectrum of production methods that are supportive of the environment. Organic farming is gaining gradual momentum across the world. Based on the global survey on organic farming carried out in 2008, organic agriculture is now practiced in more than 130 countries with a total area of 30.4 million hectares in 0.7 million number of organic farms. Global demand for organic products remains robust, with sales increasing by over US\$ 5 billion a year.

In India, about 528,171 hectares are under organic farming with 44,926 number of certified organic farms. This accounts for about 0.3% of total agricultural land. According to APEDA, a nodal agency involved in promoting Indian organic agriculture, about 585,970 tonnes of organic products worth of Rs. 301 million are being exported from India. Growing awareness, increasing market demand, increasing inclination of farmers to go organic and growing institutional support have resulted in more than 200% growth in certified area during the last two years.

Our traditional farming system were characterized mainly by small and marginal farmers producing food and basic animal products for their families and local village communities. Farming was highly decentralized with individual farmers deciding on the types of crops to grow depending on climate and soil conditions. Traditional varieties are value to us because they embody characteristics that are potentially viable, but not yet exploited. The genetic resources needed to develop the new strains will probably come from the diversity of plants stored in traditional agroecosystems. It is estimated that 20% of current World food production is still produced from traditional multi cropping system. The traditional

farmers also experiment with new varieties and breed plants purposefully to create new strains.

Community seed banks are good tool to revive the conservation traditions of rural and tribal communities. Community seed banks are established and operated through a seed exchange network in the village managed by a group of local people with the objective to ensure the sustainable supply of required planting material as well as conservation of traditional varieties and knowledge.

Hence, India is expected to emerge as a hub of organic farming in the coming years. Growing health consciousness and increased environmental concerns of consumers are driving force for growth of organic food products in India.

This book makes an attempt to present the available information on traditional varieties of rice, cereals, pulses, oilseeds and vegetables, technologies for organic seed, community seed banks, role of women in biodiversity conservation, farmer's participatory plant and seed conservation and seed fairs to promote marketing, in an easy understandable manner. This book will give an overview on organic seed production. A compilation of the information on above aspects has been felt need to the students, teachers and research workers.

**Authors**

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*Part – I:*  
**TRADITIONAL VARIETIES**

