



## **Rural development through dryland horticulture : An innovative approach**

**R.K. SARAF<sup>1</sup> and SMITA PURI<sup>2</sup>**

<sup>1</sup>Principal Scientist (Horticulture) and In-charge, <sup>2</sup>Scientist (Plant Pathology),  
Regional Agricultural Research Station, J.N. Krishi Vishwa Vidhyalaya, Sagar - 470 002 (M.P.)

Rural development has been one of the major thrusts of many developing countries around the world. It is a multi dimensional and multi directional concept. In India, rural development is the mile stone for the growth and development of Indian economy. Therefore, the father of nation Mahatma Gandhi says "Rural India is real India". India is primarily an agriculture based country. Its economy is mainly depends on agro based activities. Agriculture sector is one of the most significant part of Indian economy. Agriculture contributes nearly one fifth of the gross domestic product (GDP) in India. Indian agriculture is predominantly, a rainfed agriculture which includes both dry farming and dry land agriculture. Out of the 143 m ha of total cultivated area of the country, 101 mha area is rainfed. In dry land areas, variation in amount of soil, rainfall and distribution of rainfall influence the crop production, productivity and socio-economic condition of the farmers. Over 70 % of the population of India living in rural areas and major chunk of the working population is engaged for their lively hood on agriculture and allied sector.

Over the years, horticulture has emerged as one of the most potential agriculture enterprise in accelerating the growth of Indian economy. At present, in India, horticulture is contributing 30% of GDP from 17% land area. Its role in the nutritional security, poverty alleviation and employment generation is becoming increasingly important. It offers a wide range of options for crop diversification and also provides huge scope for sustaining large number of agro based industries which generate employments. Therefore, to improve the condition of rural population, horticulture as well as dry land horticulture would be a very important option. In this context, the horticulture sector of Madhya Pradesh (second largest state by area and sixth by population in India) is improving and linking more rural population with horticulture for their betterment.

Agriculture a core sector of Madhya Pradesh economy enjoys diverse climatic and soil conditions suitable for broad range of agriculture products. It contributes almost one fourth of the gross state domestic products (GSDP) and is the main source of employment for over 70 % of the population and contributes about 60-75 % of the rural income. Agro-climatic diversity and topographical variations enable the state to grow a wide range of horticultural crops. Madhya Pradesh leads in the production of green pea, garlic and coriander and producing about 15.77 mMT of horticulture produce from an area of 1.20 mha and accounts for 7.1 % of total horticulture production of the country. The major share of horticulture produce is from vegetables (65.8%) and fruits (28.8%). Vegetables and fruits form major and important part of our dietary requirements, which are widely grown in the rural and sub-urban areas.

A significant shift towards horticulture is evident in the state with an increase in area and production. Horticulture provides higher unit productivity and offers great scope for value addition and this sector is making its way throughout the length and breadth of the state. The area under dryland horticulture in the state is improving and has a great potential to grow high value but less water demanding horticultural crops. Unlike field crops, horticultural crops cannot be grown in all the zones. Their needs are specific with regard to agro-climatic requirement. Therefore, more emphasis has to be given to achieve higher production through encouragement for Zone wise area expansion of horticultural crops, increase in productivity, use of suitable high yielding varieties, use of improved cultural practices and irrigation systems, integrated pest management and improvement of quality of the produce. In addition to this, M.P. state government is considering fruit and vegetable processing sector as a thrust area for development. With the increase in the production of raw materials and processed horticultural products, the horticulture industry is progressing well and showing potential to generate revenues for rural population. Thus, rural development deserves priority and more emphasis on horticulture for revenue generation is necessary for maintaining self-sufficiency in nutritional and food security as well as economic progress. Dry lands, in fact are the only hope of the future for feeding the fast increasing population. To improve the economic conditions of the people in the dry tracts and their nutrition and health standards, it is necessary to encourage dry land horticulture through Research and Development and extension support.

**Author's profile** - Dr. R.K.Saraf, Principal Scientist and Incharge, Regional Agricultural Research Station, Sagar (M.P.), completed his graduation and post graduation in horticulture from J.N.K.V.V., Jabalpur and Ph.D. from Dr. H.S. Gour University, Sagar. He has served extension, research and educational posts right from Assistant Professor to Professor. He contributed a lot in the field of dryland horticulture and was awarded for his work in 2010. So far, he has published 48 research papers, 142 popular articles, 12 technical bulletins and more than 50 research publications in National and International seminar/symposiums. He is a founder member and established three centers for promotion horticulture, viz., Regional Horticulture Research Station, Jaora, Distt. Ratlam; Dryland Horticulture Research & Training Center, and Horticulture Vocational Education Institute, Garhakota, Distt. Sagar (M.P.). For the first time in M.P., Diploma course in Horticulture viz. nursery management and seed production has been initiated by him. He has received ten different awards/honours for outstanding performance to develop horticulture activities. He organized 2 national seminars/workshops, 8 special training on spices and 31 special trainings on horticulture at Sagar and Jabalpur division, M.P.