

E-Survey to Analyse Perception of Agricultural Experts Regarding Priority Setting for Future Research in Vegetables in India

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Abstract Demand of vegetables shows increasing trend due to enhanced health consciousness and purchasing power of Indian population. The productivity of vegetables is 17.3 million tonnes per hectare which is not sufficient to meet projected requirement of producing 225 million tonnes vegetables by 2030. Moreover 25–30 % vegetables go waste every year due to pre or post-harvest losses. Although India ranks second in vegetable production after China, this sector is still unorganized in scientific and economic terms. With this background, this perception study was designed to identify critical problematic areas, which seek priorities in future research to strengthen vegetable sector in India. Statements of problem under 6 major vegetable research sectors were formulated. Research priorities were obtained by calculating weighted average (WA) on the perception scores given against the statements of problem by 75 respondents of Indian Council of Agricultural Research (ICAR), State Agricultural Universities (SAU) and Krishi Vigyan Kendra (KVK) and subsequently ranking of the priorities were assigned. Rank one priorities under 6 major vegetable research sectors identified were developing climate resilient varieties (WA = 4.98), standardizing crop and area specific fertilizer schedule (WA = 3.98), estimating actual seed requirement of important vegetables (WA = 5.63), standardizing pesticide doses (WA = 3.39),

well defined post-harvest handling techniques (WA = 6.26) and infrastructure and cold storage facility (WA = 7.65). Interaction among different priority issues had been identified through regression analysis. Although priority setting is an ongoing process, this paper tries to flag some empirically tested issues which should be regarded as priority areas of research to strengthen vegetable sector in India.

Keywords Research priority · Vegetables · E Survey · Perception · Agribusiness · Postharvest

Introduction

Research management plays an imperative role for effective and efficient research outcome. The need of prioritization of research agenda has become crucial, because of limiting financial, human and time resources [1]. In India, agriculture is regarded as the backbone of its economy. Over the last two decades it has also been observed that, there is a change and shift in food habits of Indian population and consumption of fruits and vegetables have been increased particularly in Indian villages (Table 1). Vegetable sector has shown increasing trend in production, area, consumption and export. There had been phenomenal increase in area (2.99 folds), production (2.88 folds) and productivity (2.98 folds) of vegetables in the country during the last 6 decades. The per capita availability (g/person/day) of vegetables has increased from 87.66 in 1951 to 92.70 in 1961, 111.31 in 1971, 132.17 in 1981, 147.82 in 1991, 188.69 in 2001 and 230.40 in 2011 [2]. But at the same time it is faced with several challenges. Productivity of vegetables in India is not sufficient to meet the future requirement of producing 225 million tonnes by the year 2030 [3]. Availability of good quality vegetable seeds and planting material is one of the

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