## Vegetables for Livelihood Security: A Study in Disadvantageous Area of Vindhyan Region

Neeraj Singh<sup>1</sup>, B. Singh<sup>2</sup>, A.B. Rai<sup>3</sup>, Shubhadeep Roy<sup>4</sup>, Sujoy Saha<sup>5</sup> and A.Singh<sup>6</sup>

1,2,3,4,5 & 6. Scientisr, IIVR, Post Bag No. 01, P.O .- Jakhani (Sahanshahpur), Varanasi Corresponding author e-mail:neerajatic@gmail.com

## **ABSTRACT**

The vegetable crops have been well advocated as protective food. They are rich source of minerals, vitamins, vegetable fibre and contain fair amount of carbohydrate and protein. In addition to meet the local demand, vegetables have the potential for distant and export market. Vindhyan region in Eastern Uttar Pradesh is considered as potential area for vegetable cultivation but due to the lack of technical guidance and unawareness of improved technologies, farmers in this region were practicing traditional cultivars and other agronomic practices. Therefore, efforts has been made to educate the growers of two clusters in Mirzapur and one cluster in Sonbhadra districts of Vindhyan region regarding the improved cultivation of vegetables along with giving massive frontline demonstrations, farmers-scientists interaction and organizing field days for quicker dissemination and adoption of technologies. The productivity of demonstrated crops increased from 6.25–40.34 % mainly because of introduction of high yielding new varieties. Further, Kashi Pragati in okra and Kashi Kanchan in cowpea fetched maximum yield differences between demonstrated and farmers' practiced varieties. Considering the importance of nutritional security, during 2008-09 a total of 1100 households were given kitchen garden demonstration kit where as in 2009-10 and 2010-11 it increases upto 3767 and 5621 households respectively.

Key words - Improved vegetable varieties, vegetables productivity, kitchen garden

Among the food-based approaches, cereals may not provide a solution for micronutrient deficiency as it narrows down the biodiversity in production as well as in diets. Asian Vegetable Research and Development Center (AVRDC) believe that integration of micronutrient-rich food, particularly vegetables into the diet is the only viable solution for micronutrient deficiency. Among the micronutrient-rich foods, vegetables are relatively inexpensive, and produce micronutrients at a lower unit cost than other such as livestock products (Ali and Tsou 1997). Vegetables are rich source of minerals, vitamins, vegetable fiber and contain fair amount of carbohydrate and protein. Post meeting the local demand, vegetables have the potential for export market (APEDA 2010-11). Thus, considering the nutritional and livelihood security vegetables play pivotal role in Indian agriculture and have been well advocated as protective food. During the last 62 years after independence vegetable production has increased in multiples. Although, India ranks second to China in vegetable production, the

availability of vegetable in the country is only 230-240 g/caput/day which is far below the requirement in the paradigm of health.

Due to advent of improved varieties, better market price and general awareness of nutritional security among the people, vegetable cultivation in the country is getting momentum continuously among the growers, preferably small and marginal farmers for their livelihood security. Vindhyan region in Eastern Uttar Pradesh is considered as potential area for vegetable cultivation but lack of technical guidance and unawareness of improved technologies have compelled the farmers in this region to grow traditional cultivars and adopt outdated agronomic practices. These constraints are more restrictive on vegetable production in vindhyan region than in other parts of the country, as reflected by low yield and high seasonality in availability. Overcoming constraints in vegetable cultivation also require more labor, thereby creating productive employment opportunities and generating higher incomes which can therefore break the cycle of poverty.