

## Impact of knowledge of potato growers regarding potato production technology

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### SUMMARY

A sample of 200 respondents were selected from potato growing formers through proportionate random sampling technique and the investigator himself collected data with the help of pre tested interview schedule Maximum 60.50% respondents were observed in medium category of knowledge level followed by 24.00% in high and 15.50% in low category, respectively. Out of 18 variables, eight variables viz. education, size of land holding (ha), occupation, farm power, transportation, irrigation sources, annual income and extension contact were found to be highly significant and positively correlated with extent of knowledge of the respondents. Area under potato crop (ha) and communication media were observed significant and positively correlated.

Key words : Potato, Technology, Production, Growers.

In Uttar Pradesh, (2001-2002) district Kannauj occupies a prestigious position so far as potato production (in state) is concerned. The next potato producing district are Farrukhabad, Agra, Firozabad, Hathras, Badaun, Kanpur Nagar, Mathura, Mainpuri and Moradabad etc. In potato production Kannauj district is the highest producing area but in respect of average production has 8<sup>th</sup> place in Uttar Pradesh mainly due to the lack of technical know-how, inputs availability at time and skill proficiency of potato growers. Potato production of district Etawah is 157797 (q./ha.) and average production is 249.60(q./ha.). But in average production ( q/ha ) district Agra has 1<sup>st</sup> place (356.37) followed by Mathura (339.37), Rampur (336.49), respectively. District Etawah suffered yield losses of three to four percent of sometime thirty to forty per cent due to early/ late blight of potato in some area. This shows a wide gap among districts Kannauj and Etawah and neighbor district Farrukhabad, other high yielding districts and research stations.

In early years, True potato seed (TPS) has been developed for rising commercial crop. This technology provides healthy planting materials at low cost and can supplement the availability of good quality seed. There is no need to change seed every year like traditional seed. Only 10 kg TPS is sufficient for 1 ha. but in traditional seed 250 quintals for 1 ha. This study was concluded in the following objectives -

- 1-To study the socio-economic profile of potato growers.
- 2-Knowledge level of respondents regarding potato production technologies.
- 3-Correlation coefficient (r) between different variables and knowledge of the respondents.

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### MATERIALS AND METHODS

The two districts namely, Kannauj and Etawah were selected purposively for the present investigation. These are the main potato growing districts in U.P. From each village, 25 potato growers were selected on random basis. Thus, 50 respondents from each block and 100 respondents from each district selected for investigation. A sample of 200 respondents were selected from potato growing formers through proportionate random sampling technique and the investigator himself collected data with the help of pre tested interview schedule. Analyses were done with the use of correlation coefficient to know the relationship between different variables with technological gap. The formula used in this study –

$$\text{Standard deviation: S.D.} = \sqrt{\left(\frac{\sum fd^2}{n} - \left(\frac{\sum fd}{n}\right)^2\right)}$$

Where,

- S.D. = Standard deviation
- i = Size of class interval
- S = Summation.
- f = Frequency.
- d = Deviation from coded value.
- n = Number of sample.

$$\text{Correlation coefficient}(r): r = \frac{\sum(x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum(x_i - \bar{x})^2 \sum(y_i - \bar{y})^2}}$$

Where,

- r = correlation coefficient.
- y<sub>i</sub> = observation of the variable (x)