

Success Stories of Potato Farmers in Uttar Pradesh

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ABSTRACT: Potato is one of the important cash crops of the India. In India potato grow about 1.54 million hectares with 29.19 million tones annual production. Potato is mainly used as vegetable but it is also mixed with other vegetables. Many food products such as chips, halwa, gulabjamun, rasgulla, murabba, kheer, guzhia, barfi etc. are made by potato. Properly care and managed of potato yield is very high and gives high amount of net profit. Success stories of two potato farmers, one from Farrukhabad districts and another from Kannauj district of Uttar Pradesh have been presented in this paper with an object to know the best technology adopted by farmers. Kannauj farmers Praveen Srivastava obtained a 280q ha⁻¹ yield with a net profit of Rs 62000 ha⁻¹ (Price of Rs 4.00 kg⁻¹). Farrukhabad farmers Sanjesh Katiyar obtained a yield of 305q ha⁻¹ with a net profit of Rs 72000 ha⁻¹ (Price of Rs 4.00kg⁻¹).

Key words: Farmers, Potato and Stories

INTRODUCTION

The area and production of vegetable crops have increased from 5592 thousand ha with 58532 thousand tonne in 1991-92 to 7984 thousand hectare with 133737 thousand tonne in 2009-10, respectively (Anonymous, 2010). Both area and production have doubled in last 18 years, but the productivity increase is not that spectacular due to low use of plant nutrients. Use of plant nutrients in balance and suitable form results very high yield and profit. China, India, U.S.A. Turkey, Iran etc. are major vegetable growing countries. The major vegetable growing states in India are West Bengal, Uttar Pradesh, Bihar, Maharashtra etc. Among the vegetables, potato occupies a special place in area and production table 1 (Anonymous, 2011). It produces more income per unit area than other vegetables with high nutritive value. Potato used mainly as vegetable, but generally it is mixed with other vegetables. Many food products such as chips, halwa, gulabjamun, rasgulla, murabba, kheer, guzhia, barfi etc. are made by potato. Potato also used as raw materials of several industrial products such as starch and alcohol industries.

Potato is a cool season crop. It grows best in cool regions where there is sufficient moisture and fertile

soil. Sandy loam soil with temperature ranges from 18-30 °C is most suitable for cultivation of potato. The soil pH ranges 5.0 to 6.5 with rich in organic matter. Many number of potato varieties introduced in India but some most popular are kufri bahar, kufri deva, kufri kundan, kufri chandramukhi, kufri chipsona etc. In U.P. all districts grow less or more area of potato but some popular districts are Farrukhabad, Kannauj, Agra, Sikohabad, Meerut, Kanpur nagar, Kanpur dehat etc. (Singh *et.al.*, 2004)

Success story of Farrukhabad Farmer

Farrukhabad is one of the important districts in potato cultivation in the state of Uttar Pradesh. Farmers in this district mainly cultivate "kufri bahar" variety. It gives high yield and net income compared to others. The success story of a progressive potato farmer's finds a place here in. Mr. Sanjesh Katiyar is the name of the farmer who belongs to village Jahanganj district Farrukhabad, Uttar Pradesh. Farrukhabad is a rainfed area where normally annual rainfall is 750 mm. Katiyar earlier used to grow these in traditional way. On advise of Indian Horticulture department he started cultivation of potato in scientific way (Patel *et.al.*, 2008). The relative of Mr. Katiyar provided him

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scientific packages of potato cultivation. Within a year he obtained a yield of 305q ha⁻¹ and made profit of Rs 72000 ha⁻¹. Readers may be interested to know the new techniques he adopted. The techniques of potato cultivation adopted by him are mentioned below:

1. Deep summer ploughing to checks the incidence of soil borne diseases, insects and weeds. One deep ploughing followed by two or three light ploughings with planking is required.
2. Apply well rotted F.Y.M. @ 25 tonne ha⁻¹ in the soil, 3-4 weeks before planting. 100kg N and 80kg each of P₂O₅ and K₂O.
3. Tuber treatment with 0.2% solution of captan for twenty minutes.
4. Tubers of variety Kufri bahar take from a government seed company.
5. Irrigation at critical stages- germination, tuber formation, earthing and tuber bulking.
6. Weed control by pendimethalin @ 0.5kg ha⁻¹ at pre-planting.
7. Spacing- 60×20 cm
8. Seed rate @ 25q ha⁻¹
9. Earthing- 35 days after planting
10. Digging and yield- manual digging with 305q ha⁻¹

All other recommended package practices were adopted religiously by him. The farmers of this area through traditional farming used to get very less profit. Though use of Hi- technology, Mr. Sanjesh Katiyar has got very high yield and net profit. Economics of potato cultivation in Farrukhabad district given in table-2.

Success Story of Kannauj Farmer

Above, success story of Farrukhabad district farmer has described. He used new technology and was successful at the first attempt. Here we described the success story of an experience in potato cultivation with the old variety Kufri Chandramukhi. Mr. Praveen Srivastava, a resident of village- Kaithan Nagala, post- Sikanderpur, district Kannauj, U. P. is the farmer reference. He has five hectare land with grows maize, rice, potato and onion. The techniques of potato cultivation adopted by him are mentioned below:

- 1- Soil preparation with needed ploughings.
- 2- Tuber treated with Aretan solution @ 0.25% for 20 minutes.

- 3- Planting time- 15th October.
- 4- Spacing- 60×20 cm
- 5- Seed rate @ 25q ha⁻¹
- 6- Potatoes are planted on ridges
- 7- Manures and fertilizers-200q FYM, 100kg N, 60kg P₂O₅ and 100kg K₂O ha⁻¹
- 8- Irrigation- 5 with furrow method
- 9- Earthing- after the topdressing
- 10- Plant protection measures- Spraying of Dithene M-45 with 0.25% during November-December and Monocrotophos with 0.03% during the begening to manage the diseases and insects
- 11- Dehaulming- 15 days before digging
- 12- Yield- 280q ha⁻¹

All other recommended package practices were adopted religiously by him. The economics of potato cultivation by Mr. Srivastava has been computed in table 3.

Table 1
State-wise Area and Production of Potato

Sr. No.	Area (000' ha)	Production (000'MT)
1.	Uttar Pradesh	440.0
2.	Bihar	313.6
3.	Panjab	83.1
4.	Haryana	23.0
5.	Gujarat	60.1
6.	A.P.	6.9
7.	Assam	86.6
8.	H.P.	16.0
9.	Chhatishgarh	32.6
10.	Maharashtra	18.8

Table 2
Economics of Potato Cultivation Computed by Katiyar

S.N.	Items	Values
1	Total cost (Rs ha ⁻¹)	50000
2	Yield (q ha ⁻¹)	305
3	Total income (Rs ha ⁻¹)	122000
4	Net profit (Rs ha ⁻¹)	72000
5	Benefit: cost ratio	1.44

Table 3
Economics of Potato Cultivation Computed by Srivastava

S.N.	Items	Values
1	Total cost (Rs ha ⁻¹)	50000
2	Yield (q ha ⁻¹)	280
3	Total income (Rs ha ⁻¹)	112000
4	Net profit (Rs ha ⁻¹)	62000
5	Benefit: cost ratio	1.24

CONCLUSION

The fact and figures presented in this article demonstrate that the area and production of the vegetable crop have increased considerably in last 1.5 decades. But the productivity increased in marginal way. Potato is one of the important crops commercially grown in India. It is grown in whole country throughout the years. If the crop is managed properly and high amount of plant nutrients in balanced way are added very high yield and net profit are gained. Potato is more sensitive to frost. So, prevention is taken. Therefore, frost free areas are selected for potato cultivation.

REFERENCES

- Anonymous (2010), The Directorate of plant sciences, Government of India, New Delhi.
- Anonymous (2011), Indian Horticulture Data Base, *National Horticulture Board*, Gurgaon.
- Patel, N. H., Patel, C. K, Thakur, K. C and Naik, P. S. (2008), Farmers have to adopt high tech potato cultivation, *Indian Horticulture*.53 (6): 11-12.
- Singh, S. S. (2004), Cultivation of potato. Crop management. *Kalyani Publishers* (New Delhi) pp. 289-312.

