

Awareness, Adoption and Reasons for Non Adoption of Apple Growers with Regard to Recommended Horticultural Practices

Badar Naseem Siddiqui, Muhammad Zakaria Yousuf Hassan, ¹Fawad Asif,

¹Samra Iqbal, ²M. Shahbaz Bajwa and ²Nadeem Ashraf Malik

Division of Education and Extension, ¹Department of Rural Sociology,

²Department of Statistics, University of Agriculture, Faisalabad-38040, Pakistan

ABSTRACT

Twelve apple varieties were known to the respondents. But the awareness and adoption varied. The awareness of varieties varied from 3-85% where as the adoption varied from 7.50-58.33%. The most popular varieties were Golden Delicious, Red Delicious and Amri but their adoption was not more than 58%. Major reasons for non-adoption were, varieties are susceptible to disease, low production, and farm area was scattered and also less economic return as reported by 92.50, 72.50, 35.83 and 31.66%, respectively.

Key words: Awareness, adoption, varieties, apple

INTRODUCTION

Apple is not only a rich source of carbohydrates and vitamins, like, A, B and C, but also contains Iron, P etc. The most favourable climatic conditions required for successful growth of apple fruit prevails in the provinces of Balochistan, N.W.F.P., Azad Kashmir, and Northern areas of Pakistan. Nature bestowed Balochistan with the best agro-climatic conditions, which are highly suitable for temperate and tropical fruits.

In Balochistan, the major apple production areas consist of Quetta, Pashin, Kalat, Loralai and Zhob, out of which Quetta division occupies a conspicuous position for apple production. However, the average yield ha⁻¹ of apple is quite low in Balochistan as compared to other areas of Pakistan, and the same position seems in case of ha⁻¹ yield of apple which is far behind to its potential one. It is interesting that even the area in NWFP is 0.2 thousand ha and ha⁻¹ yield of apple is 2.3 thousand metric tons ha⁻¹ where as area of Balochistan Province under apple cultivation is 2.0 thousand ha and ha⁻¹ yield is 10.9 thousand metric tons (Anonymous, 2001), this situation is not at all satisfactory. These are the evidences, which reveals that the yield can increase many times by the adoption of appropriate agri-practices after interrogating the factors responsible for low production. Therefore, the present study was undertaken to probe into factors responsible for the low production of apple in Balochistan.

MATERIALS AND METHODS

The main objective of this research project was to study the extent and adoption of horticultural practices of apple growers of Tehsil Quetta, and it was selected as universe for the project area. Tehsil Quetta consist of seven union councils, out of which five were selected randomly. Then three villages from each selected union council were drawn at random. Thereafter eight apple growers having the size of apple orchard not lesser than one acre were randomly drawn from selected union council. Thus the study sample consisted of 120 respondents.

The data was collected with the help of pre-tested interview schedule. The collected data was transferred on an tally sheet for tabulation. The data was tabulated and percentages calculated for interpretation and drawing conclusion.

RESULTS AND DISCUSSION

The research findings revealed that there were twelve-apple varieties known to respondents but their awareness and adoption varied. The awareness of varieties varied from 30-85%, whereas, the adoption varied from 7.50-58.33%. The data further indicates that most popular varieties known to all the respondents were Golden Delicious, Red Delicious and Amri. A fair majority of apple growers were aware of and had adopted the recommended number of ploughings and planking for preparation of soil. The finding also pin point that the reasons for non-adoption were lack of interest, non-availability of necessary implements at proper time 7.50 and 6.6% of the respondents,

Table 1: Distribution of respondents according to the application of irrigations per year

Irrigation	Awareness		Adopters	
	No.	% age	No.	% age
1-4 years	111	92.50	77	64.17
4-9 years	104	86.66	69	57.50
Above 9 years	113	94.16	80	66.66
Irrigation at proper time; (young plants after 10 days in summer and mature Plant after 15 days in summer)	106	88.33	72	60.00

Table 2: Reasons for non-adoption of time of Irrigation

Reasons for non-adoption	No.	Percentage
Shortage of water	45	37.50
Lack of awareness	51	42.50
Lack of interest	21	17.50

respectively. Similar results were achieved by Hanif (1983) who concluded that majority of "Aware" respondents did not adopt chisel ploughing either due to lack of interest or because of its high price. This research pointed out that an over-whelming majority of respondents (86.66-94.16%) were aware of recommended number of irrigation. However, the adoption of these recommendations varied from 57 to 66% (Table 1). The percentage of aware and adopted respondents about recommendations are higher to those obtained by Akhtar (1983) who observed that 71 % of the respondents were fully aware of and adopted the recommended number of irrigation. The main reasons for non-adoption of proper time of irrigation were lack of awareness, shortage of water and lack of interest as shown in Table 1. The above said results are in consonance with Hanif (1983) who concluded that main reasons for non-adoption of recommended irrigation intervals in sugarcane were non-availability of canal water, insufficient quantity of irrigational water and high rates of tubewell water.

The research indicates that 91.66, 85.33 and 21.66% of the respondents were aware of recommended doses of fertilisers like farm yard manure, urea for young plants, urea for above 4 year plants, sulphate of ammonia for above 4 year plants in each (500 g plant⁻¹ for 20 x 20 ft and 200 g plant⁻¹ for 15 x15 ft), sulphate of potash for young plants, respectively. Whereas 70.83, 14.17, 12.50 and 11.66% of the respondents had adopted recommended doses of farm yard manure, urea for young plants and above 4 year plants, sulphate of ammonia for above 4 years, urea and sulphate of potash for fruit bearing plants in each case, respectively. These research findings approximately coincide with those of Hussain (1982) who concluded that 26.00% of respondents had adopted recommended doses of N. Although majority 65.00% of the respondents had used more than the recommended doses of P, yet 19.00% of them had applied recommended doses of phosphorus. The certain reasons for non-adoption of F.Y.M. and chemical fertilisers were the inadequate availability of irrigation water, less availability of fertilisers, lack of finance, lack of interest and transportation problems as reported by 89.16, 47.50, 40.83, 19.00 and 15.83% of the respondents, respectively. These findings are related to Athar (1982) who found that the main reasons for the non-adoption of recommended doses of fertilisers, lack of irrigation water, lack of knowledge and parity of fund.

REFERENCES

- Anonymous, 2000. Agricultural Statistics of Pakistan. Ministry of Food, Agriculture and Coopertives, Food and Agriculture Division, Economic Wing, Islamabad.
- Hanif, S., 1983. A study into the extent of adoption of improved sugarcane cultivation techniques by the farmers in Tehsil summandri of Faisalabad District. M.Sc. Thesis, University of Agriculture, Faisalabad, Pakistan.

- Hussain, R., 1982. A case study of successful cotton growers of Tehsil chistian, district Bahawalpur. M.Sc. Thesis, University of Agriculture, Faisalabad, Pakistan.
- Akhtar, M.S., 1983. A study into the adoption behaviour of farmers regarding recommendations of sugarcane cultivation. In Leiah Tehsil, District Leiah. M.Sc. Thesis, University of Agriculture Faisalabad, Pakistan.
- Athar, M.A., 1982. An appraisal of adoption of commercial fertilisers to major crops by farmers in Tehsil sammandri of Faisalabad District. M.Sc. Thesis, University of Agriculture Faisalabad, Pakistan.