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IDENTIFICATION AND PRIORITIZATION OF PRODUCTION, PROTECTION AND MARKETING PROBLEMS FACED BY THE RICE GROWERS

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Rice occupies a conspicuous place in agricultural crops. It is cultivated in at least 114 countries of the world. Total world rice production in 2007-08 was 420,618 thousand metric tones. In Pakistan, rice is the third largest crop in terms of area and is cultivated over an area of about 2.6 million hectares with the production of about 5.54 million tones and an average yield of 2117 kg/ha. The present study was conducted in Tehsil Hafizabad, District Hafizabad to identify and prioritize the production, protection, and marketing problems faced by the rice growers. Out of 20 rural union councils, five were selected randomly. From each randomly selected union council, two villages were randomly targeted to select the sample respondents. From each selected village fifteen farmers were selected at random. There by making a total sample size of 150 respondents. The data was collected through a validated interview schedule. The data obtained was analyzed with the help of Statistical Package for Social Sciences (SPSS). Timely unavailability of fertilizers, high prices of inputs and expensive labour for nursery transplantation were perceived to be the top most problems faced by rice growers and fell under very high category, while lack of finance and shortage of labour during transplantation were perceived to be high regarding production problems. High prices of pesticides, adulteration in fungicides and expensive labour for plant protection measures were perceived to be the top most problems and fell under very high category, while non-availability of fungicides when needed and adulteration in pesticide were perceived to be high regarding protection problems. Monopoly of middle men, late payments by the dealers and high carriage and other handling charges were perceived to be the top most problems and fell under very high category, while lack of storage facilities and distant markets were perceived to be high regarding marketing problem faced by rice growers.
Keywords: Rice, marketing, production, protection.

INTRODUCTION

In Pakistan, rice is the third largest crop in terms of area and is cultivated over an area of about 2.6 million hectares with the production of about 5.54 million tones and an average yield of 2117 kg/ha (Govt. of Pakistan, 2006-07). The annual share of rice in exports is rapidly increasing i.e. from 4.7 % in 1992-93 to 6.9% in 2005-06 (Govt. of Pakistan, 2005-06).

Rice is high valued cash crop and is also a major export item. It accounts for 6.1% of the total value added in agriculture and 1.3% to GDP (Govt. of Pakistan, 2006-07). It is evident that rice is an important cash crop of Pakistan but its average yield i.e. 2117 kg/ha is very low as compare to its potential yield (Govt. of Pakistan, 2006-07). There is a almost 50% gap between the actual and potential yield in rice. The reason for this gap in yield is the poor rice production practices adopted by the rice growers (Rehman *et al.*, 2007). This wide gap between average and potential yield of rice in Pakistan is due to several reasons relating to production, protection and marketing issues. Production problems included poor nursery sowing, nursery management, transplant, late sowing, poor supply of inputs, imbalance use of fertilizers and untimely irrigation scheduling (Bhatti, 2000). There are many protection problems such as moisture contents and temperature are critical as these determine small or full cracks in grain structure. Purity is related to the presence of dockage in the grain. It refers to material other than paddy and includes chaff, stones, weed seeds, soil particles, rice straw, stalks, etc. These impurities come from the field or from the drying floor. Unclean paddy increases cleaning and processing time (Farooq *et al*., 2007). There are many marketing problems such as monopoly of middlemen, false weighing, illegal dues and deductions, involvement of local contractors, lack of marketing extension service and lack of advance marketing loans to small farmers (Basra *et al*., 2006). In order to enhance per hectare yield of rice, it is essential to thoroughly investigate into all such problems so that these could be properly addressed. Thus the present study has been planned to identify and prioritize of production, protection, and marketing problems being faced by rice growers in Tehsil Hafizabad.

MATERIALS AND METHODS

The study was conducted in Tehsil Hafizabad of district Hafizabad. Tehsil Hafizabad comprises 37 union councils, which are distributed as 20 rural and 17

urban union councils. Since the study related to identify and prioritize the production, protection and marketing problems faced by the rice growers in Tehsil Hafizabad, so the rural union councils were taken for this research project. The data for the study were collected from 5 randomly selected rural union councils. From each randomly selected union council, two villages were randomly targeted to select the sample respondents. From each selected village, fifteen respondent farmers were selected for making a sample of 150 respondents. In order to know the relative rank order of various problems faced by rice growers regarding the production, protection and marketing of rice, their relative scores were computed by multiplying score valve allotted to each category of the scale with the frequency counts.

RESULTS AND DISCUSSION

Problems faced by the rice growers regarding the production of rice

The data given in the Table 1 shows that respondents identified a number of problems but intensity varied from low to very high. Timely unavailability of fertilizers, high prices of inputs and expensive labour for nursery transplantation were perceived to be the top most problems and fell under high category with mean values of 4.8, 4.3 and 4.2, respectively, while lack of finance and shortage of labour during transplantation were perceived to be high with mean values of 4.0 and 3.78, respectively. Lack of farm implements/machinery and shortage of irrigation water were perceived medium with mean values of 3.7 and 3.0, respectively. Adulteration in fertilizers, adulteration in seed and unavailability of seed for nursery were perceived low with mean values of 2.4, 2.1 and 1.9, respectively. Ranking of the problems showed that timely unavailability of fertilizers, high prices of inputs and expensive labour for nursery transplantation were ranked 1st, 2nd and 3rd ,respectively. Adulteration in fertilizers, adulteration in seed and unavailability of seed for nursery were ranked 8th, 9th and 10th ,respectively. The above research findings coincided with those of Siddique (1990) who concluded that high cost of chemicals, lack of finance, lack of labor and shortage of irrigation water were the main difficulties faced by 79, 19 and 78.3% of the respondents, respectively. Niazi (1993) also found that high price of inputs, adulteration in chemicals and fertilizers, lack of technical knowledge, non-availability of fertilizers at proper time and lack of finance were the major difficulties faced by respondents.

Table 1. Ranking of the problems faced by rice growers regarding production technology

Problems	Rank order	Score	Standard deviation
Timely unavailability of fertilizers	1	726	0.41
High prices of inputs	2	654	0.62
Expensive labour for nursery transplantation	3	636	0.58
Lack of finance	4	609	0.46
Shortage of labour during transplantation	5	567	0.57
Lack of farm implements/machinery	6	549	0.80
Shortage of irrigation water	7	462	0.56
Adulteration in fertilizers	8	366	0.60
Adulteration in seed	9	321	0.34
Unavailability of seed for nursery	10	288	0.74

Problems faced by rice growers regarding crop protection

The data given in the Table 2 shows that respondents identified a number of problems but intensity varied from low to very high. High prices of pesticides, adulteration in fungicides and expensive labour for plant protection measures were perceived to be the top most problems and fell under very high category with mean values of 3.8, 3.6 and 3.2 respectively, while non-availability of fungicides when needed and adulteration in pesticide were perceived to be high with mean values of 3.2 and 3.0 respectively. Shortage of labour for plant protection measures and non-availability of herbicides when needed were perceived medium with mean values of 3.0 and 2.9 respectively. Non-availability of pesticide when needed and adulteration in herbicides were perceived low with mean values of 2.9 and 2.8 respectively. Ranking of the problems showed that high prices of pesticides, adulteration in fungicides and expensive labour for plant protection measures were ranked 1st, 2nd and 3rd respectively. Non-availability of herbicides when needed, non-availability of pesticide when needed and

Table 2. Ranking of the problems faced by rice growers regarding crop protection

Problems	Rank order	Score	Standard deviation
High prices of pesticides	1	579	0.40
Adulteration in fungicides	2	552	0.73
Expensive labour for plant protection measures	3	552	0.50
Non-availability of fungicides when needed	4	492	0.66
Adulteration in pesticide	5	459	0.61
Shortage of labour for plant protection measures	6	450	0.63
Non-availability of herbicides when needed	7	447	0.64
Non-availability of pesticide when needed	8	447	0.42
Adulteration in herbicides	9	423	0.65

adulteration in herbicides were ranked 7th, 8th and 9th respectively. Von (2004) reported that chemical plant protection has made important advances in recent. It contributed substantially to raising and guaranteeing yield and product quality. Increases in the productivity of crop cannot be achieved without chemical plant protection and will continue to play a vital role in plant protection. The above research findings coincided with those of Chaudhry (1980) who pointed out that main problems which fell in plant protection measures were high cost of pesticides, lack of knowledge about the use of plant protection measures and lack of finance. Aslam (1987) also report that the main problems faced by small farmers regarding plant protection measures were lack of finance and technical knowledge, lack of labor and non- availability of chemicals and spraying machinery.

Problems faced by rice growers regarding marketing of rice

The data given in the Table 3 showed that respondents identified a number of problems but intensity varied from low to very high. Monopoly of middle men, late payments by the dealers and high carriage and other handling charges were perceived to be the top most problems and fell under very high category with mean values of 4.84, 4.44 and 3.90 respectively, while lack of storage facilities and distant markets were perceived to be high with mean values of 3.88 and 3.80 respectively. High storage cost, extra commission and high market committee fee were perceived medium with mean values of 3.80, 3.76 and 3.60 respectively. Less price of rice in markets, shortage of transport and lack of information about market prices were perceived low with mean values of 3.50, 3.38 and 3.02 respectively. Ranking of the problems showed that monopoly of middle men, late payments by the dealers and high carriage and other handling charges were ranked 1st, 2nd and 3rd respectively. Less price of rice in markets, shortage of transport and lack of information about market prices were ranked 9th, 10th and 11th respectively. The above research findings coincided with those of Mushtaq and Dawson (2001) reported prices were high for cash crops (cotton and sugarcane) and low for food crops (wheat and rice). Manweni (1994) also reported to provide adequate transport

Table 3. Ranking of the problems faced by rice growers regarding marketing of rice

Problems	Rank order	Score	Standard deviation
Monopoly of middle men	1	726	0.36
Late payments by the dealers	2	666	0.63
High carriage and other handling charges	3	585	0.57
Lack of storage facilities	4	582	0.51
Distant markets	5	570	0.60
High storage cost	6	570	0.53
Extra commission	7	564	0.51
High market committee fee	8	540	0.56
Less price of rice in markets	9	525	0.61
Shortage of transport	10	507	0.56
Lack of information about market prices	11	453	0.54

facilities. Because of the lack of roads to market or the higher freight charges resulting in less incentive to growers. Ali (1992) also reported that producers of basmati rice were heavily taxed during the period 1985-90. Anjum (2000) also report that village traders, merchant and commission agents, occupied an important position among market functionaries. They had their own terms to the growers in the disposal of their produce.

CONCLUSIONS

Timely unavailability of fertilizers, high prices of inputs and expensive labour for nursery transplantation were perceived to be the top most problems faced by rice growers and fell under very high category, while lack of finance and shortage of labour during transplantation were perceived to be high regarding production problems. High prices of pesticides, adulteration in fungicides and expensive labour for plant protection measures were perceived to be the top most problems and fell under very high category, while non-availability of fungicides when needed and adulteration in pesticide were perceived to be high regarding protection problems. Monopoly of middle men, late payments by the dealers and high carriage and other handling charges were perceived to be the top most problems and fell under very high category, while lack of storage facilities and distant markets were perceived to be high regarding marketing problem faced by rice growers in Hafizabad.

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