



## PROFILE CHARACTERISTICS OF MAIZE FARMERS IN MAHMUD-I-RAQI DISTRICT OF KAPISAA PROVINCE OF AFGHANISTAN

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### ABSTRACT

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The present investigation was carried out to study the profile characteristics of maize farmers in Mahmud-i-raqi district of Kapisa province one of major maize production province in Afghanistan. *Ex-post facto* research design was followed for the study and a sample of 120 respondents were drawn. The results of the study revealed that most of the respondents were young aged (39.17%), illiterate to middle school educated (30.00%), had medium experience in maize cultivation (63.33%), small farm size (58.33%), had medium mass media exposure (63.33%), medium extension contact (69.17%), low social participation (59.17%), medium scientific orientation (64.17%), medium economic orientation (65.00%), medium innovativeness (63.33%), medium achievement motivation (66.67%) and medium deferred gratification (77.50%).

**KEY WORDS:** Profile characteristics, maize farmers, extension contact

### INTRODUCTION

Maize enjoys an important position in the existing cropping systems of Afghanistan. It ranks third after wheat and rice in the country for its grain production. Maize is grown in almost all the provinces of the country. It is not only consumed by human beings in the form of food grain but it is also used as feed for livestock and poultry besides being a good forage crop. Maize is grown twice a year in Afghanistan (Spring and Autumn). In Afghanistan, it is grown on 0.142 million hectares in all of the provinces in irrigated and rainfed areas. The total production of maize in the country is 0.312 million tons with an average productivity of 2.20 tons per hectare. The average grain yield of maize is not only substantially lower compared with other important maize growing countries even though the soil and climatic conditions of Afghanistan are favorable for maize production. Mahmud-i-raqi district of Kapisa province is one of the major maize growing areas of Afghanistan. Farmers are still using traditional low yielding varieties and are not adopting the latest production recommendations leading to low yields of maize. The present research paper focuses on the profile characteristics of maize farmers in the Kapisa province. The main study on the adoption of production recommendations of maize farmers would provide better insight into the suggestions made by them which would

help in improvement of extent of adoption of new production technologies for increasing production and productivity of maize.

### MATERIAL AND METHODS

*Ex-post-facto* research design was used in the present investigation. Mahmud-i-raqi district of Kapisa was purposively selected as maize was being extensively cultivated in the district. Four villages from the district viz., Ashor Khil, Deh Baba Ali, Bazar MuradKhawja and Deh Babi were randomly selected. From each of the selected villages, 30 respondents were selected by following simple random sampling procedure thus making a total of 120 respondents who were cultivating maize crop. The data were collected by personal interview method through structured interview schedule and analyzed by employing suitable statistical tools like arithmetic mean, standard deviation, frequencies and percentages were used.

### RESULTS AND DISCUSSION

The profile characteristics studied in the study were age, education, farming experience, farm size, mass media exposure, extension contact, social participation, scientific orientation, economic orientation, innovativeness, achievement motivation and deferred gratification.

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## 1. Age

It is clear from the Table 1 that about 39.17 per cent of the respondents belonged to young age, followed by middle (35.83%) and old (25%) age categories. The probable reason for the above result might be that more than eighty per cent population of Afghanistan are directly and indirectly depend to agriculture, diary and allied activities as the country's development is crippled with frequent societal disturbances. Agriculture is the major provider of finance for most of families, hence young and middle aged rural people are preferring agriculture. Old people are retained in the homes as a mark of respect.

## 2. Education

It is evident from the Table 1 that 30 per cent of the respondents were illiterate followed by respondents who had education upto middle school (20.83%), high school (20.83%), and university level education (17.5%). Therefore from the above results it could be concluded that majority of the maize farmers were illiterate. Poor financial status and absence of formal education institutions in nearby might be the probable reasons for the low educational status. The similar results were presented by Begum (2008), Divaker (2013).

## 3. Farming experience

It is clear from the Table 1 that 65 per cent of the respondents were grouped under medium farming experience followed by low (14.17%) and high (20.83%) farming experience. The medium experience of the respondents in farming might be attributed to their younger to middle age. Definitely the farming experience is an important factor which influences the farmers to accept, evaluate and experiment the innovative technologies in their farm. But the richness of farming experience is more important than quantity. Hence, to improve the quality and richness of farming experience the extension agencies have to conduct different extension activities.

## 4. Farm size

It is clear from the Table 1 that 58.33 per cent of the respondents were small farmers followed by medium (15.83%), big (19.17%) and marginal farmers (6.67%). It could be inferred from the results that the sub division and fragmentation of the farm land from one generation to another generation was the main cause for declining

the land holding size of farmers. Hence the present study also depicted the same trend of more small land holders.

## 5. Mass media exposure

It is evident from the Table 1 that 68.33 per cent of the respondents had medium level of mass media exposure followed by high (18.33%) and low (13.34%) levels of mass media exposure. The possible reason for the above results might be due to presence of few number of mass media channels *viz.*, television, radio, news papers etc. The covering of different aspects of agriculture. This result was in agreement with Reddy (1998).

## 6. Extension contact

It is revealed from the Table 1 that, 69.17 per cent of the respondents had medium extension contact followed by high (18.33%) and low (12.50%) levels of extension contact. The probable reason for the above trend might be due to the fact that majority of the respondents were small and marginal famers with low level of education and poor economic status, hence they were not in frequent touch with the extension agencies and research stations. The number of extension staff is very poor and the number of visits made by the number of extension staff is also very less. Moreover extension staff might have concentrated their efforts on big farmers rather than small and marginal farmers. Hence the above trend was observed. This finding was in line with the results of Reddy (1998).

## 7. Social participation

It is observed from the Table 1 that 59.17 per cent of the respondents had low level of social participation followed by medium (45.37%) and high (3.33%) levels of social participation. From the above results it could inferred that majority of the maize farmers had low level of social participation followed by medium and high levels of social participation. The probable reason for the above trend might be due to the fact that most of the respondents are illiterates, had small and marginal land holdings, with meagre funds, limited resources and limited contacts with external organizations.

## 8. Scientific orientation

The findings presented in the Table 1 that 64.17 per cent of the farmers had medium level of scientific orientation,

followed by high (23.33%) and low (12.50%) levels of scientific orientation. Thus, it is inferred that majority of the respondent had medium level of scientific orientation followed by high and low levels of scientific orientation. This might be attributed to moderate trustworthiness of farmers towards scientific methods of production, lower or no access to scientific methods of cultivation, as well as medium to low extension participation and mass media exposure.

### **9. Economic orientation**

It is found from the Table 1 that 65 per cent of the respondents had medium level of economic orientation followed by high (20.83%) and low (14.17%) economic orientation. From the above results it could be inferred that majority of the maize farmers had medium economic orientation followed by high and low levels of economic orientation. This trend might be because most of the farmers being marginal and small and indulge or practise subsistence agriculture, besides less marketing facilities, only few big and medium farmers could be able to market the produce outside their village.

### **10. Innovativeness**

It is revealed from the Table 1 that 63.33 per cent of the respondents had medium level of innovativeness followed by high (22.50%) and low (14.17%) levels of innovativeness. The possible reason for the above trend might be that the farmers with higher education and extension contact could be able to update their knowledge and skills time to time and were ready to accept the new technologies. On the other side, as most of the farmers were illiterate and resource poor they lack awareness of new technologies and were not able to take risk in adoption of such technologies.

### **11. Achievement motivation**

It is evident from the Table 1 that 66.67 per cent of the respondents had medium level of achievement motivation followed by low (20.00%) and high (13.33%) levels of achievement motivation. The above results might be because of the reason that most of the respondents were illiterates, traditional and had medium profile characteristics. Many of the farmers were not knowing better planning and goal setting of their farm activities.

### **12. Deferred gratification**

The findings presented in the Table 1 indicated that 77.50 per cent of the respondents had medium deferred gratification followed by high (15.00%) and low (7.50%) levels. From the above results it could be inferred that majority of the maize farmers had medium deferred gratification followed by high and low levels of deferred gratification. This might be due to the reason that many of the respondents are small and marginal farmers and were doing subsistence agriculture and allied activities for day to day living.

## **CONCLUSION**

The findings revealed that majority of the farmers were young aged, illiterate, with medium farming experience in maize cultivation, with small holdings and had medium mass media exposure, medium extension contact, medium social participation, medium scientific orientation, medium economic orientation, medium innovativeness, medium achievement motivation and medium deferred gratification. Hence, it is imperative to focus on the personal and socio-psychological attributes of maize farmers while designing appropriate extension strategies with more training programs and demonstrations to strengthen the various attributes of maize farmers which in turn influence their extent of adoption of production recommendations of maize.

**Table 1 Distribution of respondents according to their profile characteristics (n=120)**

S. No	Variables	Category	Respondents	
			Frequency	Percentage
1	Age	Low	47	39.17
		Medium	43	35.83
		High	30	25.00
2	Education	Illiterate	36	30.00
		Can read and write only	13	10.84
		Middle school	25	20.83
		High school	25	20.83
		Institute	0	0.00
		University	21	17.50
3	Farming experience	Low	17	14.17
		Medium	78	65.00
		High	25	20.83
4	Farm size	Below 1 acre of wetland	8	6.67
		Between 1 to 2 acres of wetland	70	58.33
		Between 2 to 4 acres of wetland	19	15.83
		Above 4 acres of wetland	23	19.17
5	Mass media exposure	Low	16	13.34
		Medium	82	68.33
		High	22	18.33
6	Extension contact	Low	15	12.50
		Medium	83	69.17
		High	22	18.33
7	Social participation	Low	71	59.17
		Medium	45	37.50
		High	4	3.33
8	Scientific orientation	Low	15	12.50
		Medium	77	64.17
		High	28	23.33

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9	Economic orientation	Low	17	14.17
		Medium	78	65.00
		High	25	20.83
10	Innovativeness	Low	17	14.17
		Medium	76	63.33
		High	27	22.50
11	Achievement motivation	Low	24	20.00
		Medium	80	66.67
		High	16	13.33
12	Deferred gratification	Low	9	7.50
		Medium	93	77.50
		High	18	15.00

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