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Socio-Economic Impact of Technologies Developed By Agricultural Universities on Farmers With Respect To Pomegranate

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***Abstract* – A majority of farmers had experience more than 20 years (60.00 per cent), good irrigation status (77.50 per cent) and high adoption index (62.50 per cent) that means the said per cent of respondents highly adopted the recommended technologies of Agriculture University. Majority of respondents had medium to high impact of technologies in yield (70.00 per cent), agricultural assets (62.50 per cent) and household assets (60.00 per cent). All the respondents faced constraints like unavailability of assured irrigation water, unavailability of effective control measures against oily spot disease on pomegranate which is vulnerable problem in pomegranate cultivation in the area. All the farmers suggested regarding land slab and drip subsidies increased and effective control measures for oily spot disease.**

***Keywords* – Agricultural Universities, Impact, Pomegranate, Socio-Economic, Technologies.**

I. INTRODUCTION

The origin of pomegranate *(Punica granatum*) is Iran. Pomegranate (*Punica granatum*) is major crop in drought prone area of Maharashtra having 1,70,000 ha.area under cultivation in 2010-2011 with production of 492 MT in same year. In 2009-2010, the Sangli district has 8238 ha area under pomegranate. *Atpadi* is said to be main pomegranate growing tahsil of *Sangli* district having area 3200 ha under pomegranate fruit crop. Pomegranate is said to be a boon for drought prone area but now a days this crop is heavily infested by oily spot disease with a view this project is conducted with crop the following objectives.

1. To assess the socio economic impact of recommended technologies developed by university in Pomegranate on farmers
2. To understand the constraints faced by the farmers in adopting the recommended technologies in Pomegranate.
3. To seek the suggestions of farmers for overcoming the constraints in adoption of recommended technologies

II. METHODOLOGY

The study was conducted in jurisdiction of Mahatma Phule Krishi Vidyapeeth, Rahuri. *Atpadi* Tahsil of *Sangli* district from *Kolhapur* region was selected purposively as number of pomegranate growers is large in the area. In all 8 villages from *Atpadi* tahsil were selected randomly. Five farmers from each village having at least one acre land under pomegranate cultivation for last five years were selected randomly. The farmers were interviewed with the help of structured interview schedule personally. In all 40 farmers were selected for this study.

The data were tabulated and processed through the primary and secondary tables. The statistical tools like frequency, percentages, and means of the averages was used for interpreting the data and inferences are drawn. For calculating knowledge and adoption of recommended technologies Score method is used. For analyzing the impact, percent change was calculated for Knowledge, Adoption and Scio-economic status before and after adoption of recommended technologies.

III. RESULT AND DISCUSSIONS

The data regarding socio economic profile of respondents is given below

Socio-economic profile

Table 1: Distribution of respondents according to their socio-economic profile

S. No.	Characteristics	No. of Respondents (n=40)	Percentage
1.	**Age**		
	• Young (up to 35 years)	05	12.50
	• Middle (36-50 years)	13	32.50
	• Old (51& above)	22	55.00
2.	**Education**		
	• Illiterate	06	15.00
	• Pre- Primary	04	10.00
	• Primary	06	15.00
	• Secondary	15	37.50
	• Higher secondary	03	07.50
	• Degree & above	06	15.00
3.	**Size of Land holding (ha)**		
	• Marginal (Up to 1.00)	-	
	• Small (1.01 to 2.00)	10	25.00
	• Semi Medium (2.01 to 4.00)	20	50.00
	• Medium (4.01 to 10.00)	08	20.00
	• Large (10.01 and above)	02	05.00
4.	**Farming Experience (Years)**		
	• Up to 10	07	17.50
	• 11 to 20	09	22.50
	• Above 20	24	60.00
5.	**Irrigation status**		
	• Poor	01	02.50
	• Fair	31	77.50
	• Good	08	20.00

The data regarding socio-economic profile of respondents are depicted in table 1 and it is reveled from data that fifty five per cent of respondents are from old age group and having education up to secondary (37.50 per cent). More than half per cent of respondents are semi-medium type of land holding (50.00 per cent), experience more than 20 years (60.00 per cent), and good irrigation status (77.50 per cent).

Adoption Index:

In present study adoption of the recommended technologies of pomegranate crop by respondents are assessed in table 2

Table 2: Distribution of respondents according to their adoption index

S.No.	Categories	Frequency (n = 40)	Percentage
1.	Low : Up to 33.33	01	02.50
2.	Medium : 33.34 to 66.66	14	35.00
3.	High : 66.67 and above	25	62.50

The data from table 2 indicates that majority of respondents (62.50 per cent) had high adoption index that means the said per cent of respondents highly adopted the recommended technologies of Agriculture University. The probable reason for majority might be due to agricultural university jurisdiction of the selected district.

Impact of technologies

Impact of technologies are assessed in terms of educational change, change in social participation, change in annual spending pattern etc. are depicted in table 3.

Table 3: Distribution of respondents according to impact of technologies

S. No.	Impact of Technologies	Frequency (n=40)	Percentage
1.	**Educational change**		
	• No change	06	15.00
	• Low : Up to 33.33	21	52.50
	• Medium : 33.34 to 66.66	11	27.50
	• High : 66.67 and above	02	05.00
2.	**Change in income from selected crop**		
	• No change	00	00.00
	• Low : Up to 33.33	34	85.00
	• Medium : 33.34 to 66.66	04	10.00
	• High : 66.67 and above	02	05.00
3.	**Change in Employment**		
	• No change	01	02.50
	• Low : Up to 33.33	18	45.00
	• Medium : 33.34 to 66.66	18	45.00
	• High : 66.67 and above	03	07.50
4.	**Change in Monthly Thrift habit**		
	• No change	03	07.50
	• Low : Up to 33.33	30	75.00
	• Medium : 33.34 to 66.66	02	05.00
	• High : 66.67 and above	05	12.50
5.	**Change in Cropping Pattern**		
	• No change	11	27.50
	• Low : Up to 33.33	23	57.50
	• Medium : 33.34 to 66.66	05	12.50
	• High : 66.67 and above	01	02.50
6.	**Change in Land Utilization Pattern**		
	• No change	07	17.50
	• Low : Up to 33.33	24	60.00
	• Medium : 33.34 to 66.66	04	10.00
	• High : 66.67 and above	05	12.50
7.	**Change in Yield**		
	• No change	0	00.00
	• Low : Up to 33.33	12	30.00
	• Medium : 33.34 to 66.66	16	40.00
	• High : 66.67 and above	12	30.00

A majority of respondents had low impact of technologies in income from selected crop (85.00 per cent) followed by change in monthly thrift habit (75.00 per cent) and change in land utilization (60.00 per cent). Majority of responds hared medium to high impact of technologies in yield (70.00 per cent). The reason might be the education of respondents up to secondary level.

Overall impact of technology:

Impact of technologies are assessed in terms of educational change, change in social participation, change in annual spending pattern etc. are depicted in table 4.

Table 4 : Distribution of respondents according to overall impact of Technology

S. No	Category	Frequency (n=40)	Percentage
1.	No change	03	07.50
2.	Low : Up to 33.33	22	55.00
3.	Medium : 33.34 to 66.66	09	22.50
4.	High : 66.67 and above	06	15.00

Considering the overall impact of the technology on the respondents it is observed from table 4 that 55.00 percent of respondents had low impact to that of 37.50 percent who had medium to high overall impact of technologies developed by agricultural university.

IV. Conclusions

1. A majority of farmers had experience more than 20 years (60.00 per cent), good irrigation status (77.50 per cent) and high adoption index (62.50 per cent) that means the said per cent of respondents highly adopted the recommended technologies of agriculture university.
2. A large majority of respondents had low impact of technologies in case of change in house (95.00 percent) followed by change in income from selected crop (85.00 per cent), livestock assets (85.00 per cent).
3. Majority of respondents had medium to high impact of technologies in yield (70.00 per cent), agricultural assets (62.50 per cent) and household assets (60.00 percent).
4. More than half percent of respondents had low impact to that of 37.50 percent who had medium to high overall impact of technologies developed by agricultural university.

References

[1] Angadi S.C., "A study on knowledge adoption and marketing pattern of pomegranate growers in Bagalkot district in Karnataka state" M.Sc. (Agri) Thesis, University of Agricultural Sciences, Dharwad (K.S.), 1999

[2] Jayale P.S., 'A study on extent of adoption and sustainability of horticultural crops advocated by horticulture department M.Sc (Agri.) Thesis, Marathwada Agricultural University, Parbhani (M.S.), 1992

[3] Bhosale S. S., "Knowledge and adoption of Post Harvest Technology by the Pomegranate Growers in Sangola Tahsil of Solapur District." M.Sc (Agri.) Thesis, submitted to the M.P.K.V.Rahuri (M.S.) 2003.

[4] Kumar, H. S. " A study on knowledge adoption and economic performance of banana growers.'' M.Sc. (Agri) Thesis, University of Agricultural Sciences, Dharwad (K.S.), 1998.

[5] Kolgane,B.T., Jagdale U.D.,Tale N.N. and Bhingardeve S.D., "Socio-economic Impact of Technologies Developed by Agricultural Universities on Farmers with respect to Pomegranate.". Reaserch project submitted to the Research Review Committee, M.P.K.V.,Rahuri (M.S.). 2013.