

# Profile Characteristics of the Farmers in the Adopted and Non-Adopted Villages of the Guntur District

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#### ABSTRACT

An evaluation study of Village Adoption Programme (VAP) was undertaken with the objective to assess the difference between the profile characteristics of the farmers in the adopted and non-adopted villages of the Guntur district. Study revealed that there was a significant difference between the farmers of adopted and nonadopted villages regarding age, education, land holding, material possession, annual income, occupation, farming experience, training received, extension contact, innovativeness, social participation, mass media exposure, market orientation and achievement motivation.

# Key words: Adopted village, Non- adopted village, Profile characteristics, VAP.

The Village Adoption Programme (VAP) is to bring socio-economic development in villages by way of involving the village communities as a whole. It should be comprehensive and cover overall development of rural people instead of aiming at sectorial needs *i.e.*, agriculture alone. The central theme of VAP is to give proper leadership, community acceptance, organizational support, supplies and services. It is possible to secure this through common action, leading to increase in agricultural production and benefits of lasting value to the rural economy. The basic concept of VAP is guided self help with a goal to guide the village people towards their self employment. It is to make permanent and substantial changes in the area of operation.

Research studies have revealed that the profile characteristics of farmers are having a great contribution in the extent of participation of farmers in the development programmes and in seeking advanced technology from research institutes. Considering the above facts in a View, the present study was planned with a specific objective to study the difference between the farmers of adopted and non-adopted villages of Guntur district regarding the profile characteristics.

### MATERIAL AND METHODS

The present study was undertaken in Guntur district of Andhra Pradesh during 2014 -2015 by adopting ex-post-facto research design in purposively selected two villages namely Appikatla (adopted) and Bharthipudi (non-adopted) from Bapatla mandal of Guntur district. A total of 120 respondents were selected with equal proportions i.e. 60 respondents from adopted village and 60 respondents from non-adopted village. Data was collected through a well structured interview schedule. The collected data were coded, classified and tabulated. Finally, the statistical tests like 'Z' test, mean, standard deviation, frequency, percentage, were used for meaningful findings and for drawing conclusions.

### **RESULTS AND DISCUSSION**

Table 1, vividly depicted that more than half (53.33%) of the respondents of adopted village were under middle age group followed by the rest coming under old (36.67%) and young (10.00%) age groups. In case of non-adopted village, majority (58.33%) of the respondents were under middle age group followed by the remaining coming under young (21.67%) and old (20.00%) age groups.Calculated 'Z' value (5.00) found to be significant at 0.01 level of probability.

From the above results, it could be concluded that middle and old age groups were approximately 90.00 per cent from the adopted village and 78.33 per cent from the non-adopted village, therefore respondents in the adopted village depend on agriculture as main source of occupation and having more experience in farming than the non-adopted village farmers. This might be the reason have above trend.

From the Table1, it was evident that nearly one third (28.33%) of the farmers of adopted village belonged to primary school followed by those belonging to high school (18.33%), middle school (16.67%), illiterates (15.00%), intermediate (8.33%) and remaining 13.33 per cent had graduation. In case of non- adopted village, one third (33.33%) of the farmers were illiterates followed by those belonging to primary school (23.33%), middle school (15.00%), high school (13.33%), graduation (10.00%) and intermediate education (5.00%). Calculated 'Z' value (3.78) found to be significant at 0.01 level of probability.

From the above results it was found that only 15.00 per cent of the respondents of adopted village were illiterates and a great 85.00 per cent of them were literates, because of having more educational facilities in the village and Whereas, in non-adopted village one third (33.33%) of the respondents were illiterates and this is due to nonavailability of educational facilities in the village and lack of awareness about importance of education. It is therefore, necessary to establish education centers in the non-adopted village to improve their literacy level.

A cursory look at the Table 1, indicates that the most (83.33%) of the respondents of adopted village were big farmers followed by small (16.67%), and not even single farmer falls under category of marginal farmers. In case of nonadopted village, majority (60.00%) of the respondents were small farmers, followed by rest being big farmers (25.00%) and marginal farmers (15.00%). Calculated 'Z' value (6.02) found to be significant at 0.01 level of probability.

From the above results, it is observed that land holding of the adopted village is more than the non-adopted village. This might be due to majority of the respondents of adopted village being big farmers with higher land holdings and gaining major income from agriculture itself. In case of nonadopted village, majority of the respondents being small farmers and deriving their sustenance from agricultural labour besides farming. The above findings were in line with the findings of Nayak *et al.* (2014).

From the Table 1, it was evident that half of the (50.00%) respondents had high material possession followed by those with medium (41.67%) and low (8.33%) level of material possession. In

case of non-adopted village one third (38.33%) of the respondents had medium level of material possession followed by the rest with high (33.33%) and low (28.33%) level of material possession. Calculated 'Z' value (2.13) found to be significant at 0.05 level of probability.

The plausible reasons for the above trend might be due to the fact that the majority of the respondents of adopted village being big farmers with high income that helps them to possession of farm implements to a great extent that is making them to attain higher yields in turn profits with the effective use of available implements in day to day farming. Whereas, in non-adopted village majority of the respondents being small farmers with low incomes might show less interest towards possession of new farm implements that leads to in-efficient use of resources in cultivation, which reduces yield and profits of the respondents. This trend was also witnessed by Kumar (2006), Singh *et al.* (2009) and Ravindra Reddy *et al.* (2014).

Results furnished in Table 1, illustrated that the most (88.33%) of the respondents of adopted village had high level of annual income followed by those with medium (10.00%) and low (1.67%) level of annual income. In case of non-adopted village more than half (58.33%) of the respondents had low level of annual income, followed by the rest with medium (21.67%) and high (20.00%) level of annual income. Calculated 'Z' value (9.89) found significant at 0.01 level of probability.

This trend might be due to the majority of the respondents of adopted village having their own material possessions and belonging to big farmers category with higher land holdings and having farming as main source of occupation and in case of non-adopted village, respondents belonged to small and marginal farmers category with low level of land holding and agricultural labour besides farming as main source of occupation.

An overview of the Table 1, clearly shows that the majority (83.33%) of the respondents of adopted village had farming as main source of occupation followed by farming + agricultural labour (16.67%) and no one else found in the category of secondary occupation like employment, caste occupation and business. In case of nonadopted village, majority (61.67%) of the respondents had farming + agricultural labour as main occupation followed by farming (35.00%), farming + business (3.33%) and no one else found in the category of secondary occupation like

S.No.	. Independent variables	Adopted village		Non-adopted village		Z value
		Frequency	Percentage	Frequency	Percentag	age
1.	Age		10.00			
	Young age (up to 35 years)	6	10.00	13	21.67	
	Middle age (36 to 50 years)	32	53.33	35	58.33	5.00**
	Old age (>50 years)	22	36.67	12	20.00	
2.	Education					
	Illiterate	9	15.00	20	33.33	
	Primary school	17	28.33	14	23.33	
	Middle school	10	16.67	9	15.00	3.78**
	High school	11	18.33	8	13.33	
	Intermediate	5	8.33	3	5.00	
	Graduation	8	13.33	6	10.00	
3.	Land Holding					
	Marginal farmers (up to 2.5 acres)	0	0.00	9	15.00	6.02**
	Small farmers (2.6 to 5 acres)	10	16.67	36	60.00	
	Big farmers (above 5 acres)	50	83.33	15	25.00	
4.	Material Possession					
	Low	5	8.33	17	28.33	2.13*
	Medium	25	41.67	23	38.33	
	High	30	50.00	20	33.33	
5.	Annual Income					
5.	$L_{00}$ (1.06.000 – 2.90.000)	1	1.67	35	58.33	
	Medium $(2.91,000 - 4.27,000)$	6	10.00	13	21.67	9.89**
	High $(4\ 28\ 000\ -6\ 50\ 000)$	53	88.33	12	20.00	
6	Occupation					
0.	Farming	50	83.33	21	35.00	
	Farming + Fmployment	0	0.00	0	0.00	15.5**
	Farming + Agricultural Labour	10	16.67	37	61.67	
	Farming + Caste Occupation	0	0.00	0	0.00	
	Farming + Business	0	0.00	2	3.33	
7	Farming Function					
8.	Lin to 5 means	3	5.00	8	13.33	
	Up to 5 years	5	8.33	30	50.00	5.32**
	6-10 years	5	8.33	4	6.67	
	11-15 years	47	78.33	18	30.00	
	Above 15 years Training Pagaiyad					
	IT anning Kecerveu	17	28.33	32	53.33	
	No training	36	60.00	28	46.67	8 19**
	1-2 trainings	7	11.67	0	0.00	0.17
9.	Above 2 trainings			•		
	Low	3	5.00	20	33.00	
	Low	26	43 33	21	35.00	2 69*
	Uich	31	51.67	19	32.00	
10	nigii Innevetiveness				22.00	
10.	Innovativeness	4	6 67	15	25.00	
	LUW Modium	16	26.67	30	50.00	4 10**
	Iviculum high	40	66 67	15	25.00	1.10
	1121		00.07	10	20.00	

# Table 1. Distribution of the respondents according to their profile.

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11.	Social Participation					
	Low	8	13.33	37	61.67	
	Medium	23	38.33	0	0.00	5.40**
	High	29	48.33	23	38.33	
12.	Mass Media Exposure					
	Low	14	23.33	22	36.67	
	Medium	16	26.67	24	40.00	4.08**
	High	30	50.00	14	23.33	
13.	Market Orientation					
	Low	4	6.66	10	17.00	
	Medium	25	41.67	26	43.00	4.61**
	High	31	51.67	24	40.00	
14.	Achievement Motivation					
	Low	13	21.67	18	30.00	
	Medium	23	38.33	22	36.67	3.15**
	High	24	40.00	20	33.33	

employment and caste occupation. Calculated 'Z' value (15.5) found significant at 0.01 level of probability.

This might be due to the majority of the respondents of adopted village being big farmers with higher land holdings and more farming experience shows more interest towards agriculture. In case of non-adopted village majority of the respondents belonged to agricultural labour as main source of occupation, because majority of the farmers in non-adopted village were small and marginal farmers with lower land holdings.

A cursory glance at the Table 1, indicated a great majority (78.33%) of the respondents of adopted village had above 15 years of farming experience followed by equal per cent (8.33%) each) having 6 to 10 years and 11 to 15 years of farming experience respectively and 5.00 per cent had up to 5 years of farming experience. In case of non-adopted village half (50.00%) of the respondents had above 15 years of farming experience, followed by those with 6 to 10 years (30.00%), up to 5 years (13.33%) and 11 to 15 years (6.67%) of farming experience. Calculated 'Z' value (5.32) found to be significant at 0.01 level of probability.

The underlying reason for the above finding is due to 78.33 per cent of the respondents of adopted village having above 15 years of experience coming under middle and old age group. There by, with their more experience farmers had more knowledge about a griculture practices and there by motivating other farmers that lead to effective cultivation and in turn more profits.

Whereas, in non-adopted village, only 30.00 per cent of the respondents had above 15 years of farming experience as most of the farmers belongs to young and middle age group who were having low experience in agriculture than the respondents of adopted village.

From the Table 1, it was evident that majority (60.00%) of the respondents of adopted village had 1 to 2 trainings followed by those with no training (28.33%) and remaining 11.67 per cent with more than 2 trainings. In case of non-adopted village, more than half (53.33%) of the respondents had no training followed by those with 1 to 2 trainings (46.67%) and no one had more than 2 trainings. Calculated 'Z' value (8.19) found to be significant at 0.01 level of probability.

Therefore, it could be concluded that respondents of adopted village had received more number of trainings as they had high extension contact and village is adopted by agricultural college, bapatla conducts more number of training programmes. Whereas, in non-adopted village, majority of the respondents were not received any training on agricultural practices due to their low extension contact and non-adoption of village by any institutions or agricultural departments. Similar findings were reported by Nayak (2009) and Sravan kumar (2012).

From Table 1, it was evident that more than half (51.67%) of the farmers of the adopted village had high extension contact followed by those with medium (43.33%) and low (5.00%) extension contact. In case of non-adopted village, one third (35.00%) of the farmers had medium extension contact followed by low (33.00%) and high (32.00%) extension contact. Calculated 'Z' value (2.69) found to be significant at 0.05 level of probability.

From the above result, it could be inferred that the farmers of adopted village had higher level of extension contact than the farmers of nonadopted village. This would have been due to fact that the immediate and long term needs of farmers would force them to have more contacts quantitatively and qualitatively with scientists and extension workers. Whereas, the farmers of nonadopted village depend on personal localite source of information. This could be the reason for the significant difference between the farmers of adopted and non-adopted village regarding extension contact.

From Table 1, it was observed that majority (66.67%) of the respondents of adopted village had high level of innovativeness followed by those with medium (26.67%) and low (6.67%) level of innovativeness. In case of non-adopted village, nearly half (48.33%) of the respondents had medium level of innovativeness followed by remaining with high (23.33%) and low (23.33%) levels of innovativeness. Calculated 'Z' value (4.10) found to be significant at 0.01 level of probability. From above results, it was observed that the farmers of adopted village had high level of innovativeness than the farmers of non-adopted village.

This might be due to their higher farming experience, more number of trainings and high risk taking ability leading them to adoption of innovative technologies than the farmers of non-adopted village. This could be the reason for the significant difference between the farmers of adopted and nonadopted village regarding innovativeness. Similar findings were reported by Ashokan *et al.* (2008).

From Table 1, it could be inferred that nearly half (48.33%) of the farmers in adopted village had high level of social participation followed by those with medium (38.33%) and low (8.00%) levels of social participation. In case of non-adopted village, majority (61.67%) of the farmers had low level of social participation followed by high (38.33 %) levels of social participation and no one else comes under category of medium level of social participation. Calculated 'Z' value (5.40) found to be significant at 0.01 level of probability.

From the above results it could be inferred that most of the respondents of adopted village had

participated socially higher than the farmers of nonadopted village as adopted village farmers invited to the training programmes conducted by agriculture departments, A.O, and A.E.O. this involvement lead them to participate in other social organizations like primary agricultural co-operative societies, panchayats, and milk co-operative societies for getting some social status. Low social participation of farmers of non-adopted village because of their hand to mouth situation which would have a little time to participate in social activities of the village, even if they were interested in them. This could be the reason for the significant difference between the farmers of adopted and non-adopted village regarding social participation.

It was clear from Table 1, that the half (50.00%) of the farmers of adopted village had high level of Mass media exposure followed by those with medium (26.67%) and low (23.33%) levels of Mass media exposure. In case of non-adopted village, two fifths (40.00%) of the farmers had medium level of Mass media exposure followed by those with low (36.67%) and medium (23.33%) levels of Mass media exposure. Calculated 'Z' value (4.08) found to be significant at 0.01 level of probability.

It was clear from the above results that the farmers of adopted village had higher level of exposure to mass media than the farmers of nonadopted village. This might be due to the fact that farmers of adopted village, possessed own television and had subscribed for agricultural magazine *viz.*, Annadata, Padipantalu, Rythu Nestam and books like Vyavasaya panchangam for more updated information with their high social participation might help them to be aware of new ideas and practices.

The farmers of non-adopted village because of their scarce financial sources were not in a position to get information from mass media. Sometimes if they had time, they could not give preference to hear and see the mass media to get new agricultural information. This might be the reason for the significant difference between the farmers of adopted and non-adopted village regarding mass media exposure. The above findings are in conformity with the findings of Madhavilatha *et al.* (2004) and Talukdar *et al.* (2014).

It was clear from Table 4.13 and Figure 4.13, that the more than half (51.67%) of the farmers of adopted village had high level of market orientation followed by those with medium (41.67%)

and low (6.66%) levels of market orientation. In case of non-adopted village, more than two fifth (43.00%) of the farmers had high level of market orientation followed by the remaining with (40.00%) and low (17.00%) and levels of market orientation. Calculated 'Z' value (4.61) found to be significant at 0.01 level of probability.

This result indicates that the farmers of adopted village had higher level of market orientation than the farmers of non-adopted village. The plausible reason for the above trend might be due to the fact that majority of the respondents in adopted village were big farmers and coming under high extension contact and mass media exposure. So that, if there are low price for the produce in that year, they tend to store produce for getting better price in the future. Whereas, respondents of non-adopted village, had low extension contact and mass media exposure and sell their produce immediately after drying to meet their day to day expenses and for repaying their debts and no scope for them to develop better market orientation.

From Table 1, it was evident that two fifth (40.00%) of the respondents of adopted village had high level of achievement motivation followed by those with medium (38.33%) and low (21.67%) levels of achievement motivation. In case of non-adopted village, one third (36.67%) of the respondents had medium level of achievement motivation followed by those with high (33.33%) and low (30.00%) levels of achievement motivation. Calculated 'Z' value (3.15) found to be significant at 0.01 level of probability.

This might be due to the continuous guidance from the agriculture scientists, A.O, A.E.O and other extension officers to farmers keen to get the goal seeking behaviour and their high extension contact was also given additional support to acquire knowledge towards achievement motivation than farmers of non-adopted village. This might be the reason for the significant difference between the farmers of adopted and non-adopted village regarding achievement motivation.

#### CONCLUSIONS

From the above findings it could be concluded that there was shift in the profile characteristics from medium to high in adopted village when compared to medium to low profile characteristics of farmers in non adopted village of Guntur district. Hence the role of VAP need to be further amplified to facilitate them to take advantages of recent technologies to be communicated by various institutions and agencies because of greater level of understanding that they have developed at the instance of VAP.

#### LITERATURE CITED

- Ashokan, Ranganathan G, I M D Iqbal and Venkata Prabu J 2008 Rural women self help group members. *Madras Agricultural Journal*, 95(1-6):108-113.
- Kumar J P 2006 Village Adoption Programme in V. B. Palem of Agricultural College, Bapatla
  An Appraisal. M. Sc. (Ag.) Thesis. Acharya N. G. Ranga Agricultural University, Hyderabad.
- Madhavilatha S, Rama Chandra Reddy D and Prasad S V 2004 A Study on adoption of IPM Practices in cotton by FTC trained farmers in Kurnool district of Andhra Pradesh. *Journal of Research*, ANGRAU. 32 (1): 40-44.
- Nayak S K, Rai D P and Saxena K K 2014 Impact of Mass Media on Adoption of Agricultural Technologies. *Journal of Communication Studies*, vol. XXXII: 88-92.
- Ravindra Reddy, B., Muna Swamy, V., Ramana, C., Sumathi, P and Prasanthi, A. 2014. Impact of Andhra Pradesh Water Management Project on Livelihood of Farmers in Pilot Area of Musilipedu Southern Zone of Andhra Pradesh. *The Andhra Agricultural Journal* 61(3): 652-657.
- Singh D K, Singh A K, Yadav V P, Singh R B, Baghe R S and Mayank Singh 2009 Association of socio-economic status with economic motivation of the farmers. *Indian Res. J Ext. Edu*cation, 9 (2): 53-56.
- Sravan Kumar T 2012 A study on entrepreneurs of vermicompost technology in Guntur district of Andhra Pradesh. M. Sc. (Ag.) Thesis. Acharya N G Ranga Agricultural University, Hyderabad, India.
- Talukdar J, Saharia K K, Hazarika P and Hazarika R A 2014 Mass media exposure of farm women. *Journal of Communication Studies*, XXXII: 3-6.

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