



ISSN (E): 2277- 7695  
ISSN (P): 2349-8242  
NAAS Rating: 5.23  
TPI 2022; SP-11(3): 237-243  
© 2022 TPI  
[www.thepharmajournal.com](http://www.thepharmajournal.com)

Received: 15-01-2022  
Accepted: 19-02-2022

#### TV Kumar

Research Scholar, Department of  
Agril. Extension, PJTSAU,  
Rajendranagar, Hyderabad,  
Telangana, India

#### M Sreenivasulu

Professor & Coordinator,  
Electronic Wing, ARI, PJTSAU,  
Rajendranagar, Hyderabad,  
Telangana, India

#### V Sudha Rani

Director of Extension, PJTSAU,  
Rajendranagar, Hyderabad,  
Telangana, India

#### GECH Vidyasagar

Professor, Department of  
Agronomy, PJTSAU,  
Rajendranagar, Hyderabad,  
Telangana, India

#### D Srinivasa Chary

Associate Professor, Department  
of Statistics and Mathematics  
PJTSAU, Rajendranagar,  
Hyderabad, Telangana, India

#### Corresponding Author

#### TV Kumar

Research Scholar, Department of  
Agril. Extension, PJTSAU,  
Rajendranagar, Hyderabad,  
Telangana, India

## Profile characteristics of stakeholder of market led extension in Telangana

TV Kumar, M Sreenivasulu, V Sudha Rani, GECH Vidyasagar and D Srinivasa Chary

#### Abstract

A study was conducted to know the profile characteristics of the stakeholder (APMC office bearers, AOs, Traders) of market led extension. Market led Extension is the market ward orientation of agriculture through extension includes agriculture & economics is the perfect blend for reaching at the door steps of farming community with the help of appropriate technology. The present investigation was carried out in 7 districts of Northern Telangana zone. Expost facto research design was followed selecting 105 respondents by multistage random sampling method. profile characteristics of stakeholder viz Age, Education, Experience, Social participation, Annual income, Training received, Market accessibility, Mass media exposure, Source of information on marketing, Use of information sources, Extension contact and Interpersonal relationship were selected for the study. The study revealed that majority (65.72%) of the APMC office bearers were 45 to 54 years of age, While in case of AOs majority (54.29%) of them were in 36 to 45 years of age and majority (51.43%) of the Traders were belonged to middle age group. Majority (51.43%) of the APMC office bearers had medium work experience, majority (85.71%) of the AOs had low work experience and majority (57.14%) of the Traders had low work experience. Majority (65.72%) of the APMC office bearers received medium level of training, in case of AOs more than half (77.14%) of the AOs were received medium level of training and majority (57.14%) of the Traders received medium level of training. There is every need to improve the profile of the stakeholder to make them understand completely about Market led extension, improve their knowledge and skills in Market led extension and made them to transfer the same technology to the farmers.

**Keywords:** Market led extension, stakeholder, farming community, market accessibility, source of information on marketing

#### Introduction

Agricultural marketing in India is undoubtedly growing and changing but neither in all places nor for all farmers. Under these circumstances, a Second Green Revolution is expected to clear the mess and keep the nation on right path. In order to improve the marketing system encouraging cooperative marketing, establishment of regulated markets, and grading, storage and warehousing are essential. In this connection the role of Market Led Extension is pivotal in promoting the agricultural marketing activities. (Vilas, 2016) [26]. Market led Extension is the market ward orientation of agriculture through extension includes agriculture & economics is the perfect blend for reaching at the door steps of farming community with the help of appropriate technology. (Kaleel, 2007) [10]. Market-led-extension is comparatively new approach which includes new methods /techniques of farming, importance of proper post-harvest handling and marketing. This is to be disseminated among the communities of farmers through Agricultural Officers (AO), Horticultural officers (HO), Veterinary officers and APMCs officer bearers. This is done to maximize the profits of the producer whilst, focusing on lowering the costs of production and expose them direct to markets.

Extension agencies played very crucial role in bridging the road for production related technologies from research institutes to the farmer's fields. The production has good remuneration to the farmers. Poor efficiency in the marketing channels and inadequate marketing infrastructure are believed to be the cause of not only high and fluctuating consumer prices, but also little of the consumer rupee reaching the farmer. The producers and the consumers often get a poor deal and the middlemen control the market, but do not add much value. Therefore extension functionaries need to play a major role to build the capacity of the farmers to meet the emerging challenges and make the farmers to realize better prices to their farm produce.

This transformation of Extension is termed as Market – led extension, and so far it is not much discussed issue in the extension scenario. Hence the extension focus should extend from mere production to market led extension on end-to-end basis. (Bagish Kumar *et al.* 2019) <sup>[2]</sup>.

### Material and Methods

The present study confined to an *Ex-post-facto* research design. The state of Telangana selected purposively for current study. Northern Telangana Zone was selected purposively for current study because more number of APMCs were present in Northern Telangana and they were in functional stage compare to central and south Telangana zones, 12 districts comes under Northern Telangana zone, from this, 7 districts were selected randomly. Out of 7 districts from each district 2 APMCs were selected randomly, total 14 APMC were selected for the current study. The respondents were selected randomly based on the location of APMCs in the particular district. From each district 5 APMC office bearers, 5 Agricultural officers and 5 Traders, likewise total 35 APMC office bearers, 35 Agricultural officers, 35 Traders were selected as respondents for the current study, the profile characteristics *viz* Age, Education, Experience, Social participation, Annual income, Training received, Market accessibility, Mass media exposure, Source of information on marketing, Use of information sources, Extension contact and Interpersonal relationship were selected for the study.

### Results and Discussion

#### Age

The Table 1 indicated that more than half (65.72%) of the APMC office bearers were 45 to 54 years of age, followed by 31.43 per cent were in 36 to 45 years of age group and 2.85 per cent of the respondents were found in 27 to 36 years age group. There was no recruitment of APMC office bearers has taken up after Telangana state formation, this was the probable and main reason for the majority of APMC office bearers in old age category. Many market functionaries' posts were vacant in APMCs, some of the APMCs were running with very limited staff. This is in conformity with the results of Kavadi (2015) <sup>[11]</sup> and Sangappa (2015) <sup>[22]</sup>.

While in case of AOs, more than half (54.29%) of them were in 36 to 45 years of age, followed by 31.43 per cent were in 27 to 36 years of age and 14.28 per cent of the AOs were found in 45 to 54 years age group. In the year 2016, government of Telangana has taken up AO and AEOs recruitment, this might be a reason for the majority of AOs in middle and young age category. This is in conformity with the results of Rao *et al.* (2020) <sup>[19]</sup>.

However, majority (51.43%) of the Traders were belonged to middle age group followed by 28.57 per cent belonged to old age and 20.00 per cent of Traders were in young age group. In the study area majority middle age group respondents showing more interest on buying and selling activity because they have good observation and understanding about the situations of APMC so, the respondents were trying to take license and involving buying and selling activity in APMCs. This is in conformity with the results of Kavadi (2015) <sup>[11]</sup>, Pavithra (2018) <sup>[17]</sup> and Geethavani (2019) <sup>[6]</sup>.

#### Education

More than half (82.86%) of the APMC office bearers were educated up to Under graduation, followed by 17.14 per cent of them were educated up to Intermediate and none of them

were in primary, middle and high school education categories. Minimum qualification for getting market functionary job was intermediate and graduation, it might be a reason for above result. While in case of AOs, more than half (80.00 per cent) of them were educated up to under graduation, followed by 20.00 per cent were educated up to post-graduation and none of them were in primary, middle, high school and intermediate education categories. Majority of Agricultural officers had under graduation and it may be the criteria for entry into government services hence majority of them possessed these educational levels. This is in conformity with the results of Gummagolmath (2012) <sup>[8]</sup>, Kavadi (2015) <sup>[11]</sup> and Sangappa (2015) <sup>[22]</sup>.

However, about more than one third (37.14%) of the Traders were educated up to intermediate followed by 34.29 per cent of them were educated up to high school, 20.00 per cent of them were educated up to under graduation, 8.57 per cent of them were educated up to middle school and none of them were in post-graduation, middle school, primary school, can read and write and illiterate education categories. In the study area majority of the traders possess intermediate and high school, no minimum educational qualification required or mandatory to get license but majority of the traders know the importance of education, with the help of education they can understand the buying and selling situation better at APMC, this might be a reason for above result. This is in conformity with the results of Kavadi (2015) <sup>[11]</sup>, Pavithra (2018) <sup>[17]</sup> and Geethavani (2019) <sup>[6]</sup>.

#### Work Experience

The results indicate that more than half (51.43%) of the APMC office bearers had medium work experience, followed by low (34.28%) category of work experience and high (14.29%) work experience categories respectively. While in case of AOs, more than half (85.71%) of the AOs had low work experience, followed by medium (14.29%) and high (0.00%) work experience categories respectively. In the study area recently recruited young Agricultural officer were high in number it might be a reason for their low work experience. This is in conformity with the results of Gummagolmath (2012) <sup>[8]</sup>, Kavadi (2015) <sup>[11]</sup>, Sangappa (2015) <sup>[22]</sup> and Bhuvana (2020) <sup>[4]</sup>.

In case of Traders majority (57.14%) of them had low work experience, followed by medium (37.15%) and high (5.71%) work experience categories respectively. Majority traders in study area started trading little late because they have observed the buying and selling activity situations and the process. Some of the traders have their own processing centers like rice mills and cotton ginning mills, they took time to establish these industries, so these were the reasons for their low and medium work experience. This is in conformity with the results of Pavithra (2018) <sup>[17]</sup>.

#### Social participation

It is evident from table 1 that more than half (57.14%) of the APMC office bearers falls under medium level of social participation followed by (37.14%) low level of social participation and (5.72%) high level of social participation respectively. Majority of APMC office bearers involving community activities, they having the membership in more than one organization and they know the importance of social organizations, these might be a reasons for their medium to low social participation. While in case of AOs, more than half (71.43%) of the AOs had medium level of social

participation, followed by high and low (14.28) social participation respectively. Majority of the AOs in the study area actively involving in community activities, interaction with the farmers and involving social political issues of the village. So this might be a reason for their medium to high level of social participation. This is in conformity with the results of Gummagolmath (2012) <sup>[8]</sup>, Kavad (2015) <sup>[11]</sup> and Sangappa (2015) <sup>[22]</sup>.

In case of Traders majority (82.86%) of them had low social participation, followed by medium (14.28%) and high (2.86%) social participation respectively. Low participation in extension activities and lack of awareness about social organization might be a reason for their low social participation. This is in conformity with the results of Gummagolmath (2012) <sup>[8]</sup>, Kavad (2015) <sup>[11]</sup> and Sangappa (2015) <sup>[22]</sup> and Lalitha (2017) <sup>[12]</sup>.

### Annual income

The results indicate that more than half (51.43%) of the APMC office bearers had low annual income between Rs. 354000 – 596000 followed by (31.43%) of the APMC office bearers had high annual income between Rs. 838000 – 1080000 and (17.14%) APMC office bearers had medium annual income between Rs. 596000 - 838000. This is in conformity with the results of Gummagolmath (2012) <sup>[8]</sup>, Kavad (2015) <sup>[11]</sup> and Sangappa (2015) <sup>[22]</sup>.

While in case of AOs, the table 4.12 indicate that majority (65.71%) of the AOs had low annual income between Rs. 528000 – 672000 followed by (25.72%) of the AOs had medium annual income between Rs. 672000 – 816000 and (8.57%) the AO had high annual income between Rs. 816000 - 960000. Based on the work experience and designation of the job, The APMC office bearers and AOs will get their monthly salaries.

Majority (45.71%) of the Traders had low annual income between Rs. 720000 – 960000 followed by (34.29%) of the Traders had medium annual income between Rs. 960000 – 1200000 and (20.00%) Traders had high annual income between Rs. 1200000 - 1440000. Majority of the Traders annual income depends upon their Trading business and harvesting seasons of the crops. The annual income of the Traders fluctuates with the market prices of the crops. This is in conformity with the results of Kavad (2015) <sup>[11]</sup> and Lalitha (2017) <sup>[12]</sup>.

### Training received

The data presented in Table 1 revealed that majority (65.72%) of the APMC office bearers received medium level of training followed by low (20.00%) and high (11.43%) level of training received respectively. Majority of APMC office bearers expressed that with the limited staff at APMC they were unable to attend the training programmes because the problem of work delay and the government also not conducting need based trainings like on market oriented production and new market reforms to the APMC office bearers in their respective institutes, so these were the probable reasons for their medium to low training. While in case of AOs more than half (77.14%) of the AOs were received medium level of training followed by low (17.14%) and high (5.72%) level of training received respectively. Majority of the AOs in the study area have attended good number of trainings because government said it is mandatory to attend the training programmes at PJTSAU/SAMETI. This is in conformity with the results of Gummagolmath *et al.* (2012) <sup>[8]</sup> and Gummagolmath *et al.*

(2013) <sup>[7]</sup>, Kavad (2015) <sup>[11]</sup>.

Further, Table 1 shows that majority (57.14%) of the Traders received medium level of training followed by low (42.86%) level of training received and none of them were in high level of training received category. Majority of traders in study area expressed that they were received very limited training opportunities from the APMCs, they having interest to attend the trainings but they were not getting opportunities to participate, so there is a need to organize training programmes by the extension and training institutes and improve their knowledge in market led extension activities. This is in conformity with the results of Nirban (2004) <sup>[14]</sup> and Gummagolmath *et al.* (2013) <sup>[7]</sup>, Kavad (2015) <sup>[11]</sup>.

### Market accessibility

The data presented in Table 1 revealed that majority (60.00%) of the APMC office bearers found in the short market distance category followed by 28.57 and 11.43 per cent of them belonged to moderate market and faraway market distance categories respectively. Majority APMC officer bearers in the study area living in APMC surrounding areas so that they can access the APMC and perform the market functions and market related activities easily. While in case of AOs more than half (71.43%) of the AOs found in the short market distance category followed by 20.00 and 8.57 per cent of them belonged to moderate market and faraway market distance categories respectively. From the results it can be concluded that majority of the AOs office located near the APMCs, so AOs can easily access market related information from APMCs and disseminated same to the farmers. There is an easy possibility to conduct collaborate trainings with the APMC office bearers to the farmers on market oriented production. This is in conformity with the results of Kavad (2015) <sup>[11]</sup>, Sangappa (2015) <sup>[22]</sup> and Pavithra *et al.* (2018) <sup>[17]</sup>. Further, the Table 1 shows that majority (68.57%) of the Traders found in the short market distance category followed by 28.57 and 2.86 per cent of them belonged to moderate market and faraway market distance categories respectively. Majority of the traders in the study area had own processing centers, they were located near to APMC so the traders can easily access the market and market related services only less number of traders living in the villages for those it might be little difficult to access the market. This is in conformity with the results of Thiranjan (2005) <sup>[24]</sup>, Santoshkumar (2008) <sup>[23]</sup>, Alagh (2014) <sup>[1]</sup>.

### Mass media exposure

The results indicate that little less than half (42.86%) of the APMC office bearers were reported with high level of mass media exposure followed by medium (34.28%) and low (22.86%) level of mass media exposure respectively. From the results it can be conclude that majority of the APMCs had high mass media exposure because they were frequently using the mass media for market intelligence information and other new updates related to market. This is in conformity with the results of Saha (2010) <sup>[21]</sup> and Ramalakshmi *et al.* (2013) <sup>[20]</sup>.

Whereas AOs majority (68.57%) of them were found in medium mass media exposure category, one fourth (25.72%) of the AOs had high mass media exposure and 5.71 per cent of the AOs had low mass media exposure. From the results it can be conclude that majority of the AOs had medium to high mass media exposure because they were mostly depending on other persons for updated agricultural information it might be



a reason for their medium mass media exposure, some of the AOs were using mass media frequently but compare to APMC office bearers it is less. This is in conformity with the results of Ramalakshmidevi *et al.* (2013) <sup>[20]</sup> and Kavad (2015) <sup>[11]</sup>.

Further, the Table 1 indicate that majority 65.71 per cent of the Traders had medium mass media exposure followed by 22.86 and 11.43 per cent of them had high and low mass media exposure respectively. From the results it can be conclude that majority of the traders had medium mass media exposure because most of the traders had medium formal education and low extension contact. Some of the traders had high mass media exposure because they were using android mobile phones and messaging applications for updated market information. This is in conformity with the results of Ramalakshmidevi *et al.* (2013) <sup>[20]</sup> and Kavad (2015) <sup>[11]</sup>.

### Source of information on marketing

The data presented in Table 1 revealed that majority 97.14 per cent of the APMC office bearers source of information on marketing was mobile apps followed by 94.29, 68.57, 62.86, 54.28, 45.71, 34.14, per cent of the farmers source of information on marketing were Consulting Market officers/fellow market officers, Market portals, SMS services, Mobile apps/Portals, Booklets on market prices, local traders/commission agents, mobile SMS services and Newspapers respectively. While in case of AOs majority 97.14 per cent of the AOs source of information on marketing was mobile apps followed by 82.86, 54.28, 45.71, 42.86, 37.14, 31.43, 22.86 per cent of the farmers source of information on marketing were Consulting Market officers/fellow AOs, Market portals, local traders/commission agents, Newspapers, Booklets on market prices, Rate display board in the market and mobile SMS services respectively.

Further, the Table 1 indicate that majority 100.00 per cent of the Traders source of information on marketing was mobile apps followed by 91.43, 77.14, 60.00, 40.00, 34.28, 22.86, 17.14, 14.28 per cent of the farmers source of information on marketing were Consulting commission agents/fellow traders, Consulting Market officers/AOs/AEOs Market portals, mobile SMS services, Rate display board, Newspapers, Booklets on market prices and Information centers at villages respectively.

From the above results it can conclude that majority of the Traders source of information on marketing was mobile apps. All the traders in the study area formed a group, they had separate whatsapp groups, and through whatsapp groups they have been receiving daily updated price information. During the data collection some of the Traders expressed that they will receive updated market price information from the APMC office bearers very late, sometimes Traders will provide the market price information to the APMC officers. This is in conformity with the results of Zaidi and Munir (2014) <sup>[27]</sup>, Kavad (2015) <sup>[11]</sup>, Sangappa (2015) <sup>[22]</sup>, Pallabi *et al.* (2018) <sup>[16]</sup> and Rao *et al.* (2020) <sup>[19]</sup>.

### Use of information sources

The results showed that majority (60.00%) of the APMC office bearers were reported with medium use of information sources followed by high (25.72%) and low (14.28%) use of information sources respectively. While in case of AOs majority (51.43%) of them were had medium use of information sources followed by 31.43 per cent and 17.14 per cent of them had high and low use of information sources

respectively. From the results it can be concluded that majority APMC office bearers and AOs had medium to high use of information sources it might due to fact that APMC office bearers and AOs aware about all available information sources, they had good mass media exposure and had high formal education so they can analyze, understand, access the information channels easily and disseminate the information to the farmers.

Further, the Table 1 indicate that majority 54.28 per cent of the Traders had medium use of information sources followed by 25.71 and 20.00 per cent had high and low use of information sources respectively. Majority of traders had medium use information sources because they know the value of the information, during the data collection it was observed that they were very alert while accessing the market related information, they thought that their business will be depend on their usage of market information sources these might be the probable reasons for their medium to high use of information sources. This is in conformity with the results of Jahagirdar (2011) <sup>[9]</sup>, Mukesh Yadav *et al.* (2013) <sup>[13]</sup>, Biswarup and Ranjita (2014) <sup>[5]</sup>, and Lalitha (2017) <sup>[12]</sup>.

### Extension contact

It could be observed from the Table 1 that majority (45.71%) of the APMC office bearers were reported with medium extension contact category followed by 34.29 per cent and 20.00 per cent had low and high extension contact category respectively. While in case of AOs more than half 60.00 per cent of them had medium extension contact followed by 22.86 per cent and 17.14 per cent had high and low extension contact category respectively. From the results of Extension contact of APMC office bearers and AOs, it can be concluded that majority of the APMC office bearers and AOs had medium extension contact it might be due to fact that they had good formal education and they were directly involving in agricultural extension activities for this they should meet their superior extension officers. Some of the APMC office bearers had low extension contact because they were not completely involving in the Agricultural market extension activities. Compare to APMC office bearers AOs had more extension contact so there is a need to motivate and organize new training programmes to the APMC office bearers and made them to involve in the market oriented agricultural extension activities.

Further, the Table 1 indicate that majority 45.71 per cent of the Traders had low extension contact. More than one third (40.00%) of Traders had medium extension contact and 14.29 per cent of Traders had high extension contact. Majority of the traders had low extension contact because they were not contacting any extension officer due to their busy working hours they were accessing market related information from other sources. For trading license related issues only they were contacting the APMC office bearers. This is in conformity with the results of Painkra *et al.* (2010) <sup>[15]</sup>, Pradeep kumar *et al.* (2012) <sup>[18]</sup>, Bhangare *et al.* (2014) <sup>[3]</sup> and Bagish (2016) <sup>[2]</sup>.

### Interpersonal relationship

The data presented in Table 1 reveals that majority (57.14%) of the APMC office bearers had medium interpersonal relationship followed by low (28.57%) and high (14.28%) level of interpersonal relationship respectively. While in case of AOs little less than half (45.71%) of them reported with high interpersonal relationship followed by 42.86 and 11.43

per cent of AOs had medium and low level of interpersonal relationship respectively.

Majority of the APMC office bearers had medium to low interpersonal relationship it might be due to fact that they had good formal education and maintaining good rapport, communicating frequently with their subordinates, colleagues and their superiors, but they had very less interpersonal relationship with the farmers because they were not conducting any training programmes to the farmers, no field visits in the villages and very less collaborative development programmes with Agricultural department. These were probable reasons for their medium to low level of interpersonal relationship. Majority of the AOs had high to medium interpersonal relationship because AOs were conducting collaborative training programmes with KVKs and DAATC to the farmers, they were also conducting field demonstrations, filed visits, departmental training programmes to the farmers, so this might be helped them to

build good relationship and rapport with the farmers and with other institutes.

Further, the Table 1 indicate that majority (62.86%) of the Traders had medium interpersonal relationship followed by high (31.43%) and low (5.71%) level of interpersonal relationship respectively. From the results it was found that majority of the traders had medium to high interpersonal relationship it might be due to fact that they had maintaining good relationship with the fellow traders, APMC office bearers, commission agents and farmers, during the data collection it was observed that some of the traders helping the farmers to get the credit and inputs in right time and also during the harvesting time motivating the farmers to sell their crop produce at higher price. This is in conformity with the results of Vijayakumar. P (2011) [25] and Bhuvana (2020) [4].

### Profile characteristics of stakeholder

**Table 1:** Distribution of APMC office bearers, AOs and Traders according to their profile characteristics

S. No	Profile character	Category	APMC office bearers		AOs		Traders	
			f	%	f	%	f	%
1.	Age	Young (27 - 36)	1	2.85	11	31.43	7	20.00
		Middle (36 - 45)	11	31.43	19	54.29	18	51.43
		Old (45 - 54)	23	65.72	5	14.28	10	28.57
2.	Education	Illiterate	0	0	0	0	0	0
		Can read and write	0	0	0	0	0	0
		Primary school	0	0	0	0	0	0
		Middle school	0	0	0	0	3	8.57
		High school	0	0	0	0	12	34.29
		Intermediate	6	17.14	0	0	13	37.14
		Under graduation	29	82.86	28	80.00	7	20.00
		Post-graduation	0	0	7	20.00	0	0
3.	Work Experience	Low (2 - 13)	12	34.28	30	85.71	20	57.14
		Medium (13 - 24)	18	51.43	5	14.29	13	37.15
		High (24 - 35)	5	14.29	0.00	0.00	2	5.71
4.	Social participation	Low (0 - 2)	13	37.14	5	14.28	29	82.86
		Medium (2 - 4)	20	57.14	25	71.44	5	14.28
		High (4 - 6)	2	5.72	5	14.28	1	2.86
5.	Training received	Low (0 - 1)	7	20.00	6	17.14	15	42.86
		Medium (1 - 2)	24	68.57	27	77.14	20	57.14
		High (2 - 3)	4	11.43	2	5.72	0	0.00
6.	Market accessibility	Short distance (6 - 19)	21	60.00	25	71.43	24	68.57
		Moderate distance(19 - 32)	10	28.57	7	20.00	10	28.57
		Faraway distance (32 - 45)	4	11.43	3	8.57	1	2.86
7.	Mass media exposure	Low (3 - 5)	8	22.86	2	5.71	4	11.43
		Medium (5 - 7)	12	34.28	24	68.57	23	65.71
		High (7 - 9)	15	42.86	9	25.72	8	22.86
8.	Source of information on marketing	Rate display board in the market	0	0.00	11	31.43	12	34.28
		Friends or Neighbours	24	68.57	19	54.28	21	60.00
		Newspapers	13	34.14	15	42.86	8	22.86
		Mobile SMS services	16	45.71	8	22.86	14	40.00
		Information centers at villages	0	0.00	0	0.00	5	14.28
		Consulting Market officers/AOs/AEOs	33	94.29	29	82.86	27	77.14
		Booklets on market prices	22	62.86	13	37.14	6	17.14
		Input dealers	0	0.00	0	0.00	0	0.00
9.	Use of information sources	Local traders/commission agents	19	54.28	16	45.71	32	91.43
		Mobile apps/Portals	34	97.14	34	97.14	35	100.00
		Low (1 - 4)	5	14.28	6	17.14	7	20.00
10.	Extension contact	Medium (4 - 7)	21	60.00	18	51.43	19	54.28
		High (7 - 10)	9	25.72	11	31.43	9	25.71
		Low (3 - 5)	12	34.29	6	17.14	16	45.71
11.	Interpersonal relationship	Medium (5 - 7)	16	45.71	21	60.00	14	40.00
		High (7 - 9)	7	20.00	8	22.86	5	14.29
		Low (1 - 3)	10	28.57	4	11.43	2	5.71
		Medium (3 - 5)	20	57.14	15	42.86	22	62.86
		High (5 - 7)	5	14.28	16	45.71	11	31.43

## Conclusion

The medium level of trainings undergone by the stakeholder (APMC office bearers, AOs and Traders) indicate that more number of training programmes should be organized on market oriented agricultural activities inculcating the awareness and imparting the skills on market led extension activities. Special training programmes should be designed to suit to the needs and interests of stakeholders by Department of agricultural marketing, Department of Agriculture and scientists of SAUs. The study shows that majority of the APMC office bearers had medium work experience and in the study area lack of APMC staff was big problem to the APMCs so the government should needs to take up the recruitment of APMC staff at APMCs to provide better services to the farmers. Majority of the APMC office bearers in the study area were not possess formal education in agricultural background area so it might be a reason for low awareness on Market oriented agricultural activities. There is every need to improve the profile of the stakeholder to make them understand completely about Market led extension, improve their knowledge and skills in Market led extension and made them to transfer the same technology to the farmers.

## References

1. Alagh M. Assessment of Marketed and Marketable Surplus of Major Food grains in Gujarat. *Indian Journal of Agricultural Marketing*. 2014;28(2):60-80.
2. Bagish K. Market-Led Extension Approach for Livelihood Security of Dairy Farmers in Bihar. Ph.D (Agri) Thesis. Division of Dairy Extension, ICAR-National Dairy Research Institute, Karnal, Haryana, India, 2016.
3. Bhangare YC, Thombare BM, Suradkar DD. Adoption of improved cultivation practices of pigeon pea by the farmers. *Agricultural Extension Review*. 2014;14:21-22.
4. Bhuvana N. Eco system analysis Krishi Vigyan Kendras in Southern India. Ph.D (Agri) Thesis, College Of Agriculture, Rajendranagar Professor Jayashankar Telangana State Agricultural University, Hyderabad, Telangana, 2020.
5. Biswarup Saha, Ranjita Devi. Information Management Behaviour of Traditional Fish Farmers in Assam. *Indian Research Journal of Extension Education*. 2014;14(1):11-16.
6. Geethavani T. Impact of e-NAM on enhancement of farm income in Andhra Pradesh -An Analytical study. M.Sc. (Ag.) Thesis. Submitted to Acharya N G Ranga Agricultural University, Hyderabad, India, 2019.
7. Gummagolmath KC, Sharma P, Shailendra. Assessment of training needs and knowledge level of officers in agricultural marketing. *Indian Journal of Agricultural Marketing*. 2013;27(2):152-162.
8. Gummagolmath KC, Sharma P, Shailendra. Training Need Assessment of Officers Working in Agricultural Marketing in India, *International Journal of Extension Education*. 2012;8:63-70, 2012 ISSN : 2319-7188.
9. Jahagirdar KA, Balasubramanya AS. Comparative Study on Communication Behaviour of Extension Personnel working in Government and Private Sectors. *Journal of Global Communication*. 2011;4(2):122-126.
10. Kaleel FMH, Krishnankutty Jayasree, Satheesh Babu K. Book: Market-Led Extension Dimensions and Tools, Agrotech Publishing Academy, Udaipur – 313 002, 2007, 42-43.
11. Kavadi SD. Strategic Analysis of Market-Led-Extension Activities of Apmcs of South Gujarat, Ph.D. (Agri) Thesis submitted to N. M. College Of Agriculture, Navsari Agricultural University Navsari – 396 450 Gujarat State, 2015.
12. Lalitha N. Impact assessment of Kisan Mobile Advisory Services (KMAS) in Barwani district of Madhya Pradesh, M.Sc (Agri) Thesis submitted to Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya, College of Agriculture, Gwalior, (M.P.).
13. Mukesh Yadav, Kinjulck Singh C, Chouhan AS, Singh CJ. Techno-Economic Changes among the Farmers in Relation to Watershed Development Programme. *Indian Research Journal of Extension Education*. 2013;13(1):31-34.
14. Nirban AJ. Analysis of the agricultural produce market committees in Konkan and Western Maharashtra with reference to their potential role in agricultural marketing extension Ph. D. (Agri.) Thesis, Mahatma Phule Krishi Vidyapeeth, Rahuri (M.S.), 2004.
15. Painkra SK, Dev CM, Mandal BK. Information sources of tribal rice growers of Bastar district of Chhattisgarh. *Journal of Communication Studies*. 2010;28(9):135-139.
16. Pallabi P, Ravikant A, Boniface L, Raghavendra S. Marketing Behaviour of Vegetable Growers in East Sikkim, *Journal of Krishi Vigyan*. 2018;6(2):157-162.
17. Pavithra S, Gracy C, Rakaa S, Ganesh Gowda Patil. Innovations in agricultural marketing: a case study of e-tendering system in Karnataka, India, *Agricultural Economics Research Review*. 2018;31(1):53-64.
18. Pradeepkumar LMK, Chaturvedi ML, Shrmakedar NY. Communication behavior of the tribal farmers towards hybrid rice production technology in Surguja district of Chattisgarh. *Journal of Communication Studies*. 2012;26:91-93.
19. Rao IS, Padmaveni C, Vasantha R, Madhu Babu K. Research study on awareness of extension functionaries on agricultural marketing report submitted to NIAM Chaudhary Charan Singh National Institute of Agricultural Marketing, 2020, 1-72.
20. Ramalakshmidevi S, Satyagopal PV, Sailaja V, Prasad SV. Profile characteristics of sugarcane farmers of Chittoor district of Andhra Pradesh. *Journal of Research*. 2013;41(1):96-100.
21. Saha. Livelihood diversification pursued by farmers in West Bengal. *Indian Research Journal of Extension Education*. 2010;10(2).
22. Sangappa SR. Performance Evaluation of APMCs in Karnataka: A Case Study of Gulbarga Division. Minor Research Project Report, submitted to University Grants Commission, South-Western Regional Office, P.K. Block, Palace Road, Bangalore, 2015.
23. Santoshkumar SP. Marketing behaviour, information source consultancy pattern and problems of vegetable growers in Bijapur district of Karnataka. M.Sc. (Ag.) Thesis. University of Agricultural Sciences, Dharwad, 2008.
24. Thiranjan GB. A Study on Cultivation and Marketing Pattern of Selected Cut Flowers in Belgaum District. M.Sc. (Ag.) Thesis. University of Agricultural Sciences, Dharwad, 2005.
25. Vijayakumar P. Perception of the Employees on Quality of Work Life in Micro Small and Medium Enterprises in Coimbatore District. Ph. D. (Commerce) Thesis,

Department of Commerce VLB Janakiammal College of Arts and Science, Coimbatore, Tamil Nadu, 2011.

26. Vilas M, Kadrolkar. Agricultural marketing In India Role Of Agricultural Produce marketing Committee (APMC), Department of Studies and Research in Economics, Tumkur University, B. H. Road, TUMKUR, Karnataka State, India, 2016.
27. Zaidi Naheen Haider, Munir Abdul. Participation of farmers in Sugarcane Farming System-A Case Study of Bijnor District of Uttar Pradesh, Economic Affairs, Aligarh -202002, U.P, India. 2014;59(3):449-457.