

Short Communication

Role Performance of Agro Service Centers in Transfer of Technology

Jyoti, Deshmukh, Sriram Surana, Sanket Chikane and Puja Swami

Department of Extension Education
College of Agriculture, Latur (MS)

In India a large pool of young trained and more productive manpower in agricultural extension and related activities, whose services are presently not being utilized for the benefits of the farmers especially for small marginal and women farmers. On other hand, thousands of agricultural graduates are coming out from agricultural universities but due to lack of employment opportunities they search for alternatives and agro-service centres provide opportunity for business.

The main aim of agro-service centre was thus to providing integrated services and supplies in rural areas^[2] according to local needs i.e. quality seed, fertilizers, pesticides, engineering materials, provide the employment to the rural peoples and also advice to farmer regarding efficient utilization of land, labour, capital, assessment of land value, soil testing, farm management, soil and water conservation, crop rotation, livestock etc. So it is necessary to study actual role performed by agro service centres in transfer of technology.

The present study was conducted in purposively selected Latur district in Marathwada region of Maharashtra state. Latur is the gateway of southern market in Maharashtra, and it has more number of agro service centres, as the market is big. Five talukas Latur, Chakur, Renapur, Udgir, Shirur- anantpal were selected on the criterion of more number of

agro-service centres and having license to sale seed, fertilizer and insecticide purposively. The list of all agro-service centres in selected talukas was obtained from Agriculture Development Officer of respective talukas and Zilla Parishad Latur. Then from each talukas 24 agro service centre having license to sale seed, fertilizer and Insecticide was selected purposively. Thus, in all 120 agro-service centres were selected for study.

It is evident from table 1 that, 100 per cent of the proprietors of agro-service centres supply the seed of soybean as well as Red gram under pulses crops and cotton as a fiber crop, followed by large majority (99.16%) of respondents supply vegetables seeds of tomato to the farmers. Majority (92.50 %) of the respondents were observed in supply of seeds of chilli crop which comes under vegetable crops. Majority (85.00 %) of the respondents were observed in supply of seeds of brinjal and maize crop which comes under vegetables and fodder crops, respectively. With regards to supply of seed of safflower as well as sunflower crop same proportion (82.50%) of proprietors of agro-service centres were observed in supplying these seed. However, 70.83 per cent of respondents supplied seeds of gram and 69.16 per cent of proprietors provide seeds of greengram. While 67.50 per cent castor. With regards to fodder jawar 68.33 per cent of the respondents were observed to supply this seed. Approximately two

forth of the respondent 56.66 per cent supplies the seeds of black gram. More than half (52.50%) of respondents supply seed of spinach, followed by 40.00 per cent of respondents provides seed of cereal crops like sorghum. Some proportion one third (37.50%) of the

respondents provided seed of groundnut. Whereas, one fourth (27.50%) of the proprietors supply seed of other crops. One fifth (20.00%) of the respondents supply wheat seed and 17.50 per cent respondents supply oat seed to farmers.

Table 1 Distribution of respondents according to supply of cropwise seed respondent
N= 120

Sr.No.	Supply of seed	Frequency	Per cent	
1.	Pulses	Soybean	120	100.00
		Red gram	120	100.00
		Blackgram	68	56.66
		Green gram	83	69.16
		Gram	85	70.83
2.	Cereals	Bajara	87	72.50
		Sorghum	48	40.00
		Wheat	24	20.00
3.	Oilseeds	Safflower	99	82.50
		Groundnut	45	37.50
		Sunflower	99	82.50
		Castor	81	67.50
4.	Fiber	Cotton	120	100
5.	Vegetables	Chilli	111	92.50
		Tomato	119	99.16
		Brinjal	102	85.00
		Onion	87	72.50
		Spinach	63	52.50
		Others	33	27.50
6.	Fodder	Maize	102	85.00
		Fodder Jowar	82	68.33
		Oat	21	17.50

Table 2 Distribution of respondents according to level of supply of seed N= 120

Sr. No.	Categories	Frequency	Per cent
1	Low	18	15.00
2	Medium	55	45.83
3	High	47	39.17
	Total	120	100.00

It is seen from table 2 that, majority (45.83%) of the proprietors of agro service

centre comes under the medium level of supply of seed followed by 39.17 per cent of

respondents come under the high level of supply in low level of supply of seed. of seed. Meager (15.00%) of the respondents are

Table 3 Distribution of respondents according supply fertilizers/bio fertilizers N= 120

Sr. no.	Supply of fertilizers/bio-fertilizers	Freq.	Per cent	
1.	Nitrogenous	Urea	108	90.00
		Calcium ammonium nitrate	108	90.00
		Ammonium sulphate	96	80.00
2.	Phosphatic	Di-ammonium phosphate	120	100.00
		Triple super phosphate	81	67.50
		Single super Phosphate	72	60.50
3.	Potash fertilizers	Sulphate of potash	60	50.00
		Muriate of potash	33	27.50
4.	Complex fertilizers	10:26:26	72	60.00
		19:19:19	81	67.50
		Mono ammonium phosphate	27	22.50
		Ammonium phosphate sulphate	27	22.50
		Ammonium phosphate	27	22.50
5.	Bio-fertilizer	Rhizobium	18	15.00
		Phosphorous Solubilizing Bacteria	45	37.50

It is observed from table 3 that 100 per cent of proprietors of agro-service centres supply the phosphatic fertilizers like Diammonium phosphate followed by majority (90.00%) of respondents who supply fertilizers namely urea and calcium ammonium nitrate which are nitrogenous fertilizers. Majority (80.00%) of the respondents supplied ammonium sulphate to the farmers which comes under nitrogenous fertilizers. More than two third (67.50%) of the respondents were found to supply fertilizers like triple super phosphate and 19:19:19. More than half (60.50) of respondents

were supply single super phosphate and 10:26:26 fertilizers. About 50 per cent of respondents were found to supply sulphate of Potash and 37.50 per cent of the respondents were observed to supply phosphorous solubilizing bacteria. Further, the data revealed that 27.50 per cent of respondents supplied muriate of potash fertilizer. An equal proportion (22.50%) respondent was found to supply the mono ammonium phosphate, ammonium phosphate sulphate and ammonium phosphate. Very few (15.00%) supplied rhizobium bio-fertilizer to the farmer.

Table 4 Distribution of respondents according to supply of fertilizers N= 120

Sr. No.	Categories	Frequency	Per cent
1	Low	09	7.50
2	Medium	96	80.00
3	High	15	12.50
	Total	120	100.00

It is seen from table 4 that majority (80.00%) of the proprietors of ASC were from medium level of supply of fertilizer, followed by 12.50 per cent of respondents having high category of supply of fertilizers. Very few (7.50%) of proprietors were observed under low category of supply of fertilizers.

It can be seen from Table 5 that majority (92.50%) of proprietors of agro service centre supplied the weedicides 2-4D followed by equal number of respondents (87.50%) supplying monocrotophos insecticides and Paraqot, Diqot weedicides to the farmers. Three fourth (75%) of

the respondents were observed to supply dimethioate. Majority (65.00%) of the proprietors of agro service centre were observed to supply the insecticide like Dimethioate, Glyphoset weedicides and verticilliumlecani biopesticides. The data further revealed that 60 per cent respondent proprietors of agro service centre supplied Copper oxychloride, 57.50 per cent supplied bavistin, 42.50 per cent supplied riomil and an equal per cent (35%) were found to supply mancozeb, trichoderma and beveriabassiana to the farmer.

Table 5 Distribution of respondents according to supply of pesticides

N = 120

Sr. No.	Supply of pesticide	Frequency	Per cent	
1	Insecticides	Monocrotophos	105	87.50
		Phorate	90	75.00
		Dimethioate	78	65.00
2	Fungicides	Copper oxychloride	72	60.00
		Bavistin	69	57.50
		Ridomil	51	42.50
		Mancozeb	42	35.00
3	Weedicides	Diqot	105	87.50
		2-4D	111	92.50
		Paraqot	105	87.50
		Glyphoset	78	65.00
4	Bio-pesticides	Verticilliumlecani	78	65.00
		Trichoderma	42	35.00
		Beveriabassiana	42	35.00

Table 6 Distribution of respondents according to level of pesticides supply N = 120

Sr. No.	Categories	Number	Per cent
1	Low	15	12.50
2	Medium	96	80.00
3	High	09	7.50
	Total	120	100.00

It is seen from table 6 that, large majority (80.00%) of proprietors of ASC were having medium level of supply of pesticides, followed

by 12.50 per cent of respondents come under low level of supply of pesticides. Very few

(7.50%) of the proprietors were observed under high level of supply of pesticides.

Table 7 Distribution of respondents according to the advisory services provided N = 120

Sr. No.	Advisory services	Often		Rare		Seldom	
		F	%	F	%	F	%
1.	Information pertaining to improved varieties of different crops	120	100	-	-	-	-
2.	Information related to chemical fertilizers, dose, time of application nutrient content, method of application	99	82.50	21	17.50	-	-
3.	Information related to important pests and diseases of different crops cultivated in study area	99	82.50	21	17.50	-	-
4.	Information related to pesticides, its doses, time and application	84	70.00	30	25.00	06	05.00
5.	Information pertaining to storage of agril. produce	36	30.00	30	25.00	54	45.00
6.	Information pertaining to different irrigation methods	21	17.50	51	42.50	48	40.00
7.	Information related to subsidiary occupation	39	32.50	39	32.50	42	35.00
8.	Information related to importance of soil testing	39	32.50	42	35.00	39	32.50
9.	Information related to about agricultural machinery and equipment.	51	42.50	39	32.50	30	25.00
10.	Ideas of repairing of sprayers, dusters, tractors etc.	75	62.50	33	27.50	12	10.00
11.	Information about cropping system	72	60.00	36	30.00	12	10.00
12.	Information regarding weather forecasting	84	70.00	27	22.50	09	7.50
13.	Information regarding marketing of agricultural produce.	24	20.00	87	72.50	09	7.50

It is observed from table 7 that, 100 per cent of the proprietors of agro-service centres were providing information about improved varieties of different crops to farmers regularly. A majority (82.50%) of the respondents advised farmers on information related to chemical fertilizers with regards to its doses, time of application, nutrient content and method of its application and information on important pest and diseases of different crops grown in study area. Further it was observed that 70 per cent of the respondents provided the information about

pesticides, its doses, time of application and information regarding weather forecasting.

About 62.50 per cent of respondents were observed to provide the information related to ideas of repairing sprayers, dusters, tractors etc. and 60.00 per cent on cropping system. Less than half (42.50%) of the proprietors provided information concerning to agricultural equipments and machinery followed by 32.50 per cent of respondents providing information related to subsidiary occupation and soil testing. 30 per cent of respondents were observed in

providing information related to storage of agricultural Produce and 17.50 per cent provide information about irrigation methods regularly.

The proprietors of agro service centre were rarely providing information marketing of agricultural produce (72.50%), information pertaining to different irrigation methods (42.50%) and information of soil testing (35.00%), subsidiary occupation (32.50%), and agricultural equipments and implements

(32.50%), About 30.00 per cent were providing information of cropping system and 27.50 per cent on repairing of sprayers and dusters.

The proprietors of agro service centre were seldom providing information pertaining to storage of agril. produce (45.00%) different irrigation methods (40.00), subsidiary occupation (35.00%), weather forecasting (7.50%), marketing of agricultural produce (7.50%).

Table 8 Distribution of respondents according to their advisory service levels N = 120

Sr. No.	Categories	Number	Per cent
1	Low	25	20.83
2	Medium	82	68.33
3	High	13	10.84
Total		120	100.00

It is observed from table 8 that, majority (68.33%) of proprietors of agro service centre comes under medium level (20.83%) of advisory services followed by respondents who are observed under low level of (10.84%) providing advisory services to the farmers and represent the higher category.

Overall, it is evident from Table 9 that, more than (56.67%) of respondents were found in medium role performance category and 15.83 per cent of respondent were in high and low 27.50 per cent in low^[1].

Table 9 Distribution of proprietors of agro service centre according to their overall role performance as rated by them. N = 120

Sr. No.	Categories	Number	Per cent
1	Low	19	15.83
2	Medium	68	56.67
3	High	33	27.50
Total		120	100.00

References

1. Darade, N.W. (2010). Training needs of farm input dealers for transfer of agricultural technology in Latur district. *M.Sc. (Agri.)* Thesis College of Agriculture Latur, M.A.U., Parbhani (MS).
2. Puri, M. G., Zagade, P.M. and Sawant, P.A. (2008). The nature and extent of service provided by the agricultural consultants. Souvenir and Abstracts, May. 24-25.