

## SALES AND PURCHASING BEHAVIOUR OF AGRO-SERVICE PROVIDERS AND BENEFICIARIES

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### ABSTRACT

*The agro-service provider is one who delivers various inputs to the farmers, at his place, at right time, in sufficient quantity with affordable prices and in required quality. When the farmers perceive any field problem, they normally approach to near by agro-service providers. An ex-post facto research design was adopted to conduct the study. The five talukas of Navsari district was purposely selected while a proportionate random sampling method was used to obtain Agro-Service Providers and their beneficiaries were obtained by simple random sampling. The collected information through structural schedule was analyzed by using simple statistics. Majority of the agro-service providers and beneficiaries had medium level of sales and purchasing behaviour and the majority of respondents shown their behaviour towards five areas; from insecticide, Monocrotophos and Malathion, followed by Streptomycelene and Spade from Bacteriocide and equipment, Mancozeb from fungicide, 2 4-D and Petialachlor from herbicide. While the majority of agro-service providers and nearly half of beneficiaries had moderately performed their role.*

### INTRODUCTION

The Ministry of Agriculture and Co-operation has been lurching various situational as well as need based location specific agricultural development programmes for the enhancement of adhere population in India. The State level Line Departments are also have an eagle-eyed look and well planned network for development of agriculture. However, human resources engaged in transfer of technology are now found insufficient due to budgetary restrictions, area under his jurisdiction, inadequate advance knowledge etc., hence, several agricultural oriented agencies have shown their presence in numerous ways.

During seventh five year plan, the government considered the presence of private service providers and its role in agriculture as another contributor. The agro-service provider is one who delivers various inputs to the farmers, at his place, at right time, in sufficient quantity with affordable

prices and in required quality. When the farmers perceived any field problem, they normally approach to near by agro-service providers. The extension personnel at different level are helping the farmers with information and with their statutory limitation and this often compel to the farmers to consult private service. It was observed from the primary and secondary sources that the private service providers are playing a major role indirectly in rural areas.

### METHODOLOGY

The present investigation was purposely conducted in five talukas of Navsari district with an ex-post facto research design. A proportionate random sampling method was used to obtain 100 Agro-Service Providers (ASPs) from respective talukas. According they were approached personally and name of five villages as well as farmers obtained who came to purchase critical inputs for their ASP during last six months. Once

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again, the list of suggested villages and farmers was prepared and from this one village and two farmers were selected randomly. Thus, the sample for the study comprised of total 200 beneficiary respondents. The data about sales and purchasing behaviour and role performance of agro-service providers and beneficiaries were collected through structured schedule. The collected data were analyzed by using simple statistics.

## FINDINGS

### 1 Sales and purchasing behavior of agro-service providers and beneficiaries

There are kinds of technical grades of insecticides, fungicides, herbicides equipments being sold by the ASPs and purchased by the farmers along with seasonality of the products and technical grades were ranked according to their sale.

**Table 1: Distribution of the agro-service providers and beneficiaries according to their level of sales and purchasing behaviour** n=300

Level of sales and purchasing behavior	ASPs		BRs		Pooled	
	Nos.	%	Nos.	%	Nos.	%
Lower level of sales and purchasing behaviour	21	21.00	42	21.00	80	27.00
Medium level of sales and purchasing behaviour	61	61.00	126	63.00	145	48.00
Higher level of sales and purchasing behaviour	18	18.00	32	16.00	75	25.00
Total	100	100.00	200	100.00	300	100.00

Mean 68.85

S.D 13.33

It is observed from table 1 that the majority of the agro-service providers (61.00 per cent) and beneficiaries (63.00 per cent) had medium level of sales and purchasing behaviour followed by 21.00 each had lower level of sales and purchasing behavior and 18.00 and 16.00 per cent of them had higher level of sales and purchasing behavior respectively.

In general, nearly half of the respondent (48.00 per cent) had medium level of sales and purchasing behavior. This might be due to that the respondents are not aware about the new remedial chemicals, spectrum of control and cost benefits ratio of the same.

By providing necessary inputs at right place, at right time, in adequate quantity with proper quality and with affordable price are not enough for the farmers to bring the development in every corner of life. There are several crucial

elements working with the farmers as well as to the affiliated agencies. Out of all, season is that plays vital role in agriculture, hence the input and output mainly depends on season. Considering its importance the investigator had tried to collect information about the purchasing behaviour of agro-service providers and beneficiaries towards insecticides, bactericides, fungicides, herbicides and equipments. Information in this regards is presented in Table 2.

Table 2 clearly indicated that the majority of respondents assigned first rank to Monocrotophos (96.66 per cent) followed by Mancozeb and Malathion (96.33 per cent) as second, Carbaryl (94.00 per cent) as third, 2,4-D and Petialachlor (92.66 per cent) as fourth, Carbofuron (91.66 per cent) as fifth, Streptomycelene and Spade (88.33 per cent) as sixth, Endosulfan and Sickle (85.33 per cent) as seventh, Sulphur and Paraquat (85.00

per cent) as eight, Carbendazine (84.66 per cent) as ninth, Copper oxychloride (84.00 per cent) as tenth, Trizophos and Buttachlor (81.66 per cent) as eleventh, Wooden Plough (80.66 per cent) as twelfth, Carboxin (78.66 per cent) as thirteen, Ethyl Mercuric Chloride (Ceresan) (78.00 per cent) as fourteen, and Cartaf (77.33 per cent) ranked fifth teen.

Further, same table clearly indicated that 76.66 per cent had ranked sixteenth to the Phospamidon, 76.33 per cent had ranked seventh to the Quinalphos, 75.00 per cent ranked eighteen to the Dimethoate, 73.00 per cent had ranked nineteen to the Fenvelerite, 71.66 per cent had ranked twenty to the Captan, 71.33 per cent had ranked twenty-one to the Agrimycene, 71.00 per cent had ranked twenty-

two to the Harrow, 70.66 per cent had ranked twenty-three to the Knapsacks sprayer, 68.33 per cent had ranked twenty-four to the Phorate, 66.66 per cent had in rank twenty-five to the Idiofungine, 66.33 per cent had ranked twenty-six to the Edifanphos, 66.00 per cent had ranked twenty-seven to the Dicofol, Phenyl Mercuric Acetate (ceresin dry) and Seed drill, 65.33 per cent had ranked twenty-eight to the Acephate, Methixy Ethyl Mercuric chloride (Agallol) and Glyphosate, 64.00 per cent had rank twenty-nine to the Methyl Parathion and Mould board plough, 63.00 per cent had ranked thirty Cypermethrin, 59.33 per cent had ranked thirty-one to the Chloropyriphos and Bla-s, and 58.00 per cent had ranked thirty-two to the Pheromen trap.

**Table 2: Seasonality of agro-service providers and beneficiaries**

n=300

Sr. No.	Technical Name	Seasonality		Rank
		Frequency	Percentage	
1	Phospamidon	230	76.66	XVI
2	Quinalphos	229	76.33	XVII
3	Endosulfan	256	85.33	VII
4	Phorate	205	68.33	XXIV
5	Methyl Parathion	192	64.00	XXIX
6	Cypermethrin	189	63.00	XXX
7	Monocrotophos	290	96.66	I
8	Carbofuron	275	91.66	V
9	Trizophos	245	81.66	XI
10	Chloropyriphos	178	59.33	XXXI
11	Acephate	195	65.00	XXVIII
12	Dimethoate	225	75.00	XVIII
13	Fenvelerite	219	73.00	XIX
14	Carbaryl	282	94.00	III
15	Dicofol	198	66.00	XXVII
16	Malathion	289	96.33	II
17	Cartaf	232	77.33	XV
	<b>BACTERIOCIDES</b>			
18	Streptomycelene	265	88.33	VI
19	Agrimycene	214	71.33	XXI
20	Idiofungine	200	66.66	XXV
21	Bla-s	178	59.33	XXXI

Sr. No.	Technical Name	Seasonality		Rank
		Frequency	Percentage	
22	Mancozeb	289	96.33	II
23	Carbendazine	254	84.66	IX
24	Edifanphos	199	66.33	XXVI
25	Copper oxychloride	252	84.00	X
26	Captan	215	71.66	XX
27	Carboxin	236	78.66	XIII
28	Sulphur	255	85.00	VIII
29	Ethyl Mercuric Chloride (ceresan)	234	78.00	XIV
30	Methixy Ethyl Mercuric chloride (Agallol)	196	65.33	XXVIII
31	Phenyl Mercuric Acetate (ceresin dry)	198	66.00	XXVII
<b>HERBICIDES</b>				
32	Butachlor	245	81.66	XI
33.	Paraquat	255	85.00	VIII
34	2,4-D	278	92.66	IV
35	Glyphosate	196	65.33	XXVIII
36	Petalachlor	278	92.66	IV
<b>EQUIPMENTS</b>				
37	Seed drill	198	66.00	XXVII
38	Sickle	256	85.33	VII
39	Wooden Plough	242	80.66	XII
40	Harrow	213	71.00	XXII
41	Mould board plough	192	64.00	XXIX
42	Knapsacks sprayer	212	70.66	XXIII
43	Spade	265	88.33	VI
44	Pheromen trap	174	58.00	XXXII

Further, same table clearly indicated that 76.66 per cent had ranked sixteenth to the Phospamidon, 76.33 per cent had ranked seventh to the Quinalphos, 75.00 per cent ranked eighteen to the Dimethoate, 73.00 per cent had ranked nineteen to the Fenvelerite, 71.66 per cent had ranked twenty to the Captan, 71.33 per cent had ranked twenty-one to the Agrimycene, 71.00 per cent had ranked twenty-two to the Harrow, 70.66 per cent had ranked twenty-three to the Knapsacks sprayer, 68.33 per cent had ranked twenty-four to the Phorate, 66.66 per cent had in rank twenty-five to the Idiofungine, 66.33 per cent had ranked twenty-

six to the Edifanphos, 66.00 per cent had ranked twenty-seven to the Dicofol, Phenyl Mercuric Acetate (ceresin dry) and Seed drill, 65.33 per cent had ranked twenty-eight to the Acephate, Methixy Ethyl Mercuric chloride (Agallol) and Glyphosate, 64.00 per cent had rank twenty-nine to the Methyl Parathion and Mould board plough, 63.00 per cent had ranked thirty Cypermethrin, 59.33 per cent had ranked thirty-one to the Chloropyriphos and Bla-s, and 58.00 per cent had ranked thirty-two to the Pheromen trap.

## 2 Role Performance Of Agro-Service Providers And Beneficiaries

Role performance was operationalized as the degree to which the agro-service providers and beneficiaries were receptive to modern values and practice in their daily life style. The collected data were classified into three categories; viz. (i) poor role performance (up to 4 score), (ii) moderate role performance (5 to 6 score) and (iii) higher role performance (above 7 score). Information about

role performance of agro-service providers and beneficiaries is presented in table 3.

It is observed from Table 3 that the majority of agro-service providers (53.00 per cent) and nearly half of beneficiaries (46.50 per cent) had moderately performed their role followed by 29.00 and 31.50 per cent belonged to higher and 18.00 and 22.00 per cent to poor role performance categories respectively.

**Table 3: Distribution of the agro-service providers and beneficiaries according to their role performance** n=300

Level of role performance	ASPs		BRs		Pooled	
	Nos.	%	Nos.	%	Nos.	%
Poor role performance	18	18.00	45	22.00	55	18.00
Moderate role performance	53	53.00	93	46.50	180	60.00
Higher role performance	29	29.00	62	31.50	65	22.00
Total	100	100.00	200	100.00	300	100.00

Mean 9.20

S.D 3.80

The pooled data indicated that the majority of respondents (60.00 per cent) had performed their role moderately. The probable reason for this finding might be due to their different style of interest towards their enterprise.

### CONCLUSIONS

From the above discussion it can be concluded that majority of the agro-service providers (61.00 per cent) and beneficiaries (63.00 per cent) had medium level of sales and purchasing behaviour.

The majority of respondents shown their behaviour towards five areas; from insecticide, Monocrotophos (96.66 per cent) and Malathion (96.33 per cent), followed by Streptomycelene and Spade (88.33 per cent) from bactericide and equipment, Mancozeb (94.00 per cent) from fungicide, 2, 4-D and Petialachlor (92.66 per cent) from herbicide. The majority of agro-service providers (53.00 per cent) and nearly half of beneficiaries (46.50 per cent) had moderately performed their role.

*Studies serve for delight, for ornament and for ability.*

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