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# Constraints faced by Agri-input Dealers in Dissemination of Information to Farmers

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ABSTRACT: Agri-input dealers are the major source of farm related information in India. They provide various types of information, extension services, financial credit, etc to the farmers along with inputs. Various studies have reported that input-dealers play most prominent role in dissemination of a new technology but still very fewer studies have focused on agri-input dealers specifically. In our study 120 agri-input dealers were interviewed with the help of semi-structured questionnaire for their challenges faced by them while providing proper quality of inputs and extension services to the farmers. A total six type of major constraints were identified viz. financial, challenges related to product performance, managerial constraints, challenges faced in delivery of extension services to the farmers, constraints in managing the farmer's problem and constraints in availability of inputs. Ranking of the challenges with the help of weighted means revealed that financial constraints were the major problem faced by input dealers with timely available of inputs being the least important issue.

Keywords: Product performance, managerial constraints, challenges, Semi-structured questionnaire

#### **INTRODUCTION**

Agri-input dealers are those who sell farm inputs (fertilizers, seeds, pesticides, etc.) to the farmers and also provide various additional services like extension services to the farmers. Agronomic practices for seeds, pesticides and information on fertilizers were three important services provided to farmers by agriinput dealers Etyang (2013). Formally agricultural extension services in India are delivered by government institutions like ICAR, SAUs, line departments, KVKs, etc. but still there is a shortage of extension professionals as farming community is very large in volume. Hence, it seems impossible for formal system to cater the extension demands of farmers. Sheikh et al., (2016) observed that more than three fourth of his respondent cotton growers received extension services from private sources or seed companies. Agri-input dealers provide most of the farm information, counseling, new technology, services and input to the farmers. This informal system of extension service is very prevalent in rural areas as first-hand information to the farmers. Sindhu and Bhullar (2005) reported that farmers' information sharing with input dealers, fellow and progressive farmers was better than any other information sources in whole Punjab. Agri-input dealers are the second most important source of farm information after progressive farmers in rural areas (Chandra Shekara et al., 2007; Adhiguru et al., 2009).

A total of 58% of Indian population (IBEF, 2021) is dependent on agriculture for livelihood. An efficient extension system which timely disseminates need-based farm technology among farming communities is need of the hour. About 2.82 lakh Agri-Input Dealers are operating in rural areas covering almost all parts of the country (Goel, 2003). Even the Government of India recognizing the potential of this category (i.e. input dealers) in providing extension support to farmers diploma course has offered a at MANAGE specifically targeting input dealers who wish to brush up on the latest technical knowledge in various sub-sectors of agriculture (Gulati et al., 2018) Diploma in Agricultural Extension Services for Input Dealers (DAESI), launched by GOI at MANAGE, imparts relevant and location specific agricultural knowledge to enable these input dealers to transform them into para-extension professionals so that they can address the day-to-day problems being faced by the farmers at field level.

In dissemination of information agri-input dealers face different types of constraints like lack of proper knowledge, technical aspects of the inputs, overadoption or under-adoption of technology by farmers, etc. Prajapati *et al.*, (2012) found that Agri-input dealer possessed medium level of knowledge. Sharma (2017) stated that majority of the input-dealers face problem of delay in payment from farmers followed by lack of technical knowledge of farmers. The poor domestic

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infrastructure and limited access to agricultural credit (including seasonal credit) also undermine the effect and equitable participation in agricultural inputs trade (Sanchez, 2005). Bairwa et al., (2012) have reported that farmers often denied access to agricultural inputs due to restrictive policies and poor infrastructure. The limited use of modern inputs is often due to lack of finance, inadequate information, and unfavorable input and output prices (Goletti and Govindan, 1995). Other major constraints faced by inputs dealers are business constraints including high transport cost due to poor infrastructure, lack of market information, lack of storage facilities, and limited business skill and knowledge (Jonas et al., 2008). Besides other factors like unavailability of inputs, poor performance of products, misinterpretation of information, etc acts as major constraints for the dealers affecting their business in negative way. Hence, in this study such major challenges have been identified and ranked to obtain more clear insight of the interaction and interdependency of the farmers and agri-input dealers.

# **RESEARCH METHODOLOGY**

The current study using ex-post facto research design was conducted in two districts namely Bhagalpur and Vaishali district of Bihar state. The districts were selected purposively for the study. Three blocks each from Bhagalpur district i.e. Goradih, Sonhaula and Sabour and Vaishali district i.e. Goraul, Mahua and Lalganj respectively were selected purposively. Further twenty respondents from each block were selected randomly after obtaining the list from State Agricultural Department, Krishi Vigyan Kendra (KVK) of Bhagalpur and Vaishali districts for the aforesaid six blocks. This list was used as sampling frame. Hence, twenty agri-input dealers from each six blocks resulted into 120 agri-input dealers which were decided as sample for our study. A proper schedule was developed and the respondents were interviewed for data collection.

# **RESULT AND DISCUSSION**

From the given table 1 it is clear that the statement "Farmer purchase seeds and pesticides on credit and are

unable to pay back on time" was ranked first (I) as the major problem in financial constraints similarly Sharma (2017) stated that majority of the input-dealers face problem of delay in payment. The statement "Branded products have very less margin" was ranked second (II), "There is no direct financial scheme for the Agriinput dealer from the government" was ranked third (III), "Bank hesitates in sanctioning loan to private Agri-input dealer" was ranked forth (IV). The poor domestic infrastructure and limited access to agricultural credit (including seasonal credit) also undermine the effect and equitable participation in agricultural inputs trade (Sanchez, 2005). The statement "When a product expires it causes a direct loss to agri-input dealers and companies do not take it back." was ranked last (V).

The above Table 2 shows that the statement "I face major hurdle from farmer when, the sold seed fails to germinate" was ranked first (I) in managerial constraints followed by the statement "I find difficulty to sell pesticides which has short span of expiry date" was ranked second (II), "I find difficulty in selling seeds with short span of expiry" statement was ranked third (III) and the statement "I find difficulty to contact with other Agri-input dealer" was ranked last (VI).

As per the Table 3 it was found that the statement "Selling subsidised product is difficult as government delays in reimbursing the money." was ranked first (I) among the constraints faced by Agri-input dealers in delivery of extension services to the farmers followed by the statement "Marketing subsidised products means an extra load on the part of input dealers due to accounting problem." was ranked second (II). The statement "Once farmers get subsidy on some products they start asking for subsidy on every product." was ranked third (III) while the statement "I find difficulty in understanding language or technique delivered by private company" was ranked last (XII). Prajapati et al., (2012) reported the agri-input dealers had medium level of knowledge and Awareness of time methods quantity & number of spray, diseases, IPM and bio control were the major areas of training need reported by majority of the pesticide dealers.

Sr. No.	Statements	SA	Α	UD	DA	SDA	Wt. mean	Rank
1.	Farmer purchase seeds and pesticides on credit and are unable to	75.83%	11.66%	01.67%	09.17%	01.67%	4.51	Ι
	pay back on time.	(91)	(14)	(2)	(11)	(2)		
2.	Branded products have very less margin	41.67%	58.33%	00.00%	00.00%	00.00%	4.42	II
		(50)	(70)	(0)	(0)	(0)		
3.	There is no direct financial scheme for the Agri-input dealer	44.17%	49.17%	06.66%	00.00%	00.00%	4.37	III
	from the government.	(53)	(59)	(8)	(0)	(0)		
4.	Bank hesitates in sanctioning loan to private Agri-input dealer.	35.00%	20.83%	13.33%	26.67%	04.17%	3.56	IV
		(42)	(25)	(16)	(32)	(5)		
5.	When a product expires it causes a direct loss to agri-input	11.67%	40.00%	00.00%	36.66%	11.67%	3.03	V
	dealers and companies do not take it back.	(14)	(48)	(0)	(44)	(14)		

Table 1: Distribution of the respondent according to financial constraints faced by them.

SA=Strongly Agree, A=Agree, UD=Undecided, DA=Disagree, SDA= Strongly disagree

Sr. No.	Statements	SA	Α	UD	DA	SDA	Wt. mean	Rank
1.	I face major hurdle from farmer when, the sold seed fails to	73.33%	26.67%	00.00%	00.00%	00.00%	4.73	Ι
	germinate.	(88)	(32)	(0)	(0)	(0)		
2.	I find difficulty to sell pesticides which has short span of	12.50%	62.50%	01.67%	20.83%	02.50%	3.62	II
	expiry date.	(15)	(75)	(2)	(25)	(3)		
3.	I find difficulty in selling seeds with short span of expiry.	15.00%	57.50%	03.33%	20.84%	03.33%	3.60	III
		(18)	(69)	(4)	(25)	(4)		
4.	I find difficulty to pay tax in new GST system.	11.67%	50.00%	00.00%	36.66%	01.67%	3.33	IV
		(14)	(60)	(0)	(44)	(2)		
5.	I find difficulty to keep extra staff in my business.	15.00%	26.66%	01.67%	55.00%	01.67%	2.98	V
		(18)	(32)	(2)	(66)	(2)		
6.	I find difficulty to contact with other Agri-input dealer.	00.00%	13.33%	01.67%	83.33%	01.67%	2.27	VI
		(0)	(16)	(2)	(100)	(2)		

Table 2: Distribution of the respondent according to managerial constraints.

SA=Strongly Agree, A=Agree, UD=Undecided, DA=Disagree, SDA=Strongly disagree

#### Table 3: Distribution of respondent according to the constraints faced in delivery of extension services.

Sr. No.	Statements	SA	Α	UD	DA	SDA	Wt. mean	Rank
1.	Selling subsidised product is difficult as government delays in reimbursing the money.	83.33% (100)	15.00% (18)	00.00% (0)	01.67% (2)	00.00%	4.80	Ι
2.	Marketing subsidised products means an extra load on the part of input dealers due to accounting problem.	50.00% (60)	35.00% (42)	00.00%	15.00% (18)	00.00%	4.20	II
3.	Once farmers get subsidy on some products they start asking for subsidy on every product.	21.67% (26)	40.00% (48)	00.00%	26.66% (32)	11.67% (14)	3.33	III
4.	Selling subsidized product is more time taking.	03.33% (4)	53.33% (64)	10.00% (12)	29.17% (35)	04.17% (5)	3.22	IV
5.	I find difficulty in managing representative from private company to organise farmers' field demonstration.	05.00% (6)	39.17% (47)	10.83% (13)	36.67% (44)	08.33% (10)	2.96	V
6.	It is difficult to convince farmer that more fertilizer does not always mean more yield.	03.33% (4)	45.00% (54)	06.67% (8)	31.67% (38)	13.33% (16)	2.93	VI
7.	It is difficult to convince farmer that more pesticide does not always mean more yield.	01.67% (2)	40.83% (49)	10.83% (13)	40.00% (48)	06.67% (8)	2.91	VII
8.	It is difficult to go to for farm visit due to bad connectivity of roads.	04.17% (5)	30.00% (36)	11.67% (14)	38.33% (46)	15.83% (19)	2.68	VIII
9.	Farmers do not always follow the recommended dose.	01.67% (2)	33.33% (40)	00.00%	56.67% (68)	08.33% (10)	2.63	IX
10.	I find it difficult to allocate resource (capital, place) for holding meetings conducted by companies for the farmers.	00.00% (0)	28.33% (34)	06.67% (8)	53.33% (64)	11.67% (14)	2.52	Х
11.	I am not much interested in visiting the farmer's field.	00.00% (0)	21.67% (26)	00.00% (0)	76.66% (92)	01.67% (2)	2.42	XI
12.	I find difficulty in understanding language or technique delivered by private company.	00.00% (0)	06.67% (8)	15.83% (19)	54.17% (65)	23.33% (28)	2.06	XII

SA= Strongly Agree, A= Agree, UD= Undecided, DA= Disagree, SDA= Strongly Disagree

From Table 4 it was evident that the statement "Quantity of demanded agri-inputs supplied by the company is not sufficient to fulfil the need of the farmers" was ranked first (I) as the major constraints in availability of inputs to the input dealers. The statement "I find difficulty to get inputs timely from company at peak demand period" was ranked second (II), and the statement "I find difficulty in getting all the inputs in same brand" was ranked third (III), "I find difficulty to get inputs timely demand of the farmers" was ranked forth (IV) and the statement "I find difficulty to get inputs seasonal demand of certain products" was ranked last (V).

The above Table 5 shows that the statement "I face problem from farmers if the performance of inputs are poor" was ranked as first (I) in constraints in product performance followed by the statement "I face problem from farmers in case of complete failure of inputs" was ranked second (II). The statement "I face problem due to the selling of spurious product by company" was ranked third (III) and "I face problem from farmers if there is an untimely application of inputs by farmers" was ranked forth (IV) and the statement "I face problem due to the lack of knowledge on part of farmers to use pesticides" was ranked last (V).

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Table 4: Distribution of respondents according to the problems faced by them in timely availability of inputs.

Sr. No.	Statements	SA	Α	UD	DA	SDA	Wt.	Rank
							mean	
1.	Agri-inputs supplied by the company are not enough to	00.00%	26.67%	00.00%	60.00%	13.33%	2.40	Ι
	fulfil the needs of the farmers.	(0)	(32)	(0)	(72)	(16)		
2.	I find difficulty to get inputs timely from company at peak	01.67%	20.00%	06.67%	58.33%	13.33%	2.38	II
	demand period.	(2)	(24)	(8)	(70)	(16)		
3.	I find difficulty in getting all the inputs in same brand.	00.00%	18.33%	06.67%	68.33%	06.67%	2.37	III
		(0)	(22)	(8)	(82)	(8)		
4.	I find difficulty to get inputs timely demand of the farmers.	02.50%	21.67%	01.67%	56.66%	17.50%	2.35	IV
		(3)	(26)	(2)	(68)	(21)		
5.	I find difficulty to get inputs seasonal demand of certain	00.00%	16.67%	01.67%	63.33%	18.33%	2.17	V
	products.	(0)	(20)	(2)	(76)	(22)		

SA= Strongly Agree, A= Agree, UD= Undecided, DA= Disagree, SDA= Strongly Disagree

# Table 5: Distribution of the respondent as per their constraints faced in product performance.

Sr. No.	Statements	SA	Α	UD	DA	SDA	Wt. mean	Rank
1.	I face problem from farmers if the performance of	70.00%	11.67%	03.33%	13.33%	01.67%	4.35	Ι
	inputs are poor.	(84)	(14)	(4)	(16)	(2)		
2.	I face problem from farmers in case of complete	53.33%	33.33%	01.67%	11.67%	00.00%	4.28	II
	failure of inputs.	(64)	(40)	(2)	(14)	(0)		
3.	I face problem due to the selling of spurious	41.67%	46.66%	06.67%	05.00%	00.00%	4.25	III
	product by company.	(50)	(56)	(8)	(6)	(0)		
4.	I face problem from farmers if there is an	21.67%	43.33%	10.00%	25.00%	00.00%	3.62	IV
	untimely application of inputs by farmers.	(26)	(52)	(12)	(30)	(0)		
5.	I face problem due to the lack of knowledge on	16.67%	43.33%	00.00%	30.00%	10.00%	3.27	V
	part of farmers to use pesticides.	(20)	(52)	(0)	(36)	(12)		

SA=Strongly Agree, A=Agree, UD=Undecided, DA=Disagree, SDA=Strongly Disagree

# Table 6: Distribution of respondent as per their constraints in managing the farmers' problem.

Sr. No.	Statements	SA	Α	UD	DA	SDA	Wt.	Rank
							mean	
1.	I find difficulty in the trust issue (trust to inputs) to the	01.67%	40.83%	06.67%	39.17%	11.67%	2.82	Ι
	farmers.	(2)	(49)	(8)	(47)	(14)		
2.	I find difficulty because the farmers do not follow the	01.67%	25.83%	09.17%	55.00%	08.33%	2.57	II
	recommended advice.	(2)	(31)	(11)	(66)	(10)		
3.	I find difficulty because the farmer believes more the	00.00%	22.50%	04.17%	71.67%	01.67%	2.47	III
	neighbour rather than the Agri-input dealers.	(0)	(27)	(5)	(86)	(2)		
4.	I find difficulty because farmers do not buy the branded	01.67%	21.67%	01.67%	70.00%	05.00%	2.45	IV
	products.	(2)	(26)	(2)	(84)	(6)		
5.	I find difficulty because most of the farmers are illiterate.	01.67%	19.17%	04.17%	70.00%	05.00%	2.42	V
		(2)	(23)	(5)	(84)	(6)		
6.	I find difficulty because the farmers do not meet the Agri-	08.33%	25.83%	02.50%	53.33%	10.00%	2.36	VI
	input dealer on the right time for right recommendation.	(10)	(31)	(3)	(64)	(12)		

SA= Strongly Agree, A= Agree, UD= Undecided, DA= Disagree, SDA= Strongly Disagree

The above table 6 shows that the statement "I find difficulty in the trust issue to the farmers" was ranked first (I) in constraints in managing the farmers' problem followed by the statement "I find difficulty because the farmers do not follow the recommended advice" was ranked second (II), "I find difficulty because the farmer believes more the neighbour rather than the Agri-input dealers" statement was ranked third (III) and the statement "I find difficulty because the farmers do not meet the Agri-input dealer on the right time for right recommendation" was ranked last (VI).

Table 7 shows the weighted mean and ranking of all the major constraints faced by Agri-input dealers. It is noted that Financial constraints is ranked first (I) with weighted mean score 3.98. Sharma (2017) highlighted the problem of untimely payment to input-dealers by farmers and Sanchez (2015) depicted how limited access to credit undermines the effect of equitable input trade. Due to lack of finance, modern input has very less uses in the fields (Goletti and Govindan, 1995). Unfavourable input output prices, inadequate information, etc. are other factors responsible for low modernisation of farms.

The constraints in product performance is ranked second (II) with weighted mean score 3.95. Managerial constraints is ranked third (III) with weighted mean score 3.42 followed by constraints faced in delivery of extension services to the farmers with weighted mean score of 3.05. This may be due to medium level of knowledge of input-dealers Prajapati (2012).

Constraints in managing the farmers' problem is ranked fifth (V) with weighted mean score 2.51 and constraints in availability of inputs is ranked last (VI) due to weighted mean score 2.33 among the all the constraints. Seasonality of agri-input trade is a major problem related to input-dealers.

Table 7: Distribution of major	constraints faced by	Agri-input dealers.

Sr. No.	Major Constraints	Weighted Mean	Rank
1.	Financial constraints	3.98	Ι
2.	Constraints in product performance	3.95	II
3.	Managerial constraints	3.42	III
4.	Constraints faced in delivery of extension services to the farmers	3.05	IV
5.	Constraints in managing the farmers' problem	2.51	V
6.	Constraints in availability of inputs	2.33	VI

#### CONCLUSION

The study is conclusive of the fact that financial challenges are the major setback faced by the local agriinput dealers. Financial constraints were ranked first among all other challenges and majority of the input dealers were facing them. It also highlights the lacunae on the part of public sector banks in lending credit to the small input dealers. Failure in product performance is another problem faced by farmers and agri-input dealers leading to loss of credibility on the part of input dealers. Even when the dealers advise farmers in extension service, the farmers sometimes don't follow leading to managerial constraints. Other constraints include season ability of agri-input trade, timely unavailability of inputs, difficulty in providing extension services to the farmers and managing the problem of farmers.

#### **FUTURE SCOPE**

This paper will help the policy makers in understanding the gap in credit lending system and empower the agriinput dealers by providing credit and training wherever required. This informal system of extension can be further empowered to provide first-hand innovative technologies to the farmers.

**Conflict of interest.** This study was conducted as a part of post graduation thesis work in Bihar Agricultural University, Sabour, Bhagalpur. As per international standard and university standard, all the authors involved give consent for publication of this manuscript and there is no further competing interest.

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