

Original Research Article

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Training Needs of Agri Input Dealers

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ABSTRACT

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The present study was conducted during 2019-20 in Madurai district. A total 200 Agri - input dealers were selected by proportionate allocation method from all the 12 blocks of Madurai District. Data were collected by using pretested well structured interview schedule. After thorough review of literature and in consultation with the experts of relevant field five different potential training areas viz., fertilizer , pesticides, seeds, farm machineries and ICT applications were identified and was measured by computing the weighted mean score Different areas of training were ranked as per the weighted mean score. The results revealed that more than two –third of the agro input dealers expressed their training needs on micro nutrients, liquid fertilizer, trade name, chemical name and properties of pesticides, weedicides, IPM and viability of seed aspects. Agri input dealers desire to have training on computer application in their agri business Hence institutions support to these input dealers must give undue important on their preference of training need areas while designing and conducting training programme.

Introduction

Farmers are mostly guided by the agri input dealers in selection and use of plant protection measures to control crops losses. Chronic toxicity of pesticides affect the whole population. The farming communities were found to be largely unaware of correct usage of pesticides. The outreach of agricultural universities and agricultural departments to the farmers was minimal due to less number of extension functionaries (Bhushan *et al.*, 2013). Agri input dealers become one of the

prime source of farm information and play a vital role in guaranteeing the essential agricultural inputs that contribute to boosting the agricultural productivity Ayieko and Tschirley (2006).

Modernization of agriculture involves mainly-invention of agricultural technology, transfer of this technology and adoption of this technology. For transferring these technologies public extension services playing an important role. But, the public extension service by itself is not enough to

handle the multifarious demands of the farming community and is being supplemented by private extension, agencies like NGOs, farmer organization etc.

Agri. entrepreneur playing important role in transfer of agricultural technology at level of extension linkage. So it is necessary to train the farm input dealers in respect of new technology so that they will change and adjust with new circumstances.

Training help to improve a person's skill power of intelligence and development in him the desired attitudes and values required for the work. To make the training programme more effective, training needs of the agri. entrepreneur have to be assessed before organizing of any training programme. Therefore, the present study was focused on the specific objectives to assess training needs of agri. entrepreneur (Agro input dealers).

Materials and Methods

The present study was conducted during 2019-20 in Madurai district. A total 200 input dealers were selected by proportionate allocation method from all 12 blocks of Madurai District. Data were collected by using pretested well structured interview schedule. After thorough review of literature and in consultation with the experts of relevant field the potential training areas were identified.

These areas were appraised by the respondents on three points continuing as most needed, needed, not needed for which scores of 3, 2 and 1 was assessed. Training need was measured by computing the weighted mean score and different areas of training were ranked as per the weighted mean score. Appropriate statistical tools were used to interpret data.

Results and Discussion

The training areas regarding input categories were divided into *viz.*, pesticides, fertilizers, seeds, farm machineries and other *viz.* ICT application. These training areas were rated and presented in Table 1,2,3,4 and 5 respectively

Training needs of agro input dealers in different areas of pest management Table 1 revealed that trade name chemical name and properties of pesticides have emerged as the most needed training area and is ranked first with weighted means score 2.84 followed by trade name, chemical name and properties of weedicides with weighted mean score of 2.7. Other identified perceived training areas were diagnostic and characteristic symptom and damage, caused by insect pest, integrated pest management(2.49), Maintenance, selection, use and care of different sprayers, dusters and their minor repairs with the mean weightage score value of 2.43. The findings of the study are in conformity with the study of farm input dealer Arjun Prasad Verma *et al.*, (2019).

Training needs related to fertilizers

It could be observed from Table 2 that majority of the respondents had expressed most needed training needs on micronutrient fertilizer with the weighed score of 2.83 followed by liquid fertilizer and its method of application (2.81), different type of fertilizers (2.68) method of fertilizer application (2.62) integrated nutrient management (2.67) while respondents needed training need was expressed about soil testing of fertilizer(2.12) followed by cake fertilizer(2.02) and fertigation with the weighted score of (1.7). Findings of the study are in accordance with the study Waghmode *et al.*, who revealed that respondents had expressed most needed training needs on micronutrient fertilizer.

Table.1 Distribution on the basis of training needs of agri entrepreneur (agro-input dealers) in pest management N=200

S. No.	Training areas	Most needed*	Needed*	Not needed*	WMS*	Rank
1.	Diagnostic and characteristics symptom and damage caused by insect pest	166 (83)	9 (4.5)	25 (12.5)	2.70	II
2.	Identification of different type of pest	106 (53)	26 (13)	68(34)	2.19	VIII
3.	Trade name, chemical name and properties of weedicides	166 (83)	9 (4.5)	25 (12.5)	2.70	II
4.	Control of non-insect pest rat, birds, termites, etc.	124 (62)	60 (30)	16 (8)	2.54	IV
5.	Trade name, chemical name and properties of pesticides	170 (85)	29 (14.5)	1(0.5)	2.84	I
6.	IPM and its components	136 (68)	26 (13)	38(19)	2.49	V
7.	Trade name, chemical name and properties of micro nutrients	82 (41)	54 (27)	64(32)-	2.09	IX
8.	Maintenance, selection, use and care of different sprayers, dusters and their minor repairs	86 (43)	108 (54)	6 (3)	2.43	VI
9.	Precautions in handling-storing and use of antidotes in case of accidents	44 (22)	137 (68.5)	19 (9.5)	2.12	VII
10.	Control of stored grain pests	148(74)	40(20)	12(6)	2..67	III
11.	Bio-fertilizer – its use and importance	44 (22)	137 (68.5)	19 (8.5)	2.12	VII

Note: *Figure in paranthesis indicates percentage

*WMS-Weighted mean score

Table.2 Distribution of respondents on the basis of training needs related to fertilizers

S. No.	Training areas	Most needed*	Needed*	Not needed*	WMS*	Rank
1.	Different type of fertilizer	137 (68.50)	63 (31.5)	-	2.68	III
2.	Soil testing for fertilizer application	60(30)	104 (52)	36 (18)	2.12	X
3.	Methods of fertilizer application	130 (65)	64 (32)	6 (3)	2.62	VI
4.	Government Laws and Regulations related to fertilizer	110 (55)	78 (39)	12 (6)	2.49	VII
5.	Liquid fertilizer and method of used	161 (80.5)	34 (17)	5 (2.5)	2.81	II
6.	Bio-fertilizers	88 (44)	94 (47)	18 (9)	2.35	IX
7.	Micro-nutrients fertilizers	169 (84.5)	28 (14.3)	3 (1.76)	2.83	I
8.	Nutrient contents in fertilizers	147 (73.5)	39 (19.5)	14 (7)	2.66	V
9.	Cake fertilizers	45 (22.5)	115 (57.9)	40 (19.30)	2.02	XI
10.	Fertigation	31 (15.5)	78 (38.6)	91 (45.62)	1.7	XII
11.	Implements used for fertilizer application	122 (61)	52 (26.32)	26 (12.28)	2.48	VIII
12.	Integrated Nutrient Management	145 (72.5)	45 (22.5)	10 (5)	2.67	IV

*Figure in paranthesis indicates percentage

*WMS-Weighted mean score

Table.3 Distribution of respondents on the basis of training needs related to seeds

S. No.	Areas of training	Most needed*	Needed*	Not needed*	WMS*	Rank
1.	Improved varieties hybrids of various crops	144 (72)	44 (22)	12 (6)	2.66	IV
2.	Germination power of seed / viability of seeds aspects	178 (89)	20 (10)	2 (1)	2.67	III
3.	Seed treatment	156 (78)	42 (21)	2 (1)	2.77	II
4.	Details of Certification of seeds	170 (85)	30 (15)	-	2.85	I
5.	Different type of seeds	124 (62)	69 (34.5)	7 (3.5)	2.58	V
6.	Storage procedure and methods of seeds	143 (71.5)	46 (23)	11 (5.5)	2.66	IV

Note: * Figure in paranthesis indicates percentage

*WMS-Weighted mean score

Table.4 Distribution of respondents on the basis of training needs on farm machines

S. No.	Training areas	Most needed*	Needed*	Not needed*	WMS*	Rank
1.	Repairing of machinery and implements	140 (70)	32 (16)	28 (14)	2.56	II
2.	Operating skill	110 (55)	60 (30)	30 (15)	2.4	III
3.	Insurance subsidy and loan procedure	170 (85)	24 (12)	11 (5.5)	2.84	I

*Figure in paranthesis indicates percentage

*WMS-Weighted mean score

Table.5 Distribution of respondents on the basis of crop specific training needs

S. No.	Name of the crops	Most needed*	Needed*	Not needed*	WMS*	Rank
1.	Cereals	150 (75)	40 (20)	10 (5)	2.7	II
2.	Pulses	120 (60)	60 (30)	20 (10)	2.5	III
3.	Millets	170 (85)	20 (10)	10 (5)	2.8	I
4.	Oilseeds	140 (70)	30 (15)	30 (15)	2.55	IV
5.	Horticultural Crops	170 (85)	20 (10)	10 (5)	2.8	I
6.	Commercial crops	50(25)	30 (15)	120 (60)	1.65	V

*Figure in paranthesis indicates percentage

*WMS-Weighted mean score

Table.5 Distribution of respondents on the basis of training needs in ICT application

S. No.	Training areas	Most needed*	Needed*	Not needed*	WMS*	Rank
1.	Computer knowledge and operation	180(90)	14(7)	6(2)	2.87	I
2.	E-mail, scanning	112(56)	60(30)	28(14)	2.42	IV
3.	Internet (marketing)	142(71)	30(15)	28(14)	2.57	III
4.	General record keeping software	136(68)	56(28)	8(4)	2.64	II

*Figure in parenthesis indicates percentage

*WMS-Weighted mean score

Training needs related to seeds

From the table 3, it could be inferred that cent per cent of the agro input dealers needed training on details of certification of seeds with the weighed score 2.85 followed by seed treatment (2.77) germination power of seeds (2.67), information about the improved varieties / hybrids of various crop and storage procedure and methods of seed with the weighted score of 2.66 respectively.

Findings of the study are in accordance with the study of Arjun Prasad Verma (2019), Mande and Darade (2011)

With respect to training needs on farm machines, it could be observed that input dealers preferred training on insurance, subsidy and loan procedure to purchase farm equipment with mean weightage score of 2.84 followed by operating skill and repairing of machinery and implements with mean weightage score value of 2.56 and 2.4 respectively. This might be due to the fact that majority of the farmers required information related to the insurance subsidies and scheme availability etc for purchase of farm machine

It could be observed from table 5 that input dealers preferred training on horticultural crops and millets ranked as first with weightage score of 2.8 followed by cereals, pulses and oil seeds with the weightage score

of 2.7, 2.5 and 2.55 respectively. Least preferred training on commercial crops with mean weightage score. This might be due to the fact that farmers and dealers were well aware of technologies of commercial crops because farmers themselves take care about the commercial crop than other crops.

It could be observed from table 5 that training on computer knowledge given top most priority by agro input dealers and which ranked first with the weightage score of 2.87 followed by general recorded keeping (2.64 WMS) Internet marketing with mean weightage score of 2.57. Application of modern ICT tool is essential for any business in providing update information. Majority of them required training on application of record keeping software to maintain all the activities of business.

In conclusion more than two –third of the agro input dealers expressed their training needs on micro nutrients, liquid fertilizer, trade name, chemical name and properties of pesticides, weedicides, IPM and viability of seed aspects. Agri input dealers desire to have training on computer application in their agri business. Hence institutions support to these input dealers must give undue important on their preference of training need areas while designing and conducting training programme.

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