

Knowledge Regarding General Use of Pesticides and Training Need of Pesticide Dealers

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ABSTRACT

This study was conducted in Banaskantha, Sabarkantha and Mehsana district of Gujarat state. Three talukas from each distinct were selected randomly. Fifty dealers from each district were selected from the list obtained from the quality control office. Thus final sample consisted of 150 dealers. The data were collected by personal interview. Overall they possessed medium level of knowledge. The personal attributes like age, caste, experience in pesticides dealing, information sources used and training received by them had found associated with their knowledge level regarding general and specific areas of plant protection. 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.

Keywords : *Traning need, Pesticides knowledge*

INTRODUCTION

Among the entire crop production practices insects and diseases control practices are very complex in nature because they are highly technical in nature which require precision in use. At the same time they are recommended by scientists but are available in the market with the pesticide dealers. Our farmers are not educated so well and also skillful to use the insecticides and pesticides. They have to rely on the advice of the pesticide dealers for its use. On the other hand the dealers may not know the subject, as they are not trained in this respect. They are advising farmers on the basis of knowledge they have. Hence there is an urgent need to know the knowledge level of the pesticide dealers about the selected plant protection practices of the major crops of the area.

OBJECTIVES

- 1 To know the knowledge level of pesticide dealers the use and handling pesticide
- 2 To know the relationship between the personal characteristics and the level of knowledge.
- 3 To identify the areas of training need of the pesticide dealers

METHODOLOGY

The study was conducted in Banaskantha, Sabarkantha and Mahesana districts in North Gujarat

purposively, which covers the major crops of the North Gujarat. Taluka wise data of numbers of the registered pesticide dealers were obtained from each district. Three talukas from each distinct were selected randomly. One-third pesticide dealers were selected randomly from the list of the registered pesticide dealers. Thus fifty dealers from each district were selected from the list obtained from the quality control office. Thus final sample consisted of 150 dealers. The data were collected by personal interview. The interview schedule was developed with through discussion with experts, scientists and extension officers working in the district. The tool for data collection was interview schedule. The data were analyzed with appropriate statistical procedure.

RESULTS AND DISCUSSION

Table 1 : Distribution of the respondents according to their level of knowledge n = 150

| Sr. No. | Category | Number | Per cent |
|---------|---------------------|--------|----------|
| 1 | Low (up to 56) | 26 | 17.33 |
| 2 | Medium (56 to 66) | 85 | 56.67 |
| 3 | High (above 66) | 39 | 26.00 |

The data in Table 1 reveal that majority (56.67 per cent) of them possess medium level of knowledge regarding selected items. Where as 26.00 per cent were having high level of knowledge followed by 17.33 per cent of them were having low level of knowledge. It can be concluded from this data that majority pesticide dealers need training

for awareness and knowledge regarding general information about pesticide.

Table 2 : Association between personal characteristics of the respondents and level of knowledge

| Sr. No. | Personal Characteristics | “r” value |
|---------|--------------------------|-----------|
| 1 | Age | 0.0253* |
| 2 | Education | 0.2886 |
| 3 | Caste | 0.0382* |
| 4 | Business | 0.0691 |
| 5 | Experience | 0.0086** |
| 6 | Social participation | 0.0877 |
| 7 | Information sources used | 0.0176* |
| 8 | Training received | 0.0427* |

* = Significant at 0.05 per cent level of probability

** = Significant at 0.01 per cent level of probability

The data in the table 2 reveal that only experience of the pesticide dealers had found positive and significant association at 0.01 level of significance, while age, caste, information sources used and training received had found positive and significant at 0.05 level of significance. It indicates that age, caste, experience, information sources, training received was played significant role in increasing the knowledge of the pesticide dealers. While business, social participation and education had not established any association with level of knowledge. It indicates that Business and social participation and education was not played significant role in increasing the knowledge of the pesticide dealers.

Table 3 : Distributions of the respondents according to their training need

n = 150

| Sr. No. | Training need | Preference of training need | | |
|------------|---|-----------------------------|------------|------------|
| | | 1 | 2 | 3 |
| I | Pesticides Management | | | |
| 1 | Precautions of Pesticides | 14 (09.33) | 28 (18.67) | 40 (26.67) |
| 2 | Maintaining Register | 22 (14.67) | 29 (19.33) | 19 (12.67) |
| 3 | Selection of suitable pesticides | 30 (20.00) | 46 (30.67) | 31 (20.67) |
| 4 | Spraying calibration | 14 (09.33) | 17 (11.33) | 14 (09.33) |
| 5 | Awareness about time, method, quantity and no. of spray of pesticides | 52 (34.67) | 23 (15.33) | 25 (16.67) |
| 6 | Weedicides (pre/post emergence) | 15 (10.00) | 05 (03.33) | 20 (13.33) |
| 7 | Environment changes and pest out break | 03 (02.00) | 02 (01.33) | 01 (00.67) |
| II | Identification of pests | | | |
| 1 | Awareness of fungal /viral /bacterial diseases | 76 (50.67) | 54 (36.00) | 33 (22.00) |
| 2 | Identification of major crop diseases | 36 (24.00) | 53 (35.33) | 26 (17.33) |
| 3 | Identification of major pest | 19 (12.67) | 33 (22.00) | 58 (38.67) |
| 4 | To know about Economic injury level | 17 (11.33) | 09 (06.00) | 31 (20.67) |
| 5 | Identification of major weed | 02 (01.33) | 01 (00.67) | 02 (01.33) |
| III | Integrated Pest Management | | | |
| 1 | Awareness of I.P.M | 73 (48.67) | 37 (24.67) | 28 (18.67) |
| 2 | Use of Agril practices for pest control | 23 (15.33) | 20 (13.33) | 15 (10.00) |
| 3 | Methods of Bio- control | 32 (21.33) | 43 (28.67) | 56 (37.33) |
| 4 | Methods of Chemical control | 22 (14.67) | 50 (33.33) | 51 (34.00) |

The data presented in Table-3 revealed that the training need in case of the area of pesticide management the 34.67 per cent pesticide dealers gave first preference to the

awareness about time, method, quantity and no. of spray of pesticides followed by selection of suitable pesticides (20.00 per cent) and maintaining the Register (14.67 per cent).

First preference had given to the awareness of fungal /viral / bacterial diseases (50.67 per cent), identification of major crop diseases (24.00 per cent) and identification of major pest (12.67 per cent) in case of the area of identification of pest.

With regards to the area of integrated pest management the pesticide dealers gave first preference to the awareness about concept of I.P.M (48.67 per cent), methods of bio control (21.33 per cent) and use of Agril practices for pest control (15.33 per cent).

CONCLUSION

Overall Pesticide dealers had they possessed medium level of knowledge. The personal attributes like age, caste, experience in pesticide dealing, information source used and training received by them had found associated with their knowledge level regarding general and specific areas plant protection. Awareness of time methods quantity & no of spray, diseases, IPM and bio control were the major areas for training need reported by the majority of the pesticide dealers.