

## **COROLLARY OF THE PROFILE OF FARMERS ON THEIR ATTITUDE TOWARD INTEGRATED PEST MANAGEMENT STRATEGY**

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### **ABSTRACT**

*Implementation and adoption of an Integrated Pest Management strategy can help to reduce environmental and human health risks and reduce pest management costs. Looking to this fact, a study was carried out to find out attitude of the farmers toward Integrated Pest Management strategy and effect of various characteristics of farmers in building their positive attitude toward Integrated Pest Management. The present study was undertaken on a random sample of 120 farmers of five villages of Anand Taluka of Anand district of middle Gujarat. The study concluded that majority (85.00 per cent) of the farmers had low to medium nature of favourable attitude towards IPM strategy. The level of attitude was observed more positive among those farmers who had younger age, low level of farming experience, higher level of education, extension contact and income.*

### **INTRODUCTION**

There is increasing emphasis worldwide to change from conventional high external input agriculture into environmentally compatible, socially and economically acceptable agricultural practices. Increasing agricultural production through heavy use of pesticides and fertilizers is now recognized as a threat to the natural resource base. Environmental concerns such as depletion of natural resources, pollution of air and water, and chemical residues in foods have become important topics in agricultural production. Subsequently, the demand for Integrated Pest Management (IPM) has increased due to negative effects observed from use of pesticides.

Integrated Pest Management (IPM) can be simply defined as the use of multiple pest management tactics to efficiently produce crops, while minimizing the risk of undesirable environmental and health risks. IPM promotes the collection of information about a field, farm or geographic area that can help reduce the risks associated with pest management.

Implementation and adoption of an Integrated Pest Management strategy can help to reduce environmental and human health risks and reduce pest management costs. To accelerate rate of adoption on any technology, positivism of farmers in terms of skill, knowledge and attitude is very much essential. To understand real gap among any of all these motivational factors, systematically study is needed to understand existing status among the farmers. Manikrama (2002) Concluded that attitude towards IPM, Knowledge of IPM, and risk bearing ability are the important factors influencing adoption of IPM. Looking to this fact, a study was thought necessary with two objectives viz to find out attitude of the farmers toward Integrated Pest Management strategy and effect of various characteristics of farmers in building their positive attitude toward Integrated Pest Management.

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## METHODOLOGY

The present study was undertaken with a random sample of 120 farmers of five villages of Anand Taluka of the Anand district of the middle Gujarat. The data were collected by personal interview with the help of a specifically developed interview schedule. The statistical tools like mean, standard deviation and correlation of co-efficient were used to analyze data.

## RESULTS AND DISCUSSION

### Attitude of the farmers toward Integrated Pest Management

A key concept in IPM programs is the application of decisions making processes to determine when a chemical pesticide or other actions are needed or not. Such decisions depend on evaluation of the pest problem often in a quantitative manner. In the evaluation of agricultural crop pests, the point at which the economic benefit of pesticide use exceeds the cost of treatment is commonly referred to as the economic threshold. Such decision-making depends on positive attitude of an individual towards IPM; as it requires taking regular field observations to collect relevant information on the pest populations for its sustainable control. With a view to investigating attitude of the farmers towards IPM strategy, information was collected and data regarding this are presented in Table 1. The result indicates that majority (55.00 per cent) of the farmers had medium favourable

attitude towards IPM strategy, followed by 30.00 per cent with low favourable and 15.00 per cent with high favourable attitude towards IPM strategy.

The result says that majority (85.00 per cent) of the farmers had low to medium nature of favourable attitude towards IPM strategy. The IPM strategy is recent trend suggested by the scientists in India. It is a combination of many methods to apply at actual filed level. This requires higher level of skill, scientific orientation, exposure with scientific literature, constant touch with scientists or extension personals, continues scientific, technical, methodical, logical and precise frequent observation during the course of crop production in the field and may be higher level of formal education to understand unquestionably technical methods. Indian farmers are lacking in all most all those motivating factors leading to the creation of positive attitude and adoption of IPM strategy. This might have restricted to acquire latest technical knowledge and prevented them to have desired nature of attitude towards IPM strategy.

### Relationship of farmer's characteristics with their attitude toward IPM Strategy

With a view to study relationship of farmer's characteristics with their attitude towards IPM strategy, coefficient of correlation was worked out and results are presented in Table 2.

**Table 1. Distribution of the respondents according to their level of attitude towards IPM strategy** n=120

Sr. No	Level of attitude towards IPM Strategy	Number	Per cent
1	Low favourable attitude (Score below 30)	36	30.00
2	Medium favourable attitude (Score 31 to 61)	66	55.00
3	Highly favourable attitude (Score above 61)	18	15.00
4	Total	120	100.00

**Table 2. Relationship between farmer's attitude towards IPM and their profile n= 120**

Sr. No.	Name of variable	"r" Value
<b>Personal Profile</b>		
1	Age	-0.7780*
2	Education	0.9323*
3	Farming Experience	-.0.6561*
<b>Social Profile</b>		
4	Type of Family	0.0202 NS
5	Size of Family	-0.1330 NS
6	Caste	-0.2157 NS
7	Organizational Participation	0.2303 NS
8	Extension Contact	0.3147*
<b>Economic Profile</b>		
9	Land Holding	0.1347 NS
10	Irrigated Landholding	0.0454 NS
11	Occupation	-0.0685 NS
12	Income	0.2801 *

\* Significant at 0.05 level of probability

### 1. Personal profile and attitude towards IPM strategy

The results in Table 2 indicated that there was negative significant relationship between age as well as farming experience of the farmers and their attitude towards IPM strategy. The young and less experienced farmers have higher level of education, modern vision, enthusiasm, scientific inspiration, activeness and ability to understand scientific technology than old aged (more experienced) farmers, which might have played role to have more positive attitude towards IPM strategy among them.

The data also reveal that there was significant relationship between education of the farmers and their attitude towards IPM strategy. Higher level of education provides better ability to an individual to understand modern scientific technology.

### 2. Social profile and attitude towards IPM strategy

The result shows that type of family, size of family, caste and organizational participation of the respondents were observed non-significantly related with their attitude towards IPM strategy.

Though, that relationship between extension contact of farmers and their attitude towards IPM strategy was observed to be positive and significant. It means that the farmers with more degree of contact with extension personal had more and positive attitude towards IPM strategy. Such farmers get more opportunity to receive latest knowledge and information from extension personnel. This might be the reason to have more positive attitude among such farmers.

### 3. Economic profile and attitude towards IPM strategy

The data in the table indicates that the size of land holding and irrigated land holding of

the farmers were observed to be non-significantly related with their attitude towards IPM strategy. The number of occupations in which farmers were involved was negatively and non-significantly related with their attitude towards IPM strategy. However, the relationship between income of farmers and their attitude towards IPM strategy was observed to be positive and significant.

### **CONCLUSION**

From the above findings it can be concluded that majority (85.00 per cent) of the farmers had low to medium level of favourable attitude towards IPM strategy. The characteristics of the farmers like level of education, extension contact and income were positively correlated with their attitude towards IPM strategy.

### **REFERENCE**

Manikrama A. (2002). Factors affecting the adoption of IPM by Farmers in the Dry Zone Sri Lanka, [www.siu.no/noradrap.nsf/0/db986ba3af21b633c1256c590032a305?OpenDocument](http://www.siu.no/noradrap.nsf/0/db986ba3af21b633c1256c590032a305?OpenDocument)