

Knowledge and Attitude of Tribal Farmers of Valsad District Towards Integrated Nutrient Management

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ABSTRACT

A study was undertaken to assess the knowledge and attitude of tribal farmers of Valsad district towards the Integrated Nutrient Management (INM). Results of study indicate that more than 67% adopter farmers had complete knowledge about INM system. Among adopter of INM, 84% respondents said that INM is necessary for sustainable soil health & productivity, whereas 87 respondents agree with statement that INM, reduce the use of chemical fertilizers. Although 74% adopters said that INM system in crop production require knowledge and skill to apply. In case of non-adopter farmers less than 18% respondents had complete knowledge and more than 24% had no knowledge, although more than 41% respondents had partial knowledge about INM system. By the training, demonstration and other extension activities adoption percentage of INM in tribal farmers can be improved.

Keywords- INM, Soil health, Liquid biofertilizer, FYM

INTRODUCTION

Gujarat Vidyapeeth, Krishi Vigyan Kendra (GVKVK) -Ambheti is located in Valsad district of Gujarat, which composed largely of tribal communities depends primarily on agriculture for their livelihood. Soils of the district in general can be classified as medium black to heavy black soil with low fertility. Tribal farmers of district spends lots of money for costly fertilizers and increasing cost of production resulting into low return.

The concept of integrated soil and nutrient management implies practices such as appropriate crop rotations, cover crops, use of manure, crop residues and fertilizers, conservation and no-tillage, moisture management etc (*Gopaldasundaram et al., 2012*). Integrated Nutrient Management (INM) approach improves and sustains soil fertility and provides a sound basis for crop production systems to meet the changing needs through optimization of the benefits from all possible sources of plant nutrients in an integrated manner (*FAO, 2011*). In this regard, adoption of integrated soil fertility and nutrient management practices may help farmers to enhance crop production and to conserve natural resources (*FAO, 2003*).

Keeping in view of above facts KVK-Ambheti has carried out study to find out knowledge and attitude of tribal farmers of valsad district towards Integrated Nutrient Management (INM).

OBJECTIVE

To investigate the knowledge and attitude of tribal farmers of valsad district towards Integrated Nutrient Management (INM).

METHODOLOGY

The present study was conducted by Krishi Vigyan Kendra-Ambheti during the year 2014 for assessment of knowledge and attitude of tribal farmers of valsad district towards INM. For the study 100, tribal farmers who already adopted INM and 100, tribal farmers as non-adopter were randomly selected from 10 villages of district. For evaluating the farmers' knowledge and attitude towards INM concepts, principles and methods are propounded. Farmers were asked to indicate their opinion about the statement being true or false. Data were collected by personal interview method with the pretested schedule designed for the purpose.

RESULTS AND DISCUSSION

Knowledge of adopter and non adopter regarding INM

The data obtained from study that out of 100 Integrated Nutrient Management (INM) adopters, more than 67% respondents had complete, 20% adopters had partial and only less than 02% adopters had no knowledge about Integrated Nutrient Management (INM) system. Whereas, in

case of non-adopter tribal farmers less than 18% non adopters had complete knowledge and more than 24% farmers had no knowledge, although more than 41% non adopters had partial knowledge about INM system. It indicates that majority of the adopters had complete knowledge, while non-adopters had partial knowledge about Integrated Nutrient Management system. The adoption of Integrated Nutrient Management by the tribal farmers depends primarily upon knowledge.

Table 1: Distribution of respondents according to their knowledge about integrated nutrient management n=200

Sr. No.	Particular	Adopters (n=100)			Non-adopters (n=100)		
		Complete Knowledge %	Partial Knowledge %	No Knowledge %	Complete Knowledge %	Partial Knowledge %	No Knowledge %
1	Use of Gobargas slurry	73	25	02	08	48	44
2	Vermi composting process	77	22	01	12	47	41
3	About Liquid biofertilisers	74	24	02	07	40	53
4	Green manuring technique	67	31	02	18	42	40
5	Use of Poultry manures	69	30	01	04	72	24
6	Making of Liquid manures	77	22	01	08	42	50
7	About Micronutrient application	70	28	02	02	41	57
8	Composting process	69	29	02	08	55	37
9	Importance of Trash mulching	74	24	02	07	64	29
10	Application of Farm Yard Manures	78	20	02	12	64	24

Attitude of adopter towards INM

The data of study regarding attitude of adopter farmers towards Integrated Nutrient Management (INM) system shows that most of respondents have positive attitude. Out of 100 respondents, 82% adopter farmers did not agree with the statement “INM concept is useless”, 59% adopter farmers disagree with statement “INM is increase cost of cultivation” and 60 adopter farmers are also disagree with statement “INM is laborious”. Further, out of 100 respondents, 84% adopter farmers said that INM is necessary

for sustainable soil health & productivity, whereas 87 adopter farmers agree with statement that INM reduce the use of chemical fertilizers. The results are in conformity with the result of Shanthy and Subramaniam (2015). Results of the study revealed that there is a scope to improve extent of adoption of Integrated Nutrient Management system among tribal farmers of valsad district by awareness bringing through training, demonstration and other extension activities in the district.

Table 2 : Distribution of respondents according to their attitude towards integrated nutrient management

n=100

Sr. No.	Statements	Agree %	Undecided %	Disagree %
1	INM is necessary for sustainable soil health and productivity	84	10	06
2	INM reduce the use of chemical fertilizers	87	09	04
3	INM require knowledge and skill	74	16	10
4	INM is useless	12	06	82
5	INM increase cost of cultivation	24	17	59
6	INM is laborious	08	32	60
7	INM increase yield of crop	10	18	72

CONCLUSION

After the analysis of collected data, it is concluded that the tribal farmers of Valsad district are aware from Integrated Nutrient Management (INM). They also know, adoption of Integrated Nutrient Management (INM) system contributes to environmental sustainability as the use of excess fertilizers can be avoided and has been considered a broad based remedy against soil fertility decline. In an extension perspective, extension agencies working in Valsad district should make more effort for adoption of Integrated Nutrient Management (INM) system. It results into assured national food security, nutritional security, maintenance of soil health, enhancement of soil fertility and to leave a good heritage for the future generations.

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