Gujarat Journal of Extension Education Vol. 24 : (December 2013)

Knowledge of Farmers Regarding Green Manuring for Sustainable Agriculture

Krunal P. Patel [1] and Meena C. Patel [2]

1 Ex PG Scholar, Department of Extension Education, AAU, Anand
2 Assistant Professor, Institute of Distance Education, AAU, Anand
Email : drminacpatel@yahoo.com

ABSTRACT

Green manuring is the ploughing under or soil incorporation of any green manure crops while they are green or soon after they start the flowering. The soil nitrogen is associated with the organic matter and the decay of this organic matter influences the availability of the soil nutrients. For these reasons, it has seemed advisable to know the amount of organic matter in soils, its source and the influences, which operate for the increase of organic matter, as well as the part it plays in the soil. Such knowledge is a necessary preliminary to understand the need of green manuring. Thus a study was conducted on randomly selected 120 farmers having at least one year of experience in green manuring at their own land from 10 villages of Anand and Petlad taluka of Anand district of Gujarat state to find out the knowledge of farmers regarding green manuring for sustainable agriculture. The data were collected by personal interview schedule and analyze with the help of frequency and percentage. Slightly more than two third (66.67per cent) of the farmers had medium level of knowledge regarding green manuring.

Keywords: *Knowledge, Green Manuring*

INTRODUCTION

The green manuring is an economical, practical, and even aesthetically pleasing method of restoring productivity of overworked land. A large number of plants both legumes and non-legumes are used as green manure. The choice of a particular green manure crop has to be made based on the soil type, the time available to raise the crop and the facility for irrigation. Green manuring is biological farming practice that receives special attention on the biodynamic farm. (Sathyan and Naika, 2008). The UN millennium goals towards sustainable development include food, bio energy and livelihood as integral components and the most vital concern of our planet earth. Issues like production and supply of food for caloric and nutritional security for ever increasing population, biomass production for biofuels to meet energy needs of industry and household and generation of employment opportunities, both on farm and off farm for livelihood security have been focusing attention of policy planners and researchers globally also land use for agriculture without jeopardizing natural resource base poses a formidable challenge to the agricultural scientists to devise appropriate agriculture production technology to ensure sustainability of production systems and to harness favourable linkages among productivity-profitability and sustainability. It is believable that to motivate farmers to adopt green manuring practices positivism of farmers in terms of their skill and knowledge towards green manuring practices for sustainable agricultural development is very much essential. The final decision of farmers to use a new practice is usually the result of their knowledge of the practice and attitude. Therefore, it was felt necessary to study knowledge of farmers regarding green manuring for sustainable agriculture.

METHODOLOGY

The study was carried out in Anand district of Gujarat state. A random sample of total 120 farmers having at least one year of experience in green manuring at their own land were selected from 10 villages of two taluka, namely Anand and Petlad from Anand district of middle Gujarat. To measure that knowledge of farmers about green manuring, a suitable questionnaire was developed and the data were collected by personally interviewing the selected respondents. Knowledge of the respondents about green

manuring for sustainable agriculture was measured with the help of teacher made test based on scale developed by Jha and Singh (1970) with appropriate modification. Each question was given a score of one for correct answer and zero for incorrect answer.

RESULTS AND DISCUSSION

Knowledge of the green manuring practices would lead to adoption or rejection. Once acquired and accumulated, knowledge produces change in the thinking process.

Table 1: Distribution of the respondents according to their knowledge level of green manuring

n = 120

Sr. No.	Category	Respondents	
		Frequency	Per cent
1	Low (below 25.73)	22	18.33
2	Medium (between 25.73 to 32.33)	80	66.67
3	High (above 32.33 score)	18	15.00

The results disclose in table-1 indicate that slightly more than two third (66.67per cent) of the farmers had medium level of knowledge regarding green manuring, followed by 18.33 per cent and 15.00 per cent of them had low and high level of knowledge of green manuring. The reason for this due to that the selection of farmers in the present investigation was having at least one year experience of green manuring. For better practices of green manuring they might have realized to gain knowledge regarding green manuring and green manures are a useful tool for sustainability in productivity might be realized by the farmers during their experience and made them knowledgeable towards green manuring. Darandale (2010) also reported that slightly more than half (51.66 per cent) of the maize growers had medium level of knowledge regarding organic farming practices in maize crop.

CONCLUSION

It was concluded that slightly more than two third of the farmers had medium level of knowledge regarding green manureing for sustainable agriculture. So more efforts should be taken from grass root level in advocating the knowledge regarding green manuring through practical training programme.

REFERENCES

Darandale, A.D. (2010). A study on attitude of maize growers towards organic farming in Vadodara district of Gujarat State. Unpublished M.Sc (Agri.) Thesis, AAU, Anand.

Jha, P.N. and Singh, K.N. (1970). A test to measures farmer's Knowledge about high yielding variety programme, *Interdiscipline*, 7(1):65-67.

Sathyan K. and Naika B.N., (2008). Biodynamic agriculture: an eco-friendly approach, Marthawada Agriculture University, Maharashtra, Agro bios newsletter, Vol. (4) : 46-47.

Received : July 2012 ; Accepted : November 2013