Inspiring Personality of Farmers to have Positive Attitude towards Green Manuring for Sustainable Agriculture

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ABSTRACT

Sustainable agriculture encompasses the elements of productivity, profitability, conservation, health safety and the environment. In the absence of optimum levels of soil organic matter, inorganic fertilizers and chemicals, on the long run will damage the physical-chemical structure of the soil and fail to maintain consistency in crop production. Thus, it is very essential that each farmer should be made aware of these aspects and encouraged to adopt natural farming systems. It is because the practice of green manuring is one of these avenues and an important one. Hence the study was conducted to measure the level of attitude of farmers towards green manuring and the stimulating personality of farmers to have positivism towards green manuring. A random sample of total 120 farmers having at least one year of experience in green manuring at their own land from 10 villages of two taluka of Anand district of middle Gujarat was selected. The data were collected through the personal interview. To measure the level of attitude of farmers towards green manuring the reliable and valid attitude scale developed by the researcher was used. About two third (66.67 per cent) of the respondents had positive attitude towards green manuring. The level of attitude of farmers towards green manuring was observed positively significant with their farming experience, experience in green manuring, mass media exposure, extension contact, training received, scientific orientation and knowledge level of farmers regarding green manuring,

Keywords: *Attitude, Green Manuring, Sustainable Agriculture*

INTRODUCTION

Sustainable agriculture is the only possible way to meet the demands of the present generation, at the same time, preserving the natural capacity of the soil without any contamination for future generations. In other words, it is a system of production and cultivation practices, which can fulfill the food and nutrition needs of a particular society without depleting the essential natural resources of agriculture like water, soil fertility and diverse biological resources, making it economically, socially and ecologically sustainable. Natural and organic farming systems are linked with sustainable agriculture which considers the beneficial influence of organics on soil health and the environmental problems associated with the excessive and continuous use of chemicals. In the absence of optimum levels of soil organic matter, inorganic fertilizers and chemicals, on the long run will damage the physical-chemical structure of the soil and fail to maintain consistency in crop production. Thus, it is very essential that each farmer should be made aware of these aspects and encouraged their feeling to adopt natural farming systems. It is because the practice of green manuring is one of these avenues and an important one (Chandy, 2012).

Green manuring is a low cost but effective technology in minimizing the investment cost of fertilizers and in safeguarding the productive capacity of the soil. Green manuring is an inexpensive; eco-friendly alternative to mounting prices of fertilizer nitrogen and has become an effective technology in economizing the agricultural production system ensuring productive capacity of soil without causing environmental problem. (Selvi and Kalpana 2009).

Attitude are frequency described in terms of personal consistency, as a “latent concept” that is individual-

dependent". Attitude strength is an important determinant of attitude behaviour relationship. Attitudes are formed through direct and indirect life experiences and observations. These experiences are "behavioral beliefs". They have gathered over time and form the basis of attitudes. Therefore, attitudes are learned and can be changed. They can be viewed as an overall evaluation of behavior and can be measured on a bipolar dimension. "The more favorable a person's attitude toward a behavior, the more they intend to perform that behavior" (Golam and Hivoyuki, 2007).

The action of individual farmers is governed by personal, social, psychological and cultural factors involved in situation. Some farmers manage new cultivation technology more quickly than others because of the difference in personal characteristics. Similarly if there is difference in economic factors, process of action is changed, there by changing the pattern of management. Thus, it may be stated that the degree of attitude of the respondents towards green manuring differs with their personal, social-communicational, economic and psychological characteristics. Hence considering the importance of these inspiring characteristics and review of past research studies, an attempt has been made in this investigation to measure attitude of farmers towards green manuring and to find out their inspiring personality to have positive attitude towards green manuring for sustainable agriculture.

METHODOLOGY

To measure attitude of farmers towards green manuring scale developed by researcher was administered on a randomly selected sample of total 120 farmers having at least one year of experience in green manuring at their own land from 10 villages of two taluka, namely Anand and Petlad from Anand district of middle Gujarat. The data were collected through the personal interview. Ex-Post-Facto research design was used. The responses were collected in five continuum viz. strongly agree, agree, undecided, disagree and strongly disagree. The total attitude score for each respondent was obtained by adding all the scores of their responses of all the statements. On the basis of arbitrary classification method, the respondents were grouped into five categories viz; Highly negative attitude, negative attitude, neutral, positive attitude and Highly positive attitude. To find out the inspiring personality of farmers to have positive attitude towards green manuring for sustainable agriculture, Correlation coefficient was used.

RESULTS AND DISCUSSION

Attitude of farmers towards green manuring for sustainable agriculture

Table 1: Distribution of the farmers according to their attitude towards green manuring for sustainable agriculture n=120

Sr. No.	Category	Frequency	Per cent
1	Highly negative (up to 25.2 score)	00	00
2	Negative (25.21– 36.4 score)	00	00
3	Neutral (36.41 – 47.6 score)	32	26.67
4	Positive (47.61 – 58.8 score)	80	66.67
5	Highly positive (above 58.8 score)	08	06.66

The data given in Table -1 illustrated that about two third (66.67 per cent) of the respondents had positive attitude towards green manuring, While 26.67 and 6.66 per cent of the respondents had neutral and highly positive attitude towards green manuring respectively. Negative to highly negative attitude towards green manuring was not observed among the respondents. Patel *et al.* (2007) revealed that more than half (55.00 per cent) of the farmers had neutral level of attitude towards IPM strategy, followed by 30.00 per cent with negative attitude towards IPM strategy and 15.00 per cent with positive attitude towards IPM strategy.

From the above discussion it was concluded that majority of the farmers had positive feeling towards green manuring. The practicability of taking up green manuring techniques in the field control the sustainability of the land, which is long turned into improved agricultural productivity and ultimately furnished higher income was well recognized and realized by majority of farmers. This might be the reason that the majority of the farmers had positive attitude towards green manuring for sustainable agriculture.

Table 2: Relationship between the personalities of the farmers and their attitude towards green manuring. n=120

Sr. No.	Independent Variables	Correlation Coefficient ('r' value)
1	Age	0.026 NS
2	Education	0.034 NS
3	Farming experience	0.185*
4	Experience of green manuring	0.248**
5	Mass media exposure	0.236 **
6	Extension contact	0.183*
7	Training received	0.207*
8	Land holding	0.094 NS
9	Annual income	0.105 NS
10	Occupation	0.069 NS
11	Scientific orientation	0.201*
12	Knowledge of green manuring	0.222*

*** = significant at 5% level of probability**

****= significant at 1% level of probability**

The figure resulted in table-2 revealed that the level of attitude of respondents towards green manuring was observed positive and significant with their experience of farming, experience of green manuring, extension contact, mass media exposure, training received, scientific orientation and knowledge level of farmers regarding green manuring, while rest of variables age, education, occupation, land holding and annual income had positive and non-significant relationship with their attitude towards green manuring for sustainable agriculture. Thus it can be concluded that those farmers who had elevated level of experiences, regular habit to contact extension agents, inclination towards mass media, scientific approaches of farming , interest to attain different types of training and self equipped knowledge favoured to rely on green manuring practices, as uses and benefits of technology might have raised their concern with regards to feel the positivism about green manuring practices to sustain their farming occupation economically and environmentally protected. It was seen that attitude of farmers towards green manuring was not influenced by their age, education, occupation, landholding and annual income up to the mark. Rajesh (2011) found that inspiring personalities like; education, extension contact training received, land holding knowledge and scientific orientation of the respondents had played a significant role to have positive attitude towards bio-control measures of plant protection.

CONCLUSION

The outcome of the investigation concluded that about two third of the respondents had positive attitude towards green manuring. The level of attitude of farmers towards green manuring was observed positively significant with their farming experience, experience in green manuring, mass media exposure, extension contact, training received, scientific orientation and knowledge level of farmers regarding green manuring,

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