



P-ISSN: 2349-8528

E-ISSN: 2321-4902

IJCS 2019; 7(6): 1942-1944

© 2019 IJCS

Received: 13-09-2019

Accepted: 15-10-2019

Rashmi Rekha Kalita

Ph.D. Scholar, Department of Extension & Communication Management, College of Home Science, Assam Agricultural University, Jorhat, Assam, India

Manju Dutta Das

Professor, Department of Extension & Communication Management, College of Home Science, Assam Agricultural University, Jorhat, Assam, India

Sayanika Borah

Assistant Professor, Department of Extension & Communication Management, College of Home Science, Assam Agricultural University, Jorhat, Assam, India

Constraints faced by farmers in adoption of vermiculture technology

Rashmi Rekha Kalita, Manju Dutta Das and Sayanika Borah

Abstract

Vermiculture is the best method to dispose off organic waste. It is an easy to operate and environment friendly technology for handling biodegradable garbage. It is the latest aspect of biotechnology where application of earthworm is made for recycling the waste disposal problems. For minimizing the pollution effects and to get useful products from wastes, it requires no sophisticated machinery to operate vermiculture and do not produce any odour or any other type of pollution. So the present investigation was designed to explore the “Constraints faced by farmers in adoption of Vermiculture Technology”. The study was conducted in Jorhat district of Assam. A multi stage purposive cum simple random sampling design was followed for the research study. 120 numbers of respondents were selected randomly from 12 villages of the three blocks of Jorhat district. Data collection was done by using interview cum questionnaire. Findings of the study constraints faced by the farmers revealed that inadequate training facility rank I with the mean score 1.98 and followed by lack of organized market, lack of extension contact, lack of government support, lack of scientific knowledge, lack of relevant literature and attack of insect-pest and diseases with the ranking of II, III, IV, V, VI and VII respectively.

Keywords: Constraints faced, farmer, adoption, vermiculture technology

Introduction

For reducing the cost of agricultural inputs and use of chemical fertilizer, recycling of huge quantity of domestic, agricultural and rural industrial organic waste for various uses, vermiculture technology is only the alternative arrangement. It also reduces the environmental pollution. It improves soil physical condition which provides better environment for plant growth. From the use of vermiculture technology extra production can be marketable for generating extra income. Hence, there is an urgent need to sensitize the agricultural farmers about vermiculture technology for organic agricultural production.

The word “Vermi” means earthworms and “Culture” means farming, hence Vermiculture means farming of earthworms. Vermiculture technology is important to produce vermicompost and use in the crops field as an alternative tactic of food nutrient, disease and pest management, which is cheaper as well as effective and safe to the environment. Further it is also necessary to develop a network for production of good quality vermicompost and demonstration of technology to the farmers with existing Government, State Agricultural Universities (SAUs), Non Government Organizations (NGOs) and Self Help Groups (SHGs) on a partnership mode.

Farmer’s knowledge regarding organic farming for agricultural production and use in their field crops is very important. An improper use of chemical fertilizer has deteriorated the soil health and created the problem of agricultural waste disposal in the rural areas. So, most of the consumer has to face a number of health problems. To overcome this problem the vermiculture technology is likely to be popularized. For adopting this technology farmers faced lot of problems for agricultural production. Keeping this in view, the present study was planned to analyze the “Constraints faced by farmers in adoption of Vermiculture Technology”.

Objectives

1. To study the existing socio-economic status of farmers
2. To explore the constraints faced by the farmers in adoption of vermiculture technology

Methodology

The present study was carried out in Jorhat District of Assam. A multi stage purposive cum simple random sampling design was followed for selection of three blocks.

Corresponding Author:

Rashmi Rekha Kalita

Ph.D. Scholar, Department of Extension & Communication Management, College of Home Science, Assam Agricultural University, Jorhat, Assam, India

Selected blocks are namely Baghchung, Chipahikhula and Titabor from respective subdivision such as Jorhat and Titabor. 120 numbers of respondents were selected randomly from selected 12 villages of the three blocks that were undergone training on vermicompost formally or informally from various sources had been selected for the present study. Data collection was done by using interview cum questionnaire.

Results and Discussion

From the Table 1, it is revealed that 45.00 per cent of the respondents belonged to middle age group (32-45 years) and majority of the respondents (62.5%) had female members. 81.67 per cent respondents were. Most of the respondents (58.33%) belonged to Other Backward Caste (OBC) category.

More than one third of the respondents that is (54.17%) had farming as their main occupation and had most of the respondents (80.00%) belong to marginal land holding farmers. Respondents belonged to nuclear families are in 87.00 per cent and 60.83 per cent of the respondents had small family. Majority of the respondents (45.83%) had educational level under HSLC and 40.83 per cent of the respondents were no membership in any organization. 51.67 per cent of the respondents lived mixed house. Large numbers of respondents (70.83%) were seen television regularly and 70.00 per cent of the respondents were from medium socio-economic status group. 47.50 per cent of respondents had contact with Non Government Organization (NGO) sometimes. 66.67 per cent of respondent were attended in the training programme on different field.

Table 1: Distribution of respondents according to their personnel and socio-economic characteristics

Sl. No.	Characteristics	Category	Percentage (%)
1.	Age	Young (18-31)	29.17
		Lower Middle (32-45)	45.00
		Upper Middle(46-59)	25.83
2.	Sex	Male	37.50
		Female	62.50
3.	Marital status	Unmarried	11.67
		Married	81.67
		Widow	6.66
4	Caste	ST/SC	16.67
		OBC	58.33
		General	25.00
5	Occupation of the head of the family	Farming	54.17
		Daily wage earner	20.83
		Business	22.5
		Service	2.5
6	Family structure (a) Family type (b) Family size	Nuclear	87.00
		Joint	13.00
		Small(up to 4 members)	60.83
		Medium (5-8 members)	31.67
		Large (above 8 members)	7.50
7	Education	Under HSLC	45.83
		Under HS	31.67
		Under degree	22.50
8	Organizational membership	No membership	40.83
		Member of one organization	29.17
		Member of more than one organization	28.33
		Office bearer of one organization	1.67
9	Land holding	Marginal (below 7.5 bigha)	80.00
		Small (7.5-15 bigha)	17.50
		Small medium (15-30 bigha)	2.50
10	Type of house	Katcha	23.33
		Mixed	51.67
		Pucca	25.00
11	Material possession	Low	11.39
		Medium	76.11
		High	12.50
12	Mass media exposure	Never	13.75
		Sometimes	43.75
		Regularly	42.50
13	Extension contact	Never	29.67
		Sometimes	43.05
		Regularly	27.28
14	Training programme attended	Never	12.50
		Sometimes	20.83
		Regularly	66.67

From the table 2, it is revealed that lack of training facility ranked I with mean score 1.98, followed by lack of organized market ranked II, lack of extension contact ranked III, lack of government support ranked IV, lack of scientific knowledge ranked V, lack of relevant literature ranked VI and attack of

insect-pest and diseases ranked VII with mean score (1.86), (1.82), (1.80), (1.77), (1.69) and (1.64) respectively.

Table 2: Distribution of respondents according to Problems faced by the farmers for adoption of vermiculture technology

Sl. No.	Problems	Mean	Rank
1	Lack of scientific knowledge	1.77	V
2	Inadequate training facility	1.98	I
3	Lack of relevant literature	1.69	VI
4	Lack of organized market	1.86	II
5	Lack of extension contact	1.82	III
6	Lack of Government support	1.80	IV
7	Attack of insect-pest and diseases	1.64	VII

Conclusion

Now a days, use of organic fertilizer in agricultural production increases. But some cases people cannot adopt the technology. Because they have faced lots of problems in adoption of organic farming practices (Vermiculture Technology) for agricultural production. In the present study farmers have face lots of problems for adopting the vermiculture technology such as inadequate training facility, lack of organized market, lack of extension contact and so on.

Reference

1. Adebayo AS. Socio-economic status of organic vegetable farmers in South West Nigeria. *Journal of Food, Agriculture and Environment*. 2013; 11(2): 397-402.
2. Adesope MO, Matthews-Njoku CE, Oguzor SN, Ugwuja CV. Effect of socio-economic characteristics of farmers on their adoption of organic farming practices, Nigeria. *Crop Production Technologies*. 2012, 211-220.
3. Ananthnag K, Ali MKM, Kumar VHM. Socio-economic status of farmers practicing organic farming in Eastern dry zone of Karnataka. *Online Journal of Bio Sciences and Informatics*. 2014; 1(2):75-84.
4. Badodiya KS, Yadav KM, Daipuria PO, Chauhan SVS. Impact of Training Programmes on Adoption of Organic Farming Practices, Gwalior. *Indian Research Journal of Extension Education*. 2011; 11(2):42-45.
5. Deka P, Borgohain R, Deka B. Status and constraints of organic farming amongst tribal community of Jorhat district in Assam. *The Asian Journal of Animal Science* 2015; 8(2):86-91.
6. Jangid KM, Khan MI, Singh S. Constraints faced by the organic and conventional farmers in adoption of organic farming practices, Jaipur. *Indian Research Journal of Extension Education*. 2012; 2:28-32.
7. Kumar ST, Sivanarayana G. Socio-economic perspectives towards vermicompost technology, Andhra Pradesh. *Indian Journal of Agriculture and Allied Sciences*. 2015; 1(2):8-14.
8. Nagnur S, Hosamani V, Shapur A. Training on organic farming practices for women: An impact study, Karnataka. *Karnataka Journal of Agricultural Science* 2012; 25(2):253-255.
9. Sourabh S, Ojha SK. Constraints in adoption of vermicompost technology. *Society for Scientific Development in Agriculture and Technology*. 2013; 8:500-503.
10. Vyas L, Vyas R, Ahmed ID. Effectiveness of training for farm women of Udaipur district regarding Vermiculture technology. *Hind Agricultural Research and Training Institute*. 2012; 7(3&4):417-419.