



Study of knowledge of farm women in production of vermicompost

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ABSTRACT

The present study was purposively conducted in Parbhani, Gangakhed, Jintur and Purna Talukas of Parbhani District of Marathwada region of Maharashtra state as the considerable area under vermicompost production existence in order to assess the participation of farm women in production of vermicompost. Three villages from each Taluka were selected randomly. Ten farm women from each village were selected as the respondents for the study. The ex-post-facto-statistical design was used for the present investigation. It was found that characteristics of the respondents like education, land holding, annual income, socio-economic status, source of information, social participation and extension contact had positive and significant relationship with knowledge whereas age showed negatively significant relationship with knowledge in production of vermicompost.

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INTRODUCTION

Women constitute 48 per cent of rural population in India who toil for two-third of worlds working hours receiving one tenth of the worlds income and owning less than one hundredth of the worlds property. Women in the rural framework of India has major role in the settlement of economic condition of family. Women are the most elegant resource of the society and are the dynamic source of power. Women are the backbone of the rural economy.

The aim of modern farming system has to maximize production through use of increased quantities of external inputs such as chemical fertilizers without due consideration to their ill effects. Indiscriminate use of chemical fertilizer causes several problems on farm as well as outside farm. Chemical fertilizers deteriorate the fertility of soil and now our production is stagnated and many efforts are failed to increase the productivity and leads to health hazards (Kharmale,2006).

In order to mitigate health hazards and bring out natural balance in ecosystem, the most logical way to manage long term fertility and productivity of our soils is use of organically originated source of plant nutrients.

The term vermicomposting means use of earthworm as versatile bioreactor for composting organic residues. Vermicompost contains various amino acids, minerals and micro-organisms which humidify organic matter in the surrounding soil and act as bio-fertilizer for plant.

The vermicompost technology not only gives vermicompost but also gives allied product like vermiwash, vermicast etc. The vermiwash has importance for spraying on crops and also help to fetch good price for its produce in market. In organic manures, vermicompost is the highly efficient fertilizer which is made from the farm waste and involves advantages of increase in crop production and improve the quality of agricultural products.

Hence, the present study was undertaken to find out extend of knowledge level of farm women in production of vermicompost with the help of the specific objectives: to study relationship between personal and socio-economic characteristics of farm women with knowledge in production of vermicompost and to study the knowledge of farm women about production of vermicompost.

Key words :

Distress,
labourers, Self
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METHODOLOGY

The present study was purposively undertaken in Parbhani, Gangakhed, Jintur and Purna Talukas of Parbhani district of Marathwada region of Maharashtra state as the considerable area is under vermicompost production existence in order to assess the knowledge level of farm women about production of vermicompost. Three villages from each taluka were selected randomly. The list of farmers of selected villages was prepared with the help of Gramsevak and Agricultural Assistant of respective villages and ten farmers were selected from each village. The farmers from each village were arranged alphabetically and random sample of 10 farmers using vermicompost production were drawn by randomization. Thus, on the basis of random sampling, selected farmers from each village were personally interviewed with the help of specially designed interview schedule. The data were subjected to ex-post-facto statistical design.

RESULTS AND DISCUSSION

A study pertaining to knowledge level of farm women in production of vermicompost was conducted using 120 farmers from selected Talukas of Parbhani district. The results obtained are presented in Table 1, 2 and 3.

It is evident from Table 1, that more than half (55.83

Table 1: Distribution of farm women according to their knowledge about production of vermicompost

Sr. No	Category	Respondents	
		Frequency	Percentage
1.	Low	21	17.50
2.	Medium	67	55.83
3.	High	32	26.68
4.	Total	120	100

per cent) of the farm women from medium level category of knowledge followed by 26.67 per cent of farm women belonged to high category of knowledge while only 17.50 per cent of farm women were observed in low knowledge level category. Similar results were reported by Borkar (2000) who observed that majority of the respondents (84.00 per cent) belonged to medium category of knowledge, followed by 10.66 per cent of higher category of knowledge. While a meagre percentage (5.33 per cent) of respondents were observed in low knowledge level. Jadhav (2000) also reported that nearly half of the respondents (47.86 per cent) had knowledge to medium level.

From Table 2, it is observed that huge number of farm women (99.16 %) were knowing the use of organic matter as a raw material for preparation of vermicompost

Table 2: Distribution of farm women according to practice wise knowledge of vermicompost

Sr. No	Practice	Respondents	
		Frequency	Percentage
1.	Information of earth worm species for vermicompost preparation	108	90.00
2.	Use of organic matter as raw material	119	99.16
3.	Use of raised bed for vermicompost preparation	58	48.33
4.	Feeding to earthworm at proper interval of 2-3 days	93	77.50
5.	Information about NPK content in vermicompost	13	10.83
6.	Preparation of vermicompost bed	33	27.50
7.	Ratio of organic material and cow dung	85	70.83
8.	Ratio of cow dung and soil	84	70.00
9.	Application of earthworm per sq.m	95	79.16
10.	Covering of bed with gunny bags	110	91.66
11.	pH of vermicompost bed	6	5.00
12.	Application of water in summer	111	92.50
13.	Application of water in winter	107	89.16
14.	Method of water application to bed	109	90.83
15.	Cessation of water application to bed	82	68.33
16.	Period for preparation of vermicompost	47	39.16
17.	Separation of earthworm from vermicompost	94	78.33
18.	Information about how vermicompost is prepared from 1 ton organic matter	68	56.66
19.	Cost of 1 T vermicompost preparation	80	66.66
20.	Rate of vermicompost application per ha	46	38.33

Table 3: Relationship of personal and socio-economic characteristics of farm women with their knowledge in production of vermicompost

Sr. No.	Characteristics	R value
1.	Age	-0.599**
2.	Education	0.793**
3.	Land holding	0.474**
4.	Annual income	0.673**
5.	Socio-economic status	0.760**
6.	Social participation	0.766**
7.	Source of information	0.572**
8.	Extension contact	0.594**

followed by 92.50 per cent of the farm women who were keeping information of water application to bed in summer, followed majority of percentage of farm women (91.66 % and 90.83 %) who were knowing about covering of bed with gunny bag and method of water application to bed, respectively. The information about earthworm species for preparation of vermicompost was known to 90 per cent farm women about 89.00 per cent farm women were knowing about application of water to bed in winter season, followed by 79.16 per cent farm women having knowledge about application of earthworm per sq.m. It was also found that about 78.00 per cent farm women were knowing separation of earthworm, followed by 77.50 per cent of the farm women who were having knowledge about feeding interval of earthworm. Further, 71.00 per cent of the farm women were knowing the ratio of organic material to cow dung. After that the ratio of cow dung to soil was known to 70.00 per cent farm women, followed by 68.33 per cent farm women were knowing about when to stop watering of bed and 66.66 per cent of the farm women were knowing about cost of 1 tonn vermicompost preparation, followed by 56.66 per cent of farm women who were knowing the amount of vermicompost prepared from 1 tonn of organic matter.

It was also found that use of requirement of raised bed for vermicompost preparation was known 39.16 per cent of farm women followed by 38.33 per cent of farm women were knowing the rate of vermicompost application per ha. About 28.00 per cent of farm women were having knowledge about preparation of vermicompost bed and 10.83 per cent farm women were knowing NPK content in vermicompost followed by only 5.00 per cent women

were aware of the pH of vermicompost.

It was found that characteristics of the respondents like education, land holding, annual income, socio-economic status, source of information, social participation, extension contact all had positive and significant relationship with knowledge whereas age show negatively significant relationship with knowledge in production of vermicompost.

Conclusion:

It can be concluded that majority of the farm women had medium level of knowledge about technologies of quality production of vermicompost but more emphasize should be given on its awareness among throughout the society and should increase the rate of adoption of vermicompost as well as organic farming to minimize the soil degradation due to more use of chemicals.

Technical information regarding use of bed for vermicompost production and pH of vermicompost was known to more number of people and hence more concentration of Agriculture Department is needed on these factors to increase the knowledge level of farm women.

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REFERENCES

- Borkar, R.D.** (2000). Adoption behaviour of farmers in respect of bio-fertilizers. M.Sc.(Ag.) Thesis, Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola, M.S. India.
- Jadhav, I. B.** (2000). Adoption of vermicompost technology by the farmers. M.Sc. (Ag.) Thesis, Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola, M.S., India
- Kharmale, P.R.** (2006). Knowledge and adoption of vermicompost technology by the farmers. M. Sc. (Ag.) Thesis, Marathwada Agricultural University, Parbhani, M.S., India

