

# Impact of Socio Personal Attributes of Vermicompost Production in Terms of Income and Employment Generation in Hoshangabad District (Madhya Pradesh)

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## Abstract

*The vermicompost is the major component of organic farming as it may fulfill all the requirements with respect to production and protection of crop plants. The vermicompost may also be used as a tool for income generation, organic farming, protection of environment, maintaining the soil health and sustaining the agricultural production. Therefore present study design to find out the effect of socio-personal attributes on vermicompost preparation and selling. It was revealed that education, size of land holding, area under use of vermicompost, annual income, numbers of vermicompost unit, cost of production, mass media exposure, exposure of training had positively significant, whereas age, family type, social participation had non-significant relationship with impact of vermicompost technology in term of employment generation.*

**Keywords** - Socio personal attributes, Vermicompost Production, Employment Generation

## I. INTRODUCTION

The term “Vermicompost” originated from a latin word “vermes” meaning “worms” and the process of composting of organic material using earthworms is known as vermicomposting. Earthworms that influences soil microbial community, physical and chemical properties are popularly known as the “farmer’s friend” or “nature’s ploughman”. Earthworms have the ability to break down the large soil particles and leaf litter and thereby increase the availability of organic matter for microbial degradation

As the vermicompost is a biological source of nutrient and can be prepared with the use of biodegradable wastes available at the village farm level through the joint action of microbes and earth worms. The vermicompost is the major component of organic farming as it may fulfill all the requirements with respect to production and protection of crop

plants. The vermicompost may also be used as a tool for income generation, as well as maintaining the soil health and sustaining the agricultural production. The department of Agriculture and Farmers Welfare has been conducted so many training programmes on vermicompost technology to promote.

## II. OBJECTIVE

To study the association of socio-personnel, economic, psychological and communication attributes and vermicompost production in terms of income and employment generation.

## III. REVIEW OF LITERATURE

Srinivas and Sailaja (2013) stated that most of the farmers 62 per cent having small size area of vermicomposting for domestic as well as commercial use.

Alok (2013) indicated that majority of the respondents (75.83 per cent) had high level of exposure to various sources of information, followed by 14.17 per cent of the respondents were found to have medium level of exposure to various sources of information and 10.00 per cent of the respondents were found to have low level use of information sources category.

Srinivas and Sailaja (2013) found that training had positive and significant relationship with the income and employment generation and most of them attained 5 days of training.

Kanal (2014) revealed that majority of the respondents 64 per cent had medium mass media exposure and low to medium contact with extension agencies and had significant relationship.

Singh *et al.* (2015) observed that maximum respondents (63.33 per cent) had nuclear family type and had non significant relationship with income generation.

Kharatmol (2015) reported that the higher percentage (52 per cent) of beneficiaries belonged to

other backward classes and education is the strongest factor to adopt vermicompost technology.

Singh and Sharma (2015) concluded that majority of the trainees were from medium to high annual income group and this was significantly associated with level of adoption of organic farming practices by the trainees.

#### IV. METHODOLOGY

96 respondents producing vermicompost of Hoshangabad district were selected to know the impact of vermicompost production in terms of income and employment generation by using pre tested interview schedule

#### V. RESULT AND DISCUSSION

##### *Correlation between independent variables and employment generation:*

S.No .	Independent variables	Correlation coefficient (r) with dependent variables	t value
1	Age	0.043 <sup>NS</sup>	0.785
2	Education	0.891*	1.694*
3	Family type	-0.784 <sup>NS</sup>	-0.944
4	Size of land holding	0.861 <sup>S*</sup>	1.690*
5	Area under use of vermicompost	0.787 <sup>S*</sup>	2.161*
6	Social participation	0.034 <sup>NS</sup>	1.529
7	Annual income	0.793 <sup>S**</sup>	2.387**
8	Numbers of vermicompost unit	0.936 <sup>S*</sup>	1.668*
9	Cost of production	0.696 <sup>S*</sup>	2.165*
10	Information seeking behavior	0.802*	1.706*
11	Mass media exposure	0.812 <sup>S*</sup>	1.691*
12	Exposure of training	0.776*	2.183*
	<b>'t' Table value 94 d.f.</b>	t = 1.6608 at 5 % t = 2.3652 at 1%	

\*\*Significant at the 0.01% level (2-tailed)

\*Significant at the 0.05% level (2-tailed)

##### *A. Correlation between independent variables and employment generation by using vermicompost production:*

The data presented in given Table indicate the correlation coefficient between education, size of land holding, area under vermicompost, annual income, numbers of vermicompost unit, cost of production, information seeking behavior, mass media exposure, exposure of training had positive and

significant relationship with employment generation through vermicompost production". However, other characteristics namely age, family type and social participation had non-significant relationship with employment generation.

##### *B. Age and Employment generation*

In the case of age, computed correlation coefficient (0.043) was found to be non-significant. This led to the acceptance of null hypothesis number 1. Hence, it may be concluded that age of respondents had no influence on the employment generation through vermicompost production technology.

##### *C. Education and Employment generation*

In the case of education, computed correlation coefficient (0.891) was found to be significant at 5 per cent level. This led to the rejection of null hypothesis number 2. Hence, it may be concluded that education of respondents had influence on the employment generation through vermicompost production technology.

##### *D. Family type and Employment generation*

The correlation coefficient r between family type and income generation was found to be (-0.784) which is non-significantly related at 5 per cent level. This led to the acceptance of null hypothesis number 3, it may be concluded that family type of respondents had no influence on the employment generation through vermicompost production technology.

##### *E. Size of land holding and Employment generation*

The correlation coefficient r between size of land holding and impact in term of income generation was found to be (0.861) which is significantly related at 5 percent level. This led to the rejection of null hypothesis number 4. Hence, it may be concluded that size of land holding of respondents had influence on the employment generation through vermicompost production technology.

##### *F. Area under use of vermicompost and Employment generation*

The correlation coefficient r between area under use of vermicompost and income generation was found to be (0.787) which is significantly related at 5 percent level. This led to the rejection of null hypothesis number 5. Hence, it may be concluded that area under use of vermicompost of respondents had influence on the employment generation through vermicompost production technology.

##### *G. Social participation and Employment generation*

The correlation coefficient r between social participation and income generation was found to be (0.034) which is non-significantly related at 5 per cent level. This led to the acceptance of null hypothesis number 6, it may be concluded that social

participation of respondents had no influence on the employment generation.

#### **H. Annual income and Employment generation**

The correlation coefficient  $r$  between annual income and income generation was found to be 0.793 which is significantly related at 1 percent level. This led to the rejection of null hypothesis number 7, it may be concluded that annual income of respondents had positive influence on the employment generation through vermicompost production technology.

#### **I. Number of vermicompost unit and Employment generation**

The correlation coefficient  $r$  between number of vermicompost unit and impact in term of income generation was found to be (0.936) which is significantly related at 5 percent level. This led to the rejection of null hypothesis number 8, it may be concluded that no. of vermicompost unit of respondents had positive influence on the employment generation.

#### **J. Cost of production and income generation**

The correlation coefficient  $r$  between cost production unit and income generation was found to be (0.696) which is significantly related at 5 percent level. This led to the rejection of null hypothesis number 9, it may be concluded that cost of production of respondents had positive influence on the employment generation.

#### **K. Information seeking behaviour and Employment generation**

The correlation coefficient ' $r$ ' between information seeking behavior and income generation was found to be (0.802) which is non-significant at 5 percent level. This led to the rejection of null hypothesis number 10, it may be concluded that information seeking behavior of respondents had positive influence on the employment generation.

#### **L. Mass media exposure and Employment generation**

The correlation coefficient ' $r$ ' between mass media exposure and income generation was found to be (0.812) which is non significant at 5 percent level. This led to the rejection of null hypothesis number 11, it may be concluded that mass media exposure of respondents had positive influence on the employment generation.

#### **M. Exposure of training and Employment generation**

The correlation coefficient ' $r$ ' between exposure of training and income generation was found to be (0.776) which is non-significant at 5 percent level. This led to the rejection of null hypothesis number 12, it may be concluded that mass training exposure of respondents had positive influence on the employment generation.

Therefore, it is revealed that size of land holding, area under use of vermicompost, annual income, numbers of vermicompost unit, cost of production, information seeking behavior, exposure of training and mass media exposure and had positively significant but age, family type, social participation had non-significant relationship with employment generation through vermicompost technology.

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