

Adoption Behaviour of Tribal Farmers for Vermicompost Technology

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ABSTRACT

The present study was undertaken in Banaskantha district of Gujarat state to know the adoption behavior of tribal farmers about vermicompost technology. The finding reveals that majority of the tribal farmers had medium level of adoption about vermicompost technology. All the independent variables were selected for the study. During this study education, annual income, herd size, extension participation and knowledge were positively and significantly associated with adoption of vermicompost technology. Though, age was significant but negatively associated with the adoption of vermicompost technology.

Keywords: Vermicomposting, Knowledge, Adoption, Association

INTRODUCTION

Vermicomposting is a modified and specialized method of composting - the process uses earthworms to eat and digest farm wastes and turn out high quality compost in two months or less. Vermicompost is not a bio-fertilizer as is treated by some earth worms, merely improved compost. Organic wastes can be broken down and fragmented rapidly by earthworms, resulting in a stable nontoxic material with good structure, which has a potentially high economic value and also act as soil conditioner for plant growth. Vermicompost supplies a suitable mineral balance, improves nutrient availability and could act as complex-fertilizer granules. It should be realized that vermin-composting can be a useful cottage industry for the underprivileged and the economically weak as it may provide supplementary income to tribal farmers. Main objective of the study is to promote the vermin-composting technology in tribal area. Small and marginal farmers of tribal area can use this technology for manuring their small fields and can increase the production and productivity hence it is felt necessary to know the adoption of the technology among the farmers and constraint, they face in the technology. The present study was conducted

with the following objectives.

OBJECTIVES

- (i) To study the adoption level of the Tribal farmers regarding vermicompost technologies
- (ii) To study the relationship between selected independent variables and the extent of adoption of vermicompost technology.

METHODOLOGY

The study was under taken in Banaskantha district. The talukas selected were Amirgadh and Danta. All the six villages of two clusters Vagdadi in Amirgadh and Sanali in Danta taluka under NAIP project were selected purposively. The list of beneficiaries under NAIP for vermi-composting was obtained from NAIP Office, Sardarkrushinagar. Fifty percent of the beneficiaries from each of the village were selected randomly from the list. Thus final sample constituted 48 farmers. The data were collected through interview schedule constructed for this purpose. The data were tabulated, analyzed and interpreted in light of the objectives.

RESULT AND DISCUSSION

Adoption level of the Tribal farmers regarding vermicompost technologies

The data in Table 1 reveal that majority (58.33%) percent of the farmers had medium level adoption of vermicompost on their farms. Further it is apparent from the data that 27.09 percent of them fall under low adoption category followed by 14.58 percent of them in high level adoption category.

Table 1 : Distributions of the respondents according to their level of adoption regarding vermicompost technology n = 48

Sr. No.	Category	Number	Percent
1	Low (below 11score)	13	27.09
2	Medium (11-17score)	28	58.33
3	High (above 17 score)	07	14.58

Mean=13.40 S.D. = 3.28

Therefore it can be concluded that majority of the farmers had medium level adoption regarding vermicompost technology.

Relationship between independent variables and adoption of vermicompost technology.

Table 2 : Association of selected characteristic of farmers with knowledge and adoption of vermicompost technology n-48

Sr. No.	Characteristic	Adoption
X ₁	Age	-0.2580**
X ₂	Education	0.2340**
X ₃	Farming experience	0.1570 ^{NS}
X ₄	Land holding	0.1349 ^{NS}
X ₅	Annual income	0.2960**
X ₆	Herd size	0.2020**
X ₇	Irrigation method	0.0190 ^{NS}
X ₈	Social participation	0.0510 ^{NS}
X ₉	Extension participation	0.3310**
X ₁₀	Knowledge	0.6584**

** Significant at the level of 0.01 level

NS - Non Significant

The result presented in Table 2 revealed that out of ten variables, only four variable i.e. farming experience, land holding, irrigation method and social participation were found non-significant with adoption of vermicompost technology.

From remaining ten independent variables, only one variable age was found significantly but negatively correlated with the adoption of vermicompost technology.

Whereas, other five independent variables namely, education, annual income, herd size, extension participation and knowledge were found significantly and positively related with the adoption of vermicompost technology. Hence, it can be concluded that the education, extension participation and knowledge regarding the vermicomposting were the important variables for adoption of vermicompost technology.

CONCLUSION

It can be concluded from the above results that majority of the tribal farmers had medium level of adoption about vermicompost technology. Education, extension participation and knowledge were the important variables for adoption of vermicompost technology. The study indicated that the farmers have medium level of adoption about vermicompost technology. Hence, still there is gap in adoption of vermicompost technology. Therefore there is need to organize training for the tribal farmers regarding vermicompost technology by the extension agency working in the area.

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