

International Journal of Agriculture Extension and Social Development

Volume 7; SP-Issue 9; September 2024; Page No. 05-07

Received: 06-06-2024
Accepted: 08-07-2024

Indexed Journal
Peer Reviewed Journal

Study of production and marketing of vermicompost in Chhattisgarh

Bhawana Patel, Akshita Vashisht, Kajal and Dr. Siya Ram

Department of Agri-Business and Rural Management, College of Agriculture Raipur, Indira Gandhi Krishi Vishwavidyalaya, Raipur, Chhattisgarh, India

DOI: <https://doi.org/10.33545/26180723.2024.v7.i9Sa.1013>

Corresponding Author: Bhawana Patel

Abstract

The price requirement of vermicomposting is very small as it require waste organic material (low valued input material). The present investigation is based on primary data collected from 10 vermicompost producer. For the present study, Raipur, Bilaspur and Mahasamund districts were selected purposively. The data was collected by personal interview with the help of pre-tested well prepared interview schedules covering various aspects to answer the objective of this study. Per quintal average marketing cost of vermicompost in constructed and vermibed method was Rs.85.14 and average sell received from per quintal was Rs.439.86. It is observed that vermicompost distribution through producer- consumer channel is more used by producers than other channels of distribution.

Keywords: Vermicompost, constructed method, vermibed, marketing cost

Introduction

Vermicomposting is the use of earth-worms as a versatile bioactor for organic wastes composting. Earthworms eat 80 percent organic wastes and 20 percent soil. Vermicompost is a combination of worm casting and organic material which comprises humus, live earth-worms, their cocoons and other micro-organisms i.e. bacteria. Vermicomposting method is very cheap in cost because of the effortlessly inputs material availability, information requirement is also fewer, fewer labour requirement is also less and returns to investment are in short period of time. In India, huge no. of farmers who are using vermicompost has received a high worth to their products and they are also leading in export of agricultural product or produce because of their quality. Vermicomposting is an essential component, without high financial contribution, it can transform urban and rural organic wastes into organic manures which is rich in nutrients.

Methodology

The study was conducted in Raipur, Bilaspur and Mahasamund district of Chhattisgarh. These districts are selected purposively where maximum producer are involved in vermicompost production. Primary data were collected from the sample vermicompost producers through survey method and personal interview with the help of pre-tested well prepared interview schedules covering various aspects to answer the objectives of this study. The primary data were also collected from rural vendors and other channel of marketing prevailing in the study area. Each of selected samples of vermicompost producers were approached

personally for recording relevant data.

Results and Discussion

The present investigation was carried out in Raipur, Bilaspur and Mahasamund district of Chhattisgarh. For the study 10 vermicompost producers were selected. Among all the above districts the required information and data was collected with the help of pretested schedules.

Per quintal marketing cost of vermicompost for constructed and vermibed method (Rs. / qt)

Per quintal cost of marketing incurred by vermicompost producer is presented in Table 1. The Total Marketing Cost of unit-1, unit-2, unit-3 and unit-4 are Rs.93.41, Rs.136, Rs.33.75 and Rs.77.40 respectively, whereas, the sell received by unit-1, unit-2, unit-3 and unit-4 are Rs.406.59, Rs.364.00, Rs.466.25 and Rs.522.60.

The total marketing cost of unit-1, unit-2, unit-3 and unit-4 are Rs.93.41, Rs.136, Rs.33.75 and Rs.77.40 respectively, whereas, the sell received by unit-1, unit-2, unit-3 and unit-4 are Rs.406.59, Rs.364.00, Rs.466.25 and Rs.522.60.

Table 1: Per quintal marketing cost of vermicompost for constructed and vermibed method (Rs. / qt)

Unit	Labour Charge	Packaging Cost	Total Cost	Selling Price	Sell Received
Unit-1	43.71	49.70	93.41	500.00	406.59
Unit-2	159.99	-	136.00	500.00	364.00
Unit-3	33.75	-	33.75	500.00	466.25
Unit-4	27.40	50.00	77.40	500.00	422.60
Average	60.215	49.85	85.14	500.00	414.86

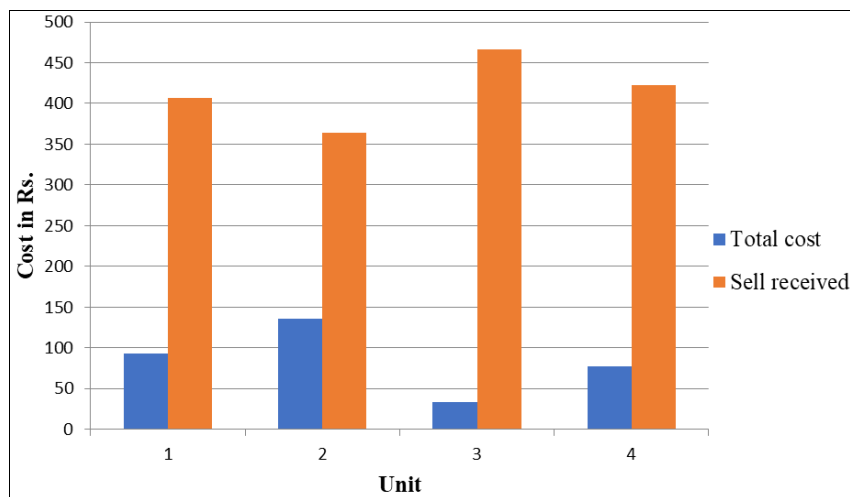


Fig 1: Total cost and sell received of vermicompost marketing for constructed method and vermibed method

Marketing channels for vermicompost marketing in study area

Vermicompost distribution through different marketing channels in study area for constructed method and vermibed

method is presented in Table 2.

The marketing channel for unit-1 was producer- consumer channel, producer-wholesale where as unit-2, unit-3 and unit-4 have only producer- consumer channel to sell their product.

Table 2: Vermicompost distribution through different marketing channels in study area for constructed and vermibed method (qt)

Unit	Production Quantity	Vermicompost Marketing through different channels			Total Sale Quantity	Percentage of total amount sold (%)		
		Producer – Consumer channel	Producer – Wholesaler – Retailer-Consumer channel	Producer- Retailer-Consumer channel		1	2	3
Unit-1	60	20	10	10	40	50	25	25
Unit-2	50	20	-	-	20	100	-	-
Unit-3	40	10	-	-	10	100	-	-
Unit-4	36	16	-	-	16	100	-	-

In unit-1 50% of total amount sold by producer- consumer channel whereas 25% of total amount sold by both producer – wholesaler – retailer- consumer channel and Producer-Retailer- Consumer channel was. In unit-2, unit-3 and unit-4 was 100 per cent of total amount was sold through producer-consumer channel. It was observed that vermicompost distribution through producer- consumer channel is more used by producers than other channels of distribution.

Summary and conclusion

In Raipur, Bilaspur and Mahasamund districts of Chhattisgarh state, vermicompost is commonly produced in 4 to 6 cycles, for different methods of vermicompost production i.e. Constructed method and vermibed method. It was observed that per cubic meter production of vermicompost in quintal was higher in constructed method i.e. 51.55 q than vermibed method i.e. 21.33 q, because in constructed method vermicompost is commonly produced in 6 cycles but in case of vermibed it was only 4 cycles. Per cubic meter net income on total cost was higher in constructed method i.e. Rs.14157.69 than vermibed method i.e. Rs. 2201.68. Benefit-cost ratio of per cubic meter was higher in constructed method (1:1.23) than vermibed method (1:0.26). These ratios indicate that constructed method is superior than vermibed method. The total cost for per quintal production of vermicompost was Rs.396.77 in vermibed method. Whereas it was Rs.228.57 in constructed method. Net income of per quintal vermicompost production

on total cost was higher Rs.271.43 in constructed method, while it was Rs.103.22 in vermibed method. The per quintal benefit cost ratio was higher (1:1.27) in constructed method while it was (1:0.29) in vermibed method.

Suggestions

1. Establishment of public earthworm culture production units at village level.
2. Training facilities for interested new producers of vermicompost.
3. Government of India should provide subsidies to vermicompost producing units.
4. Time to time availability of market related information.
5. Adequate financing facility shall be made available from co-operative banks and other financing societies.

References

1. Bhiday MR. Earthworms in agriculture. Indian Farming, 1994;43(12):31-34.
2. Kokate KA. Cost and returns from vermicompost production in Nashik district. M.Sc. (Agri) thesis, Maharashtra Agricultural University, Parbhani; c1976.
3. Patil BL, Hosamian SB. Scale of finance and cost of production for selected vermicompost producers in Bijapur district. Financing Agric. 1989;21(1):11-12.
4. Ranwa RS, Singh KP. Economics of vermicompost production and cost of production. Indian J Curr Agric. 1996;34(30):15-29.
5. Rao MS, Tripathi BN. A study of economics of

- production and marketing of vermicompost in Kankipadu block of Krishna district, Andhra Pradesh. Indian J Agric Econ. 1980;49(3):220-223.
6. Shivakumar C. Production and marketing of vermicompost in Dharwad district. Karnataka J Agric Sci. 2009;22(4):850-853.
 7. Maurya RP, Bhalerao MM. Economics of vermicompost production in Sewapuri (U.P.). Agril Banker. 1985;8(4):20-21.