Original Research Article

An Economics analysis of Super compost production and marketing under Godhan Nyay Yojna of Chhattisgarh plains

Abstract

The General objective of this study is to find out the cost and returns and marketing of super compost production of Gothan under Godhan Nyay Scheme. The Study was based under primary data; conducted in three districts of Chhattisgarh plains viz. Bilaspur, Raigarh and Janjgir-Champa. From each district four Gothans and from each Gothan one self help groups were selected randomly. Thus, a total number of 120 respondents were selected. Criteria of Gothan selection is as follows; Model Gothan, Non-Model Gothan, Village Gothan and City Gothan. The study revealed that Total cost of production of super compost in Model Gothan was lowest 4.24 Rs./Kg and Net Return from super compost production was highest 1.77 Rs./Kg followed by City Gothan, Non-Model Gothan and Village Gothan. Largest consumer of Supercompost was Farmers followed by Nursery and Agriculture department.
Keywords: Super compost, self help group, Godhan Nyay scheme, cost and returns.

Introduction

As a result, economic viability and sustainable agriculture have become major issues in Indian agriculture (Pandey and Singh, 2012: Cacek, *et al*,. 2009). "One may notice that our traditional farming systems were characterized by small and marginal farmers producing food and basic animal products for their families by using eco-friendly farming inputs farming was highly sustainable and the practices were fully organic and natural inputs" said Kasturi, (2007). Chhonkar, (2005) observed that, in traditional time the agriculture was fully cattle-based their traditions consisted of methods of controlling pests and diseases. In addition, agriculture was building soil fertility and structure one their ain indigenous ways, since farming did not include the use of chemical inputs. Further, soil health and pest control were achieved using practices such as shifting cultivation and conservation. With the increasing population, poverty, unemployment is also a serious problem. with the increasing population, the use of various types of chemical fertilizers, toxic pesticides to achieve maximum production of food; in the human race food supply affects the ecological system, weakening the fertility of the land for the solution of this problem and for the additional economic benefit of farmers Chhattisgarh government launched **'Gothan'** and **'Godhan Nyay Yojna'** under the ambitious Suraji village scheme Narwa, Garwa, Ghurwa, and Badi on 20th of July 2020. By the state Government, the Godhan scheme has been started on the occasion of the important festival of Chhattisgarh 'Hareli'. Gothan is home to cattle. In Godhan Nyay Yojna the state government purchases cow dung at 2 Rs. per k.g. from the farmers and cattle rearers of the state which leads to income as well as employment generation initially in the rural pocket later across the state. The purchasing of cow dung is done at the Gothan.

The purchased cow dung turned into vermicompost by the self-help group and later the organic manure like vermicompost sale to the farmers at Rs. 10 per kilogram and Supercompost at Rs. 6 per Kilogram. These schemes widely promote organic farming in the State as well as help livestock rearers and women self-help groups into a profitable business. These schemes create new employment opportunities in rural areas.

Objectives

The present study is focused on the cost & returns and Marketing of Super Compost under Gothan and Godhan Nyay scheme in Chhattisgarh India.

Methodology

The study was based on primary data; conducted in three districts of Chhattisgarh plains viz. Bilaspur, Janjgir-Champa and Raigarh. From each district four Gothans and from each Gothan one self help groups were selected randomly. Thus, a total number of 120 respondents were selected. Criteria of Gothan selection is as follows; Model Gothan, Non-Model Gothan, Village Gothan and City Gothan. The analysis of data was done using different analytical tools, keeping in view objective of the study as follow.

Cost Concept- Cost related to Vermicompost Production

Profitability Concepts-

Gross Income: Physical Production × Price/qt

Net income: Gross Income- Total Cost

Input-Output Ratio: Gross Income/Total Cost

Benefit- Cost ratio: Net Income/ Total Cost

Cost and Returns of Super Compost Production

Total costs of Supercompost production is demonstrated in Table 1. It clearly indicates that in Non-Model Gothan, the cost of Supercompost production per kilogram was higher than in Model Gothan. The overall production cost per kg of Supercompost was found to be averaging was Rs. 4.35 per Kg. For Non-Model Gothan, the production cost was higher; Rs. 4.45 per Kg followed by Village Gothan, Rs. 4.40 per kg., for City Gothan Rs. 4.34 per Kg and For Model Gothan production cost of Super compost was lowest, Rs 4.24 per kg.

Results and discussion

From table 1 it is clear that under cost of production of Supercompost the overall maximum cost shared by Cow dung which was Rs. 4.11 (94.46 percent), followed by Jaggery cost Rs. 0.10 (2.34 percent), Decomposer cost Rs. 1.15 (0.05 percent), transportation cost Rs. 0.04 (0.92 percent), Jute bags cost Rs. 0.02 (0.46 percent) and at last cooperative commission charge Rs.0.69 (0.03 percent).

The table 2 represents the returns of Supercompost production. The price of super compost fixed by Government was Rs.6 per kg. The overall Net Income per Kg of Supercompost was Rs. 1.65. The Net Income was higher in Model Gothan (Rs. 1.77 per kg) followed by City Gothan (Rs. 1.67 per Kg), Village

Gothan (Rs.1.60 per Kg) and lowest in Non-Model Gothan (Rs. 1.56 per Kg).

The Input-Output Ratio was higher in case of Model Gothan 1:1.42, followed by City Gothan 1:1.39, Village Gothan 1:1.36 and in case of Non-Model Gothan Input –Output Ratio was lowest 1:35. The overall Input-Output ratio of Supercompost production was 1:1.38.

Table No.1: Costs of Super-compost Production (Rs. / Kg)

Particular	Model Gothan		Non-model Gothan		Village Gothan		City Gothan		Overall	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Cow dung (2 Rs./kg)	2	4 (94.45)	2.1	4.2 (94.59)	2.08	4.16 (94.55)	2.04	4.08 (94.23)	2.005	4.11 (94.46)
Decomposer (20 Rs./kg)	0.025	0.05 (1.18)	0.025	0.05 (1.13)	0.025	0.05 (1.14)	0.025	0.05 (1.15)	0.025	0.05 (1.15)
Jaggery	0.003	0.1 (2.48)	0.003	0.1 (2.25)	0.003	0.1 (2.27)	0.003	0.1 (2.31)	0.003	0.10 (2.34)
Jute bags (0.65Rs./pieces)	1	0.02 (0.47)	1	0.02 (0.45)	1	0.02 (0.45)	1	0.02 (0.46)	1	0.02 (0.46)
Cooperative society/ bank commission @ 5%	0.03 (0.71)		0.03 (0.68)		0.03 (0.68)		0.03 (0.69)		0.03 (0.69)	
Transportation Cost (Rs)	0.03 (0.71)		0.04 (0.90)		0.04 (0.91)		0.06 (1.15)		0.04 (0.92)	
Total Cost (Rs.)	4.24 (100)		4.45 (100)		4.40 (100)		4.34 (100)		4.35 (100)	
Production (6 Rs. /kg)	1	6	1	6	1	6	1	6		6

Note: Figure in parentheses indicates the percentage to the Total.

Table No .2: Total Cost, Gross Income and Net Income of Supercompost production

S No.	Particulars	Model Gothan	Non-Model Gothan	Village Gothan	City Gothan	Overall
1	Total Cost (Rs.)	4.24	4.45	4.40	4.34	4.35
2	Production (Kg)	1	1	1	1	1
3	Gross Income (Rs.)	6	6	6	6	6
4	Input-Output Ratio	1:1:42	1:1.35	1:1.36	1:1.39	1:1.38
5	Net Income (Rs.)	1.77	1.56	1.60	1.67	1.65

Note: Figure in parentheses indicates the percentage to the Total.

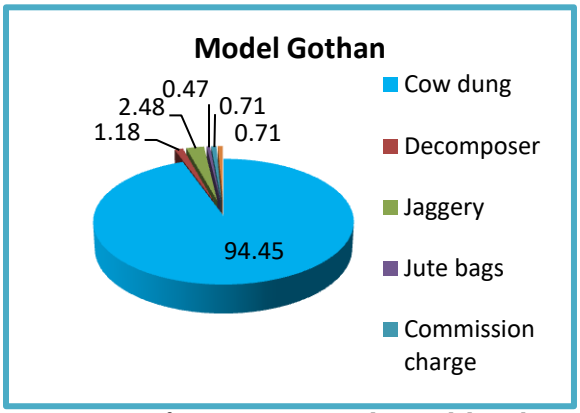

Fig.1: Costs of Supercompost under Model Gothan

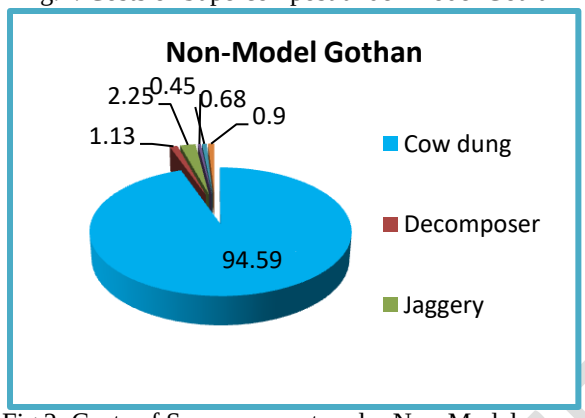

Fig.2: Costs of Supercompost under Non-Model Gothan

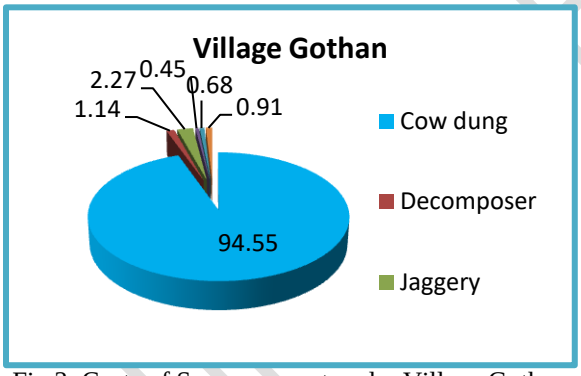

Fig.3: Costs of Supercompost under Village Gothan

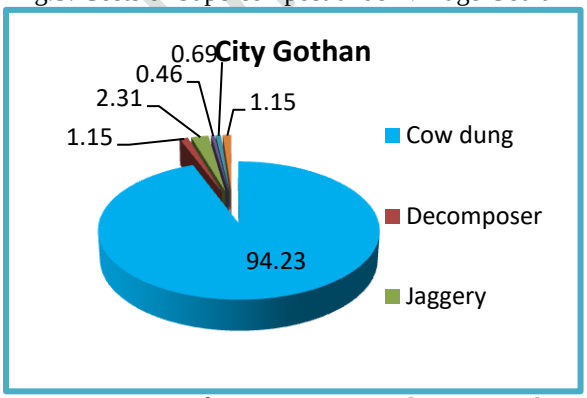

Fig.4: Costs of Supercompost under City Gothan

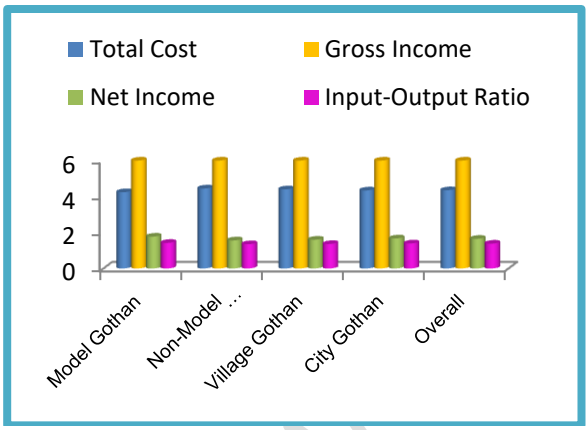

Fig.5: Total Cost, Gross Income and Net Income and Input-Output Ratio of Supercompost Production

Marketing of Supercompost:

Price of Supercompost fixed by the state government is, 6 Rupee per Kg. The marketing Channel for Supercompost is same as Vermicompost. Table 3 represents the list of buyers of Supercompost, where major buyers was farmers (30.09 percent) followed by Agriculture department (19.21 percent) and Nursery (10.98 percent).

Table.3: Buyers of the Supercompost Product in selected the study area

S No.	Consumers	Quantity (quintal)	Value (Rs.)	Percents (%)
1	Farmers	552.10	331260	30.09
2	Agriculture Department	352.38	211428	19.21
3	Horticulture Department	65	39000	3.54
4	Forest Department	142.50	85500	7.77
5	Sericulture	15	9000	0.82

	Department			
6	Nursery	201.50	120900	10.98
7	Others	506.14	303684	27.59
Total		**1834.62**	**6587799.3**	**100**

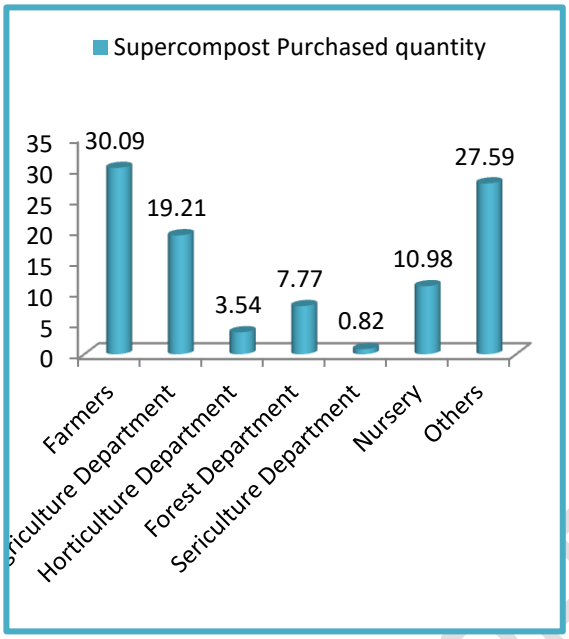

Figure 6: Supercompost purchased quantity

Conclusion

In the present study we focused on the Gothan and Godhan Nyay scheme implementing in Chhattisgarh India. On the basis of the above study; we may conclude that these newly implemented schemes play a vital role in raising the living standard of livestock rearers as well as women self help groups by providing them employment opportunities. Simultaneously, in long term use of super compost will improve the fertility of the land. The study shows that the total cost occur in producing super compost was lowest in model Gothan as compare to other Gothans. The price of super compost fixed by Government was Rs.6 per kg. The overall Net Income per Kg of Supercompost was Rs. 1.65. The Net Income was higher in Model Gothan followed by City Gothan Village Gothan and lowest in Non-Model Gothan. As a policy implication; it is suggested that farmers should be made aware about the usefulness of super compost so that they can make maximum use of it. At the same time, women should be given various training programs about marketing of vermicompost so that they can sale more and more compost and earn profit.

References

AGRICOOP. 2022. Department of Agriculture and Farmers Welfare. Godhan Nyay Scheme information. Available at: https://www.agricoop.nic.in/en/agriculturecontigency/Chhattisgarh. (Last Accessed on 4th February 2022).

AGRIPORTAL. 2021. Government of Chhattisgarh Agriculture Development and Farmer Welfare and Bio Technology Department. Godhan Nyay Scheme data. Available at: https://www.agriportal.cg.nic.in. (Last Accessed on 8th December 2021).

Cacek, Terry, Linda. Langer, L., (2009). The Economic Implications of Organic Farming. *American Journal of Alternative Agriculture*: pp.1-9.

Chhonkar, P.K.,(2005). Organic Farming: Approaches and Possibilities in the Context of Indian Agriculture. *National Academy of Agricultural Sciences, India.*

Kasturi, Das., (2007). Towards a Smoother Transition to Organic Farming. *Economics & Political Weekly*, 42, 24 : 2243-22445.

NGGB. 2021. Narwa Garuwa, Ghuruwa Badi. *Nggb book pdf. Available at:* https://nggb.cg.nic.in/assets/files/NGGB_Book.pdf . (Last Accessed on 8th August 2021.

Pandey, J., & Singh, A. (2012). Opportunities and constraints in organic farming an Indian perspective. *Journal of Scientific Research*, 56,47-72.