

Review Paper

A Review of *Gothan* and *Godhan Nyay* Scheme in Chhattisgarh

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ABSTRACT

The study aims to examine the status of *Gothan* and *Godhan Nyay Yojna* in Chhattisgarh India. The study requisite secondary data, which were collected from the site of government of Chhattisgarh, Agriculture Development and Farmers Welfare Raipur Chhattisgarh and from different articles. The study reveals that Chhattisgarh government launched '*Gothan*' and '*Godhan Nyay Yojna*' under the ambitious Suraji village scheme on 20th of July 2020. The concept of developing *Gothan* for a village is gathering all the cattle in a single place to provide them food and health facilities e.g., timely vaccination of cattle. In *Godhan Nyay Yojna* from the first phase of scheme the state government procures cow dung at ₹ 2 per k.g. from the farmers and cattle rearers of the state. Later, cow dung was bought from the farmers and livestock rearers by Self help groups itself. The procuring of cow dung is done at the *Gothan*. The procured cow dung turned into vermicompost by the woman self-help group and organic manure sale to the farmers at ₹ 10 per kilogram. Besides preparing organic manure, the dung is used to prepare various other useful items such as Diya, flower vase, etc. These schemes widely promote organic farming in the State as well as help livestock rearers and women self-help groups into a profitable business. The finding of the Study also reveals that Out of total approved *Gothans* about 61.91 per cent *Gothans* was fully constructed. In Bilaspur Division there were maximum numbers of *Gothans*. In Bastar division there were highest 75.95 per cent of sales of vermicompost and also in Bastar Division there were highest 74.21 percent of sales of Supercompost. Chhattisgarh Department of Agriculture purchased highest 13.14 percent of cow dung.

HIGHLIGHTS

- ① It was concluded that through *Gothan* and *Godhan Nyay* Scheme, the additional income of livestock rearers and women SHGs has increased.
- ② *Gothan* and *Godhan Nyay* Scheme promotes the importance of Organic Farming.

Keywords: organic farming, Vermicompost, employment generation, *Gothan* scheme, *Godhan Nyay* scheme

This review, reports the importance and significance of schemes namely *Gothan* and *Godhan Nyay Yojna* launched in Chhattisgarh which promotes cattle dung based product for organic farming and also these schemes helps livestock rearers and self-help groups in employment generation. In vermicomposting of organic wastes, cattle dung plays a central role in mineralization, nutrient recovery, earthworm and microbial activity leading to Vermicompost production. Along with playing a major role in organic farming, Vermicompost also plays a major role in income generation; it is as one of the generating additional source of income,

economic empowerment and assuring sustainable livelihood approach. Soni and Patel (2020) reported after the completion of skill training womens' SHGs started to produce quality vermicompost in their village and also vermicompost production enhanced SHGs livelihood status as well as improved soil health. Batra (2007) concluded that vermicompost is the most beneficial option in the livelihood sector

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because it required less input and also it has been proven successful in other area. Daniel *et al.* (2005) articulated that the sustainability goals of this initiative are two-fold: firstly, that vermicompost making should sustain itself as an income-generation activity; secondly, that it should contribute to sustainable farming locally. Jadav and Gorfad (2008) mentioned Quality of product is increased by use of vermicompost hence product fetches good market prize. Nagavellemma *et al.* (2004) observed that the utilization of vermicompost results in several benefits to farmers, industries, environment and overall national economy. With increasing population, poverty, unemployment is also a serious problem. With the increasing population, the use of various types of chemical fertilizers, toxic pesticides in order to achieve maximum production of food; in human race for food supply affects the ecological system, weakening the fertility of the land. The Researcher also says that gravity of environmental degradation as a result of faulty agricultural practices has caused arming situations among the farmers, scientists and conservationist (Jermy *et al.* 2007). Nayak and Panigrahi (2020) explicated that increased participation in SHGs leads to higher political empowerment in the form of higher political participation and better community mobilization. Socio-economic status and place of operation significantly moderate the effect of the level of participation on women (SHG member) empowerment. For the solution of infertile land problem and for additional economic benefit of farmers Chhattisgarh government launched 'Gothan' and 'Godhan Nyay Yojna' under the ambitious Suraji village scheme A slogan indicating aim to strengthen the rural economy came over as "Chhattisgarh k chaar chinhari, Narwa, Garua, Ghurwa , badi Ela bachana he sanwari." It says that the perennial streams of villages, livestock, organic waste coming out of the house and cow dung manure along with fruits and vegetables in the backyard are the identity of Chhattisgarh and must be protected. *Gothan* and *Godhan Nyay Yojna* launched under the ambitious *Suraji village scheme-Narwa, Garwa, Ghurwa and Badi*. *Narwa* means canal *Garwa* means cow. Both the male and female cattle are known as *Garwa*. *Ghurwa* means a place where cow dung is stored to convert into FYM (Farm Yard Manure) which is prepared from cow dung

and second is vermicompost which is produced by the use of earthworm and last one is *Badi* which means kitchen garden. By the state Government the *Godhan* scheme has been started on the occasion of the important festival of Chhattisgarh 'Hareli'. *Gothan* is home for cattle. The concept of developing *Gothan* for a village is gathering all the cattle of a village in a single place to provide them food and health facilities e.g., timely vaccination of cattle. In *Godhan Nyay Yojna* the state government procures cow dung at ₹ 2 per kg. from the farmers and cattle rearers of the state which lead to income as well as employment generation initially in the rural pocket later across the state. The procuring of cow dung is done at the *Gothan*. The procured cow dung turned into Vermicompost by woman self-help group and later the organic manure sale to the farmers at ₹ 10 per kilogram. Besides preparing organic manure, the dung is used to prepare various other useful items such as Diya, flower vase etc. Chhattisgarh is rich in livestock with 1.27 crore animals. Out of this, around 64 percent is cattle population. The scheme aims to put money in the pockets of people living in rural areas farmers and cattle owners and also solve the problem of stray cattle as the central government wants to double the income of farmers by 2022. Cow rearing is now more viable from these schemes because cows were not treated well until the time, they are not economically viable. Once they stop giving milk, they are left to roam around. Now the implementations of the scheme help in stopping movement of the cattle on the roads. Cattle are used more in farming. More and more use of manures made from cattle dung is used in agricultural works, which will improve health of the land. These schemes widely promoting 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 opportunity in the rural areas.

STUDY OBJECTIVE

Identify the present status of *Gothan* and *Godhan Nyay Yojna* in Chhattisgarh.

METHODOLOGY

The main aim of the paper is to critically examine the *Gothan* and *Godhan Nyay* Scheme in the light of current scenario.

The study is descriptive in nature and based on secondary data collected from various sources. It draws from exiting literature, research papers, articles published in news papers and magazines, blog and reference website, and reports.

The first part deals with objectives and importance of *Gothan* and *Godhan Nyay* scheme. The second part deals with numbers of *Gothan* established in state, details of numbers of SHGs works under scheme and quantity of purchased vermicompost by different agencies. Descriptive statistics tools like Tabular analysis and Charts are used to present the status of *Gothan* and *Godhan Nyay* schemes.

RESULTS AND DISCUSSION

The state government launched the scheme to increase the income of farmers. Main objective of *Gothan* is to promote organic compost, to reduce chemical fertilizer usage and improve soil health. *Gothan* is a highland near the village where village's animals are collected in the morning as part of the animal's daily sojourn of posturing. A model *Gothan* includes at least five acres of land, cattle protection trench, storage space for fodder and water, shed facility and water facility with solar powered pumps or tube wells and proper drainage. The *Gothan* is managed by Gram *Gothan* committees and SHGs with the help of cowherds. From stored dung in *Gothan*, Vermicompost is made by women SHGs. According to the demand, other items also made from cow dung like diya, flower case, vermiwash, compost, pot etc. prepared Vermicompost is sold to 10 rupee per kg to farmers, agro industry, and agricultural, horticultural department etc.

Benefits from the Scheme

- The scheme creates new employment opportunity in rural areas.
- The implementation of *Gothan* in villages and cities helps in stopping movement of cattle s on the road.
- More and More use of organic compost made from cow dung was used in agriculture works, which improve health of the land.
- Organic farming was promoted in the state.
- The scheme helps Livestock rearers and Self Help Groups to grow into a profitable business.

Status of *Gothan* in Chhattisgarh

(A) Total numbers of *Gothans* in Chhattisgarh

Total approved, under construction and constructed *Gothans* shown in table 1. Out of total approved *Gothans* about 61.91 per cent *Gothans* were fully constructed and 30.56 per cent *Gothans* were under constructed.

Table 1: Total Number of *Gothan* in State

<i>Gothan</i> Status	Number	(%)
Approved	8409	100
Under construction	2576	30.56
Fully constructed	5219	61.91
Not constructed	634	7.52

Source: nggb.cg.nic.in (2021).

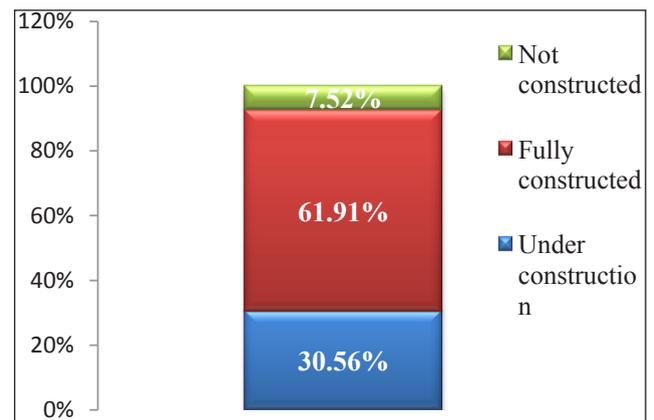


Fig. 1: *Gothan* Status in Chhattisgarh

(B) Details of Purchased Cow Dung under scheme:

Table 2 present details of purchased cow dung in Chhattisgarh under *Godhan Nyay Yojna*. It was observed that in Bilaspur Division there were maximum numbers (1520 *Gothans*) of *Gothans* and maximum quantity (1666486 quintal) of cow dung were purchased under Durg Division. The table also defines that under Raipur Division, there were maximum per cent (82.49 percent) of cow dung distributed to Self-help Group.

(C) Share of benefits of vermicompost under *Godhan Nyay Yojna*

Table 3 clearly shows the share of benefits of vermicompost under *Godhan Nyay Yojna*. The selling price of vermicompost was currently 10 ₹/Kg from

Table 2: Details of Purchased Cow dung under the Scheme

Division	Total <i>Gothan</i>	Total cow dung purchased (q.)	Total group Cow dung distribution (q.)	% of Cow dung distribution to group
Raipur	1401	1584331	1306883	82.49
Durg	1375	1666486	1216144	72.98
Bilaspur	1520	1394897	1052282	75.44
Sarguja	1150	730849	588064	80.46
Bastar	1250	480004	372874	77.68
Total	6696	5856567	4536246	77.46

Source: Department of Agriculture and Farmers Welfare Mantralaya Raipur Chhattisgarh, till 20/12/2021.

which 5 ₹/kg was given to samiti for buying cow dung for next vermicompost production. Rupee 0.65 per kg given to self help groups for packaging, 0.50 Rupee per kg Large Area Multipurpose Society (LAMPS) / Primary Agriculture Credit Society (PACS) & Cooperative banks as commission charge. Out of the remaining 3.85 Rupee, self-help groups and samiti's profits were in 85:15 ratios, which were Rupee 3.24 and 0.58 respectively.

Table 3: Share of benefits of vermicompost under *Godhan Nyay Yojna*

Particulars	Share of benefits (₹/Kg)	(%)
Selling Price	10	100
Rupee given to <i>samiti</i> for buying Cowdung	5	50
Rupee given to SHGs for packaging	0.65	6.5
LAMPS/PACS & Cooperative banks commission	0.50	5.0
SHGs Commission	3.27	32.7
Samiti Commission	0.58	5.8

(Bifurcation of 10 Rupee); Note: SHGs: Self-help Groups; LAMPS- Large Area Multipurpose Societies Scheme; PACS- Primary Agriculture Credit Society.

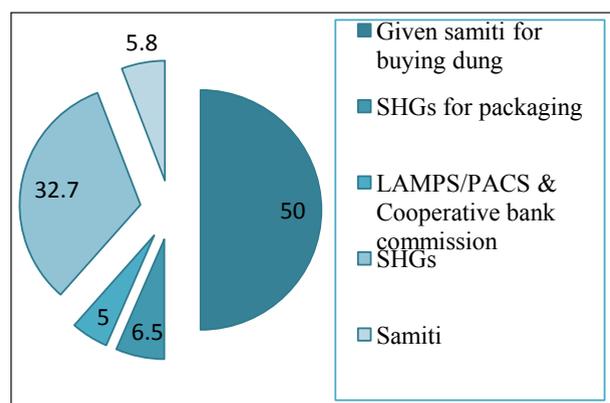


Fig. 2: Share of benefits of vermicompost under *Godhan Nyay Yojna*

(D) Details of Vermicompost Production and sale

The table 4 depicts the production and sale of vermicompost under the *Godhan Nyay* Scheme. When the scheme introduce; the production and sales of vermicompost was very high in Bilaspur division compare to other divisions. In Bastar division there were highest 75.95 per cent of sales and in Sarguja Division there were lowest 66.19 percent of sales of vermicompost.

Table 4: Details of Vermicompost Production and sale by Self-help Groups under Scheme

Division	Vermicompost		
	Production (quintal)	Sale (quintal)	Percent of sale
Raipur Division	198592.36	135483.40	68.22
Durg Division	261375.54	182412.56	69.79
Bilaspur Division	265356.40	196869.70	74.19
Sarguja Division	151146.50	100037.54	66.19
Bastar Division	100292.54	76171.60	75.95
Total	976763.34	690974.80	70.74

Source: Department of Agriculture and Farmers Welfare, Mantralaya, Naya Raipur, Chhattisgarh (20/07/2020 to 20/12/2021).

(E) Super compost Production and sale

The table 5 indicates the production and sales of super compost. Raipur division produce and sales maximum super compost compare to other division. In Bastar Division there were highest 74.21 percent of sales and in Sarguja Division there were lowest 36.61 percent of sales of Super compost.

Table 5: Details of Super compost Production and sale by Self-help Groups under Scheme

Division	Super-compost		
	Production (quintal)	Sale (quintal)	Percent of sale
Raipur Division	130676.35	58974.50	45.13
Durg Division	127287.75	47939.29	37.66
Bilaspur Division	75681.72	36917.95	48.78
Sarguja Division	55890.28	20461.64	36.61
Bastar Division	35043.25	26005.07	74.21
Total	424579.35	190298.45	44.82

Source: Department of Agriculture and Farmers Welfare, Mantralaya, Naya Raipur, Chhattisgarh (20/07/2020 to 20/12/2021).

(F) Quantity of Vermicompost: Purchased by different agencies

Table 6 presents details of cow dung purchasing agencies. It can be seen from the table that Chhattisgarh Department of Agriculture purchased highest 13.14 percent of cow dung followed by Directorate Horticulture and Farm Forestry (6.14 percent) and Forest Department (4.71 percent).

Table 6: Department wise information of purchased Vermicompost under the Scheme

Department	Vermi-compost (Q.)	Amount (lakh)	(%) Total
CG Marketing Federation	1248.9	12.5	0.17
Chhattisgarh Rajya Krishi & Beej Vikas Nigam	4411.5	44.1	0.62
Directorate Horticulture & Farm Forestry	43255.6	432.5	6.14
Department of Panchayat and Social Welfare	3662.6	36.6	0.52
Department of Secondary Education	4975.5	49.8	0.70
Chhattisgarh Department of Agriculture	90507.7	923.2	13.14
Indira Gandhi Krishi Vishwavidyalaya	1566.6	15.8	0.22
Lauh Purush Sugar Plant Pandariya	1430.9	14.3	0.20
Panchayat and Rural Development	5807.7	58.1	0.82
Chhattisgarh khadi & Village industries Board	1914.4	18.9	0.26
Forest Department	32551.9	331.4	4.71

36 Incubation Center (AIC 36Inc) Chhattisgarh	2870.4	28.7	0.40
Chhattisgarh Rajya Sahakari Bank Mydt.	32175.6	322.4	4.58
Nursery	3336.6	33.4	0.47
SERICULTURE	5274.4	52.7	0.74
Other	451891.4	4653.0	66.21
Total	686881.7	7027.4	100

Source: Department of Agriculture and Farmers Welfare, Mantralaya Raipur, Chhattisgarh.

CONCLUSION & SUGGESTIONS

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 vermicompost and super compost will improve the fertility of the land. As a policy implication; it is suggested that farmers should be made aware about the usefulness of vermicompost 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.

There is a long journey ahead of us and the time is needed to know how much the scheme will be successful in the state. If this scheme is implemented in true spirit we surely will have many more success stories to write about.

Limitations

1. Time is the major limitation as *Godhan Nyay* Scheme has been launched a year and half year ago hence there is paucity of data and good research papers.
2. The paper is purely based on secondary data and no empirical testes have been conducted.

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