



Transforming Lives through Vermicomposting for Sustainable Livelihoods in Keonjhar Forest Division, Odisha

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ABSTRACT: The study focuses on evaluating the implementation and impact of vermicomposting as an alternative livelihood strategy in five villages within the Keonjhar Forest Division, Odisha. The project, named "Vermi Village," was initiated in 2021-22 with the objective of reducing reliance on forest resources, boosting income, and promoting sustainable practices. Targeting women self-help groups (SHGs), the project aimed to achieve widespread adoption of vermicomposting, establishing specific criteria for a successful "Vermi-Village" model. Data was collected through structured interviews and analyzed to discern adoption rates across various demographic variables. Results revealed that female beneficiaries exhibited higher motivation and adoption rates compared to males. Additionally, the age group of 25 to 35 years displayed the most interest in additional income opportunities in Baghinasa and Rohiniduma villages, while the age group of 35 to 50 years exhibited the most interest in Nalabila and Tarmakanta villages respectively. Education-wise, individuals with higher education levels, particularly those with a high school pass, demonstrated higher adoption rates. Economic analysis showcased varying benefits across villages, with Baghinasa Village exhibiting the highest benefit-cost ratio (3.36), followed by Aharposi (2.87) and Nalabila (1.26). However, Tarmakanta and Rohiniduma villages faced challenges with lower returns, highlighting the necessity for market linkages. Moreover, various physico-chemical parameters such as moisture, pH, electric conductivity, organic carbon, C:N ratio, nitrogen, phosphorus, and potassium were analyzed in soil samples at the laboratory of OUAT. The study concluded that vermicompost is nutrient-rich and can contribute to better growth and sustainable forestry practices.

Keywords: Benefit-Cost Ratio, Physico-chemical, Vermi Village, Vermicomposting, SHGs.

INTRODUCTION

Alternate livelihood generation is one of the most effective ways to reduce forest fringe communities' reliance on the forest, to prevent man-elephant interaction, and to boost social capital in terms of forest and wildlife conservation. Most importantly, livelihood must be sustainable and demand-driven, with proper market linkages. Vermicompost making is one such an alternate livelihood which can be done with very low capital investment while doing core agricultural activities. It is very effective in increasing the income of farmers and forest dependent tribal communities. Vermicomposting is the term given to the process of conversion of biodegradable matter by earthworms into vermicast (Singh and Singh 2015). Vermiculture is the process of turning any kind of biodegradable waste such as farm waste (Sharma and Garg 2018), kitchen waste, market wastes, bio-wastes from agro-based enterprises, waste from livestock into nutrient-rich medium as it passes through the worm gut (Saha *et al.*, 2022; Bordoloi, 2023). To popularize women empowerment through vermicompost making, minimize reliance on forest resources and avoid human-

animal interaction creating sense of ownership among forest fringe communities regarding forest and wildlife conservation and promoting the concept of circular economy; Forest department of Keonjhar created awareness among the SHG groups through front line demonstration and capacity building program to transfer the vermicompost production technology with low-cost structures. A project "Vermi Village" has been started in the year 2021-22 in five different village at five different forest ranges of Keonjhar Forest Division.

Criteria for a Vermi- village. Abundant resources: Each household possesses an ample supply of raw cow dung and organic waste, laying a solid foundation for vermicomposting initiatives.

Thriving village community: Large-scale production of vermicompost serves as a significant alternate livelihood, particularly empowering women Self-Help Groups (SHGs).

Extensive adoption: At least 50-70% of households in a village have accepted vermicompost units, showcasing widespread community participation and environmental consciousness.

The purpose of the study was to identify the adoption percentage of beneficiaries and its distribution among the different independent variable selected for the study

MATERIALS AND METHODS

A. Study area

The study was conducted on the respondent of five different village in five different ranges of Keonjhar forest Division. The adoption percentage study was done on the respondents for the first five villages in each of the five ranges that participated in the Front Line Demonstration (FLD) program, which was conducted by Krishi Vigyan Kendra, Keonjhar, Partner NGO-PRAKALPA, and Gramin Product Marketing-BBSR between 2021 to 2023. The data collected by pretested well structure interview schedule. Demonstration and low cost production system technique were used to motivate the farmer/farm-women.

Awareness programs for adopting vermicomposting have been conducted in five different villages. The level of participation and adoption varies according to the interest and gender of the people in each village. The dependent variable of this study was adoption, and independent variables were gender, age, education, caste, income and land holding of farmers. The data were collected using pre-tested structured interview schedule personally. Adoption percentage of each category calculated as:

$$\frac{\text{Number of respondents adopted the technology}}{\text{Number of respondents participated}} \times 100$$

B. Vermicomposting methods

Species Selection: Surface dwelling *Eisenia foetida* was chosen for its efficient vermicomposting capabilities species. This earthworm act as prolific feeder and can feed upon a wide variety of degradable organic wastes. It exhibits high growth rate and have a wider tolerance for temperature (Gajalakshmi and Abbasi 2004)

Bed Size: Plastic vermicompost(HDPE) beds measuring 6ft×4ft×2ft were utilized.

Capacity of each vermicompost unit: The capacity of each vermicompost unit was 8 quintals.

Methods of vermicomposting being followed by the SHG members which given below

Site Selection: A cool and shady area under trees was chosen for the vermicomposting unit to provide suitable conditions for the process.

Waste Mixing: Organic waste and cow dung were mixed in a 1:1 ratio, with 40 kg of each material used in a specific arrangement.

Cycle Repetition: The mixing cycle was repeated every 10-15 days to facilitate decomposition.

Earthworm Introduction: After 20-25 days, earthworms were introduced to enhance the decomposition process.

Moisture Maintenance: Daily water spraying (10-20 litres/day) was implemented to sustain optimal moisture levels.

Aeration and Decomposition: Bed turning occurred once every 15 days to ensure aeration and promote aerobic decomposition.

The continuous execution of the vermicomposting process for 5 months, followed by one month maturation period, yielded nutrient-rich vermicompost ready for use.

C. Physicochemical properties analysis of vermicompost

The samples were sent to the Soil Science Laboratory of Odisha University of Agriculture and Technology (OUAT) for analysis of pH, electrical conductivity, total organic carbon, carbon-nitrogen ratio, nitrogen, phosphorus, and potash content.

RESULTS AND DISCUSSION

A. Aharposi village of Keonjhar Range

It was shown from the investigation that a majority of the respondent participated in vermicompost front-line demonstration were female members (94.12%) followed by male members (86.21%) in (Table 1). But after the demonstration, it is found that majority percentage of respondent adopted vermicompost were female members (97.50 %) followed by female (86.67 %). The results showed that female beneficiaries of Aharposi village were more motivated for Vermicomposting than the male farmers, but later male members participation was increased drastically. These results suggest an initial female dominance in motivation for vermicomposting in Aharposi village, followed by a noteworthy surge in male members participation over time.

It was also found from the survey that majority of farmers from the age group 25 yrs to 35 years participated in the FLD programmes *i.e.* (83.93%). However, the adoption percentage was found to be highest in the age group of 18 years to 25 years *i.e.* 92.31% followed by the age group 35 years 50 years (82.24 %). These findings indicate that farmers in the age class of 18 to 25 years showed greater interest in additional income opportunities.

The study revealed that beneficiaries in the High school pass category exhibited the highest adoption of the technology (96.88%), followed by those in the middle school (92.68%) and Primary school (89.29%) categories, respectively. This higher adoption percentage among High school pass individuals can be attributed to their predominant participation in FLD work compared to other education levels. Additionally, the OBC category farmers demonstrated the highest participation (93.75%) and adoption rates (93.33%), surpassing the SC category farmers (90%). As the Aharposi village is predominantly inhabited by OBC population, the maximum adoption was observed within this category. With the independent variable being income, the study revealed that the maximum adoption occurred among farmers in the income group of Rs. 40,000 to Rs. 60,000 (94.96%), followed closely by those in the income group of Rs. 40,001 to Rs. 60,000 (83.33%). This suggests that individuals from both income classes embraced vermicomposting as an alternative source of income.

Table 1: Adoption percentage of respondents in Aharposi village with different variables.

Sr. No.	Variable	No. of Individuals	No. of Participant	No. of Adopted	Participant %	Adoption %
A	Gender					
1	Male	164	115	82	70.12	71.30
2	Female	150	138	122	92	88
B	Age					
1	18 yrs to < 25 yrs	65	52	48	80.00	92.31
2	25 yrs to < 35 yrs	112	94	68	83.93	72.34
3	35 yrs to < 50 yrs	137	107	88	78.10	82.24
C	Educational levels					
1	Illiterate	33	27	19	81.82	70.37
2	Can read only	26	22	17	84.62	77.27
3	can read and write only	47	33	28	70.21	84.85
4	Primary School	58	41	32	70.69	78.05
5	Middle School	63	58	45	92.06	77.59
6	High School	87	72	63	82.76	87.50
D	Caste					
1	OBC	178	135	106	75.84	78.52
2	SC	0	0	0	0.00	0.00
3	ST	136	118	98	86.76	83.05
E	Annual income level					
1	Less than Rs 40,000	62	58	52	93.55	89.66
2	Rs. 40,001 to 60,000	252	195	152	77.38	77.95

B. Nalabila village of Ghatagaon Range

It was shown from the investigation that the majority of respondents who participated in the vermicompost front-line demonstration were female members (49.18%), followed by male farmers (11.93%). However, post-demonstration, it was found that the majority percentage of respondents who adopted vermicompost were female members (91.33%), while male members showed no interest in the work. The finding is in line with the results reported by Solanki and Indoria (2020), the female members participation was 71.79 %. These results indicate that female beneficiaries in Nalabilla village were more motivated for vermicomposting than their male counterparts.

Higher adoption was mainly due to community due to people interest and dedicated work of P NGO

The survey also revealed that the majority of farmers in the age group of 25 to 35 years participated in the FLD programs (46.26 %) and adopted in highest (83.82 %). Conversely, the age group of 35 to 50 years participated in a lesser amount (21.79%) but showed a more interesting adoption rate (93.15%). These results highlight that the farmers in the age group of 25 to 35 years actively participated in the program, whereas the age group of 35 to 50 years actively adopted the technology, with 68 out of 73 participants engaging actively in vermicomposting work.

Table 2: Adoption percentage of respondents in Nalabila village with different variables.

Sr. No.	Variable	No. of Individuals	No. of Participant	No. of Adopted	Participant %	Adoption %
A	Gender					
1	Male	285	34	0	11.93	0
2	Female	305	150	137	49.18	91.33
B	Age					
1	18 yrs to < 25 yrs	108	40	12	37.04	30
2	25 yrs to < 35 yrs	147	68	57	46.26	83.82
3	35 yrs to < 50 yrs	335	73	68	21.79	93.15
C	Educational levels					
1	Illiterate	54	51	43	94.44	84.31
2	Can read only	37	22	17	59.46	77.27
3	can read and write only	34	26	21	76.47	80.77
4	Primary School	115	36	18	31.30	50.00
5	Middle School	137	31	24	22.63	77.42
6	High School	213	15	14	7.04	93.33
D	Caste					
1	OBC	256	84	68	32.81	80.95
2	SC	0	0	0	0	0.
3	ST	334	97	69	29.04	71.13
E	Annual income level					
1	Less than Rs 40,000	256	137	69	50.36	50.36
2	Rs. 40,001 to 60,000	334	0	0	0	0

From the study, it was found that beneficiaries under the High school pass category adopted the technology the highest (93.33%), followed by those who did not attend school (84.31%), in comparison to other education levels. Das *et al.* (2016) reported in their finding that after training majority percentages of the respondent adopted vermicompost production were high school pass (93.33%) The highest participation was observed among farmers in the OBC category (32.81%), and they also exhibited a high adoption rate (80.95%), followed by farmers in the ST category (29.04%) with a participation rate of 71.13%. Given that Nalabila village is dominated by the OBC population, the maximum adoption was observed within this category.

Considering the independent variable of income, the study revealed that the maximum adoption was observed among farmers in the income group of less than Rs. 40,000 (50.36%). This reflects the moderate economic conditions of the people in the region, limiting the income group to the specified level. Above 40,000 categories neither participated nor adopted.

C. Baghinasa village of Champua Range

The investigation revealed that a majority of respondents who participated in the vermicompost front line demonstration were female members (94.12%), followed by male members (86.21%). However, after the demonstration, it was found that the majority percentage of respondents who adopted vermicompost

were female members (97.50 %), followed by male members (86.67%). These results indicate that female beneficiaries in Baghinasa village were more motivated for vermicomposting than their male counterpart)

It was also found from the survey that majority of farmers from the age group 35 yrs to 50 years participated in the FLD programmes (94.94%) and adopted the technology (90.67%). However highest adoption was seen in the age group of 25 years 35 years (95 %). These results showed that the farmers group belonging to the age group 25 years to 35 years were more concerned about the extra earning. Das *et al.* (2016) reported that after training the adoption percentage of vermicompost production were high in case of 25 yrs to < 35 yrs age group (92.50 %)

From the study, it was found that beneficiaries under the category High school pass adopted the technology highest (96.88 %) followed by Middle School(92.68%) compared to other education level. Highest participation was observed among the farmers of OBC category (93.75%) and adopted as well (93.33%) followed by the members of ST category (90 %). As Aharpasi village is dominated by OBC population, so maximum adoption was observed among this category. With the independent variable income, maximum adoption was found among the farmers of income group Rs 40,000 to Rs. 60,000 (94.96%).As the economy condition of the people is moderate in condition the income group is limited to the said level.

Table 3: Adoption percentage of respondents in Baghinasa village with different variables.

Sr. No.	Variable	No. of Individuals	No. of Participant	No. of Adopted	Participant %	Adoption %
A	Gender					
1	Male	87	75	65	86.21	86.67
2	Female	85	80	78	94.12	97.50
B	Age					
1	18 yrs to < 25 yrs	28	20	18	71.43	90
2	25 yrs to < 35 yrs	65	60	57	92.31	95
3	35 yrs to < 50 yrs	79	75	68	94.94	90.67
C	Educational levels					
1	Illiterate	5	4	3	80	75
2	Can read only	0	0	0	0	0
3	can read and write only	22	18	15	81.82	83.33
4	Primary School	31	28	25	90.32	89.29
5	Middle School	47	41	38	87.23	92.68
6	High School	67	64	62	95.52	96.88
D	Caste					
1	OBC	112	105	98	93.75	93.33
2	SC	0	0	0	0.00	0.00
3	ST	60	50	45	83.33	90.00
E	Annual income level					
1	Less than Rs 40,000	42	36	30	85.71	83.33
2	Rs. 40,000 to 60,000	130	119	113	91.54	94.96

D. Taramakanta Village of BJP Range

It was shown from the investigation that a majority of the respondent participated in vermicompost front line

demonstration were female members (26.73%) followed by male members (7.46 %) in (Table 1). After the demonstration, it is found that majority percentage

of respondent adopted vermicompost were female members (60.76%) and no such responds was received from male members. The results showed that female beneficiaries of Taramakanta village were more motivated for Vermicomposting than the male farmers. Aski and Hirevenkanagiudar (2010) reported that adoption of vermicompost in KVK Hulakoti (50 %) followed by KVK Hanumanamati (30%) in Dharwad District of Karntakaka. In present study it has been observed that the adoption percentage in Tarmakanta village showed at par result with adoption percentage in KVK Hulakoti.

It was also found from the survey that majority of farmers from the age group 25 yrs to 35 years participated (38.16%) in the FLD programmes but highest adoption is seen in 35 yrs to 50 yrs category (94.44 %) These results showed that the farmers group

belonging to the age group 35 years to 50 years were more concerned about the extra earning.

From the study, it was found that beneficiaries under the category of can read and write adopted the technology highest (96.43%) followed can read only category (77.27 %) compared to other education level. Highest participation was observed among the farmers of ST category (28%). However highest adoption was seen in OBC category *i.e.*, 59.81%. As Aharposi village is dominated by OBC population, so maximum adoption was observed among this category however members of ST community were also actively participated. With the independent variable income, maximum adoption was found among the farmers of income group Rs 40,000 to Rs. 60,000 (82.05%). As the economy condition of the people is moderate in condition the income group is limited to the said level.

Table 4: Adoption percentage of respondents in Tarmakanta village with different variables.

Sr. No.	Variable	No. of Individuals	No. of Participant	No. of Adopted	Participant %	Adoption %
A						
Gender						
1	Male	590	44	0	7.46	0
2	Female	591	158	96	26.73	60.76
B						
Age						
1	18 yrs to < 25 yrs	436	20	16	4.59	80
2	25 yrs t < 35 yrs	435	166	63	38.16	37.95
3	35 yrs to < 50 yrs	310	18	17	5.81	94.44
C						
Educational levels						
1	Illiterate	210	52	16	24.76	30.77
2	Can read only	85	22	17	25.88	77.27
3	can read and write only	125	28	27	22.40	96.43
4	Primary School	470	57	18	12.13	31.58
5	Middle School	197	30	10	15.23	33.33
6	High School	94	19	10	20.21	52.63
D						
Caste						
1	OBC	763	107	64	14.02	59.81
2	SC	168	25	14	14.88	56.00
3	ST	250	70	18	28.00	25.71
E						
Annual income level						
1	Less than Rs 40,000	975	163	64	16.72	39.26
2	Rs. 40,001 to 60,000	206	39	32	18.93	82.05

E. Rohiniduma Village of Patna Range

It was shown from the investigation that a majority of the respondent participated in vermicompost front line demonstration were female members (71.79%) followed by male members (17.28%) in (Table 1). After the demonstration, it is found that majority percentage of respondent adopted vermicompost were female members

(91.96%) and no such responds was received from male members . The results showed that female beneficiaries of Taramakanta village were more motivated for Vermicomposting than the male farmers. This result contradicts the results of Das *et al.* (2016) where adoption percentage was found maximum with male farmers.

It was also found from the survey that majority of farmers from the age group 25 yrs to 35 years participated (72.06 %) in the FLD programmes but highest adoption is seen in the same category (77.55%)

These results showed that the farmers group belonging to the age group 25 years to 35 years were more concerned about the extra earning. The participation of age group 25 years to 50 years is at par with previous age class.

From the study, it was found that beneficiaries under the category illiterate adopted the technology highest (85.71%) followed by High School (75 %) compared to other education level. Highest adoption was observed among the farmers of OBC category (49.44%) followed by the farmers of ST Category (60.47 %). As Rohinidumavillage is dominated by OBC population, so maximum adoption was observed among this category. With the independent variable income, maximum adoption was found among the farmers of income group less than Rs 40,000 category As the economy condition of the people is moderate in condition the income group is limited to the said level.

Table 5: Adoption percentage of respondents in Rohiniduma village with different variables.

Sr. No.	Variable	No. of Individual	No. of Participant	No. of Adopted	Participant %	Adoption %
A	Gender					
1	Male	162	28	0	17.28	0
2	Female	156	112	103	71.79	91.96
B	Age					
1	18 yrs to < 25 yrs	62	23	14	37.10	60.87
2	25 yrs to < 35 yrs	68	49	38	72.06	77.55
3	35 yrs to < 50 yrs	188	68	51	36.17	75.00
C	Educational levels					
1	Illiterate	42	28	24	66.67	85.71
2	Can read only	58	26	18	44.83	69.23
3	can read and write only	67	27	19	40.30	70.37
4	Primary School	72	22	15	30.56	68.18
5	Middle School	48	25	18	52.08	72.00
6	High School	31	12	9	38.71	75.00
D	Caste					
1	OBC	144	54	51	37.50	94.44
2	SC	0	0	0	0.00	0.00
3	ST	174	86	52	49.43	60.47
E	Annual income level					
1	Less than Rs 40,000	144	103	103	71.53	100
2	Rs. 40,001 to 60,000	174	0	0	0.00	0

Table 6: Present status of raw Vermicompost as on February, 2024.

Sr. No.	Name of Forest Range	Name of Vermi village	Quantity Produced (in tonne)	Quantity Sold (in tonne)	Earning amount per village (in Lakh) @ 20/Kg	Quantity Available (in tonne)	Earning per adopted individual (In Lakh)
1	Keonjhar	Aharposi	153.85	61.75	12.35	92.1	0.0605
2	Ghatgaon	Nalabilla	30.15	28.05	5.61	2.09	0.0409
3	Champua	Baghinasa	47.35	32.15	6.43	15.2	0.0450
4	BJP	Taramakanta	14.41	7.41	1.48	7	0.015
5	Patna	Rohiniduma	18.45	8.75	1.75	9.7	0.017

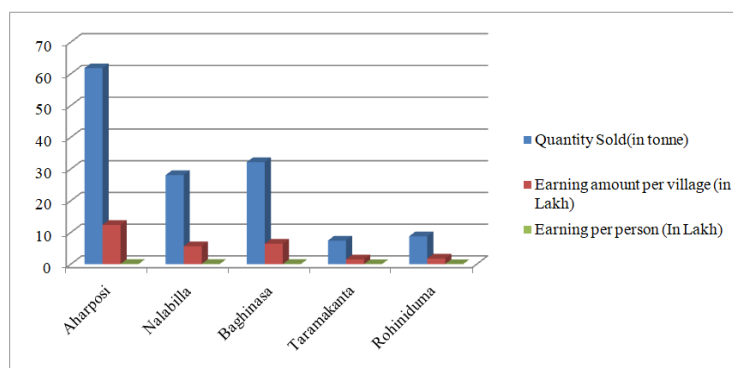


Fig. 1. Economic analysis of Vermicompost production and earning per individual.

Table 7: Economic analysis of each Vermicompost unit in five different villages.

Sr. No.	Name of Forest Range	Name of the Vermi village	Size of Plastic Beds in feet	No. of pits installed @3700/ per pit	Quantity Produced (in tonne)	Cost of Production Gross (in Rs.)	Quantity Sold (in tonne)	Gross Return (in Rs.) @20,000/ tonne	B:C Ratio
1	Keonjhar	Aharposi	6' × 4' × 2'	116	153.85	4,29,200	61.75	12,35,000	2.87
2	Champua	Baghinasa	6' × 4' × 2'	45	30.15	1,66,500	28.05	5,61,000	3.36
3	Ghatgaon	Nalabilla	6' × 4' × 2'	137	47.35	5,06,900	32.15	6,43,000	1.26
4	BJP	Taramakanta	6' × 4' × 2'	96	14.41	3,55,200	7.41	1,48,200	0.41
5	Patna	Rohiniduma	6' × 4' × 2'	103	18.45	3,81,100	8.75	1,75,000	0.45

The benefit cost ratio was recorded highest Baghinasa Village *i.e.*, 3.36 followed by Aharposi village and

Nalabilla village *i.e.*, 2.87 and 1.26 respectively. Solanki and Indoria (2020) reported that Benefit Cost ratio by

using Plastic bags in KVK Chittorgarh was 3.36, which is at par with BC ratio of Baghinasa village. In Tarmakanta and Rohiniduma village the gross return from the investment capital was lower as a result the B:C ratio was found to be less than 1. The amount to vermicompost available in both the villages was 7 tonne and 9.7 tonne respectively, it will be sold by the end of may 2024 to various planting site in the division. Vermicompost produced in first phase could not give enough production however from second phase onwards production was increased drastically.

F. Physicochemical Properties analysis

(i) Moisture Content. The value of Moisture content was found to be 29 %.

(ii) pH. The pH scale is a numerical measure used to determine the acidity or alkalinity of a substance. According to Haimi and Huhta (1987), the pH decreasing toward neutral is a significant factor influencing nitrogen retention.

Parameters	Present finding
Moisture (%)	29
pH	6.82
EC (dS/m)	0.27
Organic Carbon (%)	10.2
C:N ratio	10:1
Total N (%)	0.92
Total P ₂ O ₅ (%)	0.76
Total K ₂ O	0.67

Saha *et al.* (2022) reported a pH of 7.72 for vermicompost. The high solubility of nutrients in earthworm casts raises the pH of the cast (Barley, 1961). In the current study, the pH was observed to be

6.82, which aligns with previous findings and is favorable for increasing the biomass, fecundity, and cast production of earthworms.

(iii) Electric Conductivity. Electrical conductivity serves as an indicator of soluble salt concentrations. The vermicompost produced exhibited higher electrical conductivity compared to the substrates and control. Bhatnagar and Palta (1996) proposed an optimum ionic conductivity of below 3.0 mS/cm for earthworms. Similarly, Sheikh *et al.* (2017) reported an electrical conductivity of 1.84 for vermicompost. The current study's findings are consistent with these authors, as the electrical conductivity observed was 0.27.

(iv) Organic Carbon. Microorganisms within organic manure, such as vermicompost and farmyard manure, can utilize carbon for energy and nitrogen for growth during the decomposition of organic materials, releasing carbon as CO₂ in the process. Bhatnagar and Palta (1996) noted that the respiratory process in earthworms involves the combustion of carbon into CO₂, reducing the carbon content in the organic material. The current study's findings indicate that the organic carbon content of vermicompost is 10.2%

(v) Status of Macro Nutrients. The observed nitrogen content of the sample was 0.92%. The nitrogen content of 1.42% in vermicompost. Blair *et al.* (1997) noted that earthworms may enhance nitrogen availability by reducing microbial immobilization. Additionally phosphorus content in vermicompost as 0.81% and potassium content as 1.1%. The current study's findings align with these results, showing phosphorus and potassium content of 0.76% and 0.67%, respectively.



Awareness Meeting at Tarmakanta VSS Training and installation of vermicompost kit at Tarmakanta.



Awareness-cum CBT by officials of Keonjhar Forest Division and Scientist of KVK at Rohiniduma VSS.



Distribution and Installation of Vermicompost pit from revolving fund.



Harvesting of vermicompost



Processing



Transportation



Interaction with SHG group members at Nalabila Village under Ghatagaon Range



Interaction with SHG group members at Tarmakanta Village under BJP Range

CONCLUSIONS

Community participation is integral to the success of vermicomposting initiatives, driven by increased awareness of environmental impacts associated with conventional waste disposal methods. Prakalpa NGO serve as pivotal catalysts in promoting vermicomposting, offering expertise and organizing educational programs for communities. However, the urgent need remains to establish market linkages for the sale of surplus vermicompost, ensuring sustainability and economic viability of these initiatives. With collaborative efforts between communities, NGOs, and stakeholders, the promotion of vermicomposting can foster a more sustainable approach to waste management while generating economic opportunities.

FUTURE SCOPE

The remaining vermicompost is currently being procured by the nearby forest division. Consequently, people from neighbouring villages are showing interest in following this initiative. To support the initiative, establishing robust market linkages is essential for the sale of vermicompost

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Conflict of Interest. None.

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