





BUSINESS PLAN

INCOME GENERATING ACTIVITY - VERMI-COMPOST

By

Brahmna - Self Help Group



SHG/CIG Name	::	Brahmna
VFDS Name	::	Dodun Brahmna
Range	::	Dehra
Division	::	Dehra Divison

Prepared under:

Project for Improvement of Himachal Pradesh Forest Ecosystems Management & Livelihoods (JICA Assisted)

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Background

Vermicompostig has been gaining a strong foothold in the country due to simple production techniques, ecological, economic and human health benefits associated with it. A significant number of vermin composting units have been set up by entrepreneurs, under government support/ with the technical guidance of Non-Governmental Organizations (NGOs), particularly in the southern and central parts of the country.

Vermicompostig has direct environmental and economic benefits as it contributes to the sustainable agriculture production and income of farmers significantly. There are a number of NGOs, Community Based Organizations (CBOs), Self-Help Groups (SHGs), Trusts etc. which are making concerted efforts to promote vermin composting technology due to its established economic and environmental advantages.

Vermi composting

Production of compost through rearing/using earth worms is called the vermin composting technology. Under this technology, earthworms eat biomass and excrete it in a digested form which is known as vermicompostig or vermin compost. It is one of the simplest and cost effective methods for the production of composting for both the small and large scale farmers. Vermicompost production unit can be set up in any land which is not under any economic use but shady and free from water stagnation. The site should also be nearer to a water resource

Vermicompostig, rightly called "gold from garbage" is the major input in organic agriculture production. Owing to simple technology, many farmers are engaged in vermin composting production as it invigorates soil health; soil productivity thereby reduces the cost of cultivation.

There is a gradual increase in demand for vermin compost due to the high level of nutrient contents.

1. Description of SHG/CIG

SHG/CIG Name	::	Brahmna
VFDS	::	Dodun Brahmna
Range	::	Dehra
Division	::	Dehra Divison
Village	::	Dodun Brahmna
Block	::	Paragpur
District	::	Kangra

Total No. of Members in SHG	::	10
Date of formation	::	07/09/2022
Bank Detail	::	HDFC Bank Dehra
Bank A/C No.	::	50100592480150
SHG/CIG Monthly Saving	::	100 rs
Total saving		1000 rs
Total inter-loaning		1%
Cash Credit Limit		-
Repayment Status		-

2. Beneficiaries Detail:

Sr.no	Name Of Candidate	AGE	Contact No	Designation
1	JOGINDER KUMAR S/O VISHAN	61	9418657186	President
	DAS			
2	BAL KRISHAN SHARMA S/O	70	9418229036	Secretary
	GHUNGAR RAM			
3	RAMESH KUMAR S/O GHUNGAR	67	9418197235	Treasurer
	RAM			
4	LEKH RAJ S/O NANAK CHAND	78	9418371851	Member
5	DESH RAJ S/O CHARAN DAS	71	8894511080	Member
6	VIRENDER KUMAR S/O VISHAN DAS	62	9816276714	Member
7	KISHORI LAL S/O NANAK CHAND	66	9805411800	Member
8	MADAN LAL S/O GHUNGAR RAM	65	9418881008	Member
9	RAVINDER KUMAR S/O PRAKASH	45	9816276714	Member
	CHAND			
10	RAM KRISHAN SHARMA S/O	61	9418849650	Member
	AAGYA RAM			

3. Geographical details of the Village

3.1	Distance from the District HQ	::	75km
3.2	Distance from Main Road	::	500m

3.3	Name of local market & distance	::	Pirsaluhi &5 km
3.4	Name of main market & distance		Rakkar &13Km
3.5	Name of main cities & distance		Nadaun-18km, Dehra- 22km,Rakkar-13km
3.6	Name of main cities where product will be sold/ marketed	::	Nadaun,Dehra,Rakkar

4. Description of Product related to Income Generating Activity

4.1	Name of the Product	::	Vermi composting
4.2	Method of product identification	::	This activity has been collectively decided by group members.
4.3	Consent of SHG/ CIG / cluster members	::	Yes

5. Description of Production Processes

Step		Description
Step-1	::	Processing involving collection of wastes, shredding, mechanical separation of the metal, glass and ceramics and storage of organic wastes.
Step-2	::	Pre digestion of organic waste for twenty days by heaping the material along with cattle dung slurry. This process partially digests the material and fit for earthworm consumption. Cattle dung and biogas slurry may be used after drying. Wet dung should not be used for vermi-compost production.
Step-3	::	Preparation of earthworm bed. A concrete base is required to put the waste for vermi-compost preparation. Loose soil will allow the worms to go into soil and also while watering; all the dissolvable nutrients go into the soil along with water.
Step-4	::	Collection of earthworm after vermi-compost collection. Sieving the composted material to separate fully composted material. The partially composted material will be again put into vermi-compost bed.

Step		Description
Step-5	::	Storing the vermi-compost in proper place to maintain moisture and allow the beneficial microorganisms to grow.

6. Description of Production Planning

6.1	Production Cycle (in days)	::	90 days (three cycles in a year)
6.2	Manpower required per	::	10
	cycle (No.)		
6.3	Source of raw materials	::	From household and own farms
6.4	Source of other resources	::	Open market
6.5	Raw material - quantity required per cycle (Kg) per member	::	1800 Kg per cycle
6.6	Expected production per cycle (Kg) per member	••	900 Kg per cycle

7. Description of Marketing/ Sale

7.1	Potential market places Distance from the unit	::	HP Forest Deptt. Local market
,		"	Use on own farm
7.3	Demand of the product in market place/s	::	HP Forest deptt is procuring huge vermi- compost for their nursery
7.4	Process of identification of market	::	PMU will facilitate the tie up of procurement of vermi-compost produced by SHG by HP Forest deptt.
7.5	Marketing Strategy of the product		SHG members will also explore the additional marketing options around their villages for better sale price in future.
7.6	Product branding		At CIG/SHG level product will be marketed by branding of respective CIG/SHG. Later this IGA may require branding at cluster level
7.7	Product "slogan"		"Organic Farming"

8. SWOT Analysis

Strength

- Activity is being already done by some SHG members.
- Each of the SHG members are having cattle varying from 2 to 8 in each household
- Families of SHG members are cultivating high value crops & vegetables which offer adequate availability of raw materials i.e. farm organic wastes throughout the year.
- Raw material easily available at their farms
- Manufacturing process is simple
- Proper packing and easy to transport
- Other family members will also cooperate with beneficiaries
- Product self-life is long

Weakness

- Effect of temperature, humidity, moisture on manufacturing process/product.
- Lack of technical know-how

Opportunity

- Increasing demand of vermi-compost on account of awareness among farmers about organic and natural farming
- Application of vermi-compost on their own field will go a long way in improving and enhancing the soil health and production of quality farm produce which will offer better price.
- Best utilization of organic waste including household left outs of kitchens
- Potential for marketing tie up with HP Forest

Threats/Risks

- Possibility of break of production cycle due to extreme weather
- Competitive market
- Level of commitment among beneficiaries towards participation in training/ capacity building & skill up-gradation

9. Description of Management among Members

- → **Production** It will be taken care of by individual members including procurement of raw materials
- → Quality assurance Collectively
- → Cleaning & packaging Collectively
- → Marketing Collectively
- → Monitoring of the unit Collectively

10. Description of Economics

(Amount in actual Rs.)

			Quan						
S.			tity /	Cost					
No	Particulars	Units	Nos.	(Rs.)	Year 1	Year 2	Year 3	Year 4	Year 5
A.	Capital Cost								
	Construction of Pit and								
A.1	shed Construction as well as								
	labour cost including								
	shed (Size will be of	Per							
1	10ftX4ftX2ft)	member	10	7000	70000	0	0	0	0
	Erection of cover shed	Per .							
2	with iron angel	member	10	5000	50000	_		_	_
	Sub-total (A.1)				120000	0	0	0	0
A.2	Machinery and equipment								
A.Z	Tools, equipment,	Per							
3	weighing scale etc.	member	10	3000	30000	0	0	0	0
	Sub-total (A.2)				30000	0	0	0	0
	Total Capital Costs								
	(A.1+A.2)				150000	0	0	0	0
В	Recurring Costs								
4	Seed earthworm	Per Kg	10	550	5500	0	0	0	0
	Cost of procurement								
5	of Slurry/dung/waste	Ton	60	1000	60000	63000	66150	69457	72930
6	Labour Cost	Per ton	30	800	24000	25200	26460	27783	29172
7	Packing materials	No.	10000	3	30000	31500	33075	34730	26465
8	Other handling charges	Per ton	30	165	4950	5197	5456	5728	6015
C	Other charges	1 61 1011	30	100	4750	3177	3430	37 20	0013
9	Insurance	L/S			0	0	0	0	0
7	insurance	Per		2 per	0	0	0	U	0
10	Interest on loan	annum		cent	2000	2000	2000	2000	2000
	Total recurring costs				126450	126897	133141	139698	136582
	Total cost - Capital								
	and recurring				276450	126897	133141	139698	136582
D	Income from vermi composting								
11	Sale of Vermicompost	Tones	30	8000	240000	252000	264600	277830	291721
12	Sale of earthworm					20000	40000	40000	40000
13	Total revenue				240000	272000	304600	317830	331721
14	Net returns (C-D)				113550	145103	171459	178132	195139

Note – As labour work will be done by SHG members themselves and Slurry/dung/waste already available at their place and these materials will be not procured by them, therefore, recurring cost (Labour Cost, Cost of procurement of Slurry/dung/waste) can be deducted from total recurring cost.

Economic Analysis

Particulars	Year 1	Year 2	Year 3	Year 4	Year 5	
Capital cost	150000	0	0	0	0	
Recurring cost	126450	126897	133141	139698	136582	662768
Total cost	276450	126897	133141	139698	136582	812768
Total benefits	240000	272000	304600	317830	331721	1466151
Net benefits	-36450	145103	171459	178132	195139	653383
Net present worth of cost @15 per cent	812768					
Net present worth of benefits @15 per cent	1466151					
Benefit Cost Ratio	1.80					

Distribution of net profit - As per share in production.

11. Inferences of Economic Analysis

- Pit size for each member has been planned at 10X4X2 ft for one pit.
- Cost of production of vermi-compost comes to Rs. 4.2 per Kg
- Sale of vermi-compost (conservative side) is Rs. 8 per Kg
- Net profit will be Rs. 3.8 per Kg
- ⇒ It is proposed that each member will produce 3 tons of vermi-compost every year resulting in production of 30 tones vermi-compost by all 10 members of SHG in one year.
- Cost of earthworm has been kept at Rs. 550.00 per kg
- During th second years onwards, there will be surplus earthwork for sale (as it will multiply during the process of production of vermi-compost)
- The vermi-compost making is a profitable IGA and can be taken up by the SHG members.

12. Fund requirement:

SI. No.	Particulars	Total Amount (Rs)	Project support	SHG contribution
1	Total capital cost	150000	112500	37500
2	Total Recurring Cost	126450	0	126450
3	Trainings/ capacity building/skill	50000	50000	0
	up-gradation			
	Total =	326450	162500	163950

Note-

- Capital Cost 75% of capital cost to be covered under the Project
- Recurring Cost To be borne by the SHG/CIG.
- Trainings/capacity building/ skill up-gradation To be borne by the Project

13. Sources of fund:

Project support;	 75% of capital cost will be utilized for construction of pit (Size will be of 20ftX4ftX2ft) Upto Rs 1 lakh will be parked in the SHG bank account. Trainings/capacity building/ skill up-gradation cost. 	Procurement of materials for pit/construction of pit will be done by respective DMU/FCCU after following all codal formalities.
SHG contribution	 25% of capital cost to be borne by SHG, this include cost of shed/construction of shed. Recurring cost to be borne by SHG 	

14. Bank loan repayment

If the loan is availed from bank it will be in the form of cash credit limit and for CCL there is not repayment schedule; however, the monthly saving and repayment receipt from members should be routed through CCL.

- In CCL, the principal loan outstanding of the SHG must be fully paid to the banks once a year. The interest amount should be paid on a monthly basis.
- In term loans, the repayment must be made as per the repayment schedule in the banks.

15. Trainings/Capacity Building/Skill Up-gradation

Trainings/capacity building/skill up-gradation cost will be borne by project.

Following are some trainings/capacity building/ skill up-gradation proposed/needed:

- Project Orientation Group Formation/ Reorganization
- Group Concept and Management
- Introduction to IGA (General)
- Marketing and Business Plan Development
- Bank Credit Linkages & Enterprise Development
- Exposure Visit of SHGs/ CIGs Within the State& Outside State

16. Monitoring Mechanism

- Social Audit Committee of the VFDS will monitor the progress and performance of the IGA and suggest corrective action if need be to ensure operation of the unit as per projection.
- ⇒ SHG should also review the progress and performance of the IGA of each member and suggest corrective action if need be to ensure operation of the unit as per projection.

Group Photos:-



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Group Members Photos:-



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Resolution - cum - Group Consensus Form held on Ecosystems Management & Livelihoods (JICA Assisted) . Signature of Group secretary Memby Secretary Signature of Group Pradhan Dodum Brahma....

	Submitted to DMU through FTU
1	Name & Signature of FTU Coordinator DEHRA, Kangra (H.D.)
	Approved
	Name & Signature of DMU Officer