

# Business Plan

Vermin Composting

**Shiv Common Interest Group Balh-II**



**VFDS .....Balh-II**  
**Gram Panchayat..... Balh**  
**Forest Range.....Kullu**  
**Division..... Kullu**  
**Circle.....Kullu**

**Improvement of HP Forest Ecosystems  
Management & Livelihoods**

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### **Background**

Vermi-composting has been gaining a strong foothold in the country due to ecological economic and human health benefits associated with it. The use of vermin-compost in place of chemical fertilizers results into better soil health balanced ratio of various minerals and good fertility and best quality crop production. The organic farming which has taken the front seat in the present day lifestyle is mainly possible by using vermicompost in production of all the organic food-chain

### **Vermi composting**

Vermi-composting is a process in which the earthworms convert the organic waste into manure rich in high nutritional content. Earthworms are commonly found living in soil, feeding on biomass and excreting it in a digested form. Earthworms feed on the organic waste materials and give out excreta in the form of "vermicasts" that are rich in nitrates and minerals such as phosphorus, magnesium, calcium and potassium. These vermicasts are used as fertilizers and they improve the soil quality.

### **Materials required**

1. Water
2. Cow dung
3. Thatched roof
4. Soil or sand
5. Earthworms
6. Gunny bags
7. Organic biomass
8. Plastic or cemented tank
9. Dry straw and leaves collected from the fields
10. Biodegradable wastes collected from fields and kitchen

**Description of SHG/CIG**

	SHG/CIG Name	Shiv
	VFDS	Balh-II
	Range	Kullu
	Division	Kullu
	District	Kullu
	Total no. of members in SHG	10
	Date of Formation	20-01-2021
	Bank account no	500726529
	Bank Details	KCCB Ghandinagar Kullu
	SHG/CIG Bank monthly saving	50
	Total saving	13050
	Total inter loaning	
	Cash credit limit	
	Repayment status	



**Beneficiaries Detail:-**

S.no	Name	Designation	Age	Sex	Edu.	Category	Contact
1	Koul singh S/o Sh Kishori	Pradhan	31	M	12 <sup>th</sup>	Gen	7018483296
2	Abhilasha w/o Dhani ram	Sec	33	F	B.A	Gen	9882565006
3	Kamla W/o Om singh	Cashier	44	M	9 <sup>th</sup>	Gen	8219411434
4	Heem chand S/o Hiri chand	Member	47	F	10 <sup>th</sup>	Gen	7018707252
5	Gulab Chand S/o Ved Ram	Member	62	M	12 <sup>th</sup>	Gen	7018544990
6	Laxmi D/o Shiv Chand	Member	50	F	5 <sup>th</sup>	Gen	9459754217
7	Dhineshwari W/on Suresh	Member	33	F	10 <sup>th</sup>	Gen	8351910947
8	Hira Lal S/o Om chand	Member	33	M	10 <sup>th</sup>	Gen	9418702188
9	Maheshwer singh S/o Bhawani	Member	28	F	12 <sup>th</sup>	Gen	9459831529
10	Vivek S/o Pritam	Member	33	F	12 <sup>th</sup>	Gen	9882203921



### 3 Geographical Details of The Village

3.1	Distance from the District HQ	5 KM
3.2	Distance from Main Road	50 Mtr.
3.3	Name of local market & distance	Kullu. 5KM
3.4	Name of Main market & distance	Kullu.5KM
3.5	Name of cities market & distance	Kullu.KM
3.6	Name of main cities where product will be sold/marketed	Kullu.KM

### 4. Description of Product related to Income Generating Activity

4.1	Name of the Product	::	Vermi-composting
4.2	Method of product identification	::	The activity was shortlisted and finalized from the various activities suggested by the group members on the basis of prioritization.
4.3	Consent of SHG/CIG/cluster members	::	Yes

### 5. Description of Production Process

Step 1	To prepare compost, either a plastic or a concrete tank/pit can be used. The size of the tank/pit depends upon the availability of raw materials, however as a standard, the sizing is being kept 10ftX4ftX2ft.
Step-2	Collect the biomass and place it under the sun for about 8-12 days. Now chop it to the required size using the cutter.
Step-3	Prepare a cow dung slurry and sprinkle it on the heap for quick decomposition.
Step-4	Add a layer (2 – 3 inch) of cement concrete at the bottom of the tank/pit.
Step-5	Now prepare fine bedding by adding partially decomposed cow dung, dried leaves and other biodegradable wastes collected from fields and kitchen. Distribute them evenly on the concrete layer.
Step-6	Continue adding both the chopped bio-waste and partially decomposed cow dung layer-wise into the tank/pit up to a depth of 0.5-1.0 ft.
Step-7	After adding all the bio-wastes, release the earthworm species over the mixture and cover the compost mixture with dry straw or gunny bags.
Step-8	Sprinkle water on a regular basis to maintain the moisture content of the compost.
Step-9	Cover the tank/pit with a thatch roof to prevent the entry of ants, lizards, mouse, snakes, etc. and protect the compost from rainwater and direct sunshine.
Step-10	Have a frequent check to avoid the compost from overheating. Maintain proper moisture and temperature.



**6. Description of Production Planning**

6.1	Production Cycle (in days)	::	90 days (three cycles in a year)
6.2	Manpower required per cycle (No.)	::	1
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	::	900Kg per cycle

**7. Description of Marketing/ Sale**

7.1	Potential market places	::	HP Forest Deptt. Local market Use on own farm
7.2	Distance from the unit	::	To be supplied on different locations
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 with 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"	::	"Nature Friendly"



## 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 offers 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. Cost Analysis

(Amount in actual R

S. No	Particulars	Units	Qty./Nos.	Cost (Rs.)	Year 1	Year 2	Year 3	Year 4	Year 5
<b>A</b>	<b>Capital Cost</b>								
A.1	Construction of Work-shed								
1	Hardware items, construction of pit (Size will be of 10ftX4ftX2ft)	Per member	10	8000	80000	0	0	0	0
2	Construction of cover shed	Per member	10	5000	50000	0	0	0	0
	<b>Sub-Total (A.1)</b>				<b>130000</b>				
A.2	Machinery and equipment								
2	Tools, equipment etc.	Per member	10	3000	30000	0	0	0	0
	<b>Sub-total(A.2)</b>				<b>30000</b>				
	<b>Total Capital Costs (A.1+a.2)</b>				<b>160000</b>				
<b>B</b>	<b>Recurring Costs</b>								
*3	Lease of land for setting up unit	Per member	10	0	0	0	0	0	0
4	Other miscellaneous expenses	Per member	10	0	0	0	0	0	0
5	Seed earthworm	Per Kg	10	600	6000	0	0	0	0
6	Cost of procurement of Slurry/dung/waste	Per tonne	0	0	0	0	0	0	0
7	Labour Cost	Per tonne	0	0	0	0	0	0	0
8	Packing materials	No	150	50	7500	8000	8500	9000	9500
9	Other handling charges	Per tonne	100	100	10000	10500	11000	11500	12000
<b>C</b>	<b>Other charges</b>								
10	Insurance	L/S			0	0	0	0	0
11	Interest on loan	Per annum		0	2000	3000	4000	5000	6000
	<b>Total Recurring costs</b>				<b>25500</b>	<b>21500</b>	<b>23500</b>	<b>25500</b>	<b>27500</b>
	<b>Total cost=Capital + Recurring</b>				<b>185500</b>	<b>21500</b>	<b>23500</b>	<b>25500</b>	<b>27500</b>
<b>D</b>	<b>Income from vermin composting</b>								
12	Sale of vermin compost	Tonnes	30	8000	240000	300000	330000	360000	390000
13	Sale of earthworm			(8000)	(10000)	(10000)	(11000)	(12000)	(13000)
14	<b>Total Revenue</b>				<b>240000</b>	<b>300000</b>	<b>330000</b>	<b>360000</b>	<b>390000</b>
15	<b>Net returns (D-C)</b>				<b>54500</b>	<b>278500</b>	<b>306500</b>	<b>334500</b>	<b>362500</b>

- Note-
- \*3 On own land
  - \*6 all operation will be done by the members themselves
  - \*7 no extra labour cost, since all member will do the work themselves
  - () rates per tonne given in the parenthesis



11. Abstract of Cost/Benefit

Particulars	Year 1	Year 2	Year 3	Year 4	Year 5
Capital Cost	160000	0	0	0	0
Recurring cost	25500	21500	23500	25500	27500
Total cost	185500	21500	23500	25500	27500
Total revenue	240000	300000	330000	360000	390000
Net Profit	54500	278500	306500	334500	362500



### 11. Gist of Economic Analysis

- Pit size for each member has been planned at 10X4X2 ft for one pit.
- Cost of production of vermi-compost has been estimated at Rs. 3.6 per Kg
- Sale of vermi-compost (conservative side) is proposed at Rs. 6 per Kg
- Net profit is estimated to be Rs. 6-3.6 = 2.4 per Kg
- It is proposed that each member will produce 3.3tonnes of vermi-compost every year resulting in production of 36.3tonnesvermi-compost by all 11 members of SHG in one year.
- Cost of earthworm has been kept at Rs. 500.00 per kg
- During the second years onwards, there will be surplus earthworms for sale (as it will multiply during the process of production of vermi-compost)
- The vermi-compost making is a profitable IGA and therefore has been taken up by the SHG members.

### 12. Fund requirement:

Sl. No.	Particulars	Total Amount (Rs)	Project support	SHG contribution
1	Total capital cost	160000	80000	80000
2	Total Recurring Cost	25500	0	25500
3	Trainings/ capacity building/skill up-gradation	25000	25000	
	<b>Total =</b>	<b>210500</b>	<b>105000</b>	<b>105500</b>

Note-

- **Capital Cost** - 50% 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:	<ul style="list-style-type: none"> <li>• 50% of capital cost will be utilized for construction of pit (Size will be of 10ftX4ftX2ft)</li> <li>• Rs 1 lakh as revolving fund will be parked in the SHG bank account (should be utilized for taking bank loan in case of taking loan from bank) or as a revolving</li> </ul>	Procurement of materials for pit/construction of pit will be done by respective DMU/FCCU after following all codal formalities.
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	fund.	
	<ul style="list-style-type: none"> <li>• Trainings/capacity building/ skill up-gradation cost.</li> </ul>	
SHG contribution	<ul style="list-style-type: none"> <li>• 50% of capital cost to be borne by SHG, this include cost of shed/construction of shed.</li> <li>• Recurring cost to be borne by SHG</li> </ul>	

**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.





**Sh. Koul Singh  
Pradhan**



**Smt. Abhilash  
Secretary**



**Smt. Kamla  
Cashier**



**Sh. Maheshwar Member**



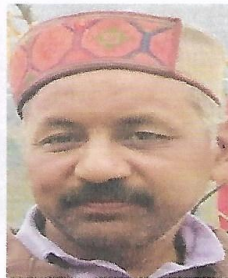
**Sh. Heera Lal Member**



**Sh. Vivek Member**



**Sh. Gulab Chand  
Member**



**Sh. Heem Chand  
Member**



**Smt. Dhaneshwari  
Member**



**Smt. Luxmi  
Member**




## Sahmati Patra

The business plan of Common Interest Group Vermi-compost Damsehar for the IGA of Vermi-Composting was presented before the general house of VFDS Balh-II for approval. After long discussion and thoughtful deliberations by the different members, the business plan was approved for adoption in the SHG and further implementation by the members of the SHG.

Dated:- 02-01-2023

Place:- Kullu

  
रवि अहलुवालिया  
विन अहलुवालिया अहलुवालिया  
शान वन विकास समिति बल्ह-II

Approved by:-

  
Divisional Forest Officer  
Kullu Forest Division, Kullu