

# BUSINESS PLAN

## INCOME GENERATING ACTIVITY –Vermi-compost by Aastha - Self Help Group Talayal



SHG/CIG Name	::	Aastha SHG Talayal
VFDS Name	::	Talayal
Range	::	Taradevi
Division	::	Shimla

Prepared under:



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

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## Background

Vermi composting 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 vermicomposting 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.

Vermi composting 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 vermicomposting technology due to its established economic and environmental advantages.

### **Vermicomposting**

Production of compost through rearing/using earth worms is called the vermicomposting technology. Under this technology, earthworms eat biomass and excrete it in a digested form which is known as vermicomposting or vermicompost. 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

Vermicomposting, rightly called “gold from garbage” is the major input in organic agriculture production. Owing to simple technology, many farmers are engaged in vermicomposting production as it invigorates soil health, soil productivity reduces the cost of cultivation.

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

## 1. Description of SHG/CIG

SHG/CIG Name	::	Aastha Self Help Group Talayal
VFDS	::	Talayal
Range	::	Taradevi
Division	::	Shimla
Village	::	Talayal,
Block	::	Tuto
District	::	Shimla
Total No. of Members in SHG	::	11
Date of formation	::	05-09-2020
Bank a/c No.	::	40052595077
Bank Details	::	SBI Ghech (Kohbag)
SHG/CIG Monthly Saving	::	100/-
Total saving		6600/-
Total inter-loaning		-
Cash Credit Limit		-
Repayment Status		-

## 2. Beneficiaries Detail:

Sl. No	Name	Father/ HusbName	Age	Category	Income Source	Address
1	Pushpa Devi	Ashwani	32	SC	Agriculture	Talaya
2	Kumari Bindu	Ravi Kumar	28	SC	Agriculture	Talaya
3	Pushpa	Pradeep Kumar	33	SC	Agriculture	Talaya
4	Ram Dai	Hari Singh	58	SC	Agriculture	Talaya
5	Neelam	Rajender	44	SC	Agriculture	Talaya
6	Jaiwanti	Jagdish Chand	57	SC	Agriculture	Talaya
7	Shashi Prabha	Bhupender	55	Gen	Agriculture	Talaya
8	Nardu Devi	Tek Chand	48	SC	Agriculture	Talaya
9	Deepawati	Satish Kumar	43	SC	Agriculture	Talaya
10	Meera	Surender	42	Gen	Agriculture	Talaya
11	Meena	Virender Kaushal	32	Gen	Agriculture	Talaya

## 3. Geographical details of the Village

3.1	Distance from the District HQ	::	30 Km
3.2	Distance from Main Road	::	8 Km
3.3	Name of local market & distance	::	Ghanahatti, 10 Km
3.4	Name of main market & distance		Shimla, 30 Km
3.5	Name of main cities & distance		Shimla, 30 Km
3.6	Name of main cities where product will be sold/ marketed	::	HP Forest Deptt. & Shimla

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

4.1	Name of the Product	::	Vermicomposting
4.2	Method of product identification	::	This activity is being already done by some SHG members and 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-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 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	::	900 Kg per cycle

## 7. Description of Marketing/ Sale

7.1	Potential market places	::	HP Forest Deptt.
7.2	Distance from the unit	::	Local market Use on own farm
7.3	Demand of the product in market place/s	::	HO 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"		"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. Description of Economics

(Amount in actual Rs.)

S. No	Particulars	Units	Quantity / Nos.	Cost (Rs.)	Year 1	Year 2	Year 3	Year 4	Year 5
<b>A.</b>	<b>Capital Cost</b>								
<b>A.1</b>	<b>Construction of Pit and shed</b>								
1	Construction as well as labour cost including shed (Pit Size internal will be of 10ftX4ftX2ft )	Per member	11	6000	66000	0	0	0	0
2	Errection of cover shed with iron angal	Per member	11	4000	44000				
	<b>Sub-total (A.1)</b>				<b>110000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>A.2</b>	<b>Machinery and equipment</b>								
2	Tools, equipment, weighing scale etc.	Per member	11	2000	22000	0	0	0	0
	<b>Sub-total (A.2)</b>				<b>22000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Total Capital Costs (A.1+A.2)</b>				<b>132000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>B</b>	<b>Recurring Costs</b>								
5	Seed earthworm	Per Kg	11	500	5500	0	0	0	0
6	Cost of procurement of Slurry/dung/waste	Tonnes	60	900	54000	56700	59535	62512	65637
7	Labour Cost	Per tonne	30	700	21000	22050	23153	24310	25526
8	Packing materials	No.	5000	2	10000	10500	11025	11576	12155

9	Other handling charges	Per tonne	30	150	4500	4725	4961	5209	5470
<b>C</b>	<b>Other charges</b>								
10	Insurance	L/S			0	0	0	0	0
11	Interest on loan	Per annum		2 per cent	3000	3000	3000	3000	3000
	<b>Total recurring costs</b>				<b>98000</b>	<b>96975</b>	<b>101674</b>	<b>106607</b>	<b>111788</b>
	<b>Total cost = Capital and recurring</b>				<b>230000</b>	<b>96975</b>	<b>101674</b>	<b>106607</b>	<b>111788</b>
<b>D</b>	<b>Income from vermicomposting</b>								
12	<b>Sale of vermicompost</b>	Tonnes	30	<b>6000</b>	<b>180000</b>	<b>189000</b>	<b>198450</b>	<b>208373</b>	<b>218791</b>
13	<b>Sale of earthworm</b>					<b>5500</b>	<b>11000</b>	<b>11000</b>	<b>11000</b>
13	<b>Total revenue</b>				<b>180000</b>	<b>194500</b>	<b>209450</b>	<b>219373</b>	<b>229791</b>
13	Net returns (C-B)				82000	97525	107776	112765	118003

**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

S. No	Particulars	Year 1	Year 2	Year 3	Year 4	Year 5	
1	Capital cost	132000	0	0	0	0	
2	Recurring cost	98000	96975	101674	106607	111788	
3	Total cost	230000	96975	101674	106607	111788	647044
4	Total benefits	180000	194500	209450	219373	229791	1033114
5	<b>Net benefits</b>	<b>-50000</b>	<b>97525</b>	<b>107776</b>	<b>112765</b>	<b>118003</b>	<b>386070</b>
6	<b>Net present worth of cost @15 per cent</b>	<b>647044</b>					
7	<b>Net present worth of benefits @15 per cent</b>	<b>1033114</b>					
8	<b>Benefit Cost Ratio</b>	<b>1.60</b>					

**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. 3.3 per Kg
- ➔ Sale of vermi-compost (conservative side) is Rs. 6 per Kg
- ➔ Net profit will be Rs. 2.7 per Kg
- ➔ It is proposed that each member will produce 2.7 tonnes of vermi-compost every year resulting in production of 30 tonnes vermi-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 earthworm 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:

Sl. No.	Particulars	Total Amount (Rs)	Project support	SHG contribution
1	Total capital cost	132000	99,000	33,000
2	Total Recurring Cost	98000	0	98000
3	Trainings/ capacity building/skill up-gradation	50000	50000	0
	<b>Total =</b>	<b>280000</b>	<b>149000</b>	<b>131000</b>

### 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;	<ul style="list-style-type: none"> <li>• 75% of capital cost will be utilized for construction of pit (Size will be of 10ftX4ftX2ft)</li> <li>• Upto Rs 1 lakh will be parked in the SHG bank account.</li> <li>• Trainings/capacity building/</li> </ul>	Procurement of materials for pit/construction of pit will be done by respective DMU/FCCU after following all codal formalities. (Please refer to Fund flow guidelines for
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	skill up-gradation cost.	further information)
SHG contribution	<ul style="list-style-type: none"> <li>• 25% 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 projectio

Group members Photos –

