BUSINESS PLAN

INCOME GENERATING ACTIVITY -Vermi-compost

by

Durga Shakti - Self Help Group



SHG/CIG Name	::	Durga Shakti
VFDS Name	::	Torjajar
Range	::	Dharampur
Division	::	Joginder Nagar

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 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.

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 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 vermi composting 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. Vermi compost 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

Vermi composting, 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	::	Durga Shakti
VFDS	::	Torjajar
Range	::	Dharampur
Division	::	Joginder Nagar
Village	::	Torjajar
Block	::	Dharampur
District	::	Mandi
Total No. of Members in SHG	::	20
Date of formation	::	17-04-2019
Bank a/c No.	::	87491300000855
Bank Details	::	H.G.B.Chhatar

SHG/CIG Monthly Saving	::	Rs.100 per Member
Total saving		
Total inter-loaning		
Cash Credit Limit		
Repayment Status		

2. Beneficiaries Detail:

S.No	Name Of Candidate	Age	Ward	Categor	Contact No	Designat
			Name	y		ion
1	Sharmila Devi W/O Rajesh	42	Sundal	General	82197-50005	Prisedent
2	Anita Devi W/O Suresh Kumar	44	Sundal	General	86796-47660	Vice-
						Prisedent
3	Indra Devi W/O Hem Raj	47	Sundal	General	82191-94762	Member
4	Kamlesh Kumari W/O Ravi	31	Sundal	General	98053-38111	Member
	Kumar					
5	Bimla Devi W/O Kedar Singh	50	Sundal	General	82141-94762	Member
6	Sunita Devi W/O Lekh Raj	45	Sundal	General	84290 12072	Member
7	Prem Lata W/O Sanjeev Kumar	44	Sundal	General	86797-06842	Member
8	Khimi Devi W/O Amar Singh	60	Sundal	General	86792-60618	Member
9	Babli Devi W/O Balwant Singh	35	Sundal	General	86795-60047	Member
10	Seema Devi W/O Ashok Kumar	37	Sundal	General	88942-73956	Member
11	Kirna Devi W/O Naresh Kumar	36	Sundal	General	86797-21809	Member
12	Shella Devi W/O Partap Chand	50	Sundal	General	98573-40976	Member
13	Bharami Devi W/O Chamaru	70	Sundal	General	86289-33919	Member
	Ram					
14	Nikki Devi W/O Sohan Singh	60	Sundal	General	86289-33419	Member
15	Sumna Devi W/O Raj Pal	44	Sundal	General	78766-94974	Member
16	Kirna Devi W/O Mohan Lal	40	Sundal	General	98570-89645	Member
17	Kirna Devi W/O Parmod	30	Sundal	General	78089-35855	Member
18	Reena Devi W/O Balvir	35	Sundal	General	90157-54696	Member
19	Anita Devi W/O Vijay Kuamr	28	Sundal	General	86796-47664	Member
20	Vidya Devi W/O Damodar Dass	45	Sundal	General		Member

3. Geographical details of the Village

3.1	Distance from the District HQ	::	115 Km
3.2	Distance from Main Road	::	.5 Km
3.3	Name of local market & distance	::	Dharampur 12 Km
3.4	Name of main market & distance		Dharampur,12 Km
3.5	Name of main cities & distance		Dharampur, 12 Km
3.6	Name of main cities where product will be	::	HP Forest Deptt. & Joginder
	sold/ marketed		Nagar, Dharampur

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-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	::	1
	(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	::	1800 Kg per cycle
	per cycle (Kg) per member		
6.6	Expected production per cycle	::	900 Kg per cycle
	(Kg) per member		

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 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.)

S. No	Particulars	Units	Quant ity / Nos.	Cost (Rs.)	Year 1	Year 2	Year 3	Year 4	Year 5
A.	Capital Cost								
A.1	Construction of Pit and shed								
1	Construction as well as labour cost including shed (Size will be of 20ftX4ftX2ft)	Per member	20	12000	240000	0	0	0	0
2	Erection of cover shed with iron angel	Per member	20	8000	160000				
	Sub-total (A.1)				400000	0	0	0	0
A.2	Machinery and equipment								
3	Tools, equipment, weighing scale etc.	Per member	20	2000	40000	0	0	0	0
	Sub-total (A.2)				40000	0	0	0	0
	Total Capital Costs (A.1+A.2)				440000	0	0	0	0
В	Recurring Costs								
4	Seed earthworm	Per Kg	40	500	20000	0	0	0	0
5	Cost of procurement of Slurry/dung/waste	Ton	230	900	207000	217350	228218	239628	251610
6	Labour Cost	Per ton	115	700	80500	84525	88751	93189	97848
7	Packing materials	No.	10000	2	20000	21000	22050	23153	24310
8	Other handling charges	Per ton	115	150	17250	18113	19018	19969	20967
C	Other charges								
9	Insurance	L/S			0	0	0	0	0
10	Interest on loan	Per annum		2 per	8800	8800	8800	8800	8800

				cent					
	Total recurring costs				333550	349788	366837	384739	403536
	Total cost - Capital and recurring				773550	349788	366837	384739	403536
D	Income from vermi composting								
11	Sale of vermicompost	Tones	115	6000	690000	724500	760725	798761	838699
12	Sale of earthworm					20000	40000	40000	40000
13	Total revenue				690000	744500	800725	838761	878699
14	Net returns (C-B)				-83550	394713	433888	454023	475164

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	440000	0	0	0	0	
Recurring cost	333500	349788	366837	384739	403536	
Total cost	773500	349788	366837	384739	403536	2278400
Total benefits	690000	744500	800725	838761	878699	3952686
Net benefits	-83500	394712	433888	454022	475163	1674286
Net present worth of cost @15 per cent	2278400					
Net present worth of benefits @15 per cent	3952686					
Benefit Cost Ratio	1.73					

Distribution of net profit – As per share in production.

11. Inferences of Economic Analysis

- ⇒ Pit size for each member has been planned at 20X4X2 ft for one pit.
- Cost of production of vermi-compost comes to Rs. 3.2 per Kg
- Sale of vermi-compost (conservative side) is Rs. 6 per Kg
- Net profit will be Rs. 2.8 per Kg

- ☐ It is proposed that each member will produce 5.4 tonnes of vermi-compost every year resulting in production of 80 tonnes vermi-compost by all 14 members of SHG in one year.
- Cost of earthworm has been kept at Rs. 500.00 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:

Sl. No.	Particulars	Total Amount (Rs)	Project support	SHG contribution
1	Total capital cost	440000	220,000	220,000
2	Total Recurring Cost	333500	0	333500
3	Trainings/ capacity building/skill up- gradation	50000	50000	0
	Total =	823500	270000	553500

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:

oject support;	 50% 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.
lG contribution	 50% 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 photo



17. Group Members Photo



Kamlesh Kumari Saroja Devi Vidya Devi Seema Devi Prem Lata



Narvada devi bimla devi anita devi bhami devi





Kirna Devi Sunita Devi Kirna Devi

Resolution - cum -Group Consensus Form It is decided in General House meeting of self Help Group, Durga shakti held on 20-09-2021 at Sundal_that our Self Help Group will undertake the Vomicompost as Livelihood income generation activity under the project for improvement of Himachal Pradesh, Forest Ecosystem Management & Livelihood (JICA Assisted). रामिला देवी Signature of Group Pradhan Signature of Group Secretary

