BUSINESS PLAN INCOME GENERATING ACTIVITY – Vermi-Composting

by Self Help Group Vermi-composting - Self Help Group Jai Mata Durga Madhrar



SHG/CIG Name	WOOD AND A STATE OF THE STATE O	Self Help Group Jai Mata Durga Madhrar
VFDS Name	**	Mohan Jhotla
Range	**	Sarain
Division	**	Chopal

Prepared under:



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

Table of Contents

Sl. No.	Particulars	Page/s
1.	Background	3
2.	Description of SHG/CIG	4
3.	Beneficiaries Detail:	4
4.	Geographical details of the Village:	5
5.	Description of Product related to Income Generation Activity	5
6.	Description of Production Processes	5
7.	Description of Production Planning	6
8.	Description of Marketing /Sale	6
9.	SWOT Analysis	7
10	Description of Management among Members	7
11	Cost analysis	8-9
12.	Gist of Economic Analysis	10
13.	Fund Requirement	10
14.	Sources of Fund	10
15.	Bank Loan Repayment	11
16.	Trainings/capacity building/skill up-gradation	11
17.	Monitoring Method	11
18.	Photo SHG Members	12
19.	Business Plan Approval	13

Background

Vermi-composting has been gaining popularity, mainly due to shift towards organic farming. There is ecological, economic and human health benefits associated with it. The use of vermin-composting in place of chemical fertilizers results into better soil health, balanced ratio of various minerals and good fertility and best quality crop production. Vermi-composting has direct environmental and economic benefits by contributing to the sustainable agriculture and horticulture production and income of farmers significantly.

Vermicomposting

Vermi-composting, rightly called Gold from garbage is the measure input in organic farming. Vermi-composting is a process in which the earthworms convert in the organic waste into manure rich and 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. There is great demand for vermin-compost due to the high leval of nutrient content.

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.

2. Description of SHG/CIG

2. Description of Site/City	Jai Mata Durga Mada Durga
SHG/CIG name	Self Help Group Jai Mata Durga Madhrar
VFDS	Mohan Jhotla
Range	Sarain
Division	Chopal
District	Shimla
Total no. of members in SHG	06
Date of formation	04-03-2022
Bank account no.	1359000100059458
Bank details	PNB
SGH/CIG monthly saving	100 /-
Total saving	3500
Total inter-loaning	2 600
Cash credit limit	
Repayment status	

	iciaries Detail						Contact No
Sr. Name	Father/ Husband Name	Age	Education	Category	Income source	Address	
Anjana (President)	W/O Anil Ramaik	33	10 th	General	Agriculture	Village- Madhrar	98169-41773
2. Nirmla Devi (Secretary)	W/O Surinder Singh	35	10 th	General	Agriculture	Village - Madhrar	98162-90188
3. Mahima Devi (Treasurer)	W/O Rajesh Ramaik	30	10 th	General	Agriculture	Village - Madhrar	78070-60045
4. Suman Devi	W/O Sher Singh	46	8 th	General	Agriculture	Village- Madhrar	76074-57264
5. Sujan Kumari	W/O Pawan Kumar	25	10 th	General	Agriculture	Village- Madhrar	88942-10503
6. Rama Devi	W/O Ranjeet Singh	37	10 th	General	Agriculture	Village - Madhrar	98055-27087

3. Geographical Details of The Village

3.1	Distance from the District HQ	::	98Km
3.2	Distance from main Road	::	2 km
3.3	Name of local market & distance	::	Pulbahal 4 km.
3.4	Name of main market & distance	::	Sarain , Chopal , 23km and 50 Km
3.5	Name of main cities & distance	::	Shimla 98km
3.6	Name of main places where product will be sold/ marketed	1::	Pulbahal,Sarain , Chopal

4. Description of Product related to Income Generating Activity

4.1	Name of the Product	::	Vermi-compost
4.2	Method of product identification	::	The activity was shortlisted and finalized, keeping in view the great demand of Vermicompost, the area being an apple belt.

4.3	Consent of SHG/CIG/cluster		
	members	::	Yes, the activity was collectively decided by
			the group.

5. Description of Production Process

Step 1	To prepare compost
	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 Prepare a cow dung observe.
Step-3	Prepare a cow dung at the cutter.
Step-4	Add a layer (2 – 3 inch) and sprinkle it on the heap for quick decomposition
Step-5	Add a layer (2 – 3 inch) of cement concrete at the bottom of the tank/pit. Now prepare fine bedding by adding partially decomposed cow dung, dried leaves evenly on the concrete wastes collected from fields and kitchen. Distribute them
Step-6	Continue adding both of
Step-7	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. and cover the compost mixture with dry straw or gunnal has a second continue and cover the compost mixture with dry straw or gunnal has a second cover the mixture.
Step-8	and cover the compost mixture with dry straw or gunny bags. Sprinkle water on a regular basis to maintain the principle of the mixture.
Step-9	Cover the tank/pit with a the third maintain the moisture content of the compost.
Step-10	snakes, etc. and protect the compost from rainwater and direct sunshine. Have a frequent check to avoid the compost from overheating. Maintain proper Output Description of the compost from overheating of the compost from the
Step-11	Collection of earthworms after Verm compost collection. Sieving of the composted material to separate fully composted ready material. The partially material will be again put into Vermi-compost bed.
Step-12	Storage of vermi compost in proper place to maintain moisture and allow the beneficial microorganis 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 ived several persons
6.3	Source of raw materials	::	From household and own farms
6.4	Source of other material	::	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

	Potential market places		
7.1		::	HP Forest Deptt. Local market
7.2	Distance from the unit	::	Use on own farm To be supplied to different locations
7.3	Demand of the product in market place/s	::	HP Forest Denove
			vermi-compost for their nursery. Huge demand in locality for orchard use, area being an apple belt.
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"	::	"Let's go organic"

8. SWOT Analysis

♦ Strength

- **○** Each of the SHG members are having cattle varying from 2 to 4 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 shelf-life is long

Weakness

- Effect of temperature, humidity, moisture on manufacturing process/product.
- 2 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 Collective

S. No	Particulars	Units	Quantity / Nos.	Cost (Rs.)	Year 1	Year 2	Year 3	Year 4	Year 5
A.	Capital Cost								
A.1	Construction of work-shed								
1	Hardware items, construction of pit (Size will be of 10ftX4ftX2ft)	Per member	6	6200	37200	0	0	0	0
2	Construction of cover shed	Per member	6	4200	25200				
	Sub-total (A.1)				62400	0	0	0	0
A.2	Machinery and equipment								
2	Tools, equipment etc.	Per member	6	2300	13800	0	0	0	0
	Sub-total (A.2)				13800	0	0	0	0
	Total Capital Costs (A.1+A.2)				76200	0	0	0	0
В	Recurring Costs								•
3	Seed earthworm	Per Kg	6	600	3600	0	0	0	0
4	Cost of procurement of Slurry/dung/waste	Tonnes	42	900	37800	39690	41674	43757	45944
5*	Labour Cost	Per tonne	21	700	14700	15435	16206	17016	17866
_	Packing materials	No.	182	50	9100	9555	10032	10533	11059
7	Other handling charges	Per tonne	21	150	3150	3307	3472	3645	3827
C	Other charges	1895.020							

8	Insurance	L/S		0	0	0	0	0	0
9	Interest on loan	Per annum		0	0	0	0	0	0
	Total recurring costs				68350	67987	71384	74951	78696
	Total cost = Capital + recurring				144550	67987	71384	74951	78696
D	Income from vermicomposting						1		
12	Sale of vermicompost	Tonnes	21	6400	134400	147840	162624	178886	196774
13	Sale of earthworm					3500	7000	7000	7000
14	Total revenue				134400	151340	169624	185886	203774
15	Net returns (D-C)				-10150	83353	98240	110935	125078

Note -

Activity on own land

All operations to be done by the members themselves

No extra labour cost, since all member will do the work themselves.

Abstract of Cost/ Benefit

Year 1	Year 2	Year 3	Year 4	Year 5
76200	0	0	0	0
			74051	78696
68350	67987	71384	74951	/8090
144550	67987	71384	74951	78696
	151340	169624	185886	203775
AND THE RESIDENCE OF THE PARTY		98240	110935	125078
	76200	76200 0 68350 67987 144550 67987 134400 151340	76200 0 0 68350 67987 71384 144550 67987 71384 134400 151340 169624	76200 0 0 0 68350 67987 71384 74951 144550 67987 71384 74951 134400 151340 169624 185886

1: 11 10 11 13

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 46.2tonnesvermi-compost by all 14 members of SHG in one year.
- Cost of earthworm has been kept at Rs. 600.00 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:

SI. No.	Particulars	Total Amount (Rs)	Project support	SHG contribution 19050	
1	Total capital cost	76200	57150		
2	Total Recurring Cost	68350	0	68350	
3	Trainings/ capacity building/skill up-gradation	25000	25000	0	
	Total =	169550	82150	87400	

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 10ftX4ftX2ft)	Procurement of materials for pit/construction of pitwillbe done by respective DMU/FCCU after following all codal
	 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 fund. Trainings/capacity building/ skill upgradation cost. 	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 SHG 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.

17. Group members Photos -













Prepared by: Tara Devi FTU Coordinater (S.R)

Business plan of Self Help Group Vermi Composting, SVIC, Jou Maile Durge Machrat or the of Vermi Composting was presented before the general house of VFDS... Mohan. January for the After long discussion and thoughtful deliberations by the different members, the business plan approved for adoption in the SHG and further implementation by the members of the SHG

03-02-2023 Mohan Thotla _{लीयता} समूह बा दुर्गा मद्राइ Insident SHG

President

viruS-Monan Jhotla G.P. Sari, Teh. Chopal, Shimla H.P. Saries Range Sa

President VFDS

Approved

DMU-CUM-Di Chopal Forest Division, Chopal