





BUSINESS PLAN

INCOME GENERATING ACTIVITY - VERMI-COMPOST

 $\mathbf{B}\mathbf{y}$

Mannat- Self Help Group



SHG/CIG Name	::	Mannat
VFDS Name	::	Indpur
Range	::	Indora
Division	::	Nurpur Divison

Prepared under:

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

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Background

Vermicomposting 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.

Vermicomposting 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.

Vermicomposting

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 Vermicomposting 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

Vermicomposting, 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	::	Mannat
VFDS	::	Indpur
Range	::	Indora
Division	::	Nurpur Divison
Village	::	Mannat
Block	::	Mangwal
District	::	Kangra

Total No. of Members in SHG	::	12
Date of formation	::	1-12-2023
Bank a/c No.	::	50076856370
Bank Details	::	The Kangra Central Co-Operative bank
SHG/CIG Monthly Saving	::	50 rs
Total saving		
Total inter-loaning		1%
Cash Credit Limit		-
Repayment Status		-

2. Beneficiaries Detail:

Sr.no	Name Of Candidate	Designation	Age	Category	Contact No.
1	Lata Devi W/O Chaman Singh	President	43	ST	7018847912
2	Vikrama W/O rajesh Kumar	Secretory	30	SC	6230927273
3	Anoop Kumari W/O Sharwan Kumar	Treasurer	29	ST	8580531991
4	Panjo devi W/PO Sunny Kumar	Member	29	SC	9816437313
5	Anita Devi W/O Ashwani Kumar	Member	26	SC	7876422464
6	Veena Devi W/O Ram Sharan	Member	40	SC	7807006334
7	Anita Devi W/O Ajay Kumar	Member	31	SC	8629886102
8	Shambo devi W/O atma ram	Member	44	SC	6230715820
9	Sumana devi W/O Jarmo ram	Member	45	SC	8891267977
10	Sapna Kumari SW/O Vinod Kumar	Member	28	SC	7876375292
11	Reena Devi W/O Rajeev kumar	Member	34	SC	9805028443
12	Pooja Devi W/O Vipin Kumar	Member	25	SC	8894229401

3. Geographical details of the Village

3.1	Distance from the District HQ	::	95Km
3.2	Distance from Main Road	::	500m
3.3	Name of local market & distance	::	Indora- 10 Km
			And Local Forest Dept.
3.4	Name of main market & distance		Indora- 10 Km
			And Local Forest Dept
3.5	Name of main cities & distance		Indora- 10 Km
			And Local Forest Dept
3.6	Name of main cities where product	::	Indora- 10 Km
	will be sold/ marketed		And Local Forest Dept

4. Description of Product related to Income Generating Activity

4.1	Name of the Product	::	Vermicomposting
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

Step		Description
		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	::	16
	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	::	2800 Kg per cycle
6.6	Expected production per cycle (Kg) per member	::	1400 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"	"Mannat 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.)

			Quan						
S. No	Particulars	Units	tity / Nos.	Cost (Rs.)	Year 1	Year 2	Year 3	Year 4	Year 5
Α.	Capital Cost	Units	NOS.	(KS.)	Teal I	Teal 2	Teal 3	Teal 4	Teal 5
	Construction of Pit and								
A.1	shed								
	Construction as well as								
	labour cost including								
1	shed (Size will be of	Per member	12	7000	84000	0	0	0	0
T	10ftX4ftX2ft) Erection of cover shed	Per	12	7000	04000	0	U	0	U
2	with iron angel	member	12	5000	60000				
	Sub-total (A.1)				144000	0	0	0	0
	Machinery and								
A.2	equipment								
3	Tools, equipment,	Per	12	3000	36000		_	_	0
3	weighing scale etc.	member	12	3000	36000	0	0 0	0	0 0
	Sub-total (A.2)				36000	U	U	U	U
	Total Capital Costs (A.1+A.2)				180000	0	0	0	0
В	Recurring Costs						_	-	
4	Seed earthworm	Per Kg	12	550	6600	0	0	0	0
	Cost of procurement								
5	of Slurry/dung/waste	Ton	96	1000	96000	100800	105840	111132	116688
6	Labour Cost	Per ton	48	800	38400	40320	42336	44452	46674
7	Packing materials	No.	16000	3	48000	50400	52920	55566	58344
0	Other handling	Dawton	40	1.05	7020	0216	0721	0167	0625
8	charges	Per ton	48	165	7920	8316	8731	9167	9625
C	Other charges	L /C			0	0	0	0	0
9	Insurance	L/S Per		2 nor	U	0	0	0	0
10	Interest on loan	annum		2 per cent	2000	2000	2000	2000	2000
	Total recurring costs	a man		00110	202220	211176	221734	232820	244461
	Total cost - Capital								
	and recurring				472220	211176	221734	232820	244461
D	Income from vermi composting								
11	Sale of Vermicompost	Tones	48	8000	384000	403200	423360	444528	466754
12	Sale of earthworm					20000	40000	40000	40000

13	Total revenue		384000	423200	463360	484528	506754
14	Net returns (D-C)		182880	212024	241626	251700	262293

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	180000	0	0	0	0	
Recurring cost	202220	212331	222947	234094	245798	
Total cost	441820	211176	221734	232820	244461	1352011
Total benefits	384000	423200	463360	484528	506754	2261842
Net benefits	-57820	212024	241626	251708	262293	909831
Net present worth of cost @15 per cent	1352011					
Net present worth of benefits @15 per cent	2261842					
Benefit Cost Ratio	1.67					

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 5.4tonnes of vermicompost every year resulting in production of 80 tones vermi-compost by all 16 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:

SI. No.	Particulars	Total Amount (Rs)	Project support	SHG contribution
1	Total capital cost	180000	135000	45000
2	Total Recurring Cost	202220	0	202220
3	Trainings/ capacity building/skill up-gradation	12000	12000	0
	Total =	394220	147000	247220

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) Upto Rs 1 lakh will be parked in the SHG bank account. 	Procurement of materials for pit/construction of pit will be done by respective DMU/FCCU after following all codal formalities.
	 Trainings/capacity building/ skill up-gradation cost. 	

SHG	• 25% of capital cost to be	
Contribution	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:

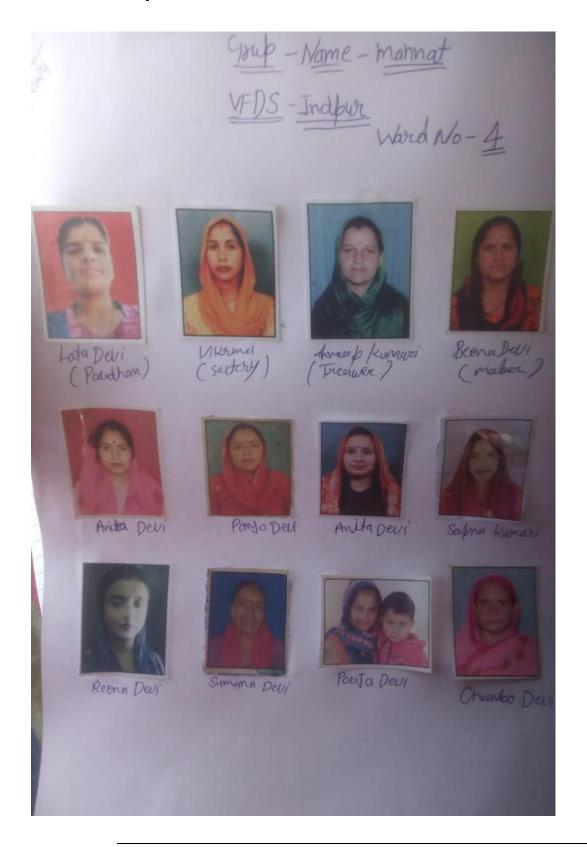
- Project Orientation Group Formation/ Reorganization
- Group Concept and Management
- Introduction to IGA (General)
- Marketing and Business Plan Development
- Bank Credit Linkages & Enterprise Development
- ⇒ Exposure Visit of SHGs/ CIGs Within the State& Outside State

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;-



Resolution cum Group Consensus Form n is decided in the general house meeting of the group Mannat held on that our group will undertake the implementation of Himachal Pradesh forest ecosystem Management and livelihood (JICA assisted).					
	tion activity Under the project for -Management and livelihood (JICA				
Presider MAIZEII v.F.D.S IMAPU) Up-Teh Gangath (Nurpur) Signa Disatto Kengrap 476022nt	Secretary V.F.D.S Implu Up-Teh. Gangath (Nurpur) Sig Dinth: Kangsacul 7 9 2 2 7 etary				

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