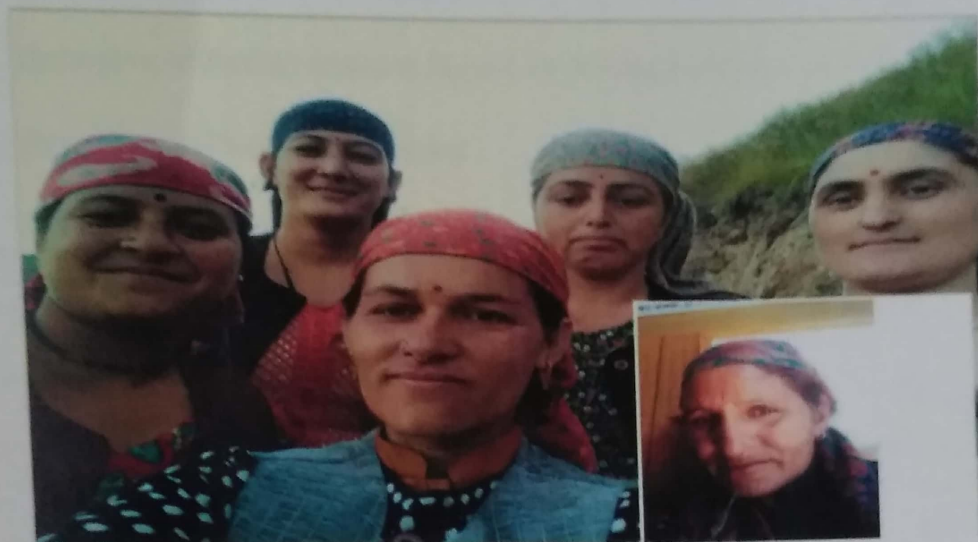


BUSINESS PLAN
INCOME GENERATING ACTIVITY –Vermi-composting
by
SHG Bagna-II .



SHG/CIG Name	::	SHG BAGNA-II
VFDS Name	::	BAGNA
Range	::	NERWA
Division	::	CHOPAL

Prepared under:



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



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Background

Vermi-composting has been gaining popularity, mainly due to shift towards organic farming. There are 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. Vermicomposting 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. Vermicomposting 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. There is great demand for vermi-compost due to the high level 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

1. Description of SHG/CIG

SHG/CIG name	SHG BAGNA-II
VFDS	BAGNA
Range	Nerwa
Division	Chopal
District	Shimla
Total no. of members in SHG	6
Date of formation	09.07.2014
Bank account no.	33966601851
Bank details	SBI NERWA
SHG/CIG monthly saving	100 /-
Total saving	13600-
Total inter-loaning	45000
Cash credit limit	-
Repayment status	-

2. Beneficiaries Detail:

Sr. no.	Name	Father/ Husband Name	Age	Education	Category	Income source	Address	Contact
1.	Sarita Devi (President)	W/o Dila Ram	45	12 th	General	Agriculture	Village Bagna PO NerwaTehChopal	9816285447
2.	Kalpana Devi (Secretary)	W/o Jagdish	33	MA	General	Agriculture	Village Bagna PO NerwaTehChopal	9805187780
3.	Sunita Devi (Treasurer)	W/o Amar Singh	35	10 th	General	Agriculture	Village Bagna PO NerwaTehChopal	9805636361
4.	Rama Devi (Member)	W/o Om Prakash	40	BA	General	Agriculture	Village Bagna PO NerwaTehChopal	9805149669
5.	Deeva Devi (Member)	W/o Ramesh	42	12 th	General	Agriculture	Village Bagna PO NerwaTehChopal	8894410109
6.	Babli Devi (Member)	W/o Surat Ram	36	5 th	SC	Agriculture	Village Bagna PO NerwaTehChopal	9816707793



3. Geographical Details of The Village

3.1	Distance from the District HQ	::	135 Km
3.2	Distance from main Road	::	11 km
3.3	Name of local market & distance	::	Nerwa 13 km.
3.4	Name of main market & distance	::	Nerwa ,Chopal,-13 km, 37 Km,
3.5	Name of main cities & distance	::	Shimla 135 km
3.6	Name of main places where product will be sold/ marketed	::	Nerwa, Chopal and adjoining villages

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, 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.
Step-11	Collection of earthworms after Verm compost collection. Sieving of the composted material to separate fully composted collection. Sieving of the 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 microorganism 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 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

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 to different locations
7.3	Demand of the product in market place/s	::	HP Forest Deptt. is procuring huge 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	::	SHG members will also explore the additional marketing options around their

	product		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.
- ⊖ 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	6000	36000	0	0	0	0
2	Construction of cover shed	Per member	6	4000	24000				
	Sub-total (A.1)				60000	0	0	0	0
A. 2 Machinery and equipment									
2	Tools, equipment etc.	Per member	6	2000	12000	0	0	0	0
	Sub-total (A.2)				12000	0	0	0	0
	Total Capital Costs (A.1+A.2)				72000	0	0	0	0
B Recurring Costs									
3	Seed earthworm	Per Kg	6	500	3000	0	0	0	0
4	Cost of procurement of Slurry/dung/waste	Tonnes	36	800	28800	30240	31752	33340	35007
5*	Labour Cost	Per tonne	18	700	12600	13230	13891	14586	15315
6	Packing materials	No.	150	40	6000	6300	6615	6946	7293
7	Other handling charges	Per tonne	18	150	2700	2835	2977	3126	3282

C Other charges									
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				53100	52605	55235	57998	60898
	Total cost = Capital + recurring				125100	52605	55235	57998	60898
D Income from vermicomposting									
12	Sale of vermicompost	Tonnes	18	6400	115200	120960	127008	133358	140026
13	Sale of earthworm					3000	6000	6000	6000
14	Total revenue				115200	123960	133008	139358	146026
15	Net returns (D-C)				62100	71355	77773	81360	85128

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

Particulars	Year 1	Year 2	Year 3	Year 4	Year 5
Capital cost	72000	0	0	0	0
Recurring cost	53100	52605	55235	57998	60898
Total cost	125100	52605	55235	57998	60898
Total revenue	115200	123960	133008	139358	146026
Net profit	-9900	71355	77773	81360	85128

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. 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	72000	36000	36000
2	Total Recurring Cost	53100	0	53100
3	Trainings/ capacity building/skill up-gradation	30000	30000	
	Total =	155100	66000	89100

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"> • 50% of capital cost will be utilized for construction of pit (Size will be of 10ftX4ftX2ft) • 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 	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"> • Trainings/capacity building/skill up-gradation cost. 	
SHG contribution	<ul style="list-style-type: none"> • 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 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.



Group members Photos -



Sasina
Devi



Kalpna
Devi



Sunita
Devi



Rama
Devi



Deeva
Devi



Babli
Devi

BAGNA-11

The business plan of Self Help Group

VERMI-COMPOSTING

was presented before the general meeting of VDS BAGNA 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.

20/10/21
Bagna

Treasurer
VDS
Vill. Forest Development Society

President
Village Forest Development
Society & CD & LI
Unit Bagna

President
VDS

Forest Officer
Village Forest Development Society

President
VDS

Approved

DMU-Cum-Divisional Forest Officer
Chopal Forest Division, Chopal

सचिव
सर्वेक्षण विभाग, चोपाल-2
चोपाल, जिला चित्तूर, डि० ५०