





INCOME GENERATION ACTIVITY – VERMI-COMPOST

By

Baner - Self Help Group



SHG/CIG Name	::	Baner
VFDS Name	::	Dhangar
Range	::	Nagrota Surian
Division	::	Dehra Division

Prepared under:

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

Table of Contents

Sr. No.	Particulars	Page/s
1	Background	3
2	Description of SHG/CIG	4
3	Beneficiaries Detail	5
4	Geographical details of the Village	5
5	Description of product related to Income Generating Activity	6
6	Production Processes	6
7	Production Planning	7
8	Sale & Marketing	
9	SWOT Analysis	
10	Description of Management among members	
11	Description of Economics	
12	Inference of Economic Analysis	
13	Fund Requirement	11
14	Source of Fund	12
15	Bank Loan Repayment	12
15	Trainings/capacity Building / Skill up-gradation	
19	Monitoring Method	
17	Group Member Photos	14
18	Approval	15

1. 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. 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

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.

2. Description of SHG/CIG

SHG/CIG Name	::	Baner
VFDS	::	Dhangar
Range	::	Nagrota – Surian
Division	::	Dehra Division
Village	::	Dhangar
Block	::	Kuman
District	::	Kangra
Total No. of Members in SHG	::	8
Date of formation	::	16/09/2022
Bank a/c No.& IFSC	::	50100577784560
Bank Details	::	HDFC DEHRA
SHG/CIG Monthly Saving	::	50rs
Total saving in a month		400rs
Total inter-loaning		1%
Cash Credit Limit		-
Repayment Status		-

3. Beneficiaries Detail:

Sr.no	Name Of Candidate	Qualification	Ward	Designation	Source of
			Name		Income
1.	Pawana Devi W/o Subhash Chand	10 th	Dhangar	President	Agriculture
2.	Pawana Devi W/o Sudarshan Singh	8 th	Dhangar	Secretary	Agriculture
3.	Shakuntla Devi W/o Rishikesh	-	Dhangar	Treasurer	Agriculture
4.	Anjana kumari W/o Ashwani Kumar	8 th	Dhangar	Member	Agriculture
5.	Usha Devi W/o Surinder Kumar	-	Dhangar	Member	Agriculture
6.	Usha Devi W/o Surinder Singh	8 th	Dhangar	Member	Agriculture
7.	Sushama Kumari W/o Ramesh Chand	12 th	Dhangar	Member	Agriculture
8.	Pushpa Devi W/o Ajit Singh	12 th	Dhangar	Member	Agriculture

4. Geographical details of the Village

3.1	Distance from the District HQ	::	80Km
3.2	Distance from Main Road	::	5 Km
3.3	Name of local market & distance	::	Shantla 1km
3.4	Name of main market & distance		Rakkar 13Km
3.5	Name of main cities & distance		Naduan 15, Rakkar 13Km
3.6	Name of main cities where product will be sold/ marketed	::	Naduan, Rakkar, Kangra

5. 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

6. 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 earthworms 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.

7. Description of Production Planning

6.1	Production Cycle (in days)	::	90 days (three cycles in a year)		
6.2	Manpower required per	::	8		
	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	::	1400 Kg per cycle		
	required per cycle (Kg) per				
	member				
6.6	Expected production per	::	700 Kg per cycle		
	cycle (Kg) per member				
8. De	8. 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	::	HO Forest deptt is procuring huge vermi-	
	in market place/s		compost for their nursery	
7.4	Process of identification	::	PMU will facilitate the tie up of	
	of market		procurement of vermi-compost	
			produced by SHG by HP Forest deptt.	
7.5	Marketing Strategy of the		SHG members will also explore the	
	product		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"	

10. SWOT Analysis

a. 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

b. Weakness

- Effect of temperature, humidity, moisture on manufacturing process/product.
- Lack of technical know-how

c. 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

d. 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

11. 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

12. Description of Economics

Sr. No	Particulars	Units	Quantity / Nos.	Cost(Rs.)	Total Capital Cost
Α.	Capital Cost				
A.1	Construction of Pit and shed				
1	Construction as well asLabour cost including shed (Size will be of 10ftX3ftX3ft)	Per member	8	13000	104000/-
2	Erection of cover shedwith iron/wooden angel	Per member	8	1000	8000/-
	Sub-total (A.1)				
	Total Capital Costs				Rs. 112000/-

13	3. Recurring Cost				
	Particulars	Unit	Qty.	Cost	Amount
1.	Seed earthworm	Per Kg	8	LS	5000
2.	Cost of procurement of Slurry/dung/waste	Ton	20	1000	20000
3.	Packing materials	No.	LS	3	5000
4.	Transport	LS	LS	-	5000
	Total				Rs. 35000/-

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 notprocured by them, therefore, recurring cost (Labour Cost, Cost of procurement ofSlurry/dung/waste) can be deducted from total recurring cost.

14. Inferences of Economic Analysis

- ➡ Pit size for each member has been planned at 10X3X3 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 5.4 tons of vermi-compost every year resulting in production of 80 tones vermi-compost by all 8 members of SHG in one year.
- Cost of earthworm has been kept at LUM SUM
- 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.

Particulars	Total Amount	Project Share 75 %	SHG contribution 25 %
Capital cost	112000/-	84000/-	28000
Recurring cost	35000/-	0	35000
Training	5000/-	5000	0
Total benefits	Rs. 152000/-	Rs. 89000/-	Rs. 63000/-

15. Fund requirement:

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

16. Sources of fund:

Project Support;	 75% of capital cost will be utilized for construction of pit (Size will be of (10ftX3ftX3ft) Up to 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 contribution	 25% of capital cost to be borne by SHG, this includes cost of shed/construction of shed. Recurring cost to be borne by SHG 	

17. Bank loan repayment

If the loan is availed from bank, it will be in the form of cash credit limit and forCCL 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.

18. Trainings/Capacity Building/Skill Up-gradation

Trainings/capacity building/ skill up-gradation cost will be borne by project.

Following is 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
- Series Contraction States Within the State Outside State

19. 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 Photo



BUSINESS PLAN APPROVAL BY VFDS & DMU

 \mathcal{R}_{acc}Group will undertaken the \mathcal{M}_{acc} livelihood Income Generation Activity under the project for implementation of Himachal Pradesh Forest Ecosystem Management & livelihood (JICA assisted). In this regard business plan of amount Rs. 152 and 1.52 and

Business plan submitted through FTU for further action please. Thank you

Paw Ma. Devi Signature of Group President

Signature of Group Secretary

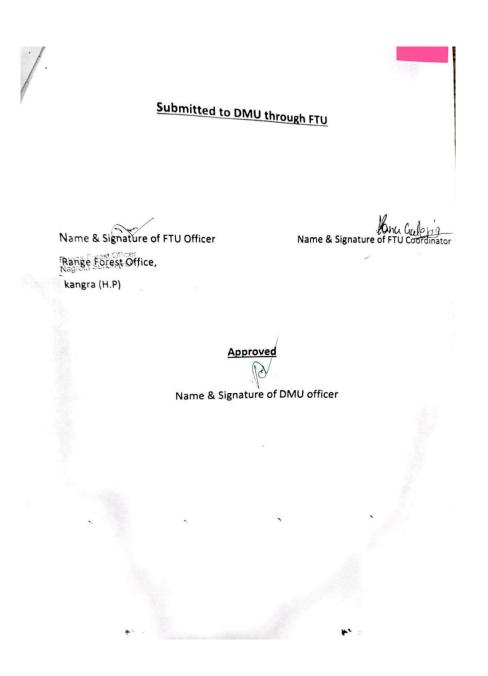
Approved

DMU – CUM - Dehra

Resolution - cum - Group Consensus Form

Pawne Devi Signature's of Group Pradhan

पुबना 601 Signature's of Group Secretary



Prepared By -;

Madan Lal Sharma HPFS project (Co-ordinator) Ms. Deeksha Devi (SMS) Ms. Shivani (FTU-Co-Ordinator