

BUSINESS PLAN

INCOME GENERATING ACTIVITY –Vermi-compost by Aastha - Self Help Group Kanda



SHG/CIG Name	::	Aastha SHG Kanda
VFDS Name	::	Kanda
Range	::	Taradevi
Division	::	Shimla

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	5
4	Geographical details of the Village	5
5	Description of product related to Income Generating Activity	5-6
6	Production Processes	6
7	Production Planning	6-7
8	Sale & Marketing	7
9	SWOT Analysis	8
10	Description of Management among members	8
11	Description of Economics	9-10
12	Inference of Economic Analysis	11-12
13	Fund Requirement	12
14	Sources of Fund	13
15	Bank Loan Repayment	13
16	Trainings/capacity Building / Skill up-gradation	14
17	Monitoring Method	14
18	Group Member Photos	15

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 vermicomposting 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 vermicomposting technology due to its established economic and environmental advantages.

Vermicomposting

Production of compost through rearing/using earth worms is called the vermicomposting technology. Under this technology, earthworms eat biomass and excrete it in a digested form which is known as vermicomposting or vermicompost. 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 vermicomposting production as it invigorates soil health, soil productivity reduces the cost of cultivation.

There is a gradual increase in demand for vermicompost due to the high level of nutrient contents.

1. Description of SHG/CIG

SHG/CIG Name	::	Aastha SHG Kanda
VFDS	::	Kanda
Range	::	Taradevi
Division	::	Shimla
Village	::	Kanda
Block	::	Tuto
District	::	Shimla
Total No. of Members in SHG	::	18
Date of formation	::	16-10- 2020
Bank a/c No.	::	2582000100030915
Bank Details	::	PNB Panesh
SHG/CIG Monthly Saving	::	100/-
Total saving		6200/-
Total inter-loaning		10000/-
Cash Credit Limit		-
Repayment Status		Good

2. Beneficiaries Detail:

Sl. No	Name	Father/HusbName	Age	Category	Income Source	Address
1	Smt. Lata	Sh. Ranjeet	33	Gen	Agriculture	V.P.O. Kanda &Distt. Teh. Shimla
2	Smt. Mamta	Sh. Joginder	33	Gen	Agriculture	V.P.O. Kanda &Distt. Teh. Shimla
3	Smt. Meena	Sh. Satish	41	Gen	Agriculture	V.P.O. Kanda &Distt. Teh. Shimla
4	Smt. Anita	Sh. Suresh	38	SC	Agriculture	V.P.O. Kanda &Distt. Teh. Shimla
5	Smt. Rukmani	Sh. Inder Pal	50	Gen	Agriculture	V.P.O. Kanda &Distt. Teh. Shimla
6	Smt. Meera	Sh. Ravinder	43	Gen	Agriculture	V.P.O. Kanda &Distt. Teh. Shimla
7	Smt. Prem Lata	Sh. Rakesh	40	SC	Agriculture	V.P.O. Kanda &Distt. Teh. Shimla

3. Geographical details of the Village

3.1	Distance from the District HQ	::	20Km
3.2	Distance from Main Road	::	1Km
3.3	Name of local market & distance	::	Ghanahatti, 1 Km
3.4	Name of main market & distance		Shimla, 22 Km
3.5	Name of main cities & distance		Shimla, 22 Km
3.6	Name of main cities where product will be sold/ marketed	::	HP Forest Deptt. & Shimla

4. Description of Product related to Income Generating Activity

4.1	Name of the Product	::	Vermicomposting
4.2	Method of product identification	::	This activity is being already done by some SHG members and 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 (No.)	::	1
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	::	1800 Kg per cycle
6.6	Expected production per cycle (Kg) per member	::	900 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"		"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 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 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	Quantity / Nos.	Cost (Rs.)	Year 1	Year 2	Year 3	Year 4	Year 5
A.	Capital Cost								
A.1	Construction of Pit and shed								
1	Pit Construction as well as labour cost (Internal Pit Size will be of 10ftX4ftX2ft)	Per member	7	6000	42000	0	0	0	0
2	Errction of cover shed	Per member	7	4000	28000				
	Sub-total (A.1)				70000	0	0	0	0
A.2	Machinery and equipment								
3	Tools, equipment, weighing scale etc.	Per member	7	2000	14000	0	0	0	0
	Sub-total (A.2)				14000	0	0	0	0
	Total Capital Costs (A.1+A.2)				84000	0	0	0	0
B	Recurring Costs								
4	Seed earthworm	Per Kg	7	500	3500	0	0	0	0
5	Cost of procurement of Slurry/dung/waste	Tonnes	40	900	36000	37800	39690	41675	43758
6	Labour Cost	Per tonne	20	700	14000	14700	15435	16207	17017
7	Packing materials	No.	4000	2	8000	8400	8820	9261	9724

8	Other handling charges	Per tonne	20	150	3000	3150	3308	3473	3647
C	Other charges								
9	Insurance	L/S			0	0	0	0	0
10	Interest on loan	Per annum		2 per cent	3000	3000	3000	3000	3000
	Total recurring costs				67500	67050	70253	73615	77146
	Total cost = Capital and recurring				151500	67050	70253	73615	77146
D	Income from vermicomposting								
11	Sale of vermicompost	Tonnes	20	6000	120000	126000	132300	138915	145861
12	Sale of earthworm					3500	7000	7000	7000
13	Total revenue				120000	129500	139300	145915	152861
14	Net returns (C-B)				52500	62450	69047.5	72299.9	75714.9

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

S. No	Particulars	Year 1	Year 2	Year 3	Year 4	Year 5	
1	Capital cost	84000	0	0	0	0	
2	Recurring cost	67500	67050	70253	73615	77146	
3	Total cost	151500	67050	70253	73615	77146	439564
4	Total benefits	120000	129500	139300	145915	152861	687576
5	Net benefits	-31500	62450	69048	72300	75715	248012
6	Net present worth of cost @15 per cent	439564					
7	Net present worth of benefits @15 per cent	687576					
8	Benefit Cost Ratio	1.56					

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. 3.3 per Kg
- Sale of vermi-compost (conservative side) is Rs. 6 per Kg
- Net profit will be Rs. 2.7 per Kg
- It is proposed that each member will produce 2.7 tonnes of vermi-compost every year resulting in production of 20 tonnes vermi-compost by all 7 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 earthworm 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	84000	63000	21000
2	Total Recurring Cost	67500	0	67500
3	Trainings/ capacity building/skill up-gradation	50000	50000	0
	Total =	201500	113000	88500

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

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13. Sources of fund:

Project support;	<ul style="list-style-type: none"> • 75% of capital cost will be utilized for construction of pit and shed (Size will be of 10ftX4ftX2ft) • Upto Rs 1 lakh will be parked in the SHG bank account. • Trainings/capacity building/ skill up-gradation cost. • The subsidy of 5% interest rate will be deposited directly to the Bank/Financial Institution by DMU and this facility will be only for three years. SHG have to pay the installments of the Principal amount on regular basis. 	Procurement of materials/construction will be done by respective DMU/FCCU after following all codal formalities.
SHG contribution	<ul style="list-style-type: none"> • 25% of capital cost to be borne by SHG. • 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.
- Project support - The subsidy of 5% interest rate will be deposited directly to the Bank/Financial Institution by DMU and this facility will be only for three years. SHG/CIG have to pay the installments of the Principal amount on regular basis

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 members Photos –

