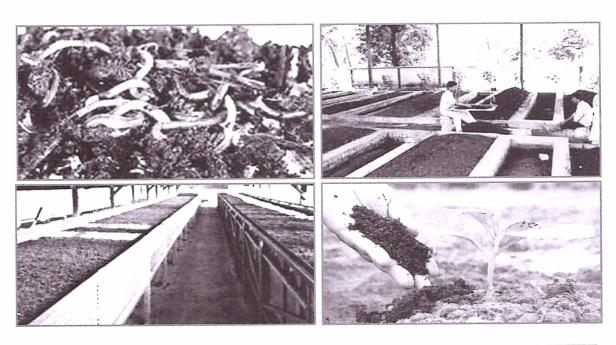
# **BUSINESS PLAN**

# INCOME GENERATING ACTIVITY -Vermi-compost by Radha Rani - Self Help Group



SHG/CIG Name	:	Radha Rani
VFDS Name	:	Jai Bhole Shankar
Range	••	Ghumarwin
Division	:	Bilaspur

## 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 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	::	Radha Rani
•		Lei Phala Chankar
VFDS	::	Jai Bhole Shankar
Range	::	Ghumarwin
Division	::	Bilaspur
Village	::	Amarpur
Block	::	Panoul
District	::	Bilaspur
Total No. of Members in SHG	::	10
Date of formation	::	11-09-2013
Bank a/c No.	::	88891300000122
Bank Details	::	HP.Gramin Bank Panoul
SHG/CIG Monthly Saving	::	100/-
Total saving	::	48000
Total inter-loaning	::	45000
Cash Credit Limit	::	-
Repayment Status	::	-

#### 2. Beneficiaries Detail:

SI. No	Name	Father/ HusbName	Age	Categor y	Income Source	Address
1	Promila Devi	Madan Lal	38	General	Agriculture	V.P.O Amarpur
2	Raj Kumari	Santosh kumar	40	General	Agriculture	V.P.O Amarpur
3	Shailja Sharma	Rajesh Kumar	43	General	Agriculture	V.P.O Amarpur
4	Veena Devi	Satish Kumar	46	General	Agriculture	V.P.O Amarpur
5	Sushila Devi	Achher Lal	40	General	Agriculture	V.P.O Amarpur
6	Kamla Devi	JagarNath	50	General	Agriculture	V.P.O Amarpur
7	Veena Devi	Sohan Singh	48	General	Agriculture	V.P.O Amarpur
8	Nirmla Devi	Subhash Chand	37	General	Agriculture	V.P.O Amarpur
9	Kamlesh Kumari	Satish Kumar	35	General	Agriculture	V.P.O Amarpur
10	Rachna Devi	Krishan Kumar	37	General	Agriculture	V.P.O Amarpur

## 3. Geographical details of the Village

3.1	Distance from the District HQ	::	20 Km
3.2	Distance from Main Road	::	100 mtr.
3.3	Name of local market & distance	::	Panoul , 1Km
3.4	Name of main market & distance		Ghumarwin, 15 Km
3.5	Name of main cities & distance		Bilaspur, 20 Km
3.6	Name of main cities where product will be sold/ marketed	::	HP Forest Deptt. & Bilaspur

## 4. Description of Product related to Income Generating Activity

4.1	Name of th	ne Produc	ct	::	Verr	nicompo	stir	ng	
4.2	Method	of	product	::	This	activity	is	being	already

	identification		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 da	ys)	::	90 days (three cycles in a year)
6.2	Manpower	required	per	::	1

	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	::	1800 Kg per cycle
	required per cycle (Kg) per		
	member		
6.6	Expected production per	::	900 Kg per cycle
	cycle (Kg) per member		

## 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

Page **9** of **21** 

10. Description of Economics

(Amount in actual Rs.)

	Particulars	Units	Quantity / Nos.	Cost (Rs.)	Year 1	Year 2	Year 3	Year 4	Year 5
	Capital Cost								
	Construction of Pit and shed								
	Pit Construction as well as labour cost(Internal Pit Size will be of 10ftX4ftX2ft	Per memb er	10	0009	00009	0	0	0	0
	Errection of cover shed	Per memb er	10	4000	40000				
1	Sub-total (A.1)				100000	0	0	0	0
	Machinery and equipment								
	Tools, equipment, weighing scale etc.	Per memb er	10	2000	20000	0	0	0	0
	Sub-total (A.2)				20000	0	0	0	0

B         Recurring Costs         Per Kg         10         500         5000         0         0         0           5         Cost of procurement of Sunty/dung/waste and procurement of Sunty/dungl/waste from the cost         Tonnes         55         900         49500         51975         54574         57302           7         Labour Cost         Tonne         30         700         21000         22050         23153         24310           8         Labour Cost         No.         5000         150         4725         4961         11576           C         Other handling charges         L/S         No.         500         150         4725         4961         11576           9         Insurance         L/S         Per         2         Per         3000         3000         3000         3000           10         Interest on loan         Per         Per         2         Per         49300         92250         96713         10139           10         Income from         Income from         Income from         Income from         18000         18900         19845         20837           11         Sale of vermicompositing         Income from         Income from         Income		Total Capital Costs (A.1+A.2)				120000	0	0	0	0
Seed earthworm         Per Kg         10         500         500         6 500         0         0           Cost of procurement of Slumy/dung/waste         Tonnes         55         900         49500         51975         54574         9           Labour Cost         Per Per Per Indoor         30         700         21000         22050         23153         11025         23153         11025         23153         11025         23153         11025         23153         11025         110200         110000         110000         110000         110000         110000         110000         110000         110000         110000         110000         110000         110000         110000         110000         110000         110000         110000         110000 <td< th=""><th>8</th><th>Recurring Costs</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></td<>	8	Recurring Costs								
Cost of procurement of Surry/dung/waste         Tonnes         55         900         49500         51975         54574           Slurry/dung/waste         Per Johne         30         700         21000         22050         23153           Packing materials         No.         5000         2         10000         11025         4961           Other handling charges         Per Johne         30         150         4500         4725         4961           Insurance         L/S         Per Johne         2         Per Johne         3000         3000         3000           Insurance         L/S         No.         2         Per Johne         3000         3000         3000           Insurance         L/S         No.         2         Per Johne         3000         3000         3000           Insurance         Capital and and recurring         Sale capital and recurring         Insurance         92250         96713           Income from verning         Income from verning         Income from verning         Isono         18900         1990         1990           Sale of vernicompositing         No.         Sale of vernicompositing         No.         18000         1900         1900           S	4	Seed earthworm	Per Kg	10	200	2000	0	0	0	0
Labour Cost         Per fonne         30         700         21000         22050         23153           Packing materials         No.         5000         10500         11025         11025           Other handling charges         Per fonne         30         450         4725         4961           Other charges         L/S         0         0         0         0         0         0           Insurance         L/S         Per fonne         2 per fonne         3000         3000         3000         3000           Interest on loan         Per fonne         Per fonne         Per fonne         2 per fonne         3000         92250         96713         96713           Total cost = Capital and recurring         Income from vernicomposting         Ionnes         30         6000         180000         1980         96713           Sale of vernicomposting         Ionnes         30         6000         180000         1990         90           Sale of vernicomposting         Iotal revenue         19400         19400         90         10000	5	Cost of procurement of Slurry/dung/waste	Tonnes	55	006	49500	51975	54574	57302	60168
Packing materials         No.         5000         2         10000         10500         11025           Other handling charges         Per tonne         30         150         4500         4725         4961         4961           Other charges         L/S         No.         150         4500         4725         4961         4961           Other charges         L/S         Per annum         2         Per annum         2         Per annum         3000         3000         3000         3000           Interest on loan         Per annum         Sale of remitompositing         No.         No.         213000         92250         96713         Per annum           Income from vermicompositing         No.         No.         Sale of vermicompositing         No.         No. <t< th=""><th>9</th><td>Labour Cost</td><td>Per tonne</td><td>30</td><td>700</td><td>21000</td><td>22050</td><td>23153</td><td>24310</td><td>25526</td></t<>	9	Labour Cost	Per tonne	30	700	21000	22050	23153	24310	25526
Other handling charges         Per tonne         30         150         450         4725         4961           Other charges         L/S         Cent and the charges         L/S         Cent and the charges         100         0	7	Packing materials	No.	5000	2	10000	10500	11025	11576	12155
Other charges         L/S         Per cent         L/S         Per cent         L/S         Per cent         2 per cent         3000         <	8	Other handling charges	Per tonne	30	150	4500	4725	4961	5209	5470
Insurance	U	Other charges								
Interest on loan         Per annum	6	Insurance	L/S			0	0	0	0	0
Total recurring costs         Total cost = Capital and recurring         30         93000         92250         96713           Total cost = Capital and recurring lincome from vermicomposting vermicomposting         10000         18900         18900         19845           Sale of vermicompost         Tonnes         30         6000         18000         19845         0           Sale of earthworm         Sale of earthworm         5000         19400         20845         10000           Total revenue         Total revenue         180000         19400         20845         0	10	Interest on loan	Per annum		2 per cent	3000	3000	3000	3000	3000
Total cost = Capital and recurring         Total cost = Capital and recurring         Total cost = Capital and recurring         Percurring         Percurreng         Percurreng		Total recurring costs				93000	92250	96713	10139 8	10631
Income from vermicomposting         30         6000         18900         19845           Sale of vermicompost         Tonnes         30         6000         18000         10000           Sale of vermicompost         Sale of vermicompost         10000         10000         10000           Total revenue         Total revenue         180000         0         0         0		Total cost = Capital and recurring				213000	92250	96713	10139	10631
Sale of vermicompost         Tonnes         30         6000         18900         19845           Sale of earthworm         Sale of earthworm         5000         10000           Total revenue         180000         19400         20845	Δ	Income from vermicomposting								
Sale of earthworm         5000         10000           Total revenue         180000         0	=	Sale of vermicompost	Tonnes	30	0009	180000	18900	19845	20837	21879
Total revenue         180000         19400         20845	12	Sale of earthworm					2000	10000	10000	10000
	13	Total revenue				180000	19400	20845	21837	22879

	12247	c
	11697	7
	11173	∞
	10175	0
	7	8/000
-		
	14 Net returns (C-B)	

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. Note – As labour work will be done by SHG members themselves and Slurry/dung/waste already available at their

**Economic Analysis** 

Tab	Table 4: Economic analysis of ve	nalysis of vermicomposting	ng				
si,	Particulars	Year 1	Year 2	Year 3	Year 4	Year 5	
-	Capital cost	120000	0	0	0	0	
2	Recurring cost	93000	92250	96713	101398	106318	
8	Total cost	213000	92250	96713	101398	106318	629609
4	Total benefits	180000	194000	208450	218373	228791	1029614
5	Net benefits	-33000	101750	111738	116974	122473	419935
9	Net present worth of cost@15 per cent	609679					
7	Net present worth of benefits @15 per cent	1029614					
∞	Benefit Cost Ratio	1.69					
8	Benefit Cost Ratio	1.60					

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
- This proposed that each member will produce 2.7 tonnes of vermi-compost every year resulting in production of 30 tonnes vermi-compost by all 11 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	120000	90,000	30,000
2	Total Recurring Cost	93000	0	93000
3	Trainings/ capacity building/skill up-gradation	50000	50000	0
	Total =	263000		

#### 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	Procurement of
	utilized for construction of pit	materials for
	(Size will be of 10ftX4ftX2ft)	pit/construction of pit will be done by
	<ul> <li>Upto Rs 1 lakh will be parked in the SHG bank account.</li> </ul>	respective DMU/FCCU after following all codal formalities.
	<ul> <li>Trainings/capacity building/ skill up-gradation cost.</li> </ul>	

SHG contribution	<ul> <li>25% of capital cost to be</li> </ul>	
	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

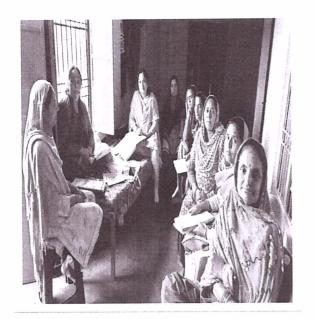
Trainings/capacity building/skill up-gradation cost will be borne by project.

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

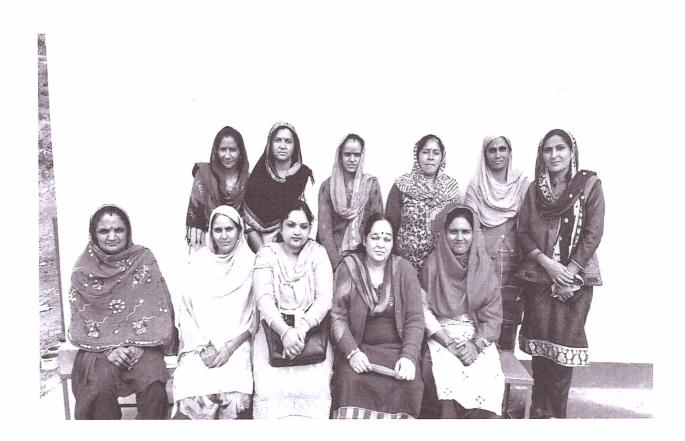
#### 16. Monitoring Mechanism

- 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.





Meeting with Group members





**Group Photo of SHG Members** 

## Individual Photo Of each member:-



Nirmla Devi



Kamala Devi



Beena Devi



RajKumari



Rachna Devi



Sushila Devi



Promila Devi



Shelja Sharma



Veena Devi



Kamlesh Kumari

## Resolution-cum-Group Consensus Form

decided in the General House nieeting group will undertake the MSm2. Compost Activity.... ss Livelihood Income Generation Activity under the Project for Improvement of Mmachal Pradish Forest Ecosystems Management & Liveliboods (JICA Assistad).

Rad Kumusu

Signature of Group Pradhan Ramala Misi Rat Kumaca Signature of Group Secretary

Radha Rani SHG Amarpur Dov. Encor Ghym rovin

# Business Plan Approval by VFDS

Roidha Raw Stig group will undertake the Vesmi Compost Activity as Livelihood Income Generation Activity under the Project for Improvement of Himachal Pradesh Forest Ecosystems Management & Livelihoods (JICA Assisted). Epproved by Tei Bhale Shankar VFDS.

Business Plan with SHG resolution is being submitted to DMU through FILL for further action, please.

Thank you

Signature of VFDS Pradhan

साम वस विकास निविति जनसपुर

सह. पुनारती किसा जिल्लासुर (कि.इ.)

Signature of VFDS Secretary

(TU Coordinate

Churcian at Maning among Unit Day Officer JICA Ferrany Project

OWN COLORES (M. P.)