



**Income Generation Activity
Business Plan Dairy Farming
2021**



| | | |
|---------------------|----------|---------------------|
| SHG/Name | : | Siva New SHG |
| VFDS Name | : | Dolan Chhir |
| FTU/Range | : | Sarkaghat |
| DMU/Division | : | Suket |
| FCCU/Circle | : | Mandi |

**Sponsored by
PIHPFEM&L**

**Prepared by:-
DMU Suket, FTU Sarkaghat & Shiva New SHG**

Table of Contents

| Sr. No | Particulars | Page |
|--------|---|-------|
| 1 | Introduction | 3-4 |
| 2 | Executive summary | 4 |
| 3 | Description of SHG | 4-7 |
| 4 | Geographical detail of the Village | 7 |
| 5 | Description of product related to Income Generating Activity. | 8 |
| 6 | Production Processes. | 8 |
| 7 | Market potential to start paneer making business | 9 |
| 8 | Reasons to start paneer making business | 9 |
| 9 | Equipment requirement for homemade paneer | 9 |
| 10 | Description of Product related to Income Generating Activity | 9 |
| 11 | Description of Production Planning | 10 |
| 12 | Requirement of raw material and expected production | 10 |
| 13 | Description of Marketing/ Sale | 10 |
| 14 | SWOT Analysis | 11 |
| 15 | Description of Management among members | 11 |
| 16 | Financial forecast/projections | 11-13 |
| 17 | Fund flow | 13 |
| 18 | Sources of fund | 13-14 |
| 19 | Trainings/capacity building/skill up-gradation | 14 |
| 20 | Bank Loan Repayment | 14 |
| 21 | Monitoring Method | 14 |
| 22 | Loan Repayment Schedule on (10%Interest) | 14 |
| 23 | Remarks. | 14-15 |
| | Business plan income generating activity –Vermi-compost | 16 |
| | Background | 16 |
| | Vermicomposting | 16 |
| | Description of Product related to Income Generating Activity | 17 |
| | Description of Production Processes | 17 |
| | Description of Production Planning | 17 |
| | Description of Marketing/ Sale | 18 |
| | SWOT Analysis | 18-19 |
| | Description of Management among Members | 19 |
| | Description of Economics | 20-21 |
| | Economic Analysis | 21 |
| | Inferences of Economic Analysis | 22 |
| | Fund requirement | 22 |
| | Sources of fund | 22 |
| | Trainings/Capacity Building/Skill Up-gradation | 22-23 |
| | Monitoring Mechanism | 23 |
| | Annexure | 24 |



1. Introduction

Himachal Pradesh is majestic, almost mythic terrain and famous for its beauty and serenity, its rich culture and religious heritage. The state has diverse ecosystem, rivers and valleys, and has a population of 7.5 million and covers 55,673 sq. km ranging from foothills of Shivalik to the mid hills (300 - 6816 mts above MSL), high hills and cold dry zones of the upper Himalayas. It is spread across valleys with many perennial rivers flowing through them. Almost 90% of the state's population lives in rural areas. Agriculture, horticulture, hydropower and tourism are important constituents of the state's economy. The state has 12 districts and Mandi is 2nd district in population wise having 14.58%.

The district lies in central Himachal and is famous for its tourist stations and Himalayan Treks connecting the trails with far remote regions between the adjacent districts of Kullu Shimla, Bilaspur, Solan, Hamirpur and Kangra districts which are bordered at North-North East, East, West and South of Mandi respectively. The District is also a home to some of the Ancient settlements, Traditional Handloom and Apple Cultivation Fields & Beas and Satluj River are the life line and main drain.

The largest valley in the district is called the Balh Valley, though other valleys such as Karsog and Hatli valleys are also known for the production of food grains, which is also known as the Valley of the Gods. There is also a town called Mandi which is situated on the banks of the Beas River in the northern part of the Balh valley, where people are hard working.

Forests and Forest eco systems are the storehouse of rich biodiversity and play a vital role in preserving the fragile slopply lands and were primary sources of livelihood for rural population. The rural peoples are directly dependent on the forest resources for their livelihoods and socio-economic development. The Harsh reality is this that these resources are constantly depleting due to over exploitation, such as Fodder, fuel, NTFP extraction

Grazing, Fires, and droughts etc.

Under Dolan Chhir VFDS two SHGs have been formed for implementing livelihood Improvement activities. One of these is, “Shiva New” concerned with Paneer Making and value addition. Group members belong to a weaker section of society and have less land holdings. To raise their socio-economic conditions, they decided to produce dairy products. Technical inputs for preparing Business plan were provided by Dr. Pankaj Sood, Principle Scientist & Head Dr. Kavita Sharma & DS Yadav, KVK Mandi at Sunder Nagar. Team consisting of Sh. Vijay Kumar SMS, o/o DMU Sunder Nagar, Monika, FTU Co-ordinator sarkaghat Range of Suket Forest Division, Mr. Vijay Kumar Forest Guard Kaldoo Beat and Ramesh Chand of Durgapur block prepared the business plan under the constant supervision and guidance of V. P.Pathania, Rtd. DFO.

2. Executive summary

Dolan Chhir: VFDS: -

Dolan Chhir VFDS is part of Dolan and Chhir revenue muhal. It is located in Sarkaghat block of Mandi district in Himachal Pradesh and lies between 31.7342485° N latitude-76.7729018°E longitudes. The Dolan Chhir VFDS falls under Jamdwar beat of Sarkaghat Range in Suket Forest Divisional Management Unit (DMU)

Important features of VFDS: -

The area is famous for tradition houses in the village. The ward is rich in water sources and sufficient water is available in sources. The local deities are Batla temple at Chhir, known for the protection cattle’s in the Jungle, whereas Lakhdatta Devta temple is located at Chhir Village. Also temple of Naina Mata situated in this Ward

| | |
|-------------------|---------|
| No. of Households | 85 |
| BPL families | 8=9.42% |
| Total population | 267 |
| Total Cattle | 80 |

3. Description of SHG

The informal Shiva New SHG group was formed in February 2020 under Dolan Chhir VFDS to provide Livelihoods Improvement Support by up gradating skill and capacities. The group consists of poor and marginal farmers.

Shiva New SHG group is women group (Twelve females) consists of marginal and financial weaker section of Schedule Tribe category of the society having less land resources. Though all Group member grow seasonal vegetable etc. but as the land holding of these members is very small and irrigation facility are less and the production level has reached near

saturation, so in order to meet out their financial requirements' they decided to go ahead with Dairy products which can enhance their income. There are 10members in this group and their monthly contribution is Rs 100/- per month. The detail of Group members is as under:-

Detail of SHG Members along with Photos

| Sr. No. | Name | Designation | Category | Age | Qualification | Cont. No. |
|---------|-----------------------------------|------------------|----------|-----|------------------|-------------|
| 1. | Dimple w/o Sh. Rakesh Kumar | President | General | 45 | 10th | 78070 11719 |
| 2. | Kirna Devi w/o Sh. Sunil Kumar | Member Secretary | General | 40 | 12th | 91051 07387 |
| 3. | Urmila Devi w/o Sh. Sharan Das | Member | General | 38 | MA | 78077 10224 |
| 4. | Leela Devi w/o Sh. Devender Kumar | Member | General | 41 | 10th | 98168 58175 |
| 5. | Kamlesh Kumari w/o Sh. Chet Ram | Member | General | 47 | 10th | 98946 27997 |
| 6. | Jaidei w/o Sh. Deler Singh | Member | General | 47 | 8th | - |
| 7. | Rekha Devi w/o Jagga Ram | Member | General | 55 | 8th | - |
| 8. | Vina Devi w/o Sh. Jagdish Chand | Member | General | 40 | 12 th | 98171 20493 |
| 9. | Kalpna Devi w/o Sh. Bhup Singh | Member | General | 36 | 8 th | 98174 26858 |
| 10. | Rajo Devi w/o Sh. Sairu Ram | Member | General | 33 | 12 th | 82689 40006 |
| 11. | Tanu Kumari w/o Sh. Bhim Sen | Member | General | 56 | 5 th | 93186 89744 |
| 12. | Meena Devi w/o Sh. Mouji Ram | Member | General | 38 | 10 th | - |

Photograph of Self Help Group members

| | | | |
|--|---|--|---|
|  |  |  |  |
| Dimple (President) | Kirna Devi (Member Secretary) | Urmila Devi (Member) | Leela Devi (Member) |
|  |  |  |  |
| Kamlesh Kumari Member | Jaidei Member | Rekha Devi Member | Vina Devi Member |
|  |  |  |  |
| Kalpna Devi Member | Rajo Devi Member | Tanu Kumari Member | Meena Devi Member |

Shiva New Self Help Group Dollan Chhir

| | | | |
|------|----------------------------|----|-----------------------------------|
| 2.1. | Name of SHG | :: | Shiva New |
| 2.2 | SHG/CIG MIS Code No | :: | - |
| 2.3 | VFDS | :: | Dollan Chhir |
| 2.4 | Range | :: | Sarkaghat |
| 2.5 | Division | :: | Suket |
| 2.6 | Village | :: | Dolan Chhir |
| 2.7 | Block | :: | Gopalpur |
| 2.8 | District | :: | Mandi |
| 2.9 | Total no of members in SHG | :: | 12 |
| 2.10 | Date of formation | :: | February 2020 |
| 2.11 | Bank Name and details | :: | HP Gramin Bank Chattar |
| 2.12 | Bank A/C No. | :: | 87491300000882 IFSCPUNB0HPGB04 |
| 2.13 | SHG/monthly saving | :: | Rs.1000/-Month |
| 2.14 | Total Saving | :: | 6000/- |
| 2.15 | Total inter-loaning | :: | Yes |
| 2.16 | Cash Credit limit | :: | |
| 2.17 | Repayment status | | Quarterly Bases |

4. Geographical detail of the Village

| | | | |
|-----|---|---|--|
| 3.1 | Distant from District HQ | : | 55 km |
| 3.2 | Distant from Main Road | : | 0 Km (But from main road 100 to 200 mts) approximately |
| 3.3 | Name of Local Market and distant | : | Sarkaghat 20km, Mandi 55 kms app. |
| 3.4 | Name of main Cities and distant | : | Sarkaghat 20KM Sunder nagar, 55 kms, Mandi 55 kms app. |
| 3.5 | Name of the main cities where Products will be sold/ marketed | : | Sarkaghat,Sundernagar, Mandi |
| 3.6 | Status of backward and forward linkages | : | Backward linkages Training, (KVK) etc. Milk locally available and forward linkage Market exists and Suppliers etc. |

5. Description of product related to Income Generating Activity

| | | | |
|-----|----------------------------------|----|--|
| 4.1 | Name of the Product | :: | The Group will be involved in production of milk and milk products such Khoya, Paneer etc. as per the market demand |
| 4.2 | Method of Product Identification | :: | Though the entire Group member grows seasonal vegetable and traditional crops. As their land holding is small, has reached in saturation point of production, so they are not able to meet out their financial requirements' therefore it has been decided by the group member that dairy and dairy product unit is to be started with the assistance of JICA project which will enhance their income. Further they usually go to sell their vegetable traditional crop and milk crops in locality. Market linkages are already in place. They do not have to spend extra time and money for marketing Dairy products |
| 4.3 | Consent of SHG /CIG/ Cluster | :: | Consent is attached as an Annexure. |

6. Description of production process

Initially the members of paneer making SHG agreed to start the business with 120 kg of pure milk. The 40-liter milk will be heated to a temperature of 80-90⁰c in heavy based milk pots with 50lt capacity of each pot by continuous stirring. When the milk will attain the temperature of approximately 90⁰C add 0.2% citric acid (i.e. 80gm of citric acid) and keep on stirring upto 5-6 minutes and put off the flame and allow it to cool down. Add the product into the muslin cloth and squeeze off the additional water and press the paneer by putting additional weight over it/ by using paneer press and keep the resultant material in the muslin cloth inside the cold water. The same process will be repeated with the remaining 80 lt of milk in the other two milk pots.

As per the standard average around 24 kg of paneer will be produced from 120lts of milk daily which can be marketed as per the targeted markets to fetch reasonably better price. On an average if the price of paneer is Rs. 250 per kg, the SHG will have net sale of Rs 6000/-daily and if the milk is procured at a rate of Rs 40/kg amount of 120kg of milk is worked at Rs. 4800 per day and thereby Rs 1200 will be gross profit daily.

7. Market potential to start paneer making business

Paneer is a natural dairy item that is healthy, rich in nutrients, and in great demand. There is increasing demand in the present day and likelihood of the demand being more in near future. The business is profitable and needs less capital, inexpensive ingredients and basic machinery. Quality paneer demands quality control, proper equipment and standardized protocols.

8. Reasons to start paneer making business

- Natural dairy product
- Huge demand
- The business is money-spinning
- Less capital needed
- Inexpensive constituents
- The SHG members are conversant with the activity at individual level

9. Equipment requirement for homemade paneer

The following equipments will be procured initially to start the production of homemade paneer

1. Boiler vessel 100lt capacity
2. Stirring rod
3. Commercial gas cylinder with connection
4. Gas bhatti (Chullah)
5. Digital weighing machine
6. Measuring device (1lt, 2lt, 5lt)
7. Refrigerator (200ltr)
8. Kitchen tools and other miscellaneous articles
9. Poly sealing table top
10. Heat sealer
11. Apron, cap, plastic hand gloves etc.
12. Chairs table etc.
13. Paneer pressing machine

10. Description of Product related to Income Generating Activity

| | | | |
|---|---------------------------------------|----|--|
| 1 | Name of the Product | :: | Paneer making |
| 2 | Method of product identification | :: | This product is being already made by some SHG members |
| 3 | Consent of SHG/ CIG / cluster members | :: | Yes |

11. Description of Production Planning

| | | | |
|---|------------------------------------|----|-----------------------------|
| 1 | Production Cycle (in days) | :: | 1 day |
| 2 | Manpower required per cycle (No.) | :: | all members |
| 3 | Source of raw materials | :: | Locally available |
| 4 | Source of other resources | :: | S nagar., 40Km, Mandi, 40km |
| 5 | Quantity required per cycle (Kg) | :: | 120 lt milk (initially) |
| 6 | Expected production per cycle (Kg) | :: | 24 Kg (initially) |

12. Requirement of raw material and expected production

| Sr. No. | Raw material | unit | Time | Quantity | Amount per kg (Rs) | Total amount | Expected Paneer production (Kg) | Rs. Per Kg | Total amount |
|---------|----------------------|------|---------|----------|--------------------|--------------|---------------------------------|------------|--------------|
| 1 | Buffalo/ Cow milk | Kg | Per Day | 120lt | 40 | 4800 | 24 | 250 | 6000 |

13. Description of Marketing/ Sale

| | | | |
|---|---|----|---|
| 1 | Potential market places | :: | S nagar., 16Km, Mandi, 40km |
| 2 | Distance from the unit | :: | |
| 3 | Demand of the product in market place/s | :: | Daily demand |
| 4 | Process of identification of market | :: | Group members, according to their production potential and demand in market, will select/list retailer/wholesaler. Initially product will be sold in near markets. |
| 5 | Marketing Strategy of the product | | SHG members will directly sell their product through village shops and from manufacturing place/shop. Also by retailer, wholesaler of near markets. Initially product will be sold in 1 Kg packaging. |
| 6 | Product branding | | At CIG/SHG level product will be marketed by branding CIG/SHG. Later this IGA may required branding at cluster level |
| 7 | Product "slogan" | | "A Product of Purity and Supremacy" |

14. SWOT Analysis

❖ Strength –

- Activity is being already done by some SHG members
- Raw material easily available
- Manufacturing process is simple
- Proper packing and easy to transport
- Product shelf life is long

❖ Weakness –

- Effect of temperature, humidity, moisture on manufacturing process/product.

❖ Opportunity –

- Location of markets
- Daily/weekly consumption and consume by all buyers in all seasons

❖ Threats/Risks –

- Effect of temperature, moisture at time of manufacturing and packaging particularly in winter and rainy season.
- Suddenly increase in price of raw material
- Competitive market

15. Description of Management among members

By mutual consent SHG group members will decide their roles and responsibilities to carry out the work. Work will be divided among members according to their mental and physical capabilities.

- Some group members will involve in Pre-Production process (i.e. procuring of raw material etc.)
- Some group members will involve in Production process.
- Some group members will involve in Packaging and Marketing.

16. Financial forecast/projections

The final rather foremost step to start up the business is to make a financial plan to determine the cost to run the business and it should also cover the business profit initially the SHG is going to earn in nutshell a cost benefit analysis is required to be projected.

| A. | CAPITAL COST | | | |
|--------|---|----------|------------|--------------------|
| Sr.No. | Particulars | Quantity | Unit Price | Total Amount (Rs.) |
| 1 | Boiler vessel 100lt capacity | 3 | 5000 | 15000 |
| 2 | Stirring rod | 3 | 300 | 900 |
| 3 | Commercial gas cylinder with connection | 2 | 4000 | 8000 |
| 4 | Gas bhatti (Chullah) | 3 | 1500 | 4500 |
| 5 | Digital weighing machine | 1 | 10,000 | 10000 |
| 6 | Measuring device (1lt, 2lt, 5lt) | 3 | L/S | 1000 |
| 7 | Refrigerator (200ltr) | 1 | 22000 | 22000 |
| 8 | Kitchen tools and other miscellaneous | L/S | L/S | 4000 |

| | | | | |
|----|--------------------------------------|----|------|--------------|
| | articles | | | |
| 9 | Poly sealing table top Heat sealer | 1 | 2000 | 2000 |
| 10 | Apron, cap, plastic hand gloves etc. | 12 | L/S | 6000 |
| 11 | Chairs table etc. | | L/S | 5000 |
| 12 | Paneer Pressing machine | 1 | L/s | 3000 |
| | Total Capital Cost (A) | | | 81400 |

| B. | RECURRING COST | | | |
|----------------|---|------------------------|----------------|--------------------------|
| Sr. No. | Particulars | Quantity | Price | Total Amount (Rs) |
| 1 | Raw milk | 120 ltr daily | 40 ltr | 144000 |
| 2 | Citric acid | 6ltr | 150/ltr | 900 |
| 3 | Room rent | Per month | 500 | 500 |
| 4 | Packaging material | monthly | 3000 | 3000 |
| 5 | Labour | 2 persons daily | 275/person | 16500 |
| 6 | Transportation | monthly | Rs 100 per day | 3000 |
| 7 | Miscellaneous expenditure (i.e. stationary, electricity bill, water bill, etc.) | monthly | 1000 | 1000 |
| 8 | Gas | One cylinder per month | 2000/cylinder | 2000 |
| 9 | Muslin cloth | Monthly | L/S | 1500 |
| 10 | Soap & detergent/vim scrubber, brooms, wiper, etc. | monthly | L/S | 1000 |
| | Total Recurring cost (B) | | | 173400 |

| C. | Cost of Production (Monthly) | |
|---------------|---|--------------------|
| Sr.No. | Particulars | Amount (Rs) |
| 1 | Total Recurring Cost | 173400 |
| 2 | 10% depreciation annually on capital cost | 678 |
| | Total cost of production | 174078 |

| D. Total income monthly | | | | | |
|--------------------------------|------------------------------------|--------------------|-----------------------------|-------------------------|---------------------|
| Sr.No. | Particulars | Daily | Expected rate per kg | Total sale daily | Monthly sale |
| 1 | Total production of paneer | 24kg | 250/kg | 6000 | 180000 |
| | Cost Benefit Analysis | | | | |
| Sr.No. | Particulars | Amount (Rs) | | | |
| 1 | Depreciation @ 10% on capital cost | 678 | | | |
| 2 | Total Recurring Cost per month | 173400 | | | |

| | | |
|---|-------------------------------------|---|
| 3 | Total expenditure | 174078 |
| 4 | Total production (monthly) | 720 kg |
| 5 | Rate expected per kg | 250/kg |
| 6 | Total sale amount | 180000 |
| | Net income (monthly)= 180000-174078 | 5922 |
| 7 | Profit sharing | The profit sharing will be collectively agreed between the members; however a chunk of profit will be kept as reserve for future contingency. |

Note: The amount of labour (16500) which has been added to recurring cost is practically the income of the members of SHG because the labour input will be within the members of SHG.

17. Fund flow

| Sr.No. | Particulars | Total Amount (Rs) | Project support | SHG Contribution |
|--------|---|-------------------|-----------------|------------------|
| 1 | Total capital cost | 81400 | 61050 (75%) | 20350 |
| 2 | Total Recurring Cost | 173400 | - | 173400 |
| 3. | Monthly contribution till date | 6000 | | 6000 |
| 4. | Trainings/capacity building/ skill up-gradation | 60000 | 60000 | - |
| | Total | 320800 | 121050 | 199750 |

Note-

- The SHG consists of all members and 75% capital cost will be contributed by the project.
- The recurring Cost will be borne by the SHG/CIG members.
- Trainings/capacity building/ skill up-gradation expenditure will be borne by the project.

18. Sources of fund

| | | |
|-----------------|--|---|
| Project support | <ul style="list-style-type: none"> • 75 % of capital cost will be utilized for purchase of machineries including equipments as detailed at serial no. 8 above. • Upto Rs 1 lakh will be parked in the SHG bank account. • Trainings/capacity building/ skill up-gradation cost. | Procurement of machineries/equipment 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, this include cost of materials/tools other than machineries. • Recurring cost to be borne by SHG | |
|------------------|--|--|

19. 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:

- Cost effective procurement of raw material
- Quality control
- Packaging and Marketing
- Financial Management

20. 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.

21. Monitoring Method –

At the initial stage baseline survey and yearly survey will be conducted of the beneficiaries.

Some key indicators for the monitoring are as:

- Size of the group
- Fund management
- Investment
- Income generation
- Production level
- Quality of product
- Quantity sold
- Market reach

22. Remarks:

The forth coming vision of the Group is to enhance their income by value addition in the form of other Dairy items etc.

The forth coming vision of the Group is to enhance their income by way of taking up of additional activity of Vermi composting as the activity is well connected with the Dairy

product where the group is involve in collection of milk as well as rearing of cattle's for production of milk. These two activities go hand in hand hence, proposed in one Buisness plan. The detailed activity is annexed below.

BUSINESS PLAN

INCOME GENERATING ACTIVITY –Vermi-compost by Shiva New - Self Help Group

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.

Description of Product related to Income Generating Activity

| | | |
|---------------------------------------|----|--|
| Name of the Product | :: | Vermicomposting |
| Method of product identification | :: | This activity is being already done by some SHG members and has been collectively decided by group members |
| Consent of SHG/ CIG / cluster members | :: | Yes |

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. |

Description of Production Planning

| | | |
|--|----|----------------------------------|
| Production Cycle (in days) | :: | 90 days (three cycles in a year) |
| Manpower required per cycle (No.) | :: | 1 |
| Source of raw materials | :: | From household and own farms |
| Source of other resources | :: | Open market |
| Raw material - quantity required per cycle (Kg) per member | :: | 1800 Kg per cycle |
| Expected production per cycle (Kg) per member | :: | 900 Kg per cycle |

Description of Marketing/ Sale

| | | |
|---|----|---|
| Potential market places | :: | HP Forest Deptt. |
| Distance from the unit | :: | Local market Use on own farm |
| Demand of the product in market place/s | :: | HO Forest deptt is procuring huge vermi-compost for their nursery |
| Process of identification of market | :: | PMU will facilitate the tie up of procurement of vermi-compost produced by SHG by HP Forest deptt. |
| Marketing Strategy of the product | | SHG members will also explore the additional marketing options around their villages for better sale price in future. |
| 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 |
| Product “slogan” | | “Nature Friendly” |

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

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

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 | Machinery and equipment | | | | | | | | |
| | Tools, equipment, weighing scale etc. | Per member | 12 | 2000 | 24000 | 0 | 0 | 0 | 0 |
| | Total (A.1) | | | | 24000 | 0 | 0 | 0 | 0 |
| B | Recurring Costs | | | | | | | | |
| 2 | Seed earthworm | Per Kg | 12 | 500 | 6000 | 0 | 0 | 0 | 0 |
| 3 | Cost of procurement of Slurry/dung/waste | Tonnes | 80 | Available with the group members | Available with the group members | Available with the group members | Available with the group members | Available with the group members | Available with the group members |
| 4 | Labour Cost | Per tonne | 40 | 700 | 28000 | 29400 | 30870 | 32414 | 34034 |
| 5 | Packing materials | No. | 5000 | 2 | 10000 | 10500 | 11025 | 11576 | 12155 |
| 6 | Other handling charges | Per tonne | 40 | 150 | 6000 | 6300 | 6615 | 6946 | 7293 |
| C | Other charges | | | | | | | | |
| 7 | Insurance | L/S | | | 0 | 0 | 0 | 0 | 0 |
| | Total recurring costs | | | | 50000 | 46200 | 48510 | 50936 | 53482 |
| | Total cost - Capital and recurring | | | | 74000 | 46200 | 48510 | 50936 | 53482 |
| D | Income from vermicomposting | | | | | | | | |
| 8 | Sale of vermicompost | Tonnes | 40 | 6000 | 240000 | 252000 | 264600 | 277830 | 291722 |
| 9 | Total revenue | | | | 240000 | 252000 | 264600 | 277830 | 291722 |
| 10 | Net returns (C-B) | | | | 190000 | 205800 | 216090 | 226894 | 238240 |

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 | 24000 | 0 | 0 | 0 | 0 | |
| Recurring cost | 50000 | 46200 | 48510 | 50936 | 53482 | |
| Total cost | 74000 | 46200 | 48510 | 50936 | 53482 | 273128 |
| Total benefits | 240000 | 252000 | 264600 | 277830 | 291722 | 1326152 |
| Net benefits | 190000 | 205800 | 216090 | 226894 | 238240 | 1077024 |
| Net present worth of cost @15 per cent | 273128 | | | | | |
| Net present worth of benefits @15 per cent | 1077024 | | | | | |
| Benefit Cost Ratio | 3.94 | | | | | |

Distribution of net profite – As per share in production.

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. 1.85 per Kg
- ➔ Sale of vermi-compost (conservative side) is Rs. 6 per Kg
- ➔ Net profit will be Rs. 4.15 per Kg
- ➔ It is proposed that each member will produce 3.3 tonnes of vermi-compost every year resulting in production of 40 tonnes vermi-compost by all 12 members of SHG in one year.
- ➔ Cost of earthworm has been kept at Rs. 500.00 per kg
- ➔ The vermi-compost making is a profitable IGA and can be taken up by the SHG members.

Fund requirement:

| Sl. No. | Particulars | Total Amount (Rs) | Project support | SHG contribution |
|---------|---|-------------------|-----------------|------------------|
| 1 | Total capital cost | 24000 | 18000 | 6000 |
| 2 | Total Recurring Cost | 50000 | 0 | 50000 |
| 3 | Trainings/ capacity building/skill up-gradation | 50000 | 50000 | 0 |
| | Total = | 124000 | 68000 | 56000 |

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

Sources of fund:

| | | |
|------------------|---|---|
| Project support; | <ul style="list-style-type: none"> • 75% of capital cost will be utilized for purchase of weighing machines • Upto Rs 1 lakh will be parked in the SHG bank account. • Trainings/capacity building/ skill up-gradation cost. | Procurement of materials for pit/construction of pit 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, this include for purchase of weighing machines • Recurring cost to be borne by SHG | |

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

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.

Cost of the Dairy Project is

Capital Cost= 81400/-

Recurring Cost = 173400/-

Total for Dairy Project =254800/-

Cost of Vermicompost Project is

Capital Cost= 24000/-

Recurring Cost = 50000/-

Total for Vermicompost Project=74000/-

Grand Total of Business Plan is Rs. 328800/- only

Annexure

We the member group here by consented to actively participate in the IGA activity Opt the group (Dairy Farming activity) as per the guideline of JICA project For Improvement of HP Ecosys management and livelihood and coordination with the VFDS.

The detail of members is as under

| Sr. No. | Name | Designation | Category | Signature |
|---------|-----------------------------------|------------------|----------|---------------|
| 1. | Dimple w/o Sh. Rakesh Kumar | President | ST | Dimple Devi |
| 2. | Kirna Devi w/o Sh. Sunil Kumar | Member Secretary | ST | Kirna Devi |
| 3. | Urmila Devi w/o Sh. Sharan Das | Member | ST | Urmila Devi |
| 4. | Bandu Devi w/o Sh. Karam Chand | Member | ST | — |
| 5. | Leela Devi w/o Sh. Devender Kumar | Member | ST | Leela Devi |
| 6. | Kamlesh Kumar w/o Sh. Chet Ram | Member | ST | Kamlesh Kumar |
| 7. | Krishna w/o Sh. Rintu | Member | ST | — |
| 8. | Jaidei w/o Sh. Deler Singh | Member | ST | Jaidei |
| 9. | Rekha Devi w/o Jagga Ram | Member | ST | Rekha Devi |
| 10. | Vija Devi w/o Sh. Jagdish Chand | Member | ST | Veena Devi |
| 11. | Kalpna Devi w/o Sh. Bhup Singh | Member | ST | Kalpna Devi |
| 12. | Rajo Devi w/o Sh. Sairu Ram | Member | ST | Rajo |
| 13. | Tanu Kumari w/o Sh. Bhim Sen | Member | ST | Tanu Kumari |
| 14. | Meena Devi w/o Sh. Mouji Ram | Member | ST | Meena Devi |

Kirna Devi
Signature of secretary

Dimple Devi
Signature of Pradhan

[Handwritten Signature]
Signature of VFDS Secretary

Kaldeva
Signature of VFDS Pradhan
प्रधान वन विभाग, सुकेत
डोलन-छीड डा. 17200
सरकाघाट, जिला मुण्डी 17200

[Handwritten Signature]
Signature of Fgd

[Handwritten Signature]
Signature of Block Officer

[Handwritten Signature]
Signature of RFO

Approved by DMU

[Handwritten Signature]
Divisional Forest Officer
Suket Forest Division
Sunder Nagar (HP)