



Himachal Pradesh
Forest Department



Income Generation Activity

Business Plan Mushroom

Cultivation

2021



SHG Kali Cutting and Tailoring - Self Help Group VFDS Khalair

SHG/ Name	::	SHG Kali Cutting and Tailoring
VFDS Name	::	Khalair
FTU/Range	::	Nither
DMU/Division	::	Ani at Luhri
FCCU/ Circle	::	Rampur Bsr.

Sponsored by	Prepared by
PIHPFEM&L	DMU JICA ANNI

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1. Introduction

A mushroom farming business can be a means of big profit in just few weeks with considerably low short up capital investment to start the business. The cultivation of mushrooms is an art and requires both study and experience. Different types of mushrooms have different productions cost and it is important to decide on a budget availability and the demand in the locality and acceptable in the target market. Broadly there are three types of mushrooms such as:

1. Button mushroom
2. Oyster mushroom
3. Paddy straw mushroom.

The members of this SHG are more familiar and comfortable with the white button mushroom and therefore it has been decided that this SHG will grow white button mushroom. Mushroom farming suits best to the people who enjoy gardening, growing plants and take keen interest in agricultural activities. Since the group members are already in agriculture/horticulture activities in their own fields, therefore this activity as income generating activity has been finalized by this SHG and business plan has been initiated by them. This activity will aim at enhancing their income and thereby improving the livelihood and living standard of the group members. Team consisting of Madan Mohan Khushdil (HPFS Retd.), Lalit Thakur (SMS) and Mitika Gupta (FTU coordinator) has put their best efforts in consultation with the group members to prepare this business plan.

Broad features of SHG Kali Cutting and Tailoring

SHG Kali Cutting and Tailoring falls in Katmor Beat, Margi block, Nither Range of Anni forest Division.















Total No. of households	77
BPL families	13
Total population	344
Total cattle	

SHG Kali Cutting and Tailoring was formally formed on 18.05.2020 under Khalair VFDS. The Group consists of poor and marginal farmers and all the members fall in General categories. There are 14 members in this SHG and their monthly contribution is Rs. 50.

Detail of SHG Members along with Photos

Sr. No.	Name	Name of Father/Husband	Category	Age	Qualification	Cont. No.
1.	Sushma Devi (President)	Sanu Ram	General	31	BA	94593-96493
2.	Kavita Devi (Secretary)	Jagdish Chand	General	30	10 th	94597-36117
3.	Sunita Devi (Cashier)	Beli Ram	General	33	8 th	76509-40818
4.	Tikma Devi	Mangat Ram	General	37	10 th	-
5.	Geeta Devi	Devi Singh	General	37	-	-
6.	Munga Devi	Mahesh Kumar	General	42	10 th	-
7.	Vidya Devi	Thakur Dass	General	42	6 th	-
8.	Geeta Devi	Ramesh Kumar	General	38	8 th	-
9.	Urmila Devi	Girija Nand	General	50	Literate	-
10.	Praveena Devi	Thakur Dass	General	35	10 th	-
11.	Neena Devi	Neeraj Kumar	General	31	8 th	-
12.	Anita Devi	Bittu	General	25	10 th	-
13.	Neha Thakur	D/o Om Prakash	General	24	BA	-
14.	Sunita Devi	Narotam Dass	General	28	Twelfth	-

Photograph of CIG members

				
SUSHMA DEVI (PRESIDENT)	KAVITA DEVI (SECRETARY)	SUNITA DEVI (CASHIER)	TIKMA DEVI	GEETA DEVI
				
MUNGA DEVI	VIDYA DEVI	GEETA DEVI	URMILA DEVI	PRAVEENA DEVI
				
NEENA DEVI	ANITA DEVI	NEHA THAKUR	SUNITA DEVI	

Financial status of the SHG Kali Cutting and Tailoring

2.1.	Name of SHG/	::	SHG Kali Cutting and Tailoring
2.3	VFDS	::	Khalair
2.4	Range	::	Nither
2.5	Division	::	Ani at Luhri
2.6	Village	::	Khalair
2.7	Block	::	Margi
2.8	District	::	Kullu
2.9	Total no of members in SHG	::	14
2.10	Date of formation	::	18.05.2020
2.11	Bank Name and details	::	PNB Bagipul
2.12	Bank A/C No.	::	24290001000 99239
2.13	SHG/ monthly saving	::	Rs.50/-month
2.14	Total Saving	::	5800
2.15	Total inter- loaning	::	1000
2.16	Cash Credit limit	::	
2.17	Repayment status	::	

2. Geographical detail of the Village

3.1	Distant from District HQ	:	182Km
3.2	Distant from Main Road	:	3km
3.3	Name of Local Market and distant	:	Bagipul 30km
3.4	Name of main Cities and distant	:	Rampur Bsr 60Km
3.5	Name of the main cities where products will be sold/ marketed	:	Rampur Bsr 60Km, Nirmand 42km
3.6	Status of backward and forward link ages	:	Backward linkages Training, procurement of compost bags with added spore and Forward linkages with markets and exiting suppliers etc.

3. Description of product related to Income Generating Activity.

4.1	Name of the Product	::	The Group will be involved in production of Button Mushrooms in controlled environment.
4.2	Method of Product Identification	::	Though the entire group member grows high value cash crops. As their land holding is very small, so they are not able to meet out their financial requirements. Therefore, it has been decided by the group member that Mushroom cultivation will enhance their income. Further they usually go to sell their cash crops in Nirmand & Rampur. Market linkages are already in place. They do not have to spend extra time and money for marketing mushrooms.
4.3	Consent of SHG/ CIG/ Cluster	::	Consent is attached as an Annexure.

4. Production Processes.

The training of Mushroom cultivation will be arranged by JICA project. The full cost of training will be borne by the JICA Project.

The Group decided initially to start with Button Mushroom Production. 300 Compost spawn added bags will be purchased and fixed in hired/ rented room.

Three tier wooden /Bamboo racks fitting, along with two Exhaust fans one for fresh air and other at the bottom to expel out the inner air will be installed. One ceiling Fan to lower the room temperature and other (heat blower) to increase the room temperatures. one Dry and wet thermometers will be installed in the hall to maintain the required room temperature. The room will be washed and sanitized with formalin (5ml/liter) twice to thrice before loading the Bags.

Following the technical input during the training, the business plan with three crops of Button Mushrooms (70 to 75 days cycle for each) (August to April are best months for Button Mushroom) has been prepared after having thorough discussions with the group.

The group members will work 1hrs daily, half an hour in the morning and half an hour in the evening.

5. Description of Production Planning:

6.1	Production Cycle (75 days)	::	<p>In Kullu district Button Mushroom can be grown from August to April. After adding spawn in the compost bag, mushroom takes 30 to 40 days to pin up. Thereafter three flushes can be taken. In total 75 days are required to take the three flushes of mushroom crop. The production cycle of one crop will be 75 days. In a year four cycles of crop will be repeated as per detail below:-</p> <p>1st crop of Button Mushroom (May to end of July =75 days) 2nd crop of Button Mushroom (August to October =75 days) 3rd crop of Button Mushroom, (November to January =75 days) 4th crop of Button Mushroom (February to April = 75days)</p>
6.2	Manpower required (No)	::	<p>Initially whole group will work together to install/ construct the racks, clean the room and carry compost bags from the road to production sites. Thereafter for first 30 days 2 persons for 1 hours (1/2 Hour Morning and 1/2-hour evening) on rotation bases will work for cleaning, moistening, temperature regulation etc. For next 31 to 75 days 4-person 3hours for harvesting, caging soil, cleaning, weighing and packing. Marketing hours are not included as one of the members will sell mushrooms along with vegetables in the market regularly. Compost making 4 persons will work for 2hours for 2days.</p> <p>Labor work will be for total 704hrs, if we divide it by 8(hours) it will be 88days and multiply it by wages rate of Rs 275/day then the cost of labour comes out to be Rs24200/-</p>
6.3	Source of raw material	::	<p>Horticulture Department, Solan district of Himachal Pradesh. However, the raw material can be purchased from Kullu and Bajaura also.</p>
6.4	Source of other Resources	::	-do-

6. Description of Marketing /Sale

7.1	Potential Market Places	::	Nirmand, Rampur and Anni
7.2	Distance from unit	::	Nirmand 42km, Rampur 62km, Anni 108km
7.3	Demand of the Product in Market		Mushrooms are always in demand throughout the year.
7.4	Process of Identification of Market	::	All the above three places are well established for vegetable selling
7.5	Impact of seasonality on Market.	::	Mushrooms are all weather delicacy and are in high demand throughout the year. However, during summer, due to Tourist and marriage ceremonies demand is more.
7.6	Potential buyers of the Product.	::	Potential Market Buyers are Hospitals. Hotels, Hostels, Shops, Local residents/ Marriage and other ceremonial occasions etc.
7.7	Potential consumers in the area.	::	All Health-conscious citizens/ Households and hotels and dhabas
7.8	Marketing mechanism of the Product.	::	Daily supply of the Mushrooms to the Market on Demand Basis and group will also sell these in open market of Bagipul, Arsu, Nirmand etc.
7.9	Marketing strategy of the Product.	::	Initially group will contact all the vegetable retail sellers in various townships, thereafter on increase of production, the retail sellers of Rampur and Anni market will also be contacted to sell their product.
7.10	Product Branding.	::	"Garden Fresh Mushroom".
7.11.	Product Slogan	::	"Vegetarian's Delicacy."

7. Description of Management among the Members

All Members will take training and divide themselves for daily work operations, Marketing. Linkages with department and with VFDS. All the members will contribute towards the strengthening of the group as per their capacity and wisdom.

8. SWOTAnalyses

Sl.no	Detail/Items	:	Description
1.	Strength	::	All Group members are like minded, well adapted to local and social environment. Production cost is less, Produce is of high quality and growing cycles are short, production will be throughout the year. Readymade Compost bag are available in the open market. For SHG Financial support Trainings and exposures will be organized by JICA Forestry Project as per the norms and instructions.
2.	Weakness	::	New Self-help Group, lack of experience in Mushroom production/cultivation.
3.	Opportunity	::	Demand is high and return is high.
4.	Threats	::	Internal Conflict in Group, lack of Transparency, and lack high Risk bearing capacity are anticipated and are negotiable with the group.

9. Description of Potential risks and measures to mitigate them.

Sr.No.	Potential risks	:	Measures to mitigate them.
1.	1. At times harmful infection can destroy the crop. 2. Temperature maintenance and regulations 3. Market saturation	:	First of all, cleanness is to be maintained by washing hands and feet with soap and dip in formalin solution before entering into the room. Only 2 to 3 persons will enter the room with full kit (cap, gloves, apron etc.). Regular sprays to avoid fungal attack. With the help of thermometers, the required temperatures will be maintained with given devices. To do Value addition or dry mushrooms for making Mushroom Pickles, soups and other products etc in the later years of production.
2.	Internal Conflict in Group, Transparency	:	Conflicts to be dealt with in the initial stage, to eradicate the cause. Equal exposure to all Group members, equal benefit sharing needed Give Respect, and honour to every member.
3.	Market	:	Market is always fluctuating; Demand and supply are always at variance. So members to keep on searching new markets and buyers.
4.	Production	:	Production will be increased slowly as per the market demand and member's experience.

10. Financial projections

1st Cycle

Sr. No	PROJECT COST	Amount in Rs.
A	CAPTIAL COST	
A.1	Construction of three tire wooden /Bamboo racks fitting	22000
a	Ceiling Fan (1 No)	1800
b	Exhaust fans (2)	3000
c	Room heat/ blower/ (heat pillar)	3000
d	Dry and wet thermometer (1 set)	1000
e	Medium spray pumps (1no) (knapsack)	3200
f	Set of sharp knives no (1 set)	400
g	Scissor.(2no)	600
h	Trays/Basket (6 no)	1500
i	Crate (6no)	2800
j	Water tanks 1000 litre 1 no including carriage	8000
k	Water and electricity fitting material & Charges	8200
l	Miscellaneous expenditure	5000
	Total Capital Cost	60500

B.	RECURRING COST of First Cycle (75 days)	
B.1	Cost of Rented room 1 Hall(mushroom growing Unit) @ Rs 1800/Month. (3 month) =5400	5400
B.2	Formalin	600
B.3	Labour wages 88 day = (@ Rs 275/ day) = Rs 24200	24200
B.4	Button mushroom Compost Bags 300 no. @ Rs 90 per bag and other raw material including carriage	27000
B.5	Packaging (packaging material etc.)	3200
B.6	Transportation	1800
B.7	Electricity and water usage charges @ Rs 1000 per month	3000
B.8	Miscellaneous expenditure (stationery, Bill book, receipt etc.)	2000
	Recurring Cost of one cycle = B1+B2+B3 + B4 +B5 + B6+B7+B8	67200
	Total Project cost (A+B) = 60500+67200 =	127700

Cost Benefit Analysis First Cycle:-

Sr no	Particular	Unit	Quantity/no	Rate	Amount in (Rs)
A	Depreciation 10% on Capital Cost	Month	3	10%	1515
B	Recurring Cost for 3 Months				
1.	Cost of Rented room 1 Hall(mushroom growing Unit)@ Rs 1800/Month. (3 month)	Month	3	1800	5400
2.	Formalin containing 250 in each Bottle.	No	2 bottle	300	600
3.	Labour wages 88 days = (@ Rs 275/ day)= Rs 24200	Days	88	275	24200
4.	Button mushroom Compost Bags 300 no. @ Rs 90 per bag and other raw material including carriage	No	300	90	27000
5.	Packaging (packaging material etc.)	Kg	5	200	1000
6.	Transportation Charges	-	-	-	1800
7.	Electricity and water usage charges @ Rs1000 per month	Month	3	1000	3000
8.	Miscellaneous expenditure (stationery, Bill book, receipt etc.)		L/S	-	2000
	Total				66515
9.	Total Production in Kg.	Button mushroom Compost			750 kg 750 kg

10.	Total sale (Kg)	Button mushroom 750 kg @ Rs 120	90000
		Compost 750kg@10kg	7500
			97500
11.	Total Benefit	97500-66515=30985	30985
12.	The net profit of Rs. 28235 will be kept as emergency reserve for future contingency		

Cost Benefit Analysis Second Cycle

Sr. No.	Particular	Unit	Quantity/no	Rate	Amount in (Rs)
A	Depreciation 10% on Capital Cost	Month	3	10%	1515
B	Recurring Cost for 3 Months				
1.	Cost of Rented room 1 Hall(mushroom growing Unit) @ Rs 1800/Month. (3 month)	Month	3	1800	5400
2.	Formalin containing 250 in each Bottle.	No	2 bottle	300	600
3.	Labour wages 88 days = (@ Rs 275/day)=Rs 24200	Days	88	275	24200
4.	Button Mushroom Compost Bags 300 no. @ Rs 90 per bag and other raw material including carriage	No	300	90	27000
5.	Packaging (packaging material etc.)	Kg	5	200	1000
6.	Transportation Charges	-	-	-	1800
7.	Electricity and water usage charges @ Rs1000 per month	Month	3	1000	3000
8.	Miscellaneous expenditure (stationery, Bill book, receipt etc.)		L/S	-	500
	Total				65015
9.	Total Production in Kg.	Button Mushroom Compost			750kg 750 kg
10.	Total sale (Kg)	750kg @ Rs 120			90000
		Compost 750 kg @ Rs 10			7500
				Total	97500
11.	Total Profit	97500 - 65015			32485

The total profit of Rs. 32485 after 2nd cycle is available to be distributed amongst the SHG members

Cost Benefit Analysis Third Cycle

Sr no	Particular	Unit	Quantity/no	Rate	Amount in (Rs)
A	Depreciation 10% on Capital Cost	Month	3	10%	1515
B	Recurring Cost for 3 Months				
1.	Cost of Rented room 1 Hall(mushroom growing Unit) @ Rs 1800/Month. (3 month)	Month	3	1800	5400
2.	Formalin containing 250 in each Bottle.	No	2 bottle	300	600
3.	Labour wages 88 days = (@ Rs 275/ day)=Rs 24200	Days	88	275	24200
4.	Button Mushroom Compost Bags 300 no. @ Rs 90 per bag and other raw material including carriage	No	300	90	27000
5.	Packaging (packaging material etc.)	Kg	5	200	1000
6.	Transportation Charges	-	-	-	1800
7.	Electricity and water usage charges @ Rs1000 per month	Month	3	1000	3000
8.	Miscellaneous expenditure (stationery, Bill book, receipt etc.)		L/S	-	500
	Total				65015
9.	Total Production in Kg.	Button Mushroom Compost			750kg 750 kg
10.	Sale of Production in Kg.	750kg @ Rs 120 Compost 750 kg @ Rs 10			90000 7500
			Total		97500
11.	Total Profit	97500 - 65015			32485
Total profit of Rs. 32485 after 3rd cycle is available to be distributed amongst the SHG members					

Cost Benefit Analysis Fourth Cycle

Sr no	Particular	Unit	Quantity/no	Rate	Amount in (Rs)
A	Depreciation 10% on Capital Cost	Month	3	10%	1515
B	Recurring Cost for 3 Months				
1.	Cost of Rented room 1 Hall(mushroom growing Unit) @ Rs 1800/Month. (3 month) =	Month	3	1800	5400
2.	Formalin containing 250 in each Bottle.	No	2 bottle	300	600
3.	Labour wages 88 days = (@ Rs 275/ day)=Rs 24200	Days	88	275	24200
4.	Button Mushroom Compost Bags 300 no @ Rs 90 per bag and other raw material including carriage	No	300	90	27000
5.	Packaging (packaging material etc.)	Kg	5	200	1000
6.	Transportation Charges	-	-	-	1800
7.	Electricity and water usage charges @ Rs1000 per month	Month	3	1000	3000
8.	Miscellaneous expenditure (stationery, Bill book, receipt etc.)		L/S	-	500
	Total				65015
9.	Total Production in Kg.	Button Mushroom Compost			750kg 750 kg
10.	Sale of Production in Kg.	750kg @ Rs 120			90000
		Compost 750 kg @ Rs 10			7500
		Total			97500
11.	Total Profit	97500 - 65015			32485
Total profit of Rs. 32485 after 4 th cycle is available to be distributed amongst the SHG members					

11. Summary of Economics

(a) Cost of Production in Four Circle

Drano	Particular	Amount in Rs.
1	Total Recurring Cost	
	(i) First Cycle Button Mushroom	66515
	(ii) Second Cycle Button Mushroom	65015
	(iii) Third Cycle Button Mushroom	65015
	(iv) Fourth Cycle Button Mushroom	65015
		65015
	Total	261560
2	Total Income	
	(v) First Cycle Button Mushroom	97500
	(vi) Second Cycle Button Mushroom	97500
	(vii) Third Cycle Button Mushroom	97500
	(viii) Fourth Cycle Button Mushroom	97500
		390000
	Total	390000
3.	Net income	128500

12. Benefit Cost Analysis(Yearly)

Sr. No	Particulars	Amount (Rs)
1	10% depreciation on capital cost (a)	6060
2	Recurring cost (b)	
2.1	Room Rent	21600
2.2	Labour	96800
2.3	Cost of compost bag	108000
2.4	Formalin	2400
2.5	Packaging (packaging material etc.)	4000
2.6	Transportation Charges	7200
2.7	Electricity and water usage	12000
2.8	Miscellaneous expenditure (stationery, Bill book, receipt etc.)	3500
	Total	261560
3	Total Production of Button Mushroom	3000
4	Sale value of Button Mushroom	360000
5	Sale value of compost	30000
	Total	390000
6	Total Profit= Sale value-(Capital cost + Recurring cost)= 390000-261560	128440

13. Fund flow in the group:

Sr.No.	Particulars	Total Amount (Rs)	Project contribution	SHG contribution
1	Total capital cost	60500	30250	30250
2	Total Recurring Cost	67200	-	67200
3	Trainings/capacity building/Skill up-gradation	70000	70000	
	Total outlay	197700	100250	97450

Note-

- **Capital Cost** - 50% of the total capital cost will be borne by the Project
- **Recurring Cost** -The entire cost will be borne by the SHG/CIG.
- **Trainings/capacity building/ skill up-gradation** -Total cost to be borne by the Project

14. Sources of funds and procurement:

Project support;	<ul style="list-style-type: none">• 50% of capital cost will be utilized for purchase of machineries including equipments.• Upto Rs. 1 lakh will be parked in the SHG bank account as a revolving fund.• Trainings/capacity building/skill up-gradation cost.	Procurement of machines/equipments will be done by respective DMU/FCCU after following all codal formalities.
SHG contribution	<ul style="list-style-type: none">• 50% of capital cost to be borne by SHG.• Recurring cost to be borne by SHG	

15. Remarks:

The forth coming vision of the Group is to enhance their income by value addition in the form of pickles, readymade soups, dried mushrooms; etc.

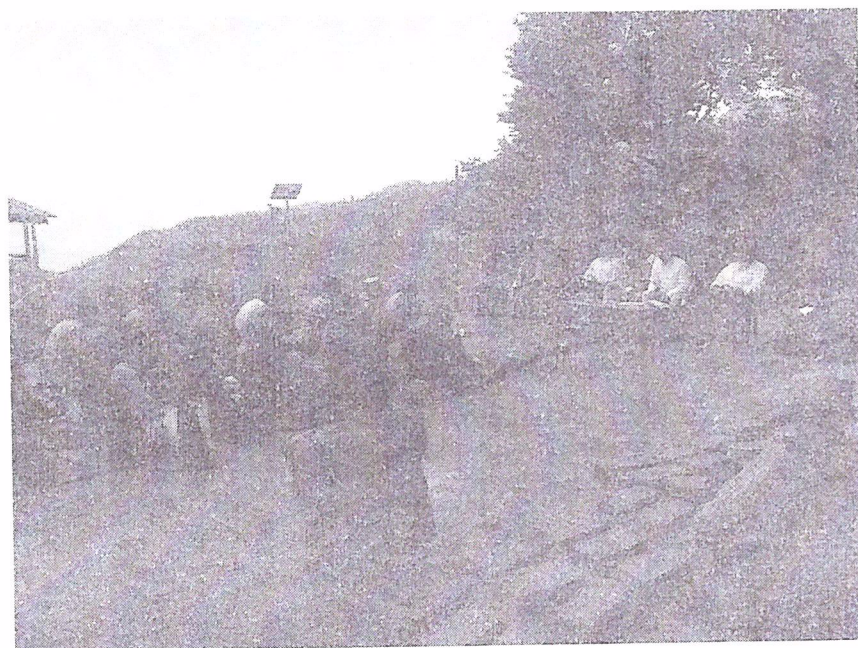
7 Surprising Mushroom Health Benefits for Your Skin, Brain, and Bones

"They contain many minerals, like selenium, potassium, copper, iron and phosphorus that are not often found in plant-derived foods."

1. Mushrooms may help keep you young.
2. Mushrooms can protect your brain as you age.
3. Mushrooms may boost your memory.
4. Mushrooms can help your heart health.
5. Mushrooms can assist in strengthening your bones.
6. Mushrooms will help give you energy
7. Mushrooms helps in fighting many diseases specially CANCER.

Delicacy of Mushrooms is special Nish, Tasty, Healthy and affordable.

Glimpses of Photos during Discussion on Business plan with SHG



The business plan of Self Help Group **SHG Kali Cutting and Tailoring** for the IGA of **Mushroom Cultivation** was presented before the general house of VFDS **Khalair** 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 SHG.

Shale um
General Secretary

President
President
V.F.D.S. Khalair
Teh. Nirmal Distt. Kullu H.P.

Treasurer
Treasurer
Secretary
V.F.D.S.
Teh. Nirmal Distt. Kullu H.P.

662
Forest Officer
Forest Range
Deerhar

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Forest Officer Anil*
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