

# District Profile

## CHITRAL



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## **1. Introduction:**

District Chitral is the north-most district of Pakistan, situated just across the border from Afghanistan. It is situated in between the succession range of Koh Hindukush. It is one of the largest district of NWFP provinces, which consist of two tehsils of Chitral and Mastuj. It is bounded on the north side with the Wakhan Patti of Afghanistan through Dorah pass, which is a link between Pakistan and Tajikistan, on the north-west by the Hindukush mountains, on the east side with Swat, on the north-east side with Gilgit through the Shandoor pass, on the west side with the Afghanistan province Nuristan through the Kalash valley, on the south side with the district Upper Dir through the Lowari pass, on the south-west side to the Afghan province Kunar through the Arrundu.

From ancient times, Chitral was an important point on the trade routes from northern Afghanistan (ancient Bactria) and the Tarim Basin to the plains of Gandhara (in northern Pakistan), and the region near Jalalabad, in eastern Afghanistan.

The people belong to over a dozen different cultures and speak more than 14 languages. As a result of its unique location and historical links with the Central Asia and Europe, the material and non-material culture of Chitral bears traces of Greeks, Iranians, Mongolian, Tatar and Turk influences. It remained an independent state for centuries with its own culture and language. In the late nineteenth century it became part of British India.

One of the famous products of Chitral is Chitrali Patti. Chitrali Patti, called “Shu” in Khowar, is a pure wool fabric, woven from entirely hand-spun yarn. It comes in natural shades of white, gray, black and brown, and the distinctive walnut-dyed, red.

Shandur is the highest polo ground in the world, the game of polo is played between Chitral and Gilgit in every year of July. Besides polo, Shandur Festivities have much to offer to the tourists, who start arriving almost a week before the three-day festivities that from July 7-9 each year. Nights are usually spent playing cards and dancing on local tunes. Music competitions are also held between groups from Chitral and Gilgit. During day the tourists go to nearby Phandar Valley for freshwater fishing.

Chitral is also home of the Kalash tribe who reside in three remote valleys southwest of Chitral Town. Between the town of Drosh and Chitral city, a track turns to the left from village of Ayun on Kunar river to the Kalash Valley, where these strange yet attractive people live in three villages of Rukmu, Mumret and Biri (called Rambur, Bumburet and Birir in local Kalashi language), south of Chitral. Bumburet (above right), the largest and the most picturesque valley of the Kafirs, is 40 kilometres from Chitral and is connected by a jeepable road.

The general population is mainly of the Kho people, who speak the Khowar language (or Chitrali).

## **2. History:**

Chitral remained an independent state for centuries with its own culture and language. In the late nineteenth century it became part of British India. It was a princely state in 1947, which acceded to Pakistan in same year. The rule of the Mehtar came to an end in 1954 and power was henceforth exercised by the political agent posted at Chitral. The state was merged into Pakistan in 1969. The recorded history of Chitral is divided into six epochs as follows:

**Iranian rule:** The Achemeanian Empire of Persia was extended to these regions during 400 BC. Its more than two thousand years since this empire receded but its supremacy was so strongly established that many Persian cultural traits are still in practice in Northern Areas as well as few parts of Chitral. Khowar, which is the native language of the local people (Khow), contains much borrowing from Persian. A festival on 21st March (Nouroz) the first day in Persian calendar still prevails in Chitral.

**Kushan rule:** The Kushan dynasty established its rule in this area in 200 AD. In the second century Kanishka the most powerful emperor of Kushan dynasty had extended his rule all over Northern India, probably as far as south Vindhyas.

**Chinese rule:** The Chinese extended their influence in the 4th century AD and remained in power until the 8th century. The rock inscription of Pakhtoridini near Maroi refers to Chinese rule. Another inscription in Barenis refers to the Kushans. It's also believed that the northern parts had embraced Islam by the end of 9th century when Arabs defeated Bahman, chief of the country.

**Kalash rule:** In the 11th century AD southern Chitral was invaded by the Kalash from Afghanistan, who occupied the country as far to the North as Barenis village, while the upper parts were under another chief Sumalik. Some Kalash Chiefs Rojawai, such as Nagar Shah and Bala sing ruled Southern Chitral from 11th to 13th centuries A.D.

**Rais rule:** In the beginning of 11th century Shah Nadir Rais occupied southern Chitral and defeated the Kalash. Shah Nadir Rais extended his dominion from Gilgit to the present southern boundaries of Chitral. Rais family ruled over Chitral for about three hundred years when Katura family succeeded them.

**Katur rule:** The Katur succeeded the Rais dynasty in 1595. Muhtaram Shah I was the founder of Kature rule in Chitral, whose descendants ruled over Chitral until 1969 when the State was merged as a district of NWFP. During the rule of Amirul Mulk in 1895, Umra Khan the chief of Jandool crossed the Lawari pass and invaded lower Chitral. As a result, there was fierce fighting in which the Mehtar of Chitral and British officers were besieged in Chitral fort for 42 days. Troops from Gilgit and Nowshera came to the rescue of the besieged fort and the British rule was extended over entire Chitral in April 1895. During the Pakistan movement there was a campaign in Chitral in favor of independence. May 1947 H.H. Muzafarul Mulk informed the Viceroy about his intention to join the new state of Pakistan. The accession instrument was signed on November 7, 1947.

## **Profile**

Total Area	:	14850 sq. kilometer
Population (2004 Census)	:	378,000
Literacy Rate	:	40.30 %

### **3. Economic Scenario of the District**

District Chitral is rich of different kinds of fruits i.e. apples, pears, apricot, mulberry, grapes etc. Apple and Apricot are the main fruits. These fruits are dried and send to the markets. Chitrali dry fruits are famous through out the country.

### **4. Economic Potential**

#### **4.1 Forestry**

Forests Play an Important Role in the Natural Beauty and income of the district.

Distribution of Coniferous Forest are:

RANGE	COMMERCIAL	NON-COMMERCIAL	TOTAL
CHITRAL	3,688	8,592	12,280
DROSH (north)	4,964	5,723	10,687
DROSH (south)	16,809	22,298	39,107
TOTAL	25,461	36,613	62,074

#### 4.2 Mineral Products

The people of the district also get benefits from the mineral product. The major minerals found in the district are Marbles and Serpentine. The production of Marble per year is 3066 ton and serpentine is 143 ton per year

There Area also many other mineral resources if they are properly exploited, Chitrali mineral deposits could be open up an additional sector of the economic activity in the area some of them are as follow.

#### 4.3 Fisheries

Most of the peoples also involve in the fishing activities. The total products are 32.600 M-ton per year which gives the total revenue of 166150 rupee.

#### 4.4 Livestock

To fulfill daily requirement like milk, meat, and other dairy products the people of the district have their own livestock's.

#### 4.5 Agriculture

Most of the populations of the district involve in the agricultural sector. Different agricultural products are grown in the district. The main crops of the district are Wheat, Maize, Rice, Bajra and Barley.

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Different kinds of vegetables are found in district Chitral. The mostly vegetables found in Chitral are potato, onion, brinjal, turnip, carrot, tomatoes and chilies.



#### 4.6 Handicrafts

Chitrali Patti of Chitral is famous through out the country. Patti is an Urdu word meaning “strip or bandage” and the word was probably borrowed by the British in India to describe the “Leggings made of cloth strips” used primarily by the military, and called puttees. Chitrali Patti, called “Shu” in Khowar, is a pure wool fabric, woven from entirely hand-spun yarn. It is usually produced in lengths of 20 yards, and between 12 to 14 inches wide. It comes in natural shades of white, gray, black and brown, and the distinctive walnut-dyed, red. The fabric is felted after weaving which ensures that as well as being light and warm, it is also wind-proof. Patti is spun and woven in parts of Northern Areas as well, including Hunza, where it is known as “Pattu”. These patties are exported to national and international markets.



## **5. Trade and Trade Centers**

### **a) Main Chitral Bazar.**

The most popular and main market place of the district is the Chitral city bazar, from where every kind of products and things of the daily use are exported to the different areas of the district.

### **b) Drosh Bazar**

It is also one of the main commercial area of the district that is situated at the lower area of the district, and about 45km from the main Chitral city. This area is situated near to the Afghanistan border i-e 32 km resulting in lots of products from Afghanistan sold here.

### **c) Garum Chashma Bazar**

It is also one of the main business area of the district, situated about 40 km away from the main city area, from where a large number of fruits and vegetables are supplied to the different part of the district.

### **d) Booni Bazar.**

Booni is situated about 76 km away from the main city bazar of the district. In this area a large number and different variety of fruits and dry fruits are found, which are supplied to the different part of district and country.

### **e) Mastuj Bazar**

It is also one of the main market area situated about 96km away from the main city area, from where also a large number of fruits and dry fruits are supplied to different area of the district and the country.



## **6. INVESTMENT OPPORTUNITIES:**

1. Trout Farming
2. Marble Mosaic Manufacturing Unit
3. Model Vegetable Farms (Walk-in Tunnel)
4. Honey Bee Keeping
5. Stitching Unit
6. Fruit Processing Plant.

## 6.1 Trout Farming (Aquaculture)

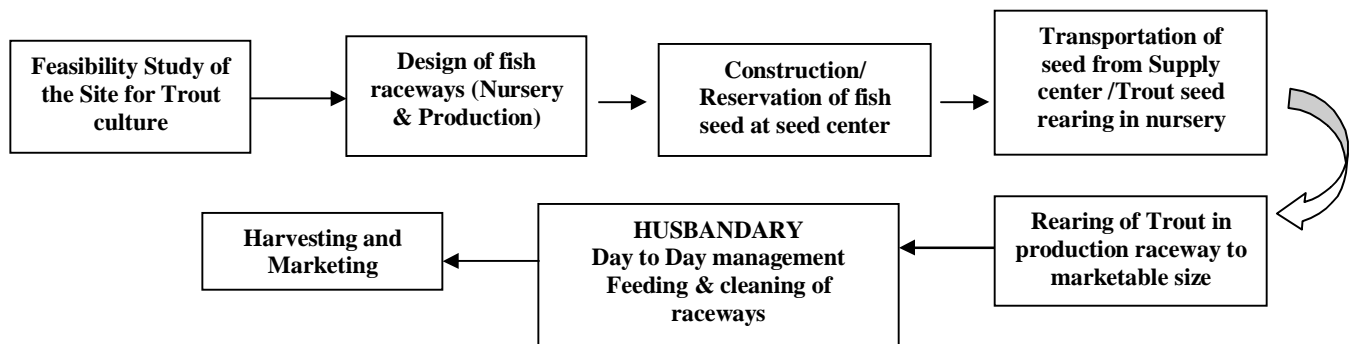
### INTRODUCTION

Aquaculture is an emerging industry in Pakistan; and is becoming of vital importance to food security and income generation potential in the rural area. The available technologies for the purpose are the variable size Concrete Raceways or earthen raceways in which trout rearing can be done.



Market Access and trade issues are key areas of concern for producers in terms of wealth creation and regional job. The trout fish is high demand and the production will be sold out on its availability within the local market. However, it is advisable to form cooperatives or group formation for the marketing of the product for better returns from sale of the trout production on the farms.

### Business Process Flow:



### (Micro Trout farm < 1,000 Kilogram)

A	GENERAL INFORMATION	
	Type of Farm	Small Scale
	Size of proposed raceway	640 sft space Duplix 40' x 8' x 3.5' with a common wall.
	Elevation of site from sea level	5000 to 6000 feet
	Water Availability	Stream/Spring water with minimum discharge of 12 -20 litres per Second during dry spell/season
	Water Temperature range	5-18 Celsius
	CONSTRUCTION	
	Cost of land	Land available with owner
	Size of pond	Provided above
	Mode of Construction	Concrete/Stone with steel reinforcement/earthen if site allows
	Working area around the pond	150 sft
	Water flow channel	From stream to pond & out flow to main stream

### Estimated Capital Fixed Cost

Item/Category	Units	Price	Quantity	Value
Site preparation				10,000
Concrete floor	Feet <sup>sq</sup>	30,000	2 Nos	60,000
Concrete walls	Feet <sup>sq</sup>	25,000	3	75,000
Reinforcing steel	Pair			15,000
Drain pipe	Pair			15,000
Screens	Pair			3,000
Drain channel				25,000
Water Channel assembly				15,000
Equipment	Lot			30,000
Machinery	One set			50,000
Cost of wooden frame with plastic gauze size 8'x3.5'				7,000
<b>Total cost</b>				<b>305,000</b>

### Operational Cost

Item/Category	Units	Price	Quantity	Value
Fish seed 4"	Each	5	5000	25,000
Standard Feed	Kilogram	30	2200	66,000
Medicine	Variable	-	-	6,000
Chemicals	Variable			3,000
<b>Total Variable Cost</b>				<b>100,000</b>

### Estimated Annual Revenue From Sale of One Crop.

Item/Category	Units	Price (Rs)	Quantity (Kg)	Value
Sale of Fish	Kilogram	300	1000	3,00,000
Operating cost	Per annum			1,00,000
Operating cost	6 months			50,000
<b>Total gross return</b>				<b>150,000</b>

Add:

- Variable cost of land rent per annum = 4,000
- After first operation the production cycle will be for each year by including Nursery unit at the farm.

Assumptions:

- Based on final weight of 250-300 grams/fish over a period of 18-20 months each crop.
- Nursery units to be established with the production raceways 10'x5'x3' including 6" free board
- Amount of feed consumed based on 2.2:1 food conversion rates.

## **6.2 Marble Mosaic Manufacturing Unit**

### **Introduction**

NWFP Pakistan is blessed with more than 100 colors of marble and granite and this probably make it unique in the country and other parts of the world. When properly applied, mosaic products permit to décor every type of ambience beautifully. Its look is sophisticated, warm, elegant and sumptuous.

The proposed project envisaged the manufacturing of marble mosaic in various sizes and their sales in the local and export market. However, it is pertinent to note that during discussions with the industry players it was found that more than 90% of the marble tiles manufactured locally are exported.

The proposed marble mosaic manufacturing unit will produce approximately 250×36 pieces of mosaic of different sizes like ½” thickness with 1” square, ¼” at ½” square daily.



### **Marble Mosaic Cutting Process**

For cutting mosaic into different sizes, dyes of different sizes are used. In these dyes, raw material which is marble tile of 12”×12”, 12” ×6”, 4” ×4”, 4” ×6” or 4” ×12” are placed for cutting by multi blade cutter.

## **PROJECT CAPACITY AND DEMAND**

- A) Production capacity of the proposed Mosaic pieces cutting unit with single shift is estimated at 6000 sq. feet in one month with 60% capacity utilization. Demand for the product is manifold. If only these mosaic pieces are sold in the market here are approximately 12-15 entrepreneurs who demand 1000 to 1500 feet each for making mosaic products.
- B) There is a sizeable demand of finished products in all the categories mentioned. There are few mosaic units in Pakistan while no such in N.W.F.P.

### **Raw Material Sourcing**

Marble, Limestone, onyx and Granite are mostly found in NWFP and Balochistan. It is estimated that there are more than 3000 processing units which are the direct source of the supply of raw material. The raw material can be in the shape of tiles of various sizes like 12”×12” standard size or other small sizes and even the factory waste. In the N.W.F.P. marble products (tiles) ranging from white to black colors are cut, while some other colors like pink are also cut rarely. This colored raw material (tiles) can be purchased from processing units in N.W.F.P.

## **PROPOSED PRODUCT MIX**

Broadly the product can be divided into two categories:

A- Making and selling of marble mosaic pieces.

B- Selling of final finished products in the following categories:

**1. Medallions.**

**2. Flooring.**

**3. Sheets.**

**4. Borders.**

## **LAND & BUILDING REQUIREMENT FOR SITE DEVELOPMENT**

The Marble tiles manufacturing unit is estimated to require a total area of 500 sq. yards (approximately 4500 sq. ft) plot or a rental premise of this measurement

## **PROJECT INVESTMENT**

The cost of the project including land requirement, building size, machines and Equipment and utilities, personnel requirement is given below:

<b>I</b>	<b>Cost of the Project</b>	<b>(Rs. in Million)</b>
	Building Construction Cost	= Assumed on rental basis
	Machines and Equipment	= 2685,000
	Electric Transformer	= 300,000
	Working Capital	= 3207,350
	<b>Total</b>	<b>= 6,442,350</b>
<b>II</b>	<b>Utilities</b>	
	Requirement of Electricity	= 100 KW
<b>III</b>	<b>Staff requirement</b>	= 43

A total of Rs. 6.4 million (approximately) is estimated to be the cost of the project. The working capital requirement is estimated around Rs 3.2 million, while Rs. 3.0 million worth of machinery furniture and other tools are required to make the unit operational. Keeping the high variation in land cost and building construction in consideration, the premises is assumed to be hired on rental basis.

### 6.3 Model Vegetable Farms (Walk-in Tunnel)

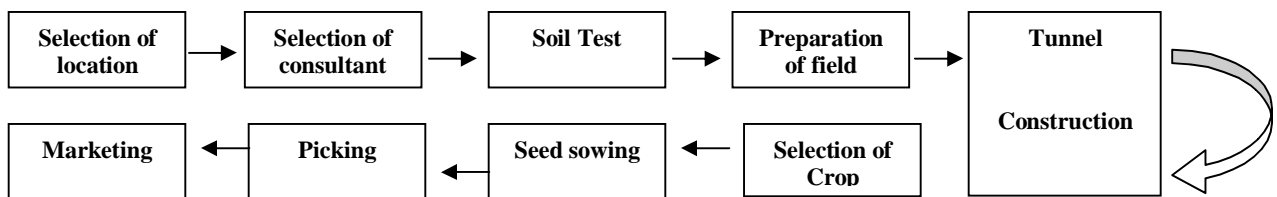
#### Introduction

This artificial method of plastic tunnels, specifically **walk-in Tunnel** farming, are lower than the high tunnels but they are gaining popularity as they provide high yield compared to low tunnels. The tunnel is suitable for growing tomatoes, cucumbers, sweet pepper and hot pepper.



These tunnels will be 190 feet long, 6 – 8 feet high and 12 feet wide. The tunnel is built by pipe material of 20-mm diameter 18 feet length, and round shaped mild steel iron rods of 12-mm diameter and 2 feet length. This tunnel structure will then be covered by 0.06-mm thick and 20 feet wide plastic sheet. A total of around **13** tunnels can be constructed on an acre of land.

#### Process Flow:



#### Financials:

Total cost of the Project is estimated to be Rs. 200,000 for one model farm and the total cost for 5 farms would be around 1 Million excluding the cost of land/rentals, expenses of land preparation, hybrid seeds and insecticides, which will be born by the private sector partner.

S.No.	Description	Cost/farm (Rs.)	Total (Rs.)
1.	Structure	100,000	500,000
2.	Consultancy and Training program	50,000	250,000
3.	Equipment/ Machinery rentals	25,000	125,000
4.	Labor charges	25,000	125,000
	<b>Total</b>	<b>200,000</b>	<b>1,000,000</b>

## 6.4 Honey Bee Keeping

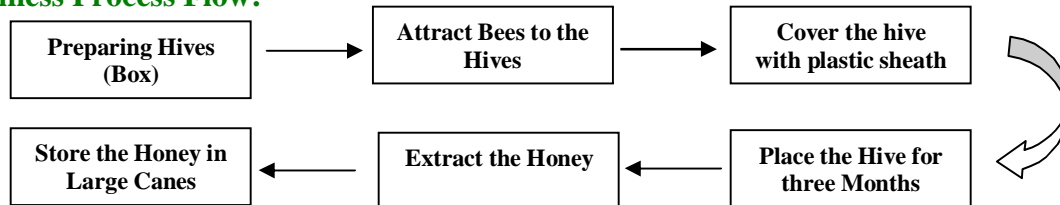
### Introduction

Honey is a sweet substance produced by honey bees from the nectar of blossoms. Honey consists essentially of different sugars, predominantly glucose and fructose etc. Honey, a pure, natural sweetener prepared by bees from nectar collected from wild and cultivated flowers, was the first sweetener known to man.



Honey Cluster of NWFP is spread over in different districts of the province. The belts of Swat, Naran, Kaghan and southern districts like Peshawar, Mardan, Karak, Kohat, Haripur, FATA and other adjoining areas have tremendous potential for fostering the honey-industry. The total numbers of the bee keepers entrepreneurs (farm) in NWFP is about 3500 and the direct employment in these farms are 17500 people.

### Business Process Flow:



### Tools & Machinery

No.	Equipment	Quantity	Price
1.	Honey Extractor Machine	1	3,500
2.	Monkey Cap	3	450
3.	Smoker	1	150
4.	Queen catcher	2	160
5.	Swarming catch basket	2	300
6.	Spray Bottle Plastic	3	210
7.	Gloves	3	210
8.	Fork	4	320
	<b>Total</b>	<b>19</b>	<b>5,300</b>

### Cost of Project: per annum

No.	Particulars	Price
1.	Colonies of bees @ Rs.5000 - 10 frames	250,000
2.	Wooden Box with frame @ Rs.550 each	27,500
3.	Human Resource (3 personnel)	240,000
4.	Foundation sheet @ Rs.25 each	12,500
5.	Tools & Machinery (as per list above)	5,300
6.	Feeding of Bees	60,000
7.	Transportation Cost	10,000
8.	<b>Total Investment</b>	<b>605,300</b>
9.	Return on capital Employed (after 1 <sup>st</sup> year)	445,100
10.	<b>Profit</b>	<b>135,100</b>
11.	<b>Rate of Return</b>	<b>23%</b>



## 6.5 Stitching Unit

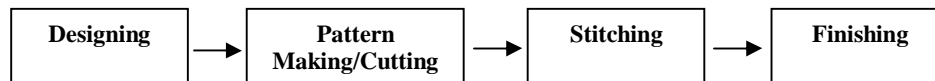
Clothing is the visual demonstration of social needs of people wearing it. As an enterprise it has huge potential on small and medium levels. It is a desirable business needed in rural as well as in urban areas. It is a feasible low investment opportunity with better returns.



### Production Capacity

Daily 8 suits will be stitched, but the production will be increased with the passage of time, annual production will be of 2496 suits.

### Production Process:



### Furniture & Machinery:

S. No	Name of Item	Qty. No.	Price per unit	Cost in Rs.
1	Single Needle Stitching Machine	3	5,000	15,000
2	Over lock Machine	1	7,000	7,000
3	Accessories (Scissors, iron, measuring tap etc.)			10,000
4	Fixture and furniture			10,000
	<b>Total</b>			<b>42,000</b>

### Manpower Requirement:

Title	Salary per year in Rs.
Master tailor @Rs. 4000 per month	36,000
Tailors @Rs. 4000x2 per month	72,000
Helper @Rs. 2500 per month	30,000
<b>Total</b>	<b>138,000</b>

### Cost Analysis: Basis: 2496 suits per annum:

S. No	Description	Amount in Rs.
1	Rental Building @ Rs. 2000 per month	24,000
2	Salaries (shown from above graph)	138,000
3	Machinery and equipment	32,000
4	Fixture and furniture	10,000
5	Raw Material (Tags, buttons, thread, plastic bags etc.)@ Rs. 40 per suit	99,840
6	Utilities expense @ 1500 per month	18,000
7	Working capital	279,840
8	Total Investment	321,840
9	Revenues @ Rs.150 x 2496	374,400
10	Profit Per Annum	52,560
11	<b>Rate of Return</b>	<b>14%</b>

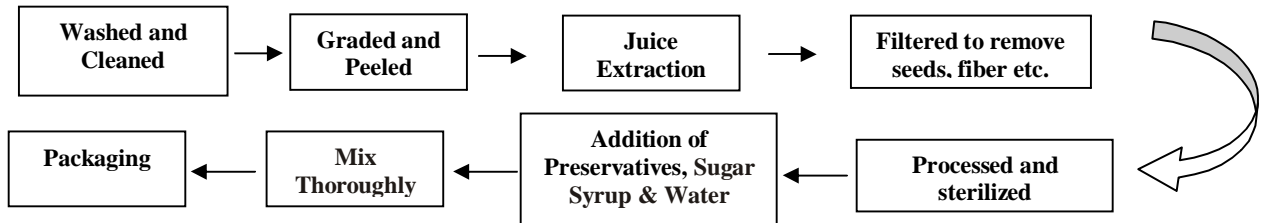
## 6.6 Fruit Processing Plant

### Introduction

Pakistani fruits have huge demand in the international market due to its rich flavor, aroma, and health value, i.e., nutrients and minerals contents. It has been observed that in order to enter into the international markets with longer shelf life, good quality of fruit will require physical infrastructure facilities like modern processing and logistics.

There are many methods like dehydration, preparation of pulp or quash or syrup etc. This note considers manufacturing of syrup from pulp. The project involves processing of fruit to syrup.

### Processing Process:



Weight and process loss is on an average 35% to 40%.

### Capital Inputs

#### Land and Building

A plot of land of around 200 sq.mtrs. with built-up area of 100 sq.mtrs. would be sufficient. Land may cost Rs. 75,000/- whereas cost of construction could be Rs. 2.50 lakh.

#### Manpower Requirements

Particulars	Nos.	Monthly Salary (Rs.)	Total Monthly Salary (Rs.)
Machine Operator	1	12,000	144,000
Semi-skilled Workers	2	6,000	144,000
Helpers	4	4,000	192,000
<b>Total</b>	<b>7</b>	<b>22,000</b>	<b>480,000</b>

### Machinery & Equipments:

The unit will need the following equipments:

Item	Qty.	Price (Rs.)
Fruit Washing Tanks	1	10,000
Juice Extractors	2	130,000
Steam-jacketed Kettle	1	50,000
Stirrer	1	30,000
Boiler	1	80,000
Bottle Washing, Filling and Capping Machine	1	130,000
Testing Equipments, Weighing scales etc.	--	70,000
<b>Total</b>	<b>7</b>	<b>500,000</b>

**Cost of Project: Per annum**

<b>No.</b>	<b>Particulars</b>	<b>Price</b>
12.	Land	135,000
13.	Building Construction	500,000
14.	Machinery	500,000
15.	Furniture and Fixture	100,000
16.	HR	480,000
17.	Utilities	100,000
	<b>Total</b>	<b>1,815,000</b>