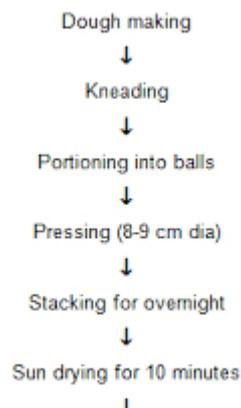


# गृह उद्योग Papad Making Unit

## Introduction



Papad making is a traditional Indian culinary art that involves crafting thin, crispy wafers from a variety of flours, primarily lentil or rice flour. The process typically begins with mixing the flour with water, salt, and spices to form a dough. This dough is then shaped into small balls and flattened into thin discs. These discs are left to dry in the sun or air-dried, and finally, they are cooked by deep-frying or toasting over an open flame until they become crispy and flavorful. Papads are a beloved snack and accompaniment to meals across India, often served with chutneys, pickles, or as a topping for various dishes.



The art of papad making is not only a culinary tradition but also a source of livelihood for many families in India. Papads are made in various shapes, sizes, and flavors, each region adding its unique twist to the recipe. Some popular varieties include Urad Dal Papad, Moong Dal Papad, and Rice Papad.

## **Market Potential**

The papad market in India is growing at a rate of 10% per year. The exports of papad are increasing by more than 30% annually. In the next decade, the market is projected to reach at least INR 1,500 crore.

The Compound Annual Growth Rate (CAGR) of the papad making business in India is estimated to be around 5-7%. This growth is driven by several factors, including:

- **Increasing demand:** Papads are a staple snack in India and their demand is constantly growing due to their affordability, versatility, and long shelf life.
- **Growing population:** The increasing population of India is contributing to the rising demand for food products, including papads.
- **Urbanization:** With more people moving to urban areas, the demand for packaged and processed foods, including papads, is increasing.
- **Rising disposable incomes:** As people's incomes rise, they are spending more on food, including snacks and processed foods.
- **Growing exports:** Papads are increasingly being exported to other countries, which is contributing to the growth of the industry.

**However, the papad making business also faces some challenges, such as:**

- **Competition:** The papad making industry is highly competitive, with many small and large players operating in the market.
- **Price fluctuations:** The price of raw materials, such as lentils and rice, can fluctuate, which can impact the profitability of the business.
- **Changing consumer preferences:** Consumers are becoming more health-conscious, which is leading to a demand for healthier and more nutritious snacks.

Overall, the papad making business in India is a growing industry with good potential for future growth. However, businesses need to be aware of the challenges and opportunities in the market to succeed.

## **Raw Material Description**

Here The primary raw materials required to make papad are:

- **Pulses:** The most common pulse used is Urad Dal (black gram), but other varieties like Moong Dal (green gram) and rice flour are also used.



Rice flour

- **Spices:** A blend of spices is added for flavor, which may include red chili powder, cumin powder, asafoetida, and black pepper.



Red chili powder

- **Salt:** Salt is essential for taste and preservation.



- **Water:** Water is used to mix the dough.
- **Oil (for frying):** While optional, oil is used for deep-frying the papad to make it crispy.



In addition to these primary ingredients, some manufacturers may also use additives like sodium bicarbonate (baking soda) to improve the texture and shelf life of the papad.

## **Plant & Machinery Details**

The The plant and machinery required to make papads depend on the scale of production and the level of automation desired. Here are some essential equipment:

- **Mixer:** Used to mix the flour, spices, and water to form a smooth dough.



- **Sheeter:** Flattens the dough into thin sheets, ensuring uniform thickness.



- **Cutting Machine:** Cuts the dough sheets into round or square papads.



- **Drying Chamber:** Used to dry the papads evenly and quickly, especially during humid weather.



- **Frying Pan or Vats:** Used for deep-frying the papads to make them crispy.



- **Packaging Machine:** Used to pack the papads in airtight containers or packets.



In addition to these machines, you will also need basic equipment like weighing scales, mixing bowls, trays, and storage containers.

For small-scale production, some of these machines can be manual or semi-automatic. However, for large-scale production, fully automatic machines are preferred for efficiency and productivity.

The choice of machinery also depends on the type of papad being produced. For example, if you are making rice papads, you may need a different type of sheeter and cutting machine than for lentil papads.

It's important to choose high-quality machinery from reputable manufacturers to ensure durability, efficiency, and safety. You can also consider leasing or renting machinery, especially if you are starting on a small scale.

*By investing in the right plant and machinery, you can streamline your papad production process, improve quality, and increase your output.*

*Sources and related content*

# **Manufacturing Process**

The The papad-making process involves several steps, from preparing the dough to drying and frying the papads. Here's a general overview:

## **1. Raw Material Preparation:**

- **Cleaning and Sorting:** The raw materials, such as lentils (urad dal, moong dal) or rice flour, are cleaned to remove impurities and sorted to ensure quality.
- **Grinding:** The lentils or rice are ground into a fine flour using a mill.

## **2. Dough Preparation:**

- **Mixing:** The flour is mixed with water, salt, and spices (red chili powder, cumin powder, asafoetida, etc.) to form a smooth dough.
- **Kneading:** The dough is kneaded thoroughly to ensure even distribution of ingredients and to develop gluten.

## **3. Shaping:**

- **Ball Formation:** The dough is divided into small balls of uniform size.
- **Flattening:** The balls are flattened into thin, round discs using a rolling pin or a specialized papad-making machine.

## **4. Drying:**

- **Sun Drying:** Traditionally, the papads are sun-dried for several hours until they become semi-dry and flexible.
- **Mechanical Drying:** Modern units use drying chambers with controlled temperature and humidity to speed up the drying process.

## **5. Frying (Optional):**

- **Deep Frying:** Papads are deep-fried in hot oil until they become crispy and golden brown.

- **Toasting:** Alternatively, papads can be toasted over an open flame or in a toaster.

#### **6. Cooling and Packaging:**

- **Cooling:** The fried or toasted papads are cooled to room temperature.
- **Packaging:** The cooled papads are packed in airtight containers or packets to maintain freshness and prevent breakage.

#### **Additional Considerations:**

- **Hygiene:** Maintaining cleanliness throughout the production process is crucial to ensure food safety.
- **Quality Control:** Regular quality checks are conducted to monitor the size, thickness, color, and taste of the papads.
- **Storage:** Papads should be stored in a cool, dry place to maintain their crispiness and prevent spoilage.

By following these steps and maintaining strict quality control, papad manufacturers can produce high-quality, delicious papads that are popular among consumers.

**PROJECT AT A GLANCE - TOP SHEET**

<b>1</b>	Name of the Beneficiary	<b>XXXXXX</b>		
<b>2</b>	Constitution(Legal Status)	<b>Individual</b>		
<b>3</b>	Father/Spouse Name	XXXXXXX		
<b>4</b>	Unit Address	XXXXXX		
		Taluk/Block:	<b>XXXXXX</b>	
		District :	<b>XXXXXX</b>	
		Pin:	<b>XXXXXX</b>	State: <b>XXXXXX</b>
		E-Mail :	<b>XXXXXX</b>	
		Mobile	<b>XXXXXX</b>	
<b>5</b>	Cost of Project	:	<b>Rs.</b>	<b>5.72 in Lakhs</b>
<b>(i)</b>	Plant & Machinery			<b>3.00 in Lakhs</b>
<b>(ii)</b>	Furniture & Fixtures			<b>0.50 in Lakhs</b>
<b>(iii)</b>	Working Capital Required			<b>2.22 in Lakhs</b>
<b>6</b>	Means of Finance	:	<b>Rs.</b>	
<b>(i)</b>	Term Loan			<b>3.15 in Lakhs</b>
<b>(ii)</b>	Working Capital			<b>2.00 in Lakhs</b>
<b>(iii)</b>	Own Capital			<b>0.57 in Lakhs</b>
				<b>5.72 in Lakhs</b>
<b>7</b>	Debt Service Coverage Ratio	:		<b>4.60</b>
<b>8</b>	Break Even Point	:		54.09%
<b>9</b>	Plant & Machinery	:		Mixer, Sheeter, Cutting Machine, Drying Chamber, Frying Panor Vats, : Packaging Machine
<b>10</b>	Major Raw materials	:		Pulses, Rice Flour, Water, Spices, Salt, Oil etc
<b>11</b>	Employment	:		6
<b>12</b>	Power Requirement	:		3.00
<b>13</b>	Name of the project / business activity	:		गृह उद्योग Papad Making Unit

## **PROJECTED CASH FLOW STATEMENT**

<b>PARTICULARS</b>	<b>YEAR-I</b>	<b>YEAR-II</b>	<b>YEAR-III</b>	<b>YEAR-IV</b>
<b><u>SOURCES OF FUND</u></b>				
Capital	0.57	-	-	-
Reserve & Surplus	3.02	3.71	4.51	4.91
Depriciation & Exp. W/off	0.50	0.43	0.37	0.31
Increase in Cash Credit	2.00	-	-	-
Increase In Term Loan	3.15	-	-	-
Increase in Creditors	0.36	0.06	0.06	0.06
Increase in Provisions	0.50	0.03	0.03	0.03
<b>TOTAL :</b>	<b>10.10</b>	<b>4.22</b>	<b>4.95</b>	<b>5.30</b>
<b><u>APPLICATION OF FUND</u></b>				
Increase in Fixed Assets	3.50	-	-	-
Increase in Stock	0.39	0.06	0.06	0.06
Increase in Debtors	2.18	0.46	0.42	0.45
Repayment of Term Loan	0.63	0.84	0.84	0.84
Drawings	1.00	2.50	3.50	4.50
<b>TOTAL :</b>	<b>7.69</b>	<b>3.86</b>	<b>4.82</b>	<b>5.85</b>
Opening Cash & Bank Balance	-	2.41	2.77	2.90
Add : Surplus	2.41	0.36	0.13 -	0.55
Closing Cash & Bank Balance	<b>2.41</b>	<b>2.77</b>	<b>2.90</b>	<b>2.35</b>

## PROJECTED BALANCE SHEET

PARTICULARS	YEAR-I	YEAR-II	YEAR-III	YEAR-IV
<b><u>SOURCES OF FUND</u></b>				
Capital Account	-	2.59	3.80	4.80
Add: Addition	0.57			
Add : Net Profit	3.02	3.71	4.51	4.91
	3.59	6.30	8.30	9.71
Less : Drawings	1.00	2.50	3.50	4.50
<b>NET OWN FUNDS</b>	<b>2.59</b>	<b>3.80</b>	<b>4.80</b>	<b>5.21</b>
Term Loan	2.52	1.68	0.84	-
Cash Credit	2.00	2.00	2.00	2.00
Sundry Creditors	0.36	0.42	0.48	0.54
Provisions & Other Liab	0.50	0.53	0.55	0.58
<b>TOTAL :</b>	<b>7.97</b>	<b>8.43</b>	<b>8.67</b>	<b>8.33</b>
<b><u>APPLICATION OF FUND</u></b>				
<b>Fixed Assets</b>	3.50	3.50	3.50	3.50
Less : Depreciation	0.50	0.93	1.29	1.61
Net Fixed Assets	3.00	2.57	2.21	1.89
<b>Current Assets</b>				
Sundry Debtors	2.18	2.63	3.05	3.50
Stock in Hand	0.39	0.45	0.51	0.58
Cash and Bank	2.41	2.77	2.90	2.35
<b>TOTAL :</b>	<b>7.97</b>	<b>8.43</b>	<b>8.67</b>	<b>8.33</b>
	-	-	-	-

## **PROJECTED PROFITABILITY STATEMENT**

<b>PARTICULARS</b>	<b>YEAR-I</b>	<b>YEAR-II</b>	<b>YEAR-III</b>	<b>YEAR-IV</b>
Capacity Utilisation %	<b>75%</b>	<b>80%</b>	<b>85%</b>	<b>90%</b>
<b><u>SALES</u></b>				
Gross Receipts/Sale	21.75	26.32	30.54	35.03
<b>Total</b>	<b>21.75</b>	<b>26.32</b>	<b>30.54</b>	<b>35.03</b>
<b><u>COST OF SALES</u></b>				
Purchase & Consumables	10.88	12.63	14.35	16.12
Electricity Expenses	2.18	2.63	3.05	3.50
Other Direct Expenses	1.31	1.58	1.83	2.10
<b>Cost of Production</b>	<b>14.36</b>	<b>16.84</b>	<b>19.24</b>	<b>21.72</b>
<b>Add: Opening Stock /WIP</b>	<b>-</b>	<b>0.39</b>	<b>0.45</b>	<b>0.51</b>
<b>Less: Closing Stock /WIP</b>	<b>0.39</b>	<b>0.45</b>	<b>0.51</b>	<b>0.58</b>
<b>Cost of Sales</b>	<b>13.97</b>	<b>16.78</b>	<b>19.18</b>	<b>21.66</b>
<b>GROSS PROFIT</b>	<b>7.78</b>	<b>9.54</b>	<b>11.36</b>	<b>13.38</b>
	<b>35.78%</b>	<b>36.24%</b>	<b>37.20%</b>	<b>38.18%</b>
Salary to Staff	3.26	3.59	3.95	4.34
Selling & Adm Expenses Exp.	0.44	1.32	2.14	3.50
Depriciation	0.50	0.43	0.37	0.31
Interest on Term Loan	0.35	0.28	0.18	0.09
Interest on Working Capital	0.22	0.22	0.22	0.22
<b>TOTAL (D+G)</b>	<b>4.76</b>	<b>5.83</b>	<b>6.86</b>	<b>8.47</b>
<b>NET PROFIT</b>	<b>3.02</b>	<b>3.71</b>	<b>4.51</b>	<b>4.91</b>
	<b>13.88%</b>	<b>14.09%</b>	<b>14.75%</b>	<b>14.00%</b>
<b>CASH ACCRUALS</b>	<b>3.52</b>	<b>4.14</b>	<b>4.87</b>	<b>5.22</b>

## COMPUTATION OF PRODUCTION

Manufacturing Capacity per day	100	Packets (Containing 20 pcs)
No. of Working Hour	10	
No of Working Days per month	25	
No. of Working Days per annum	300	
Total Production Per Annum	30,000	Packets

Year	Capacity Utilisation	Packets No. of Units
YEAR-I	75%	22,500
YEAR-II	80%	24,000
YEAR-III	85%	25,500
YEAR-IV	90%	27,000

## COMPUTATION OF SALE

Particulars	YEAR-I	YEAR-II	YEAR-III	YEAR-IV
Op Stock	-	750	825	878
Production	22,500	24,000	25,500	27,000
	22,500	24,750	26,325	27,878
Less : Closing Stock	750	825	878	929
Net Sale	21,750	23,925	25,448	26,948
Selling Price per Packet	100.00	110.00	120.00	130.00
<b>Net Sale (in lacs)</b>	<b>21.75</b>	<b>26.32</b>	<b>30.54</b>	<b>35.03</b>

## COMPUTATION OF DEPRECIATION

Description	Plant/Machinery Equipments	Furniture	TOTAL
Rate of Depreciation	<b>15.00%</b>	<b>10.00%</b>	
<b>Opening Balance</b>	-	-	-
Addition	3.00	0.50	3.50
	3.00	0.50	3.50
Less : Depreciation	0.45	0.05	0.50
WDV at end of Year-1	2.55	0.45	3.00
Additions During The Year	-	-	-
	2.55	0.45	3.00
Less : Depreciation	0.38	0.05	0.43
WDV at end of Year II	2.17	0.41	2.57
Additions During The Year	-	-	-
	2.17	0.41	2.57
Less : Depreciation	0.33	0.04	0.37
WDV at end of Year III	1.84	0.36	2.21
Additions During The Year	-	-	-
	1.84	0.36	2.21
Less : Depreciation	0.28	0.04	0.31
WDV at end of Year IV	1.57	0.33	1.89

## TERM LOAN

Year	Opening Balance	Repayment	Closing Balance	Interest @ 11%
1st	3.15	0.63	2.52	0.35
2nd	2.52	0.84	1.68	0.28
3rd	1.68	0.84	0.84	0.18
4th	0.84	0.84	0.00	0.09

<b>BREAK EVEN POINT &amp; RATIO ANALYSIS</b>				
<b>Particulars</b>	<b>1st Year</b>	<b>2nd Year</b>	<b>3rd Year</b>	<b>4th Year</b>
Fixed Cost	5.74	6.80	7.83	9.06
Variable Cost	13.38	15.87	18.27	21.13
Total Cost	19.12	22.67	26.09	30.19
Sales	21.75	26.32	30.54	35.03
Contribution (Sales-VC)	8.37	10.45	12.27	13.90
Capacity Utilisation	75%	80%	85%	90%
B.E.P in %	51.42%	52.09%	54.22%	58.65%
Break Even Sales in Rs.	11.18	13.71	16.56	20.55
Net Profit Ratio	13.88%	14.09%	14.75%	14.00%

<b>CALCULATION OF D.S.C.R</b>				
<b>PARTICULARS</b>	<b>YEAR-I</b>	<b>YEAR-II</b>	<b>YEAR-III</b>	<b>YEAR-IV</b>
<b>CASH ACCRUALS</b>	3.52	4.14	4.87	5.22
Interest on Term Loan	0.35	0.28	0.18	0.09
Total	3.87	4.41	5.06	5.31
<b>REPAYMENT</b>				
Instalment of Term Loan	0.63	0.84	0.84	0.84
Interest on Term Loan	0.35	0.28	0.18	0.09
Total	0.98	1.12	1.02	0.93
<b>DEBT SERVICE COVERAGE RATIO</b>	<b>3.96</b>	<b>3.95</b>	<b>4.93</b>	<b>5.70</b>
<b>AVERAGE D.S.C.R.</b>			<b>4.60</b>	