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**Aman Kumar Gupta**  
Department of Agri-Business  
and Rural Management, College  
of Agriculture, Indira Gandhi  
Krishi Vishwavidyalaya, Raipur,  
Chhattisgarh, India

**Ajay Kumar Gauraha**  
Department of Agri-Business  
and Rural Management, College  
of Agriculture, Indira Gandhi  
Krishi Vishwavidyalaya, Raipur,  
Chhattisgarh, India

**Sanjay Kumar Joshi**  
Department of Agri-Business  
and Rural Management, College  
of Agriculture, Indira Gandhi  
Krishi Vishwavidyalaya, Raipur,  
Chhattisgarh, India

**Hulas Pathak**  
Department of Agri-Business  
and Rural Management, College  
of Agriculture, Indira Gandhi  
Krishi Vishwavidyalaya, Raipur,  
Chhattisgarh, India

**Rahul Dhurandhar**  
Department of Agri-Business  
and Rural Management, College  
of Agriculture, Indira Gandhi  
Krishi Vishwavidyalaya, Raipur,  
Chhattisgarh, India

**Siya Ram**  
Department of Agri-Business  
and Rural Management, College  
of Agriculture, Indira Gandhi  
Krishi Vishwavidyalaya, Raipur,  
Chhattisgarh, India

**Corresponding Author:**  
**Aman Kumar Gupta**  
Department of Agri-Business  
and Rural Management, College  
of Agriculture, Indira Gandhi  
Krishi Vishwavidyalaya, Raipur,  
Chhattisgarh, India

## Cost and return of all products of Koriya agro producer company limited in Koriya district of Chhattisgarh

**Aman Kumar Gupta, Ajay Kumar Gauraha, Sanjay Kumar Joshi, Hulas Pathak, Rahul Dhurandhar and Siya Ram**

### Abstract

An overall the total cost, total return, net return and Input-Output ratio of per year production of all products of Koriya agro producer company limited calculated was 52000, 64000, 12000, 1.23 (Citronella oil), 45750, 53250, 7500, 1.16 (Lemon grass oil), 486000, 530000, 44000, 1.21 (Ghee), 82000, 100000, 18000, 1.14 (Desi Arhar Dal), 32400, 40000, 7600, 1.23 (Desi Masoor Dal), 17600, 20000, 2400, 1.13 (Detergent Powder Premium), 63000, 74700, 11700, 1.18 (Turmeric Oil), 220000, 256000, 36000, 1.16 (Honey), 12500, 17500, 5000 1.4 (Desi Kulthi Dal), 55200, 71200, 16000, 1.28 (Desi Chana Dal), 441000, 711000, 180000, 1.61 (Scented Jeeraphool Rice), 45000, 53250, 8250, 1.18 (Palmarosa Oil), 180000, 238000, 58000, 1.32 (Mustard Oil), 1800, 3000, 1200, 1.66 (Lemon Grass Herbal Tea), 58100, 72800, 14700, 1.25 (Desi Urad Dal), 40500, 54500, 14000, 1.34 (Desi Moong Dal). The study showed that the input: output ratio is greater than 1 in all major business activities.

**Keywords:** Farmer producer company, farmer producer organization, cost and return, total cost, total return, input: output ratio

### Introduction

Farmers Producer Companies can be compared as a cross between a cooperative society and a private company. The producer business concept was developed to help smallholders become a part of contemporary supply networks while avoiding expenses associated with transactions and coordination and gaining the advantages of scale. They were overseen by experts, financed by the government or donor organizations, and operated and owned by farmers. Organization and group effort can help to strengthen farmers' competitiveness and their advantage in new market prospects in this climate of growing instability and competition. After the Indian firms Act (1956) needed to be modified in order to accommodate section 9A, farmer producer firms in India became a legally recognized organization in 2003. Farmers' producer cooperatives can be compared to a cross between cooperative societies and private businesses. The producer-company concept aims to merge the effectiveness of a business with the cooperative spirit of older cooperatives.

Located in Chhattisgarh, Koriya Agro Producer Company Limited is a private limited company. The Corporate Identification Number (CIN) of Koriya Agro Producer Company Limited is U01100CT 2016 PTC007218 and the registration number is 007218. The company was registered on Ministry of Corporate Affairs (MCA) on April 11, 2016. It is registered with the Registrar of Companies in Chhattisgarh, India, and is categorized as a non-government corporation. The paid-up capital and authorized share capital of Koriya Agro Producer Company Limited, respectively, are Rs. 10,000,000. It hopes to work in agriculture, hunting, and related fields throughout all of India. The directors of Koriya Agro Producer Company Limited are Santosh Kumar Sahu, Ajay Kumar Singh, Faiyaj Alam, Manjay, and Ghupat Singh.

### Materials and Methods

In this study the following methodologies were used mainly selection of study area, sampling design and methodology, Method of enquiry & data collection, and analytical tools & framework.

**Sampling design and methodology**

**Selection of district**

The Chhattisgarh state has 33 districts. Out of 33 districts Koriya district was selected purposively because there are active Farmer Producer Company. In which Koriya district having Koriya Agro Producer Company Limited.

**Selection of blocks**

Koriya district having 5 blocks namely Baikunthpur, Bharatpur, Khadgawana, Manendragarh and Sonhat. Out of 5 blocks of Koriya district, Baikunthpur block was selected purposively.

**Method of enquiry and data collection**

In this study the data related to business performance of selected Farmer Producer Company will be collected from Koriya District of Chhattisgarh.

**Data Sources:** Both primary and secondary data were collected for the study.

**Primary data:** Primary data was collected from the farmers through interview schedule, questionnaire etc.

**Secondary data:** Secondary data was collected from the internet sources and website of FPC.

**Analytical tools and framework**

This includes the detail analysis of the individual enterprise as well as company as a whole, the various measures used for the analysis which is given as follows:

**Business analysis**

**a) Total input**

Value of Purchasing Material (seed, fertilizer and others cash expenses).

Other cash expenses e.g. transportation.

Interest on fixed and working capital.

Rent of company building whether rented or owned.

**b) Total output**

The quantity of product produced by enterprises was treated as the total output when the output was multiplied by its price then it is the output value.

**c) Net income**

It is the different between total receipt and total expenses. It was calculated as Net income = Gross income - Total expenses

**d) Input-Output ratio**

It can be expressed as the ratio of output to input. The ratio was calculated

$$\text{Input-output ratio} = O/I$$

Where,

O = Total output

I = Total input

**Discussions**

**Cost and Return of all products of Koriya agro producer company limited**

**Cost and Return of Scented Jeeraphool Rice**

The business analysis of Scented Jeeraphool Rice is presented

in table 1. The total amount of rice produces was 90 quintal in 2021-22.

The total cost of production of rice was found to be Rs. 441000 per year and for per kg was Rs. 49.

The major cost was Raw material, about 81.63% of total cost followed by packaging, Labour, maintenance, transporting and electricity charges 6.12, 4.08, 4.08, 2.04 and 2.04% respectively the total cost.

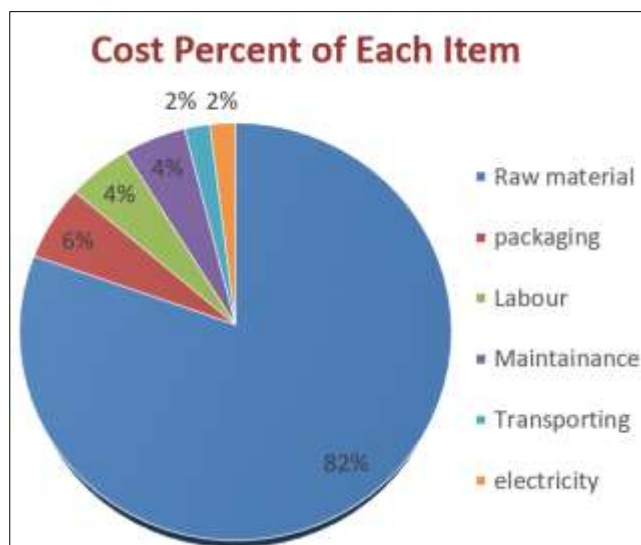
**Measure of farm profit**

The total return of KAPCL from 90 quintal rice was found to be 711000 and for per kg was Rs. 79. The gross return depends upon the total input cost and price.

The overall net return was about 180000 for 90 quintal rice and for per kg was Rs. 20. The input-output ratio was observed to be 1.61 at year 2021-22.

**Table 1:** Cost and Return of Scented Jeeraphool Rice

Scented Jeeraphool Rice (1 kg)				
S. No.	Manufacturing/Processing Cost	Cost (1 kg)	Total Cost (90 quintal)	Percentage to Total Cost
1	Raw material (Paddy)	40	360000	81.63
2	Electricity	1	9000	2.04
3	Labour	2	18000	4.08
4	Packaging	3	27000	6.12
5	Maintenance	2	18000	4.08
6	Transporting	1	9000	2.04
7	Total cost	49	441000	100.00
8	Total return	79	711000	
9	Net return	20	180000	
10	Input Output ratio	1:1.61		



**Fig 1:** Cost of Scented Jeeraphool Rice

**Cost and Return of Desi Masoor Dal**

The business of Desi Masoor Dal is presented in table 2. The total amount of Desi Masoor Dal produces was 4 quintal in 2021-22.

Over all, total cost of production per year of Desi masoor dal was found to be Rs. 32400 and for per kg was Rs. 81.

In this table result showed that raw material charges accounted the maximum cost for Desi Masoor dal production and found to be (88.89%) cost which is followed by packaging cost (3.70%), Transporting cost (2.47%), Labour cost (2.47%) and minimum on Electricity (1.23%) and Maintenance (1.23%) cost respectively.

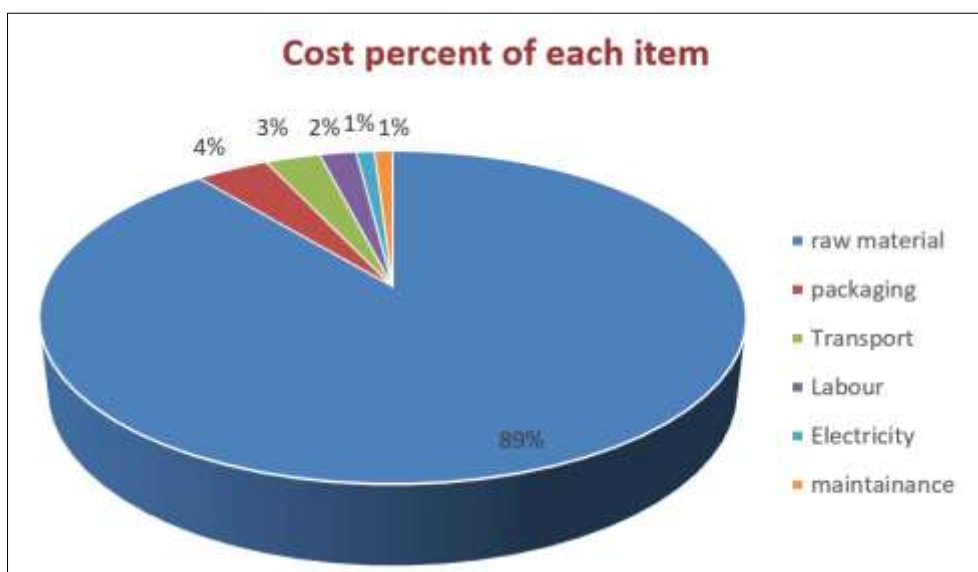
**Measure of Farm profit**

The overall gross return was observed to be Rs. 40000 in year 2021-22 and for per kg was Rs. 100 in the study area.

The net return was found to be Rs. 7600 per year. The overall input-output ratio was observed to be 1.23 in year 2021-22.

**Table 2:** Cost and Return of Desi Masoor Dal

Desi Masoor Dal 1 kg				
S. No.	Manufacturing/Processing Cost	Cost (1 kg)	Total Cost (4 quintal)	Percentage to Total Cost
1	Raw material (Lentil)	72	28800	88.89
2	Electricity	1	400	1.23
3	Labour	2	800	2.47
4	Packaging	3	1200	3.70
5	Maintenance	1	400	1.23
6	Transporting	2	800	2.47
7	Total cost	81	32400	100.00
8	Total return	100	40000	
9	Net return	19	7600	
10	Input Output ratio	1:1.23		



**Fig 2:** Cost and Return of Desi Masoor Dal

**Cost and Return of Citronella Oil**

The cost and return of Citronella Oil is presented in table 3. The total amount of Citronella oil produce was 20 litres in 2021-22.

The total cost of production of Citronella oil was found to be Rs. 52000 per year and for 20 ml was Rs. 52 in year 2021-22.

The major cost was raw material about 59.62% of the total cost followed by packaging cost 28.85%. The cost of electricity and Maintenance charge are accounted to be same 3.85% of total cost followed by transporting and labour

charge for 1.92% of total cost.

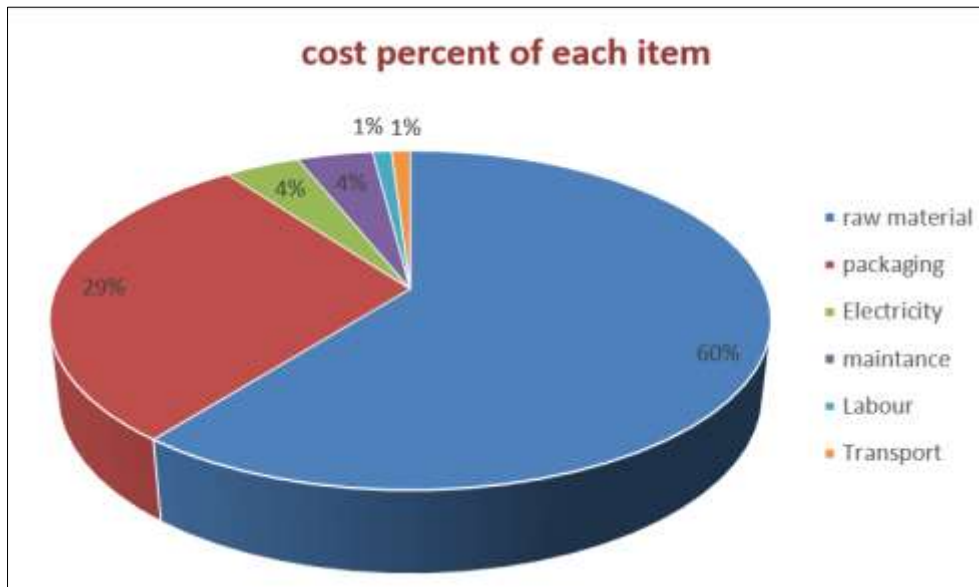
**Measure of Farm profit**

The total return of KAPCL from 20 litre Citronella oil was observed to be 64000 and for per 20 ml was Rs. 64. The gross return depends upon the total input cost and price.

The overall net return was observed to as Rs. 12000 for 20 litre Citronella oil and for per 20 ml was Rs.12. The input-output ratio was observed to be 1.23 at year 2021-22.

**Table 3:** Cost and Return of Citronella oil

Citronella Oil 20 ml				
S. No.	Manufacturing/Processing Cost	Cost (20 ml)	Total Cost (20 litre)	Percentage to Total Cost
1	Raw material (Citronella grass)	31	31000	59.62
2	Electricity	2	2000	3.85
3	Labour	1	1000	1.92
4	Packaging	15	15000	28.85
5	Maintenance	2	2000	3.85
6	Transporting	1	1000	1.92
7	Total cost	52	52000	100.00
8	Total return	64	64000	
9	Net return	12	12000	
10	Input Output ratio	1:1.23		



**Fig 3:** Cost and Return of Citronella oil

**Cost and Return of Turmeric oil**

The business of Turmeric oil is presented in table 4. The total amount of Turmeric oil produces was 18 litres in 2021-22. Result indicates that total cost of production of Turmeric oil was found to be Rs. 63000 and for 20 ml was Rs. 70. The raw material charges accounted the maximum cost for Turmeric oil production and found to be (68.57%) cost which is followed by packaging cost (21.43%), electricity cost (4.29), Labour cost (2.86) and minimum on Transporting

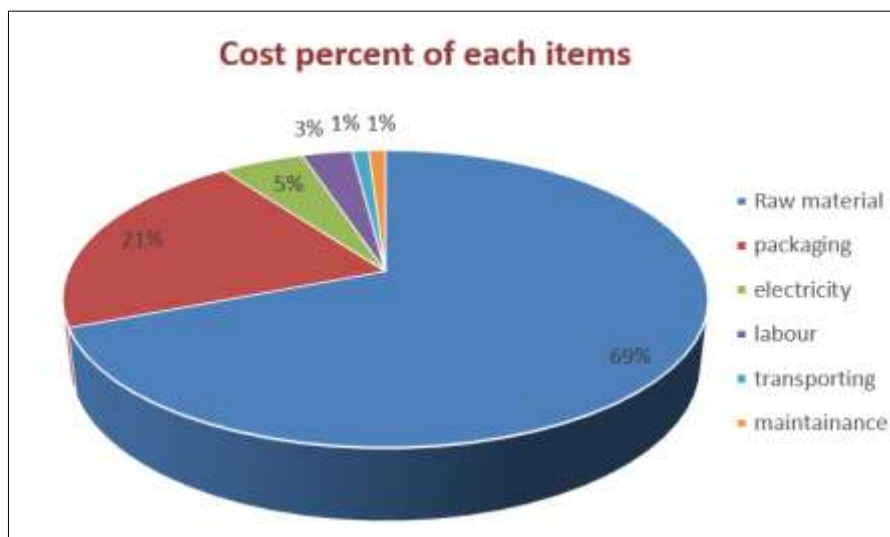
(1.43%) and Maintenance (1.43%) cost respectively.

**Measure farm Profit**

In this table result showed that the overall gross return was observed to be Rs. 74700 in year 2021-22 and for 20 ml gross return was Rs. 83 in the study area. The net return was found to be Rs. 11700 per year and for 20 ml net return was observed to be Rs. 13. The overall input-output ratio was observed to be 1.18 in year 2021-22.

**Table 4:** Cost and Return of Turmeric oil

Turmeric Oil 20 ml				
S. No.	Manufacturing/Processing Cost	Cost (20 ml)	Total Cost (18 litre)	Percentage to Total Cost
1	Raw material (Turmeric rhizomes)	48	43200	68.57
2	Electricity	3	2700	4.29
3	Labour	2	1800	2.86
4	Packaging	15	13500	21.43
5	Maintenance	1	900	1.43
6	Transporting	1	900	1.43
7	Total cost	70	63000	100.00
8	Total return	83	74700	
9	Net return	13	11700	
10	Input Output ratio	1:1.18		



**Fig 4:** Cost and Return of Turmeric oil

**Cost and Return of Palmarosa Oil**

In this table 5 result showed that the business analysis of Palmarosa oil. The total amount of Palmarosa oil produces was 15 litre in 2021-22.

In this table result indicate that the total cost of production was observed to be Rs. 45000 per year and for 20 ml total cost of production was Rs. 60.

The major cost was raw material about 65% of the total cost followed by packaging cost 25%. The cost of electricity and Maintenance charge are accounted to be same 3.33 percent of

total cost followed by transporting and labour charge for 1.67 percent of total cost.

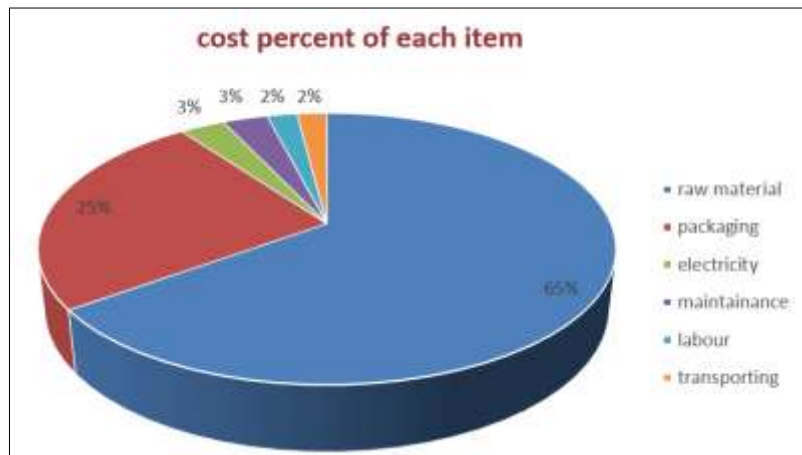
**Measure farm profit**

The overall total return or gross return was observed to be Rs. 53250 in year 2021-22 and for 20 ml gross return was Rs. 71 in the study area.

The net return was found to be Rs. 8250 per year. Result indicates that the input-output ratio was observed to be 1.18 in year 2021-22.

**Table 5:** Cost and Return of Palmarosa oil

Palmarosa Oil 20 ml				
S. No	Manufacturing/Processing Cost	Cost (20 ml)	Total Cost (15 litre)	Percentage to Total Cost
1	Raw material (Palmarosa grass)	39	29250	65.00
2	Electricity	2	1500	3.33
3	Labour	1	750	1.67
4	Packaging	15	11250	25.00
5	Maintenance	2	1500	3.33
6	Transporting	1	750	1.67
7	Total cost	60	45000	100.00
8	Total return	71	53250	
9	Net return	11	8250	
10	Input Output ratio	1:1.18		



**Fig 5:** Cost and Return of Palmarosa oil

**Cost and Return of lemon grass oil**

The cost and return of lemon grass oil was presented in table 6. The total amount of lemon grass oil produces was 15 litres in 2021-22.

The total cost of production of rice was found to be Rs. 45750 per year and for per 20ml was Rs. 61.

The major cost was Raw material, about 67.21% of total cost followed by packaging, maintenance, labour, transporting and electricity charges 24.59, 3.28, 1.64, 1.64 and 1.64%

respectively the total cost.

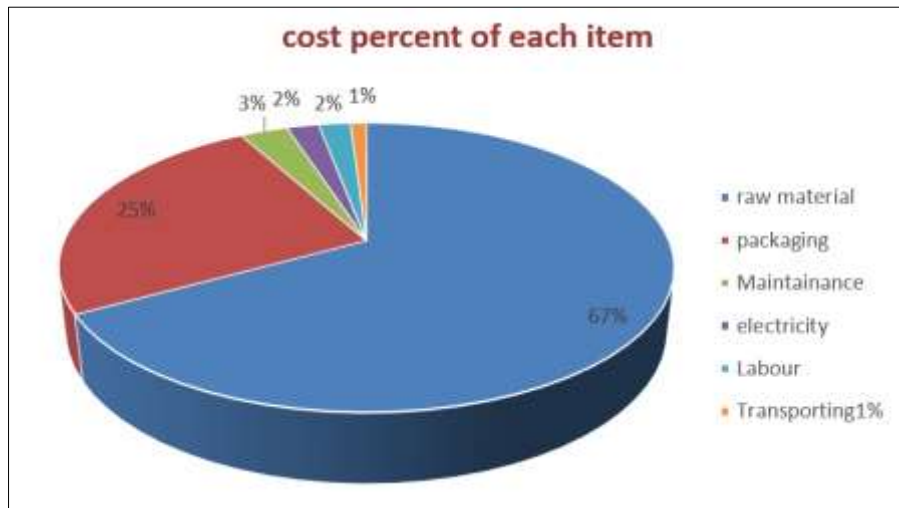
**Measure of farm profit**

The total return of lemon grass oil for 15 litres was found to be Rs. 53250 and for 20ml was found to be Rs. 71.

The gross return depends upon the total input cost and price. The overall net return was about Rs.7500 for 15 litres and for 20 ml was found to be Rs. 10. The input-output ratio was observed to be 1.16 at year 2021-22.

**Table 6:** Cost and Return of lemon grass oil

Lemon Grass Oil 20 ml				
S. No.	Manufacturing/Processing Cost	Cost (20 ml)	Total Cost (15 litre)	Percentage to Total Cost
1	Raw material (leaves and flowering of Lemon grass)	41	30750	67.21
2	Electricity	1	750	1.64
3	Labour	1	750	1.64
4	Packaging	15	11250	24.59
5	Maintenance	2	1500	3.28
6	Transporting	1	750	1.64
7	Total cost	61	45750	100.00
8	Total return	71	53250	
9	Net return	10	7500	
10	Input Output ratio	1:1.16		



**Fig 6:** Cost and Return of Lemon Grass Oil

**Cost and Return of Honey**

The business of Honey is presented in table 7. The total amount of Honey estimated was 500 litres in 2021-22.

Over all, total cost of production per year of honey for 500 litre was found to be Rs. 220000 and for 250 ml was observed to be Rs. 110.

In this table result showed that raw material charges accounted the maximum cost for honey production and found to be (69.09%) cost which is followed by packaging cost

(22.73%), electricity cost (2.73%) and minimum on labour, Transporting and Maintenance cost (1.82%) respectively.

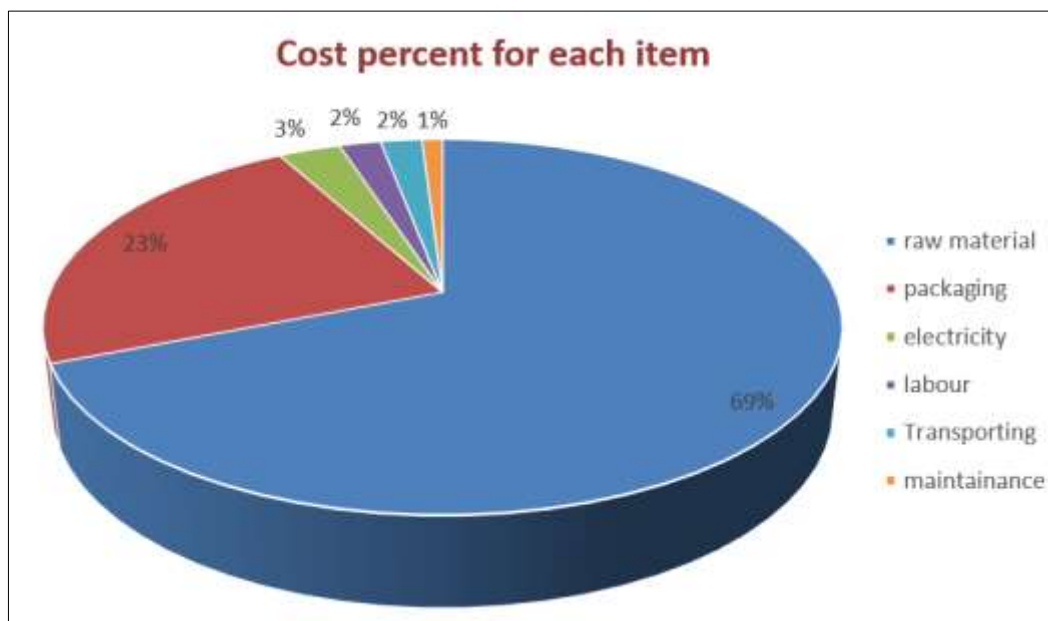
**Measure of Farm profit**

The overall gross return was observed to be Rs. 256000 in year 2021-22 and for 250 ml was Rs. 128 in the study area.

The net return was found to be Rs. 36000 per year. The overall input-output ratio was observed to be 1.16 in year 2021-22.

**Table 7:** Cost and Return of honey

Honey 250 ml				
S. No.	Manufacturing/Processing Cost	Cost (250 ml)	Total Cost (500 litre)	Percentage to Total Cost
1	Raw material (Nectar collected by Bees)	76	152000	69.09
2	Electricity	3	6000	2.73
3	Labour	2	4000	1.82
4	Packaging	25	50000	22.73
5	Maintenance	2	4000	1.82
6	Transporting	2	4000	1.82
7	Total cost	110	220000	100.00
8	Total return	128	256000	
9	Net return	18	36000	
10	Input Output ratio	1:1.16		



**Fig 7:** Cost and Return of Honey

**Cost and Return of Mustard Oil**

In this table 8 result showed that the business analysis of Mustard oil. The total amount of Mustard oil produce was 1000 litre in 2021-22.

The total cost of production of Mustard oil was found to be Rs. 180000 per year and for 1 litre total cost was observed to be Rs. 180 in year 2021-22. The major cost was raw material about 70% percent of the total cost followed by packaging cost 22.22%. The cost of electricity and Maintenance charge are accounted to be same 2.22 percent of total cost followed

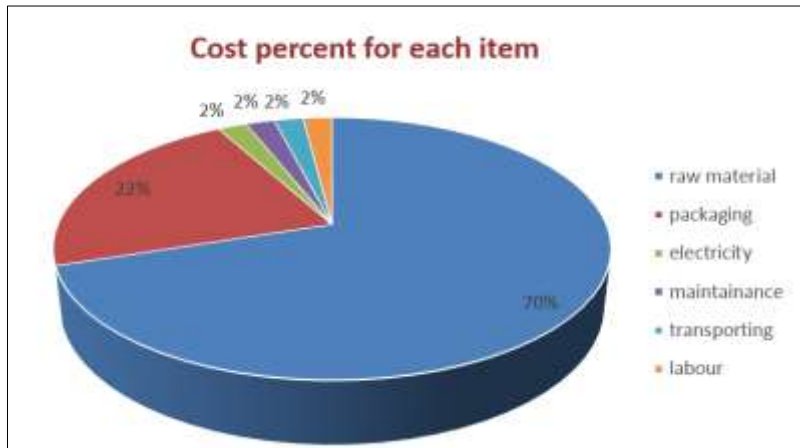
by transporting and labour charge for 1.67 percent of total cost.

**Measure of Farm profit**

The total return of Mustard oil was observed to be 238000 and for per 1 litre was Rs. 238. The overall net return was observed to as Rs. 58000 for 1000 litre Mustard oil and for per 1 litre was Rs.58. The input-output ratio was observed to be 1.32 at year 2021-22.

**Table 8:** Cost and Return of Mustard oil

Mustard Oil 1 litre				
S. No.	Manufacturing/Processing Cost	Cost (1 litre)	Total Cost (1000 litre)	Percentage to Total Cost
1	Raw material (Mustard seeds)	126	126000	70.00
2	Electricity	4	4000	2.22
3	Labour	3	3000	1.67
4	Packaging	40	40000	22.22
5	Maintenance	4	4000	2.22
6	Transporting	3	3000	1.67
7	Total cost	180	180000	100.00
8	Total return	238	238000	
9	Net return	58	58000	
10	Input Output ratio	1:1.32		



**Fig 8:** Cost of Mustard oil

**Cost and Return of Ghee**

The business of ghee is presented in table 9. The total amount of ghee produces was 500 litres in 2021-22.

The total cost of production of Ghee was found to be Rs. 486000 and for 250 ml total cost found to be Rs. 243.

The major cost was raw material charges about 84.36 percent of total cost followed by packaging, maintenance, electricity, labour and transporting charge about 10.29, 2.06, 1.23, 1.23 and 0.82% respectively of total cost.

**Measure farm profit**

The overall total return or gross return was observed to be Rs. 530000 in year 2021-22 and for 250 ml gross return was Rs. 265 in the study area.

The net return was found to be Rs. 44000 per year. Result indicates that the input-output ratio was observed to be 1.21 from 2021-22.

**Table 9:** Cost and Return of Ghee

Ghee 250 ml				
S. No.	Manufacturing/Processing Cost	Cost (250 ml)	Total Cost (500 litre)	Percentage to Total Cost
1	Raw material (Unsalted or white butter)	205	410000	84.36
2	Electricity	3	6000	1.23
3	Labour	3	6000	1.23
4	Packaging	25	50000	10.29
5	Maintenance	5	10000	2.06
6	Transporting	2	4000	0.82
7	Total cost	243	486000	100.00
8	Total return	265	530000	
9	Net return	22	44000	
10	Input Output ratio	1:1.21		

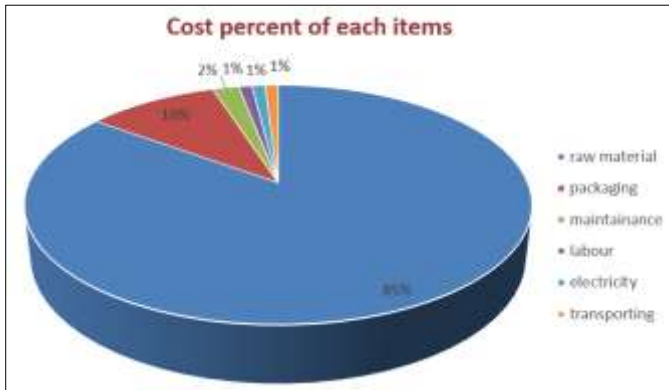


Fig 9: Cost and Return of Ghee

**Cost and Return of Desi Kulthi Dal**

The cost and return of Desi Kulthi Dal is presented in table 10. The total amount of Desi Kulthi Dal produces was 2.5 quintal in 2021-22.

Over all, total cost of production per year of Desi kulthi dal was found to be Rs. 12500 and for per kg was Rs. 50. The major cost was raw material about 80% percent of the total cost followed by packaging cost 6%.

The cost of Transporting electricity and Labour charge are accounted to be same 4 percent of total cost followed by maintenance charge for 2 percent of total cost.

**Measure of Farm profit**

The overall total return was observed to be Rs. 17500 in year 2021-22 and for per kg was Rs. 70 in the study area. The gross return depends upon the total input cost and price.

The net return was found to be Rs. 5000 per year and for 1 kg net return was found to be Rs. 20. The overall input-output ratio was observed to be 1.4 per year.

Table 10: Cost and Return of Desi Kulthi dal

Desi Kulthi Dal 1 kg				
S. No.	Manufacturing/Processing Cost	Cost (1 kg)	Total Cost (2.5 quintal)	Percentage to Total Cost
1	Raw material (Seeds of kulthi dal)	40	10000	80.00
2	Electricity	2	500	4.00
3	Labour	2	500	4.00
4	Packaging	3	750	6.00
5	Maintenance	1	250	2.00
6	Transporting	2	500	4.00
7	Total cost	50	12500	100.00
8	Total return	70	17500	
9	Net return	20	5000	
10	Input Output ratio	1:1.4		

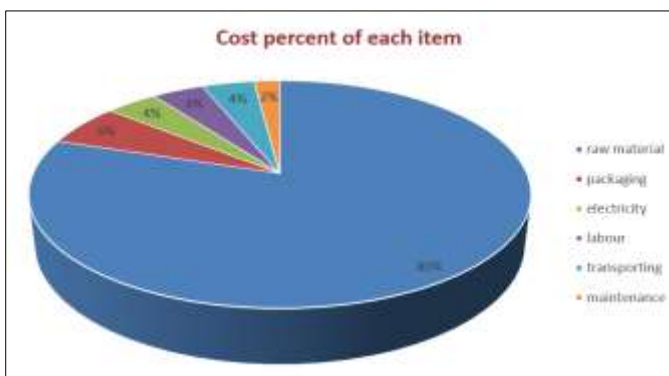


Fig 10: Cost and Return of Desi Kulthi Dal

**Cost and Return of Lemon Grass Herbal Tea**

The business analysis of Lemon grass herbal tea is presented in table 11. The total amount of tea production was 10 kg in 2021-22.

The total cost of production of lemon grass herbal tea was observed to be Rs.1800 per year and for 100 g was Rs. 18. The major cost was Raw material about 66.67 percent of total cost followed by packaging cost 16.67%. Other cost i.e. Labour, transporting, Maintenance and electricity charges 5.56, 5.56, 4.08, 2.78 and 2.78 percent respectively.

**Measure of farm profit**

The total return of herbal tea for 10 kg was found to be 3000 and for per 100 g was Rs. 30. The gross return depends upon the total input cost and price. The overall net return was about Rs. 1200 for 10 kg lemon grass herbal tea and for per 100 g was Rs. 12. The input-output ratio was observed to be 1.66 at year 2021-22.

Table 11: Cost and Return of Lemon Grass Herbal Tea

Lemon Grass Herbal Tea 100 g				
S. No.	Manufacturing/Processing Cost	Cost (100 g)	Total Cost (10 kg)	Percentage to Total Cost
1	Raw material (Lemon grass leaves and ginger)	12	1200	66.67
2	Electricity	0.5	50	2.78
3	Labour	1	100	5.56
4	Packaging	3	300	16.67
5	Maintenance	0.5	50	2.78
6	Transporting	1	100	5.56
7	Total cost	18	1800	100.00
8	Total return	30	3000	
9	Net return	12	1200	
10	Input Output ratio	1:1.66		

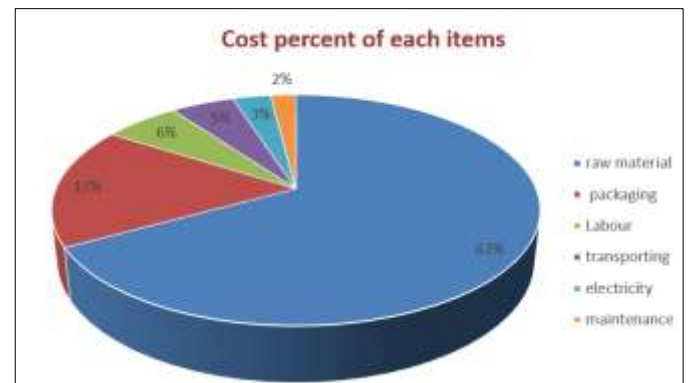


Fig 11: Cost and Return of Lemon Grass Herbal Tea

**Cost and Return of Desi Arhar Dal**

The cost and return of Desi Arhar Dal is presented in table 12. The total amount of Desi Arhar Dal produces was 10 quintal in 2021-22.

Over all, total cost of production per year of Desi Arhar dal was found to be Rs. 82000 and for per kg total cost was Rs. 82.

In this table result showed that raw material charges accounted the maximum cost for Desi Arhar dal production and found to be (89.02%) cost which is followed by packaging cost (3.66%), Transporting cost (2.44%), Labour cost (2.44%) and minimum on Electricity (1.22%) and Maintenance (1.22%) cost respectively.



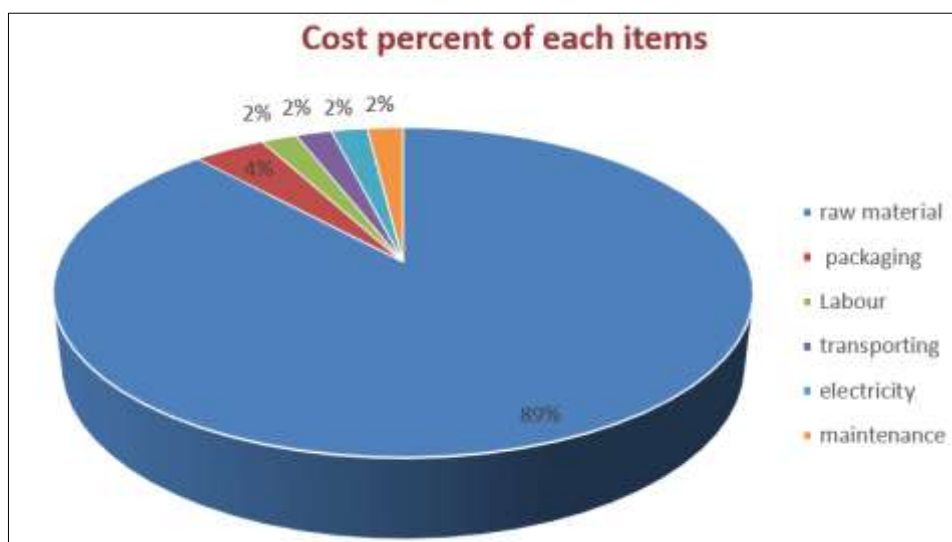
**Measure of Farm profit**

The overall net return was found to be Rs. 18000 per year and for 1 kg net return was observed to be Rs. 18.

The gross return was observed to be Rs. 100000 in year 2021-22 and for per kg was Rs. 100 in the study area. The overall input-output ratio was observed to be 1.14 in 2021-22.

**Table 12: Cost and Return of Desi Arhar Dal**

Desi Arhar Dal 1 kg				
S. No.	Manufacturing/Processing Cost	Cost (1 kg)	Total Cost (10 quintal)	Percentage to Total Cost
1	Raw material (Seeds of pigeon pea)	73	73000	89.02
2	Electricity	1	1000	1.22
3	Labour	2	2000	2.44
4	Packaging	3	3000	3.66
5	Maintenance	1	1000	1.22
6	Transporting	2	2000	2.44
7	Total cost	82	82000	100.00
8	Total return	100	100000	
9	Net return	18	18000	
10	Input Output ratio	1:1.14		



**Fig 12: Cost and Return of Desi Arhar Dal**

**Cost and Return of Desi Chana Dal**

The business analysis of Desi Chana Dal is presented in table 13. The total amount of Desi Chana Dal produces was 8 quintal in 2021-22.

The total cost of production of Desi Chana Dal was found to be Rs. 55200 per year and for per kg was Rs. 69. The major cost was Raw material, about 86.96% of total cost followed by packaging cost 4.35%.

The cost of transporting and labour charge are accounted to be same 2.90% of total cost followed by electricity and

maintenance charge for 1.45% of total cost.

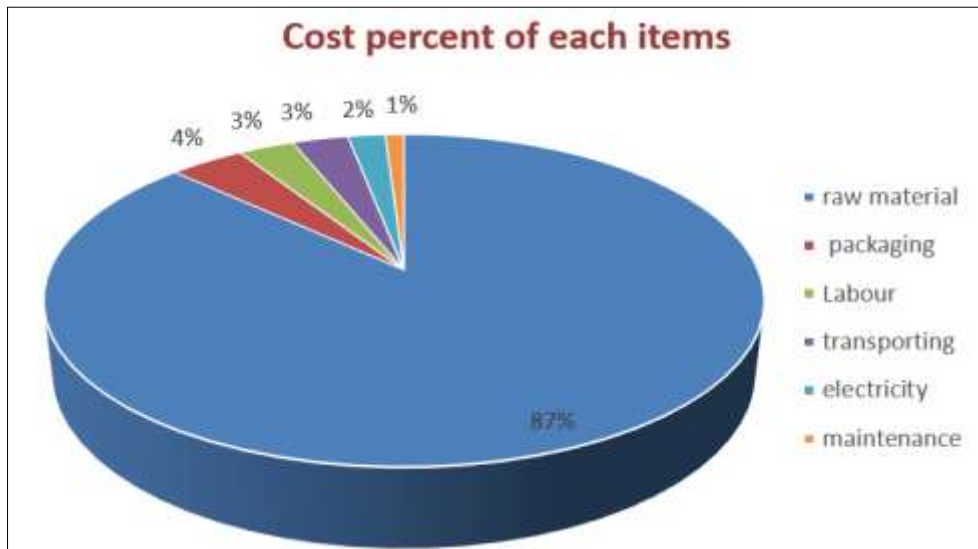
**Measure of farm profit**

The total return of Desi Chana Dal was found to be Rs. 71200 and for per kg was Rs. 89. The gross return depends upon the total input cost and price.

The overall net return was about 16000 for 8 quintal Chana dal and for per kg net return was Rs. 20. The input-output ratio was observed to be 1.28 in 2021-22.

**Table 13: Cost and Return of Desi Chana dal**

Desi Chana Dal 1 kg				
S. No.	Manufacturing/Processing Cost	Cost (1 kg)	Total Cost (8 quintal)	Percentage to Total Cost
1	Raw material (Seeds of Gram)	60	48000	86.96
2	Electricity	1	800	1.45
3	Labour	2	1600	2.90
4	Packaging	3	2400	4.35
5	Maintenance	1	800	1.45
6	Transporting	2	1600	2.90
7	Total cost	69	55200	100.00
8	Total return	89	71200	
9	Net return	20	16000	
10	Input Output ratio	1:1.28		



**Fig 13:** Cost and Return of Desi Chana Dal

**Cost and Return of Desi Urad Dal**

The cost and return of Desi Urad Dal is presented in table 14. The total amount of Desi Urad Dal production was 7 quintal in 2021-22.

Over all, total cost of production per year of Desi Urad dal was found to be Rs. 58100 and for per kg total cost was Rs. 83.

In this table result showed that raw material charges accounted the maximum cost for Desi Urad dal production and found to be (89.16%) cost which is followed by

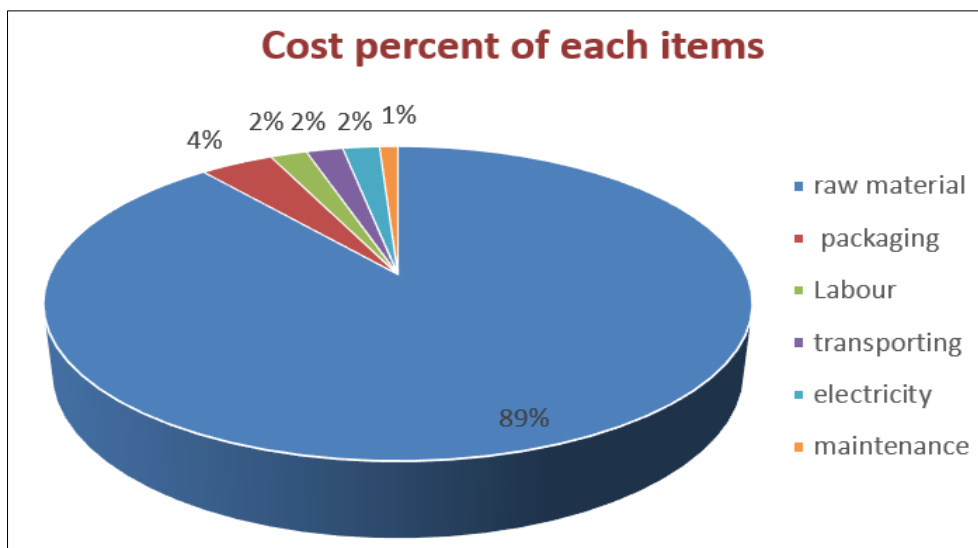
packaging cost (3.61%), Transporting cost (2.41%), Labour cost (2.41%) and minimum on Electricity (1.20%) and Maintenance (1.20%) cost respectively.

**Measure of Farm profit**

The overall net return was found to be Rs. 14700 per year and for 1 kg net return was observed to be Rs. 21. The gross return was observed to be Rs. 72800 in year 2021-22 and for per kg was Rs. 104 in the study area. The overall input-output ratio was observed to be 1.25 per year.

**Table 14:** Cost and Return of Desi Urad dal

Desi Urad Dal 1 kg				
S. No.	Manufacturing/Processing Cost	Cost (1 kg)	Total Cost (7 quintal)	Percentage to Total Cost
1	Raw material (Seeds of black gram)	74	51800	89.16
2	Electricity	1	700	1.20
3	Labour	2	1400	2.41
4	Packaging	3	2100	3.61
5	Maintenance	1	700	1.20
6	Transporting	2	1400	2.41
7	Total cost	83	58100	100.00
8	Total return	104	72800	
9	Net return	21	14700	
10	Input Output ratio	1:1.25		



**Fig 14:** Cost and Return of Desi Urad Dal

**Cost and Return of Desi Moong Dal**

In this table 15 result showed that the business analysis of Desi Moong Dal. The total amount of Desi Moong Dal production was 5 quintal in 2021-22.

The total cost of production of Desi Moong Dal was observed to be Rs. 40500 per year and for per kg was Rs. 81.

The major cost was Raw material about 88.89 percent of total cost followed by packaging cost 3.70%. Other cost i.e. Labour, transporting, Maintenance and electricity charges

2.47, 2.47, 1.23, and 1.23 percent respectively.

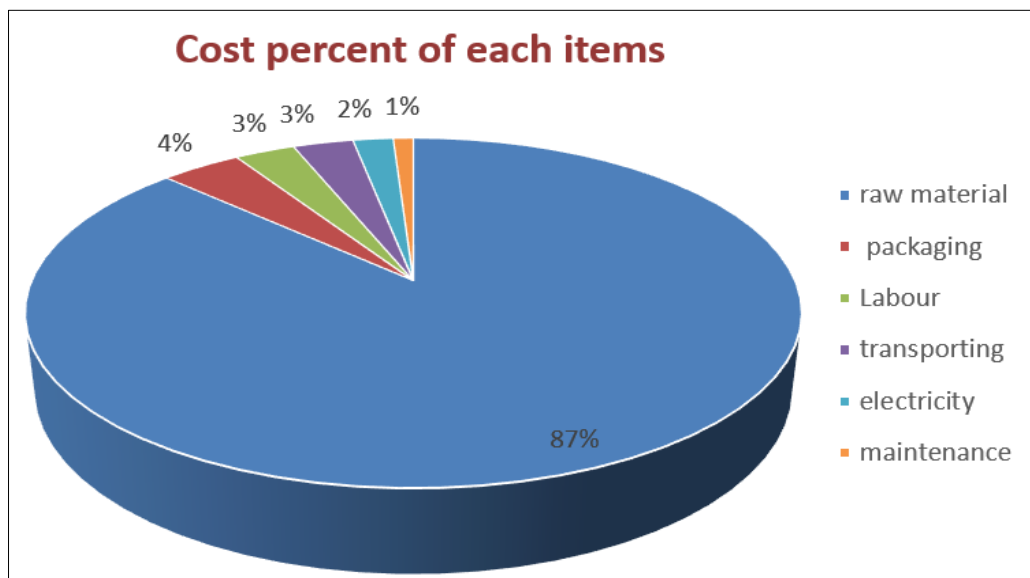
**Measure of farm profit**

The total return of Desi Moong Dal for 5 quintal was found to be 54500 and for per kg was Rs. 109.

The gross return depends upon the total input cost and price. The overall net return was about Rs. 14000 for 5 quintal of Desi Moong Dal and for per kg was Rs. 28. The input-output ratio was observed to be 1.34 from 2021-22.

**Table 15:** Cost and Return of Desi Moong Dal

Desi Moong Dal 1 kg				
S. No.	Manufacturing/Processing Cost	Cost (1 kg)	Total Cost (5 quintal)	Percentage to Total Cost
1	Raw material (Seeds of green gram)	72	36000	88.89
2	Electricity	1	500	1.23
3	Labour	2	1000	2.47
4	Packaging	3	1500	3.70
5	Maintenance	1	500	1.23
6	Transporting	2	1000	2.47
7	Total cost	81	40500	100.00
8	Total return	109	54500	
9	Net return	28	14000	
10	Input Output ratio	1:1.34		



**Fig 15:** Cost and Return of Desi Moong dal

**Cost and Return of Detergent Powder Premium**

The cost and return of Detergent Powder Premium is presented in table 16. The total amount of Detergent powder premium production was 2 quintal in 2021-22.

The total cost of production of Detergent Powder Premium was found to be Rs. 17600 per year and for per kg was Rs. 88 in year 2021-22. The major cost was raw material about 85.23% of the total cost followed by packaging cost 11.36%. The cost of labour and transporting charge are accounted to be same 1.14% of total cost followed by electricity and

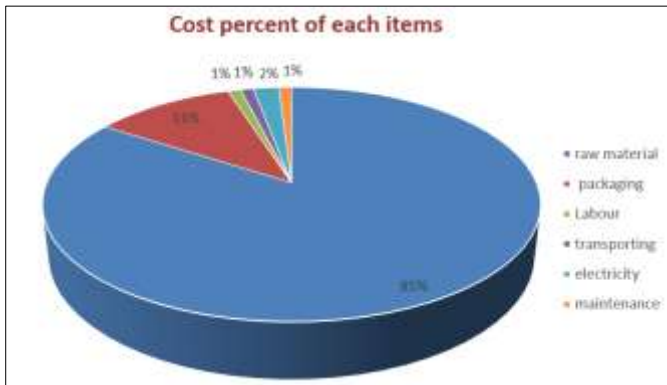
maintenance charge for 0.57% of total cost.

**Measure of Farm profit**

The total return of Detergent powder Premium was observed to be 20000 and for per kg was Rs. 100. The gross return depends upon the total input cost and price. The overall net return was observed to as Rs. 2400 for 2 quintal Detergent powder Premium and for per kg was Rs.12. The input-output ratio was observed to be 1.13 per year.

**Table 16:** Cost and Return of Detergent Powder Premium

Detergent Powder Premium 1 kg				
S. No.	Manufacturing/Processing Cost	Cost (1 kg)	Total Cost (2 quintal)	Percentage to Total Cost
1	Raw material (Acid slurry, soda ash, soda bicarb, sodium tripoly phosphate, sodium sulphate)	75	15000	85.23
2	Electricity	0.5	100	0.57
3	Labour	1	200	1.14
4	Packaging	10	2000	11.36
5	Maintenance	0.5	100	0.57
6	Transporting	1	200	1.14
7	Total cost	88	17600	100.00
8	Total return	100	20000	
9	Net return	12	2400	
10	Input Output ratio	1:1.13		



**Fig 16:** Cost and Return of Detergent Powder Premium

**Conclusions**

The total cost, total return, net return, and input-output ratio of the annual production of all products by the Koriya Agro Producer Company Limited were calculated as follows: 52000, 64000, 12000, 1.23 (Citronella oil), 45750, 53250, 7500, 1.16 (Lemon grass oil), 486000, 530000, 44000, 1.21 (Ghee), 82000, 100000, 18000, 1.14 (Desi Arhar Dal), 32400, 40000, 7600, 1.23 (Desi Masoor Dal), 17600, 20000, 2400, 1.13 (Detergent Powder Premium), 63000, 74700, 11700, 1.18 (Turmeric Oil), 220000, 256000, 36000, 1.16 (Honey), 12500, 17500, 5000 1.4 (Desi Kulthi Dal), 55200, 71200, 16000, 1.28 (Desi Chana Dal), 441000, 711000, 180000, 1.61 (Scented Jeeraphool Rice), 45000, 53250, 8250, 1.18 (Palmarosa Oil), 180000, 238000, 58000, 1.32 (Mustard Oil), 1800, 3000, 1200, 1.66 (Lemon Grass Herbal Tea), 58100, 72800, 14700, 1.25 (Desi Urad Dal), 40500, 54500, 14000, 1.34 (Desi Moong Dal). The study demonstrated that all significant business operations had input: output ratios greater than 1.

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