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SLUP

(STATE LEVEL UPGRADATION PLAN)

for

KOHIMA DISTRICT IN THE STATE OF NAGALAND



Prepared by
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Executive summary

Kohima is a hilly district of India's the North Eastern State of Nagaland, sharing its borders with Assam State and Dimapur District in the West, Phek District in the East, Manipur State, and Peren District in the South, and Wokha District in the North. The main crops of the district are rice, maize, potato, assorted vegetables, and chilly, with fruits like papaya, fruit, guava, and other temperate fruits. The cultivation practice is organic by default. In the Kohima district area under agriculture, crops are 46% and the remaining 54% of the area is under horticulture crops.

Pickles are the ODOP of the district: 25 household enterprises in the district are processing varieties of pickles such as mango pickles, lime pickles, Naga chili pickles, meat pickles, pork pickles, and mixed vegetable pickles. The pickle industry is completely a household industry in the Kohima district. Almost 167 employees are engaged in the 25 pickle processing units. Out of the total working population in the pickle processing units in the district, 98% of the workers are females.

Cluster – about 25 pickle processing units were studied located in the villages like Viswema, Kigwema, Jotsoma, Meriema, Jakhama, Mezoma, etc. All the units are household units.

Based on the primary observation of micro and small enterprises the major bottlenecks identified and recommendations/ Insights are briefed below-

1. Lack of proper machinery for processing – Almost 98% of the total 25 responded units expressed that they adapted traditional/ Conventional methods of processing. Concerning their income and livelihood, and also to scale up their business from the current scenario modern/ advanced technologies need to be provided. For example, advanced machinery such as Vegetable cutters, De boner, solar dryers, Pickle mixtures, and Packaging machinery would reap huge benefits for these enterprises.

2. Lack of common infrastructure facilities – It was observed that there are no common infrastructure facilities for the processing units in the district. As Kohima is a hilly area and due to a lack of regular transportation in the district, the post-harvest losses of the crop are very high. To minimize the post-harvest loss of ODOP and Non-ODOP commodities, we are proposing the establishment of common infrastructure facilities like reefer vans, cold storage structures, pack houses, etc.

3. Lack of marketing linkages – A very common and serious problem noticed in our primary survey is processing units are selling their commodities within the districts without any brand name. To overcome this problem and to support the micro and household enterprises there is a need of creating strong market linkages in India. To capture the Indian market concerning the pickle industry an organic brand needs to be created especially for the “Naga Chili” as Naga chili is already certified by the GI Tag for its high pungency level when compared to other varieties in the country. To showcase the specialty of Naga chili across India, ODOP shops need to be established in places like airports, railway stations, bus stations, historical, religious, and tourism.

As the “Naga chili “crop is certified by the “GI tag” developing the band around the GI tag will benefit the local processing units

4. Incubation center and food testing lab – From the primary survey it is observed that approximately 80 new entrepreneurs are interested to come into the sector but are unable to do due to a lack of proper guidance and facilities in the food processing sector in the district. We are proposing one incubation center in the district with common processing facilities for 3 to 4 processing lines (Dairy products, Soybean, Bakery products, and Banana Based products) in the district.

5. Food testing lab: None of the pickle processing enterprises are selling the produce under the FSSAI license. There is no food testing lab in the district. A food testing lab is also proposed to be set up in the incubation center to support the existing and new enterprises. The incubation center is also used for upgrading the skill set of the food processing enterprises.

Proposed fund allocation:

Proposed fund allocation for Kohima District		
Intervention	Target	Amount (Cr.)
Capital investment in plant and machinery (Individual units)	To upgrade and scale up in the production process for 137 Micro Units (The average fund required per unit is 12.4 lakh)	16.9
Capital investment in plant and machinery (Group units)	To upgrade and scale up the production process for 14 Groups (The average fund required per unit is 12.07 lakh)	1.69
Incubation center	One incubation center (IC) is proposed for the district. Cost per IC 2.75 Cr.	2.75
Common infrastructure	One common infrastructure facility (CIF) is proposed for the district. Cost for the CIF 4.0 Cr.	4
Branding and Marketing	Common Branding and Marketing for both Individual units and Groups	1.54
Training and Mentorship	Training and Mentoring for Entrepreneurship. Training on New Technology for a total of 122 individuals. (2 people to be trained from each enterprise/group)	0.15
Total		27.03

Proposed government assistance under the SLUP

Proposed subsidy under SLUP Initiative for Kohima District					
Intervention	Target No. of units	Project cost per unit (Lakhs)	Total Cost (Lakhs)	Subsidy per unit	Govt. assistance (Lakhs)
Capital Investment in Plant & Machinery (Individual units)	137	12.4	1698.8	35%	594.58
Capital Investment in Plant & Machinery (FPO/SHG/ Cooperatives)	14	12.07	168.98	35%	59.143
Common Infrastructure	1	400	400	35%	140
Incubation Cum Custom Hiring Centre	1	275	275	100%	275
Branding & Marketing (Total no. of Units/group)	151	1.01	152.51	50%	76.255
Training & Mentorship (No. of the individual)	151	0.06	9.06	100%	9.06
Total			2704.35		1154.038

By 2025, with the support of the PMFME scheme, the processing percentage of respective commodities may go up. Nearly, 650 to 800 new employments will be generated, the income level of micro and small entrepreneurs may increase by 30% to 40% (approximately), better price realization can be captured for processed commodities, and local products may reach different parts of India as well as World.

Project Methodology

This chapter explains the study area, sampling techniques, and different tools and techniques used for analyzing the collected data. The methodology adopted for the present study is presented in the following sections.

- 1) Study area
- 2) Sampling Technique adopted
- 3) Nature and sources of data
- 4) Analytical tools and techniques used

Study Area

The study on State Level Up-gradation Plan is conducted in the entire Kohima district of Nagaland state of India.

Sampling Technique and Sample Size adopted

Sampling Technique - Multistage random sampling technique was adopted.

Sample Size:

25 ODOP and Non-ODOP respondents are covered in the primary survey and the report is prepared on the covered sample size.

Nature and sources of data

Both primary and secondary sources of data are collected for this study.

Primary Data

India is one of the leading processors of various types of pickles. Pickle processing has undergone a lot of developments from traditional to modern processing. The survey was conducted in various Pickle processing units located in the Kohima district. In the primary survey, different stakeholders like unit holders (Registered and Unregistered), farmers, agriculture department officials, horticulture department officials, raw material suppliers, skilled labor, district industries center officials, farmer producer organizations, retailers, logistics officials concerned, etc., for gathering the necessary information like the availability of raw materials, changes in the year on year production, problems facing by the processors and other stakeholders, production process and the technology adopted by unit holders, availability of skilled labor and their wages, range of products, value chain, the testing methodology adopted by them, packaging, marketing, exports and other information from them.

Secondary Data:

The secondary data is collected from various sources like DICGS annual report, Nagaland Statistical Handbook, APEDA, Indiatat.com, Journals and articles, and other internet sources to know the area, production, export, import of Pickles

Analytical tools and techniques used

Tabulation of Collected Data, Percentage Analysis, and Graphical Solutions was used to get a comprehensive picture and analysis of the Data. After the data has been collected, it has been interpreted and presented to arrive at conclusions.

I. Baseline

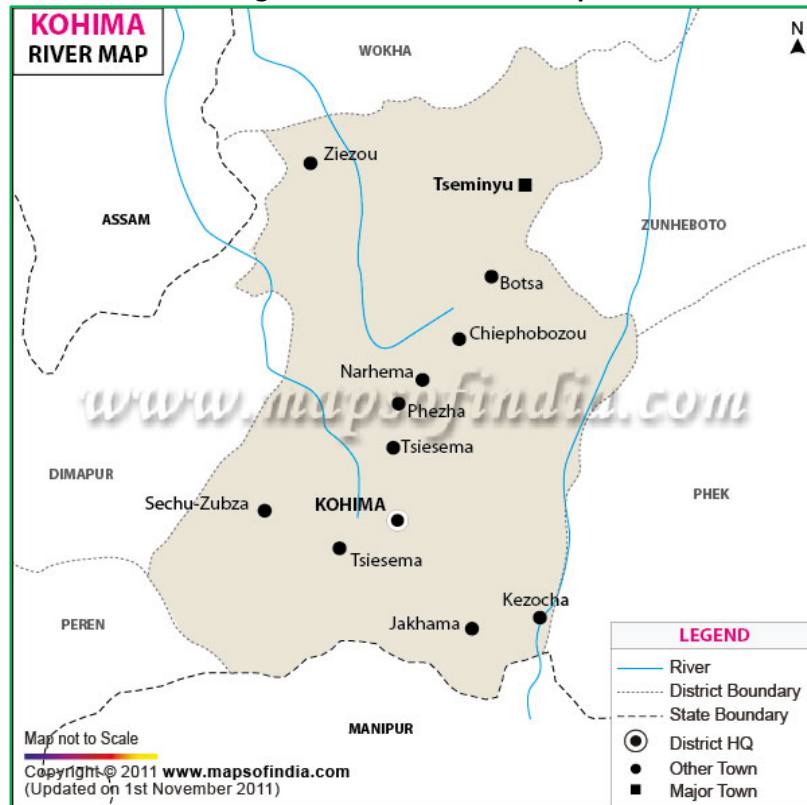
Assessment studies:

1. Baseline Assessment studies:

Kohima is a hilly district of India's the North Eastern State of Nagaland, sharing its borders with Assam State and Dimapur District in the West, Phek District in the East, Manipur State, and Peren District in the South, and Wokha District in the North. One of the oldest among the eleven districts of the state, Kohima is the first seat of modern administration as the Headquarters of Naga Hills District (then under Assam) with the appointment of G.H. Damant as Political Officer in 1879. When Nagaland became a full-fledged state on 1st December 1963, Kohima was christened as the capital of the state.

Since then, parts of Kohima district have been carved out thrice - the first in 1973 when Phek District was created, then in 1998 Dimapur was carved out and declared as a separate district and it was in 2004 for the third time that Kohima district once again gave birth to one of the youngest districts in the state called Peren District. The name Kohima is so called because the Britishers could not pronounce its original name "KEWHIRA" which is the name of the village where Kohima town is located. Kohima village, also called 'Bara Bosti' which is the second largest village in Asia forms the North-Eastern part of the Kohima Urban area today.

Figure 1: Kohima district Map



Demographics

As of the 2011 Census, the Kohima district has a population of 270,063. Males constitute 140,118 of the population and females 129,945. Kohima has an average literacy rate of 85.58%, higher than the national average of 74.04 %: male literacy is 89.28 % and female literacy is 81.56 %. In Kohima, 36,157 of the population are under 6 years of age.

Table 1: Demographic profile of the district

Demographic Label	Value
Area	1463 sq km
No. of Municipal Cooperation	1
No. of Village	96
Total Population	2,70,063
Sex Ratio	1000:928
Density Per Sq. Km	213
Literacy Rate	85.23%
ADC Headquarters	2
Sub-Division	2
EAC Circle	3

A. Agriculture Profiling of the Districts in the State

Kohima is the Nagaland State capital and is also one of the oldest districts of Nagaland state. The total geographical area is 1595 sq km. with an altitude ranging from 600m-3048 m MSL. Agriculture is the livelihood for the majority of the population which numbers 3, 14,366. The main practice of agriculture is wet rice terrace cultivation and Jhum. The main crops of the district are rice, maize, potato, assorted vegetables, and chilly, with fruits like papaya, passion fruit, guava, and other temperate fruits. The cultivation practice is organic by default.

Agro-ecological Situation of the District:

Kohima district can be divided into two broad categories depending upon agro-ecological conditions.

AES-2 (Mid Hill) Altitude from 600 - 1500 m MSL

AES-3 (High Hill) Altitude from 1500 m - 3048 m MSL

Paddy, maize, ginger, chillies, tomato, colocasia, banana, vegetables, piggery, and poultry are some common agricultural activities in Agro ecosystem-II

In Agro ecosystem-III the major agricultural activities are paddy, maize, potato, temperate fruits, floriculture, and forestry.

People commonly practice and engage traditional methodologies or Jhum for the cultivation of rice and other cereals. Modern technologies of agriculture such as improved seed, application of fertilizers, and modern plant protection methods are of limited use or absent. There is minimal use of agro-chemical in crop production, which in turn gives the advantage of going for organic farming. Throughout the world, organic products are appreciated and in great demand.

ODOP

i. Total production of the product in the district

Area and Production of Pulses, Cereals, and Oil seeds

In 2019-20, the total area under the major crops like pulses, cereals, and oils is 36891 ha with the production of 112279 metric tons in the district. Major crops in the district are WTRC paddy, jhum paddy, and maize cultivated in the area of 11510 ha, 5140 ha, and 4612 ha with the production of 33222 tons, 10221 tons, and 9154 tons respectively.

Table 2: Area and Production of Pulses, Cereals, and Oil seeds			
S. No	Crops	Area (Ha)	Production (MT)
1	WTRC Paddy	11510	33222
2	Jhum Paddy	5140	10221
3	Maize	4612	9154
4	Soybean	2085	2660
5	Rapeseed Mustard	2031	2051
6	Small Millet	1792	2032
7	Potato	1644	16468
8	Ricebean/Nagadal	823	945
9	Rajma/Kholar	757	970
10	Colocasia	704	6700
11	Pea	652	712
12	Linseed	470	380
13	Ginger	467	4274
14	Perilla	447	268
15	Sesamum	394	243
16	Wheat	371	682
17	Tea Green	351	1564
18	Beans	320	449
19	Tur/Arhar	310	280
20	Yam	268	1958
21	Sugarcane	230	10023
22	Tapioca	220	4461
23	Jobstear	212	221

Table 2: Area and Production of Pulses, Cereals, and Oil seeds

S. No	Crops	Area (Ha)	Production (MT)
24	Lentil	182	150
25	Sweet potato	174	1482
26	Mesta	122	135
27	Bajra	90	90
28	Groundnut	83	84
29	sun-flower	80	70
30	Jowar	60	60
31	Gram	60	50
32	Black gram	60	50
33	Barley	50	60
34	Horsegram	40	40
35	Oats	30	30
36	Urd/Moong	30	30
37	Castor	20	10
	Total	36891	112279

Source: Department of Agriculture and Horticulture Nagaland

Area and Production of the fruits-

In 2019-20, the total area under the fruits crops in the district is 2689 ha with the production of 14974 tons. Major crops cultivated in the district are banana and mandarin in the area of 1000 h and 895 with the production of 1230 tons and 7890 tons respectively.

Table 3: Area and Production of fruits

S. No	Fruit crops	Area (Ha)	Production (MT)
1	Gooseberry	29	360
2	Apple	40	361
3	Banana	1000	1230
4	Guava	70	495
5	Kiwi	55	560
6	Mango	39	270
7	Papaya	190	1684
8	Peach	35	238
9	Pineapple	240	1237
10	Plum	72	515
11	Pomegranate	4	24
12	Kinnow/Mandarin Orange	895	7890
13	Sweet Orange/Mosambi	20	110
	Total	2689	14974

Table 3: Area and Production of fruits

S. No	Fruit crops	Area (Ha)	Production (MT)
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Source: Department of Agriculture and Horticulture Nagaland

Area and Production of Vegetables-

In 2019-20, the total area under the vegetable crops in the district is 5441.25 with the production of 51712.5 tons. Major crops cultivated in the district are Cabbage, Green chili, and tapioca in 770 ha, 670 ha, and 530 ha with the production of 14596 tons, 4788 tons, and 9426 tons respectively.

Table 4: Area and Production of vegetables

S. No	Vegetable crops	Area (Ha)	Production (MT)
1	Ash Gourd/Petha	12	35
2	Beans (All Including Lab-lab)	220	2080
4	Bitter Gourd	15	50
5	Bottle gourd	15	50
6	Brinjal	52	380
7	Broccoli	5	50
8	Cabbage	770	14596
9	Capsicum	5	35
10	Carrot	50	545
11	Cauliflower	62	447
12	Green chilly	670	4788
13	Cucumber	60	450
14	Kaddu/Pumpkin	75	703
15	Okra/Ladies Finger	21	178
16	Onion	70	632
17	Peas (Green)	135	1000
19	Potato	500	6604
20	Radish	67	662
22	Leafy Vegetables (Amaranths, Kashmiri Sag, Spinach, Celery, etc.)	550	535
23	Sweet Potato	165	265
24	Tapioca	530	9426
25	Tomato	420	2029
28	Other vegetables Specify Crop in Remarks Column)	462	5544
29	Mushroom	0.25	12.6
30	Arbi/Colocasia	510	616
	Total	5441.25	51712.6

Source: Department of Agriculture and Horticulture Nagaland

Area and Production of the Spice crops

In 2019-20, the total area under the spice crops in the district is 1651 ha with the production of 6311 tons. The major spice crops cultivated are Large cardamom, Red chili in 625 ha and 670 ha with the production of 300 tons and 470 tons respectively.

Table 5: Area and Production of the Spice crops

S. No	Spice crops	Area (Ha)	Production (MT)
1	Cardamom Large	625	300
2	Coriander Seed	11	20
3	Garlic	39	361
4	Ginger	281	4800
5	Turmeric	25	360
6	Red Chilly	670	470
	Total	1651	6311

Source: Department of Agriculture and Horticulture Nagaland

Area and Production of Flower crops:

In 2019-20, the total area under the flowers is 23310 sq. M and productions of flowers are 35000 per stem.

Table 6: Area and Production of Flower crops

S. No	Flower crops	Area (Sq M)	Production (Per stem)
1	Alstroemeria	10000	100000
2	Lilium	2813	50000
3	Orchids	500	100000
4	Rose	10000	100000
	Total	23313	350000

Source: Department of Agriculture and Horticulture Nagaland

ii. ODOP production as a percentage of total agricultural produce of the district

In 2019-20, the total area under the crops in the district is 46672.3 ha with the production of 185276.6 tons. Red chili and mango contribute 1.4% and 0.1% of the total area with the production of 27.9% and 0.1% respectively of the total agricultural crop production in the district.

Table 7: ODOP production as a percentage of total agricultural produce of the district

S. No	Crops	Area (Ha)	% Share	Production (MT)	% Share
1	Pulses, cereals, and Oil seeds	36891	79.0%	112279	60.6%
2	Spices	981	2.1%	5841	3.2%
3	Fruits	2650	5.7%	14704	7.9%

Table 7: ODOF production as a percentage of total agricultural produce of the district

S. No	Crops	Area (Ha)	% Share	Production (MT)	% Share
4	Vegetables	5441.25	11.7%	51712.6	27.9%
5	Red Chilly	670	1.4%	470	0.3%
6	Mango	39	0.1%	270	0.1%
7	Total	46672.3	100.0%	185276.6	100.0%

Source: Department of Agriculture and Horticulture Nagaland

iii. Perishable nature of the produce

Food preservation in the form of pickles has been one of the strategies for lengthening the shelf life of fruits and vegetables. The shelf life of pickles depends on a variety of factors, such as the best by date, the preparation method, and how the pickles are stored. The pickling process involves vinegar which is very acidic and creates an extremely hostile environment for the growth of bacteria in a pickle jar.

Pickle is a perishable product. If processed properly and stored in standard containers/jars, it can last for over 1 year. Generally, the shelf life of a pickle is 6 to 9 months at normal temperature while in the refrigerator it lasts for 1 to 2 years.

iv. Production of ODOF Agriculture Produce in that district compared to other districts and states

Various kinds of fruits, vegetables, and spices like mango, Ginger, Turmeric, Red chili, Mango, Lemon, and Gooseberry are the raw materials of the pickles processing enterprises in the district. The production of Ginger, Turmeric and Red chilly in Nagaland are 35.6, 9.3, and 1.7 thousand tons respectively.

Table 8: Production of ODOF agriculture produce in other districts in Nagaland state

District	Ginger		Turmeric		Red Chilly	
	Production (MT)	% Share	Production (MT)	% Share	Production (MT)	% Share
Dimapur	2600.00	7.3%	4600.00	49.4%	65.00	3.6%
Kohima	4800.00	13.5%	360.00	3.9%	470.00	26.1%
Kiphire	1198.40	3.4%	30.00	0.3%	87.61	4.9%
Mokokchung	1900.00	5.3%	200.00	2.1%	250	13.9%
Mon	3835.00	10.8%	66.20	0.7%	124	6.9%
Longleng	3390.00	9.5%	19.00	0.2%	180.00	10.0%
Phek	2340.00	6.6%	192.00	2.1%	0.00	0.0%
Peren	5396.00	15.1%	3141.00	33.8%	0.00	0.0%
Tuensang	2128.00	6.0%	65.00	0.7%	121	6.7%
Wokha	3122.00	8.8%	375.00	4.0%	50.00	2.8%
Zunheboto	4921.00	13.8%	255.00	2.7%	450.00	25.0%
Nagaland State	35630.40	100.0%	9303.20	100.0%	1797.61	100.0%

Source: Department of Agriculture and Horticulture Nagaland

The production of Mango, Lime and Lemon, and Aonla/Gooseberry in Nagaland is 3.6, 6.1, and 2.4 thousand tons respectively.

Table 9: Production of ODOP agriculture produce in other districts in Nagaland state						
District	Mango		Limes and Lemon		Aonla/ Gooseberry	
	Production (MT)	% Share	Production (MT)	% Share	Production (MT)	% Share
Dimapur	550.00	15.0%	3000.00	48.5%		0.0%
Kohima	270.00	7.3%		0.0%	360.00	14.5%
Kiphire	252.00	6.9%		0.0%	280.00	11.3%
Mokokchung	472.00	12.8%	1338.00	21.6%	280.00	11.3%
Mon	260.00	7.1%		0.0%		0.0%
Longleng	305.00	8.3%		0.0%	73.00	2.9%
Phek	273.00	7.4%		0.0%	399.00	16.0%
Peren	758.00	20.6%	1810.00	29.3%	289.00	11.6%
Tuensang	90.00	2.4%		0.0%	250.00	10.1%
Wokha	341.25	9.3%	32.50	0.5%	291.50	11.7%
Zunheboto	105.00	2.9%		0.0%	265.00	10.7%
Nagaland State	3676.25	100.0%	6180.50	100.0%	2487.50	100.0%

Source: Department of Agriculture and Horticulture Nagaland

The production of Gooseberry in India is 1.0 thousand tons. Uttar Pradesh contributes 35.8% of the total Gooseberry production in the country.

Table 10: Production of Aonla/Gooseberry in other states in India (2018-19)			
Aonla/ Gooseberry			
S. No	State	Production (000 MT)	% Share
1	Uttar Pradesh	384.32	35.8%
2	Madhya Pradesh	302.18	28.1%
3	Tamil Nadu	152.87	14.2%
4	Gujarat	81.9	7.6%
5	Chhattisgarh	43.29	4.0%
6	Nagaland	2.88	0.3%
7	Other states	107.16	10.0%
	Total	1074.6	100.0%

Source: Horticulture Statistics Division, Department of Agriculture, Cooperation & Farmers welfare.

The production of Lime and Lemon in India is 3.1 thousand tons. Gujarat contributes 19.2% of the total crop production in the country.

Table 11: Production of Lime/ Lemon in other states in India

Lime/ Lemon			
S. No	State	Production (000 MT)	% Share
1	Gujarat	605.62	19.2%
2	Andhra Pradesh	562.01	17.9%
3	Madhya Pradesh	306.73	9.7%
4	Karnataka	306.21	9.7%
5	Odisha	259.83	8.3%
6	Maharashtra	250.62	8.0%
7	Telangana	178.25	5.7%
8	Other states	671.29	21.3%
9	Nagaland	7.51	0.2%
	Total	3148.47	100.0%

Source: Horticulture Statistics Division, Department of Agriculture, Cooperation & Farmers welfare.

The production of Mango in India is 21.8 thousand tons. Uttar Pradesh contributes 20.86% of the total crop production in the country.

Table 12: Production of Mango in other states in India

Mango			
S. No	State	Production (000 MT)	% Share
1	Uttar Pradesh	4551.83	20.86%
2	Andhra Pradesh	4373.61	20.04%
3	Bihar	2443.47	11.20%
4	Karnataka	1760.6	8.07%
5	Tamil Nadu	1234	5.65%
6	Gujarat	1207.78	5.53%
7	Other states	6246.79	28.63%
8	Nagaland	4.24	0.02%
	Total	21822.32	100.00%

Source: Horticulture Statistics Division, Department of Agriculture, Cooperation & Farmers welfare.

The production of Tapioca in India is 4.9 thousand tons. Tamil Nadu state contributes 57.8% of the total crop production in the country.

Table 13: Production of Tapioca in other states in India

Tapioca			
S. No	State	Production (000 MT)	% Share
1	Tamil Nadu	2862.14	57.8%
2	Kerala	1725.98	34.9%
3	Andhra Pradesh	192.15	3.9%

4	Nagaland	79.32	1.6%
5	Meghalaya	36.24	0.7%
6	Other states	53.79	1.1%
	Total	4949.62	100.0%

Source: Horticulture Statistics Division, Department of Agriculture, Cooperation & Farmers welfare.

The production of Turmeric in India is 1.13 thousand tons. Telangana state contributes 26% of the total crop production in the country.

Table 14: Production of Turmeric crop in other states in India

Turmeric			
S. No	State	Production (MT)	% Share
1	Telangana	294.56	26.0%
2	Maharashtra	190.09	16.8%
3	Tamil Nadu	116	10.2%
4	Odisha	54.5	4.8%
5	Andhra Pradesh	79.73	7.0%
6	Gujarat	78.91	7.0%
7	Karnataka	76.49	6.8%
8	Nagaland	10.19	0.9%
9	Other states	232.25	20.5%
	Total	1132.72	100.0%

Source: Horticulture Statistics Division, Department of Agriculture, Cooperation & Farmers welfare.

The production of Ginger in India is 1.18 thousand tons. Assam state contributes 15% of the total crop production in the country.

Table 15: Production of the Ginger crop in other states in India

Ginger			
S. No	State	Production (MT)	% Share
1	Assam	167.39	15.0%
2	Maharashtra	140.6	12.6%
3	West Bengal	130.4	11.7%
4	Gujarat	108.25	9.7%
5	Kerala	86.27	7.7%
6	Meghalaya	66.2	5.9%
7	Mizoram	60.13	5.4%
8	Sikkim	55.9	5.0%
9	Nagaland	48.65	4.4%
10	Other states	254.37	22.7%
	Total	1118.16	100.0%

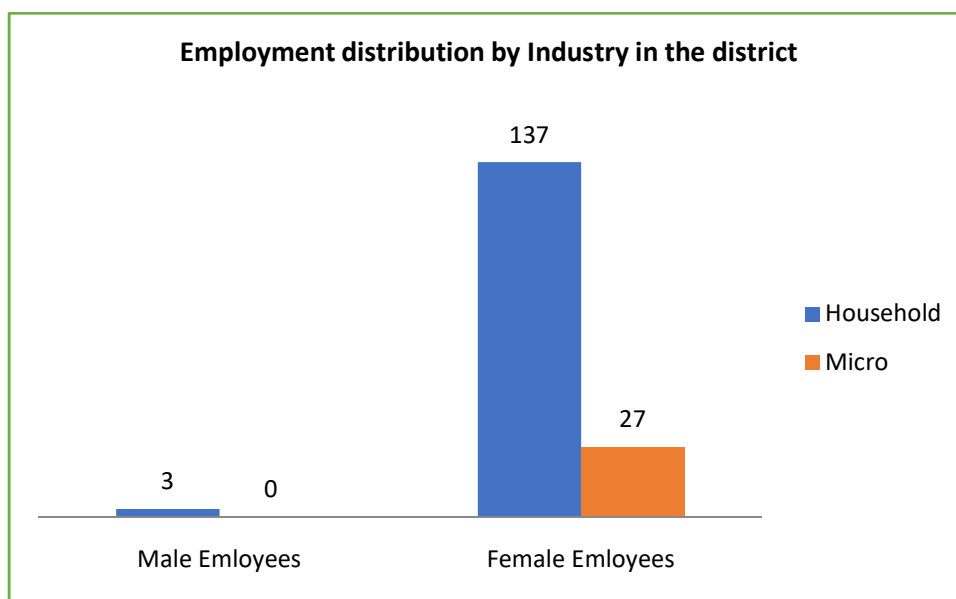
Table 15: Production of the Ginger crop in other states in India

Ginger			
S. No	State	Production (MT)	% Share
<i>Source: Horticulture Statistics Division, Department of Agriculture, Cooperation & Farmers welfare.</i>			

v. Number of workers engaged in the ODOP cultivation

The pickle industry is completely a household industry in the Kohima district. Approximately 167 employees are engaged in processing in the 25 pickle processing units in the district. Among the total employees 167, 98% are female employees working in the household and micro industry. Traditionally, women are involved in pickle making process at home; the same thing is reflected in the household industry, as it shows more involvement of female workers in the pickle processing.

Figure 2: Number of workers engaged in the ODOP processing



Non-ODOP:

i. Major crops are being cultivated apart from the chosen ODOP Product.

WTRC paddy, Jhum Paddy, Maize, Soybean, Rapeseed Mustard, Small millet, and Potato are the major pulses, oil seeds, and cereal crops cultivated in the district. Banana and Mandarin are the major fruit crops cultivated and Cabbage is the major vegetables cultivated crop in the district.

Table 16: Major crops apart from the chosen ODOP product

S. No	Crops	Area (Ha)	Production (MT)
1	WTRC Paddy	11510	33222
2	Jhum Paddy	5140	10221
3	Maize	4612	9154

4	Soybean	2085	2660
5	Rapeseed Mustard	2031	2051
6	Small Millet	1792	2032
7	Potato	1644	16468
8	Banana	1000	1230
9	Kinnow/Mandarin	895	14974
10	Cabbage	770	14596
	Total crops	46672.3	185276.6

Source: Department of Agriculture and Horticulture Nagaland

ii. Total Production of each of the Produces in the District:

Red chili, Mango, Lime, Turmeric, Ginger, Tapioca, and Gooseberry crops are the major raw material for the Pickle-based products enterprises in the district.

Table 17: Total Production of each of the Produces in the District		
Crop	Area (Ha)	Production (MT)
Red Chilli	670	470
Turmeric	25	360
Ginger	281	4800
Mango	39	270
Gooseberry	29	360
Lime	960	7510
Tapioca	530	9426

Source: Department of Agriculture and Horticulture Nagaland

iii. Non-ODOP produce as a percentage of total agricultural produce of the district:

Pickle-based products, Dairy products, King chili, and Processed meat products are considered as Non-ODOP of the district based on the area and production of the crop in the district and the number of units processing the produce. Spices contribute 3.5% of the total agricultural area in the district with the production of 2.6% of the total agricultural production. Pulses, cereals, and oil seeds contribute 79% and 70% of the area and production respectively.

Table 18: Non-ODOP produce as a percentage of total agricultural produce of the district					
S. No	Crop	Area (Ha)	% share	Production (MT)	% Share
1	Pulses, cereals, and Oil seeds	36891	79.0%	167536	69.7%
2	Spices	1651	3.5%	6311	2.6%
3	Fruits	2689	5.8%	14974	6.2%
4	Vegetables	5441.25	11.7%	51712.6	21.5%
	Total	46672.3	100.0%	240533.6	100.0%

Source: Department of Agriculture and Horticulture Nagaland

iv. Perishable nature of the Non-ODOP produce:

Along with Paddy, Maize, Mustard, and Banana are also important crops in the district. Processing of fresh produce increases its shelf life. Hence processed products are relatively less perishable than fresh ones.

Mustard, Soybean perishability depends on moisture content. Vegetables and fruits are perishable.

Table 19: Perishable nature of the Non-ODOP crop and the processed products

S. No	Value Added Products	Shelf Life (Room temperature)
I	Pickles	
1	Red chili pickle	6-8 Months
2	Vegetable pickle	3-5 Months
II	Meat processed products	
1	Meat pickle	4-6 Months
2	Dried meat	1 Month
III	Dairy-based products	
1	Khoa	15 days
2	Panner	2-3 days
3	Butter	3 months

v. Number of workers engaged in the cultivation of each of the Non-ODOP products.

The total area under Non-ODOP cultivation in the district is 1651 ha in 2019-20. Approximately, 2752 households are involved in the cultivation of the produce and the number of individuals involved is 11007.

Table 20: Non-ODOP produce, Avg. holding, No. of household and No. of people involved in cultivation

Crop Name and Particulars	
Spices (Non-ODOP) Total area	1651 ha
Average Land Holding size of Nagaland State	0.6 ha
No. of Households engaged in Non-ODOP Cultivation	2752 No.
No. of people involved in Non-ODOP cultivation in the district	11007 No.

B. Assessment of the existing Policy and Regulatory frameworks for FPI and FPI Micro Enterprises in the State:

i. Assessment of Food Processing Policies in the State:

Pradhan Mantri Kisan SAMPADA Yojana by MOFPI

The government of India (GOI) has approved a new Central Sector Scheme – Pradhan Mantri Kisan SAMPADA Yojana (Scheme for Agro-Marine Processing and Development of Agro-Processing Clusters) with an allocation of Rs. 6,000 crores for the period 2016-20 coterminous with the 14th Finance Commission cycle. The scheme will be implemented by the Ministry of Food Processing Industries (MOFPI).

PM Kisan SAMPADA Yojana is a comprehensive package that will result in the creation of modern infrastructure with efficient supply chain management from farm gate to retail outlet. It will not only provide a big boost to the growth of the food processing sector in the country but also help in providing better returns to farmers and is a big step towards doubling farmers' income, creating huge employment opportunities, especially in the rural areas, reducing wastage of agricultural produce, increasing the processing level and enhancing the export of the processed foods.

The following schemes will be implemented under PM Kisan SAMPADA Yojana :

- Mega Food Parks
- Integrated Cold Chain and Value Addition Infrastructure
- Creation/ Expansion of Food Processing/ Preservation Capacities (Unit Scheme)
- Infrastructure for Agro-processing Clusters
- Creation of Backward and Forward Linkages
- Food Safety and Quality Assurance Infrastructure
- Human Resources and Institutions

Table 21: Nagaland State Government policy in FPI			
Policy and Incentives			Description
Name of Policy			State Industrial Policy-2000 (Revised-2004)
Nodal Agency			The Ministry of Food Processing Industries (MOFPI)
Single Window System	Clearance		Not available
Power/Electricity Subsidy			Subsidy on power will be provided at the rate of 30% and 25% for connected loads up to 1 MW and above 1 MW respectively for five years from the date of commercial production subject to a maximum ceiling limit of ` 2.00 lakh annually. This will be a reimbursement scheme for the actual consumption of power for the manufacturing process substantiated with requisite details.
			Drawal of Power Line: Cost of drawal of 33/11 KV line to eligible units located outside the notified areas shall be reimbursed for one time only subject to a ceiling of `2:00 lakh (now as per NEIIPP-2007, anywhere in the State)

Table 21: Nagaland State Government policy in FPI	
Policy and Incentives	Description
Capital Subsidy	Not available
Interest Subsidy	Not available
VAT/CST/SGST/TAX Exemption/Reimbursement	<p>Stamp Duty Exemption</p> <p>50% Stamp Duty and Registration Fee for securing loans from Financial Institutions including Mortgage of fixed assets shall be exempted from the Stamp Duty Act for 5 (five) years</p>
Employment Generation	<p>Manpower Subsidy</p> <p>The government will reimburse up to 25% of the actual wage bill for local tribal employees employed by eligible units up to three years from the date of entertainment subject to a maximum ceiling of Rs.1.00 lakh annually. This grant would be for five years from the date of entertainment of such staff and would be given to those units where the investment in plant and machinery exceeds Rs.10.00 lakh and the number of employees engaged in the unit exceeds 20 (twenty) numbers and where the at least 50% of the employees are local tribal youth. Units availing subsidy under this scheme shall take all effective steps to ensure 75% employment of local youth over five years. This subsidy will be admissible on a reimbursement basis for only those employees who complete one year of regular employment in the unit.</p>
Freight/Transport Subsidy	Not available
Others	<p>Subsidy for Feasibility Study Cost</p> <p>The subsidy will be available at the rate of 50% of the cost of Detailed Reports subject to a ceiling of Rs.1.00 lakh, which shall be eligible only for new units with investment in plant and machinery above Rs.25 lakh provided the report is prepared by a Government approved Industrial Consultants.</p> <hr/> <p>Subsidy Incentives for 100% Export Oriented Units (EOU)</p> <p>An additional 5% capital investment subsidy is subject to a maximum ceiling of Rs.3.00 lakh.</p>

Table 21: Nagaland State Government policy in FPI

Policy and Incentives	Description
	<p>Subsidy for Quality Control measures</p> <p>The cost of laboratory equipment for quality control and ISI/BIS/ISO 9000 certification will be reimbursed subject to a maximum ceiling of Rs. 50,000/- in cases where it does not form part of the project cost for SSI and Rs.1.00 lakh in case of Large and Medium units.</p>

ii. Assessment of ongoing and proposed Government programs of Nagaland Administration in the FPI and allied sectors:

Currently, there are no existing food processing policies in the state. Recently the Industry and Commerce department of Nagaland, Proposed One food processing policy named “Nagaland State food processing Industries policy (NSFPI).

iii. Assessment of existing Regulatory frameworks for FPI:

PM FME Scheme- PM Formalization of Micro Food Processing Enterprises Scheme-

Unorganized micro food processing units, need intensive hand-holding support for skill training, entrepreneurship, technology, credit, and marketing, across the value chain, necessitating active participation of the state government for better outreach. In the last decade, Central and State Governments have made intensive efforts to organize farmers in Food Processing Organizations (FPOs) and women’s Self-Help Groups (SHGs). SHGs have achieved considerable progress in thrift and their repayment record with a 97% NPA level is among the best. Governments have made efforts to enable SHGs to undertake various manufacturing and service sector activities including food processing. However, there are few Government schemes to support FPOs andSHGs to make investments and upscale their operations.

This scheme is a centrally sponsored scheme that is designed to address the challenges faced by micro-enterprises and to tap the potential of groups and cooperatives in supporting the up-gradation and formalization of these enterprises.

Table 22 PMFME Scheme- PM Formalization of Micro Food Processing Enterprises Scheme

Scheme Component	Particulars
Support to individuals and groups of micro-enterprises	Individual micro food processing units would be provided credit-linked capital subsidy @35% of the eligible project cost with a maximum ceiling of Rs.10.0 lakh per unit. The beneficiary contribution should be a minimum of 10% of the project cost with the balance being a loan from the bank.

Table 22 PMFME Scheme- PM Formalization of Micro Food Processing Enterprises Scheme	
Scheme Component	Particulars
Farmer Producer Organizations (FPOs)/Producer Cooperatives	i) Grant @35% with credit linkage; ii) Training support; iii) Maximum limit of grant in such cases would be as prescribed.
Self-Help Groups (SHGs)	Seed capital: i) Seed capital @ Rs40,000/- per member of SHG for working capital and purchase of small tools would be provided under the scheme; ii) Priority would be given to SHGs involved in ODOP produce in giving seed capital; iii) All the members of an SHG may not be involved in the food processing. Therefore, seed capital would be provided at the federation level of SHGs; iv) This would be given as a grant to the SHG federation by SNA/ SRLM. SHG federation would provide this amount as a loan to the members of SHGs to be repaid to the SHG.
Support to individual SHG member	As a single unit of the food processing industry with credit linked grant @35% with the maximum amount being Rs 10 lakh.

iv. Stakeholder Mapping

MINUTES OF THE MEETING (MOM) OF NAGALAND PMFME SLUP STAKEHOLDERS MEETING DTD 09-02-2022 HELD AT DIRECTORATE OF INDUSTRIES and COMMERCE, KOHIMA – ONLINE and OFFLINE MODE – REG

Industries and Commerce

- Kekhrievor Kevichusa, Commissioner and Secretary, Industries and Commerce department (Commissioner)
- Hokishe K Assumi, Director of Industries and Commerce (Director)
- Vitsutho Nyuthe, Additional Director of Industries and Commerce (Additional Director)
- Zakielatuo Yiese, Deputy Director, Industries and Commerce (Deputy Director)

- Mhasiphizo Michael Khezhe, Nodal Officer, PMFME Scheme, Directorate of Industries and Commerce (Michael)

TransGraph

- Dr. Abdul Rahmanlyas, Global Head and Vice President, TransGraph Consulting, Hyderabad
- Mr. Deekshit Manchaiah, Analyst, TransGraph Consulting, Hyderabad

Stakeholders

- M. Rollan Lotha, COO, NSRLM, Nagaland
- Lentinario, Program Manager, NSRLM
- Dr. Hiales Zeliang, Deputy Director, Veterinary, GoN
- Dr. Vimezo Kire, Deputy Director, Fisheries, GoN
- Sendong, Jr. Asst. Commissioner, Food Safety, GoN
- Meyasashi, Deputy Director Horticulture, GoN
- Bokato Hesso, Deputy Director, Cooperation department. GoN

The meeting was held in the Directorate of Industries and Commerce, Kohima on Feb 9th, 2022 which started at 11.15 Am and concluded at 1.30 Pm.

- The formal introduction was done by Michael who welcomed the offline and online participants, he was apprised about the PMFME scheme and the State Level Up gradation Plan (SLUP) and apprised the group that a state-level study was conducted by M/s. Transgraph Consulting prepares district-wise reports that were circulated to all the stakeholders and the objective of this meeting is to take suggestions from every stakeholder to be incorporated into the final report. He requested the attendees to introduce themselves and later requested Commissioner to give the keynote address.
- Commissioner presented the keynote and highlighted how important the PMFME scheme is for the State of Nagaland as it is bound to scale in the coming years in terms of increased support to the food processing sector, he highlighted the objectives of the PMFME and requested all the stakeholders present to offer their recommendations and suggestions if any to be incorporated into the final SLUP report that will become a torchbearer to implement for the development of the food processing sector so the inputs from all are going to be very crucial and encouraged all to participate.
- Director spoke about ODOP and Non-ODOP and gave a summary that Nagaland the produce is same across all the districts, so not to be confused on the ODOP and Non-ODOP, while in certain districts based on the production of that particular product is high was chosen while in other districts the same stand as Non-ODOP. So PMFME would be looking at the clusters. Director further said TranGraph Consulting Hyderabad has done a good study and the reports have been submitted to all today they will be presenting the summary and key findings of the report for stakeholder's suggestion and feedback. He requested Trangraph to go ahead and present the report.

- Dr. Abdul Rahman from TransGraph Consulting, Hyderabad gave a brief overview of the PMFME Scheme and SLUP, he acknowledged the support of the Commissioner and Director and his team, and various important stakeholders across Nagaland. He further presented the methodology adopted for the study and gave a detailed crisp presentation on each district and covered 11 districts.
- Mr. RollanLotha, NSRLM spoke about Peren district and informed that they have a 100kg per batch vacuum drier, 24 tray over bio mass solar drier with 250 MT Capacity. In Wokha he informed fishery sector is dominated by Men, whereas NSRLM also includes women, he further informed that a fish value chain project is being currently planned in partnership with ECOP, New Delhi. 1500 kg of fish is going out of Nagaland from the Dhyong River and he wanted to establish a fish processing unit. He further informed that they have been waiting to get cooperative status for their organization which is pending with the Coop Department and requested that it be expedited. So that buy-back arrangement can be extended with a corpus which is currently a bottleneck for them.
- BokatoHesso, Deputy Reg, Cooperation Department, GoN, informed the audience that there is skilled labor available for barista coffee and he has shared a list of 100 cooperatives with the DFPI. He informed that they are working on the 10,000 FPO national mandate driven by Nabardand focusing on the creation of FPOs in Peren, Kiphire, and Kohima. 3 under cooperative act under Nabard / NCDC and 10 under SFAC under Companys Act. He further informed that at Block level 5 villages engage in cooperative activity, hence they are trying to develop an Integrated Multipurpose Cooperative Society to tap the small group on their Adhaar base.
- Mr.Ashish, Trangraph's Survey lead informed that they touch based Cooperatives list given by the Department and a few of them are inactive and others have been contacted and information captured. He further said that as part of the cluster study all the existing cooperatives will be mapped.
- Deputy DOH informed us that there is a marketable surplus in Pineapple and Kiwi. For example, he said farmers throw 20-25 of their produce at farm level and do not even bother to value add because of lack of time similarly in Kiwi there is a 50% marketable surplus resulting out of grading as only Grade 'A' is bought by traders. So there is an immense opportunity to convert the marketable surplus into value-added products which is currently not happening. In the district Phek, the production is kiwi is small at the same time other districts also have small production areas of Kiwi such as Kohima, Zonhebato, and Tusenang for which an aggregation hub can be created.
- Michael took over and informed all the stakeholders present to send their suggestions and feedback earlier by Monday i.e. 13th February 2022 formally. So that their respective feedback can be captured in the final report. He also requested the online participants to send their feedback by email. He further requested Additional Director to give closing remarks.

- Add. Director Industries thanked TrangGraph for giving an elaborate presentation and also thanked the participants for giving their valuable feedback. He also informed me that the report is in finalization state all the feedback and suggestions given will be incorporated.

The meeting concluded at 13.30 hours.

C. Profiling of existing Micro Enterprises ecosystem:

1. Industrial Profile of the Districts in the State

Kohima is one of the cities in the Northeast which excels in the field of handicrafts and woven products. Kohima city is technologically not much developed and hence the people are dependent on agriculture for their food and economy as well. Another major business and economic development of this place is its tourism industry. Tourism is a major source of income for people residing here today. Being a developing place, the people here have been humbly earning their income and running their families with whatever they earn.

The city of Kohima is not much industrially developed. The cottage and small-scale industries are one of the main industries in Kohima. A good amount of revenue from Kohima comes from the cottage and small-scale industries like products of cane and bamboo, wooden products, and handloom products. Tourism also contributes a good amount of revenue to Kohima and it is needless to mention that Kohima has beautiful tourism potential.

Table 23: Industrial Scenario of Kohima District

S. No	Head	Unit	Particular
1	Registered industrial unit	204	Micro Enterprises
2	Total Industrial unit	204	Micro Enterprises
3	Registered medium and large unit	No	Nil
4	The estimated average number of daily workers employed in SME Industries	63 Nos	employees
5	Employment in large and Medium Industries	Nil	Nil
6	No. of Industrial area	One	Mini Industrial Growth Centre, Viswema
7	Turnover of SME Industries	155 Lakhs	Micro sector
8	Turnover of Medium and large scale Industries	Nil	Nil

Source-Brief Industrial Profile Report of Kohima district by MSME, GOI

2. Identifying Non-ODOP Products:

Identified Non – ODOP products through a primary survey in the district are listed below table;

Table 24: Non-ODOP products of the district

S. No	Crop Name	Value added products
1	Dairy	Khoa, Panner, Butter
2	Meat-based units	Meat pickles, and Dried meat
3	King chilly products	Chili pickles, Chili powder
4	Pickles based product	Fruits and Vegetable pickles, Mango pickles, Bamboo shoot pickles, Fish pickles

4. District-wise profiling based on secondary research

i. Is the district recognized with the ODOP product?

Pickles are identified as the ODOP of the district based on the existence of households, small units engaged in pickle making process, and the relevant raw material for pickles like fruits and vegetables are grown largely in the district. Major raw material for pickle processing like Naga chili is grown in the area of 670 Ha in the district.

Awareness about the ODOP Product in Kohima District

It is observed from the Primary survey that not a single respondent is aware that Pickle is ODOP for the district. There is a need to create awareness among the processors regarding the ODOP concept and the benefits of the PMFME scheme. It will be helpful for the processors who are willing to expand their current household business of pickle processing.

ii. Has the product been granted Geographical Indication status by the Government of India?

King chili (U-Morok) is native to the northeastern region of India and subsequently, the “geographical Indication (GI)” of goods tag for this chili has been obtained by the Nagaland State Government. King chili is also known as ghost pepper, ghost chili, or naga chili Naga Jolokia, and bhoot Jolokia is among one of the hottest chilies in the world.

iii. Special nature and relationship of the product with the district, uniqueness, history, etc?

Naga King chilly is a native of the northeast region. Pickle of King chilly, Bamboo shoot pickle, beef pickle, meat pickle, and pork pickles are some of the signature pickles in the Kohima district. It is an age-old tradition in the Kohima district to make a variety of pickles at home. Earlier it was made for household consumption but retailers started to display the products in the shops as the demand for the products seen an upward trend with the increase of tourist visits to the district.

There is also another story about the Bamboo pickle, the ancestors knew that if the bamboo was not pickled in the right season then it might lead to hunger in the winters, and so the recipe for this crucial pickle was made.

Pickle is having a history of thousands of years as it began 4000 years ago in India. Pickling was a very useful way to preserve non-seasonal food which could be used for a long journey, especially by sea (for sailors and travelers). Meat, vegetables, and fruits are used for making pickles.

It is the oldest and most economical method for the development of a diversity of aromas, flavors, and textures as well as for food preservation and biological enrichment by manipulation of different microbial populations. Wild fruits and vegetables have more nutritional value than cultivated fruits and contribute to sustainable food production and security. Fermented products are region-specific and have their unique substrates and preparation methods. Soybeans, bamboo shoots, and locally available vegetables are commonly fermented by most tribes.

Different types of pickles made in the district

- Bamboo Shoot pickle
- King Naga Chilly pickle
- Pork pickle
- Beef pickle
- Dry Fish (Bombay Duck) Pickle
- Dry Small Fish Pickle
- Smoked Beef Pickle SN
- Smoked Pork Pickle SN
- Bamboo with King Chili Pickle
- Chicken Pickle, KFP
- Dry Prawn Pickle
- Kiwi sweet pickle
- Jujube Berry(Boroi/Bogori/Kul/Ber) Pickle
- Mango Pickle
- Sticky rice roti

iv. Level of processing happening for ODOP in the district, in other districts, and outside the State.

Approximately, 435 quintals of pickles (Naga chili, Mango, and Meat pickles) are processed in a year by the existing processing unit in the district. Among the 25 surveyed processing units, 22 units are operating at the household level and the remaining are micro processing units. There is no use of machines for cutting the vegetables or drying the meat. Pickle is packed in plastic bags or containers and it is sold in shops available in the villages. The majority of the processing units are not certified by FSSAI. Pickle processing units are majorly located in Viswema, Kigwema, Jotsoma, Meriema, Jakhama, and Mezoma, villages.

Table 25: Approximate quantity of processing.

Pickles	Quantity (Kg)/ Per annum per unit	Total Number of units	Quantity of production (Kg)
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Table 25: Approximate quantity of processing.

Pickles	Quantity (Kg)/ Per annum per unit	Total Number of units	Quantity of production (Kg)
Naga chili	360	25	9000
Fruits and Vegetables (Mango, bitter guard, Bamboo shoot)	480		12000
Meat (Chicken, Mutton, Beef, and Fish pickles)	900		22500
Total			43500

v. Mapping of the Micro, Small, Medium, and Large Industries in the District (Total number of Units).

A total of 24 agro-processing units are registered in the Kohima district under the MSME sector. 12 are involved in agriculture, hunting, and related service activities and the other 12 are in the manufacturing of food products and beverages

Details of the units are given in below table:

Table 26: Details of Existing Micro and Small Enterprises and Artisan units in the Kohima District

NIC Code No	Type of Industry	No. of units	Investment (Lakhs)	Employment
1	Agriculture, Hunting, and Related Service Activities	12	30	105
2	Mfg. of Food Products and Beverages	12	286.92	103
	Total	24	316.92	208

Source-Brief Industrial Profile Report of Kohima district by MSME, GOI

Potential for new MSMEs

- Organic Food Products
- Bamboo
- Medicinal and Aromatic plants
- Consultancy firms /units for giving fiscal guidance to the 1st generation entrepreneurs

Classification of ODOP and Non-ODOP enterprise mode of operation in the Kohima District

From the primary survey, it is observed that among the 25 pickle processing units in the district, 22 units are processing at the household level. All the units in the district are operating manually and selling the products through existing sales channels in the district.

Table 27: Mode of operation

Category	No. of Units
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Household enterprises	22
Micro Processing units	3
Total	25
<i>Source-Primary survey analysis</i>	

Industries Registration (ODOP and Non-ODOP) in Kohima District

From the primary survey, it is observed that out of 25 surveyed units in Kohima district, only 6 are registered and 19 are unregistered units. District industries centers need to create awareness among household-level processing units about the benefits associated with the registration of the units.

Table 28: Industries Registration (ODOP and Non-ODOP) in Kohima District

Category of units	Registered	Unregistered	Total
Household unit	3	19	22
Micro units	3	0	3
Total			25

vi. Number of clusters engaged in the processing of this product

Pickle processing is a much-unorganized industry in the district. It is mostly household units. There is no specific cluster for pickle processing in the district. However, there are other 5 major clusters identified for other and non-ODOP in the district, details of these clusters are given below to understand the existing status of these clusters. In existing clusters, importance is given to honey products.

1) Name of the Cluster: -Beekeeping

Table 29: Bee Keeping cluster

1.	Principal products Manufactured in the cluster	Honey Products
2.	Name of the cluster	Sikhazou bee-keeping cluster, Kohima
3.	No functional units in the clusters	45 Nos
4.	Turnover of the clusters	1.00 lacks
5.	Value of exports from the clusters	Nil
6.	Employment in clusters	95Nos
7.	Average investment in plant and machinery	1.00 lacks
8.	Major issues/ requirement	Rearing problems for flowers, Loan, Box tools, etc
9.	Presence of capable institutions	Honey Mission of Nagaland, Kohima
10.	Thrust Areas	Thrust building, Capacity training, Exhibition etc

Table 29: Bee Keeping cluster

11.	Problems and constraints	Exporting of products to be up-gradation needs for training, excess to modern technology etc
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Presents status of the cluster: - Name of the cluster: Honey cluster at Kohima District

2) Name of the Cluster: - Honey Products

Table 22: Honey products cluster

1	Principal products Manufactured in the cluster	Honey products
2	Name of the cluster	Honey cluster at Jakhama
3	No. of functional units in the clusters	25 Nos.
4	Turnover of the clusters	1.6 lacks
5	Value of exports from the clusters	Nil
6	Employment in clusters	50 Nos.
7	Average investment in plant and machinery	2.00 lakhs
8	Testing Area	Quality, Packaging, etc.
9	Thrust Areas	Rural area
10	Access to the export market	Nil

3) Name of the Cluster: - Wood Curving cluster: - One at Kohima

Table 30: Wood curving cluster

1	Principal products Manufactured in the cluster	
2	Name of the cluster	Wood Carving Association Kohima
3	No. of functional units in the clusters	30 Nos.
4	Turnover of the clusters	2 lakhs
5	Value of exports from the clusters	Nil
6	Employment in clusters	124 Nos
7	Average investment in plant and machinery	5.00 Lakhs
8	Major issues	Technology, design, quality improvement, etc.
9	Access to the export market	Nil

4) Name of the cluster – Fabrication and General Engineering cluster: - Steel Fabrication unit, Kohima

Table 31: Fabrication and General Engineering cluster		
1	Principal products Manufactured in the cluster	Grill, gate, shuttle, welding, etc
2	Name of the Association	Steel fabrication association, Kohima
3	No. of functional units in the clusters	27Nos
4	Turnover of the clusters	1.5Lakhs
5	Employment in clusters	162 Nos.
6	Average investment in plant and machinery	2.5 Lakhs
7	Major issues	Very old methods of production, poor design, poor quality, etc
8	Access to the export market	Nil

5) Name of the cluster – Handloom cluster at VISAMA, Kohima

Table 32: Handloom cluster at VISAMA		
1	Principal products Manufactured in the cluster	Local loom, handloom
2	Name of the Association	Kohima handloom association, Kohima
3	No. of functional units in the clusters	50 Nos
4	Turnover of the clusters	1.5 Lakhs
5	Employment in clusters	100 Nos.
6	Average investment in plant and machinery	1 Lakhs
7	Major issues	Design, new technology
8	Access to the export market	Nil

vii. Number of workers engaged in the ODOP processing

From the primary survey, it is observed that 98% of the 167 workers engaged in processing units are female workers. Among the total employees engaged in processing the ODOP, 137 workers are engaged in household processing and 27 workers are engaged in the micro processing units. Pickle processing is a household activity hence obviously involvement of women workers is more in the business. Considering women’s involvement, there is a need to strengthen the SHG to increase the volume of the business.

In pickle processing, natural and artificial preservatives play an important role in the shelf life and quality of the products, hence training on the standardized process of pickle preparation from the food technology institute will have a positive impact on the processed product in the district.

Figure 3: Distribution of employees in the ODOP processing enterprises

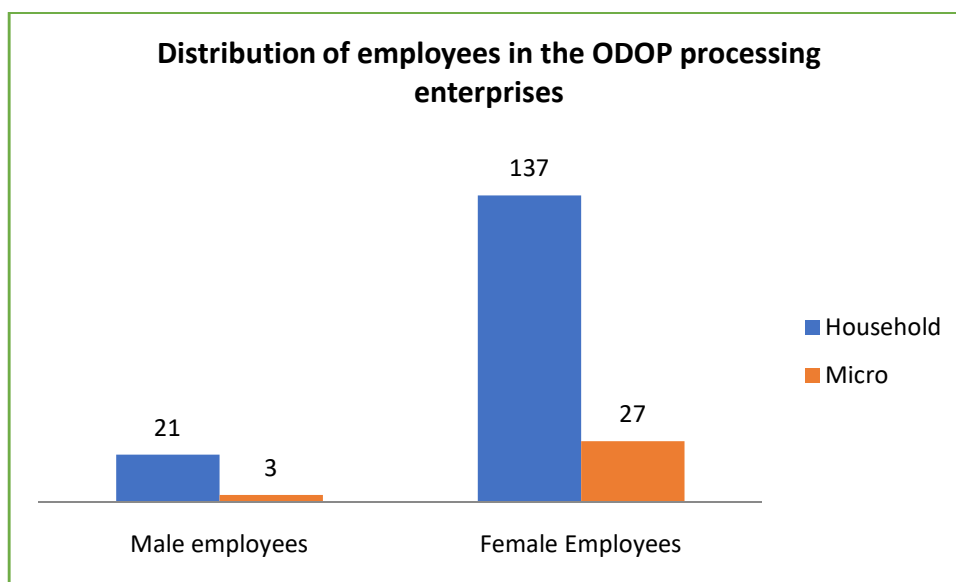


Table 33: Number of workers engaged in the ODOP processing

Category	Male Employee	Female Employee	Total
Household	3	127	130
Micro	0	27	27
Total	3	164	167

Source-Primary survey analysis

viii. Marketing linkages within the district, state, and outside

Currently, none of the processing units in the district are following any of the specialized marketing practices like an advertisement or digital marketing. The product is prepared on a pre-order basis. There is no involvement of the middleman as the processors directly sell the produce to the retailers. Product is directly sold from processors to the shopkeepers and other individual customers. Local retailers sell the produce to tourists and other consumers.

There is huge scope for marketing of the product as currently it is a household activity and confined to local areas only. Bamboo shoot pickle, Naga chilly pickle and meat, and pork pickles are the signature variant of the pickle from the district. Currently, the processing of the product is very less and limited only to the household mode. With the availability of marketing and training support, the production of the product can be increased and can be marketed outside the district and state.

ix. Level of infrastructure for ODOP processing within the district, in other districts, and States

There is no common infrastructure facility for the food processing industries in the district.

There is one FCI storage depot and public food laboratory in the district.

Table 34: FCI food depot in the district

Name of a food depot	Owned/ Hired	Capacity (MT)	Name of Depot in charge/ Manager	Contact No.
FSD, Phesama	Owned	4590	N. Santa Singh	986255901

Table 35: Public food laboratory

S. No	Laboratory and Address
1	State Public Health Laboratory, Merhuliesta colony, Near CMO office, Kohima, Nagaland

x. Total production value of the ODOP product manufactured in the district and as % of total agricultural production.

Estimated pickle value production in the district is between 10.2 to 11.5 lakhs per unit per annum. Approximately 1740 kg of pickle is processed in the enterprise in the district.

Table 36: Estimated value of pickle production in the district

S. No	Products	Estimated production (Per Kg)	Avg. Price per kg	Estimated value (Lakhs)
1	Naga chili Pickle	360	450 to 500	1.62 to 1.80
2	Mixed vegetables and fruit pickles	480	300 to 350	1.44 to 1.68
3	Meat pickles	900	800 to 900	7.20 to 8.10
		1740		10.2 to 11.5

xi. Number of enterprises involved in the processing of this product and as a % share of the total number of micro food processing enterprises in that district

There are 25 enterprises in the district are involved in pickle processing the district. Among the total pickle processing units in the district, 22 units are household units and 3 are micro-processing units.

The list of the processing units in the district is attached in the Annexure.

xii. Number of Self Help Groups and Farmer Producer Organizations engaged in the Processing of this product.

There are around 43 SHGs involved in various food processing activities in the District. Out of which 26 are involved in the pickle processing business and 12 are covered in the primary survey.

Horticulture Department has developed one FPC under the name, 'Kohima District Vegetable Growers Co-operative Society Ltd.' which has 1091 nos. of registered members.

Under the District, the State Government has promoted an FPO namely, ‘Kohima District Organic Farmer Producer Co-operative Society Ltd.’ with 1075 farmers registered as members.

A list of FPOs, Cooperatives, and the SHGs in the district is attached in the annexure.

The Nagaland State Co-Operative Marketing and Consumers’ Federation (Marco fed) Ltd., H.O. Dimapur

The Nagaland State Co-operative Marketing and Consumers’ Federation Ltd. popularly known as MARCOFED is an Apex Level Co-operative Institution for Marketing Agricultural produces and distribution of essential commodities in the State which was established in the year 1968 under the sponsorship of the State Govt. as a public sector undertaking with its Registration No. NL/0222 Dt. 17-08-1968 and based in Dimapur as its Head Office, Nagaland.

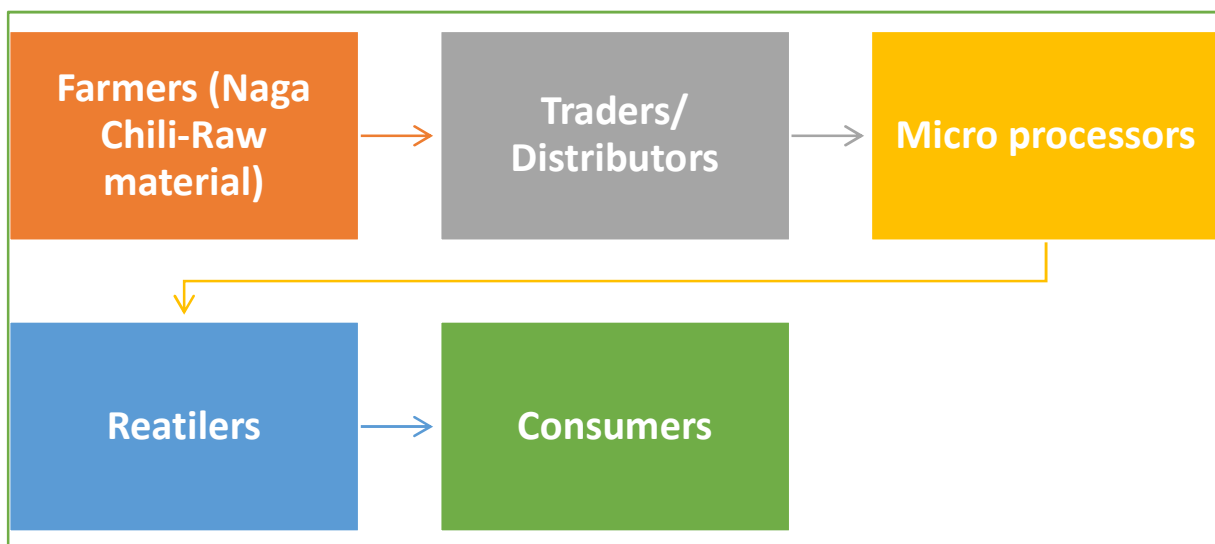
xiii. Sale of this product to other districts, and states and exported to other countries

None of the units in the districts are selling the processed products to other districts in the state and other states. All the units in the district are selling the products only to the retailers in the local.

5. Mapping the value chain aspects

A very simple value chain is present in the district. Generally, pickles are made on a pre-order basis. Currently, the pickling activity is done on small scale, volume is not big. Whatever pickle is processed, it is sold out in the village only. Interestingly, there is no role of middleman or trader in like other value chains.

Figure 4: Mapping the value chain aspects



6. Understanding the Infrastructure constraints faced by Micro Enterprises:

Road quality is the basic infrastructure constraint in the district. Financial assistance requires for better packaging machines for the pickles. The sealing machine is mentioned by processors. Along with it, training regarding the quality aspect of the product and FSSAI certification, and new technology is also essential in the district. There are several hurdles in the pickle processing business. Lack of awareness about government promoting schemes and, lack of information about the advanced and developed food technology-related aspects to the processors in the district.

Table 37: Infrastructure constraints faced by the enterprises	
Infrastructure	Up-gradation proposals
A) Public Infrastructure	<ul style="list-style-type: none"> Pickle processors are facing transportation losses during transporting their produce to other districts in the state. To overcome this issue state and central governments should construct good roadways to connect nearby districts as well as to other states, which will reduce the crop loss post harvesting and also encourage existing enterprises to expand their business and new entrepreneurs to come into the sector.
B) Common facilities	<ul style="list-style-type: none"> There is no common infrastructure like pack houses in the district for the processing enterprises and the farmers for primary processing. In the present situation, the pickle industry in the district is completely household activity and the current quantity of processing is also very less. One Common processing facility with machinery like Meat dryers, fruit vegetable cutting machines, spices mixture, and sealing machines is proposed in the budget.
C) Testing facilities	<ul style="list-style-type: none"> Due to poor public infrastructure and lack of common infrastructure facilities, the scale of the industry is very small in the district and the majority of the enterprises are not centerfield by the FSSAI. There is only one food testing lab in the district. The testing lab can also be set up in the proposed incubation center for the existing and new enterprises.
D) Safety standards	<ul style="list-style-type: none"> Regular safety standards and quality checks for the processed product are required to ensure the quality of the product produced by consumers. Most of the processor units in the district are not certified by the FSSAI.

7. Mapping the market potential of FPI micro enterprises

Pickle making is a household industry in the district. It is unorganized and scattered in the present situation. It is facing the following issues.

Table 38: Mapping the market potential of FPI micro enterprises

Issues	Remarks
Lack of Awareness	<ul style="list-style-type: none"> Processors are not even aware that pickle is the ODOP for the district. Processors running this business as a household industry. They don't have FSSAI registration. Need to create awareness about ODOP, and PMFME scheme among the processors
Public Infrastructure	<ul style="list-style-type: none"> Roads are not of good quality. It adversely impacting on the logistics and transportation in the district
Common infrastructure facilities	<ul style="list-style-type: none"> Driers and Sealing machines are required for pickle manufacturers. Currently, plastic bags and containers are used for the packing of the pickles. The requirement of glass bottles for packing is mentioned by the respondents. The dryer is also required to dry the meat in case of a meat pickle.
Testing facilities	<ul style="list-style-type: none"> Processors don't have any kind of testing facility in the village to test the quality parameters of the product
Skilled workers	<ul style="list-style-type: none"> The majority of workers engaged in this business are female workers. There is a need to have the proper training for them regarding the new development of the product, quality standards, food technology, etc.
Financial assistance	<ul style="list-style-type: none"> It is the basic constraint mentioned by almost every respondent. They need financial assistance to buy advanced packaging machines, and meat dryers and expand their current business.

D) Mapping the firm-level issues:

Table 39: Mapping the firm-level issues

S. No	Sectors	Gaps	Recommendations	Costing (Lakhs)
1	Skill training needs	<ul style="list-style-type: none"> There is a shortage of skilled labor in the pickle processing industry and there are no proper skill training facilities available in the district. Skill training is required regarding the use of advanced technology and machines in the business. 	<ul style="list-style-type: none"> Provide training to the existing enterprises and new entrepreneurs on the standardized process of processing the produce. 	15
2	Manufacturing practices	<ul style="list-style-type: none"> Existing enterprises are following the traditional method of pickle processing as the quantity of their processing is very less. 	<ul style="list-style-type: none"> Providing training on handling the advanced machinery like vegetable cutter, sorting and 	400

Table 39: Mapping the firm-level issues

S. No	Sectors	Gaps	Recommendations	Costing (Lakhs)
		<ul style="list-style-type: none"> All the activities involved in pickle processing like cutting, mixing, and packaging are done manually. 	<ul style="list-style-type: none"> grading machine, mixers, and packaging. Common infrastructure facilities can be used for processing the products by the enterprises in the district. 	
3	Technologies	<ul style="list-style-type: none"> There is no use of advanced technology or machine. Fruit/vegetable cutting machines, spice mixing machines, automatic sealing and filling packaging machines, and dryers are essential to increase the volume of the business. 	<ul style="list-style-type: none"> Providing advanced machineries like vegetable cutters, sorting and grading machines, mixers, and packaging machines under subsidized prices. 	1859
4	Access to finance	<ul style="list-style-type: none"> Lack of financial support to the processing units due to lack of existing food processing policies in the state and constraints faced in providing the collateral and preparing the DPR. 	<ul style="list-style-type: none"> The proposed incubation center can be used in attaining financial support for the enterprises by providing DPR and guiding the enterprises in attaining the support. 	275
5	Access to mentorship/ Services	<ul style="list-style-type: none"> There is no access to mentorship/ service in the district 	<ul style="list-style-type: none"> An incubation center is proposed to be set up in the district for guiding the existing and new enterprises in the district 	275

II)

**DETAILED CLUSTER STUDY FOR ODOP
PRODUCTS**

1. Industry and Market Analysis

1.1 Introduction

Pickles are made by soaking fruits or vegetables in brine or a vinegar solution and stored for a period during which the ingredients go through the pickling process and acquire the desired taste. Pickles are usually made from a mixture of vegetables and fruit. They are eaten as a savory, spicy accompaniment to a meal. Pickles are preserved by a combination of increased acidity (reduced pH), added salt, reduced moisture, and added spices.

Different types of pickles

A. Commercially available pickles are of two types.

1) Fermented pickles and

- Brine pickle
- Oil pickle
- Vinegar pickle
- Sweet pickle

2) Unfermented pickles.

1.2 Benefits of the product

King chili (U Morok) is native to the northeastern region of India and subsequently, the geographical indication (GI) of goods tag for this chili has been obtained by the Nagaland state Government. It is grown in districts of Kohima, Mon, and Peren of Nagaland State.

King chili is also known as ghost pepper, ghost chili, naga Jolokia, and bhoot Jolokia are among one the hottest chilies in the world.

King chili entered in “The Guinness Book of world records (Measuring 855000 Scoville units) beating the “Mexican red savana habaneros” (5,77,000 Scoville units).

It is consumed in fresh or dried form and used for its distinct flavor and aroma in various culinary preparations.

Due to its distinct taste and pungency, people of Northeast India commonly use this chili for making pickles and adding hotness to non-vegetarian foodstuff. In recent years this crop is gaining importance because of its high content of capsaicin (3-5%) as compared to any other Indian chili. King chilies have a soft texture and with high water content (85%) hence their quality deteriorated over time.

Table 40: Nutritive value of Dry King chili		
S. No	Parameters	Nutritive value
1	Fiber	8.90%
2	Fat	3.30%
3	Protein	4.46%
4	Ascorbate	6.26 mg/g
5	Capsaicin	7.65%
6	Proline	75.82 µmol/g
7	Carotenoid	3.99 mg/g

Source: NIFTEM Report

Table 41: Nutritive value of pickles		
S. No	Nutrient	Value
1	Water [g]	94.08
2	Energy	11
3	Energy [kJ]	44
4	Protein [g]	0.33
5	Total lipid (fat) [g]	0.2
6	Ash [g]	3.13
7	Carbohydrates, by difference [g]	2.26
8	Fiber, total dietary [g]	1.2
9	Sugars, total including NLEA [g]	1.06
10	Iron, Fe [mg]	0.4
11	Magnesium, Mg [mg]	4
12	Phosphorus, P [mg]	14
13	Potassium, K [mg]	23
14	Sodium, Na [mg]	1208
15	Vitamin C, total ascorbic acid [mg]	1

Source: NIFTEM Report

Health Benefits of Pickles

- High antioxidant Properties
- Improves Digestion
- Supply essential minerals and vitamins
- Improves insulin sensitivity
- Protects liver
- Reduce ulcers
- May ease muscle cramps

1.3 Global Market for the Product

The global pickles market was valued at USD 11.10 billion in 2018 and is expected to reach a value of USD 14.62 billion by the end of 2026, with an anticipated CAGR of 3.5% during the forecast period, 2019–2026.

The increasing demand for organic pickles is expected to drive the growth of the global pickles market during the forecast period. Additionally, the booming food service sector is also contributing to the increasing demand for pickles around the globe, which is likely to propel market growth. Furthermore, the increasing popularity of non-GMO (genetically modified organisms), organic pickles, and the introduction of innovative products with a better taste than target health concerns are some of the opportunities available in the global pickles market.

The global pickles market has been divided, by packaging type, into Jars, Pouches, Bottles, Tubs, and others. The jars segment is expected to dominate the global pickles market during the assessment period since jars are easy to carry and store and are cost-effective. The pouches segment is projected to record the highest CAGR as pouches offer ease of storage and usage and can be used as refill packs. Furthermore, longer shelf life can be achieved by using Tetra Pak pouches.

Pickle exports-

Pickle exports are one of the largest export sectors in India. As of 2019, the global trade share of the pickle industry contributed to about 0.012%, making a staggering USD 2.18 billion. In the Middle East, the United Arab emirate, and other nations with a sizeable Indian population, homemade pickles are in high demand. India's pickle exports have grown significantly during the past decade. The overall value of pickle exports worldwide in 2019 was USD 544.3 million, a 2.7 percent rise from 2015.

Pickles can be exported through a variety of channels. India exports pickles to 54 countries with a total value of USD 31.45 million. However, the top 5 exports account for a total of 21.46 USD million in export value. This export value represents 68.24% of the overall export value. India's pickle exports have seen a considerable increase. The entire pickle exports in 2009 were USD 15.76 million. In contrast, exports were worth USD 30.31 million in 2018, an increase of 30.03%

Key Players in Global Market

- ADF Foods (India),
- Del Monte Foods (U.S.),
- Mt. Olive Pickle Company (U.S.),
- Kraft Foods Inc. (U.S.),
- Reitzel International (Switzerland),
- Pinnacle Foods, Inc. (U.S.)

- Mitoku Company, Ltd. (Japan),
- GLK Foods
- Nilons Enterprises Pvt. Ltd
- Orkla ASA (MTR Foods)
- Peter Piper’s Pickle Palace, Inc

1.4 Indian Market and Valuation for the Product

In India, unripe fruits such as mangoes, Indian gooseberry, unripe tamarinds, and lemons are traditionally used for pickling. Apart from these, various vegetables such as gherkin, bitter gourd, carrot, cauliflower, ginger, garlic, onion, jackfruit, and citron are also pickled. Non-vegetarian pickles are also popular and they are made from chicken, fish, prawns, pork, and mutton.

No Indian meal is complete without a smidgen of the pickle. Ready to eat pickle is very popular in almost every household. Apart from the domestic market, Indian pickles have very inspiring export demand. There are 1000 different types of pickle recipes in the country. All those have very strong regional footprints. However, pickling techniques and the finished product might vary vastly from region to region. In addition, this is an easily scalable business.

On average, an Indian family consumes around 2 kilograms of pickles per year. As life is becoming fast and hectic, people want ready-made quality products that can provide a homemade taste. Now, almost every segment of society middle class, upper middle class, and the rich class are looking for readymade food options with good services.

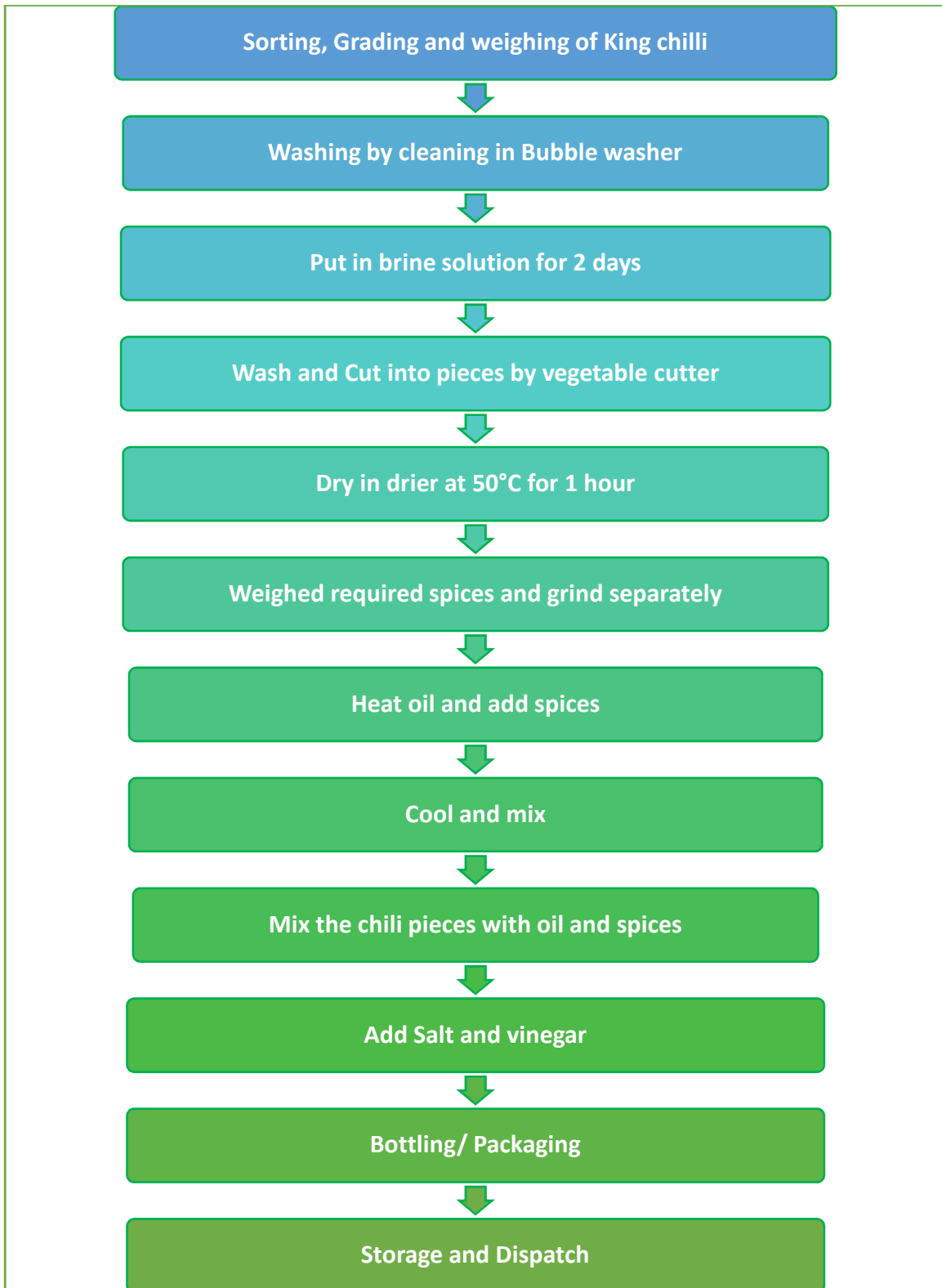
There is a moderate level of competition in the global market as the industry is scattered. Pickle by regional players using local products is preferred in the market.

Supermarkets and hypermarkets dominated the market in 2018, accounting for over 50.0% of the global packed pickles market. A majority of consumers find this distribution channel more convenient due to its extensive range of products offered on a single platform. Additionally, rapid urbanization and infrastructure development in emerging economies like China and India have resulted in the growing presence of supermarkets and hypermarkets. These retail stores offer numerous discount coupons and loyalty programs, thereby attracting a larger consumer base.

The online distribution channel is anticipated to exhibit the highest CAGR of 5.5% from 2019 to 2025. The soaring popularity of online grocery shopping apps across developing and developed countries will be the driving force behind segment growth. This trend can be attributed to the penetration of and access to high-speed internet and an increasing number of smartphone users around the world. The convenience that online channels offer is unparalleled and this will continue to be a key factor propelling this segment. Players like Amazon and Walmart have been making a mark in the online grocery business and gaining significant popularity among urban consumers.

1.5 Manufacturing Process

Figure 5: Naga Chili Pickle preparation Flow Chart-



Machines Required

A list of important machinery is given below:

Table 42: List of machinery					
S. No	Particulars	UOM	Qty.	Rate (INR Lakhs)	Value (INR Lakhs)
	Plant and Machinery/equipment				
a)	Main Machinery				
1	S.S.Top Working Table, Two head bottle Washing machine, SS Vessels for Oil dipping and Storage, S.S.Knife, ladles, Small utensils, mug, cups	Nos	1	5.00	5.00
2	Vegetable/Fruit Cutting Machine	Nos	1	1.35	1.35
3	Spices Mixing Machine	Nos	1	1.10	1.10
4	Automatic Filling Sealing and Packing Machine	Nos	1	1.85	1.85
5	Weighing Scale	Nos	3	0.18	0.54
6	Material Handling Equipment	Nos	LS	0.30	0.30
7	Misc. Tools	Nos	LS	0.25	0.25
	<i>sub-total Plant and Machinery</i>				10.39
	Furniture / Electrical installations				
1	Office furniture and Electrification	LS	1	0.85	0.85
	subtotal				0.85
	Other Assets				
1	preliminary and preoperative	LS		1.04	1.04
	<i>sub-total Other Assets</i>				1.04
	Total				12.28
<i>Source: NIFTEM Report</i>					

Figure 6 Machinery used for the pickle preparation

1. Vegetable grading and sorting machine. 2. Mixture. 3 Vegetable cutter. 4. Packaging machine



Chili value-added products:

Machines and equipment required for chili pickles manufacturing

Table 43 Chili pickle: Capacity 150 MT/Per year				
S. No	Equipment	capacity	Quantity	Price (Lakhs)
1	Cold store Sq. Meter	1	1500 Kg	4
2	Vegetable washing trough	1	500 Liter	0.65
3	Brine dipping tank	1	500 Liter	0.65
4	Vegetable cutter	1	80 Kg/Hr	0.25

Table 43 Chili pickle: Capacity 150 MT/Per year				
S. No	Equipment	capacity	Quantity	Price (Lakhs)
5	Dryer	1	120 Kg/ Batch	2.2
6	Gas operated kettle	1	80 Liters /Hr	0.75
7	Blending/Mixing tank	1	300 liters	1.4
8	Bottle filling unit	1	400 PPH	1.5
9	Induction sealer	1	Suitable	0.3
10	Shrink tunnel	1	Suitable	0.35
11	Batch coding machine	1	Suitable	0.12
12	Weighing balance	1	Suitable	0.006
13	Accessories	1	Suitable	0.5
				12.73

Table 44: Chili powder: Capacity 500 MT / Per day					
S. No	Equipment	Capacity	Quantity	Unit cost	Amount (Lakhs)
1	Micro pulverizer with 10 HP motor	1 Mt/ Hr	1	260000	2.60
2	Hanging weighing scale	100 Kg	1	17000	0.17
3	Digital weighing machine	100 Kg	2	4300	0.09
4	Band sealer		2	2159	0.04
5	Packaging machinery	2000 Pack/ Hr	1	650000	6.50
6	Sieving machine	15 Kg/ Hr	2	82000	1.64
7	Miscellaneous		1	10000	0.10
	Total				11.14

1.6 The test is done for the Product – Collected by interactions with FSSAI personnel

Following specifications under the bureau of Indian Standard related to the processing of such products may be referred to:

IS: 4626-1978

IS: 2860-1964

IS 7254-1974 6.2

FSSAI License: FSSAI License is issued by the Food Safety and Standards Authority of India (FSSAI), Ministry of Family Health and Welfare, Government of India. Application to commence a food business must be made to the FSSAI in the prescribed format. Based on the application and supporting documents, FSSAI will accord approval. The Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations 2011 introduced to improve the hygiene and quality of food have brought about tremendous changes in the food industry. As per the Act, no person shall commence or carry on any food business except under an FSSAI license or FSSAI registration. Therefore, any food

manufacturing or processing or packaging, or distributing entity is now required to obtain an FSSAI License or Registration.

As per FSSAI regulations, Pickles may be of combinations as given below:

(i) Pickles in Citrus juice or Brine conforming to the following requirements:

- (a) Drained Weight not less than 60.0 percent
- (b) Sodium Chloride content when packed in Brine Not less than 12.0 percent
- (c) Acidity as Citric Acid when packed In Citrus Juice Not less than 1.2 percent

(ii) Pickles in Oil

- (a) Drained Weight Not less than 60.0 percent
- (b) Fruit and Vegetable pieces shall practically remain submerged in oil

(iii) Pickles in Vinegar

- (a) Drained Weight Not less than 60.0 percent
- (b) Acidity of vinegar as acetic acid Not less than 2.0 percent

(iv) Pickle without medium means the pickles may

Contain onion, garlic, ginger, sugar jaggery edible vegetable oil, green or red chillies spices, spice extracts/oil, lime juice vinegar/ acetic acid, citric acid, dry fruits, and nuts

Table 45: Preservatives for Pickles and chutneys made from fruits or vegetables

S. No	Preservatives	Eligible Quantity
1	Benzoic acid	250 ppm
2	Sulfur dioxide	100 ppm
3	Calcium chloride, calcium carbonate	350 ppm
4	Acetic, citric, malic acid	GMO

2. District Profiling

There are 5 sub-divisions and 97 Grampanchayats in the district. There are almost 20-22 units of pickle processing in the district. Out of which, almost all are household units. Pickle processing volume is very low. And there is no specific farmers' organization or cluster for pickle processing in the district.

2.1 Demographic and Socio-economic profiling

According to the 2011 census Kohima District has a population of 2,70,063. Kohima district has a sex ratio of 928 females for every 1000 males, and a literacy rate of 85.23%.

Table 46: Demographic and Socio-economic profiling				
S. No	Particular	Year	Unit	Statistics
1	Geographical features			
A	Geographical Data			
	i) Latitude			25°40'N 94°07'E25.667°N
	ii) Longitude			94.117°E
	iii) Geographical Area		Hectares	159500
B	Administrative units			
	i) Sub Divisions		No	5
	ii) Tehsil		No	4
	iii) Sub-Tehsil		No	3
	iv) Patwar circle		No	6
	v) PanchayatSimitis			
	vi) Nagar Nigam			
	vii) Nagar Palika			
	viii) Gram Panchayats		Numbers	97
	ix) Revenue Villages		Numbers	97
	x) Assembly Area		Numbers	7
2	Population			270063
A	Sex wise			
	i) Male (Urban)	2011	Numbers	63748
	ii) Female (Urban)	2011	Numbers	59401
B	i) Male (Rural)	2011	Numbers	76370
	ii) Female (Rural)	2011	Numbers	70544
3	Agriculture			
A	Land Utilization			
	i) Total Area	2011	Ha	159500
	ii) Forest cover		Ha	49268
	iii) Non-Agriculture Land		Ha	94033
	iv)Cultivation of Barren Land		Ha	16199
4	Forest		Ha	81029.01
	Railways			
	i) the length of the rail line	2010-11	KM	Nil

Table 46: Demographic and Socio-economic profiling				
S. No	Particular	Year	Unit	Statistics
	Roads			
	a) National Highway	2010-11	KM	76
	b) State Highway	2010-11	KM	297
	c) Main District highway	2010-11	KM	216.80
	d) other districts	2010-11	KM	393.45
	e) Rural Road/Agriculture Marketing Board Roads	2010-11	KM	332.9
	f) Kachacha Road	2010-11	KM	730.55
	Communication			
	a) Telephone connections	2010-11	Numbers	55322
	b) Post offices	2010-11	Numbers	52
	c) Telephone Centre	2010-11	Numbers	45
	d) Density of Telephone	2010-11	Numbers/1000 person	55.32
	e) Density of Telephone	2010-11	Numbers/KM	100
	f) PCO	2010-11	Numbers	562
	g) PCO-STD	2010-11	Numbers	435
	h) Mobile	2010-11	Numbers	55832
	Public Health			
	a) Allopathic Hospital(District Hospital)	2010-11	Numbers	1
	b) Beds in Allopathic Hospital	2010-11	Numbers	574
	c) Ayurvedic Hospital	2010-11	Numbers	NA
	d) Beds in Ayurvedic Hospital	2010-11	Numbers	NA

Table 46: Demographic and Socio-economic profiling				
S. No	Particular	Year	Unit	Statistics
		11		
	e) Unani Hospitals	2010-11	Numbers	NA
	f) Community Health Center	2010-11	Numbers	3
	g) Primary Health Centre	2010-11	Numbers	14
	h)Dispensaries	2010-11	Numbers	NA
	i)Sub-Health center	2010-11	Numbers	40
	j)Subsidiary Health Centre	2010-11	Numbers	2
	k)Private Hospitals	2010-11	Numbers	NA
	Banking Commercial			
	a)Commercial Bank	2010-11	Numbers	27
	b)Rural Bank products	2010-11	Numbers	3
	c)Co-operative bank products	2010-11	Numbers	4
	d)PLDB Branches	2010-11	Numbers	NA
	IX)Education	2010-11	Numbers	
	a)Primary School	2010-11	Numbers	236
	b)Middle Schools	2010-11	Numbers	76
	c)Secondary and Senior Secondary Schools	2010-11	Numbers	Govt 16 Govt Rec -102
	d)Colleges	2010-11	Numbers	Govt 3 Govt Rec -17
	e) Technical University	2010-11	Numbers	1
<i>Source- Kohima district handbook</i>				

2.2 Industrial Profiling

In Kohima district, there are altogether around 226 industrial units. All kinds of small, large, and medium employ 1695 people.

3. Cluster Analysis

3.1 Location of the cluster

The pickle industry in the district is majorly a household industry and industries are scattered all over the district. The majority of the industries are located in the villages namely Viswema, Kigwema, Jotsoma, Meriema, Jakhama, and Mezoma. About 170 workers are engaged in processing the pickles in the district.

3.2 Turnover and Employment

Estimated pickle value production in the district is between 10.2 to 11.5 lakhs per unit per annum. Approximately 1740 kg of pickle is processed in the enterprise in the district. Approximately 250 to 280 Lakhs turnover is generated by the pickle processing enterprises in the district.

Table 47: Estimated value of pickle production in the district

S. No	Products	Estimated production (Per Kg)	Avg. Price per kg	Estimated value (Lakhs)
1	Naga chili Pickle	360	450 to 500	1.62 to 1.8
2	Mixed vegetables and fruit pickles	480	300 to 350	1.4 to 1.6
3	Meat pickles	900	800 to 900	7.2 to 8.1
		1740		10.2 to 11.5

Employment:

About 25 pickle processing units are operating in the district which generates employment for around 170 workers in the district. Among the total workers engaged in pickle processing in the district, 98% are females. On average 6 to 7 employees are working in each enterprise in the district.

3.3 Social Economic Profiles of the ODOP Producers

- It is observed from the primary survey that most of the unit owners belong to the age group of 35 to 60 years and their education level lies from intermediate to post-graduation
- Workers' age group lies between 20 years to 60 years and they have education up to intermediate.

3.4 Infrastructure

3.4.1 Essential amenities required for the production of the product

To process the 150MT per annum, 12.73 Lakh worth of machinery is required.

Table 48: Essential machinery for the processing				
S. No	Equipment	Capacity	Quantity	Price (Rs. In Lakhs)
1	Cold store Sq. Meter	1	1500 Kg	4
2	Vegetable washing trough	1	500 liter	0.65
3	Brine dipping tank (SS 316 L)	1	500 liter	0.65
4	Vegetable cutter	1	80 kg/ Hr	0.25
5	Dryer	1	120 Kg/ batch	2.2
6	Gas operated kettle	1	80 liters/ hr	0.75
7	Blending/ Mixing tank	1	300 liter	1.4
8	Bottle filling unit	1	400 PPH	1.5
9	Induction sealer	1	Suitable	0.3
10	Shrink tunnel	1	Suitable	0.35
11	Batch coding machine	1	Suitable	0.12
12	Weighing balance	1	Suitable	0.06
13	Accessories	1	Suitable	0.5
	Total			12.73

3.4.2 Existing infrastructure

There is no common infrastructure like cold storage and pack houses in the district for the processors. There is no incubation center and common processing center to encourage the new entrepreneurs and support the existing enterprises.

3.4.3 Additional infrastructure required

Incubation center- There is a need to set up an incubation center to train the existing and new entrepreneurs and provide handholding support to them.

Common infrastructure facility (Cold Storage and Reefer van)- In the present situation there is no immediate requirement for cold storage as the volume of the product is very less, however in the future, if the production goes up then there will be a requirement for cold storage.

Machinery required-Right now, all units are operating on a very small scale and not using advanced machines. However, a few basic machines like SS tables, Fruit/vegetable cutting machines, spice mixing machines, automatic filling and sealing, and packing machines will be required to increase the volume of the product.

Good quality Roads - Good quality roads are the basic infrastructure required for any kind of processing industry. This basic infrastructure is lacking in the district. Hence it is required to construct good quality roads and their proper maintenance.

3.5 Raw materials

3.5.1 The vital raw material and all the added material along with that

Below mentioned are the raw material required for processing 100 Kg of the mango pickle.

Table 49: Quantity of raw material added in the preparation of the mango pickle

S. No	Particulars	Quantity (kgs)
I	Raw Materials	
1	Mango	100
2	Salt	15
3	Fenugreek Powder	2.5
4	Turmeric Powder	1.5
5	Red Chilli Powder	1.5
6	Clove	2.5
7	Black Pepper	1.5
8	Cumin	1.5
9	Mustard Oil	25

3.5.2 The quality parameters being checked for all the raw materials

In the present situation, all quality parameters are checked with manual inspection. Raw material like spices, oils, fruits, vegetables, and meat is procured from the village itself or Kohima town.

3.5.3 Whether the raw material is perishable

The quality parameters being checked for all the raw materials

Whether the raw materials are perishable

Fruits, vegetables, and meat are perishable while salt, oil, and spices are used to increase the shelf life of pickles.

3.6 Production Process

The detailed production process is explained in point number 1.5 of section II i.e. manufacturing process

However, there are various types of pickles depending on slight variations in the process.

Table 50: Production process of the pickles

Product	Salt	Sugar	Vinegar	Process
Fermented sweet pickle	5% then 3%	1-2% then 3%	0 then 5%	Ferment for 1-2 weeks then repacked in vinegar+ salt+ sugar (optional pasteurization)
Fermented sour pickle	5% then 3%	0 then 0	0 then 5%	Ferment for 1-2 weeks then repacks in vinegar + salt (optional pasteurization).
Unfermented pickle	3%	1%	5%	Pack straight away and pasteurize
Salt-stock pickle	15%	0	0	Store until required. Wash out salt and repack as an unfermented pickle.

3.7 Product Range

- Bamboo Shoot pickle
- King Naga Chili pickle
- Pork pickle
- Beef pickle
- Dry Fish (Bombay Duck) Pickle
- Dry Small Fish Pickle
- Smoked Beef Pickle SN
- Smoked Pork Pickle SN
- Bamboo with King Chilli Pickle
- Chicken Pickle, KFP
- Dry Prawn Pickle
- Kiwi sweet pickle
- Jujube Berry(Boroi/Bogori/Kul/Ber) Pickle
- Mango Pickle
- Sticky rice roti

3.8 Technology

New Technology developed by CFTRI

Mutton Pickle-

Equipments-Grinder, cooker, slicer, Dryer, and Fryer

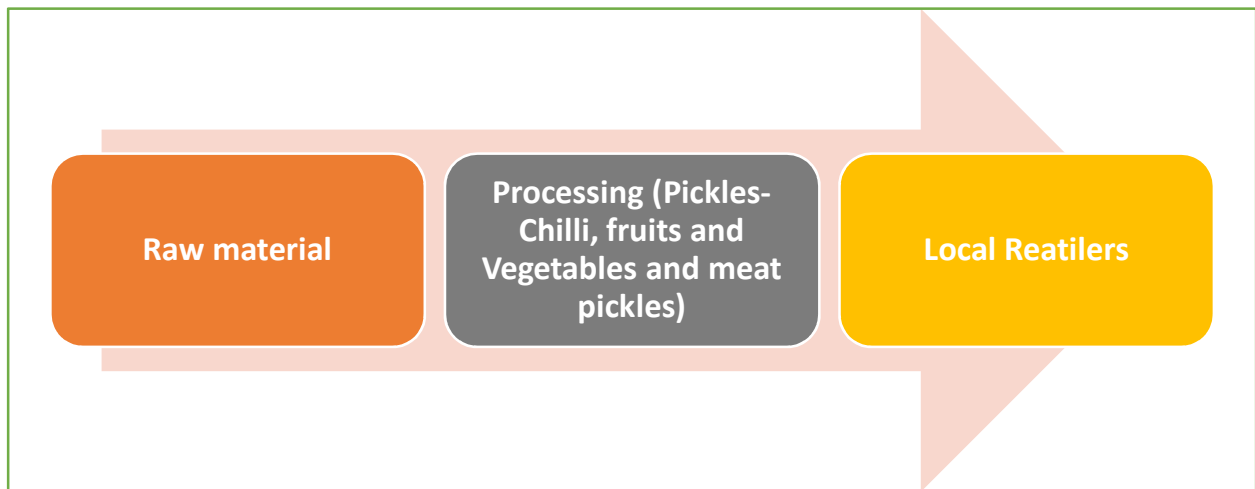
Economics of project-120 kg/day

Cost of plant and equipment- INR 2.12 Lakhs

3.9 Marketing

Marketing of the product is confined to the village level only. All the 25 processing units in the district are selling their produce to the retailers in the local. There are a lot of scopes to increase the marketing, however, FSSAI and other quality formalities need to complete before marketing the product.

Figure 7: Marketing flow-



3.10 Human Resource

Number of an employee engaged in the ODOP processing units

168 workers are engaged in the processing of pickles in the district. Among the total workers in pickle processing in the district, 84% of the total workers are contributed by the household enterprises and 16% of the workers are working in the micro food processing enterprises.

Table 51: Employees in the ODOP processing units			
S. No	Enterprise	No. of Employees	% Share of the employees
1	Household enterprises	141	83.9
2	Micro enterprises	27	16.1
	Total	168	100.0

3.11 Skill Development

Standardized process- Existing and new processing units in the district need to be trained on the standardized processing of the pickles and other non-ODOP products in the district to maintain the quality of the crop over time.

Handing advanced technology- The majority of the units in the district are manually processing the crop. Need to be trained in handling the advanced machinery to increase the quality and quantity of the crop.

Skill development on branding and marketing- All the units in the district are marketing the processed products to the retailers in the local. There is a need to train the units in the district on marketing and branding the processed products to increase the marketing linkages of the produce.

3.12 Testing

There is one testing lab in the district. All the units in the district are selling the processed pickles without testing. Testing facilities are required to fulfill the quality norms set by FSSAI.

3.13 Institutional Support

The Bankers, MOFPI, Horticultural department, and Marketing departments who are directly and indirectly involved with the micro food processing industry are extending their support for the growth of the industry with the implementation of schemes that are beneficial to unit holders.

3.14 Support Infrastructure

Public infrastructure such as Road connectivity to the enterprise needs to be strengthened as the quality of the connectivity is low when compared to other states. There is a lack of continuous flow of electricity and water to the enterprises in the district which need to be developed.

Good quality roads with good connectivity with other districts and states, Warehouses, Cold storage, Reefer vans, and advanced machinery are the major infrastructure for food processing.

3.15 Financial Linkages

NRLM facilitates building a bridge for universal access to affordable cost effective reliable financial services to the poor through their SHGs and their federations. These include financial literacy, bank account, savings, credit, insurance, remittance, pension, and counseling in financial services.

Capitalizing institutions of the poor-

NSRLM provides Revolving Fund and Community Investment Fund (CIF) as Resources in Perpetuity to the institutions of the poor for meeting their credit needs for both consumption purposes and also for investment in livelihoods promotion. This fund is a corpus /capital resource for institutions of the poor. Largely this fund is used for on-lending to the SHGs for providing financial assistance. This also strengthens their institutional and financial management capacity and builds their track record to attract mainstream bank finance.

- Revolving Fund (RF) is provided to SHGs as a corpus to meet the members' credit needs directly and as catalytic capital for leveraging repeat bank finance. RF is given to SHGs that have been practicing

'Panchasutra' (Regular meetings; Regular savings; regular inter-lending; Timely repayment; and Up-to-date books of accounts).

- Community Investment Fund is provided as Seed Capital to SHG Federations at the Cluster level to meet the credit needs of the members through the SHGs/Village Level Organizations and to meet the working capital needs of the collective activities at various levels.
- Vulnerability Reduction Fund (VRF) is provided to SHG Federations at the Village level to address vulnerabilities like food security, health security, etc., and to meet the needs of the vulnerable persons in the village.

Access to credit-

NSRLM expects that the investment in the institutions of the poor would leverage the bank credit of at least Rs.1,00,000 /- accessible to every household in repeat doses over the next five years. For this, SHGs go through Micro-Investment Plan (MIP)/Micro Credit Plan (MCP) process periodically. MIP/MCP is a participatory process of planning and appraisal at household and SHG levels. The flow of the funds to members/SHGs is against the MIPs. The rural poor need credit at a low rate of interest and in multiple doses to make their ventures economically viable. To ensure affordable credit, DAY-NRLM has provided interest subvention for all eligible SHGs to get loans at 7% per annum from mainstream financial institutions. Further, an additional 3% interest subvention is available only on prompt repayment by SHGs in most backward 250 districts. Making poor the '*preferred clients of the banking system and mobilizing bank credit*' is core to the DAY-NRLM financial inclusion and investment strategy.

SHG Credit linkage-

To facilitate bank linkages, State Level Bankers' Committees (SLBC) have constituted an exclusive sub-committee for SHG bank linkages and financial inclusion in NSRLM activities. Similarly, District Level Coordination Committees and Block Level Coordination Committees review SHG-Bank linkages and NSRLM.

SHG members are fostered as Bank Facilitators (Bank Sakhi) to drive Financial Inclusion in their community. They facilitate close interaction between the community and the Bank Branch in addressing the financial needs of the SHGs, and for 100% recovery of loans through Community Based Recovery Mechanism (CBRM) positioned in the banks. CBRM is monitored by the 'Sub Committee on Bank Linkage and Recovery of Loans' under the Village Level Organisation.

To ensure banking services is delivered at the doorstep of unbanked and underbanked area, SHG members are engaged as Business Correspondent (BC) as an alternate banking solution for the rural community.

NSRLM works towards increasing the portfolio of products of savings, credit, insurance (life, health, and assets), and remittance through the institutions of the poor directly or in partnership with mainstream financial institutions using various institutional mechanisms and technologies.

Source-"Nagaland State Rural Livelihoods mission", GoN.

3.16 Environmental Impact: no such impact

There is no negative impact on the environment from the pickle processing industries in the district. All the 25 units in the district are either household-level or micro-level industries.

3.17 Cluster Actors

No. of skilled and semi-skilled Workers

Altogether about 114825 workers are available in the district, out of which 68140 are male and 46685 are female workers available in the district.

Almost 130 workers are engaged in the pickle processing units out of which 98% are female workers

Manufacturers

Pickle manufacturers are scattered throughout the district as it is a form of household industry.

Unit Owners – 25 Units

Raw Material Supplier-

- Wholesalers or traders in the village or Kohima town supply the material to processing units in the district.
- Currently, it is a small household industry and its volume is also small hence it is not difficult to make available the raw material.

Enterprise Promotion Councils

No enterprise promotion council exists in the district

Financial Institutions

Nationalize banks are extending loans to purchase the machinery as well as towards working capital to the unit holders.

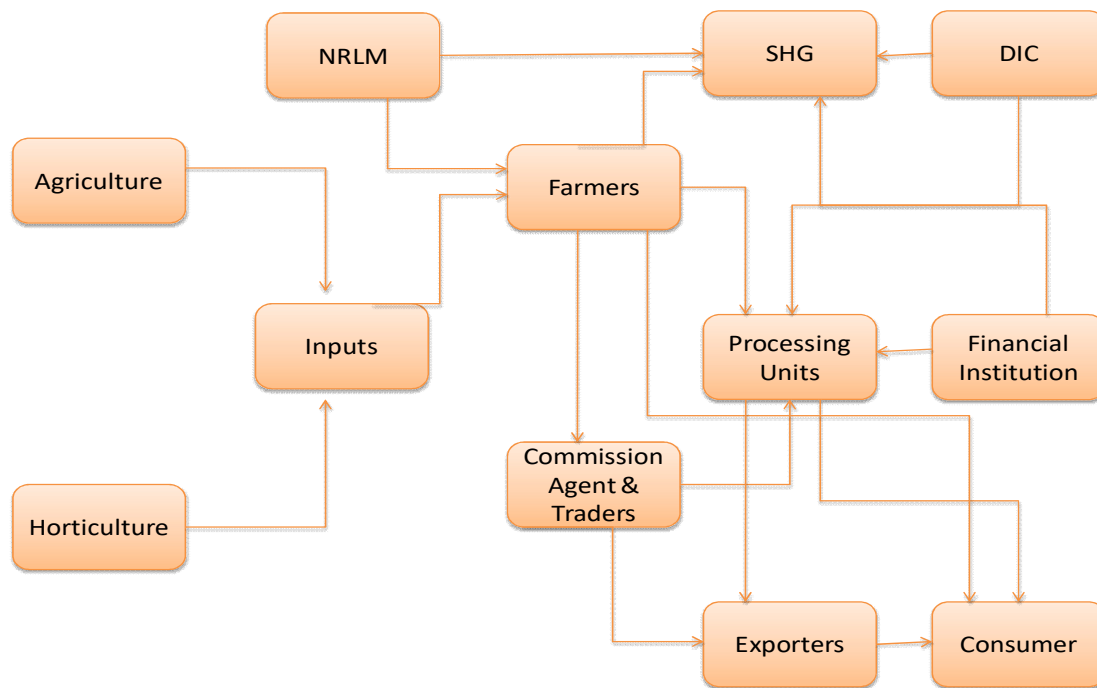
Marketing Players

- Processor himself sells his product to a retail shop or individual customer as volume is very small
- There is no involvement of a middleman, which is a good thing and the processor can get a reasonable price for his product.
- If the cluster is formed, then also it is possible to keep away middleman's involvement and the product can be directly sold to end users.

3.18 Existing Government Schemes

All schemes from MOFPI and the Nagaland government are mentioned in detail in point's number 2.1, 2.2, and 2.3 of this document.

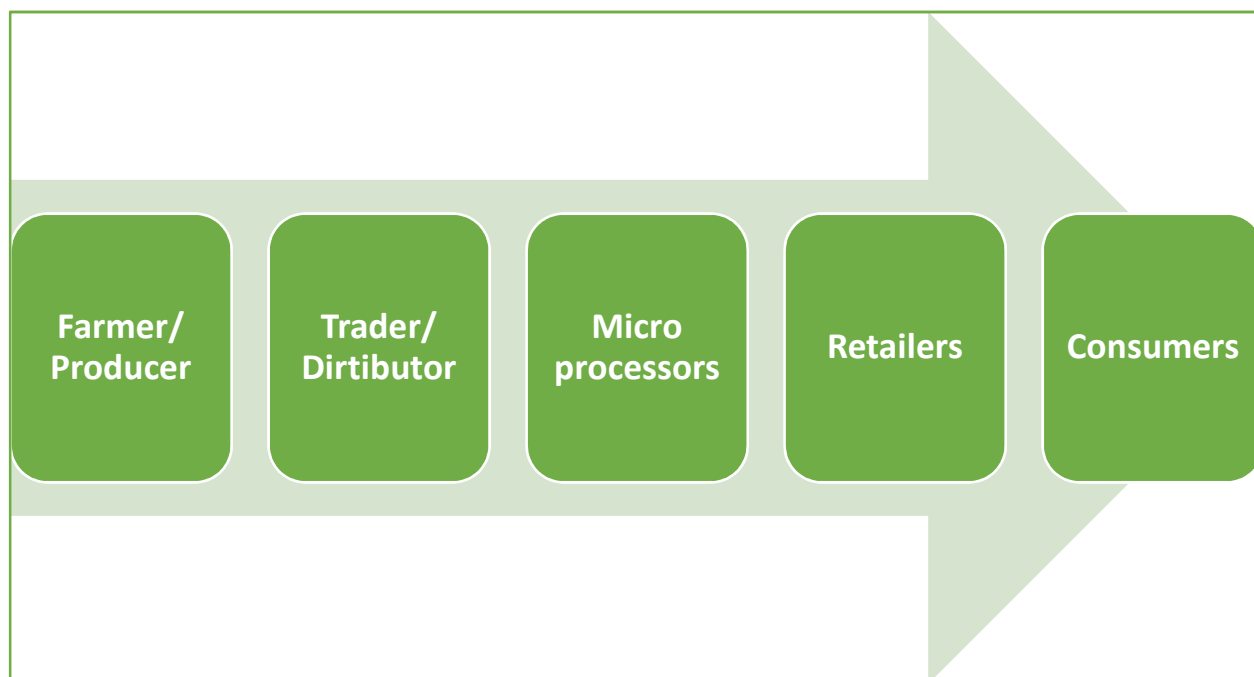
3.19 Cluster Map



3.20 Value Chain

Table 52: Value chain of the produce					
S. No	Particulars	Activities	Purchasing price (Per Kg)	Selling price (Per Kg)	Difference in INR
1	Farmer	Cultivation		95 to 100	
2	Trader	Primary processing, Storage, and Transport	100	130	30
3	Microprocessor	Processing (95% recovery)	130	500	370
4	Retailer	Storage and distribution	500	560	60

Figure 8-Movement of the Naga chili in the district



3.21 Product Cost analysis:

Varieties of pickles are produced in the Kohima district here giving an example of mango pickle and Naga chili pickle product cost analysis.

Table 53: Cost of Production of Mango Pickle

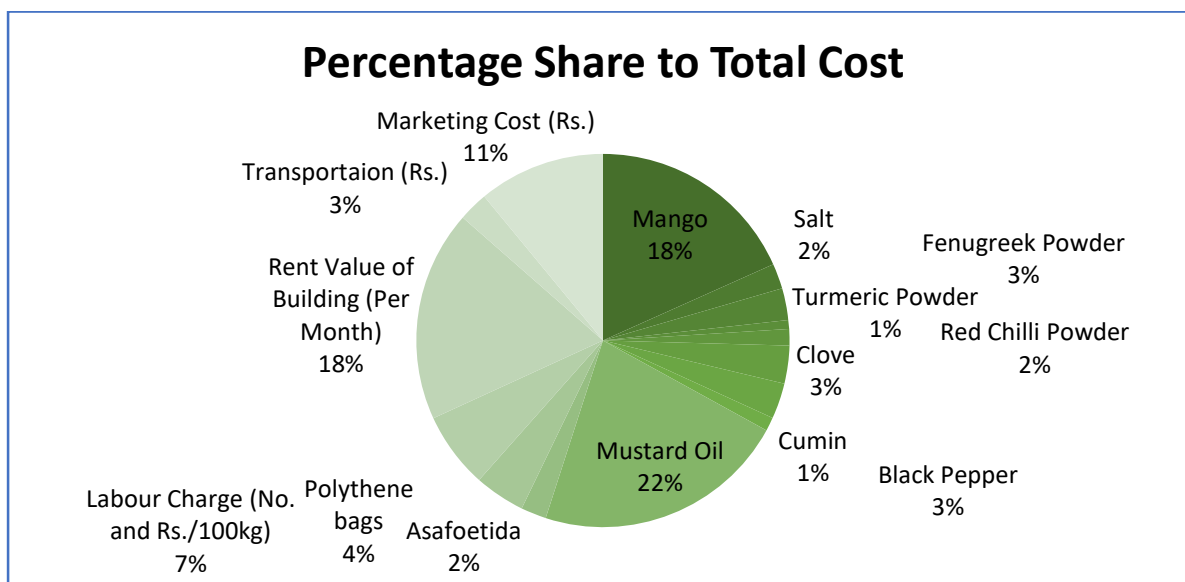
Unit: Rs/Quintal					
S. No	Particulars	Quantity (kgs)	Average Rate (Rs./kg)	Cost (Rs.)	Percent to Total
	Variable Cost				
I.	Raw Materials				
1	Mango	100	25	2500	18.30
2	Salt	15	20	300	2.20
3	Fenugreek Powder	2.5	150	375	2.75
4	Turmeric Powder	1.5	70	105	0.77
5	Red Chilli Powder	1.5	130	195	1.43
6	Clove	2.5	180	450	3.29
7	Black Pepper	1.5	280	420	3.07
8	Cumin	1.5	110	165	1.21
9	Mustard Oil	25	120	3000	21.96
10	Asafetida	2	150	300	2.20
II.	Packaging Material				

Table 53: Cost of Production of Mango Pickle

					Unit: Rs/Quintal	
S. No	Particulars	Quantity (kgs)	Average Rate (Rs./kg)	Cost (Rs.)	Percent to Total	
11	Polythene bags	400	1.5	600	4.39	
III	Labour Cost			0		
12	Labour Charge (No. and Rs./100kg)	5	180	900	6.59	
IV	Fixed Cost					
13	Rent Value of Building (Per Month)		2500	2500	18.30	
V	Marketing Cost					
14	Transportation (Rs.)			350	2.56	
15	Marketing Cost (Rs.)		1500	1500	10.98	
VI.	Total Cost	153		13660	100.00	
VII.	Total Revenue	153	140	21420		
VIII.	Net Income			7760		
IX.	Benefit Cost Ratio			1.57		

Source: Secondary Research

Figure 9: Percentage of the total cost in pickle making



The total cost of production of mango pickle per quintal is Rs. 13660, of which 68 percent is a variable cost, 18 percent is a fixed cost and 14 percent is a marketing cost. Net income generated per quintal is Rs.7760 with a benefit-cost ratio of 1.57.

Naga Chili Pickles

The total cost of production of naga chili pickle per kilo is Rs. 1431 and the net income generated per kilo is Rs. 869 with a benefit-cost ratio of 1.6.

Table 54: Cost of production of Naga chilies

S. No	Particulars	Amount per unit (Rs.)
1	Raw material	1200
2	Packaging material	20
3	Labor	5
4	Manager	2
5	Electricity	1
6	Transportation	1
7	Miscellaneous	2
8	Loss in processing	50
9	Other raw materials (Oils, Salt, Spices)	150
10	Total	1431
11	Selling price	2300
12	B: C Ratio	1.6

3.22 SWOT Analysis

Table 55: SWOT analysis

<p>Strength</p> <ul style="list-style-type: none"> Pickle is famous for its unique traditional taste in the district. Strong domestic demand for the pickles Health benefits are associated with the consumption of the produce. 	<p>Weakness</p> <ul style="list-style-type: none"> The industry is completely household, unorganized, and scattered Business volume is very low. The sale of the product is confined to that village only. No FSSAI registration of the unit holders No awareness about government support and schemes for the processors in the district Lack of advanced machinery like cutting machine, de-boner, sealing machine, dryer, etc No formal organization or cluster available for pickle processing units
<p>Opportunities</p> <ul style="list-style-type: none"> Opportunity to create the brand for the pickles produced in the district. Opportunity to upgrade the existing unit with the support of schemes implemented by state and central government. 	<p>Threats</p> <ul style="list-style-type: none"> Competition from the settled brand in the market. Quality and safety of the produce Huge fluctuation in the raw material cost. (Oil cost, Spices and fruits, and vegetable cost)

<ul style="list-style-type: none"> • There is scope to cater to a foreign market for the export of the pickle processed in the district. 	
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4. Benchmark Study

A Case Study on Pickle Manufacturer in Dadra and Nagar Haveli

This is the story of Shankar Pickles, a micro-unit from Silvassa Head Quarters in Dadra and Nagar Haveli Union Territory.

Table 56: Benchmark study at the National level	
Name of the Organization	Shankar Pickle
Founded By	Shankar Patel
Started In	2001
Number of Persons Involved	5
Manufacturer	Praveen Shankar Patel, Dhokwadi, Silvassa, Dadra, and Nagar Haveli
Formed and Support By	None (Individually Established)
Training Received On	None
Turn Over Per Annum	Rs.8,00,000
Net Profit Per Annum	Rs. 2,50,000 to 3,00,000

Shankar pickles were founded in 2001 by Shankar Patel with family members in Dhokwadi, Silvassa headquarters in Dadra, and Nagar Haveli U.T, he started the business on his own without any support from the government. Now his son Praveen Shankar Patel is looking towards the business with his family and they are doing a transaction of Rs.8,00,000 per annum with a net profit of Rs.2,50,000 to Rs. 3,00,000. They use to sell the pickles in polythene covers without packaging, labeling, and branding.

Table 57: Types of Pickles and Average Monthly Sale of Pickles				
S. No	Type of Pickle	Average Monthly sale (in Kgs)	Price (Rs./Kg)	Monthly Turnover (Rs.)
1	Mango	350	120	42000
2	Lemon	120	120	14400
3	Chilli	150	120	18000
4	Mixed	100	120	12000
	Total	720		86000

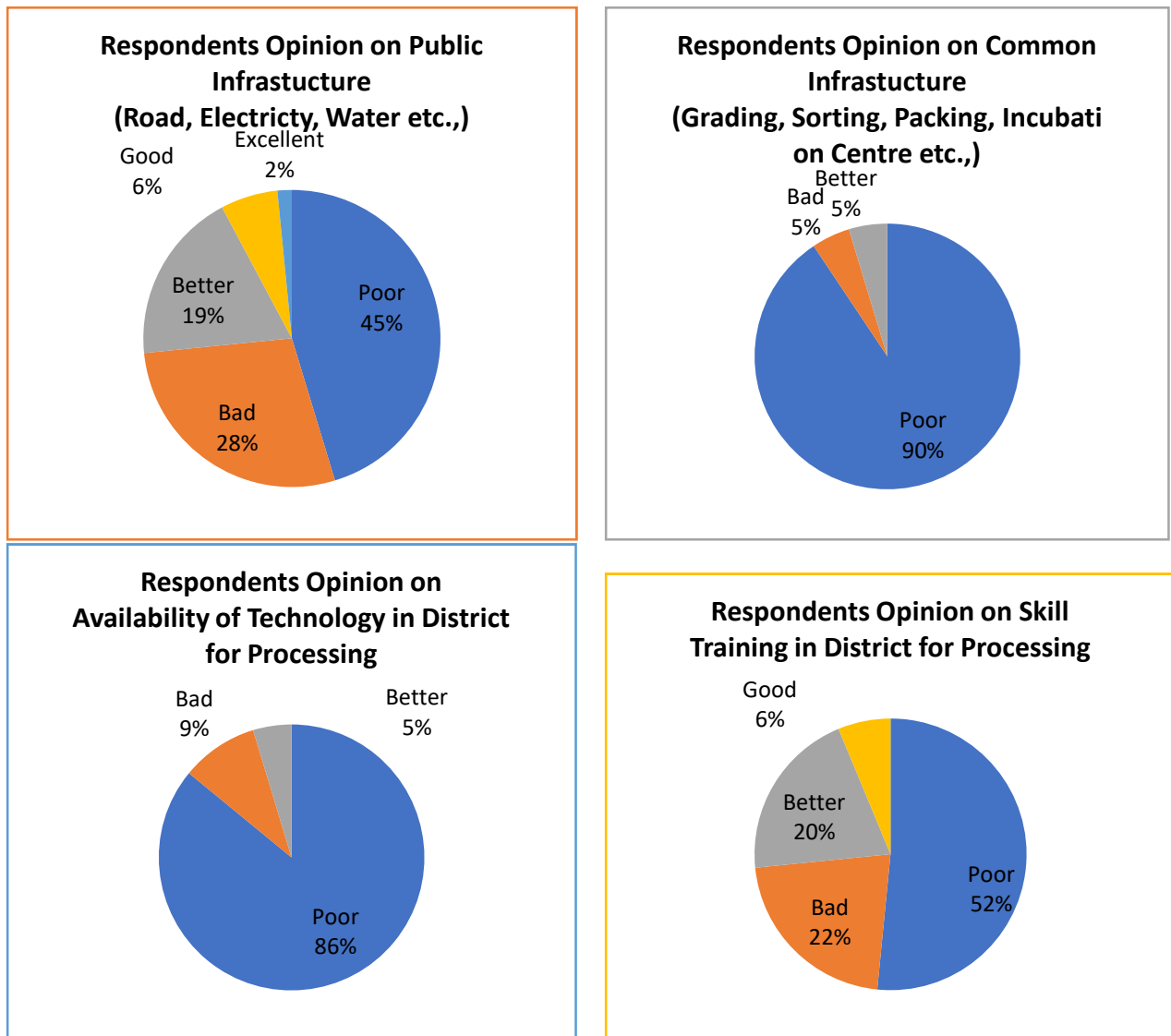
5. Stakeholder Consultation

5.1 Individual Meetings –

A Survey of 25 pickle processing units is done through face-to-face meetings. To understand their perspective about business and other factors related to processing industries. All the information mentioned in the questionnaire is filled in the individual meetings.

The below pie chart is prepared based on the opinion of respondents on existing public infrastructure, common infrastructure, availability of technology, and skill training for processing ODOP products.

Figure 10: Individual meeting



5.2 Agenda Points and discussions

The points discussed are-

- Availability of technology
- Scope for processing
- Common Infrastructure facilities
- Logistic
- Branding and Marketing

Minutes of Meeting with Various Stakeholders;

- The processing is happening at a very small scale and small processors have adopted the traditional method of processing.
- The availability of new technology or modern method of processing (using semi-automated and automated machinery) is lacking.
- There is no availability of common infrastructure facilities such as incubation center, grading, sorting, and packing units
- Transportation is a huge problem in the district
- The marketing of products is challenging in the district due to logistic problem
- There is a huge scope for organic pineapple products in the district as well as in nearby districts
- There is a high requirement for skill training and development for micro and small processors
- The majority of the micro and small processors are selling value-added products without brand. They require training and exposure to build the brand, logo, and knowledge on labeling and packing of the produce.

6. Need Assessment and Gap Study

Table 58: Need assessment and Gap study

Gaps	Remarks
FSSAI Registration	<ul style="list-style-type: none"> • As per the Act, no person shall commence or carry on any food business except under an FSSAI license or FSSAI registration. Therefore, any food manufacturing or processing or packaging, or distributing entity is now required to obtain an FSSAI License or Registration. • It is a basic requirement of any food processing business. Need to literate processors regarding the importance of FSSAI license and every processing unit should have this license.
Technology	<ul style="list-style-type: none"> • In the present situation business volume is low; hence the traditional method is used in processing. • There is no use of advanced technology or machine. Fruit/vegetable cutting machines, spice mixing machines, automatic sealing and filling packaging machines, and dryers are essential to increase the volume of the business.
Public Infrastructure	<ul style="list-style-type: none"> • Lack of good quality roads is the basic problem mentioned almost by

Table 58: Need assessment and Gap study

Gaps	Remarks
	<p>every respondent in the primary survey.</p> <ul style="list-style-type: none"> • Due to the poor quality of roads, transportation is getting affected.
Testing Facilities	<ul style="list-style-type: none"> • There are no proper testing labs in the Kohima district. The product must meet quality standards as per the Food Safety and Standards Authority of India.
Skill Training	<ul style="list-style-type: none"> • There is a shortage of skilled labor in the pickle processing industry and there are no proper skill training facilities available in the district. Skill training is required regarding this advanced technology and machines in the business.
Marketing	<ul style="list-style-type: none"> • There is a strong need of marketing the product through various channels like events, exhibitions, online marketing, etc. In the current situation, product sale from the processor is confined to the village or town level only. The sale should cross the borders of the district, state, and country.
Cluster	<ul style="list-style-type: none"> • Though there is enough scope for pickle processing in the district as processors wish to expand their unit with financial assistance, there is a lack of formal clusters for pickle processors. There should be a formal cluster that will bring together all household, small, and micro-processing units from different districts under one cluster.

Rating of Response Count (Based on Primary Survey)

Rating 1 is considered as poor and Rating 5 is considered excellent.

Table 59: Rating of responses count on the existing infrastructure

S. No	Particular	Response Count						Total	
		Ratings	1	2	3	4	5		Not Responded
1	Public infrastructure such as roads for backward and forward linkages		4	11	7	3	0	0	25
2	Access to common facilities such as grading, sorting, packaging, cold chain facilities, etc.		24	0	1	0	0	0	25
3	Access to testing facilities		24	1	0	0	0	0	25

4	Compliance with standards and the frequency of inspections from the safety regulators	25	0	0	0	0	0	25
5	Skill training needs	11	13	1	0	0	0	25
6	Manufacturing practices	16	9	0	0	0	0	25
7	Technologies Available	23	2	0	0	0	0	25
8	Access to finance	4	18	3	0	0	0	25
9	Access to mentorship/ service	12	13	0	0	0	0	25
10	Awareness of Govt Policies among micro /small manufactures	17	8	0	0	0	0	25
11	Awareness of ODOP products in the District	24	1	0	0	0	0	25
12	Marketing/sales facilities	4	18	3	0	0	0	25
13	Facilities for the workers	18	7	0	0	0	0	25

Public infrastructure such as roads for backward and forward linkages – Most of the respondents rated it on a scale of 2, which means it is in poor condition and needs to look into it on a priority basis.

Access to common facilities such as grading, sorting, packaging, cold chain facilities, etc – Facilities like cold storage are not available

Access to testing facilities – The majority of respondents mentioned there is a direct need for testing facilities in the district

Compliance to standards and the frequency of inspections from the safety regulators – the majority of respondents expressed that they are not undergone any kind of inspection concerning safety regulators.

Skill training needs – the need for training rated on the 1-2nd scale, means there is a need for training for the workers engaged in coffee processing

Technologies Available – Lack of technology and lack of advanced machines in the units.

Access to finance – Financial assistance is very important almost for every respondent to expand their existing units as well as to purchase advanced machines.

Access to mentorship/ service – most of the respondents mentioned the need for mentorship to upgrade their business and livelihood.

Awareness of Govt Policies among micro /small manufacturers –There is no awareness of any government schemes.

Awareness of ODOP products in the District –The majority of respondents are not aware of ODOP in the district.

Marketing/sales facilities – Most of them expressed that they need proper training in marketing and branding to improve their business.

7. Recommendation

7.1 Vision Statement and Key Objectives for SLUP

Vision Statement: To promote Individual units and SHGs to up-grade existing processing activities in pickle products.

Objectives:

- Identifying interested stakeholders in pickle processing in Kohima district.
- Up-gradation of existing micro-processing units in the District

7.2 Project Strategy and Interventions

Before devising the intervention strategy, let us understand the context of processing in the district.

Context of ODOP Processing (Kohima)

The pickling industry in the Kohima district is at a nascent stage. It is a complete household industry; not organized and hence it is difficult to get accurate data on exact pickle production in the district. Various types of pickles such as bamboo shoot pickle, meat pickle, fish pickle, beef pickle, pork pickle, vegetable pickle, naga king chili pickle, soybean pickle, etc., are produced by households in the district. It is an age-old tradition in the Kohima district to make a variety of pickles at home. Earlier it was made for household consumption only; however, its demand got increased from the tourist visit to the district. Then retailer shops started to keep it in their shops to make it available to outsiders.

As part of our primary survey, we have interviewed around 25 units, who are involved in the processing of various kinds of pickles like Naga chili, Mixed vegetable pickles, meat pickles, etc. Processors are selling the processed pickles within the district to local retail shops, traders, and also directly to the consumer.

Table 60: Total number of surveyed respondents

Particular interviews done		Number of Respondents Interviewed
ODOP- Pickles	Existing Enterprises	25
	New/Potential Possible Enterprises	78

Proposed fund allocation:

Table 61: Proposed fund allocation for Up-grading the existing and the new units in the district		
Proposed fund allocation for Kohima District		
Intervention	Target	Amount (Cr.)
Capital investment in plant and machinery (Individual units)	To upgrade and scale up in the production process for 137 Micro Units (The average fund required per unit is 12.3 lakh)	16.9
Capital investment in plant and machinery (Group units)	To upgrade and scale up the production process for 14 Groups (The average fund required per unit is 12.07 lakh)	1.69
Incubation center	One incubation center (IC) is proposed for the district. Cost per IC 2.75 Cr.	2.75
Common infrastructure	One common infrastructure facility (CIF) is proposed for the district Cost for the CIF 4.0 Cr.	4
Branding and Marketing	Common Branding and Marketing for both Individual units and Groups	1.5
Training and Mentorship	Training and Mentoring for Entrepreneurship. Training on New Technology for a total of 122 individuals. (2 people to be trained from each enterprise/group)	0.15

Proposed government assistance under the SLUP

Proposed subsidy under SLUP Initiative for Kohima District					
Intervention	Target No. of units	Project cost per unit (Lakhs)	Total Cost (Lakhs)	Subsidy per unit	Govt. assistance (Lakhs)
Capital Investment in Plant & Machinery (Individual units)	137	12.4	1698.8	35%	594.58
Capital Investment in Plant & Machinery (FPO/SHG/ Cooperatives)	14	12.07	168.98	35%	59.143
Common Infrastructure	1	400	400	35%	140

Proposed subsidy under SLUP Initiative for Kohima District						
Intervention	Target No. of units	Project cost per unit (Lakhs)	Total Cost (Lakhs)	Subsidy per unit	Govt. assistance (Lakhs)	
Incubation Cum Custom Hiring Centre	1	275	275	100%	275	
Branding & Marketing (Total no. of Units/group)	151	1.01	152.51	50%	76.255	
Training & Mentorship (No. of the individual)	151	0.06	9.06	100%	9.06	
Total			2704.35		1154.038	

Individual existing – During the primary survey respondents (existing individuals and potential units) expressed that they are interested in making processed various pickle products. Respondents of individual units expressed that they need funds for the purchase of new machinery sealing machines, meat driers, and packing machines.

Individual new – During the primary survey, we have asked new/potential entrepreneurs if they are willing to enter into processing, and if yes, into which products. New/potential entrepreneurs expressed that they are interested in pickle making especially naga chili pickles, beef pickles, and meat pickles.

Groups – There are no FPOs/ cooperatives for ODOP processing in the district, but few SHGs are active in pickle making. The fund requirement for an SHG is for the purchase of new machinery, branding, and marketing. It was emerging from the primary survey that SHGs are willing to expand and they need funds. PMFME scheme can fill this gap.

Marketing & branding- There is a need for mass advertisement and campaigning for ODOP products in the district to create awareness about local products, and here we are specifically talking about indigenous naga chili pickles, beef pickles, meat, and pork pickles.

Through primary survey observed that the majority of the respondents expressed that they are willing to produce processed pickles products. There is a demand for beef and meat pickles from tourists coming from outside India.

To attract tourists and expand production brand need to establish. Most people are not aware of the specialty and uniqueness of “Naga chili” pickles in India, to reach more people mass marketing and branding are required. This is can be achieved through organizing exhibitions by the department of agriculture, horticulture, and animal husbandry.

7.3 Strategy for Integrated Development

Integration of stakeholders such as agriculture, horticulture, marketing, financial institution, industries, associations, testing agencies, traders, farmers, and processors are necessary to start the cluster.

Table 62: Strategy for integrated development

Particulars	Requirement	Supporting Department/Agencies
Marketing	<ul style="list-style-type: none"> • Training and Skill Development • Packaging, Labeling, and Branding • Qualitative and Quantitative Testing 	<ul style="list-style-type: none"> • DIC and Financial institutions should support Packing, labeling, and branding. • FSSAI should involve in the certification and licensing of the product.
Innovation	<ul style="list-style-type: none"> • The beauty of Naga Chilli Pickles • Organizing pickle exhibition • Retail outlets in major pickle-consuming cities 	

7.4 Proposed Interventions

We have proposed a total fund of 27.1 cr. for the up-gradation of existing and new enterprises and the setting of a common facility center and incubation center in the district. We have proposed a budget of 1.5 cr. for the branding and marketing support for the group and individual units in the district.

Table 63: Proposed interventions

S. No	Particulars	Recommendations	Cost (Cr.)
1	Infrastructure	Proposed one incubation center in the district with 3-4 processing lines and hand-holding support for the existing and new enterprises in the district.	2.75
2	Technology	Proposed up-gradation of the 151 enterprises in the district (Group and Individual units)	16.9
3	Common facilities	Proposed one common facility center and one incubation center in the Kohima district to increase the quantity of crop processing in the district and to reduce the crop loss post harvesting.	4.00
4	Marketing support	Proposed training on marketing and branding of the processed products in the district.	1.5

8. Key Impacts

Table 64: Key impacts of the scheme	
Particulars	Impact
Opportunity to increase processing activity	<ul style="list-style-type: none"> Through support under the PMFME scheme, there is a possibility of an increase of 10 % to 15 % percentage of processing in the next three years
Employment	<ul style="list-style-type: none"> Each unit will employ 4-5 members on average i.e. approximately 600-700 employments will be created in the next three years with the help of the PMFME scheme.
Income	<ul style="list-style-type: none"> Through proper branding and marketing, the net profit of units will increase by 40-50 %
Reduce waste	<ul style="list-style-type: none"> Through processing and common infrastructure, farm-level waste might reduce to 5 % from current 10 %
Better Profits	<ul style="list-style-type: none"> Micro Units can expect a 25 % increase in profits with Better market linkages and Branding
Better Price Realization	<ul style="list-style-type: none"> An export window will be opened to micro and small entrepreneurs. Better price realization can be observed by micro and small entrepreneurs' by exporting turmeric powder to major importing countries in the world.

Annexure:

Table 65: Detail List of FPOs for assessment under PM-PME in Kohima District

S. No	Name of the FPO	Location	Contact details	Total No of Registered members	Produces/ Products manufactured
1	Mezavi MPCs Ltd	Sechu-Zubza, Kohima	Neilezonuo/Kevikhelie 9856786861	50	<p>1. Fruit processing -</p> <p>a. Juice - Banana, wild apple, and gooseberry</p> <p>b. Candy - Wild apple, Gooseberry</p> <p>c. Achar/Chutney - ParkiaSpeciosia, Khula, and mixed veg.</p> <p>2. Rice/Cereal Processing-a. Local sticky rice roti b. Local wal/ cereal</p>
2	Krotho MPCs Ltd	Kohima village, Kohima	DilviKintso 9856259030 Ketoseno 9077691362	45	<p>Processed fruits- a. Jam (sweet/spicy) - Grapes, khula</p> <p>b. Juice - wild apple, gooseberry</p> <p>c. Candy/dried - wild apple, ginger, and gooseberry</p>
3	Vision Women Weaving/ Industrial, Handloom and Handicraft CS Ltd	Daklane colony, Kohima	Tosheli 9612805624 Yeheli 9774463658	30	<p>Processed food-</p> <p>a. Mixed vegetable pickle</p> <p>b. Local dal (Axone)</p>
4	Koinonia MPCs Ltd	High school colony, Kohima	Anna Khawakhrie 8575641534	45	<p>Processed food-</p> <p>a. Cookies</p>

Table 65: Detail List of FPOs for assessment under PM-PME in Kohima District

						b. Pastries c. Sticky Rice Roti
5	Lulu Marketing CS Ltd	Chandmari colony, Kohima	Alemla	9436642397	25	Processed food- a. Cookies
6	Dzevi Consumer CS Ltd	Midland colony, Kohima	Tenyisele	9089618218 9615690966	30	Processed food- a. Namkeen Snack b. Naga Dal, gram, etc
7	Nagaland Dairy federation, Kohima	Kohima	Dr. Simon	9436006696	35	Dairy Products

Total Number of cooperative societies as on 30.01.21.

Table 66: Total Number of cooperative societies as on 30.01.21

S. No	Type of Society	Km a	Dm p	Mk g	Ts g	Wk a	Zbt o	Ph k	Mo n	Per en	Kpr e	Lgl g	Mb a	Pf tr	St k	Tot al
A	State Level Societies															
1	Nagaland State Cooperative Bank Ltd.		1													1
2	MARCOFED Ltd.		1													1
3	Nagaland State Coop. Union		1													1
4	Nagaland Apex Weavers Federation		1													1
5	Nagaland State Piggery Federation		1													1
6	Nagaland State Dairy Federation	1														1
7	The Nagaland State Entrepreneurs Associates	1														1

Table 66: Total Number of cooperative societies as on 30.01.21

S. No	Type of Society	Km a	Dm p	Mk g	Ts g	Wk a	Zbt o	Ph k	Mo n	Per en	Kpr e	Lgl g	Mb a	Pf tr	St k	Tot al
	Thrift and Credit Coop. Federation Ltd.															
		2	5													7
B	District Level Societies															
1	Kohima Dist. Milk Union	1														1
2	Dimapur Dist. Milk Union		1													1
3	Mokokchung Dist. Milk Union			1												1
		1	1	1												3
C	Primary Cooperative Societies (District Wise)															
1	Lamps C.S. Ltd.	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1
2	Consumer C.S. Ltd.	68	24	24	31	9	25	21	12	6	11	2	7	1	-	241
	1. Petrol Pump C.S. Ltd.	-	-	1	-	-	-	-	-	-	-	-	1	-	-	2
3	Service C.S. Ltd.	-	37	16	-	9	4	2	1	6	-	-	4			79
	Institution C.S. Ltd.	-	1	-	-	-	1	-	-	-	-	-	-			2
	Transport C.S. Ltd.	-	2	1	2	-	-	-	-	-	-	-	-			5
	Canteen C.S. Ltd.	-	-	1	-	-	-	-	-	-	-	-	-			1
	Education and Training C.S. Ltd.	1	-	-	-	-	-	-	-	-	-	-	-			1
	Dry Cleaners	1	-	-	-	-	-	-	-	-	-	-	-			1
4	Multi-Purpose C.S. Ltd.	85	97	32	24	42	28	23	97	104	16	35	11			385
		4	4	0	9	6	7	1			0		8			5
5	Marketing C.S. Ltd.	10	28	19	28	5	9	13	3	2	5	1	1			124
	Trading	-	-	1	-	-	-	-	-	-	-	-	-			1
6	Weaving and Handloom/Knitting /Handicraft /Industrial C.S. Ltd.	12	15	37	49	43	76	34	40	22	26	12	7	-		628
		7	5													
7	Dairy C.S. Ltd.	37	58	13	25	6	20	30	17	7	9	1	2		1	226

List of SHGs in Kohima District

Table 67: List of SHGs in Kohima district

S. No	Name of the SHG	Location	Contact Details	Total No. of Registered Members	Produces/ Products Manufactures	Marketing Details of Produce/Product	The scale of Production (In MT)
1	LiepfiiSHG	Khuzama		0	8575744672	Sale Of Products Within The Village Jurisdiction	0.5
2	VikehieSHG	Khuzama	9863754737/ 9612588444	0		Sale Of Products Within The Village Jurisdiction And Local Vendors	1
3	TsoleviSHG	Khuzama	9383352957	0	Wild Apple Juice, Dry Fruits	Sale of Products Within The village Jurisdiction And Local Vendors	0.25
4	Organic Farming SHG	Kigwema	7630856142	0	Beef Pickle	Sale Of Products Within The Village Jurisdiction	0.01
5	Vino SHG (Kelhoubono Mera)	Kigwema	8119887673	0	Beef Pickle, King Chilli Pickle	Sale Of Products Within The Village Jurisdiction	0.01
6	ThenupfiiKetsikeviKrotho (ViphrevonoN eihu)	Kigwema	8837359102	0	Local Biscuit	Sale Of Products Within The Village Jurisdiction	0.015
7	YokuzouSHG (Medongonut hapo)	Viswema	9402701437	0	Meat Pickle, Ginger Pickle, Gooseberry Candy, Kholo(Spondius Fruit Jelly), Dried Wild Apple Auxiliaries	Sale Of Products Within The Village Jurisdiction AndKohima Town	0.34

Table 67: List of SHGs in Kohima district

S. No	Name of the SHG	Location	Contact Details	Total No. of Registered Members	Produces/ Products Manufactures	Marketing Details of Produce/Product	The scale of Production (In MT)
8	SedeKrotho (DzuvisenuKikhi)	Viswema	897484 8616	0	Ginger Candy, Khola (Spondius Axillaries Fruit Jelly), Chilli Pickle, Gooseberry Candy, Fruit Juice	Sale Of Products Within The Village Jurisdiction AndKohima Town	0.074
9	NousiSHG	Kigwema	897475 2780	0	Beef Pickle	Sale Of Products Within The Village Jurisdiction	0.015
10	PensoLogwa	Terogunyu	985699 7013	0	Dried Processed Fruits (Gooseberry, Wild Apple)	Wholesale	0.15 Tonnes
11	HengwaSHG	Phenda	878759 9106	0	Dried Processed Fruits (Gooseberry, Wild Apple)	Retailer And Wholesale	0.20 Tonnes
12	Rose Seb	Kashanyi shin	700543 7962	0	Fresh Milk	Whole Sale	360 Litres/ Year
13	Shagwale Kent	Phenda	700596 5650	0	Pickle (Meat, Parkia),	Retailer And Wholesale	0.10 Tonnes
14	RhinloteTep	Kashanyu	986253 5859	0	Cardamom	Wholesale	0.08 Tonnes
15	SedeKhrotho	Chiechama	986269 1151		Meat Pickle, Dried Chana.	Kohima, Chiechama.	0.5
16	Ngukemezhi	Chiechama	801426 9720		Meat Pickle.	Kohima, Chiechama.	0.6
17	KruoviKrotho (Thepfuletuouii Usou)	Nerhema Village	700501 1744		King Chilly Pickle, Dried Wild Apple. Dried Gooseberry	NerhemaAndKohima.	0.5
18	DzieseKhrotho	Nerhema Model	897442 7523		Dry Meat Pickle	Chiephobozou	0.02

Table 67: List of SHGs in Kohima district

S. No	Name of the SHG	Location	Contact Details	Total No. of Registered Members	Produces/ Products Manufactures	Marketing Details of Produce/Product	The scale of Production (In MT)
19	VierheKhrotho	Nerhe Model	986267 5104		Dry Meat Pickle	Chiephobozou	0.02
20	Kezekevi	Nerhe Model			Dry Meat Pickle	Chiephobozou	0.025
21	Nourhe	Nerhe Model	937806 3184		Sticky Rice Roti	Chiephobozou	0.012
22	NousiKrotho (Khriezotuonuo)	Tsiesem aBawe			Bakery Products (Roti N Nimki)	TsiesemaAndKohima	0.03
23	PhesaKrotho	Meriem a	938334 3783		Cookies	Within The Village	0.3
24	SedeKrotho	Meriem a	825981 5296		Beaf Pickle	Export To Kohima	0.3
25	KekhrieKrotho	Meriem a	879484 0889		Beaf Pickle	Export To Kohima	0.4
26	NousiKrotho	Meriem a	878783 9724		Chana Pickle	Export To Kohima	0.4
27	SiedzeKrotho	Meriem a	961506 0931		Beaf Pickle	Export To Kohima	0.3
28	NousiKrotho	Meriem a	908950 8895		Beef AndChanaPickel	Export To Kohima	0.4
29	Vilhoubeinuoyubvii	Zhadima	700503 4036		Bakery Products (Roti N Nimki)	ZhadimaAndKohima, Phezha. Chiechama.	0.1
30	KimhoKrotho	Zhadima	841309		Beef Pickle	ZhadimaAndKohima.	0.05

Table 67: List of SHGs in Kohima district

S. No	Name of the SHG	Location	Contact Details	Total No. of Registered Members	Produces/ Products Manufactures	Marketing Details of Produce/Product	The scale of Production (In MT)
	(Neiketounuo)		5055				
31	RüzhaRükhro SHG	Jotsoma	985637 3887	No	Pickle	Pre-Order And Self Selling	0.005 Tonne
32	Vitsongunuo (KhriesaSHG)	PhezuJotsoma	940263 3599	No	Pickle	Sell On Own Shop	0.145 Tonne
33	ThejaSHG	SechüZubza	600990 1785	No	Pickle And Local Chilli Powder	Sells To Village People	0.02 Tonne
34	SabitaThapa (ThejaSHG)	SechüZubza	943640 2354	No	Cassava Chips, Jam, And Pickle	Pre-Order	0.02 Tonne
35	Unity Krotho	Peducha	986235 6910	No	1. Dried Wild Apple, Dried Gooseberry 2. Dry Chilli Powder	Pre-Order And Wholesale	1) 50 - 70 Packets 2) 100 - 120 Packets
36	Kevikieno (KetouKrotho)	Peducha	825981 6930	No	Dried Wild Apple	Pre-Ordered	0.05 Tonne
37	KemehiZie (L Mary Semy Individual)	Chunlikha	811984 9900	0	Meat And Dried Fish Pickle	Selling To Group Membersandvillagers	.04 Tonne
38	KebenZie(NenchuleMagh (Individual)	Chunlikha	872997 5854	0	Meat Pickle	Selling To Group Members And Villagers	.03 Tonne
39	Tile Kath(Zakhawa Zie)	K.Station	883726 9953	0	Mango Pickle	Selling Within The Village	.01 Tonne

Table 67: List of SHGs in Kohima district

S. No	Name of the SHG	Location	Contact Details	Total No. of Registered Members	Produces/ Products Manufactures	Marketing Details of Produce/Product	The scale of Production (In MT)
	(Individual)						
40	Hichule(Meha iwaZie) (Individual)	K.Station	936622 0265	0	Fermented Bamboo Shoot	Selling Within the Village and along The Highway	.04 Tonne
41	NenliyaWanth (KulewaZie) (Individual)	K.Station	878771 7736	0	Fermented Bamboo Shoot	Selling Within The Village and along The Highway	.04 Tonne
42	KemehiZie(Group)	Chunliha	763099 3773	0	Gooseberry Pickle	Selling Within TheVillageandexporting To Towns	.10 Tonne
43	KechaZie(Group)	Nsunyu	700576 4890	0	Gooseberry Pickle	Selling Within TheVillageandexporting To Towns	.10 Tonne

List of the processing units:

Table 68: List of the ODOP processing units in the district

S. No	Name of the Unit	Contact person Name	Designation	Village and Mandal	District / City	Mobile No.	Category of Company	Products Name (finished produce)
1	Local food products	Akono phira	Owner	Viswema village	Kohima	8014255248	Household	Meat pickle, chilly pickle, soybean pickle
2	Khora home food	Tenuketsiera	Owner	Kigwema Village	Kohima	8119887673	Household	Naga king chili pickle, meat pickle, soybean pickle, sticky rice roti
3	Mera unit	Neisavino	Owner	Kigwema Village	Kohima	9856233899	Household	Meat pickle, pop rice
4	Nousi krotho SHG	Neithonuo	Member	Kigwema Village	Kohima	6009931674	Household	Meat pickle (beef, pork), soybean pickle, sticky rice roti
5	Nousi SHG	Khrieno	Member	Kigwema Village, Kohima Nagaland	Kohima	8974752770	Household	Meat pickle
6	Organic Farming SHG	Neiseno	Member	Kigwema Village, Kohima Nagaland	Kohima	8730938975	Household	Meat pickle, sticky rice roti
7	Rüzha Rükhro SHG	Ruth	Member	Jotsoma village, Kohima Nagaland	Kohima	9856373887	Household	Meat pickle, Naga king chili pickle, dried chili powder
8	Sede krotho SHG	Neichülieü	Member	Meriema village, Kohima Nagaland	Kohima	8259815296	Household	Meat pickle, king chilli, sticky rice cake
9	Sopfu	Sopfu	Owner	Kohima town,	Kohima	961232622	Household	Beef pickle

Table 68: List of the ODOP processing units in the district

S. No	Name of the Unit	Contact person Name	Designation	Village and Mandal	District / City	Mobile No.	Category of Company	Products Name (finished produce)
	pickles			Kohima Nagaland		7		
10	The heba unit	Abe	Owner	Jakhama village, Kohima Nagaland	Kohima	8014927849	Household	Meat pickle. Naga king chili pickle, bamboo shoot pickle, carrot pickle, radish pickle, local dried chili powder
11	A.V beef pickle	Avi	Owner	Peraciezie, Kohima Nagaland	Kohima	9466012114	Household	Beef pickle
12	Daily favorite	Thepfuletuou	Owner	Chiephobozou village, Kohima Nagaland	Kohima	7005011744	Household	King chili pickle, gooseberry candy, wild apple candy, gooseberry squash
13	Kruovi krotho SHG	Letuou	Member	Nerhema village, Kohima Nagaland	Kohima	8730944172	Household	King chili pickle, Soyabean, and ginger farming
14	Ayohthru SHG	Lipila	Secretary	Thuthezu village	Kohima	7005073450	Micro	Cucumber, cabbage
15	Liepfu Shg	Yiehole	Member	Khuzama village, Kohima Nagaland	Kohima	8575744672	Household	Chilli pickle, sticky rice roti, ginger farming
16	Tsolevi SHG	Mhasino	Member	Khuzama village Kohima Nagaland	Kohima	9383352957	Household	Chickpeas pickle, cabbage farming
17	Vikehie SHG	Avino	Member	Khuzama village Kohima Nagaland	Kohima	9763754737	Household	Produces radish, mustard leaves, and ginger.
18	Organic	Kevisekhono	Member	Khuzama	Kohima	936215760	Household	Wild apple juice, Banana juice,

Table 68: List of the ODOP processing units in the district

S. No	Name of the Unit	Contact person Name	Designation	Village and Mandal	District / City	Mobile No.	Category of Company	Products Name (finished produce)
	juices		r	village Kohima Nagaland		4		blackberry juice
19	Sede Krotho	Dzuisenu	Member	Viswema village	Kohima	8974848616	Household	King chili pickle
20	Yokuzou	Medongonu	Member	Viswema village	Kohima	9402701437	Household	Meat pickle
21	Khriesa SHG	Vitsei	Member	Sechü Zubza block	Kohima	7005648901	Household	Beef pickle
22	Thenupfu SHG	Aneino	Member	Kigwema village	Kohima	883759102	Household	Chilli pickle, local biscuits
23	Resethsi SHG	Apila	Secretary	Old resethsi	Kohima	8731923083	Micro	Kolar
24	Chingchun g SHG	Mariam	Secretary	Lamong Sheanghah village	Kohima	9366561473	Household	King chilli pickle using cardamom
25	Limrela SHG	Asu	Secretary	Kinsam village	Kohima	8132869637	Micro	Kolar

