

AGROBASED INDUSTRIES AS APPROPRIATE CHOICE FOR DEVELOPMENT OF RURAL MARATHWADA

Dr. Dhanashri J. Mahajan

Professor

Department of Economics

Dr. Babasaheb Ambedkar Marathwada University

Aurangabad (M.S.)

e-mail: - dhanashree27mahajan@gmail.com

In order to reduce the burden of population on agricultural sector, expansion of industrial sector is required.

In the Marathwada region, more than 60 percent population is dependent on agriculture for its livelihood. This proportion has to be reduced for improving the rate of employment as well as the productivity of labour.

The Marathwada region is hardly having any mineral resources which are essential for industrialization. Infrastructure is not adequately available in all the districts of the Marathwada region. These are the reasons why industries do not tend to locate in districts other than Aurangabad.

It becomes essential therefore, to promote agro based industries in the Marathwada region. These industries have the potential ability to support the agricultural sector and to release the pressure of population on the sector to some extent.

It is possible to cultivate a number of types of fruit crops; vegetables etc. in the various districts of the Marathwada region as there are huge surpluses of various crops available for processing purposes after their due consumption and crop losses.

Government Policy:

Post harvest processing of various crops can play important role in enhancing the level of income of the farmers through value addition at various stages. Government of India has assigned a high priority to the agro-processing sector and has set up the National Institute of Food Technology Entrepreneurship and Management. Loans to agro-processing sector are treated as "Priority Sector Lending". The Maharashtra Agro Industries Development Corporation is acting as Nodal Agency to implement schemes of Govt. of India.

The National Bank for Agricultural and Rural Development (NABARD) also plays a crucial role-such as refinance and publication of model schemes etc. Besides these activities, credit linked subsidy schemes, cold storages, rural godowns,

market yards, post harvest management are operated through the NABARD.

The Govt. of India is giving fiscal incentives like zero excise duty on ready to eat food, reduced customs duty on packaging machines, and income tax rebate on 100% profit for five years. Tax rebate is given on 25% profit for next five years for new fruits and vegetables.

Agro Industrial Policy of Govt. of Maharashtra 2010

Maharashtra is one of the leading states in agro industry in general and food processing in particular.

The Maharashtra Industrial Infrastructure & Investment Policy 2006, is also applicable to agri processing and other agro- industrial units. In 2010, the Govt. of Maharashtra chalked out a separate policy for agro- industry with a special focus on food processing & preservation.

Following were the main

Objectives of the policy:

1. Value addition to agricultural produce by induction of modern technology into food processing, encouraging R & D, development of infrastructure for storage, transportation & promotion of investment in their field.
2. Creating off farm jobs and thereby increasing incomes the rural population.
3. This policy excludes the sub sectors of sugar, distilleries, alcohol production & textiles as the existing support & incentive schemes are also applicable to them.

Policy Components

I. Agri Clusters based on production strengths:

The following table No1 shows top 5 districts indentified by commissioner ate of Agricultural, Govt. of Maharashtra with regard to production strength in fruits, vegetables etc.

Govt. of Maharashtra intends to establish various clusters in the locations shown in the table. It shows that every district from the Marathwada

region holds the potential for forming fruits, vegetables, pulses or oilseeds clusters.

Table No 1

Clusters	Crops	Locations
Fruits	Pomegranate	Solapur, Nashik, Sangli, Pune, Satara
	Banana	Jalgaon, Nanded, Hingoli, Nandurbar, Pune
	Orange	Amravati, Nagpur, Jalna, Yavatmal, Nanded
	Grapes	Nashik, Sangli, Ahmednagar, Solapur, Pune
	Mangoes	Sindhudurg, Ratnagiri, Raigad, Aurangabad, Thane
	Amla	Akola, Yavatmal, Jalna, Dhule, Buldana
Vegetable	Potato	Pune, Nashik, Ahmednagar, Satara, Sangli
	Onion	Nashik, Pune, Ahmednagar, Jalgaon, Dhule
	Tamarind	Ahmednagar, Osmanabad, Latur, Solapur, Beed
Cashew	Cashew nuts	Ratnagiri, Sindhudurga
Cereals and pulses	Rice	Gondia, Bhandara, Thane, Gadchiroli, Chandrapur
	Pulses	Nanded, Amravati, Buldhana, Osmanabad, Parbhani
Oilseeds	Soybean	Akola, Washim, Nagpur, Latur, Wardha
Dairy	Milk	Ahmednagar, Kolhapur, Pune, Solapur, Satara

Source: NHM (top 5 production Districts), commissioner ate of Agricultural, Govt. of Maharashtra, ADF, Govt. of Maharashtra

The Marathwada region has also has access to Agricultural University located at Parbhani. Such clusters would help farmers & Parbhani. Such clusters would help farmers & processors to engage in productive agriculture.

II. Food Parks:

A Food Parks is an agri / horticultural processing estate developed for processing units with support infrastructure including some common processing facilities & services with a well established supply chain.

Based on regional production strengths the state Govt. intends to support development of Food Parks and related infrastructure.

In the care of MIDC estates in D, D+ talukas, low HDI and No – Industry Districts under Package Schemes of Incentives (PSI 2007), in the following form

- Prefund of 20% land price after 2 to 3 years by MIDC under certain condition.
- Provide benefits to units in the Park (in all area) at one scale above their entitlement under PSI
- Upto 10% subsidy over & above their entitlement to units in Parks in backward areas.

III. Micro Level Clusters:

The State Govt. has decided to support clusters in backward area of the State to the extent of 10% of project cost in addition to Central finding

Fiscal Incentives:

Following enhance incentives are proposed to be given to agro-industrial & food processing units under PSI 2007 in all backward areas of the State:

- Reimbursement of 50% of net VAT paid (instead of 25%)
- 5% interest subsidy on term loans for fixed capital investment for 5 years.
- In care of products attracting zero VAT, incentives against the amount of VAT retained and not refunded on input purch

Also the eligibility criterion under PSI 2007 of additional 25% investment subject to minimum of Rs 1 crore has been reduced irrespective of the location of the unit to encourage smaller units to grow in all parts of the State.

Raw Material Base for Agro-Based Units in the Aurangabad District:

Among all the districts in the Marathwada region, Aurangabad is the most industrialised district. However, industry in Aurangabad district in concentrated around the Aurangabad City only, leaving the rest of the blocks in the district with the predominance of agriculture.

The agro-climatic conditions in the Aurangabad district are suitable for growing crops such as good quality cotton, mango, fig., tamarind, chiku, custard apple, maize etc.

The following Table No. 2 shows the area and production of major crops cultivated in the Aurangabad district.

It is evident from Table No. 2 that cotton and sugarcane are core crops in the district. High quality cotton is produced in some parts of the district. About 2% of the cotton is retained by the

farmers for their own use and 98% is sold in the market. It is used in ginning, processing and spinning mills to separate seeds and cotton and

then it is transported for sale to some parts of Maharashtra, Gujarat and Madhya Pradesh. There is scope for establishing textile units in the district.

Table No. 2

Agricultural production of Main Crops in Aurangabad District
 (Area - Hect. (000) production M.T. (00))

Sr. No.	Type of Crop	Area shown in ha. (2005-06)	Annual Production (MT)	Produce consumed/ marketed in raw form (MT)	Produce available for processing (MT)
1.	Food grains				
	A. Wheat	49,500	64,200	0	64,200 (100%)
	B.Coarse cereals - Jowar, Bajra, Maize etc.	430,100	429,505	18,800 (5%)	410,705 (95%)
2.	Oilseeds and Pulses				
	A. Oilseeds	47,000	32,242	3,225 (10%)	29017 (90%)
	B. Pulses	58,100	25,099	2510 (10%)	22589 (90%)
3.	Fruits	48,053	144,359	129743 (90%)	14416 (10%)
4.	Vegetables	11,700	11,700	11700 (100%)	0
5.	Medicinal & aromatic Plants	NA	NA	NA	NA
6.	Sugarcane	12,100	786,500	0	786,500 (100%)
7.	Cotton	260,600	355,600	350 (0%)	355,250 (100%)
8.	Others-spices	4,600	1,150	575 (50%)	575 (50%)

Source: PLP, NABARD, Aurangabad District P. 122.

The entire sugarcane produced in the district is processed for sugar production. There are nine sugar factories of which eight are in the co-operative sector & one in private sector.

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Of the total oilseeds production, 10% is consumed or marketed in raw form leaving 90% of the production available for processing. Same is the case with the production of pulses. 90% of pulses are available for processing activity, leaving a great scope for setting up Dal mills as well as oil mills in the various blocks of the Aurangabad district. With regard to the production of fruits, 90% fruits are marketed in raw form and 10% of

the total fruits production is available for processing in the form of pickle, jams, juices, squash etc.

95% production of coarse cereals (Jowar, Bajra, Maize etc.) is available for processing. Sillod block of the Aurangabad district is known for production of maize. Presently, maize is sold to traders from Gujarat who are using it for manufacturing starch which clearly shows the potential of the district with respect to setting up of starch manufacturing units locally.

Agro-Processing Activities in the Aurangabad District:

Table No.3 shows crop-wise agro-processing activities and number of agro-processing units along with their presence in the various blocks in the Aurangabad district.

Table No. 3

The Present structure of agro-industry in Aurangabad District

Crop	Activity	Blocks in the district where the activities are undertaken	No. of existing units
Food grains & Pulses	Flour Mills	9	730
	Dai Mills	7	24
	Oil Mills	3	17
	Animal Feed	1	2

	Food Products	6	98
	Bakery	2	KM
Sugar Other Crops	Sugarcane/gur/khandsari	8	105
	Fruits	3	2
	Cotton ginning & pressing	8	48
Other activity	Spices making	9	5
	Other agro-industries	3	13

Source: DIC, Aurangabad

The above Table No.3 shows that the present structure of agro-based units in the Aurangabad district in traditional. There is predominance of traditional agro-processing activities such as flour mills, gur/khandsari making units.

Out of the nine blocks in the district, only six have food products units.

There is scope in the development and innovation of a variety of food based products using local crops such as maize, Jowar, Soyabean etc.

Potential for Agro-Processing Activity in Aurangabad District:

Following Table No. 4 shows potential for agro-processing activity in Aurangabad District.

**Table No. 4
 Potential for Agro-Processing in Aurangabad District.**

Sr.No.	Produce	Product	Processing Unit/Project
1.	Kesar Mango/Mosambi	Pulp/concentrate of Mango, fruit bar, to fee, jam, syrup	1) Post Harvest Management Centre 2) Aspetic Packing 3) Fruit Processing Units 4) Bottaling, Canning Plant. 5) Cold Storage Plant
2.	Soya Bean	Powder, Soya Biscuits soya cake, cheese, sauce, soya vadi	1) Packaging Units 2) Processing Units
3.	Jowar/Maize	Starch for textile processing Jowar/Maize-flakes poultry feed product of maize useful in baby food	1) Processing Units
4.	Cotton	Cotton stalk based products. 1) Corrugated Boxes 2) Kraft Pulp & Paper 3) Hard Boards 4) Cotton stalk for Mushroom cultivation	Cotton stalk based industries.

Source: Compiled from background paper for Business conference by MEDC

There is ample potential for fruit processing, Soyabean processing, Jowar / Maize Processing units and cotton stalk based industries.

As fruits are perishable, farmers are compelled to sell fruits at the price that is offered by the fruit merchants. If instead the fruits produced in the district such as Kesar Mango are processed, it would lead to value addition and better prices to local farmers due to increased demand.

Cotton is a major crop grown in the Aurangabad District. 99% of cotton crop is available for processing. Cotton stalk is important in mushroom cultivation. There is great demand for mushrooms in the domestic as well as international market. Other cotton stalk based products such as corrugated boxes, craft pulp & paper, hard boxes can also be manufactured.

Soybean processing and Jowar / Maize processing units can be set up as there is a huge scope for innovative Soybean based products.

Potential for Agro-based Units:

Table No. 5 shows various agro-processing activities with their unit cost according to NABARD's projections for the year 2008-09. These projections are based on the available infrastructure.

The cost per unit of Flour Mill is estimated at Rs. 30,000. According to NABARD projections, there is scope for 125 mills on the basis of available raw

material. Loan can be obtained from banks upto 80% of the total cost.

In the case of sugar derivatives such as Gur / Khandsari, unit cost is Rs.2.65 Lakhs. 20 such units can be established in the district. With regard to cotton ginning and pressing activity, the unit cost is 15 Lakhs. These mills have great potential in the district considering the availability of cotton as raw material. The cost of ginger processing unit is very low (Rs.25, 000) as per NABARD projections. Ten such units can be set up in the district besides 25 fruit processing units with Rs. 1.25 Lakh cost per unit.

Table No. 5
Projections Regarding Agro-based units by NABARD PLP Plan

(Rs. Lakhs)

Commodity Group	Activity	Assessed Credit Potential			
		Unit Cost	Physical (No. of Units)	Total Financial Outlay	Bank Loan
Agro-based Food grains	Flour Mills	0.30	125	37.50	30.00
	Dai Mills	4.00	15	60.00	48.00
	Oil Mills	2.60	25	65.00	52.00
Sugar derivatives	Gur / Khandsari	2.65	20	53.00	42.40
	Ginger	0.25	10	2.50	2.00
	Fruits	1.25	25	31.25	25.00
Other Crops	Cotton ginning & pressing	15.00	5	75.00	60.00
	Cotton Spinning mills	75.00	2	150.00	120.00

Source: PLP Plan, NABARD, Aurangabad District P. 127.

Raw Material Base for Agro-Processing Units in the Jalna District:

Jalna is a major cotton producing district. It is also known as a world class bio-technology and seed grower's centre. Jalna district is rich in capital resources and entrepreneurship also. Jalna has the potential to develop as an agricultural tools, implements and small machines manufacturing centre as the steel re-rolling mills in Jalna together produce 3000 tons of rolled steel per day.

The major crops produced in the district are maize, wheat, pulses, oilseeds, fruits, vegetables, sugarcane, cotton and live stock products and by products.

Some new crops suggested in the C-DAP such as Potato, medicinal plants, rainfed horticulture and sources of bio-fuel such as castor and jetrofa can be cultivated.

Agro Processing activities in the Jalna District:

There are five sugar factories in the district and together their capacity of crushing sugar cane is 7500 tons per day. Two of these factories are sick and not working currently. There are 13 Gur-Khandsari units with 25 tons per day capacity each. The processing capacity of these factories

and units is adequate considering the production of sugar cane in the district. However, the sugar factories need to manufacture downstream products. There are numerous possibilities of downstream product lines.

There are two co-operative spinning mills in the district. They are both inactive. There are 53 ginning mills in the district with the capacity of ginning about 6000 metric tons of cotton each. Considering the availability of cotton in the district, more cotton gins are needed to be set up. Also at least two non private sector spinning mills and a large modern textile mill can be set up in the district.

The Jalna district produces more than one lakh metric tons of maize at present. Maize is not processed. Six maize mills can be set up at Ambad, Bhokardan, Partur and Jalna. There is further scope for downstream processing of maize into starch, samolina, noodles, roti flour etc. The germ recovered can be used for oil extraction. The de-oiled germ cake with high protein content can be used to produce health supplementary foods. High fructose syrup can be obtained from maize. It is a good substitute for sugar. Jalna is an ideal location

for a large scale maize mill and dozens of smaller processing units.

Considering the fact that wheat production in Jalna is more than 35metric tons, there is good scope for a large scale modern flour mill with a capacity range of 100-200 tons per day at Jalna for producing different flours. These can be transported to Mumbai, Hyderabad etc. through direct rail transport.

Jalna is already a centre of industries processing pulses. There are 15 dal mills at present. These mills need to be modernized. More dal mills can also be established in the district taking into account the growing production of pulses in the district.

The by product of dal mills which is being used as cattle feed, can be used for making by - products such as Chakli, Papad etc. Such a by-product recovery unit can provide employment to 5 persons and bring value addition to the by-product of dal mills.

Areas under Soyabean and groundnut are increasing fast leading to potential for setting up new oil mills in addition to the existing 31 units in the district. There is also one large oil expeller unit in Jalna set up by the Khadi and Village Board.

The present level of production of oil seeds in the district is more than 66,000metric tons. There are a number of traditional oil ghanies working with bullock power. Such ghanies need to be technologically upgraded.

The Jalna district produces sweet lime (Mosambi), Mangoes, Papaya, Amla, Bananas, Grapes and Pomegranates in large quantities besides many varieties of vegetables. There is great scope for proper harvesting, storage, transportation and marketing of fruits & vegetables.

There are two cold storages in Jalna with a combines capacity of 1050metric ton. The district requires more such cold storages.

The district also requires an institute for farmers for training in basic processing like dehydration, canning, packaging, processing of fruits & vegetables.

Raw Material Base for Agro-Based Units in the Parbhani District:

Following Table No. 6 shows production of various crops in the Parbhani district. It shows that in the following crops, there is significant surplus production. Wheat 25%, Guava 29.41%, Aonla 43%, Oilseeds, Pulses, Sugarcane and Cotton 100%.

**Table No. 6
 Production of Crops in Parbhani District**

Sr. No.	Type of Crop	Productive Area in ha. (2005-06)	Annual Production (MT)	Productivity ha.	Produce consumed in raw form (MT)	Produce Available for Processing (MT)	% Surplus
1.	Food Grain						
	Wheat	41,100	390500	1460	75%	292875	25%
	Maize	1500	00	0	0	NA	NA
	Jawar	92100	84500	918	2460	25350	30%
	Bajra	7700	3900	562	6007	NA	NA
2	Oilseeds						
	Sunflower	3200	1800	579	-	All	100%
	Soyabean	68600	66400	969	-	All	100%
3	Pulses						
	Gram	1300	200	509	-	All	100%
4	Tur	50900	25900	510	25137	All	100%
	Urad	14500	5300	363	8712	All	100%
	Mung	38100	13100	344	1028	All	100%
	Sugarcane	6200	485000	75	-	All	100%
	Cotton	198000	272700	148	-	All	100%
5	Fruit Crops						
	Mango	2000	-	3400*	13600	1400	9.33%
	Guava	658	-	12000*	3600	1500	29.41%
	Tamarind	2036	-	2000*	2000	500	20%
	Aonla	81	-	5000*	200	150	43%
	Ber	3195	-	15000*	22500	5000	18.18%

* For fruit crops productivity figures shown is State level data for 2002-03

For fruit crops productivity area is assumed to be 50%

Source Potential Linked Credit Plan, Parbhani Dist. NABARD P. 73

Agro-Processing Activities in the Parbhani District

As on 31.03.2006, there are 198 permanent registered units in the Parbhani District engage in food/agro processing, which include dal mills (3), oil mills (8) animal feed & grain / pulses processing units (12), fruit and cashew processing unit (one each) and spices processing units (4) besides a number of cotton pressing & ginning mills.

Maharashtra State Oil seed Commercial Industrial Corporation Ltd. (MOCICOL) had established cottonseed oil, sunflower oil, oil cake, cattle feed producing units in Parbhani & Gangakhed which have become defunct today.

Two of the three sugar factories in the Parbhani district are not functioning.

Potential for Agro-based Activities in the Parbhani District

Considering the increasing production of Soyabean, the district has a huge potential for establishing soya processing units. Such units do not exist in the district at present. 5 such units can be established according to NABARD projections given in Table No.7

Despite appreciable production of pulses, there are only 3 dal mills in the district. Five more dal mills can be established with Rs. 7 Lakhs investment per unit.

Table -7

POTENTIAL TAKING INFO ACCOUNT AVAILABLE INFRA STRUCTURE FOR 2008-09

PLP 2008-09					
Sr, No.	Type of Activity	Unit cost	Physical Units	Financial Outlay	Bank Loan
1	Dal Mill,	7.00	5	35.00	28.00
2	Oil Mill,	8.00	11	88.00	70.40
3	Soys Mill,	6.50	5	32.50	26.00
4	Turmeric Procening	5.00	2	10.00	8.00
5	Bakery & Confectionary	1.50	5	7.50	6.00
6	Masala grinding	1.50	5	7.50	6.00
7	casheu processing	1.00	5	5.00	4.00
8	Jaggary Making	3.00	50	150.00	120.00
9	Khoya / Paneer Makaing	0.30	10	3.00	2.40
				338.50	270.80

Source: PLP Parbhani District, NABARD,, P.76.

It is obvious from table no.7 that bank loans form a major part of the total financial outlays for these activities. The proportion of bank support is 80% for dal mills, oil mills, soya mills, turmeric processing, bakery & confectionary, masala grinding units, cashew processing self help groups, jaggary making units, khoya/paneer making units respectively.

Scope for Development of Agro –Based Industries in Parbhani District:

1. **Jawar:** Jawar is one of the major crops of Parbhani district (Kharip and Rabi). The present surplus available for processing is 25350 MTs. There is a big scope for processing Jawar for the production of

glucose, starch, malt beer, alcohol/ethanol, which is a raw material for liquor industry, basic chemical industry (i.e. for producing ether, acetone, ethylene di-oxide, chloroform) which is utilized for production of rubber, synthetic fiber, drugs, insecticides, etc. Ethanol is the main ingredient for production of petroleum and petro-products. Jawar is considered as one of the best and easily available raw materials in the district for production of industrial ethanol.

2. **Sugar Cane:** At present there are three sugar mills in the district. These sugar mills provide biogases, which can be utilized for power generation, manufacture of particle boards, paper, etc. The molasses can be used for the production of industrial alcohol, acetone, ethyl

acetate, and ester, which is the basic raw material for chemical industries.

There are about 50 un-registered jaggery units existing using sugar cane. This number can be increased.

3. **Soyabean:** The area under Soyabean in the district is showing an increasing trend, as it is now fetching a better price. The surplus production of Soybean in the district available for processing is about 66400 MTs. There are only 5 units making use of Soyabean for value addition leaving a vast scope for setting up more units for processing Soyabean. A number of products based on Soyabean like, milk, oil, cakes, etc. are important in human and animal diet due to its high protein content. It has a great medicinal value due to low carbohydrates and high percentage of unsaturated fats in maintaining cholesterol level and preventing heart diseases.
4. **Dal Mills or Pulses:** Although the acreage and production of various pulses in the district is quite appreciable, there are just three dal mills. There is scope for setting up dal mills with 10 to 15MT production capacity per day. For this purpose, modern technology may be employed to manufacture high quality dals.
5. **Horticulture Crops:** It is reported that Kesar Mango is being exported to some Western countries and Japan. leading to rising levels of incomes of the Mango growers in the Parbhani district

Local variety of Mangoes can be utilized for setting up pickle, pulp and juice manufacturing units. As the development of the district mainly depends on agricultural produce, Govt. of Maharashtra has established Agriculture University with HQ at Parbhani. Food Technology department of is very the University can be helpful in this respect.

Scope in Allied Sectors – Dairy/Goatery:

- i. Due to the availability of quality goats and sheep in the district provide scope for developing goat meat complex and packaged meat supply industries. They also can provide scope for hide business/tanneries and leather manufacture which has export potential too.
- ii. The district has good dairy activity and hence provides scope for milk processing

The Khava and Paneer and Pedha making needs to be developed in a more integrated manner. Cluster approach with necessary marketing support will create sufficient employment and income for people. The Maharashtra Centre for Entrepreneurship Development has started

conducting training programs in Agro / Food processing Goat farming, floriculture, dairy based activities etc. which will contribute to increased in agro processing activities in the district in the future.

- i. SHGs can be encouraged to take up micro entrepreneurs like cashew processing on a cluster basis so that the raw material can be taken up by SHGs or individuals in view of the spurt in the dairy activity in the district and support for the same under Venture Capital Scheme.
- ii. Sizable area of the district is under cultivation of spices. Therefore scope exists for industrial units of agro-processing and packaging. A few specific EDPs needs to be conducted in the district.

Raw Material Base For Agro Processing Units In The Hingoli District

Economy of Hingoli District is agro-based. It is natural that development of industry in the district will be agriculture based. Cotton is a traditional crop in the district. That is why the number of ginning and pressing mills is large.

According to the statistics from District Industries Centre (DIC) in Hingoli District, there were 214 small industrial units having investment of Rs. 1492.12 lakh. These small units have created employment of 1779 workers. Out of these 214 small units, 78 units are based on agro and food processing. Total investment in agro and food is Rs. 1038.18 lakh.

The area of Soya bean cultivation is increasing in the district. That is why there is possibility of increase in the number of small units in future. Table No. 8 shows the area and production of major cultivated crops and fruits in Hingoli District.

1. Cultivated area and production of Soya bean crop is the highest in Hingoli District. It is 2,175 M.T. for 2006-07. According to the estimate by Agricultural extension department 100% production is available for processing industry.
2. 50% of Mung and Tuvar Dal (Pulses) production is available for food processing.
3. Two cash crops i.e. cotton and sugarcane are available 100% for processing.
4. There is great scope for fruit processing of mango, orange and banana. There is 25% subsidy from The Government of Maharashtra on fruit crop cultivation. State Government has included this scheme of fruit crop cultivation in the Employment Guarantee Scheme. That's why the area of Mango,

Orange, Ber, Pomegranate, Fig, Tamarind and Guava cultivation is increasing.

5. Central Government has included Hingoli District in National Horticulture Mission,

Since August 2007 Central Government has distributed: - (1) Rs. 50 lakhs subsidy in the district and (2) Rs. 226.53 lakhs for this Mission.

Table No. 8
Agricultural production of main crops in Hingoli District
(Area-Hect'(000)', Production-M.T.(00))

Sr. No.	Crop	2005-06		2006-07		Available production for processing (%)
		Area	Production	Area	Production	
1	Jowar	505	758	500	729	30
2	Tur	219	198	240	217	50
3	Mung	186	93	200	100	50
4	Urad	146	78	180	96	30
5	Soya bean	1395	1943	1450	2175	100
6	Cotton	543	928	400	464	100
7	Sugarcane	76	5320	95	7602	100
8	Mango	372		330		
9	Sweet Lime	396		360		
10	Amla	78		70		
11	Chikoo	83		60		

(Source: PLP plan, NABARD, Hingoli, P. 58)

AVAILABILITY OF INFRASTRUCTURE AND OTHER SERVICES: -

State Industrial Policy has declared Hingoli District as 'No Industry District' therefore there are vast incentives available for the district.

The district can avail the following incentives: -

- 100% exemption to all new units for a period of 15 years in electricity duty.
- 100% exemption to all new units in stamp duty
- Monetary ceiling for complete period of eligibility is 35% of fixed capital for seven years for textile, hosiery, knitwear SSI units.

Indian confederation of industries (CII) has decided to implement 'Dungarpur Model of Rajasthan' in Hingoli District. Rajasthan is the first state in India which has developed a separate agency for Non-farm sector. Under this model, priority is given to food processing industries, encouraging many industrialists to develop their units in food processing activity. However better infrastructure is required to attract entrepreneurs to backward areas.

SCOPE FOR FUTURE DEVELOPMENT OF AGRO-PROCESSING INDUSTRIES IN HINGOLI DISTRICT: -

Promotion of agricultural exports is important for creating condition for providing remunerative prices to farm products. The concept of Agricultural Export Zones Developed by Agricultural and Processed Food Products Export Development Authority (APEDA) aims to improve the levels of food processing to reduce waste, increase marketability & help farmers to enjoy higher value realization. That where 'Cluster Approach' is important.

The Under cluster approach integrates the entire process from the stage of production till it reaches the market.

Hingoli District has been declared as Agriculture Export Zone for Banana. It is expected that 3,000 farmers are likely to get benefited a result of setting up of this zone. Table No.9 gives the projections on the basis of potentials for agro-processing units for the district. Following products can be developed with the available produce in the district.

Table No. 9
Potential for Agro-processing in Hingoli District

Sr.No	Produce	Product	Processing unit / project
.			

1	Kesar Mango	Pulp / concentrate of Mango, Fruit bars and Toffees, Jam, Pickles, Syrup.	1. Post Harvest Management Centre. 2. Aseptic Packaging 3. Fruit processing unit 4. Bottling plant 5. Canning plant 6. Commercial cold storage plant
2	Banana	Banana powders, Wafers, Puree, Fiber from banana stalk for ropes and papers	1. Powder plant 2. Processing 3. Ropes and Paper plant with Fiber
3	Pomegranates	1. Powder 2. Syrup, Squash	1. Post Harvest Management Centre. 2. Packaging units
4	Bor	1. Powder 2. Pickles	1. Processing units 2. Bottling plant
5	Soya bean	1. Powder (Ata) 2. Soya Biscuits 3. Soya Coke 4. Soya Cheese (Toffee) 5. Soya Sauce 6. Soya vadi	1. Packaging units 2. Processing units
6	Jowar	1. Starch for textile processing 2. Jowar flakes	Processing unit
7	Cotton	Cotton stalk based products 1. Corrugated Boxes 2. Kraft pulp and paper 3. Hard Boards 4. Mushroom cultivation	Cotton stalk based Industries.

(Source: compiled from background paper for Business conference by MEDC)

Cotton stalk based industries can produce alternative raw material such as craft pulp, paper for corrugated boxes etc. These boxes are made from conventional raw material and are comparatively cheaper too.

Raw Material Base for Agro Based Units In Nanded District

Nanded district shows the predominance of agriculture. Cotton is the traditional crop in the district with largest area out of the total area sown under different crops. This is the reason why there are a large no. of ginning and cotton processing units in the district.

Post Harvest agro-processing units: present status:

According to district industry centre (DIC) statistics, in Nanded district, 82 units are based agro and food processing. Out of these, 102 are medium scale and the remaining are small scale industries. 7 are in the co-operative sector and remaining are in the private sector while 17 units were sick.

Production of Major Crops in Nanded District:

1. Cultivated area under cotton crop is the highest among all crops in the Nanded District.

While production was 39275 MT for 2007-08. According to the estimate by agriculture extension department, 97% of the production is available for processing industry.

2. Through cultivated area under fruits is modest however annual production of fruits is the highest in the Nanded District. It is 475675 MT. out of this; only 2.1% of the produce is available for processing industry. There is a lot of scope for fruit processing also
3. Sugarcane is cash crop and its annual production in the district is 4717 MT. out of which 84.8% of the produce is available for processing.
4. In the category of food grains, maximum area sown is under coarse cereals (Jowar, Bajra, maize). However, very little (0.2%) is available for processing.
5. No of oil mills in Nanded district is the largest among all post harvest agro – processing units. It is because there is considerable oil seeds production (15412 MT) in the district. However, out of this, only 7% produce is available for processing.
6. Production of pulses is also significant in the Nanded district. Hence there are 29 dal mills

- in the district. However, negligible part of total pulses production is available for processing.
7. Medicinal and aromatic plants production is a new and upcoming area of production. Of which almost 100% of the produce is available for processing.
 8. Sickness of food processing units in the district is due to non availability of raw material in adequate quantity obsolescence in machinery, higher cost of production, management, mis overstaffing.

Table no. 10
Agriculture Production of Main Crops in Nanded District.

(Area in ha. / production in Metric Tones)

Sr. No.	Type of Crop	Area sown	Annual Production	Produce consumed / marketed in raw form	Produce available for processing
1	Food Grains				
A	Wheat / paddy	54800	48581	4592	3500
B	Coarsecereals-Jowar, Bajra, Maize	230400	278386	770	500
2	Oilseed and pulses				
a	Oilseeds	64514	15412	1333	1100
b	Pulses	164800	84921	335	150
3	Fruit – Horticulture	35098	475675	465675	10000
4	Vegetables	10900	68485	60000	35000
5	Medicinal and aromatic plants	100	124	124	120
6	Sugarcane	13500	4717	4500	4000
7	Spices	7900	16680	16000	12000
8	Cotton	261900	39275	39000	38000

SOURCE: PLP NANDED DISTRICT, NABARD,

SCOPE FOR FUTURE DEVELOPMENT OF AGRO – PROCESSING INDUSTRIES IN NANDED DISTRICT:

NABARD has projected potential for setting up some processing units in 2009-10 considered the

availability of raw material and infrastructure in the district. Projections regarding agro – processing activities are depicted in table 11.

Table no.
Projection Regarding Agro – Based Units

By NABARD PLP Plan (PLP 2009-10)

Commodity. Group	Activity	Unit cost	Physical No. Of units	Financial outlay	Bank Loan
Agro based food Grains.	Rice mills	5.00	2	10.00	7.50
	Dal mills	8.0	10	80.00	60.00
	Oil mills	6.00	10	60.00	45.00
	Animal feed	2.00	5	10.00	7.50
	Solvent extraction plant	20.00	2	40.00	30.00
	Papad, noodles, etc.	1.00	5	5.00	3.75
Sugar derivatives	Gur	0.50	100	50.00	37.50
	Khandsari	10.00	2	20.00	15.00
Other Crops	Turmeric & Chilly Powder	1.00	10	10.00	7.50
	Medicinal and aromatic plants	2.00	2	4.00	3.00
	Fruits	5.00	5	25.00	18.75
	Spices	1.00	4	4.00	3.00
Total			157	318.00	238.50

Sorce: NABARD

For all the given agro processing activities in Table No. 11 the investment per unit ranges from Rs. 50000 to Rs. 20 Lakh.

According to the given plan, the financial outlay for agro – based food grains, sugar derivation and other crops has been estimated. NABARD provides up to 90% loan of total financial outlay. It is expected that an entrepreneur should raise the remaining 10% amount from various schemes like Seed Money Assistance etc.

NABARD has prepared model project profiles and has circulated these to banks for preparation of borrower specific investment proposals. Some of the model project profiles are on fruit and vegetables processing, mango pulp and button

mushrooms. These are available on NABARD website. www.nabard.org.

Food park may be established under assistance from the ministry of Food Processing for providing basic infrastructure to agro processing units at MIDC Nanded, Krushnoor and, Degloor.

RAW-MATERIAL BASE IN BEED DISTRICT:

Beed district is an agrarian economy with a good base for agro and food processing units. Jowar, Bajra, Tur, Udid, mung, sunflower, groundnut, cotton, sugarcane and soyabean and are the major crops raised in the district. The surplus of these produce available for processing is shown in the following table.

Table 12
Raw material available for processing in Beed district

Sr. no.	Type of crop	Area Sown (ha) 2006-07	Annual Producti on (MTs)	Product ivity (kg/ha)	Produce consumed / marketed in raw form (MTs)	Produce available for processing (MTs)
1	Food grains					
	Jowar	489	599	1225	300	250
	Bajra	1668	1312	787	800	850
2	Oilseeds					
	Groundnut	87	63	721	24	35
	Sunflower	95	43	450	Nil	40
	Soyabean	514	577	1123	Nil	550
3	Pulses					
	Tur	533	383	647	Nil	380
	Urad	126	68	540	Nil	65
	Moong	128	16	479	Nil	15
4	Non-food \ crops					
	Sugarcane	527	38471	70*	100	38300
	Cotton	1608	2043#	216#	Nil	2000
5	Fruit crops					
	Mango	1006.14	23.33	2.32	20.00	3.00
	Sweet orange	188.90	20.79	1.10	20.00	1.00
	Aonla	70.25	0.12	0.17	0.02	0.10
	Custard Apple	71.35	0.13	5.81	-	-

Sorce: Computed from data published by Agri Dept. Beed and District Statistical deptt.

This table indicates area under various food and non-food crops; annual production (in MTs); Productivity per ha/kg; produce consumed and marketed in the form of raw material annually and finally, the surplus available for processing.

There is good surplus in Jawar, Bajra, Ground-nut, Sunflower, Soyabean, Sugarcane, Cotton, and fruit crops.

5. POTENTIAL FOR AGRO-PROCESSING IN BEED DISTRICT:

On the basis of the surplus available for agro-processing units in Beed district, the potential for

additional investments in agro processing units is shown in Table NO. 13. The table shows that there is a good scope for the establishment of 9 categories of activities under agro-processing sector. The total number of units suggested for 2008-09, is 117 with a total investment of Rs. 375 lakhs; Bank loan available for these projects is quite substantial i.e. Rs. 336.96 lakhs or 89.7% of total investments. The Private entrepreneurs should be encouraged to undertake such activities in the district.

Table 5.23

Potential for additional investments in agro-processing units in the Beed district (2008-09)

Sr. no.	Activity	Units	Unit cost	Physical units	Financial outlay	Bank loan	Bank loan as % of outlay
1	Mini Dal Mills	No.	7.25	5	36.25	29.00	80
2	Oil mills	No	9.00	5	45.00	40.50	90
3	Soya/other foods	No	7.25	7	50.75	45.68	90
4	Meat Processing	No.	15.00	2	36.00	32.40	90
5	Bakery and Confectionary	No.	1.50	10	15.50	13.50	87
6	Masala grinding units	No.	2.50	25	62.50	56.25	90
7	Mango Processing SHG	No.	1.25	10	12.50	11.25	90
8	Jaggery (Gur)	No.	3.25	35	113.75	102.40	90
9	Khawa/Paneer making	No.	0.35	18	6.30	5.98	95
	Total			117	375.05	336.96	89.7

Source: PLP – 2008-09 Beed district, P – 76

OTHER ISSUES:

- a) For marketing of perishable goods, availability of cold storages in adequate capacity is essential. Agriculture Dept. should make Taluka-wise scientific assessment of storage capacities required in the district.
- b) In Beed district there is lack of railway network (except Parli-Hyderabad and Parli-Parbhani rail link) Beed town is not connected to any city rail line. The public demand for Parli-Beed-Ahmednagar is still in initial stage. If this rail line is completed, it would give a big boost to the district economy. Solapur-Beed-Aurangabad Jalgaon rail-line is also under consideration of the Govt. of India. These rail-lines would link Beed with major cities like Mumbai, Pune, Aurangabad and North Indian cities. This would enable the farmers to sell their agro-products in these big consumption centres and obtaining better prices for their products. Good road linkages; cold storages with regular quality power supply, market yard facilities which are other important infra-structure facilities which are lacking today.

RAW MATERIAL BASE OF OSMANABAD DISTRICT:

The following table no. 14 indicates the annual production of various crops in the Osmanabad district. It also shows the quantity of produce available for processing purposes, after their due consumption and crops losses. It is obvious from this table that there are huge surpluses of various crops available for processing for example, the following crop production has major surplus: sunflower 95%, Tur 94%, Soyabean 93%

Sugarcane 95%, Gram 86%, Mung 90%, Mango 4.7%, Grapes 7.4%, Wheat 7.0% Jawar 2.0% etc.

6. POST HARVEST AGRO-PROCESSING UNITS: PRESENT STATUS:

According to the data available from the District Industrial Centre (DIC), Osmanabad, there are 69 permanent registered units engaged in food /agro processing, with an investment in plant and machinery to the tune of Rs. 611.72 lakhs and an installed capacity worth Rs. 1818.56 lakhs; These units have provided employment to 536 workers.

The number of units with provisional registration in the district is 536. Their investment in machinery and plant is Rs. 4153.16 lakh, while their installed capacity is worth Rs. 6480.21 lakh. These units have provided employment to 3660 workers.

Full potential of the district is yet to be exploited.

- i. The existing agro-processing units in the district are engaged in the activities like, Raisin making, mini oil milling cum-cake making, chili powder, pickle and spice making, bio-tech, organic fertilizers, ice candy, sugar confectionery, Jaggery production, Poha mills, mini-dal milling etc.
 There are 8 sugar mills, a few medium fertilizer units, and one or two cotton mills, that are facing numerous problems. Several household Khawa making units exist in Bhoom and Washi blocks of the district; One grape wine unit of small capacity has come up recently.
- ii. Osmanabad district is witnessing an increasing trend in soyabean production; At present about 31000 metric tones of surplus Soyabean is available for further processing and value addition. Soya processing units are not set up in the district as yet

Although the area under pulses like, Tur, Udad, Gram is quite appreciable, there are only 5 dal mills in the district; of which one is closed. The climate of the district is very conducive for the development of horticulture crops, like Mango, Pomegranate, and Grapes in particular. The grape

production of table and wine varieties has increased substantially during the last two years in Osmanabad, Tuljapur, Omerga and Bhoom talukas. There is a big potential for expansion in this area.

	Type of crop	Productive Area in ha(2004-05)	Annual Production (MT)	Productivity ha	Produce consumer Losses of (MT)	Produce Available for processing (MT)	% surplus
1	Food grains						
	Wheat	43100	3340	775	3100	240	7.0%
	Rice	1280	4633	362	4400	233	5.0%
	Jawar (kh, R)	321900	204260	672	2,00,000	4200	2.0%
	Bajra	19200	6600	345	6,600	-	-
2	Oilseeds						
	Sunflower	23600	9800	417	500	9300	95%
	Soyabean	27200	33300	1223	2300	31000	93%
3	Pulses						
	Gram	50,000	24450	509	3450	22000	86%
	Tur	83500	42600	510	2600	40,000	94%
	Udid	51500	25400	748	2400	23000	91%
	Mung	22400	10400	606	1040	9360	90%
4	Sugarcane (5SSK) When fully Operational	20900	1148000				95%
5	Fruit crops						
	Mango	1470	7350	5	7000	350	4.7%
	Grapes	540	14040	26	13000	1040	7.4%
	Guava	105	2900	27.2	2870	30	1.0%
	Tamarind	75	740	9.7	730	10	1.3%
	Ber	276	552	2.0	545	7	-

Table – 1

Source : Potential Linked credit plan 2008-09, Osmanabad dist. NABARD. P.7

ASSESSMENT OF POTENTIAL TAKING INFO ACCOUNT AVAILABLE INFRA – STRUCTURE FOR 2008-09:

Taking into account the availability of infrastructure facilities and also the national priorities,

the realizable potential for the district for the year 2008-09, is estimated by the PLP Osmanabad district, as shown in the following table No 15

Table - Potential for the Development of Agro-processing units in the Osmanabad District

Sr. No.	Activity	Unit	Unit cost	Physical Units	Financial Outlay	Bank Loan	Annual Capacity (M.T.)
1	Mini Dal Mills	No	7.00	15	105.00	94.00	200
2	Oil Mills	No	8.00	5	40.00	36.00	300
3	Soya/other foods	No	6.35	2	12.70	10.20	135
4	Peckle making	No	3.50	10	35.00	31.50	40
5	Raisin making	No	2.25	20	45.00	40.30	10 tons of grape

6	Winery	No	130.00	2	260.00	234.00	1 lakh litres
7	Khawa making	No	0.30	200	60.00	54.00	3 T.
	Total				557.70	500.00	

Source: PLP Osmanabad District, NABARD, P.73.

It is obvious from table – 15 that bank loans form a major part of the total financial outlay for these activities. The proportion of bank support is 85.5 % for dal mills, 90 % for oil mills, 80.3 % for soya mills, 89.5 % for raisin making, 90 % for winery and khawa making and 80.3% for pickle making.

Development Of Rural Industries

SCOPE FOR FUTURE DEVELOPMENT OF AGRO-BASED INDUSTRIES (OSMANABAD)

- Jawar:** Jawar is one of the major crops of Osmanabad district (Kharip and Rabi). The present surplus available for processing is 42000 MTs. There is a big scope for processing Jawar for the production of glucose, starch, malt beer, alcohol/ethanol, which is a raw material for liquor industry, basic chemical industry (i.e. for producing ether, acetone, ethylene di-oxide, chloroform) and which is utilized for production of rubber, synthetic fiber, drugs, insecticides, etc. Ethanol is the main ingredient for production of petroleum and petro-products. Jawar is considered as one of the best and easily available raw materials in the district for production of industrial ethanol. It is reported that M/S Deccan Zenia Agro Tech India Ltd. has begun the construction of its ethanol unit in Osmanabad block. This project is likely to be completed within 20 months providing employment to 250 persons. The company has planned to process Jawar from Osmanabad, Latur and Solapur districts. The State Govt. has declared its policy to offer a subsidy of Rs. 10 per liter of manufactured alcohol.
- Sugar Cane:** At present there are six sugar mills in the district providing employment to 2603 persons. These sugar mills provide biogases, which can be utilized for power generation, manufacture of particle boards, paper, etc. The molasses can be used for the production of industrial alcohol, acetone, ethyl acetate, and ester, which is the basic raw material for chemical industries. There are about 100 un-registered jaggery units using sugar cane. This number can be increased.
- Soyabean:** The area under Soyabean which is fetching a better price none a days, is showing an increasing trend. The surplus production of Soyabean in the district is about 31000 MTs,

which is available for processing. But, as of to-day, there is no unit existing making use of Soyabean for value addition. Hence, there is a vast scope for setting up units for processing Soyabean. There are number of products based on Soyabean such as, milk, oil, cakes, etc.

- Dal Mills or Pulses:** There is a wide scope for the establishment of dal mills with 10 to 15MT capacity per day. For this purpose, modern technology including SORTEX may be employed to manufacture high quality dals.
- Horticulture Crops:** there is a good scope in Osmanabad district for fruit processing manufacture of mango pulp/jams etc of Kesar mango which is cultivated on an area of about 9000 ha, under the EGS linked P-H. Scheme. There are cultivators in Washi, Osmanabad Tuljapur and Omerga blocks who are growing quality mango produce. Kesar Mango is being exported to some Western countries and Japan. This may lead to rising levels of incomes of the Mango growers in Osmanabad district

Local variety of Mangoes can be utilized for setting up pickle, pulp and juice manufacturing units.

Grapes: Production of grapes is one of the important horticulture crops in Osmanabad district. A few farmers are exporting grapes to European countries.

Project proposals for setting up of 3 winery units in the district is reported to be in progress. There is also a proposal for setting of Wine Park, which is under consideration of the State Government. There is also good scope for resin making from table grapes.

At present, there are only two cold storage units in the district. Taking into account the level of production of fruit crops in Omerga, Osmanabad, Tuljapur and Bhoom blocks, there is a need to construct 5 to 6 more cold storage units in these blocks.

SCOPE IN ALLIED SECTORS – DAIRY/GOATERY:

- Osmanabadi goat is famous for its quality meat. There is large number of quality goats in the district. Hence there is scope for the development of “Meat Complex” and packaged meat supply industries. Hide business/tanneries and manufacture of leather

which has a good export market can also be encouraged in the district.

- ii. Already there are a good number of dairy activities in Bhoom, Paranda and Kalam blocks of the district. Khawa and Pedha making business are already flourishing in areas like Bhoom, Kunthalgiri and Saramkundi etc. These activities need to be developed in more integrated manner. A cluster approach with necessary marketing support may create sufficient employment and income to the rural population. Banks also need to extend necessary support.

POTENTIAL FOR AGRO AND FOOD PROCESSING INDUSTRIES IN LATUR DISTRICT

I. Food crops:

Jowar: is an important food crop covering about 94% area under Kharif and about 60% in Rabi

season. Other crops are Wheat, Paddy and Bajra. Tur, Udid, Mung and Gram also are important crops. Under oils seeds, Soyabeen, Sunflower, Safflower, and Groundnut are cultivated in the district. Cotton, sugarcane, chilli, ginger, coriander, garlic and vegetables are also grown in the district.

Horticulture crops: Mangoes, grapes, tamarind, acid lime, sweet orange, guava, pomegranate, sapota amla, etc are grown in the district.

Medicinal and Aromatic Plants: There are numerous medicinal and aromatic plants grown in Latur district. They are Arjuna, Hasan, Asoka, Bel, Gugul, Rakth chandan, Isabgol, Ashwagandha, etc.

The following table shows the potential for expansion of agro-based industries / processing units in Latur district

Table 3
Potential for Agro based industries in Latur district

(Area ha; production MT)

Sr. no.	Type of crop	Area sown 2006-07	An Productio n	Produce consumed	Produce available for processing
1	Food grains:				
	i. Wheat/Paddy	26500	16600	10000	6600
	ii. Jowar/Bajra maize	168600	256200	200000	56200
2	Oil seeds; Pulses:				
	i) Oil seeds	142700	151000	20000	131000
	ii) Pulses	148000	93300	25000	68300
3	Fruits:				
	i) Grapes	455	9100	5000	4100
	ii) Mangoes	12933	13200	10000	3200
	iii) Pomegranate	820	1100	700	410
4	Sugar cane	4700	3290000	10000	3190000

Source: PLP Latur District P.67.

Latur district has been declared as an Agriculture Export Zone (AEZ) for the cultivation of Kesar Mango. Kesar variety of Mango cultivation is now undertaken in Chakur, Nilanga. Latur, Ahmedpur and Udgir blocks of the district. There is a good scope for establishing small scale processing units.

AGRO PROCESSING IN LATUR DISTRICT (SUGAR):

There are a total number of 11 sugar factories in the Latur district. Of these 2 factories are located in Latur Taluka; 3 factories in Ausa Taluka; one in Chakur Taluka; one in Nilanga; one in Ahmedpur; one in Udgir, and 2 factories in Renapur Taluka. Of these 11 sugar factories, 5 factories have per day crushing capacity of 2500 MTs; while the

remaining 6 factories have per day crushing capacity of 1250 MTs.

AGRO-PROCESSING (MILK):

There are a total number of 9 dairy centres in the district, of which two are (Mahananda and Kapila dairy) located in Latur Taluka and 2 each in Udgir and Ahmedpur talukas. There are Govt. chilling centres one each at Nilanga, Ausa, Shirur Tajband.

SERICULTURE OR SILK:

There is only one silk reeling centre in Latur Taluka, with a per day capacity of 0.07tons.

AGRO INDUSTRIES AND AGRO PROCESSING ACTIVITIES IN THE LATUR DISTRICT

AGRO INDUSTRIES:

There are a total number of 11 sugar factories in Latur district. Of these, 2 factories are located in Latur Taluka; 3 factories in AUSA Taluka; one factory each in Chakur, Nilanga & one in Ahmedpur block. There are 5 sugar factories in the district with a per day crushing capacity of 2500 MT; while the remaining 6 sugar factories have a daily crushing capacity of 1250 MT. Generally, the efficiency of a sugar factory is measured recovery rate. By this indicator, Manjra Sugar factory tops the table with a recovery rate of 13.06%. Other sugar factories also have registered a very high recovery rate ranging between a minimum of 1.38% to a maximum of 12.96%. It may be noted here that majority of the sugar factories in the Latur district have recorded a

recovery rate of more than 11%. These sugar factories have been able to create substantial employment to rural labour force.

Silk unit: There is only one silk reeling unit in Latur Taluka with a per day capacity of 0.07 metric tones. While the annual processing capacity is about 12 MTs

The Existing structure of agro-industries: The following table shows the existing position of agro-industries in Latur district. At present there are a total no. of 2836 agro processing units, in different talukas of the district. They are flour mills, rice mills, dal mills, oil mills, Gur and Khandsi, medicinal and aromatic plants, spices, etc.

**Table
 Structure of Agro-industries (Latur)**

(Rs. Lakhs)

Sr. no.	Crop	Activity	Blocks (no.) where activities are undertaken	No. of existing units	Installed capacity
1	Food grains & pulses	Flour mills	10	1500	720000
		Rice mills	2	2	3000
		Dal mills	2	132	792000
		Oil mills	2	67	67000
		Animal feed	2	10	600
		Solvan extr-action plant	1	6	120000
		Papad, noodles.	10	30	18000
2	Sugar	Gur	10	1000	15000
		Khansari	1	1	4500
3	Other Crops	Turmeric and chilly power	10	50	5
		Medicinal and aromatic plants	1	1	0.10
		Fruits	10	20	3
		Cashew Processing	1	12	2.4
		Spices	2	5	0.5
Total				2836	

Source: PLP, Latur district P.70.