



CHAPTER IIIA) SUGAR INDUSTRY IN INDIA :

Textile is the first largest industry in India and the second is Sugar Industry. Sugar industry occupies a prominent position in the industrial sector of the country. It is one of the largest agro-based industries in India. Area under sugarcane nearly 7 million acres is the largest in the world but the yield and the quality of cane are poor because of sub-tropics. It provides direct employment to 3.6 lakh<sup>1</sup> workers and sustaining 2.50 to 3.00 crores of agriculturists and persons engaged in transportation and harvesting cane.

It is said that sugarcane as a crop came to be established first in India. In 1903, the first sugar factory was established in India at Mairwa in East Uttar Pradesh. In 1932, there were only 32 sugar factories producing 1.52 lakh tonnes of sugar. In 1934-35, the number of sugar factories rose to 130 and sugar production to 9.57 lakh tonnes. Further growth of the industry suffered due to the second world war and by 1950, the number of sugar factories in India was 138 and the production of sugar was 11.34 lakh tonnes.<sup>2</sup>

The following table shows the trends in number of factories, production and consumption of

sugar in India between 1950-51 and 1985-86.

TABLE No. 1

Year	No. of Sugar Factories	Sugar production in lakh tonnes	Consumption in lakh tonnes
1950-51	138	11.34	10.98
1955-56	143	18.92	19.72
1960-61	174	30.28	21.13
1965-66	200	35.32	28.10
1970-71	216	37.40	40.27
1975-76	253	42.62	36.87
1980-81	314	51.58	49.70
1985-86	341	70.16	70.59

Source - Yojana, June 16-30, 1987 Page 23

The above table shows that the total number of sugar factories increased by more than 147 percent i.e. from 138 in 1950-51 to 341 in 1985-86. Similarly, the total production of sugar has gone up from 11.34 lakh tonnes in 1950-51 to 70.16 lakh tonnes in 1985-86, including an overall rise of nearly 518.6 percent ( Whereas India's total consumption of sugar rose from 10.98 lakh tonnes in 1950-51 to 70.50 lakh tonnes in 1985-86, showing an overall increase of nearly 542 percent.)

STATEWISE LOCATION OF SUGAR FACTORIES :

The location of sugar factories initially was governed by the proximity of sugarcane acreage, which was concentrated in U.P. and Bihar. In India sugar industries are mostly situated to rural areas of U.P., Bihar, A.P., Tamilnadu, Karnataka and Gujarath.

Statewise Sugar Factories in IndiaTABLE No. 2

<u>States</u>	<u>1950-51</u>	<u>1960-61</u>	<u>1970-71</u>	<u>1985-86</u>
U.P.	57	70	71	100
Bihar	29	29	27	23
Maharashtra	15	27	41	88
A.P.	-	12	19	1
Tamilnadu	12	8	15	24
Karnataka	1	8	11	22
=====				
Total in India	138	178	216	268
=====				

Source : Yojana, June 16-30, 1987

(Compiled from various issues of the Indian Sugar, New Delhi )

From the above table, the total number of sugar factories in U.P. went up from 57 in 1950-51 to 100 in 1985-86 including an overall rise of nearly

75.4 percent. But in case of Bihar, the number of sugar factories have declined by nearly 20.6 percent i.e. from 29 in 1950-51 to 23 in 1985-86. The total number of sugar factories in case of Maharashtra have increased by 486.6 percent between 1950-51 and 1985-86 i.e. from 15 to 88. But the total sugar factories in A.P. showed a decline of 91.6 percent i.e. from 12 in 1960-61 to 1 in 1985-86. Similarly, the total number of sugar factories in Tamilnadu have gone up from 12 in 1950-51 to 24 in 1985-86, showing an overall rise of 100 percent. The State of Karnataka also recorded a rise of 2100 percent between 1950-51 and 1985-86 i.e. from 1 to 22. This shows that the rate of increase in the number of sugar factories is much higher in Karnataka as compared to other States. The Maharashtra State comes next and Tamilnadu holds the third place followed by Uttar Pradesh.

#### Statewise Sugar Production in India

The major sugar producing states are Uttar Pradesh, Bihar, Maharashtra, Tamilnadu and Karnataka. These states accounted for more than 99 percent of the total production in 1985-86.

Statewise Sugar Production (In lakh Tonnes)

TABLE No. 3

States	1950-51	1960-61	1970-71	1985-86
U.P.	6.02	14.27	12.99	16.50
Bihar	2.92	3.85	2.92	2.50
Maharashtra	3.20	5.23	10.55	23.88
A.P.	1.00	1.83	2.67	4.06
Tamilnadu	0.92	1.31	2.29	8.11
Karnataka	0.20	1.20	2.05	5.09
All India	11.18	30.28	37.40	60.14

Source : Commerce Weekly - October 1987

From the above table it can be seen that the country's total production of sugar increased from 11.18 lakh tonnes in 1950-51 to 60.14 lakh tonnes in 1985-86. The total production of sugar in U.P. has gone up by more than 145 percent i.e. from 6.02 lakh tonnes in 1950-51 to 16.50 lakh tonnes in 1985-86. But the total production of sugar in Bihar has come down by more than 14 percent i.e. from 2.92 lakh tonnes in 1950-51 to 2.50 lakh tonnes in 1985-86 during the period under review. The total production of sugar in

Maharashtra went up from 3.20 lakh tonnes in 1950-51 to 23.88 lakh tonnes in 1985-86 indicating an overall rise of sugar. Similarly, the total production of sugar in A.P. has gone up. The total production of sugar in Tamilnadu and Karnataka has also gone up continuously. The rise in sugar production is higher in Maharashtra than other states. In some states there is decline in sugar production due to a fluctuating sugarcane acreage caused by the variations in the prices of sugarcane in relation to those of competitive food crops, diversion of sugarcane in factory areas for production of sugar and Khandsari, natural vagaries like floods and draught and incidence of pests, insects and disease.

EXPORT :

India started export of sugar since 1957. The export, import trends of sugar in India is shown in the following table.

TABLE No. 4

Year	Export in lakh tonnes	Import in lakh tonnes
1960-61	1.9	-
1965-66	4.3	-
1970-71	3.9	-
1975-76	9.5	-
1980-81	0.8	2.14
1983-84	6.5	0.9

Source : Commerce, Bombay November 16, 1985 P.903

Sugar export in India has increased from 1.9 lakh tonnes in 1960-61 to 6.5 lakh tonnes in 1983-84. However, during the year 1980-81, the export of sugar from the country fell sharply due to less sugar production caused by draught situation. Therefore, India had to import 2.14 lakh tonnes of sugar in 1980-81. The export of sugar increased further to the level of 6.5 lakh tonnes in 1983-84. However, this export incurred a loss of Rs. 76.04 crores because of the lower sugar prices in the international market.

A bulk of India's sugar export is directed to countries like the U.S.A., U.K. Canada and Japan.

#### CO-OPERATIVE SUGAR FACTORIES IN INDIA :

Presently there are 367 sugar factories<sup>3</sup> in the country. Comparatively, sugar factories on co-operative basis are more than private. The Maharashtra State stood first in co-operative sugar movement in the country. The first co-operative sugar factory was set up at Pravara ( Ahmadnagar District ) in Maharashtra in 1950 by the late Prof. Dr. Gadgil. The establishment of Pravara Co-operatives, sugar factory has given rise to a powerful movement of sugar co-operatives in the country. The present policy of Central Government is that future

Licences for fresh sugar industry will be in co-operative sector.

There are 97 sugar factories in Maharashtra out of this 87 are on co-operative basis. Sugar industry is the biggest industry in co-operative sector in Maharashtra . It contributes to 30% to 40% of total sugar production of country.

SUGAR PRODUCTION IN MAHARASHTRA :

Yearwise sugarcane production, area under sugarcane cultivation and sugarcane production per hector is shown as below :

SUGARCANE PRODUCTION

TABLE No. 5

Year	Hectores under cultivation (thousands of hectore )	Sugarcane (thousands of ton	Sugarcane Production (per hectore) kg.
1977-78	300	25,828	10,499
1978-79	298	24,643	10,096
1979-80	274	21,074	9,493
1980-81	317	25,939	10,152
1981-82	366	31,551	10,608
1982-83	390	33,264	10,210
1983-84	351	28,377	9,652
1984-85	354	28,108	9,606
1985-86	319	25,450	9,593

Source : Yojana (Marathi) 1-15 Nov. 1987; Page 17

The above table shows decrease sugarcane production per hectore. In last ten years there is increase of 1.9 lakh hectore of land but sugarcane production decreased by 37,800 tonnes. It means that there is average decrease in sugarcane production by 904 kilograms per hectore. Reasons of these are - low water supply, irregular electricity supply, continuous draught, low price etc.

Districtwise number of sugar factories in Maharashtra State.

TABLE No. 6

Sr.No.	Name of District	No.of Co-op.Sugar factories
1)	Ahmadnagar	13
2)	Aurangabad	5
3)	Beed	4
4)	Buldhana	1
5)	Dhule	4
6)	Jalgaon	3
7)	Jalna	1
8)	Kolhapur	10
9)	Latur	3
10)	Nanded	2
11)	Nasik	6
12)	Nagpur	1
13)	Osmanabad	2
14)	Parbhani	3
15)	Pune	6
16)	Ratnagiri	1
17)	Sangli	7
18)	Solapur	6
19)	Satara	6
20)	Yeotmal	1
		<u>85</u>

Source : 30th Annual Report of Maharashtra Rajya  
Sahakari Sakhar Karkhana Sangh Ltd., Bombay  
for 1985-86 Page No. 3

NEED AND IMPORTANCE OF SUGAR INDUSTRY :

Sugar industry is one of the most important agro-based industries in our country. It is quite different from other agro-based industries i.e. Cotton, Jute etc. Mostly, the sugar factories are established in rural areas because sugarcane is perishable product and sugarcane growers are in rural areas.

Sugar factories are the means of economic development of rural people. Sugar industries are helpful for the development of other trends and allied industries like distilleries, paper mills, acetone products, etc. The sugar industry's contribution to the central and state exchequer is estimated at Rs. 400 crores annually. It provides direct employment to 3.6 lakh workers. Sugarcane is the single largest crop in the country, its annual output is even higher than that of foodgrains. India is the only country in the whole world, where cane is still being paid on the basis of weight and not on the basis of quality. So, the cultivator who is the bulk supplier of sugarcane to the factories is naturally interested in the tonnage of his cane per acre.

Sugarcane is the main raw material of sugar factory. It is perishable. Therefore, it is necessary to carry immediately otherwise recovery decreases. Sugar industry brings changes in the socio-economic cultural, educational and political affairs of the rural areas.

Particularly, in Maharashtra, co-operative sugar industries play a lions share in rural development. The sugarcane production in Maharashtra in 1985-86 was 23.88 lakh tonnes which is higher than any other States in the country.

India's sugar producing capacity is highest in the world. Maharashtra State stands first in sugar production in India and it stands 10th in the world in producing white sugar.

Sugar industries play an important role in adoption of improved crop technology by rendering different services to the sugarcane growers, like supply of inputs, financial assistance, harvesting, transportation etc.

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B) PROFILE OF TERNA SHETKARI SAHAKARI SAKHAR  
KARKHANA LTD. DHOKI (TERNANAGAR) DIST.OSMANABAD. :

(I) A. INTRODUCTION :

This is the first and the biggest sugar factory in Marathwada region. It has a lion's share in economic, social and political life in its area of operation. The idea of establishing a sugar factory in such economically backward district firstly came into the minds of Shri. Tulshiram Abaji Patil, ex-member of parliament, Late Shri Kishanrao Samudre, Shri. Shivajirao Nade, Shri. T. I. Bhosale and Shri. Keshavrao Sonavane. They found that the surroundings and the environment of Dhoki - Ter villages in Osmanabad district is suitable for establishing the sugar factory.

In 1959, the sugarcane growers in the area of Dhoki - Ter - Kallam, Murud felt the need of and demanded the sugar factory on co-operative basis. In this regard, the first meeting of sugarcane growers from Osmanabad, Kallam and Latur Taluka was held under the Presidentship of Ex-M.P. Shri. Tulshiram Abaji Patil on 19th April, 1960. Due to the sincere efforts of the above promoters, the factory came into existence on 10th September, 1965.

Terna Sugar factory was registered under the registration No. OSM/PRG-(A)2 dated 10-9-1965. Its Sales

Tax No. is C.S.T./BOM/47-C/21 dated 21st April 1966. The factory received industrial licence No. 25/N/178/66 dated 30-5-1966. Thus, Terna Shetkari Sahakari Sakhar Karkhana Limited, Dhoki came into existence legally.

This factory is having an area of 391.29 acres. This factory is situated at a distance of 35 kilometers from Osmanabad City and 1.5 kilometers from Dhoki village. The area of operation under this factory is of 164 villages.

(B) FACTORY LOCATION :

The surroundings and climate of Dhoki is suitable for the establishment of sugar factory. The Terna river flows from west to east of southern side of factory. Terna project is on this river which is about 3 kilometers away from factory. Water supply to factory is from this project. This area is suitable and land is fertile for sugarcane cultivation.

The following are some other reasons for selecting the site for factory erection. These are - sufficient water supply from Terna project, hilly and rocky land, facility of road and railway transport, Koyna electricity supply, proximity to the towns of Kallam, Barsi, Osmanabad and Latur. Considering all these facilities, the site was selected. Farmers have donated 391.29 acres of land to the factory.

The erection of factory commenced on 11th May 1966. The foundation stone was laid by late Shri. Yeshwantrao Chavan then Defence Minister of India. The initial crushing capacity of the factory was 1250 M. tonnes per day and the present crushing capacity of the factory is 2200 M. tonnes per day and recently factory has received the permission of 3500 M. tonnes crushing per day.

(C) OBJECTIVES OF THIS FACTORY ( TERNA SHETKARI SAHAKARI SAKHAR KARKHANA LTD. DHOKI )

Every activity has its own objectives. Objectives are the ends towards which all management activities are directed. Before taking any course of action, the objectives must be clearly defined, well understood, well defined objectives and goals will lead to continuous growth and progress. They must also be realistic and reachable. Webster says, " Effective management is management by objectives."

The important objective of Terna Sugar factory is to collect member's sugarcane and manufacture sugar and give them proper returns. The sugar factory is having a distillery unit which helps to give more price for sugarcane to the cane grower members.

The aims and objectives of the sugar factory are listed in its constitution and bye-laws. They are

as follows :

- 1) To encourage self reliance, economy and mutual co-operation among the members.
- 2) To manufacture sugar and its by-products from the sugarcane supplied by the members.
- 3) To give knowledge of improved modern methods of agriculture and to supply seeds, fertilizers, pesticides and agricultural equipments to producer members at concessional rates.
- 4) To advance loans to farmers to improve their agriculture.
- 5) To arrange the training programmes for producer members.
- 6) To start other units for utilisation of by-products in the factory.
- 7) To undertake subsidiary and allied activities which are conducive to the development of society.
- 8) To construct buildings and roads in the factory area.
- 9) To purchase machinery and raw material for processing on molasses and pressmud.
- 10) Encourage the farmers to produce the cash-crops where sugarcane cannot be cultivated.

- 11) To impliment the schemes of water supply, land development and cottage industries for farmers.
- 12) To conduct the cultural and educational programmes for farmers and employees.
- 13) To purchase, operate and hire the means of transportation.
- 14) To establish research and development centres of sugarcane in factory area.
- 15) To raise the required capital (Bye-laws 4).
- 16) Harvesting the cane of members and to transport it quickly to the factory for crushing.
- 17) Membership is free to all the persons in the society, irrespective of any caste and creed.

(D) SOME OF THE IMPORTANT HISTORICAL EVENTS  
OF TERNA SHETKARI SAHAKARI SAKHAR KARKHANA  
LIMITED DHOKI (TERNANAGAR) DIST.OSMAHABAD.

- 1) 19th April 1960 First General Meeting for the foundation of Sugar factory on co-operative basis.
- 2) 10th August 1965. Letter of Intent received from Ministry for Industries, Government of India and the first meeting of promoters and sugarcane growers.

- 3) 10th September 1965 Registration of Terna Sugar factory.
- 4) 21st October 1965. The first Annual General Meeting.
- 5) 11th November 1965 Site selection of factory.
- 6) 21st February 1966 Agreement to purchase the machinery for factory from M/s Walchand Nagar Industries Limited.
- 7) 11th May 1966. Inaugural function of foundation stone of factory.
- 8) 30th May 1966 Industrial Licence of Sugar factory.
- 9) 20th March 1968 Commencement of Trial crushing season.
- 10) March 1968 Establishment of Diesel and Petrol Pump.
- 11) 30th May 1968 Inaugural function of factory.
- 12) 17th November 1968 Commencement of first crushing season.
- 13) January 1972 Crushing capacity increased from 1250 M.tonnes to 2000 M.tonnes.
- 14) 30th November 1973 the first election of Board of Directors.
- 15) 27th December 1973 Licence received to establish the distillery unit.

- 16) 30th November 1974 Letter of intent of distillery received.
- 17) 21st July 1976 Industrial licence received for production of Alchohal.
- 18) 31st December 1977 Permission to increase the crushing capacity upto 2250 M.tonnes per day.
- 19) 20th February 1978 commencement of trial season of distillery project.
- 20) 30th April 1979 Licence received for the production of country liquar 'BHARARI' from Central Government.
- 21) 21st October 1979. Production of country liquar started.
- 22) 6th December 1983 Permission letter received from Central Government to increase the ~~crush~~ crushing capacity upto 3500 M. Tonnes.

(II) AREA OF OPERATION UNDER TERNA SHETKARI  
SAHAKARI SAKHAR KARKHANA LIMITED DHOKI  
(TERNANAGAR) DISTRICT OSMANABAD.

Sugarcane is the raw material of sugar factory. Raw materials are classified into two categories (1) Gross or weight losing materials and (2) Pure materials. Sugarcane is the weight losing material. It loses its weight in the process of transportation into finished products. Sugar factories established monthly in sugarcane growing tracks because carrying out the bulky raw materials is expensive and the transportation of sugar to market is comparatively cheaper.

The area of operation of Terna Sugar factory is spread in Kallam, Latur and Osmanabad talukas. The number of villages under the factory area is 164. All these villages are within the distance of 25 kilometers from the sugar factory. Sugarcane can be brought immediately within the 24 hours of cutting. Therefore, there does not arise the problem of less recovery in sugar.

The number of sugarcane supplying villages is shown in the following table:

Number of Sugarcane supplying villages :TABLE No. 7

Sr. No.	Description	1981-82	82-83	83-84	84-85	85-86
1)	No. of villages under factory (i.e. Kallam 66, Latur 19, and Osmanabad 79 taluka)	164	164	164	164	164
2)	Out of area villages in Maharashtra	5	74	81	38	154
3)	No. of villages outside the Maharashtra State	-	-	-	-	65
Total Number of sugarcane supplying villages.		169	239	245	202	383

Source : Annual Report 1985-86 P.50 and Bye-laws of Factory P.30

The above table indicates that the number of villages under the factory area are constant. Due to the draught condition in the district, sugarcane was brought from outside the operational area. The trend of sugarcane supplied by the villages outside the operational

area is increasing. It is also found that the cane supply by the villages outside the State is to the extent of 65 villages.

Thus, the total number of villages supplying sugarcane to factory were 383 in the year 1985-86.

The area of operation of factory is divided into five circles. The following table shows the number of villages under each circle.

TABLE No. 8

Sr.No.	Name of Circle	No.of villages
(1)	Dhoki	27
(2)	Osmanabad	24
(3)	Ter	28
(4)	Moha	47
(5)	Shiradhon	38
Total		164

Source : Bye-laws of factory - Schedule B

The above mentioned area of operation of the factory is constant since its establishment.

(III) : FACTORY MEMBERSHIP :

The factory membership is free to all persons in its area of operation. Person one who fulfills the conditions of the bye-laws can be a member of factory. Any individual, cane grower and institution can be a member of sugar factory. There is no discrimination about caste, creed, religion, sex or language for membership of factory.

The membership of Terna Shetkari Sahakari Sakhar Karkhana Ltd., Dhoki is divided into four categories.

- 1) Producer members ('A' Class).
- 2) Ordinary or Non-producer members ('B' Class).
- 3) Nominal members.
- 4) Benifishery members.

Note : Nominal and Benifishery members will not get dividend. They cannot participate in the factory affairs and also have no voting power.

1. Producer Members :

Producer member is an important component of factory. He supplies sugarcane to the factory. He must fulfill the following conditions of membership.

- 1) He should cross the age limit of 18 years and competent to contract.

- 2) He should cultivate minimum of 1/2 acre of sugarcane.
- 3) He should register all the details of his acherage, survey number, name of village in the factory record.
- 4) He should apply for getting membership of factory and must pay minimum Rs. 500/- as first instalment.
- 5) He should pay Rs. 5/- as an enterence fees.
- 6) He is bound to supply sugarcane to factory.

## 2. Ordinary or Non-producer Members :

Any registered body can be a member of factory. These members elect one director among themselves. These members have the voting right in election.

The following are the rules for membership.

- 1) Such Co-operative Society should be under the factory area.
- 2) They should apply for getting the membership of factory and pay atleast Rs. 500/- as first instalment.
- 3) Rs. 5/- as an enterence fees should be paid.

## 3. Nominal Membership :

As per name, these members are nominal. They have no voting power nor they can participate in factory

affairs. This type of membership is free to any individual, partnership firm, corporation or co-operative society. The terms and conditions of such membership are as follows :

- 1) He should pay Rs. 5/- as membership fees.
- 2) His written application for membership should be sanctioned by the Board of Directors.
- 3) He should cross the age limit of 18 years and competent to enter into contract.

4. Benefishery Members :

The persons who are benefitted due to the development schemes of factory are known as benefishery members. The rights and duties of such members are like ordinary members.

The following are the conditions for becoming benefishery members :

- 1) He should be atleast 18 years old and liable to enter into the contract.
- 2) To become a benefishery member one should possess the minimum prescribed land within its area of operation.
- 3) He should pay atleast 25% amount of the total cost of development scheme.

- 4) He should pay Rs. 25/- with the application form to factory.
- 5) His written application should be sanctioned by the Board of Directors.

Though, we find the provisions made by the factory for becoming a benifishery member, so far no such members are registered under this category.

#### STATE GOVERNMENT

Government of Maharashtra is a member of Terna Shetkari Sahakari Sakhar Karkhana Limited Dhoki. Maharashtra Government contributed Rupees five lakhs as share capital, so it is one of the members of the factory.

The following is the table showing the description of members of Terna Sugar factory.

#### TABLE No. 2

TABLE No. 2

Sr. No.	Particulars	81-82	82-83	83-84	84-85	85-86
<u>No. of Members</u>						
<b>A) <u>Producer Members :</u></b>						
	'A' Class Total	7994	8469	11132	11613	12209
	Out of 'A' Class					
	Scheduled Castes	39	42	64	86	114
	Scheduled Tribes	31	33	65	49	58
<b>B) <u>Non-producer Individual Members :</u></b>						
	'B' Class Total					
	Out of 'B' Class					
	Scheduled Castes					
	Scheduled Tribes					
There is no provision of such membership in bye-laws.						
<b>C) <u>Non-producer Society Members :</u></b>						
	Co-op. Societies	73	106	106	106	105
<b>D) Maharashtra Govt.</b>						
		1	1	1	1	1
<b>E) Total Members :</b>						
	(A+B+C+D)	8068	8576	11239	11720	12315
<b>F) <u>Nominal Members :</u></b>						
	'C' Class	5072	5146	5232	5466	5768

Source : Annual Report 1985-86 Page 50

The above figures indicate the total number of members under various categories since last five years. In the year 1981-82, the number of producer members were 7994 whereas in the year 1985-86 it was 12209. The above figures indicates an increasing trend in membership. Similarly membership to co-op. societies has increased from 73 in 1981-82 to 105 in 1985-86. In the year 1982-83 to 1984-85 the membership was constant i.e. 106. But in 1985-86 the membership has reduced by one society. Maharashtra Government is also a member of factory. Government of Maharashtra has taken 2500 shares of factory at Rs. 2000/- each share. Maharashtra Government contributed a lot by taking 2500 shares. Among the total producer members, Scheduled Castes and Scheduled Tribes members were 39 and 31 respectively in the year 1981-82 which has increased to 114 and 58 members in the year 1985-86. There is one director of backward class and one director from economically backward class in the Board of Directors.

Table No. 10 showing the number of zones and cane supplied by each zone during last five years i.e. 1981-82 to 1985-86.

TABLE No. 10

Name of Zone	1981-82 M. Ton-kgs	1982-83 M. Ton-kg.	1983-84 M. Ton-kg.	1984-85 M. Ton-kg.	1985-86 M. Ton-kg.
1) Dhoki	31416.835	23980.490	6422.100	23128.035	20333.595
2) Ter	40833.425	30662.990	6258.270	31814.100	10915.435
3) Osmanabad	37529.175	29116.960	12311.345	23309.215	7297.230
4) Bembli	35548.925	25549.890	9708.835	19351.345	8340.920
5) Samudra- wani	35580.635	33895.680	12470.350	22645.035	8962.210
6) Shiradhon	31594.615	26496.180	8738.510	21924.365	18929.225
7) Shirala	43740.635	46535.515	15162.595	32213.720	18568.325
8) Murud	47840.540	32357.565	6365.485	30049.715	17139.600
9) Kallam	28837.195	16062.655	5766.507	17402.620	10531.330
10) Moha	35495.980	20357.540	8981.395	25837.505	24012.350
11) Yermala	22947.730	14776.430	7058.500	15285.360	11517.300
12) Upale (M)	29800.915	22197.180	7740.300	16318.335	8892.030
13) TernaNagar	50276.810	51645.300	19720.910	44598.360	34371.525
14) Khamas- wadi	34732.625	18673.010	5718.350	26083.270	20270.645
15) AArni	38916.725	30600.350	12624.175	25830.365	11461.905
16) Yedashi	22712.255	17927.260	4730.355	16265.730	12755.820
<b>Total M. Tonnes</b>	<b>567805.020</b>	<b>440884.995</b>	<b>149878.035</b>	<b>392057.075</b>	<b>244299.445</b>

Source : Annual Reports 1984-85 and 1985-86 respectively  
Page 10 and 11 both.

The above table indicates decrease in the cane supply to factory by members and non-members. Comparatively Murud Zone supplied more cane than any other zones. Ter zone stood second in cane supply. On an average Yedashi zone supplied less cane during these years.

In the year 1983-84 all the zones supplied less sugarcane which is mainly due to draught situation in the area of operation. Generally, it is observed that the tonnage continuously decreased from 1982-83 to 1985-86.

(IV) FINANCIAL MANAGEMENT OF TERNA SHETKARI SAHAKARI  
SAKHAR KARKHANA LIMITED DHOKI (TERNANAGAR)

Finance is the life blood of business. Finance is needed for the production of goods and services as well as their distribution. The success of any business depends on its financial soundness.

Terna Shetkari Sahakari Sakhar Karkhana Ltd. has raised capital through issuing of shares, debentures and taking loans. Initial contributors for raising finance were cane growers, Govt. of Maharashtra, Maharashtra Co-operative Bank Limited, Bombay, Industrial Finance Corporation and Life Insurance Corporation of India. Initially, how the capital has been raised by Sugar factory is shown in the following table.

TABLE No. 11

1) Producer members	Rs.	58,46,000.00
2) Non-refundable deposits	Rs.	9,95,000.00
3) Debentures	Rs.	1,85,000.00
4) Industrial Finance Corporation	Rs.	80,00,000.00
5) Life Insurance Corporation of India	Rs.	40,00,000.00
6) Maharashtra Government (2500 shares of Rs. 1000 each)	Rs.	25,00,000.00
7) Maharashtra State Co-op. Bank Ltd., Bombay.	Rs.	30,00,000.00
		<hr/>
Total	Rs.	2,45,26,000.00
		=====

Thus, the total amount of capital raised by the sugar factory was 2 crores, forty five lakh and twenty six thousand from 1967-68 to 1969-70. This amount was sufficient for erection of factory at the initial stage.

CAPITAL STRUCTURE OF SUGAR FACTORY :

The following is the capital structure of the Terna Shetkari Sahakari Sakhar Karkhana Limited, Dhoki for the year 1985-86.

TABLE No. 12

Sr. No.	Description	No. of Members	No. of Shares	Total Amount Rs.
1)	'A' Class Members (Producer members)	12209	14,115	28230000=00
2)	'B' Class Members (Co-op. Societies Non-producer )	105	130	260000=00
3)	Maharashtra Govt. (2500 Red. Pref. shares of Rs.2000 each )	1	2,500	50,00,000=00
	Total	12315	16,745	3,34,90,000=00

SHARE CAPITALAUTHORISED AND PAID-UP SHARE CAPITAL

<b>A) <u>Authorised Share Capital</u></b>	
a) 'A' Class Producer Members (2000 shares of Rs.2000 each)	4,00,00,000.00
b) 'B' Class Non-producer Members Co-op. Societies (200 shares at Rs.2000/- each)	4,00,000.00
c) Maharashtra Government (2500 redeemable/shares at Rs.2000/- each /Pref.)	50,00,000.00
	<u>4,54,00,000.00</u>
<b>B) <u>Issued Share Capital :</u></b>	
a) Producer Members 'A' Class ( 20000 shares of Rs. 2000/- each)	4,00,00,000.00
b) Non-producer Members 'B' Class Co-operative Societies (200 shares at Rs. 2000/- each)	4,00,000.00
c) Maharashtra Government (2500 redeemable Pref. shares at Rs.2000/- each)	50,00,000.00
	<u>4,54,00,000.00</u>
<b>C) <u>Subscribed and Paid-up :</u> <u>Capital</u></b>	
a) Total 12209 Producer Members 14115 shares at Rs.2000/- each	28,23,00,000.00
Less Arrears	57,52,885.00
Subscribed	<u>22,47,71,115.00</u>
b) Total 105 Non-producer members i.e. Co-op. societies 130 shares at Rs.2000/- each	26,00,000.00
Less:Arrears	11,52,50.00
Subscribed	<u>14,47,50.00</u>

c) Maharashtra Government	50,00,000.00
(2500 redeemable Pref. Shares at Rs.2000/- each)	
Less: Arrears	<u>48,05,000.00</u>
Subscribed	<u>19,50,000.00</u>

TOTAL Rs.	<u>22,81,6865.00</u>
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Source : Annual Report 1985-86 Page.30

: NON REFUNDABLE DEPOSITS :

Prosperity, economic stability and development of sugar factory depends upon capital. Internal source of finance is always better than loan. In the year 1968-69, the factory started compulsory non-refundable deposit scheme i.e. Rs. 5/- per ton sugarcane supplied to the factory.

Sugar factory collected the amount from producer members by way of non-refundable deposit i.e. five year's figures are given below : 1981-82 to 1985-86.

TABLE No. 13

Year	Non-refundable Deposit (Rs.in lakh)
1981-82	166.76
1982-83	188.81
1983-84	196.30
1984-85	215.90
1985-86	228.11

BANK DEBENTURES :

This is the second source of factory for rising the capital. The factory purchased the debenture from Maharashtra State Co-operative Bank. The amount spent on debentures was Rs. 2,54,125/- in 1968-69, Rs. 1,85,917/- in 1969-70, Rs. 5,29,494/- in 1970-71, Rs. 3,32,764/- in 1971-72, Rs. 3,16,360/- in 1972-73, Rs. Nil in 1973-74 and Rs. 5,91,752/- in 1974-75. Thus the total amount invested in debentures was Rs. 22,10,412/-. This scheme was closed since 1975-76.

Source : Annual Report 1974-75.

Table showing the investment made by Terna Sugar factory during the year 1985-86 in various sources.

TABLE No. 14

INVESTMENTS IN 1985-86.

Sr.No.	Description	Amount
1)	National Savings Certificate	25250.00
2)	Shares of Maharashtra State Co-op. Bank Ltd., (16500 shares of Rs. 50 each)	825000.00

Sr. No.	Description	Amount Rs.
3)	501 Shares of Rs. 50 each of Osmanabad District Central Co-op. Bank.	20,050.00
4)	20 Shares at Rs. 10 each of Latur Central Co-op. Consumers Stores.	200.00
5)	8 Shares at Rs. 25/- each of Co-op. Oil Industries, Latur.	200.00
6)	200 Shares at Rs. 50 each of Kallam Taluka Purchasing and Selling Federation, Kallam.	10,000.00
7)	10 Shares at Rs. 100 each of Maharashtra State Co-op. Marketing Federation Ltd., Bombay.	1,000.00
8)	1 Share at Rs. 2500 each of Estimated Maharashtra Sugar Industries Development Finance Supply Co-op. Society Limited.	2,500.00
9)	Osmanabad Taluka Farmers Co-op. Purchasing & Selling Federation (5 Shares at Rs. 1000/- each).	5,000.00
10)	Amount deposited for National Heavy Co-op. Ltd., Pune.	25,000.00
11)	Maharashtra State Co-op. Land Development Bank Ltd., Bombay.	10.00
Total Rs.		9,39,710.00

Source : Annual Report 1985-86 Page 32.

BALANCE SHEET

( As on 30th September 1986 )

Capital and Liabilities		Rs.	Rs.
<b>1) <u>Share Capital :</u></b>			
Members Share Capital		22477115.00	
Society Share Capital		144750.00	
Maharashtra State Govt.		<u>195000.00</u>	
		22816865.00	
Advance Share amount		<u>1234676.76</u>	24051541.76
<b>2) <u>Reserve Fund &amp; Other Fund</u></b>			
a) Reserve fund		1327354.51	
b) Depreciation fund		41613967.12	
c) Development Rebate Reserve		4426121.02	
d) Investment Allowance Reserve		4888122.14	
e) Levy Sugar private equity fund		11141506.40	
f) Molasis Pit fund		3239522.09	
g) Alcohol Storage fund		218382.43	
h) Distillery empliment disposal fund		<u>173552.72</u>	67028528.43
<b>3) <u>Loans :</u></b>			
As per schedule B ( Mortgage loans )			3231875.00

Capital & Liabilities		
	Rs.	Rs.
<b>4) Deposits :</b>		
a) Members Non-refundable deposits.	22810712.00	
b) Other deposits	<u>14579182.00</u>	37389894.00
<b>5) Other liabilities :</b>		
a) Outstanding Sugarcane Bills	16153660.43	
b) Field development contribution	75765.03	
c) Trade Bills	1850661.91	
d) Sugarcane Sale receipts	574917.75	
e) Molasis Sale receipts	70764.90	
f) Spint Sales receipts	189040.93	
g) Outstanding Sugarcane Purchase tax	442069.70	
h) Receipt on account of fertiliser.	58771.55	
i) Small Savings (through Sugarcane bills)	1044608.00	
j) Govt. Liabilities	121826.93	
k) Servant liabilities	618577.93	
l) Other liabilities	<u>11418354.34</u>	32619019.40

-----		
Capital and Liabilities	Rs.	Rs.
-----		
6) <u>Outstanding Interest :</u>		
a) Interest on Term loan	981998.63	
b) Interest on Refundable and Non-refundable Deposits	2942802.13	
	-----	3924800.76
7) <u>Provisions :</u>		
a) Expenses on sugar transportation	32682.50	
b) Losses on sugar export	295500.00	
c) Provision for bonus	1962259.95	
d) Provision for gratuity	1874635.41	
e) Other incidental charges	1711084.64	
	-----	5876162.50
8) Bank Overdraft		326379.69
		-----
		174448201.54
		=====
-----		

Assets and Properties	Rs.	Rs.
1) <u>Cash in hand and at Bank</u>		
a) Cash in hand	37 105.16	
b) Cheques and Drafts in hand	236620.50	
c) Bank balance	19546613.05	
d) Postal balance	513847.10	
e) Short term deposit in Bank	-	20334185.81
2) Investment (As per attached schedule)		939710.00
3) <u>Advances &amp; Outstanding Bills :</u>		
a) Light & Fertilizers	2233346.13	
b) Machinery	7866427.76	
c) Outstanding balance from Traders	327718.83	
d) Outstanding interest on bank deposit	-	
e) Deposit	898507.94	
f) Other advances	2674653.77	
g) Other balances	1123622.74	
h) Amount paid to Bank for guarantee of loan on mortgage	4357001.26	17471278.43
4) Advance expenses		-

Assets and Properties		
	Rs.	Rs.
5) Current Assets (As per schedule attached)		38780365.55
6) Fixed Assets (As per schedule attached)		86118568.40
7) Revenue expenses on sugarcane development and Research which is outstanding.		262724.43
8) <u>Profit &amp; Loss Account</u>		
Cumulative losses	11183553.82	
Current losses	-	
Less :Current year profit	<u>642184.90</u>	10541368.92
		<u>174448201.54</u>

Source : Annual Report 1985-86 Page 26 to 29.

TABLE No. 15

Table showing yearwise sugarcane crushed  
and sugar produced.

Year	Sugarcane crushed in lakh M. Tonnes	Sugar bags produced in Qtls. Qtl s.	No. of days operated	Sugar Recovery
1981-82	564820	537521	276	9.73 %
1982-83	444404	454045	209	10.01 %
1983-84	152670	148377	83	9.72 %
1984-85	390697	401709	194	10.28 %
1985-86	285757	311237	154	10.89 %

Source : Annual Report 1985-86.

TABLE No. 16SALE OF SUGAR

Year	Levy sugar Qtl s.	Non-levy sugar Qtl s.	Total Sales	Average cost of production per Qtl.	Average price paid to farmers
1981-82	280454	134467	414921	Rs. 135	Rs. 184
1982-83	255508	145399	400907	135	179
1983-84	206098	137690	343788	249	150
1984-85	193392	186956	380348	161	258
1985-86	166448	156955	318403	186	295

Source : Annual Report 1985-86.

The above table shows decreasing trend of sugar sales. In the year 1981-82 total sugar sales was 414921 qtls. and cost of production per quintal was Rs. 135/- and the amount paid to farmers per ton was Rs. 184/- . But during the years 1982-83, 1983-84, 1984-85 and 1985-86 the sales have decreased and comparatively the cost of production has increased hence factory could not pay satisfactory amount to farmers.

TABLE No. 17  
MARKETING OF SUGAR

Sr. No.	Description	1981-82 Qtls.	1982-83 Qtls.	1983-84 Qtls.	1984-85 Qtls.	1985-86 Qtls.
A)	Within country Sale (Regulated sale)	270514	232228	154221	173472	166448
B)	Within country (Free Sale)	131827	145399	137690	186956	151955
C)	Export of sugar (Regulated Sale)	9940	23280	51877	19920	-
D)	Export sugar (Free sale)	2640	-	-	-	-
<b>Total Sale</b>		<b>414921</b>	<b>400907</b>	<b>343788</b>	<b>380348</b>	<b>318403</b>

Source : Annual Report 1985-86 P.53

The above table indicates the highest sale of sugar in the year 1981-82. In the year 1985-86 sugar was not exported.

(V) MANAGEMENT OF TERNA SHETKARI SAHAKARI SAKHAR  
KARKHANA LIMITED DHOKI (TERNANAGAR) .

Management is a technique of leadership. It is a means of co-ordination and co-operation. Management is a task of planning, organising, staffing and controlling. It brings together all the factors of production.

Management of Terna Shetkari Sahakari Sakhar Karkhana Ltd., Dhoki is based on the principle of democracy and co-operation. One vote to individual member is the principle of factory.

Sugarcane growers are the real owners of factory. Producer members of the factory are scattered in 164 villages. Total voters in the year 1985-86 were 12314 including co-operative societies. All the shareholders cannot take part in day to day affairs of the factory. And it is beyond their capacity to do so, by which every five year, they elect directors from among themselves. They manage and control the factory. The decisions regarding the policy matters are taken by the members in annual general meeting and in extra-ordinary general meetings.

The total area of the factory is divided into five circles for the election of directors.

TABLE No. 19

Sr.No.	Description	No.of Directors
(1)	Directors elected by producer members.	15
(2)	Director elected by Co-operative societies.	1
(3)	Director through economically backward class.	1
(4)	Director through Backward class	1
(5)	Bank representatives	2
(6)	Government representative	1
(7)	Managing Director (Ex-officio)	1
Total		22

Source : Annual report 1985-86

Maharashtra Government recommended the factory to take one director from economically backward class and one director from backward class in 1978-79. So now these two directors are taken by factory in Board of Directors. This shows that the factory has given justice to the people of all classes.

Previously, one director was among the workers. In order to maintain good relations between labour and management. But presently there is no director of workers in board. It is the demand of the workers to take one

director in the Board to represent them.

Backward and economically backward class representative, Bank representative, Govt. representative and Managing director can participate in the affairs of the factory but they have no power of voting in the election of Chairman and Vice-chairman.

Duties of board of directors are briefly discussed below :

- 1) To frame the policies.
- 2) Make the recruitment of required staff in the factory.
- 3) To arrange the sugarcane development programmes.
- 4) To invest the fund properly.
- 5) To undertake the welfare activities.
- 6) To distribute the dividend among the Shareholders properly.

Following are the some important committees of the board of directors. These committees are formed for enhancing the efficiency, quick decision and *their* implimentation.

1. Development Committee
2. Construction Committee
3. Sugarcane Transportation Committee
4. Employee Appointment and Management Committee

TABLE No. 18

Sr.No.	Name of the Zone	No.of villages included in each zone	No.of Directors to be elected
1)	Shiradhon	38 Villages	3
2)	Moha	47 "	3
3)	Ter	28 "	3
4)	Dhoki	27 "	3
5)	Osmanabad	24 "	3
Total		164 Villages	15 Directors

Source : Bye-laws of factory.

15 Directors are elected by producer members. In addition to these directors one director according to sugar factory bye-laws 29(1) is elected. This director is elected by members of co-operative societies under factory area. Thus, the total number of elected directors is 16.

#### BOARD OF DIRECTORS

Board of Directors is of 22 directors. Description of Board of Directors is given as below :

5. Distillery Committee

6. Executive Committee

Managing Director implements the decisions taken by the board through the departmental heads of the various departments.

(VI) DISTILLERY PROJECT :

In order to utilise the molasses a by-product of sugar, the factory established a distillery plant in the year 1978 to manufacture alcohol. This is the first and biggest project in Marathwada region. Molasses is the raw material for producing alcohol which is easily available. This project is linked with sugar factory. It is run under the same management. 150 M. tonnes of molasses is used for the production of rectified spirit daily. Alcoholic production is 6500 gallon per day.

Need and Importance :

While producing sugar, molasses and wastage of sugarcane come out, with the help of these wastage, paper and alcohol can be produced. Molasses is the raw material of alcohol. If the molasses is not utilised, number of problems arises. If this wastage is diverted to river or tank, it is harmful for the fish and other animals in the water. To destroy it is a costly affair and if it is decided to sell, it will get less price.

Considering all these problems, the sugar factory decided to erect the Distillery project. Due to the sincere efforts of Board of Directors, the Distillery project came into existence on 22nd February 1978. Country liquor named 'Bharari' is being produced since 1979.

LICENCES (PERMITS )

Too many permits are required for the production of liquor. Terna Sugar factory acquired the following permits for the production of alcohol and country liquor 'Bharari'.

1. Maharashtra Government issued licence on 27-12-1973 for the establishment of distillery project.
2. Industrial licence for the production of Alcohol received on 21-7-1976. The Industrial Licence No. is C.I.S./271/76.
3. Maharashtra Government has given permission to Terna sugar factory for consuming 10 lakh gallon water from the Terna project.
4. Government of India issued licence for producing country liquor i.e. 'Bharari' on 30-4-1979. Licence Number is I.L. 19 (79).

PRODUCTION CAPACITY

Molasses is the main source of raw material for the production of alcohol. The productivity chiefly depends on the quality of molasses, with the help of one ton molasses how much litres of alcohol is produced is the measurement of productivity. Generally, 190 to 275 litres of alcohol from one tone of molasses is economically affordable. It is treated as standard production. This distillery project is producing 231 to 253 litres of liquor from one tone molasses which is a reasonable production.

The following table shows the productivity of liquor.

TABLE No. 20

Year	Molasses used M. tonnes	Spirit produced litres	Days oper- ated	Spirit Recovery litres
1981-82	20507	4829166	203	235
1982-83	20115	4702133	209	233
1983-84	15309	3390441	212	221
1984-85	22120	4739562	173	214
1985-86	19424	4151810	151	213

Source : Annual Report 1985-86 ( Note : Some figures are rounded off )

MARKETING OF ALCHOHOL

The following table shows the yearwise sale of spirit and country liquar for five years.

TABLE No. 21

Year	Total production litres	Total cost of production Rs.in lakhs	Price received Rs.in lakh
1981-82	4829166	84.90	102.60
1982-83	4702133	78.88	83.98
1983-84	3390441	90.93	106.67
1984-85	4739562	127.88	164.69
1985-86	4151810	125.01	199.48

Source : Annual Report 1985-86.

FINANCIAL MANAGEMENT

The total capital investment of distillery project is Rs. 60 lakhs. The capital has been raised by the following two sources :

1. Rs. 24 lakh 50 thousand loan from Maharashtra State Co-operative Bank Ltd., Bombay and
2. Rs. 24 lakh 50 thousand from Sugar factory's own fund.

### PERSONNEL MANAGEMENT

There are 40 employees working on permanent basis. In the distillery, there is one Incharge and 4 Supervisory chemists. Clerical staff consists 4 persons. Distillery unit is operated for 10 months in a year. Two months are required for cleaning the machinery. The spirit is stored in a warehouse according to the State Government excise rules. The sale of spirit is being done under the control and guidance of Government appointed officer.

### USES OF SPIRIT

Spirit is used for number of purposes :

1. It is used in medicine.
2. It is used for preparing liquar.
3. Spirit is the base for preparing the higher alcohol linkage solvants etc.

(VII) PERSONNEL MANAGEMENT OF TERNA SHETKARI  
SAHAKARI SAKHAR KARKHANA LTD. DHOKI.

There are four important factors of production. i.e. land, labour, capital and organisation. Among these four factors labour is very important factor. Without the help of this factor, the production machinery cannot operate smoothly.

The importance of personnel management has been increasing day-by-day. In large organisations, there is a separate personnel department with an executive incharge and staff.

Terna Shetkari Sahakari Sakhar Karkhana Limited, Dhoki (Ternanagar) Dist. Osmanabad has its personnel department. The number of personnel (Permanent and Seasonal ) working under various departments are shown in the following chart.

TABLE No. 22

Sr. No.	Name of the Department	June 1985-86			June 1986-87			June 1987-88					
		P	S	D	Total	P	S	D	Total	P	S	D	Total
1		3	4	5	6	7	8	9	10	11	12	13	14
2													
1)	General Office	26	-	-	26	24	1	-	25	22	1	-	23
2)	Accounts Office	71	20	-	91	60	24	-	84	61	24	-	85
3)	Planning and Development	5	-	-	05	6	-	-	06	6	-	-	06
4)	Medical	14	-	-	14	4	-	-	04	4	-	-	04
5)	Personnel Department	16	-	-	16	14	2	2	18	14	2	2	18
6)	Sugar Godown	7	1	-	08	6	1	-	07	6	1	-	07
7)	General Stores	18	-	-	18	15	5	11	31	15	5	11	31
8)	Civil Office	20	-	-	20	21	-	1	22	21	-	1	22
9)	Guest House	8	-	-	08	6	-	-	06	6	-	-	06
10)	Petrol Pump	8	2	-	10	7	3	-	10	7	3	-	10
11)	Security	38	19	-	57	22	16	3	41	22	14	3	39
12)	Agriculture	83	128	-	211	86	97	10	193	84	96	10	190

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
13) Motor	30	1	-	31	28	-	28	28	28	28	28	-	-	28
Department														
14) Engineering	161	94	-	255	171	95	22	288	160	95	22	277		
Department														
15) Manufacturing	36	175	-	211	43	135	31	199	44	134	21	199		
16) Distillery	49	-	-	49	18	3	4	25	23	3	4	30		
17) Research	5	-	1	6	-	-	-	-	-	-	-	-		
Total	595	440	1	1036	531	382	74	987	523	378	74	975		

Abbreviations : P = Permanent  
 S = Seasonal  
 D = Daily wages

Source : Compiled office record from June 1985-86 to 1987-88 June.

STATEMENT SHOWING THE GRADES, WAGES & SALARIES OF TERNA SUGAR FACTORY EMPLOYEES

Hon'ble Shankar Bajirao Patil Award : Statement showing the details about Pay scale and respective variable Dearnes

Sr. No.	Category	Wage Scale	D.A.		1-7-87 to 30-9-87	1-10-87 to 31-12-87	1-1-88 to 31-3-88	1-4-88 to 30-6-88
			1-10-86 to 31-12-86	1-1-87 to 31-3-87				
1)	Unskilled	292-5-317-7-387	627.07	658.42	674.92	717.82	767.32	782.
2)	Semi skilled	305-7-340-9-430	630.07	661.42	677.92	720.82	770.32	785.
3)	Skilled 'C'	312-9-357-11-467	635.07	666.42	682.92	725.82	775.32	790.
4)	Skilled 'B'	327-11-382-13-512	640.07	671.42	687.92	730.82	780.32	795.
5)	Skilled 'A'	352-13-417-15-567	667.19	698.54	715.00	757.94	807.44	822.
6)	Highly skilled	387-15-462-17-632	672.19	703.54	720.04	762.94	812.44	827.
<u>GENERAL</u>								
1)	Clerk IV	319-9-364-11-474	646.07	677.42	693.92	736.82	786.32	801.
2)	Clerk III	342-11-397-13-527	672.19	703.54	720.04	762.94	812.44	827.
3)	Clerk II	367-13-432-15-582	682.19	713.54	730.04	772.94	822.44	837.
4)	Clerk I	437-15-512-17-682	687.19	718.54	735.04	777.94	827.44	842.
<u>SUPERVISORY</u>								
1)	C	437-21-542-27-812	692.19	723.54	740.04	782.94	832.44	847.
2)	B	487-27-622-34-962	697.19	728.54	745.04	787.94	837.44	852.
3)	A	557-45-782-60-1382	697.19	728.54	745.04	787.94	837.44	852.

Daily Rate Rs. 43.17

NOTE : Since 1-1-1984 a special grade is given to Managing Director

It is Rs. ~~1300-100-2000-50-125-3000~~

In the year 1985-86, the permanent employees in various departments were 595 and seasonal workers were 440 and one worker was on daily wages. But in the year 1986-87, the permanent employees were 531 and the seasonal workers were 382 and workers on daily wages were 74. In comparison with these two years i.e. June 1985-86 and June 1986-87, there is decrease in permanent workers by 64. Similarly seasonal workers are decreased by 58. But the strength of workers on daily wages increased by 74 in 1986-87.

Again it is found that there is continuous decrease in permanent, seasonal as well as daily workers in the year June 1987-88.<sup>3</sup>

This is due to decrease in the cultivation acreage of sugarcane. This decrease in cultivation of sugarcane happened due to lack of rainfall.<sup>4</sup>

In addition to the above employees, the factory requires labourers for harvesting the sugarcane and cane transporting activities.

The labourers engaged in various vehicles is shown in the following table.<sup>5</sup>

TABLE No. 23

Year	No.of various vehicles	No.of labourers under each vehicle	Total labourers
1985-86	600 Bullock Carts	03	1800
	80 Trucks	30	2400
	30 Tractors	20	600
			<u>4800</u>
1986-87	418 Bullock Carts	03	1254
	155 Trucks	30	4650
	30 Tractors	20	600
			<u>6504</u>
1987-88	60 Bullock Carts	03	180
	81 Trucks	30	2430
	35 Tractors	20	700
			<u>3310</u>

Source : Compiled from office records.

In the year 1985-86, there were 600 bullock carts but in the 1987-88, there were only 60 bullock carts. There is decrease by 540 bullock carts. This is due to less cane cultivation area.

In 1985-86, the No.of trucks were 80 but in 1986-87 the No.of trucks 155, there is increase of 75 trucks. But in the year 1987-88 there is decrease in No.of trucks by 74 (155-81).

In 1987-88 the No. of tractors increased by 5 in comparison with the last two years but the No. of labourers on each vehicle was constant.

In addition to all the above employees and labourers, thousands of people are engaged in cultivation activities.<sup>4</sup>

(VIII) IRRIGATION FACILITIES

There are 164 villages under the factory area. Land under the factory area is fertile and useful for sugarcane cultivation. Farmers mainly depend on wells, rivers and rains for water supply. Main and important source of water supply for sugarcane cultivation is through wells. But many of the wells get dried in summer season and water level in some wells decreases resulting into the decline in sugarcane yield.

Secondly, farmers depend on rainfall. Rainfall under this area is near about 25 to 35 inches. If in any year, there is less rainfall, it affects the productivity. To overcome on this natural calamity, the sugar factory has undertaken the borewell system and borewell scheme for producer members.

In the year 1985-86, the factory has taken 32 borewells. The cost incurred on this by the factory was Rs. 145807.62 and the producer members sustained Rs. 276993.38. Thus, the total cost of 32 borewells was Rs. 422801.40. In addition to this, the members who have taken bores without the help of factory received Rs. 1000/- as grant from the factory.

There were 12257 wells in 1985-86 Terna charitable trust has its own boring and blasting

machines. This factory takes the help of this trust for taking borewells and blasting in the farm of its members.

(IX) CROP CULTIVATION AND DEVELOPMENT

Methods of sugarcane cultivation are found old. Previously, sugarcane was mainly used for Gur, Khandsari, and juice purpose. Even today cane cultivation method is not well developed. Therefore, the percentage of sugar is less. Factory supplies seeds of high yielding varieties to the members at cheaper price as the factory is having large sugarcane area. Many members do not know the proper way of sowing. For this purpose, factory arranges trips at sugarcane research and development centres, seminars and guidance from specialists. Seeds like C-740, CO-6215, CO-7415 are suitable.

Every year the factory distributes various types of seeds such as single eye-bud and KOSI-671 seed etc. on experimental basis to find out the result of recovery. In order to make the propoganda of this seed, factory distributed freely one M.tonne seed, 100 M.litre bawistin and 20 kg. fertiliser. Cultivation was made under 200 acres. For this purpose, the

expenses borne by factory were Rs. 60000/- and spent Rs. 76,580/- on pesticides in 1985-86.

Under the guidance of Deccan Sugar Institute Pune the factory arranged a programme of seed nursery. According to this scheme seeds were distributed as follows :

TABLE No. 24

Type of Sugarcane	Free M. Tonnes	50% grant M. Tonnes	Total M. Tonnes
CO-7219	729.000	453.250	1182.250
KOSI-671	274.250	366.590	640.840
<b>Total :</b>	<b>1003.250</b>	<b>819.840</b>	<b>1823.090</b>

Source : Annual Report 1985-86.

In this regard, the cost borne by the factory is Rs. 300 per M. ton and total cost for free seed is Rs. 4,23,951.00 Similarly, expenses incurred on seed transportation and pesticides is Rs. 4,16,264.49 in the year 1985-86.

Sugarcane seed nursery was implemented in 54 acres of land and 50% grant was given to interested

members. Total cost incurred on this programme was  
Rs. 3,24,150.00

Supply of improved seeds, fertilizers  
pesticides.

Supply of sprayers, soil testing progra-  
mmes, guidelines, seminars, tours of farmers.

Cane-crop competition.

Seed nursery scheme.

Subsidy for plantation of adsali/suru  
sugarcane.

Distribution of press-mud.

Tillage operations.

Pilot scheme etc. programmes arranged by  
factory for increase the cane productivity.

(X) FACILITIES PROVIDED BY FACTORY

1) IRRIGATION :

Farmers under factory area depend on wells, rivers, rains and canals for water supply. More than 95% farmers cultivate their land with the help of well water. Other means of irrigation are insufficient. The factory lends boring machine and blasting machines at concessional rates to the producer members under its area of operation. In the year, 1985-86, the factory undertaken 32 borewells. The total cost of 32 borewells was Rs. 4,22,801=40. Of this, factory incurred Rs. 1,45,807=60 and rest of the cost was borne by concerned farmers. In addition to this, the factory has given financial assistance of Rs. 1000/- to 23 members who have taken bores without the help of factory.

2) SUGARCANE DEVELOPMENT SCHEMES :

Factory supplies improved quality seeds to its members. Many farmers do not know proper way of sowing. They do not know high yielding varieties of sugarcane. Factory has arranged tours and seminars for giving information of high quality seeds like CO-740, CO-6215, CO-7415, CO-7219, COSI-671. For members single eye-bud scheme was also implemented. Sugar factory has also undertaken the seed nursery scheme.

Many farmers have taken advantage of this scheme. Factory encourages the farmers to take nursery plots in their own field. For this purpose, 1 M.tone seed on 50% concession was given. In this regard factory incurred Rs. 3,24,150/- in the year 1985-86. In the same year high recovery of sugar and immediate maturity seed KOSI 671 was supplied freely to farmers, and the expenses of pesticides and fertilizers was borne by the factory. Subsidy for plantation of adsali/suru sugarcane is also given by the factory. Cane crop competition schemes are arranged by the factory.

### 3) PHALBAG YOJANA :

Factory has its own Phalbag of 48 acres of land, It includes dalimb, mango, boras, coconut, badam, nilgiri, suru, botanical garden, dry food, medicine trees, sag, flower garden, subabhul and sugarcane.

Factory is also encouraging to its members to implement the phalbag yojana on their own field. Factory supplies boras, mango, coconut, lemon, dalimb plants to farmers at cheapest rate. It assists to increase the income of members.

### 4) TECHNICAL GUIDENCE :

Majority of cane growers are illiterate. They do not know the modern methods of cultivation.

For giving guidance to farmers, there is agricultural department. Cane development officers and staff give technical guidance on the demand of farmers.

5) LOANS :

Sugar factory provides loan facilities to producer members through the Agricultural State Bank of Hyderabad - Branch Ternanagar. These loans are of short term, medium term and long terms. Crop loans are also provided by the bank. Seed loans for the purchase of engines, electric pump sets, pipes etc. is given to the farmers.

6) CONSTRUCTION OF ROADS :

In order to get the highest recovery, it is necessary condition that the time lapse from the harvested cane in the field to the sugar in bag should be the minimum possible. The first step is to get the cane quickly transported to the factory and feed into the cane carrier for crushing. Cane is very perishable raw material, as it rapidly deteriorates with the passage of time, converting sucrose into invert sugars which are non crystallisable and pass out in the final molasses. Good roads in the factory area are a great pressing necessary and more attention to this aspect is urgently called for.

Factory has constructed many approach roads in its area. Approach roads are attached to the main tar roads. Therefore, quick transporting has become possible.

7) TRANSPORT FACILITIES :

Factory has provided transportation facilities like trucks, tractors and bullock-carts for producer members. It helps the farmers for transporting sugarcane easily to the factory.

8) HARVESTING AND TRANSPORTING :

The factory makes harvesting and transporting arrangements at its own costs.

9) DISTRIBUTION OF PRESSMUD :

Factory does not supply chemical fertilizers but it provides press-mud freely. Only transportation cost is charged by the factory for distributing the press mud on the field of farmers.

10) EXHIBITIONS :

Factory arranges exhibitions of fertilizers, machinery, pesticides, bullock-carts, cattles, mango, dalimb etc. with the objective of creating an awareness among the farmer society.

11) SEMINARS :

Factory arranged many seminars group discussions to discuss various problems. Cane growers management, workers participated in seminars. Expert's lectures were also arranged.

12) EMPLOYMENT :

The factory provides employments to about 1050 permanent , seasonal and daily ~~workers~~ workers. In addition to that thousands of persons are indirectly, employed for six months during season as labourers for harvesting and loading cane as drivers and cleaners for trucks, as craftsman to transport cane for feeding cane and other allied works.

13) FAMILY PLANNING :

According to 20 point programme, the factory has taken family planning camp in the year 1985-86. 87 persons were under family planning operations schemes. Factory gave Rs. 100/- per individual who was not an employee and Rs. 150 to 32 employees were operated under family planning scheme.

14) EDUCATIONAL ACTIVITIES :

One Zilla Parishad School upto 7th standard is run in the factory campus only for the children of employees. One montesary school is run by Mahila Mandal. One polytechnic college is run by

Terna Charitable Trust. Workers welfare centre is run by factory with the help of social welfare department. There are many magazines, periodicals, newspapers, equipments of domestic and foreign games and entertainment equipments are kept by the centre for employees.

15) LABOUR WELFARE FACILITIES :

a) Bonus : The factory is giving 20% bonus to its employees since last two years and 3% gratuity.

b) Medical facilities : Factory has started one hospital in the factory premises. Medical treatment is given to the employees and their family members with nominal fees.

c) Carrier award : This award is given to the employees who exhibit outstanding performance in imparting their duties. Workers welfare council- Bombay has awarded " Meritorious workers " award to Shri G. B. Pawar, General Supervisor-cum typist of the factory. This shows that the employees in the factory are hard working, loyal to their duties, prompt and regular.

d) Other facilities : Factory has given many other facilities to its employees e.g. games, library, equipments, dress to employees etc.

16) CIVIL WORKS :

a) First floor of the office building completed.

b) Construction of 'F' type quarters completed.

- c) Repairs of roads from sugar godown to distillery and coloney roads completed.
- d) Factory has received permission of 3500 M. tonnes crushing capacity. Therefore to store the molasses are 5000 M. tonnes capacity molassis still steel tank is installed.

17) Cultural Programmes :

Factory arranges various cultural activities at its campus. For these programmes, employees voluntarily pays contribution. Programmes like Ganesh Utshav, Shiva Jayanti, Ambedkar Jayanti, Lokmanya Tilak Jayanti, Gokul Astami etc. are undertaken. Sugar factory has its own projector of 16 mm. Generally four cinemas are shown to employees in a year.

18) ECONOMIC FACILITIES :

Factory has supplied loans to labourers for purchasing cow, buffellow and cattles. Factory has provided short term loans to employees for purchase bicycles, motor vehicles, sofa sets, dining tables, freeze, cupboards etc. This helped to improve the standard of living of employees.

19) PROMOTIONAL ROLE OF TERNA SHETKARI SAHAKARI SAKHAR KARKHANA LTD. DHOKI IN PROMOTING OTHER ORGANISATIONS:

- a) A co-operative consumer store is established at factory campus.

- b) There is one employees' credit co-operative bank.
- c) One Canteen is run at concessional rates.
- d) A flour mill is run by factory.
- e) A garden is maintained and various types of fruits and flowers (is) witnessed in this garden which is maintained by a full time appointed gardner.
- f) A petrol pump is run by the factory.
- g) Factory has donated amount to Chief Minister's fund in the year 1985-86.
- h) Factory donated amount to draught fund.
- i) Factory has saved the money in small savings, National Savings Certificates etc.
- j) Factory gives 25 k.g. sugar twice in a year at concessional rates. The factory also provides one quintal of sugar at concessional rate to all the shareholders on the occasion of marriage ceremony.