

### CHAPTER-III

#### EMPLOYMENT POSITION IN FARM SECTOR

Farm sector so far as sugar industry is concerned, comprises of farming activities practised either directly or indirectly for the purpose of the benefit of sugar industry. Sugar industry is an employment generating organisation established to achieve rural development. Sugar factories are, indeed, growth centres of the rural regions. The employment opportunities in the farm sector are higher than those of the factory sector. The industry imparts some confidence among the farm community about their economic upliftment. Economically, sugar factories help to improve the standard of living of farmers; socially, they bring about social equality and self-help with mutual help through co-operative organisation; morally, a farmer's commitment to the society as a whole grows, a result of collective efforts and confidence in industrial setting of their own. Farmers are becoming rich because of the surety in agricultural produce due to irrigation potentials created by sugar co-operatives. Thus, sugar industry plays a vital and significant role in improving the economic health of rural sector in general and farm sector in particular. Simultaneously, the industry has accepted the responsibility to extend infrastructural and social service facilities to the ruralites.

On an average, each a sugar factory produces 40,000 tonnes of sugar, worth Rs. 30 crores, 10,000 tonnes of bagasse valued at Rs. 25 lakhs and 16,000 tonnes of molasses worth Rs. 2 crores (export price). Each factory employs 15,000 persons directly and indirectly. The cane growers of each sugar factory handle the income to the worth Rs. 17

crores and Rs. 1.5 crores worth as the salaries of the workers of each sugar factory. In Maharashtra there are 106 sugar factories operating in rural area. On the basis of the above data it can be estimated that, about 15.9 lakh persons are employed directly or indirectly in this industry. The cane growers get more than Rs. 1,800 crores as their earnings from sugarcane, and the workers earn Rs. 159 crores as their salaries. The direct employment constitutes about 1 lakh persons and remaining 14.9 lakh persons are directly employed in this industry in Maharashtra State.

### 3.1 EMPLOYMENT IN CANE-FARMS :

Once the sugarcane is being planted, it may be continued for another two years depending on the quality of the soil and the availability of irrigation sources. Some farmers undertake only two crops viz. plantation crop and one ratoon crop. Sugarcane can be planted during August-September, which is known as 'Adsali' (18 months) plantation or it can be planted in the months of October-November, which is known as 'Suru' or 'Eksali' (12 months) plantation. According to Baburao Phalke's<sup>1</sup> estimation of labour, for 'Suru' plantation requires 115 mandays in one year (i.e. upto harvesting) and for 'Adsali' 130 mandays are required for a crop season. A ratoon crop both, 'Suru' and 'Adasali' requires 95 to 100 mandays in a year.

Besides, some independent studies have revealed the fact that the sugarcane crop generates additional employment of 33 man days for every acre of cultivation per year, even when it was compared with the most labour intensive alternative paddy, wheat in Gujarat.<sup>2</sup>

On the basis of this, it can be estimated that, about 13.16 crore mandays employment has been created by sugarcane cultivation in farm sector in Maharashtra during 1990-91 and an additional employment of of 3.62 crores mandays during the same season.

It is estimated that about 4 lakh cane growers are directly involved in sugarcane cultivation in Maharashtra. A sugar factory with a 2500 T.C.D. capacity requires about 4 lakh tonnes of cane for a season of 160 days. The area under sugarcane required is about 15,990 acres where the average yield of sugarcane is 28-30 tonnes per acre. In the area of lower cane yield, the area is more.

Sugar co-operatives in Maharashtra initiate in exploring and expanding irrigation potentialities. The factories, with their own finance and with the assistance of other financing agencies have organised and executed lift irrigation schemes and have brought 2 lakhs acres of land under irrigation in Maharashtra.

### 3.2 EMPLOYMENT IN ALLIED DEVELOPMENT ACTIVITIES :

Sugar factories have created an ample employment opportunity in subsidiary, supplementary and/or allied farm activities in rural area. The social and infrastructural facilities are also managed by sugar co-operatives in Maharashtra. Dairy, poultry, marketing and processing institutions have developed in the sugar factory area. Apart from this, sugar factories have provided gainfull seasonal employment to the rural masses. The co-operative sugar factories have sponsored and given an undertaking to the financial institutions for extension of assistance for the purchase of trucks and tractors by individuals, and in some cases have given the margin money to the deserving educated unemployed with a

view to enable them to raise capital for such employment. All factories in Maharashtra have begun to provide tyre (bullock) carts to transport workers, with a result of an increase in their earnings.

Warana, Akluj and Krishna (Rethare Bk.) co-operative sugar factories have organised dairy and poultry farms on a large scale basis, where the landless, agricultural labour and tenants are employed throughout the year whose number is 70-75 percent. The popularity of dairy activity is increasing in drought areas, as an effective means of economic upliftment.

The co-operative sugar factories in Maharashtra have been actively participating in tree plantation and agro-forestry in their areas. Bio-gas and gobar gas plants have been installed by member farmers through an assistance and subsidy from sugar co-operatives. The small and scattered land pieces of backward class farmers have been undertaken by sugar co-operatives for sugar cane cultivation which is again an incentive to develop their standard of living and employment in general.

In the field of education, the co-operative sugar factories have played an important role in expansion of educational facilities to the rural masses. This helped the general masses, both directly and indirectly in acquiring employment opportunities. Besides number of sugar factories in Maharashtra have undertaken construction of houses for landless, extending medical aids and participating family welfare activities as a social service and employment generation in rural area.

Thus, sugar factories in Maharashtra have been playing the role of lead industry and employment gaining industry for the development of various by-products industries like paper plants, distilleries, alcohol

based chemical industries and animal feed factories etc. Number of industries for manufacturing the items required for sugar factories like engineering and chemical items are also developing in the areas to sugar co-operatives. This has created a forward, backward and horizontal linkages in the process of industrial development. The multiplier effect of the development due to sugar factories in rural area may have to be taken into consideration while judging the place of co-operative sugar factories in the socio-economic development and employment generation. Sugar factories, therefore, have to be viewed not only as a sugar factories but as a lead industry for the development of rural area and as a growth centre including employment to ruralites.

### 3.3 EMPLOYMENT IN HARVESTING AND TRANSPORT :

The number of cane cutters, bullock carts and trucks/tractors to be tendered for work normally depends on the crushing capacity of a sugar factory, average per acre yield of sugarcane in an operational area, and the distance, from where the cane is to be transported etc. Generally, it is estimated that, a couple of workers (normally husband and wife) can harvest 1 to 1.5 tonne of sugarcane a day. And, a truck or tractor can load 9 to 10 tonnes of sugarcane at a time. A simple bullock cart can load 1 to 1.5 tonnes of sugarcane, and an improved tyre cart can load 2 to 2.5 tonnes of sugarcane. A group of 10 couples (or Koyatas)<sup>3</sup> has been allotted to one truck or tractor. Three workers are required for a simple bullock cart, and five workers for a tyre bullock cart to carry out the work like cane cutting, pruning, collecting green leaves of sugarcane and feeding the bullocks etc. The bullock carts are expected to transport the sugarcane within the range of 8 to 10 k.m. from the

site of sugar factory. Therefore, 50 to 60 per cent of sugarcane is transported by bullock carts, while remaining sugarcane is transported by trucks and tractors. Trucks or lorries are expected to carry out sugarcane from long distances, and tractors are used for medium distances.

On the basis of above calculations a factory management tenders the demand for vehicles (trucks and tractors), bullock carts and sugarcane harvesting gangs or groups for cane cutting and transporting the sugarcane. Cane cutters are not directly demanded by the sugar factories (See Appendix No. 3.A). However, before 1985-86, the sugar factories directly make demand and sign an agreement of contract of cane harvesting with cane cutters. Similar agreement was also being signed with vehicle owners. The factory management tenders the demand for vehicles and harvesting workers jointly, normally with the expectation that it will be able to use excess crushing capacity of 25 per cent of the authorised crushing capacity. So, sugar factories demand 10 to 15 per cent more harvesting workers, than the actually required, because normally the proportion of absenteeism rises during the early summer.

### 3.3.1 Estimation of Development Group<sup>4</sup>:

The Development Group, Pune in its survey report estimated the requirement of harvest workers and vehicles (See Table No. 3.1) for a sugar factory having 5000 T.C.D. with an assumption that the use of crushing capacity by 25 per cent more than licensed capacity.

TABLE 3.1  
REQUIREMENT OF HARVESTING AND  
TRANSPORT WORKERS AND VEHICLES

| Transport Mean             | Number | Cane cutting<br>Transporting<br>of sugarcane<br>M.T. | Required Labour<br>Force |
|----------------------------|--------|------------------------------------------------------|--------------------------|
| Simple Bullock carts       | 1000   | 1000                                                 | 3000                     |
| Tyre carts                 | 1000   | 2000                                                 | 5000                     |
| Trucks                     | 150    | 1500                                                 | 3000                     |
| Tractors                   | 150    | 1500                                                 | 3000                     |
| Total :                    |        | 6000                                                 | 14000                    |
| Mukadamas<br>(Supervisors) |        |                                                      | + 200                    |
| Grand Total :              |        |                                                      | 14200                    |

Source : Sakhar Udyogatil Asanghatit Mazoor,  
M.D. Sathe, Development Group, p. 9.

Table No. 3.1 illustrates that, a factory with a crushing capacity of 5000 T.C.D. requires 14000 seasonal harvesting workers.

The total crushing capacity of 97 sugar factories in Maharashtra was 1,85,950 T.C.D. in 1990-91. On the basis of above estimation, about 6 lakh harvesting and transport workers got seasonal employment opportunities in that year. This number is naturally increasing with an increase in the number of sugar factories.

### 3.3.2 Subramaniam Committee :

A Study Group on Droughts in Maharashtra headed by Dr. V. Subramaniam (October, 1984) asked the Director of Sugar to produce statistical information regarding the number of harvesting and transport workers involved in sugar factories including their places of origin and destination etc. Accordingly, it was observed that nearly 1,18,300 harvesting workers had migrated from 18 districts of Maharashtra in 1983-84. Nearly 84 per cent of migrant labourers were from six districts, viz. Beed, Ahmednagar, Jalgaon, Solapur, Aurangabad and Nashik. The percentage of migrants from Beed and Ahmednagar districts constitute 37 and 18 per cent respectively (See Table No. 3.2).

TAB TABLE 3.2

MIGRATION OF SUGARCANE HARVESTING  
AND TRANSPORT WORKERS

| Districts  | Number of | Percentage |
|------------|-----------|------------|
| Beed       | 43,424    | 37         |
| Ahmednagar | 20,973    | 18         |
| Jalgaon    | 9,192     | 8          |
| Solapur    | 9,175     | 8          |
| Aurangabad | 8,311     | 7          |
| Nasik      | 7,339     | 6          |
| Total :    | 98,414    | 84         |

Source : Quoted in Sakhar Udyogatil Asangatit  
Mazoor - Development Group, Pune, p.7

### 3.3.3 Survey by Labour Commissioner<sup>5</sup> :

The socio-economic survey department of Labour Commissioner, Bombay conducted a socio-economic survey of seasonal migrant harvesting and transport workers. A questionnaire was forwarded by the Department to all sugar factories in Maharashtra asking them to furnish detailed information about the migrant workers. Out of 89 sugar factories operating in 1985-86, only 5 private and 17 co-operative sugar factories have communicated information. According to their estimate, the number of workers was 2,12,135 in 1985-86 season. The details are illustrated in Table No. 3.3.

TABLE No. 3.3  
NUMBER OF HARVESTING AND TRANSPORT WORKERS  
IN SUGAR INDUSTRY (MAHARASHTRA)  
(ACCORDING THE SURVEY OF LABOUR COMMISSIONER)

| Items                              | Co-operative | Private | Total  |
|------------------------------------|--------------|---------|--------|
| 1. No. of units                    | 17           | 5       | 22     |
| 2. Appointed by sugar factory :    |              |         |        |
| a) Male                            | 215          | -       | 215    |
| b) Female                          | -            | -       | -      |
| c) Children                        | -            | -       | -      |
| d) Total                           | 215          | -       | 215    |
| 3. Appointed through contractors : |              |         |        |
| a) Male                            | 22,848       | 8,683   | 31,530 |
| b) Female                          | 13,350       | 6,683   | 20,033 |
| c) Children                        | 2,400        | 210     | 2,610  |
| d) Total                           | 28,597       | 15,576  | 54,173 |

TABLE No. 3.3 (Contd...)

| Items                                       | Co-operative | Private | Total  |
|---------------------------------------------|--------------|---------|--------|
| 4. Appointed through Labour Co-operatives : |              |         |        |
| a) Male                                     | 3,099        | -       | 3,099  |
| b) Female                                   | 2,285        | -       | 2,285  |
| c) Children                                 | -            | -       | -      |
| d) Total                                    | 5,384        | -       | 5,384  |
| 5. Appointed through other Institutions :   |              |         |        |
| a) Male                                     | 10,911       | 1,100   | 12,011 |
| b) Female                                   | 4,848        | 1,100   | 5,948  |
| c) Children                                 | -            | -       | -      |
| d) Total                                    | 15,759       | 2,200   | 17,959 |
| 6. Total workers :                          |              |         |        |
| a) Male                                     | 37,072       | 9,783   | 46,855 |
| b) Female                                   | 20,483       | 7,783   | 28,266 |
| c) Children                                 | 2,400        | 210     | 3,610  |
| d) Total                                    | 59,955       | 17,776  | 77,731 |

Source : Labour Commissioner, Bombay.

Table No. 3.3 reveals the fact that there were 77,731 (46,855 males + 28,266 females + 2,610 children) workers engaged in 22 sugar units. These workers have acquired the work through four agencies viz. (a) factory's direct appointments, (b) middlemen/contractors, (c) Labour co-operatives and (d) other institutions etc. For the recruitment of the work force, 15 sugar factories have communicated through middlemen, 2 factories through labour co-operatives and 5 factories by other media. Further it is stated that out of 15 contractors only one was licensee holder and out of 22 sugar factories only 8 factories have registered their names under Contract Labour Act, 1970 and Interstate Migrant Workmen Act, 1979.

#### 3.3.4 Author's Survey :

According to the study survey conducted by the author, a questionnaire was administered to 92 co-operative sugar factories in Maharashtra, out of which only 25 sugar factories have responded, furnishing all related information since 1970-71, or since the year they installed. Out of 25 sugar factories that responded, 15 factories belong to the Kolhapur and Sangli districts. The details are illustrated in Table No. 3.4 below. It may be concluded from the table No. 3.4 that the average per factory cane cutters and transport workers during 1979-80 and 1985-86 is less in comparison with other years. This is because of the strikes of the migrant workers during the period, demanding higher wages and/or wages according to the awards. The number of arrival of bullock carts mostly depend on rate of rainfall in drought areas. If the rainfall is sufficient, then the bullock cart owners will hesitate to migrate. In 1990-91 the average workers and average number of bullock carts migrated was high. This may be because of the increase in the area of cultivation of sugarcane in the operational area of sugar factories responded so far.

TABLE NO. 3.4  
NUMBER OF CANE CUTTERS, TRANSPORT WORKERS AND  
BULLOCK CARTS IN SELECTED 25 SUGAR FACTORIES

| Years   | Number of<br>Co-operative<br>sugar units<br>responded | Cane<br>cutters<br>(H.C.W.) | Average<br>workers | Number of<br>bullock<br>carts | Average<br>bullock<br>carts |
|---------|-------------------------------------------------------|-----------------------------|--------------------|-------------------------------|-----------------------------|
| 1970-71 | 4                                                     | 9,501                       | 2,375              | 2,655                         | 664                         |
| 1971-72 | 5                                                     | 17,878                      | 3,676              | 3,789                         | 758                         |
| 1972-73 | 5                                                     | 18,353                      | 3,671              | 4,121                         | 824                         |
| 1973-74 | 8                                                     | 25,072                      | 3,134              | 5,721                         | 715                         |
| 1974-75 | 8                                                     | 28,814                      | 3,602              | 6,974                         | 872                         |
| 1975-76 | 9                                                     | 30,027                      | 3,336              | 7,459                         | 829                         |
| 1976-77 | 9                                                     | 34,836                      | 3,871              | 8,125                         | 903                         |
| 1977-78 | 12                                                    | 43,590                      | 3,633              | 8,276                         | 690                         |
| 1978-79 | 12                                                    | 40,917                      | 3,410              | 8,014                         | 668                         |
| 1979-80 | 13                                                    | 36,011                      | 2,770              | 8,158                         | 628                         |
| 1980-81 | 16                                                    | 55,511                      | 3,469              | 10,188                        | 637                         |
| 1981-82 | 16                                                    | 57,792                      | 3,612              | 10,340                        | 646                         |
| 1982-83 | 16                                                    | 57,539                      | 3,596              | 10,046                        | 628                         |
| 1983-84 | 17                                                    | 62,577                      | 3,681              | 9,087                         | 535                         |
| 1984-85 | 19                                                    | 63,878                      | 3,362              | 9,772                         | 514                         |
| 1985-86 | 21                                                    | 61,756                      | 2,941              | 10,554                        | 503                         |
| 1986-87 | 24                                                    | 83,222                      | 3,468              | 11,473                        | 478                         |
| 1987-88 | 23                                                    | 78,596                      | 3,417              | 10,820                        | 470                         |
| 1988-89 | 25                                                    | 91,317                      | 3,653              | 14,069                        | 563                         |
| 1989-90 | 25                                                    | 90,751                      | 3,630              | 13,772                        | 551                         |
| 1990-91 | 22                                                    | 91,585                      | 4,163              | 16,233                        | 738                         |

Further it reveals the fact that, with an increase in the crushing capacities, the number of workers goes on increasing positively. On the basis of the above data we may estimated the total number of workers and bullock carts involved in sugarcane harvesting in Maharashtra. It shows an increasing trend during the period since 1970-71 (See Table No. 3.5). One bullock cart employs 2 to 3 workers.

Sometimes some factories are unable to harvest all registered/recorded sugarcane area during a season. This is because of (a) excess sugarcane area more than what is actually recorded, (b) irregularity of sugarcane crushing, (c) scarcity of harvesting workers and (d) because of natural odds e.g. rainfall etc.

Further it is observed that, the harvesting and transport workers have been appointed through direct contractors (See the next chapter for details) or vehicles contractors or trusts or labour co-operatives. Two sugar factories have reported that, the appointment of workers was being done through trusts, specially established so far. Now-a-days, particularly since 1985-86 strike of these workers, the industrial relation of the workers (harvesting and transport) is changing. The State Level Federation of sugar factories is guiding the member sugar factories in this regard. A few factories are following a new method of Federation while the rest are in a position to follow the old system. However, the sugar factories seek their suitability in this regard.

TABLE No. 3.5  
GROSS ESTIMATED NUMBER OF WORKERS  
AND BULLOCK CARTS IN MAHARASHTRA

| Years   | Number of<br>co-operative<br>sugar<br>factories | Cane cutters<br>and transport<br>workers<br>(E) | Bullock<br>carts<br>(E) |
|---------|-------------------------------------------------|-------------------------------------------------|-------------------------|
| 1980-81 | 67                                              | 2,32,423                                        | 42,679                  |
| 1981-82 | 67                                              | 2,42,004                                        | 43,282                  |
| 1982-83 | 67                                              | 2,40,932                                        | 42,076                  |
| 1983-84 | 67                                              | 2,46,627                                        | 35,845                  |
| 1984-85 | 77                                              | 2,58,879                                        | 39,578                  |
| 1985-86 | 80                                              | 2,35,280                                        | 40,240                  |
| 1986-87 | 84                                              | 2,91,312                                        | 40,162                  |
| 1987-88 | 85                                              | 2,90,445                                        | 39,950                  |
| 1988-89 | 90                                              | 3,28,770                                        | 50,670                  |
| 1989-90 | 92                                              | 3,33,960                                        | 50,692                  |
| 1990-91 | 93                                              | 3,87,159                                        | 68,634                  |

E = Estimated on the basis of Table No. 3.4.

In conclusion it can be stated that the employment potentials in farm sector is higher because of sugar factories. The seasonal harvesting and transport workers are not treated as employees of the sugar factories, even when Bombay Industrial Relation Act, 1946 is applicable to this category of workers. The migration of harvesting workers is a routine matter today. Nearly 5.5 to 6 lakhs seasonal (harvesting and transport) workers regularly migrate to the destinations of sugar factories.

APPENDIX-3.ASugar Factory XPublic Notification

(Published in Local Newspaper dated 28-3-1992)

This is an announcement made to all concerned contractor of sugarcane harvest workers and vehicle owners that, our factory is in need of truck vehicles with a minimum 30 harvest workers each to harvest and transport the sugarcane for the season 1991-92. They will be paid an attractive rates of commissions for their services. Those willing to work may meet our Agricultural Officer.

Managing Director,  
Sugar Factory 'X'

REFERENCES

1. Krishi Pundit - Farmer famous for his sugarcane cultivation.
2. Socio-Economic Impact of Sugar Co-operatives-V, Malyadri.
3. Cane cutting implement; a small wood-bill. Male workers use this implement for cane harvesting and female workers prune the sugarcane, Male and Female Workers = a Kyota.
4. Sakhar Udyogatil Asanghatit Mazoor (Marathi) - M.D. Sathe Development Group, Pune, February, 1989.
5. Labour Commissioner, Bombay, Socio-Economic Survey Deptt., M.K., 11, 1986.