

SHRI CHHATRAPATI SHAHU CO OPERATIVE

SUGAR FACTORY LTD, KANGALE

**CHAPTER - 1**

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### **1. INTRODUCTION :**

#### **1.1. The Meaning and Nature of Co-operatives :**

##### **Meaning of Co-operative:**

To co-operate or co-operation, in dictionary, means to work or act together toward the same end, and to form and operate co-operatives or societies, the members of which jointly own and run business and share profits among themselves. It is in the latter sense that the term co-operation has been mostly used in the context of economic systems; it denotes co-operative institutions, co-operative organizations, and co-operative movements. It is to be noted that co-operation here involves institutionalization and formal arrangement, or formation of formal business or commercial or financial agencies or enterprises.

The co-operatives in essence are mortalities formed by small economic units to undertake in common certain activities related to their functioning as economic unit so as to serve their own economic or material interests by obtaining advantages of modern technology and economics of large scale. The co-operatives, like corporatist associations, are essentially common-interest organizations which are established to serve “Categorical material interests”. It is for this reason that they are sometimes described as neo-corporatist organizations. Many people believe that co-operatives are not even mutuality’s in practice; they very

often function as fully independent ordinary economic establishments or entities. <sup>1</sup>

Co-operation is a movement of people. It is essentially an activity of the people for mutual help and collective progress. Co-operation is an activity, where a group of people having common interests come together and work for mutual benefit. The groups can organise themselves to cater to diverse interests, from housing societies, to industrial production to co-operative credit to massive co-operative banks.

Co-operation in the widest sense, meaning the union and co-ordination of the resources and endeavors of each individual in a joint effort to achieve the results sought after by all, is a form of human behavior observed in all the ages of humanity.

"No man is an island" it is said. True. Man has always been a social animal. He cannot thrive alone on himself. Thus this habit of mutual assistance has always been evident in him ever since he exists.

Co-operation is thus a group activity with a common purpose, in the present context - for economic progress. To this extent the modern day co-operative institution is similar to the traditional community institution of the primitive past where a group of people would till the land; sow seeds guard it and then divide the reaped benefits.

Co-operation helps you to organize your own group. You can select the people with whom you wish to interact (this is, however, difficult in case of housing societies, where societies may be formed after everybody has acquired their houses).

Your group is regulated by regulatory machinery and is a legal entity. You can elect your office bearers and they are not only answerable to you but are also governed by the laws of co-operation. Your group is protected by elaborate laws.

You can grow economically by helping and co-operating with each other. There are a host of facilities available to the co-operative societies. From equity participation of the government to a plethora of schemes especially for societies which are into production of goods or services.<sup>2</sup>

## **1.2. Evolution :**

The historical roots of modern formal co-operatives as economic agencies can be traced to Medieval European Guilds, mutual self-help associations typical of early industrialization in England, and active social experiments of the Utopian Socialists such as Fourier, Saint Simon, Proudhon, Louis Bank and Rebert Owen. Co-operative philosophy and experiments had emerged as a revolt against the ills, failures, exploitation and evils of capitalism. They originated as answer to hardship and adverse circumstances of the small group or section of people. Further, co-operatives appear to have first originated primarily in the fields of trading and commerce. Finally, although in some countries they were set up at the initiative of the people themselves, in many countries they were set up at the initiative of the people themselves, in many countries they came into being primarily at the initiative of the Governments.

Temporally, the formal co-operativization began in England in the first half of the nineteenth century, and it slowly spread to other countries over the next sixty-seventy years. The first consumer co-

operative store or shop, The Rochdale Pioneers, was set up at Toad Lane in London in 1844 by industrial workers with a view to fighting their exploitation by small as well as large traders. Subsequently, co-operativization started in the fields of credit in Germany in 1852 and in Italy in 1866, in the fields of credit in Japan in 1890, and the field of agriculture in China in 1919. In India, it began in the field of agriculture credit in 1904 at the initiative of Government, which gave it legal backing by passing the Co-operative Society Act, 1904 and Co-operative Society Act 2, 1912. While the former enabled the setting up of credit societies, the latter covered other areas of activities. By now, the co-operativization has become a widely used form of organization; it exists in almost all countries, under almost all systems, and in almost all fields of activities, albeit with varying degree of coverage, intensity and success. For example, it now covers the sector such as production, processing, distribution, marketing, agriculture, industry, service, banking, finance and credit and housing.

### **1.3. Principle of Co-operatives :**

In the 1960s the efforts of the International Co-operative Alliance [ICA] resulted in the emergence of the following as the announced principle of co-operation:

- Voluntary association,
- Democratic management and control,
- Self or mutual help,
- Open door policy and the sectarian, political religious neutrality,
- Equality of members,
- One member one vote,

- Fixed and limited return on investment,
- Distribution of surplus in dividends in proportion to member's business or capital in the society,
- Limited liability
- Co-operation among co-operatives.

It appears that “No profit, No loss” is not basic principle of co-operatives; when it is mentioned as an important principle, profit is referred to as surplus.<sup>3</sup>

#### **1.4. The history of sugar: The world story**

Humans have always enjoyed sweetness, but before the discovery of sugar this was limited to restricted sources such as honey from bees. However, somewhere between 5,000BC and 2,000BC Polynesian people discovered a grassy cane containing a sweet tasting juice which, over many thousands of years, eventually became what we know today as sugar :

- By 1,500BC - migration had brought sugar cane to India with the Sanskrit name ‘sakara’, which became ‘sugar’. At this time it was only known as a liquid and was prized as an expensive and rare medicine.
- By 100BC - trade had spread sugar cane to China and the Middle East.
- By 600AD - the Persians discovered how to boil sugar juice to crystallise it into sugar.
- By 1200 - the Crusaders had brought sugar back from the Middle East and the trading empires of the Venetians and others had spread sugar through the Mediterranean and southern Europe.

- By 1500 - the expansion of the Ottoman Empire had brought sugar to Spain and France and it was known throughout the Courts of Europe as a luxury food.
- By 1600 - Columbus introduced sugar cane to the West Indies and the Plantation system was established, with the arrival of slave labor from Africa.
- By 1750 - sugar production was booming and the Golden Age had arrived. European ships would take manufactured goods to sell in Africa and then take slaves to the West Indies, before returning with sugar for Europe. European wealth was built on this Triangular Trade and sugar was known as white gold.
- In 1800 - the French Revolution encouraged a slave revolt on the French island of St. Domingo which stopped French sugar production. Napoleon imposed his Continental System on Europe and looked for home grown sugar. The Napoleonic Wars between Britain and France included a trade war, with the British fighting for free trade and sugar imports from the West Indies, whilst Napoleon was developing the beet sugar industry in France.
- In 1815 - the Battle of Waterloo gave victory to the British and free trade was restored.
- By 1830 - most European countries had seen the benefit of promoting a home grown beet sugar industry and had imposed import tariffs and excise duties to protect their national industries.<sup>4</sup>

### **1.5. India's sugar industry :**

India has been known as the original home of sugar and sugarcane. Indian mythology supports the above fact as it contains legends showing the origin of sugarcane. India is the second largest

producer of sugarcane next to Brazil. In 2008 year, about 4 million hectares of land is under sugarcane with an average yield of 70 tons per hectare.

India is the largest single producer of sugar including traditional cane sugar sweeteners, khandsari and Gur equivalent to 26 million tons raw value followed by Brazil in the second place at 18.5 million tones. Even in respect of white crystal sugar, India has ranked No.1 position in 7 out of last 10 years.

Traditional sweeteners Gur and Khandsari are consumed mostly by the rural population in India. In the early 1930's nearly 2/3rd of sugarcane production was utilised for production of alternate sweeteners, Gur and Khandsari. With better standard of living and higher incomes, the sweetener demand has shifted to white sugar. Currently, about 1/3rd sugarcane production is utilised by the Gur and Khandsari sectors. Being in the small scale sector, these two sectors are completely free from controls and taxes which are applicable to the sugar sector.

The advent of modern sugar processing industry in India began in 1930 with grant of tariff protection to the Indian sugar industry. The number of sugar mills increased from 30 in the year 1930-31 to 135 in the year 1935-36 and the production during the same period increased from 1.20 lakh tons to 9.34 lakh tones under the dynamic leadership of the private sector.

The era of planning for industrial development began in 1950-51 and Government laid down targets of sugar production and consumption, licensed and installed capacity, sugarcane production during each of the Five Year Plan periods.<sup>5</sup>

Although sugarcane was being grown in India from time immemorial and sugar produced in lumps during fourth century, there



was no sugar industry in India. It is said that the first sugar plant in India was established by the French People at Aska in Orissa in 1824. Not much is known about this factory except that it was maintained by Late James Fredrick Vivian Minchin and that it stopped its operation around 1940. However, the first vacuum pan process sugar plant was set up at Saran in Marhowrah in Bihar in 1904. By 1931-32 there were 31 sugar factories in India all of which were in the private sector. The total production of sugar at that time was only about 1.5 lakh tones, whereas the consumption was about 12 lakh tons. To meet the domestic demand of sugar, India had to import sugar mainly from Java (Indonesia).

In 1930, the Tariff Board appointed by the Government of India decided to recommend grant of protection to Indian sugar industry by way of imposing custom duty of 7.25 per cent plus surcharge of 25 per cent on the sugar imported to India. Accordingly, the Government of India promulgated in 1932 the Indian Sugar Industry Protection Act for a period of 15 years, thereby enabling the Indian Sugar Industry to develop, stabilise and compete with imported sugar. As a result of this protection granted to the Indian sugar industry, there was a spurt in the establishment of sugar factories and by 1933-34, there were 111 sugar factories producing 4.6 lakh tons of sugar. However, as all the factories were established by private capitalists, the sugarcane farmers were exploited and the Government had to take various measures and pass laws relating to sugarcane price and its payment to protect sugarcane growers. Although, the Cooperative Societies Act was already enacted in 1904, the same year that the first vacuum pan sugar factory was established, it was aimed only to provide cheap credit to farmers and to save them from exploitation of money lenders. It was only in 1933-35 that the cooperative movement made an in-road into the sugar sector in

Andhra Pradesh. Although sugarcane was not one of the principal crops of Andhra Pradesh, the sugarcane growers badly affected by the violent fluctuations of the jaggery market, decided to utilise the underlying notion of self-help and self-reliance in the Cooperative Societies Act and organised cooperative societies and set-up cooperative sugar factories at Etikoppaka, Thummapala and Vuyyuru. However, because of initial teething problems, lack of organisational and managerial ability and scarcity of funds, Thummapala and Vuyyuru had to be sold off to private enterprises. Thummapala, was however, returned to the cooperative fold in 1959 in the name of Anakapalle Cooperative Agricultural and Industrial Society Ltd. During 1933-35, in Uttar Pradesh also a cooperative sugar factory was set up at Biswan which also had to be sold off to private enterprise. Etikoppaka Cooperative Sugar Factory in Andhra Pradesh survived because of good leadership, strong backing of the Central Cooperative Bank, gradual and cautious expansion, good relationship with members, payment of higher cane price and variety of other effective incentives.

The promulgation of Indian Sugar Industry Protection Act in 1932 had brought some expansion in the sugar industry but the development was mainly in the private sector and in the sub-tropical belt, comprising, the States of Uttar Pradesh, Bihar, Punjab and Haryana. By 1940-41 the number of sugar factories had increased to 148 and production was around 11 lakh tons. Even this 11 lakh tons of sugar production could not be depended upon, as there was fluctuation in the supply of sugarcane. After 1940-41 there was no expansion in the Indian sugar industry for some time and India continued to depend heavily upon imported sugar.

## **1.6. Emergence of Cooperative Sector :**

The growth of the Indian sugar industry in an organised manner had its beginning, when the Government of India passed the Industrial Policy Resolution on April 6, 1948, followed by the Industrial Act, 1956, wherein the principle of Cooperation was assigned an important role for the country's economic development, particularly for industries based on agricultural produce such as sugarcane. Under this policy, the Government of India started giving preference to licensing of new sugar factories in the cooperative sector. This policy was reemphasized in all the subsequent Industrial Policy Resolutions made by the Government till the delicensing of sugar industry in 1998. The preferential licensing policy was mainly responsible for the rapid development of the sugar industry in India.

As a result of the preferential policy adopted by the Government in the matter of licensing, there was a spurt in the establishment of sugar factories, especially in the cooperative sector of Maharashtra. The evolution of cooperative sugar industry in Maharashtra has been a trend setter for all the cooperatives in India. The establishment of sugar factories in areas which did not have any irrigation facilities and which were almost barren i.e. Pravara, Sanjivani and Sangamner represented a category of considerable significance, not only because of the success they achieved as agro industrial units concerned with production of an important commodity like sugar, but also in terms of the distribution of socio-economic benefits to all their members spread over the entire sugarcane belt in the country.

Another crucial development was the adoption of social land reforms policy by the Government of independent India. Ceiling was

imposed on land holding - both irrigated and dry lands. This made private sugar factories with captive large sugarcane plantations unworkable. Even the sugarcane estates developed by private sugar factories in Maharashtra State were taken over by the State Government and brought under the control and management of State Farming Corporation, a State Government undertaking. The private entrepreneurs lost interest in sugar industry.

On the other hand, the consumption of sugar was growing rapidly with the increase in population and with increased standard of living. The Government of India wanted self-sufficiency in sugar production as it could not afford to spare foreign exchange for import of agricultural commodities. The exchange was to be utilised for import of other goods mainly food grains. The first cooperative sugar factory to be set up in Maharashtra was the Pravara Cooperative Sugar Factory at Ahmednagar.<sup>6</sup>

### **1.7. Sugar cooperatives in Maharashtra :**

The cooperative sugar factory is engine for development but in the mid-1970s the harvests began to turn bitter for a variety of reasons that the pioneers had probably not foreseen.

In the cooperative scheme of things, the factory arranged credit, provided seeds and fertilizers, and helped harvest and transports the sugarcane. The farmer only had to water the crop. On its part a 1,500-tonne-a-day-capacity sugar factory had an average recovery of 10 per cent (10 kg of sugar from 100 kg of sugarcane), producing three lakh tons of sugar in a 180-day operation. Each factory crystallized the economy of at least a hundred villages with roads, electricity, education and

healthcare and accelerated rural development. Value addition from the factory was in the form of by-products such as industrial alcohol, rectified spirit and acetic acid from molasses and particle board, paper and electricity from bagasse.

Cooperative sugar factories mushroomed in the region with the support of the Central and State governments, and the area under sugarcane increased manyfold. In 2004, Maharashtra had 177 sugar factories and leads the country in sugar production. According to the statistics put out by the Maharashtra State Sugar Cooperative Federation, 1.6 million farmers in the State cultivate sugarcane on 0.7 million hectares, producing 60 million tons of sugarcane.

The sugar factories in the State have a combined turnover of about Rs.8, 000 crores and provide employment, directly or indirectly, to 1.5 crore people. Any crisis affecting the factories is bound to have a cascading effect on the rural economy. Many sugar experts opine that a way out would be to decontrol the sugar industry. They claim that decontrolling the industry will benefit the producer, processor and consumer just as the decontrol of cement in 2004 made it available freely and at a steady price.

"Reforms will shock the factories for a year or two, but they will eventually adjust to the situation. Our policy supports sick factories by giving them subsidy. Instead, we should give incentives in the form of infrastructure facilities, on merit," says B.B. Thombre, Managing Director of Natural and Allied Sugar Industries and a sugar expert.

Some experts believe that sugar factories must diversify to generate electricity by using bagasse as fuel and sell the extra power to

the State. Each factory can generate electricity at least three megawatts a day. They point out that in Karnataka and Tamil Nadu, the State governments purchase power from sugar factories. Sugarcane juice and molasses can also yield ethanol or ethyl alcohol, which is mixed with petrol. Sorghum can also be processed in the factories to produce ethanol.<sup>7</sup>

## **2. SHREE CHHATRAPATI SHAHU CO-OPERATIVE SUGAR FACTORY**

### **2.1. Shree Chhatrapati Shahu Co-Operative Sugar Factory's Location :**

Kagal is a town lying in Kolhapur district of the Indian state of Maharashtra. The Shahu sugar factory area is situated 15 km from Kolhapur city and the airport, which is connected by direct flight to Mumbai by Air Deccan. The nearest railway station is at Kolhapur 20 km away from the Shahu sugar factory area and which is well connected with almost all the cities of India. The Shahu sugar factory is located 1 km from the National Highway 4 (Mumbai-Bangalore) about 400 km from Mumbai and about 600 km from Bangalore. The Karnataka State boundary is just 5 km from this estate and Belgaum, a city just 70 km from the estate. The Shahu sugar factory is situated on latitude 16°35' north and 74°19' east.<sup>9</sup>

The location of Shahu Co-Operative Sugar Factory in the state of Maharashtra is shown in map.



## **2.2. Shree Chhatrapati Shahu Co-Operative Sugar Factory:**

### **History :**

The late ruler of Kolhapur State in western Maharashtra and visionary Chhatrapati Shahu Maharaj was a great social reformer who always strived for upliftment of the poor in the society. He spent all his life for this noble cause. Apart from his great contribution in the fields of education and other social reforms, he encouraged farmers to go for modern methods of agriculture. It is because of his vision that Kolhapur and the surrounding areas started enjoying benefits of irrigation schemes almost a century and a half ago.

Some three decades ago, Mr. Vikramsinh Ghatge, direct descendant of Chhatrapati Shahu Maharaj, saw a dream. He realized that a cooperative sugar factory in the area around Kagal could change life of the people, especially in view of the then upcoming Kalamawadi Irrigation Project. His idea was widely welcomed, and with enormous support from the local people, he succeeded in bringing his dream into reality. No wonder, the new Factory was aptly named after Chhatrapati Shahu Maharaj.

Kagal is in the Kolhapur district. Kagal was recognized as a 'Pensioners town.' On the north of Kagal, there is Kolhapur city. On the south of the Kagal there is Nipani city which is in Karnataka State, it is known as tobacco center, on east of Kagal is Hupari well-known market place of silver. However, in spite of this Kagal never developed by industrially, commercially and agriculturally.

Right from the early days, Kagal faces shortage of water. Even the two rivers Doodhganga and Vedganga that flows across Kagal



run dry during the month of December to January. The rest area of taluka named as Kapshi khore always has scarcity of water. The agriculture of Kagal purely depends on rainwater. Hence, to start green revolution and to see dream of sugar factory was unimaginable.

However, to bring this dream in reality there was a meeting held by native farmer on 30<sup>th</sup> Aug 1973. In this meeting, they decided to go ahead with sugar factory based on co-operative act. They named Vikramsinh Ghatge as a chief promoter of their project.

Vikramsinh Ghatge led the foundation of this project. Vikramsinh Ghatge took great effort in installing the factory and at last he succeeded to get the industrial permission letter of Central Government on 12<sup>th</sup> Jan. 1977. In the next month as per Government of Maharashtra issued sanction letter 'KPR/PRG[A]/7' on 21<sup>th</sup> Feb. 1977. Moreover, he got green signal by all sides.

The committee under the president Mr.A.M.Nimbalkar, who was appointed the director of Sugar by Government of Maharashtra, personally surveyed the plot and took final decision for construction of sugar factory on 15<sup>th</sup> July 1978. This factory contacted about the purchase of machinery on 30<sup>th</sup> June 1971 with M/S. Bakaulf, New India Engineering Work LTD [Today's Krupp Industrials]. The Land worshipping ceremony was held by hands of Mr. Yashvantraoji Mohite and under the president of central home state minister Mr.Sonusinghji Patil.

The Government had sanctioned the permission to crush 1250 metric tons and sanctioned the expenditure of Rs. 761 lakhs for the project. In that the member had to collect Rs.75 lakhs as share – capital of the factory .But actually Rs.33 lakhs share –capital was collected .That is why, some expenditure of works or sections had been reduced and only intention was given to crush the sugarcane. In this way due to suitable

planning and hard working the capable and powerful factory was set up successfully.

After setting up the factory under the tough situation at desert rocky land, the first crushing process was taken in the year 1980-81 the boiler firing ceremony of this first crushing season took place on 15<sup>th</sup> Oct 1980. First test of crushing season took place on 17<sup>th</sup> Nov 1980. This auspicious ceremony was held with the hands of Ex. finance, minister, Ramrao Adik and Home state minister Abhaysingh Raje Bhosale.

However, in the first season only 33000 metric tons sugarcane was available. That was reality. At that time, the work of 'Kalamawadi Dam' was going on, but it was very slow.

Everyday 1250 metric tons crushing was done from the 1980-81 to 1993-94. However, the factory had to face many problems like scarcity of sugarcane, water and natural calamities etc. During this period after February to continue the crushing, the factory had to bring water from lakes with tanker on hire basis. The factory stored such water in stone lakes near the factory.

The availability of sugarcane was the problem. The main reason was the slow work on Kalamawadi Dam on Doodhganga River. Due to water scarcity, there was not enough sugarcane for the factory. However, it was beneficial to crush minimum two lacks metric tons. However, to achieve this target, it was compelled to bring 2/3 sugarcane from outside the factory area. There were many difficulties in that mission. However, the government of Maharashtra put a ban since 1984. Sugarcane control order [zoning] was implemented. There were many problems in bringing sugarcane from outside the area; on the other hand, the factory had to face many problems like interstate ban, conflicts, increasing transport expenditure etc.

Thus, the factory had to face adverse natural situations. Having such calamities and problems, the factory directors and pioneers showed their imagination, future look, sensible capacity and power to face such problems and that why the factory continued its successful journey.<sup>10</sup>

During the period 1980-81 to 1993-94, the factory has maintained main factors like – capability, appropriate rate for sugarcane and belief of farmers. Due to planning, there was increase in sugarcane. The factory was successful in maintaining satisfactory average and increase in production and due to increase in production, the factory could give good rate for sugarcane. Considering all such points, the crushing capacity was expanded in the year 1994-95 to 25000 metric tons per day.

However, this crushing capacity was not enough. It was beneficial to crush maximum 4 to 4.50 lakhs metric tons for season. After completing the Kalamawadi Dam project, there was tremendous increase in production of sugarcane and more than 5 lakhs metric tons sugarcane was available for crushing. Because of the late crushing, there would be a loss in sugarcane weight. Thus would be a loss for the farmers and the factory. To avoid such loss, the factory decided to expand the crushing capacity and was increased to 3500 metric tons every day. Since 2000-2001 seasons, the expanded crushing process is going on.

### **2.3. Sugarcane Development Plan :**

Water is soul of sugarcane land. Since 1986-87, water came in the river from Kalamawadi Dam in Doodhganga River, and this was a boon to Kolhapur district and factory area. After that, the factory could succeed in implementing different sugarcane development plans. After

many researches for increasing total production of sugarcane, the new improved kind of healthy sugarcane seeds were produced. However, it was difficult for the farmers to bring and plant such improved kind of sugarcane. The factory produced such kind of sugarcane plants and it was supplied to farmers in concessional rates. On the other hand, the factory has provided the facility of basal dose fertilizer in concessional rate on credit base. The amount was recovered within one and half or two years. For this plan, the factory has been investing nearly Rs.2 crores every year.

Every year, sugarcane development plan has been implemented to increase factory-working area, increase sugarcane production per hector to reduce expenditure in production to increase ration of sugar average. Because of these there is as increase in hector sugarcane production, record breakly sugar ration and reduction in sugarcane crop production expenditure.<sup>11</sup>

Realizing the importance of procuring the best quality of cane and improving per acre yield, the Factory has taken necessary measures to develop and implement its cane development activities in the area of operation. The Factory has earmarked funds for this activity, through which cane growers get improved varieties of cane seeds, fertilizers, insecticides, pesticides, weedicides, farm implements and drip irrigation systems at subsidized rates.

Under this Programme, the Factory:

- Provides basal dose, fertilizers and manures to the farmers. This has resulted in significant improvement in the quality of cane and its yield per acre.
- Guides cane growers in adopting newer cultivation patterns.

- Provides cane growers financial support for farm leveling, mulching of trash in the field and also for laying of pipelines in their fields adopting newer cultivation patterns.
- Holds village wise cane development seminars for bringing about better interaction among the farmers and its agriculture department
- Provides subsidy for installation of biogas plants to its Members

The Factory has been taking active efforts to educate cane growers in improving their per acre yield. This exercise involves direct interaction with the farmers and provides them specific guidelines at various stages throughout life of the crop. Starting with a group of 84 cane growers in the crushing season 2006-07, the number of participating farmers in the coming season has grown up to 1000. As a part of this effort, last year the Factory identified a group of 284 cane growers. The results of this experiment have revealed that per acre yield level of cane has significantly improved up to 70 per cent. The Factory encourages cane growers to go for multi-ratoon patterns, as it reduces cultivation cost of the crop.<sup>12</sup>

#### **2.4. Sugarcane development fund :**

Under this plan new kind of sugarcane seeds, basal dose, green fertilizer, anti-disease medicines, sugarcane plant prize, sugarcane production instruments khodava pachat plan, khodava cutting, training, sugarcane crop discussion, khodva management etc. have been implemented. Therefore, there has been tremendous increase in for the sugarcane production in the area of operation.

## **2.5. Compost fertilizer plan :**

With the help of chemicals and spent wash process, the compost fertilizer has been produced of molasses, bagas, dung, other raw-spoiled materials etc. This fertilizer is very effective and beneficial for improvement of land and its quality. More than 15-20 thousand metric tons compost fertilizer has been produced and this fertilizer has been provided to the member of the factory based on 'No loss, No profit'. The factory provides this compost fertilizer on the lands of the farmers who has less than one acre land. Nearly 80% common farmers have been taking the benefit of this plan. Some lands are away from the factory area, for such lands, the factory has been providing this fertilizer bearing the transport expenditure above 140 metric tons. The factory has been giving support to the farmer members.<sup>13</sup>

## **2.6. Shahu varmi compost plan :**

The compost manure prepared by using earthworms is called vermi-compost. It is a mixture of much decomposed fine biomass particles of vermicastings (fecal matter released by earthworms after digesting the food.)It is soft, spongy, sweet smelling and dark brown in color. Vermicompost is very important component of organic farming. It is easy to prepare, has excellent properties and is harmless to plants. The Factory launched the Vermicompost Project in Feb.2004 on a pilot scale. It produces 50 M.T. vermicompost per month from decomposed pressmud, trash, cow dung and decomposed bagasse with the help of earthworms. The Factory intends that farmers in the area develop such plants on their own, and encourages them for doing so. Vermicompost manure is extremely useful in maintaining and enriching soil productivity

and fertility. As a part of the Cane Development Programme, the Factory supplies vermicompost to its members at subsidized prices.<sup>14</sup>

The factory has been supporting the farmers to maintain the quality of land using vermin compost. The factory has undertaken the vermin compost project to maintain the sugarcane crop to maintain the equality of physical, chemical and biological qualities. Every year 300 to 400 metric tons Shahu vermin compost fertilizer has been provided to the members on the basis of 'No loss, No profit'.

The major aim of this project is that the member of factory who has 3 or 4 animals can produce varmi compost of nearly 10 to 15 metric tons every year in minimum expenditure. The farmers can produce maximum sugarcane with maintain good quality of land in minimum expenditure.<sup>15</sup>

## **2.7. Seminar on sugarcane crop, sugarcane crop competition and training:**

The seminar have been organized for the guidance of farmers to make sugarcane farming beneficial maximum production in minimum expenditure, to increase in weight of sugarcane, and ration of sugarcane production to produce sugarcane with modern system. Even the competitions have been taken regarding sugarcane production. In such seminars, agriculture experts guide the farmers regarding sugarcane beans, fertilizers, reaping etc.

The sugarcane competitions have been organized on the behalf of the factory. Some prizes have been distributed among the farmers. Some employees of agriculture department are being sent to

research centers to take training to provide recent information about sugarcane crops.

## **2.8. Water supply scheme :**

The factory area has favorable condition to increase area under sugarcane, after the Kalamawadi dam project. However, the dam has canal system. It is not possible for single or two farmers to use water, economically. Therefore, the farmers have demanded the water supply scheme from such canal. The factory has established a special irrigation unit on cooperative base in factory area and 23 water supply schemes have been sponsored by the factory. Nearly, 25000 acres of land comes under these schemes. It is possible for the factory to get sure sugarcane. The expenditure of such project is nearly Rs.30 crore.

The factory management has taken nearly 19 scheme water permits on Doodhganga, Vedganga and Chikotra rivers from irrigation dept. The services like individual pipe line scheme, survey from river, well or canal to plan and make estimate are being provided with minimum charges more than 270 members have taken the benefit of such service and nearly 2800 acres land have come under irrigation.

Water supply scheme is expensive so, common farmers cannot raise 10 to 15% amount in time due to economic difficulty. Considering the difficulty of farmers, the factory has provided share development fund of Rs.100 lacks. It has been decided to use some amount for the expenditure as electric capital necessary. In the same manner, the factory had financed from the irrigation deposit fund to water supply cooperative societies since 1997-98.<sup>16</sup>

As an extension of the cane development programme, the Factory also actively supports various irrigation schemes in its area of



operation. A separate Irrigation Department of the Factory extends necessary technical, financial and logistic support to such schemes. Under this Scheme, the Factory encourages farmers to form a cooperative society and helps them to contribute their equity. The Factory contributes an equal amount towards its own equity in the Scheme. In the next stage, it helps the Society in getting finance from a bank and provides all technical support to implement the scheme. If there is any shortfall in funds or escalation in the project cost, the same is contributed by the Factory. After cane plantation, bank loan is repaid in fixed installments. The Factory takes back its equity only after the scheme is completely loan-free.

- Out of the 16 irrigation projects undertaken / sponsored by the Factory, 14 have already been commissioned.
- The total project cost of these schemes together is Rs. 22.95 crores.
- The Factory has so far contributed Rs. 2.52 crores towards these schemes as its own equity.
- These schemes have brought a total area of 4700 acres under irrigation, which includes almost 2700 acres of land under cane cultivation.<sup>17</sup>

## **2.9. Biogas scheme :**

The factory has participated in national program of biogas plantation establishment in factory area. The plants protection mission has been undertaken. In the manner the grants have been distributed every year among the members who have set up biogas plantation for the 'Village Clean Movement'.

## **2.10. Other Programmes :**

To take maximum production of sugarcane by reducing expenditure of production the factory has undertaken different new schemes in factory area like: sugarcane piolet scheme, double line plantation, long line plantation, khodva scheme, potato mix crop system, khodva cutting, one planting double khodva crop system, anti-weeds, medicos plan, filter, sugarcane selection scheme, pipe line scheme, anti crops spoiling spray, sugarcane reaping instruments etc. The scientific information has been provided through 'Shahu Warta' about different chain sugarcane crop system, scheme etc.<sup>18</sup>

## **2.11. Computer Department :**

In changing modern situation the computer have been used to maintain accuracy and rapidness in work. Knowing the importance of computer the factory has been using computer since 1992. The information regarding sugarcane crops are preserved in the computer. Since 1980, all the bills of sugarcane producers have been recorded in the computer. Since 1992-93, the data on payments have been saved in the computer.

- **Hardware :**

There were two servers, two tablets, two laptops, 26 thin clients and 54 desktop computer sets and 58 printers in the factory in 2007. In the factory, all computers have been joined by network.

- **Software:**

Self-software system has been prepared in the factory. For that MS.Net 2005, oracle 10G, Microsoft windows 2003 server, crystal

report etc. software used in it. For Marathi medium ISM 5.0 has been used working of all section in going on with software.

- **Shahu smart card scheme:**

In the factory personal records of every farmers is available on smart card. The following information is included in this smart card: members share, deposit, sugarcane records, sugarcane bills, sugar etc. All transactions of farmers in factory are on smart card.<sup>19</sup>

## **2.12. Area development :**

Shahu factory have been registered as per multistate co-operative society rule 2002, the special trust has been established for planning area development fund.<sup>20</sup> Along with sugar production, the factory is aware of social commitment. So it is trying its level best for the social, culture, education and sport development. The area of factory is rural and undeveloped. So considering the area of factory and common person as a center target. The factory has followed the government-guided principle to make economic and social programmes.<sup>21</sup>

The Factory Management has always felt its obligation to the Society and has taken several steps towards its development in the area of operation. In addition to its support and encouragement to academic and sports activities, the Factory has been taking efforts in various social activities. Under this program, the factory, runs gyms in few villages in the area of operation, for creating awareness about health / fitness among the youth, generously contributes towards renovation of several old temples in the area of operation, provides aid for the victims of natural hazards in the area of operation, provides aid in case of medical emergencies.<sup>22</sup>

### **2.13. Shahu Sugar Newspaper:**

The factory has started 'Shahu sugar newspaper' once in a month or two months. It gives very useful information about new improved technology, different programmes, meetings, seminars, new project, schemes, favorable and unfavorable effect on sugar industry on the state and country and about the working of the factory. The newspapers are distributed to the shareholder members, office staff, farmer and workers.

### **2.14. Justice section :**

There are complaints regarding daily working of factory, by sugarcane producers, shareholder members and shareholder nonmembers. Even, there are complaints about sugarcane crops rights and sugarcane bill rights and water hire charges. For the immediate decision, justice section has been started in the factory. Due to this justice section, members can avoid their trouble and they can save their time and money in going to court. The special justice department is playing an important role in life of all members.<sup>23</sup>

### **2.15. Welfare programmes for workers and employees :**

There are gentle and cordial relationships among the workers, employees and Chh. Shahu sugar employee society. The management of the factory has maintained and preserved the rights of workers and employee in good manner. For that, the factory is trying to provide the facilities time to time. The factory has given preference to the local people, backward classes, handicapped and women of weaker section in the service of the factory. There has a hospital on the site of the

factory. The hospital has provided excellent medical service in minimum rate to employees and their family members.

The factory has provided the montesary, primary and secondary education with all facility to children of the employee. Even the factory offers scholarship for the children for higher education. 'The shetkari sangh ltd. Kolhapur, branch Kagal' and 'Kagal Bazaar' provide necessity commodities on credit to the worker and employee. The Kagal cooperative bank ltd. branch Shahu factory Jaysinghrao Park, Kagal and Chh. Shahu cooperative factory workers, cooperative credit society ltd, Kagal provides loan.

Majority of employees are working in factory area are commuters. In this situation, they should maintain their ability to work and do their duty with great pleasure and spirit and for that factory has undertaken the employees guarantee and so, Shri Mahalaximi Bank, Kolhapur and Kagal cooperative Bank ltd. branch Shahu factory, Jaysingrao Park, Kagal have provided on loan less interest rate to purchase them the motorcycle.

The factory has provided the facilities like accident policy, group-gratuity, EDLI scheme and family medical claim policy plans to the workers. For the purpose of employee freethinking and development of their skill qualities, the factory has started three monthly house magazines called 'Shahu Parivar Warta' since, 2007-08. Through this media, all get information about different schemes, plans, activities of factory and new information, housing facility, uniform. Concession rated tea and refreshment through canteen are being provided to workers. The workers and employee who live in factory colony get free electricity up to certain unit. The workers who retire from their service are honored by gifts.

## **2.16. Training for officers and workers :**

The officers and workers should be efficient and psychologically satisfied and if there is a need of skilled at management for these entire things for all these subject, seminars are organized every year on subjects like ‘human resource development’ and ‘personality development’.

If the officer and workers are efficient and psychologically satisfied, they can give their commitment of their duty. For this, the experts in such fields are invited to discuss on such subjects in the factory. The section officers, supervisors and workers are sending to participate in meetings, seminars organized by Vasantdada Sugar Institute, Pune, Sugar sangh, Mumbai and other administrative societies and it will be beneficial for every worker and in the working of factory as it provides modern and new information. Today factory officers and worker have taken benefit of such seminars.<sup>24</sup>

## **2.17. The Sugar Plant :**



The Sugar Plant has a capacity to crush 3500 MT cane per day. Its salient features include use of Auto Feed Control System and

Auto Control of Pan Cycle, which help in achieving better efficiency. The state-of-the-art Sugar Silo System which facilitates efficient cooling of sugar is augmented with auto weighing and auto stitching of sugar bags.

**Plant Details :**

- ❖ Initial capacity 1250 TCD (1980-81)
- ❖ supplied by M/s Buckau Wolf India Ltd., Pune.
- ❖ First expansion from 1250 to 2500 TCD (1994-1995)
- ❖ Supplied by M/s Buckau Wolf India Ltd., Pune.
- ❖ Second Expansion from 2500 to 3500 TCD (1999-2000)
- ❖ Supplied by M/s. S.S.Engineers, Pune.
- ❖ Cane crushing per annum
- ❖ 7.00 to 8.00 lakh M.T.
- ❖ Sugar production per annum
- ❖ 95,000 to 1, 00,000 M.T.
- ❖ Average sugar recovery
- ❖ 13 to 13.50%
- ❖ Peak sugar recovery
- ❖ 14 to 14.50%<sup>25</sup>

**2.18. Business :**

Manufacturing of sugar from cane is the main business activity of the Factory. The 3500 TCD Sugar Plant runs for almost 180 days in a year from November to April. It crushes about 7.0 to 8.0 lakh MT of cane to produce an average of 90,000 to 100,000 MT of sugar every year. Realizing the importance of by-products, the factory has diversified its business in other areas. It has a 45 KLPD capacity Distillery Plant having an average spirit recovery of 275 liters per MT of

molasses. The 12.5 MW bagasse based Cogeneration Plant of the Factory was commissioned in March 2008. After in-house consumption, surplus power is exported to the State Electricity Grid. The Factory is one of the first ones in the cooperative sector in Maharashtra to have a dedicated Marketing Department. Activities performed by the Marketing Department include

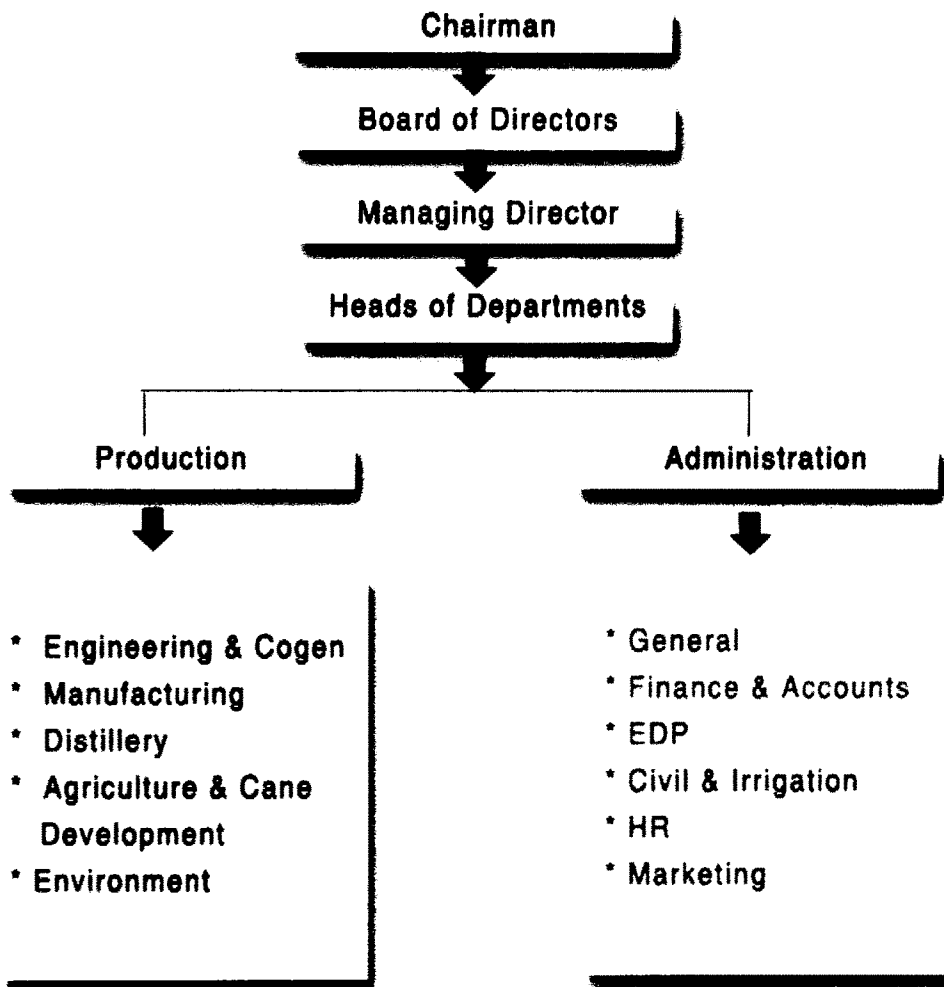
- Development of domestic customers
- Export /Import of Sugar
- Trading of sugar on NCDEX <sup>26</sup>

#### **2.19. Overview of Organization:**

- Multi-state Co-operative Society (since May 2006)
- Total number of cane producing Members : 14000 plus
- Total number of cane suppliers: 20,000 plus
- Number of villages in the Area of Operation : 91 (82 from Maharashtra State and 9 from Karnataka State)



## 2.20. Organizational : Structure



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## 2.21. Chairman's Profile :

### *Founder and Chairman :*

Today the Mill has established itself as a leading cooperative sugar mill, not only in Maharashtra, but in the entire country, under Mr. Ghatges's able guidance and vision. It is today known for its excellent

technical and financial efficiency and for paying the highest price to the cane growing farmers.

Mr. Vikramsinh Ghatge's contribution is not limited to the activities of the Mill alone. He has contributed significantly to a number of social causes. A lover of wrestling and other sports, Mr. Ghatge has generously supported young sportsmen.

He is associated with a number of organizations in cooperative sector and is also actively involved in those engaged in social work, sports promotion and cultural activities.<sup>28</sup>

## **2.22. Awards and recognition :**

The factory has won many awards for its excellence in production. The factory won the most prestigious awards Best Co-operative sugar factory in India three times by National Federation, New Delhi. It is the only sugar factory in India who got three time best sugar factory awards. The Mill has earned its reputation of being one of the best cooperative sugar mills, not only in Maharashtra but also in the country. So far it has won a total number of 39 awards at both and State and National levels in various categories such as Best Technical Efficiency, Best Financial Management, and Best Recovery etc.

### **Shree Chhatrapati Shahu Co-Operative Sugar Factory is:**

- \* ISO 9001-2000 Certified
- \* ISI Certified
- \* Certified as 2-StarExport House

***General Category (9 Nos.)***

1. Best Distillery in Maharashtra, 2007-2008 by Vasantdada Sugar Institute, Pune.
2. Best Cooperative Sugar Factory in High Recovery Area, 2007-2008 by National Federation of Cooperation Sugar Factories, New Delhi.
3. Overall Best Cooperative Sugar Factory in India, 2006-2007 by National Federation of Cooperation Sugar Factories, New Delhi.
4. Best Innovative Cooperative Sugar Factory by Vasantdada Sugar Institute, Pune, Season 2005-2006.
5. Best Cooperative Sugar Factory High Recovery Area from National Federation of Cooperation Sugar Factories, New Delhi. Season 2004-05.
6. Trophy for Overall Best Sugar Factory in Maharashtra, 2003-04 from Vasantdada Sugar Institute, Pune.
7. Overall Best Cooperative Sugar Factory Award (All India Basis) National Federation of Cooperation Sugar Factories, New Delhi. Season 2002-03.
8. First Prize for Overall Best Sugar Factory (Late. Vsantdada Patil Revoling Trophy) from Vasantdada Sugar Institute, Pune. Season 1998-99.
9. Award from Vasantrao Naik Agriculture and Rural Development Foundation, Mumbai 1992

***Finance Category (5 Nos.)***

1. MSC Bank Ltd. Mumbai certificate to the factory appreciating its efforts Financial Year 2007-08.
2. Best Financial Management Award in south zone Vasantdada Sugar Institute, Pune. Season 2005-2006.
3. First Prize for Financial Management Season 2005-06 from National Federation of Cooperation Sugar Factories, New Delhi.
4. First Prize for Financial Management in high Recovery Area Season 2003-04 from National Federation of Cooperation Sugar Factories, New Delhi.
5. Best Financial Management Award in south zone from Vasantdada Sugar Institute, Pune. Season 2000-01. <sup>29</sup>

***Agriculture Category (3 Nos.)***

1. Best Cane Development Award in South Zone Season 2003-04 from Vasantdada Sugar Institute, Pune.
2. First Prize for Cane Development from National Federation of Cooperation Sugar Factories, New Delhi. Season 2002-03.
3. First prize in High Recovery Zone by National Federation of Cooperation Sugar Factories, New Delhi. Season 1996-97.

***Technical Category (22 Nos.)***

1. Third Prize for the Best Technical Efficiency Vasantdada Sugar Institute, Pune. Season 2006-2007.

2. Second Technical Efficiency Award by VASANTDADA SUGAR INSTITUTE, PUNE. Season 2004-2005.
3. First prize for Best Technical Efficiency in south Zone By Vasantdada Sugar Institute, Pune. Season 2003-04.
4. Third prize for Best Technical Efficiency by Vasantdada Sugar Institute, Pune. Season 2000-2001.
5. First prize for Best Technical Efficiency in South Zone by Vasantdada Sugar Institute, Pune. Season 1999 – 2000.
6. First prize for Best Technical Efficiency in South Zone by Maharashtra Rajya Sahakari Sakhar Karkhana Sangh Ltd., Mumbai, season 1999-2000.
7. First prize in Technical Efficiency in South Maharashtra Rajya Sahakari Sakhar Karkhana Sangh Ltd., Maharashtra by Mumbai. Season 1998-99.
8. First prize in Best Technical by Vasantdada Sugar Institute, Pune. Season 1998-99.
9. Third prize for Best Technical Efficiency by Vasantdada Sugar Institute, Pune. Season 1997-98.
10. Third prize in Technical Efficiency Maharashtra Rajya Sahakari Sakhar Karkhana Sangh Ltd., Mumbai. Season 1997-98.
11. Third prize for High Recovery Zone by Vasantdada Sugar Institute, Pune. Season 1997-98.
12. Second prize in Technical Efficiency by Maharashtra Rajya Sahakari Sakhar Karkhana Sangh Ltd., Mumbai. Season 1996-97.

13. Second prize in Best Technical Efficiency by Vasantdada Sugar Institute, Pune. Season 1996-97.
14. First prize for High Recovery Zone by National Federation of Cooperation Sugar Factories, New Delhi. Season 1996-97.
15. Third prize for Technical Efficiency by Vasantdada Sugar Institute, Pune. Season 1994-95.
16. First prize in Best Technical Performance Maharashtra Rajya Sahakari Sakhar Karkhana Sangh Ltd., Mumbai. Season 1991-92.
17. First prize in best technical performance by Vasantdada Sugar Institute, Pune. Season 1991-92.
18. First prize in Technical Efficiency by Maharashtra Rajya Sahakari Sakhar Karkhana Sangh Ltd., Mumbai. Season 1990-91.
19. First prize in Technical Efficiency by Vasantdada Sugar Institute, Pune. Season 1990-91.
20. First prize for Technical Efficiency by National Federation of Cooperation Sugar Factories, New Delhi. Season 1990-91.
21. Second prize for Technical Efficiency by National Federation of Cooperation Sugar Factories, New Delhi. Season 1989 – 90.
22. Commendation Certificate for Technical Efficiency, by National Federation of Cooperation Sugar Factories, New Delhi. Season 1986-88. <sup>30</sup>

## References :

1. Bhole L.M. - The Role of Co-operative in Socio-Economic Development in India-A Review, IASSI Quarterly Vol.23 Jan-March 2005. No.3. pp-108-109.
2. <http://www.mah.nic.in/sahakaar.htm>.
3. Bhole L.M. – Op. Cit.1 pp-109-110.
4. <http://www.mah.nic.in/sahakaar.htm>
5. ‘Wissington Sugar Factory’ a guide to the history of sugar and the story of a Fenland factory that grew to be world class. From [www.freelancecopywriting.biz/userimages/WissingtonGuide.pdf](http://www.freelancecopywriting.biz/userimages/WissingtonGuide.pdf)
6. [http://resources.alibaba.com/industry-insights/India\\_s\\_sugar\\_industry.html](http://resources.alibaba.com/industry-insights/India_s_sugar_industry.html)
7. <http://www.coopsugar.org/history.php>
8. Frontline-Volume 20 - Issue 26, December 20, 2003 - January 02, 2004 India's National Magazine from the publishers of The Hindu.
9. <http://www.shahusugar.com/pages/loction.html>
10. Shree Chhatrapati Shahu Co-Op. Sugar Factory Ltd., Kagal, ‘Smarnika 2002’ magazine pp No.11 to 16.
11. Shree Chhatrapati Shahu Co-Op. Sugar Factory Ltd., Kagal, ‘Smarnika’ magazine 2002 pp No.20.
12. <http://www.shahusugar.com/pages/cane-development.html>.
13. Shree Chhatrapati Shahu Co-Op. Sugar Factory Ltd., Kagal, ‘Smarnika 2002’ magazine pp No.20.21.

14. <http://www.shahusugar.com/pages/vermi-compost.html>
15. Shree Chhatrapati Shahu Co-Op. Sugar Factory Ltd., Kagal, Annual Report 2007-08. p.9.
16. Shree Chhatrapati Shahu Co-Op. Sugar Factory Ltd., Kagal, 'Smarnika 2002' magazine pp.22 to 14.
17. <http://www.shahusugar.com/pages/irrigation-schemes.html>
18. Shree Chhatrapati Shahu Co-Op. Sugar Factory Ltd., Kagal, Annual Report 2007-08. p.11.
19. Shree Chhatrapati Shahu Co-Op. Sugar Factory Ltd., Kagal, Annual Report 2006-07. pp.8 to 9.
20. Shree Chhatrapati Shahu Co-Op. Sugar Factory Ltd., Kagal, Annual Report 2007-08. p.12.
21. Shree Chhatrapati Shahu Co-Op. Sugar Factory Ltd., Kagal, 'Smarnika 2002' magazine p.24.
22. <http://www.shahusugar.com/pages/area-development.html>
23. Shree Chhatrapati Shahu Co-Op. Sugar Factory Ltd., Kagal, 'Smarnika 2002' magazine p.33.
24. Shree Chhatrapati Shahu Co-Op. Sugar Factory Ltd., Kagal, Annual Report 2007-08. pp.13-14.
25. <http://www.shahusugar.com/pages/sugar-plant.html>.
26. <http://www.shahusugar.com/pages/business.html>
27. <http://www.shahusugar.com/pages/overview.html>
28. <http://www.shahusugar.com/pages/chairmans-profile.html>



29. <http://www.shahusugar.com/pages/awards1.html>

30. <http://www.shahusugar.com/pages/awards2.html>