

# **NATURAL SUGAR – A SUCCESS STORY**

## **1. Necessity of Natural Sugar In this area:-**

Natural Sugar & Allied Industries Ltd., is located in a area of abundant raw material i.e. best quality sugar cane. Its operational area is within 25 kms. having 145 villages only. Due to excess cane (high yield sector) there was less demand and lower prices to this cane. Thus, no demand, no price, frustrated the farmers. All these conditions necessitated the strong will for establishment of Natural Sugar. It is located at the 100% perennial area of Manjara Dam, which is 15 kms below the dam location. The area within 30 kms is irrigated by right and left canals of Manjara Dam, right and left bank river water and Raighavhan medium project. Hence, the availability of best quality cane is assured even in the draught condition also.

Natural Sugar is a public limited Company registered under Indian Company Act. 1956. It is the **first sugar plant** completed in February 2000 in a shortest span of 9 months and at the lowest cost of Rs.20.00 crores with the strong financial support from farmer members by contributing 11.00 crores as share capital and Rs.9.00 crores as a term loan from The Vaidvanath Urban Co-Operative Bank Ltd., Parali Vaidyanath with other urban banks in consortium.

## **2. Within a span of 10 years, Natural Sugar has expanded its activities vertically and horizontally. By year 2010 the Natural Sugar has developed strength in various activities as follows.**

### **a) Sugar Plant :-**

We have installed 5000 TCD new sugar plant in additional to existing 3500 TCD plant. Milling Plant is 36"x78" with most modern technologies absorption, adoption and innovation such as planetary gears and VFD etc. Hence the total milling crushing capacity is 8500 TCD with which, we can crush minimum 12.50 lakhs tons of cane with an average sugar recovery of 12.00%. The annual average sugar production is 14.00 lakhs quintals, valuing to Rs. 350.00 crores of sales turnover.

### **b) Co-Generation Plant :-**

With additional 13 MW power generation, the total power generation capacity is 22 MW out of which 8 MW is used for sugar production, 10 MW for Ferro Alloys (Steel) Plant and balance 3 MW for Sugar, Refinery, Distillery, Dairy and other activities. The total 22 MW power is consumed in house for various by-products and ancillary activities. The annual average production is 1.00 lakh MW (10.00 crores units) valuing to Rs. 50.00 crores of sales turnover.

### **c) Ferro Alloys (Steel) Plant :-**

We have installed one sub merged arc furnaces having capacity of 6 MVA The 5 MW power is consumed by the furnaces for manufacturing of Ferro Manganese and Silico Manganese from Manganese ore. Ferro Manganese and Silico Manganese are a basic raw material for manufacturing of any sort of steel. The daily production capacity of Ferro Alloys (Steel) Plant is 25 to 30 MT per day. The yearly production of Ferro Alloys plant is 15,000 MT.

### **d) Distillery Project :-**

We have installed Distillery Plant of most modern technology multi pressure-vacuum distillation to process the molasses and produce R.S. 45,000 KL and Ethanol 45,000 KL per year valuing to Rs. 270 .00 crores of sales turnover.

e) **Bio-Gas base power plant** :-

The Distillery effluent namely spent wash is treated in Bio-Digester having capacity of 20,000 M<sup>3</sup> per day of Bio-Gas generation. The said gas is further purified with H<sub>2</sub>S separation plant and pure Methane is used for gas and used for steam generation and Bio-CND (CBG) production of 5 MT. Hence the 100% recycle of Hazards waste of Distillery effluent i.e. spent wash is treated and “0” pollution concept is 100% achieved with value addition and a strong profit centre from Hazards waste.

f) **Sugar Refinery** :-

We have installed most modern sugar refinery plant of 250 Tons capacity per day for manufacturing Refine Sugar of 45 ICUMSA, which will be sulphur free and 100% pure sugar as per the International Standard.

g) **Bio-Compost Plant** :-

The press-mud, bio product of sugar plant is treated with outflow of Bio-Digester i.e. treated spent wash with additions of micro nutrients and bio culture to enrich the press-mud and converted into high quality bio-compost at the Bio-Compost Plant. The average annual production is 25,000 MTs valuing to Rs. 1.25 crores of its sales turnover.

**Natural Phosphate** – We have installed and commissioned plant to manufacture Natural phosphate /Bhuratna Phospo compost fertilizer from bio-compost with addition of nutrients and rock phosphate in 50 kg P.P. Bags, distributing to agriculturists with cheaper rate.

h) **Dairy - Milk Processing Project** :-

To have a ancillary activities of milk production to the farmers, we have recently installed most modern and fully automatic Dairy Plant of 75,000 ltr capacity per day. The annual production of milk and milk products will be of 2.70 crores litres valuing to Rs.135.00 crores of sales turnover.

Presently we are marketing Natural “Amrut” and “Healthy” fresh, pure rich milk with quality Ghee.

i) **Software Division:-**

We have started full-fledged software division mainly for development of various types of modules for sugar and bio-products industry. The software developed by our division is well proved and accepted by many sugar factories in Maharashtra. We are marketing Natural Sugar “ERP” to other Sugar Industries also and made it commercially viable project.

i) **Natural Sugar Unit No.2** :-

We have purchased the Sudhakarrao Naik Sahakari Sakhar Karkhana Ltd., Gunj, Sawana, Tq. Mahagaon, Dist. Yewatmal in open tender sale from The Maharashtra State Co-operative Bank Ltd., Mumbai under SARFAESI Act.2002 on 22/03/2016 sale certificate has issued in our favour of our Company by Authorized Officer and Joint Manager of said Bank.

3. With above activities in various fields following are our special achievements in sugar Industry for projection of environment and natural resources.

A) **Environmental protection:**

To control water pollution of sugar plant, we have installed diffused aeration and bio-digester of advanced system technology and well supported to achieve the required the norms of the MPC Board. The treated water is used exclusively for agriculture purpose. MDH fly ash arrestor for boiler chimney, which has 100% efficiency for arresting the fly ash, prevents the air pollution. The collected ash is used to increase the porosity of Press-mud instead of Bagasse, which is resulted in saving of bagasse and value added waste as compost to the farmers.

**a) Water Conservation: -**

As the Maharashtra state is passing through a vicious cycle of water scarcity, Natural Sugar has decided to use the water available in sugar cane itself and succeeded since last 5 years to run the sugar plant with water available in sugar cane without availing water from outside sources by recycling and prohibiting miss-use of water with well planned close circuit. This reduces the effluent generation big way.

**b) ISO-9001-2008:-**

Our's is a ISO 9001-2008 Company by the Quality Assurance Services of Australia. The ISO 9001 -2008 norms are strictly observed and implemented in day-to-day working of the Company. The implementation of **ISO 9001-2008** has drastically improved the performance, the quality and efficiency of the Company.

**B) Sugar Cane Development Scheme :-**

To increase the yield of sugar cane par acre, initiated a scheme of "Natural Lakhapati Yojana" for Cane development in the region, drip, sub surface, sprinklers, irrigation equipments with farm equipments etc., of optimum use of water, use of bio-compost and Natural phosphate to reduce in organic fertilizers, cane wide spacing plantation schemes, soil analysis schemes, providing fresh high sugar recovery quality cane seeds to follow advance cane development activities to get maximum earnings. Introduce mechanical cane harvesters to over come harvesting labours problems to certain extent. 50% trash is baled and burnt in boiler to save Bagasse and 50% is used in the fields for mulching.

**4. Socio Economic Development of Area:-**

With set-up of Natural Sugar, the Socio Economic Development of Kallam Taluka, which is industrially backward region of Marathwada, has started with galloping speed.

**a. Approach Roads :-**

We have undertaken new approach roads and all villages are connected with main state high way of Kallam to Latur.

**b. Telephone Exchange :-**

Telephone exchange of 500 capacities is already setup at the factory site with total connectivity with all villages in area by department of telephone, Government of India.

**c. Sakhar Shala (Seasonal School) :**

Neglected aspects of poor labour's children's education is considered on priority and have started Sakhar Shala for them from December 2001.

**d. Medical Aid :**

Free medical aid is provided to all the workers with their family members from dispensary at the factory site.

- e. **Housing with Free Light and Water** :  
We have provided 150 well constructed houses to the officers & employees with pure drinking water, electricity at free of cost.
- f. **Natural Palya Pension Yojana** :  
The unique scheme of giving a pension to parents of employee is voluntarily implemented. With this scheme, we are deducting 10% of gross salary of all employees under this scheme and paying directly to their parents monthly, which helps old aged parents to have their own money for survival.
- g. **Shri Sai Gramin Bigar Sheti Sahakari Patsansta** :-  
A financial facility with 35.00 crores of deposits and 15.00 crores of loans to the farmers and employees, is extended by Patsansta i. e credit co-operative society established in 2003.
- h. **Natural Bazar Consumer Stores Ltd,**  
To provide best quality of daily needs from pin to plano, we have started Departmental Stores within the Company's premises so as to facilitate the Employees, Farmers & residents within the vicinity.
- i. **Natural English School & Sai College of Computer Education.**  
To provide best quality education we have started English Medium School from LKG to 4 Class at present & having permission for expansion of classes till 10<sup>th</sup> standard.  
  
To provide Computer & Technical education we have started Sai College of Computer Education for BCA & BCS. In the 1<sup>st</sup> year of start itself one of the Student has topped the university Exam in BCA & she is maintaining the same tract record by topping in Second year exam also.
- j. **Implementing 4 D's**  
D-Discipline, D-Devotion, D-Dedication and D-Determination in Natural Pariwar.
- k. **N SAI Rural Hospital.**  
As a corporate social responsibility we have proposed to construct a rural hospital to facilitated medical services at cheapest rate at the nearest location . The said rural hospital is being constructed by shri sai sarvangin vikas pratishthan and will be operated , " No Profit No Loss " basis for members as well as general public of the surrounding area.
- l. **"Natural Jalsandharan Yojana"**.  
To overcome the cyclic rotation of draught, we have decided to implement the water and soil conservation schemes from our own resources. Accordingly we have provided Rs.2.5 crores out of our profit for the said scheme and every year we are completing at least 10 to 15 villages under the scheme and have a programme of complete eradication of draught from of our area of 50 villages within next 5 years.

The main schemes are **Contour** percolations **Canal** at foot level of Healy areas and **Nala** deepening and widening. With this both schemes excess

rain water flowing out of farm will be collected, stored and will be percolated underground and will be stored underground, which enrich heavily the underground water level permanently and utilized for drinking as well as irrigation purposes by the villagers. This is the only ultimate source to eradicate permanently the draught from Maharashtra. This is the decentralized, most, cost effective and high result oriented scheme to be adopted and implemented by Government of Maharashtra as well as Government of India on top priority as a permanent measure to overcome the draught.