



DWARIKESH SUGAR INDUSTRIES LIMITED

ELEVENTH ANNUAL REPORT | 2003 - 2004

**ANNUAL REPORT 2003 - 2004**

**DIRECTORS**

S K Neotia

M G Diwan

Vivek Saraogi

S S Vaidya

K P Medhekar

L N Heda

Yashpal Gupta

IDBI Nominee Director (till 14th June, 2004)

Milind J. Vichare

IDBI Nominee Director (from 15th June, 2004)

G R Morarka

Chairman & Managing Director.

**REGISTERED OFFICE & FACTORY**

Dwarikesh Nagar - 246 762

District: Bijnor

Uttar Pradesh

**ASST. VICE PRESIDENT [TAXATION] & COMPANY SECRETARY**

B J Maheshwari

**CORPORATE OFFICE**

511, Maker Chambers – V

221, Nariman Point

Mumbai - 400 021

**CHIEF GENERAL MANAGER**

Kulbansh Singh

**GENERAL MANAGER-CANE**

Nagendra Singh Shekhawat

**GENERAL MANAGER-COMMERCIAL**

K P Gadia

**GENERAL MANAGER-CORPORATE AFFAIRS**

J R Banka

**SOLICITORS**

Mulla & Mulla & Craigie Blunt & Caroe

Kanga & Co.

**AUDITORS**

Sharp & Tannan

Chartered Accountants

**BANKERS**

Punjab National Bank

**DWARIKESH SUGAR INDUSTRIES LIMITED****NOTICE**

NOTICE is hereby given that Eleventh Annual General Meeting of the Company will be held on Monday, 1st November, 2004, at 10.00 a.m. at the Registered Office of the company at Dwarikesh Nagar - 246 762, Dist. Bijnor, Uttar Pradesh, to transact the following business:

**ORDINARY BUSINESS:**

1. To receive, consider and adopt audited accounts for the year ended 30th September, 2004, Directors' Report and the Auditors' Report thereon.
2. To appoint auditors and fix their remuneration.
3. To declare dividend on preference shares.
4. To declare dividend on equity shares.
5. To appoint a Director in place of Mr. M G Diwan, who retires by rotation and being eligible offers himself for re-appointment.
6. To appoint a Director in place of Mr. K P Medhekar, who retires by rotation and being eligible offers himself for re-appointment.
7. To appoint a Director in place of Mr. S K Neotia, who retires by rotation and being eligible offers himself for re-appointment.

**NOTES:**

1. A member entitled to attend and vote is entitled to appoint a proxy to attend and vote instead of himself and the proxy need not be a member of the Company.
2. Proxies, in order to be effective, should be duly completed, stamped and signed and must be deposited at the Registered Office of the Company not less than 48 hours before the commencement of the meeting.
3. Monday, 25th October 2004 is fixed as record date for determining the eligible shareholders for payment of dividend on 12% preference shares and equity shares.
4. Dividend on preference shares & equity shares, when declared, will be paid to those shareholders whose names shall appear on the Register of Members as on Monday, 25th October, 2004.
5. Members are requested to notify any change in their address immediately to the company.
6. Members/proxies are requested to bring their copy of Annual Report, while attending the Annual General Meeting.
7. Unpaid dividend for following years are due as per details below for transfer to Central Government.

Financial Year	Unpaid Dividend amount (Rs.) as on 30/09/2004	Due date of Transfer to Central Government
1996-97	9200.00	26/04/2005
1997-98	9000.00	11/05/2006
1998-99	13650.00	09/05/2007
1999-00	13500.00	18/07/2008
2000-01	17967.00	26/04/2009
2001-02	9950.00	29/06/2010
2002-03	17682.00	28/04/2011

By Order of the Board  
For Dwarikesh Sugar Industries Limited

PLACE : Mumbai  
DATE : 8th October, 2004

**B J Maheshwari**  
Asst. Vice President [Taxation] &  
Company Secretary

**Registered Office :**  
Dwarikesh Nagar - 246 762  
Dist. Bijnor, Uttar Pradesh.

## MANAGEMENT DISCUSSION AND ANALYSIS

### Industry Structure:

India is one of the major producers of sugar in the world. There are around 531 Sugar Mills in the country of which 294 are in the Co-operative Sector, 167 in the Private Sector and 70 in the Public Sector. A large number of sugar companies in the private sector are located in Uttar Pradesh, Tamil Nadu, Andhra Pradesh and Karnataka.

Cane is transported by factory from the centres besides being supplied at the factory gate. The crushing season extends from November to April/May in North. However, the season is relatively longer in Southern States.

The Sugar Industry is cyclical in nature. Higher cane and sugar production has an effect on reduction in sugar price and impacting the financials of factories to pay cane dues to farmers. In number of states, as a result of cane arrears, farmers switch over to alternative crops. This leads to cane shortage by rotation and this in turn leads to increase in cane price and sugar price, and the farmers again switch back to the cane crop.

Sugar is one of the most regulated commodities in the Indian Industry. However there have been some attempts on the part of the Government to progressively de-regulate the industry such as ratio of levy free sugar from 40:60 has been brought down to 10:90 in last couple of years.

There has been reduction in Sugar cane production over the last few years. The production figures for last 5 years are given below:

	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004 (Estimated)
Production	182.00	185.11	185.29	201.40	140.00
Local consumption	161.01	162.45	165.21	183.84	175.00
Closing stock	93.40	103.62	113.17	116.14	85.64

In Lac Tonnes

Source: ISMA

The country has witnessed very low exports as compared to the total production on account of un-remunerative price prevailing abroad.

The Govt of India has recently allowed duty free import of Raw Sugar under duties with an obligation that refined sugar of the equivalent amount should be re-exported within 24 months.

### Government Policy initiatives – Sugar

The Essential Commodities Act (ESA) was amended and the sugar release mechanism was brought within the direct purview of the ESA. This will bring discipline in the sugar release mechanism by making it legally enforceable.

The Government of India on December 18, 2003 continued a buffer stock of 2mn MT of sugar for another one year. This move was taken in order to help sugar mills reduce their cost of inventory holding, storage and insurance.

In the past, the Government permitted only small sized units of 1,250 TCD and 2,500 TCD. Expansions for 5,000 TCD and above were discouraged. The industry has grown horizontally as a result of this. The Government of India de-licensed sugar sector in August 1998, encouraging entrepreneurs to set up sugar mills without a license but at a distance of 15 kms away from existing factories. The de-licensing is applicable not only for new capacity initiatives but also for expansion of existing capacities.

Effective from July 7, 2000 the Government has withdrawn restrictions on stock holding limits applicable to recognized sugar dealers. Turnover limits of 30 days applicable to recognized sugar dealers have also been abolished since August 20, 2001.

The Government permitted futures trading in sugar and granted approval to three Companies for setting up Futures Exchange. Consequently, certain sugar Companies floated Public Limited Companies to cater to this new segment.

### Cane Price:

Cane is one of the major components of cost of production in the sugar factory and constitutes around 65 % of total cost. The price of cane is related to recovery and State Administrated Price, which vary from state to state. The procurement price of cane by mills is controlled by Statutory Minimum Price, which is announced by Central Government on the basis of CACP studies and is linked to a sugar recovery of 8.5%. The price is suitably adjusted on Pro-rata basis for higher recoveries.

The Supreme Court of India has upheld the validity of State Advised Price(SAP) and in terms of which there is an additional liability on all sugar factories for the differential price payable for 3 sugar seasons viz. 1996-97, 2002-03 and 2003-04. In our case the cumulative liability for 3 years comes to a sum of Rs. 991.13 lakhs which has been provided in the accounts for the year ending 30th September, 2004.

### Dwarikesh's Business:

We are one of the private sector Sugar manufacturers in India. We derive our Income from manufacture and sale of sugar, generation and distribution of power. Besides this the company presently also sells its by-products viz. molasses & bagasse.

**DWARIKESH SUGAR INDUSTRIES LIMITED**

Dwarikesh Sugar Industries Ltd. (DSIL), presently, has a co-generation capacity of 9 MW, which is being expanded to 17 MW and the expanded capacity would be operational by November, 2004. Besides, the company is also setting up a 30 KLPD Distillery for manufacture of Ethanol, which would be operational by February, 2005. Ethanol is one of the additives in petrol. The mixing of Ethanol with Petrol has been made mandatory in Nine States including the State of Uttar Pradesh, Tamil Nadu, Andhra Pradesh, Karnataka, Maharashtra etc. The Government of India is likely to increase the mixing percentage from 5% to 10%. Ethanol is eco-friendly and as is also a foreign exchange saver.

**Out Look:**

The year ahead is promising as the company is focusing on following areas:

a)	Expansion of Co-generation capacity from 9 MW to 17 MW
b)	Setting up to 30 KLPD Distillery for manufacture of Ethanol
c)	Optimising the Existing production facilities for higher productivity
d)	Setting up of Refinery & Pouch Packaging

The company is contemplating an Initial Public Offer (IPO) of 50 Lac Equity shares at price of Rs.65/- per equity Share. The IPO is likely to come in the month of November, 2004. The object of the IPO is to part finance the Ethanol Project, optimise the existing productivity, setting up of a sugar refinery and to set up facilities for pouch sugar. The aforesaid expansion would help the company to generate additional revenues and higher earnings which would help the company to improve its bottom line and its financials.

The sugar prices in the last 4 – 5 months have been quite promising and the future seems to be good. The aforesaid expansion into co-generation as also into Ethanol production would help company to de-risk it's present business.

**Financial Results :**

The Year under review was one of the best years in the history of the Company. The year under review witnessed a sharp jump in the profits of the Company. This was attributable to higher realisation in finished goods & by-products and better efficiency in working of the plant.

Sales were Rs. 15313.25 lacs for the year under review as against Rs. 8,683.21 lacs in the previous year registering a growth of 76.35%. Profit before tax witnessed a growth of 351.87% at Rs.1721.86 lacs as against Rs.381.05 lacs in the previous year. Profit after tax was higher at Rs. 976.06 lacs, as against Rs. 205.94 lacs during the previous year recording a remarkable growth of 373.95 %. Cash Profit at Rs. 1436.70 lacs was 126.28% higher when compared to the cash profit of Rs. 634.92 lacs in 2002-2003.

During the year, the Company made all possible efforts to reduce costs & in it's efforts have been able to reduce on interest and commitment charges from Rs. 724.41 lacs to Rs. 703.83 lacs

An analysis of Balance Sheet reveals that Debt Equity ratio of the Company is at a level of 0.72: 1 as compared to 0.91:1 in the previous year. This is mainly on account of increase in Reserve & Surplus due to profits during the current year.

Current ratio is 0.95:1 as against the permissible limit of 1:1. In normal course it would have been 1.03:1 if the disbursal of Term Loan by IDBI and SDF total amounting to Rs. 385 Lacs would have been made in September, which due to procedural delays has been disbursed in the first week of October, 2004.

Fixed Asset Coverage Ratio of 2.75 is at a comfortable level.

Earning per Share has shown a jump from Rs. 1.75 in 2002-03 to Rs. 12.13 in the year 2003-04 on account of several austerity measures and efficiency enhancement exercises and increase in realisation of sugar and its by-products, which led to remarkable increase in profits during the year.

Book Value of the Company's equity share has increased from Rs 40.23 per share to Rs 50.10 on account of increase in reserves due to higher profits.

## DIRECTOR'S REPORT

The Members of the Company,

Your Directors take pleasure in presenting their Eleventh Annual Report together with the audited accounts for the year ended 30th September, 2004.

### 1. FINANCIAL RESULTS

	<b>Rs. in lacs</b>	Rs. in lacs
	<b>Year ended</b>	Year ended
	<b>30.09.2004</b>	30.09.2003
Gross profit before depreciation, interest & tax	<b>2258.61</b>	1534.44
Less: Depreciation	<b>460.64</b>	428.98
Interest	<b>703.83</b>	724.41
Profit before tax	<b>1094.14</b>	381.05
Less: Provision for taxes	<b>87.37</b>	45.95
Deferred tax	<b>30.71</b>	129.16
Profit after tax	<b>976.06</b>	205.94
Add: Balance brought forward from previous year	<b>434.30</b>	350.96
<b>Amount available for appropriation</b>	<b>1410.36</b>	556.90
<b>Appropriations:</b>		
Interim Dividend on 11%(Redeemed )Preference Shares	<b>39.03</b>	55.00
<b>Proposed Dividend</b>		
- On equity Shares	<b>151.21</b>	37.80
- On preference Shares	<b>13.20</b>	13.20
Additional tax on dividend	<b>26.49</b>	16.60
Transfer to general reserve	<b>500.00</b>	---
<b>Balance carried forward to next year</b>	<b>680.43</b>	434.30
	<b>1410.36</b>	556.90

### 2. DIVIDEND

Your directors are pleased to recommend payment of dividend @ 12% on 12%-Cumulative redeemable preference shares (Rs. 12/- per share of Rs. 100/- each), and @ 20% on equity shares (Rs.2.00 per equity share of Rs. 10/- each).

The total amount on account of dividend outgo (including additional tax on dividend) will be Rs. 229.93 lacs.

### 3. REDEMPTION OF PREFERENCE SHARES

As per provisions of Section 80 and other applicable provisions of the Companies Act, 1956, 5,00,000 - 11% Redeemable Non-Cumulative Preference Shares (RNCP) of Rs. 100 each issued to UTI Bank Limited fell due for redemption on 5th June, 2004 & the same was redeemed on the due date. Interim Dividend @11% for the period from 1st April, 2004 till the date of redemption of Rs 39.03 lacs was paid as per the terms of Memorandum of Understanding.

### 4. YEAR IN RETROSPECT

#### OPERATIONS:

During the year, your company crushed 75.18 lac quintals of sugar cane and produced 7.81 lac quintals of sugar as against 86.48 quintals of sugar cane crushed and 8.82 lac quintals of sugar produced in the previous year.

The Company achieved a recovery of 10.39% in 2003-04 against 10.20% achieved in the earlier year. This year's recovery has been the highest achieved by the Company so far. The Company achieved crop day crushing average of 50,119 qtls per day which is also the highest.

#### FINANCIAL PERFORMANCE:

The Year under review was one of the best years in the history of the Company. The year under review witnessed a sharp jump in the profits of the Company. This was attributable to higher realisation in finished goods & by-products and better efficiency in working of the plant.



## DWARIKESH SUGAR INDUSTRIES LIMITED

Sales were Rs. 15313.25 lacs for the year under the review as against Rs. 8,683.21 lacs in the previous year. Profit after tax was higher at Rs. 976.06 lacs, as against Rs. 205.94 lacs during the previous year recording a remarkable growth of 373.95 %. Cash Profit at Rs. 1436.70 lacs was 126.28 % higher when compared to the cash profit of Rs. 634.92 lacs in 2002-2003.

Had the Company not been required to provide for exceptional liability of Rs. 991.12 lacs on account of Supreme Court decision on the cane price profit after tax would have been Rs. 1967.18 lacs.

### CANE & SUGAR POLICY:

The salient features of the Sugar Policy for 2003-2004 are given below:

1. The ratio of levy and free sale sugar was 10:90.
2. The price of levy sugar for Central U.P. for the year 2003-04 was 1293.04 per qtl and has been revised to Rs. 1330.77 per qtl.
3. The statutory minimum price of sugar cane was fixed at Rs. 74.50 per qtl. linked to the sugar recovery of 8.5% with a premium for higher recovery.
4. The minimum statutory price in past 3 years along with the price applicable to the company on the basis of recovery are given below:

Season	SMP Rs. / Qtl.	Company's SMP Rs. / Qtl. (General variety at the gate)
2000-01	59.50	70.00
2001-02	62.05	75.92
2002-03	64.50	78.18
2002-03 (Revised)	69.50	84.26
2003-2004	74.50	89.40

The Supreme Court of India has upheld the validity of the State Advised Price(SAP) and in terms of which there is an additional liability on all sugar factories in U.P. for the differential price payable for 3 sugar seasons viz. 1996-97, 2002-03 and 2003-04. In our case, the cumulative liability for 3 years comes to a sum of Rs. 991.12 lacs which has been provided in the accounts for the year ending 30th September, 2004.

### 4. PERFORMANCE OF POWER UNIT

During the year 67,43,286 units of kWh of power was exported to state grid, which generated gross revenue of Rs 182.79 lacs as compared to 72,60,753 units of kWh, which generated gross revenue of Rs. 190.53 lacs in the previous year.

### 5. DIRECTORS

Pursuant to Article 146 of the Articles of Association of the company, Mr. M G Diwan, Mr. K P Medhekar and Mr. S K Neotia, retire in the ensuing Annual General Meeting and being eligible offer themselves for reappointment.

### 6. Statement of Director's Responsibilities

Your Directors confirm that:

- (i) in the presentation of the annual accounts, applicable Accounting Standards have been followed.
- (ii) the accounting policies are consistently applied and reasonable, prudent judgment and estimates are made so as to give a true and fair view of the state of affairs of the Company at the end of the Financial Year.
- (iii) proper & sufficient care has been taken for the maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding the assets of the Company and for preventing and detecting fraud and other irregularities.
- (iv) annual accounts have been prepared on a going concern basis.

### 7. CORPORATE GOVERNANCE

Your Company is maintaining the highest standard of transparency and accountability in all its activities. The Company, being an unlisted Company, the provisions of Corporate Governance as announced by Securities & Exchange Board of India and Stock Exchange (s) are not applicable. However, in terms of the requirement of Section 292 A of the Companies Act, 1956, the Audit Committee has been constituted. Two Audit Committee Meetings were held during the year.

Besides, the Remuneration and Shareholders Committees have also been constituted.

### 8. EMPLOYEES

As required by the provisions of sub-section (2A) of Section 217 of the Companies Act, 1956 as amended, read with the Companies (Particulars of Employees) Rules, 1975 the names and other particulars of the employees are set out in Annexure - I to the Director's Report.

**11<sup>TH</sup> ANNUAL REPORT 2003-2004****9. CONSERVATION OF ENERGY, TECHNOLOGY ABSORPTION AND FOREIGN EXCHANGE EARNINGS AND OUTGO:**

Pursuant to section 217 (1)(e) of the Companies Act, 1956, the particulars in respect of conservation of energy, technology absorption and foreign exchange earnings & outgo are furnished in Annexure -II.

**10. AUDITORS & AUDITOR'S REPORT:**

You are requested to appoint the Auditors and fix their remuneration.

Note no. 8 & 13 referred to in the auditors report are self explanatory in nature and do not call for any further explanation.

**11. PUBLIC DEPOSITS**

Requirements of Section 58A of the Companies Act, 1956 and directions of Reserve Bank of India were duly complied with while accepting deposits from public during the year. As on the balance sheet date, the company does not have any unclaimed or overdue deposits.

**12. ACKNOWLEDGEMENT**

Your directors wish to place on record their sincere gratitude and appreciation to the members, sugar cane growers, employees, bankers, financial institutions, Central & State Government for the co-operation and support extended by them throughout the year.

**By Order of the Board**  
**For DWARIKESH SUGAR INDUSTRIES LIMITED**

Place : Mumbai  
Dated : 8th October, 2004

**G R MORARKA**  
**CHAIRMAN & MANAGING DIRECTOR**

**K P MEDHEKAR**  
**DIRECTOR**

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**ANNEXURE - I**

**STATEMENT OF PARTICULARS OF EMPLOYEES AS REQUIRED UNDER SECTION 217 (2A) OF COMPANIES ACT, 1956 READ WITH THE COMPANIES (PARTICULARS OF EMPLOYEES) RULES, 1977 AND FORMING PART OF THE DIRECTOR'S REPORT FOR THE YEAR ENDED 30TH SEPTEMBER 2004.**

A. Particulars of employees employed throughout the period in terms of Section 217 (2A)(a)(i).

Sl. No.	Name of the Employee	Designation/ Nature of duties	Remuneration received Rs.	Qualification & experience	Date of Commencement of employment	Age	Particulars of previous Employment and years of employment
1.	Shri Gautam R. Morarka	Chairman & Managing Director	33,83,880	B.Com Inter ICWA 22 Years	19.04.1994	42	Managing Director, Pampasar Distillery Limited (3 1/2 Years)

B. Particulars of employees employed for part of the period in terms of Section 217 (2A)(a)(ii).

Sl. No.	Name of the Employee	Designation/ Nature of duties	Remuneration received Rs.	Qualification & Experience	Date of Commencement of employment	Age	Particulars of previous Employment and year of employment
NIL							

1. Remuneration includes salary, commission, house rent allowance, other allowance, ex-gratia, encashment of leave and taxable value of perquisites as per income tax rules.

2. Nature of employee is contractual.

3. Mr G R Morarka, Chairman & Managing Director holds 33.24% of Company's paid up equity share capital.



**DWARIKESH SUGAR INDUSTRIES LIMITED****ANNEXURE - II**

**PARTICULARS AS REQUIRED UNDER THE COMPANIES [DISCLOSURE OF PARTICULARS IN THE REPORT OF THE BOARD OF DIRECTORS] RULES, 1988.**

**1. CONSERVATION OF ENERGY**

Energy conservation is an on-going activity in the Company and the efforts to conserve energy through improved operational methods and other means are continuing. Details of total energy consumption and energy consumption per unit of production are furnished in the prescribed Form 'A' below.

**FORM 'A'****[See Rule 2]**

FORM FOR DISCLOSURE OF PARTICULARS WITH RESPECT TO CONSERVATION OF ENERGY

**A. POWER AND FUEL CONSUMPTION**

	<b>Current Year 2003-2004</b>	<b>Previous Year 2002-2003</b>
<b>1. Electricity</b>		
a) Purchased		
Unit - KWH	NIL	NIL
Total amount (Rs.)	N.A.	N.A.
Rate / Unit (Rs.)	N.A.	N.A.
b) Own Generation		
i) Through Diesel Generator		
Unit - KWH	681,298 kwh	581,385 kwh
Unit per Ltr. of diesel	2.60 unit/Ltr.	2.60 unit/Ltr.
Oil Cost / Unit (Rs.)	Rs. 8.64/Unit	Rs. 7.87/Unit
ii) Through Steam Turbine /Generator		
Unit - KWH	25,798,983	29,733,327
Unit per Ltr. of fuel	N.A.	N.A.
Oil / gas	}	}
Cost / Unit (Rs.)	}	}
<b>2. Coal (Specify quantity and where used)</b>		
Quantity (Tonnes)	NIL	NIL
Total Cost	N.A.	N.A.
Average Rate	N.A.	N.A.
<b>3. Furnace Oil</b>		
Quantity (Kilo Ltrs.)	NIL	NIL
Total amount	N.A.	N.A.
Average Rate	N.A.	N.A.
<b>4. Other / internal Generation</b>		

	<b>Bagasse (Qtls.)</b>		<b>Firewood (Qtls.)</b>		<b>Diesel (Ltrs.)</b>	
	<b>2003-2004</b>	2002-2003	<b>2003-2004</b>	2002-2003	<b>2003-2004</b>	2002-2003
Quantity	1,876,443	2,346,837	Nil	Nil	248,800 Ltrs.	223,110 Ltrs.
Total Cost (Rs.)	Own generation	Own generation	-	-	5,889,014	4,573,493
Rate/Unit (Rs.)	-	-	-	-	(Rs.23.67/Ltr.)	(Rs.20.50/Ltr.)

11<sup>TH</sup> ANNUAL REPORT 2003-2004**B. CONSUMPTION PER UNIT OF PRODUCTION****PRODUCT - SUGAR (Unit Qtls.)**

Total Sugar Produced = 781,104

	Standards (if any)	Current Year 2003-2004	Previous Year 2002-2003
Electricity (KWH)	N.A.	-	-
Furnace Oil	N.A.	-	-
Coal (Specify Qua)	N.A.	-	-
Others (Specify)	N.A.	-	-
Firewood (MT)	N.A.	-	-
G.N. Husk (MT)	N.A.	-	-
<b>Bagasse (MT)</b>		<b>0.24 MT/ Qtls. of Sugar</b>	<b>0.27 MT/ Qtls. of Sugar</b>

**TECHNOLOGY ABSORPTION****FORM-B****FORM FOR DISCLOSURE OF PARTICULARS IN RESPECT OF ABSORPTION.****A. RESEARCH AND DEVELOPMENT:**

## Specific Area

- 1 Proper interaction with sugar cane scientists / Research stations to educate our staff regarding new Technology of sugar cane cultivation, control of insect, pest and disease.
- 2 Distribution of nuclear cane seed of varieties like Cos 88230, 98231, 8436, 98247, 96268, 8432 and Cop 84212 for raising the foundation seed nurseries and onward multiplication of these in primary and secondary nurseries and finally distribution of cane seed for commercial cultivation of these varieties.
- 3 Cane seed treatment of improved varieties through M.H.A.T. units for renovation of various seed born disease in Cos 767 and of other varieties being done free of cost, by raising these treated varieties in nurseries for maintaining disease free seed.
- 4 Biological Control of Early shoot borer, Top borer, Gurdaspur borer Pyrrilla insect pest etc being done through Trichogramma Chilonis and Tricho Japonicum Eipipyrix rearing in Bio control laboratory.
- 5 Seed for new improved varieties multiplication programme done at Factory farm as well as progressive growers fields for distribution among the growers.
- 6 Conducted village meetings, arranging staff and farmers training programme, staff training and farmers tour is being arranged to visit various sugar cane and progressive farmers field of U.P. state and research stations.
- 7 Developing of the area link roads with a view to increase new cane area in interior zone and to provide easy transportation facility to our cane suppliers.
- 8 Rearing of vermiculture to produce vermicompost to provide the sugar cane growers for the improvement of soil texture and also to increase the water holding capacity of the soil. The vermiculture as such are being sold to the cane growers on subsidies rates.

**B. BENEFITS DERIVED:**

- 1 Area under new & improved varieties increased from 10 % to 15 % which has replaced the area of undesirable and rejected varieties.
- 2 Distribution of cane seed of improved varieties. Adoption of Agrochemicals, plant protection measures & other developmental activities has improved production, productivity and sugar recovery.
- 3 Use of improved agricultural implements has helped in mechanized cane cultivation, use of sprayers in protection of cane crops from pests & diseases.
- 4 Demonstration plots, farmers meeting, training and tour programmes are very helpful in imparting the improved technical know-how of sugar cane cultivation to staff members as well as cane growers.