

THE SHAHABAD COOPERATIVE SUGAR MILLS LTD., SHAHABAD (M.), DISTT.KURUKSHETRA.

PROPOSED CANE DEVELOPMENT PLAN FOR THE SEASON 2023-24

The Cane area in the assigned zone of Shahabad Sugar Mills during the season 2022-23 is 34292.0 acres.

The cane area and expected cane availability for the season 2022-23 and projections for 2023-24 are given as under:-

S.No.	Particulars	Season 2022-23	Projections/ Targets/for 2023-24
1.	Total cane area (in acres)	34292	32000
2.	Area under Ratoon cane (in acres)	19207	16000
3.	Area under plant cane (in acres)	i)Autumn = 783 ii)Spring =9600 iii)Mid/Late =4702	i)Autumn = 5500 ii)Spring = 8500 iii)Mid/Late = 2000
4.	i) %age of Early varieties ii) %age of Mid/late	Co-0238 = 54 Co-0118 = 25 COH-160 = 14 CoJ-85 = 3 Mid/late = 3 Co-15023= 1	(Area in acres) Co-0238 = 2000 Co-0118/ = 4000 Co-0239 COH-160 = 2000 Co-15023 = 4500 Mid/late = 3500
5.	Expected average yield (qtl./acre)	330	330
6.	Expected production of ratoon cane (in lac qtls.)	61.00	52.80
7.	Expected production of plant cane (in lac qtls.)	50.00	52.20
8.	Total cane production (in lac qtls.)	111.00	105.00
9.	Expected availability of ratoon cane (in lac qtls.)	44.00	41.00
10.	Expected availability or plant cane (in lac qtls.)	36.00	49.00
11.	Total expected cane availability (in lac qtls.)	80.00	80.00
12.	Expected sugar recovery (%)	11.25	11.25
13.	Minimum Targets of Breeder seed(acre) as per MoU with SBI,RC,Karnal.	7.0	10.0
14.	Minimum planting targets at 4 ft. (acres)	792.0	10000.0
15.	Minimum targets area for application of press mud (acres)	500.0	2500.0

In order to get sufficient quantity of cane for crushing during the season 2023-24 and to achieve more than 11.25 % sugar recovery. More emphasis is required for development of new early maturing high sugared varieties. Accordingly an ambitious Cane Development plan of Rs.1096.67 lacs has been prepared, out of which 39.03 lacs subsidy other than interest & Rs.67.29 lacs interest will be borne by the Mills. At present the cane area under different early and mid early varieties is around 99 %, out of which 98% area is under early variety. In the proposed cane development plan more emphasis has been laid on to increase the cane area under early maturing varieties like Co-15023, Co-0118,, Co-0239 & COH-160 . In addition to above maximum efforts shall be made to increase the cane area under early varieties like Co-15023 & Co-118. Some important features of Cane Development plan for the year 2023-24 are given as under:-

1. **Seed programme**

a) **Breeder/Nucleus seed programme**

Seed material/seedlings(especially Co-15023 & Co-118) will be provided by SBI,Regional Centre Karnal as per the MoU for this purpose. The rates of the seed material/seedlings will be changed as per the prevailing rates fixed by the SBI, Regional Centre Karnal. The recommended seed rate is 30-35 qtls. per acre & seedlings per acre may vary from 5000-7500 seedlings per acre depending upon the variety and planting season. Fifty percent subsidy will be provided to the farmers on seed material/seedlings purchased from SBI,Regional Centre,Karnal or HAU,RRS,Uchani,Karnal. For this purpose Rs.2.25 lacs has been kept in the Cane Development plan.

b) **Tissue culture seedlings.**

i) With a view for fast multiplication, purity and rejuvenation of high sugared varieties and to provide disease free healthy seed, seedlings raised through tissue culture techniques will be arranged for Ten acres @ 10000 seedlings per acre from tissue culture lab Sugar Mills Karnal @ Rs. 9.00 per seedling. A target of 10.0 acres has been fixed in cane development plan to raise seed nurseries by planting tissue culture seedlings. Tissue culture seedling of promising varieties especially Co-15023 & CoH-118 (minimum 5 acres of each variety to each Mill) & other, if any will be provided @ Rs. 1.00 per seedling to farmers for seed multiplication and remaining cost of seedling (presently Rs. 8.00 per seedling)will be borne by Mills, if no amount is received from Agriculture Deptt. under various Schemes.. A provision of Rs.9.00 has been kept in this head.

ii) Transportation cost of seedlings from Karnal Mills to our Mills will be borne by our Mills & a provision of Rs.0.40 lac has also been kept for this purpose.

c) **Foundation seed nurseries**

The two tier system of seed programme has already been adopted in our Mills zone to provide disease free and healthy cane seed of improved and high sugared varieties. The Mills has installed 4 Nos. Moist Hot Air Treatment plants for free seed treatment to raise foundation seed nurseries. Our Mills has purchased 3 nos. Mobile Moist Hot Air Cane Seed Treatment plants & our Mills will provide MHAT plants(stationery/mobile) for treatment of cane seed, lump sum incentive of Rs.2000.00 per acre will be provided to compensate the growers for cost of fuel/power, Labour, transportation, etc. For this purpose a provision of Rs. 2.00 lacs has been kept in the cane development plan

2. **Multiplication of new promising varieties.**

a) **Crop loan.**

The cane area under early varieties during the season 2022- 23 is about 98 %. In the proposed cane development plan emphasis has been laid on to increase area under other varieties like Co-15023, Co-0118,Co-0239 & COH-160 . In the proposed cane development plan to maintain proper varietal balance cane seed of early varieties i.e. Co-15023, Co-0118 or any other new promising varieties, if any(in consultation with Cane Advisor, Sugarfed) will be provided on interest free loan only for cane seed nurseries developed under Three Tier seed production programme under the supervision of Cane Section of Sugar Mills. For this purpose a provision of Rs.619.54 lacs has been made in the proposed cane development plan.

b) **Subsidy on cane seed transportation**

A provision of Rs.75.00 per qtls. for 100 acres as harvesting, loading labour & transportation subsidy will be given to cane growers who will bring sugarcane seed from out side the Mills assigned area/Research Stations/ neighboring States/ other Sugar Mills farm for early, mid and new promising varieties of sugarcane & earmarked Rs.3.00 lacs as harvesting, loading labour & transport subsidy in the proposed cane development plan.

3. **Plant protection.**

Sugarcane being a long duration and sugar rich crop plays a role of host to a number of insect-pests. About two dozen insect-pests viz, borers, scale, pyrilla, termites, white grubs, mealy bugs, grass hoppers etc. attack the sugarcane. If the attack of insects/pests is not controlled/ Bio-logically/mechanically well in time, it affects the sugar recovery/yield adversely. Timely control of various pests and diseases is the first and most important step required to be taken. In the proposed cane Development plan provision has been made to purchase required pesticides/chemicals to control the attack of different insects-pests from time to time.

a) **Cane seed treatment**

For treatment of cane seed Emisan-6, Dithan M-45, Bavstin, etc. on 10% subsidy or interest free loan shall be provided & for this purpose a provision of Rs. 2.14 lacs has been made in the proposed cane development plan.

b) **Chemical control of top borer/ E.S.B.**

i) The attack of top borer/ E.S.B. is controlled by the application of Rynaxypr 20 SE @ 150 ml. per acre will be given on 10% subsidy or interest free loan and for this purpose a provision of Rs.198.21 lacs has been made in the proposed cane development plan.

ii) The attack of top borer/ E.S.B. is controlled by the application of Carbofuran 10.00 kg.. per acre will be given on 10% subsidy or interest free loan and for this purpose a provision of Rs.31.68 lacs has been made in the proposed cane development plan.

c) **Pre plantation soil treatment**

Pre plantation soil treatment by Chemicals/pesticides (Fipronil 0.3G/Chlorpyrifos 10G/20EC) will be given on 10% subsidy or interest free loan & for this purpose a provision of Rs.102.72 lacs has been made.

d) **Spray against black-bug.**

Black bug is a harmful insect which damage the crop from the month of April to June. For effective control of this insect, the work of spray shall be carried out by providing required insecticides directly to the farmers. 10% cost of insecticides shall be borne by the Mills as subsidy or interest free loan and a provision of Rs.29.61 lacs has been made in the proposed cane development plan..

e) **Chemical control of root borer.**

The work of application of Quinalphos 5G/Dursban 10G will be carried out by the Mills in the entire area of COH-160 , Co-05011 & any other variety effected by root borer 10% cost of pesticide shall be borne by the Mills as subsidy or interest free loan and a provision of Rs. 22.08 lacs has been made in the proposed cane development plan.

f) **Control of Cyperus rotundus (Motha)**

To Control of Cyperus rotundus (Motha) herbicide namely Halosulfuron methyl 75WG (Sempra) will be given on 10% subsidy or interest free loan. A provision of Rs.21.29 lacs has been kept in the proposed cane development plan.

g) **Mechanical control of early shoot borer/red rot.**

The roughing of affected early shoot borer /red rot of sugarcane will be carried out from the fields in early stage under the supervision of field staff and area of 5000 acres will be covered under mechanical control of early short borer/red rot.

i) **Ratoon Management.**

In view of the fact that ratoon crop gives better sugar recovery in the earlier part of crushing season and is also more profitable to the farmers, but mostly farmers do not pay much attention to the ratoon crop of sugarcane as compared to plant crop. In order to take higher yield from ratoon crop proper management like ground level harvesting ,stubble shaving, gap filling & mulching followed by immediate irrigation, hoeing, timely application of fertilizer and spraying etc. is required. To educate & motivate the farmers for adopting above mentioned steps for ratoon management and area of 5000 acres will be covered under Ratoon management demonstration.

ii) **Soil & Water testing lab.**

The Govt. of Haryana has established a Soil & water testing lab at our Sugar Mills preemies, where soil & water testing facility will be provided free of cost to the farmers and area of 8000 acres will be covered under this scheme.

4. **Biological control of Pyrilla , stalk borer & Top borer.**

Many types of insect/pests attack the crop which affect the sugar recovery badly and also decrease the yield of sugarcane. Some insects/pests are controlled by chemicals, but pyrilla & stalk borer can be controlled biologically. A bio-logical lab. is established in our Sugar Mills and our Mills provide the parasites to the cane growers free of cost. A provision of Rs.21.00 lacs has been kept in the Cane Development plan. Bio-control lab. expenses to be proportionately shared from beneficiary Mills i.e. Kaithal & Karnal..

5. **Repair & maintenance of MHAT/Mobile MHAT plants.**

A provision of Rs.1.00 lacs has been kept in the cane development plan for repair & maintenance MHAT/ Mobile MHAT plants.

6. **Publicity/Seminars/Tours.**

To educate the farmers regarding latest technologies on sugarcane development, seminars will be organized in co-ordination with HAU, Uchani (Karnal), KVK, Kurukshetra and Sugar-fed, Panchkula. Pamphlets will also be distributed time to time regarding control of various disease/pests/borer. Field day/ farmers meetings will be organized at the farms of progressive farmer's field for practical knowledge of sugarcane. Cane field staff of the Mills and progressive farmers will be sent to various sugarcane research stations/seminars, so that their knowledge on various new developments on sugarcane may be updated. A provision of Rs.3.00 lacs has been kept in Cane Development plan.

7. **Repair & maintenance of Agriculture implements.**

A provision of Rs.1.00 lacs has been kept in the cane development plan for repair & maintenance of agriculture implements.

8. **Intercropping in autumn sowing**

In the proposed cane development plan emphasis has been laid on to increase the area in autumn sowing, a provision of Rs.1.76 lacs kept in Cane Development plan for inter crop seed.

9. **To promote use of Bio-compost for improvement of soil health**

Press mud will be provided to the cane farmers on 50% subsidy & a provision of Rs.25.00 lacs has been kept in Cane Development plan.

Physical target and financial outlay of the proposed cane development plan for the season 2023-24 is enclosed.

Note:- Managing Director of the Mills is authorized to use/transfer the budget of cane development plan from one head to another head as per local needs basis requirement under intimated to the Sugar-fed.

CANE MANAGER

C.D.O

THE SHAHABAD COOPERATIVE SUGAR MILLS LTD., SHAHABAD (M)., DISTT.KURUKSHETRA

PROPOSED CANE DEVELOPMENT PLAN FOR THE SEASON 2023-24

S. No.	Particulars	Area to be covered (In acres)	Quantity of inputs required	Approx. rate per unit (in Rs.)	Total (Rs. In lacs) (Principle Amount)	Interest Amount (If applicable) (Rs. in lacs)	Gross Amount (Principle+ Interest) (Rs. in lacs)	Recoverable amount (Rs. in lacs)	Subsidy/Interest amount (In proposed budget) (Rs. in lacs)	Last year's approved subsidy/interest (Rs. in lacs)	Last year's actual expenditure (Rs. in lacs)
1.	Seed Programme										
a)	Breeder/Nucleus seed programme										
	Seed material/seedlings(especially Co-15023 & Co-118) will be provided by SBI,Regional Centre Karnal as per the MoU for this purpose. The rates of the seed material/seedlings will be changed as per the prevailing rates fixed by the SBI, Regional Centre Karnal. The recommended seed rate is 30-35 qtls. per acre & seedlings per acre may vary from 5000-7500 seedlings per acre depending upon the variety and planting season. Fifty percent subsidy will be provided to the farmers on seed material/seedlings purchased from SBI,Regional Centre,Karnal or HAU,RRS,Uchani,Karnal.	10	7500	3.00	2.25	0	2.25	1.12	1.13	1.13	0.68
b)	Tissue culture seedling										
i)	Tissue culture seedling of promising varieties especially Co-15023 & CoH-118 (minimum 5 acres of each variety to each Mill) & other, if any will be provided @ Rs. 1.00 per seedling to farmers for seed multiplication and remaining cost of seedling (presently Rs. 8.00 per seedling) will be borne by Mills, if no amount is received from Agriculture Deptt. under various Schemes..	10	100000 Seedlings	9.00	9.00	-	9.00	1.00	8.00	4.00	-
ii)	Actual Transportaion cost of seedling from Karnal Mills to our Mills will be borne by Mills.	10	10000 each forTen time	4000	0.40	-	0.40	-	0.40	0.20	-
c)	Foundation seed nurseries.										
	Mills will provide MHAT plants (Stationery/Mobile) for treatment of cane seed lump sum incentive of Rs. 2000/- per acre will be trnsferred on line on the beneficiaries accounts to compensate the growers for cost of fuel/power, labour, transportaion etc.	100	100	2000.00	2.00	-	2.00	-	2.00	2.00	0.98

i)	Ratoon management (Stubble cutting, Trashmulching, Gap filling)	5000	-	-	-	-	-	-	-	-	-
ii)	Soil & water sample testing in Mills Soil testing Lab.	8000	-	-	-	-	-	-	-	-	-
4	Bio-control lab. Expenses to be proportionately shared from beneficiary Mills i.e. Kaithal & Karnal.	-	-	-	21.00	-	21.00	14.00	7.00	7.00	8.50
5	Repair & Maintenance of MHAT/Mobile MHAT plants.	-	4 Nos	-	1.00	-	1.00	-	1.00	1.00	0.18
6	Publicity, propaganda, meeting tour, training camps to the farmers/staff and prizes to staff on achieving the sowing targets.	-	-	-	3.00	-	3.00	-	3.00	3.00	0.08
7	Repair & maintenance of Agriculture implements	-	-	-	1.00	-	1.00	-	1.00	1.00	0.05
8	Intercropping in Autumn sowing										
	Gram seed will be given on 10% subsidy or interest free loan	60	12 Qtls.	100.00 per kg	1.20	0.08	1.28	1.20	0.08	0.08	0.05
	Mustard seed will be on 10% subsidy or interest free loan	500	5 qtls.	90/-P/kg.	0.45	0.03	0.48	0.45	0.03	0.03	-
9	To promote use of Bio-compost for improvement of soil health Press mud will be provided to the cane farmers on 50%subsidy	2500	50 qtl. per acre	20/- p/ctl.	25.00	0.00	25.00	12.50	12.50	2.50	-
	Total				1029.38	67.29	1096.67	990.35	106.32	88.40	52.81

Note:- Managing Director of the Mills is authorised to use/transfer the budget of cane development plan from one head to another head as per local needs basis requirement under intimated to the Sugarfed.

Summary :

	<u>Amount (Rs. in lacs)</u>
Total Recoverable amount (Loan+Cash)	990.35
Subsidy Given:	
- Interest Subsidy	67.29
- Subsidy other than Interest	<u>39.03</u>
Total Amount	<u>106.32</u>
	<u>1096.67</u>