**Basic principles and parameters/norms for evaluating the performance of
factories for Efficiency Awards for the year 2013-2014**

A.   Basic Principles

1.   Only those factories who have submitted various performance data in the
prescribed format will be considered eligible for participation.

2.   The cooperative sugar factories, which are in arrears of any dues of NFCSF,
shall not be considered for awards. The factories are required to obtain 'No
Dues Certificate' from NFCSF in respect of dues.

3.   The factories have been grouped in two zones namely (a) High Recovery Area
(HRA) having recovery 10% and above and (b) Other Recovery Area (ORA) i.e.
recovery below 10%. The States falling under these two areas are as follows:-

   a)   High Recovery Area (HRA) – South Gujarat, Maharashtra and
   Karnataka

   Note: South Gujarat comprises districts of Surat, Valsad, Bharuch and
   Narmada in Gujarat State.

   b)   Other Recovery Area (ORA) – Areas other than those specified at (a)
   above.

4.   The factory must have worked for more than 100 days during current season in
High Recovery Area and 80 days in Other Recovery Area for its eligibility for
Efficiency Awards.

5.   Many sugar factories have added plant and machinery to increase the rate of
crush but have not registered for the increase in installed capacity. On account
of the above, if a mill crushes beyond its licensed capacity, its actual capacity will
be taken into account to arrive at normative crushing capacity. Similarly, for
Cane Development Awards, instead of installed capacity, normative capacity will
be considered. Submission of Form i(1) is essential.

6.   No factory shall be eligible for more than one award in any category in a
particular year.

7.   In case a factory getting eligible for more than one award, the maximum score in
each category shall be considered i.e. In the event of a particular factory getting
eligible for awards in all the three categories viz. Technical Efficiency, Cane

Development & Financial Management, the maximum score achieved in each category will be considered for granting the award in that particular category.

8. Every year, there shall be two separate awards in High and Other recovery areas under the category of Overall Best Coop. Sugar Factory Award. In addition, there will be a separate award for Overall Best Coop. Sugar Factory on all India basis. There will no second prize under this category.

9. The evaluation of overall best performance shall include the key parameters of Technical Efficiency, Cane Development Work, Financial Management and the marks for Overall Best Cooperative Sugar Factory will be evaluated on the following basis :-

   a) Cane Development   -   30%
   b) Technical Efficiency   -   30%
   c) Financial Management   -   40%
                                                    100%

10. The evaluation of financial performance shall be based on the audited Balance Sheet and Profit & Loss Account of each factory. Therefore, the audited balance sheet for previous year must be attached.

11. The award for Overall Best Cooperative Sugar Factory will be given in the memory of Late Shri Vasantdada Patil, in view of the yeomen services rendered by him for development of cooperative sugar industry in the country. These awards will be called ' Shri Vasantdada Patil Awards'.

12. Two awards will be given separately for high recovery area and other recovery area for each category i.e. Technical Efficiency, Cane Development and Financial Management. For Overall Best Cooperative Sugar Factory Award, there will be two awards separately for high recovery area and other recovery area and one award for the Overall Best Cooperative Sugar Factory on all India basis. One more award is given for highest export in quantitative terms in each category. Thus, the total number of awards will be 17.

****

CANE DEVELOPMENT AWARD

PARAMETERS	**MARKS**
1. **Total Cane Crushed (Tones)**	**25**
2. **Cane Production Data:**	**10**
i. Total area under plant cane in the factory zone (ha.)	
ii. Total area under ratoon cane in the factory zone (ha.)	
iii. Total area under sugar cane (Plant + Ratoon) (ha.)	
iv. Total production of cane (plant + Ratoon) (Tones)	
v. Average yield of plant crop per ha. (Tones)	
vi. Average yield of ratoon crop per ha. (Tones)	
3. **Quality of cane**	**15**
i. Pol % cane	
ii. Pol % cane during last two seasons	
4. **Varietal Effect**	**15**
i. Pol % cane up to end of December	
ii. Average Pol % cane up to December during last two seasons.	
5. **Qualitative Improvement Activities**	**10**
Percentage of seed procured from Research Organizations (Enclose certificate of the Research Organizations. No certificate means, no marks).	
6. **Amount spent by the factory for different activities such as soil testing, plant protection measures and water harvesting etc.**	**10**

7. **Details of extension work done by the sugar factory for development of cane.**   **15**

i.   Number of Kisan Melas, Seminars, Kisan Goshthis etc. organized. Mention amount spent for both the seasons.

ii.   Whether the factory has availed SDF loan for cane development? If yes, what is its impact?

Total :   100

TECHNICAL EFFICIENCY AWARD

PARAMETERS	MARKS

1. Capacity utilization   10

$$\frac{\text{Total quantity of cane crushed during crushing season}}{\text{Normative crushing capacity x Available days.}} \times 100$$

$$\text{Available days} = \frac{\text{Total hrs. Crushing + Total hrs. lost}}{24}$$

2. Total sugar losses % cane   5

a) Sugar loss in bagasse

b) Sugar loss in final molasses

c) Sugar loss in press mud

d) Unknown sugar loss

3. Mill house performance   10

PI, Pol % bagasse, moisture % bagasse & Primary extraction RME (Mittal)

4. Boiler performance   10

Boiler efficiency based on steam cycle bar/ºC on GCV

5. Stores used   10

a) Fire wood % cane

b) Lime % cane

Process , Spray pond & ETP etc.

c) Sulphur % cane

d) Lubricants consumption in kg/ton cane crushed

6.	**Boiling house performance**	5
a)	Reduced boiling house recovery (RBHR) (G.R.)	
b)	Reduced overall recovery RBHR (GR) x RME (Mittal)	
7.	**Steam % cane**	10
a)	Steam fuel ratio for bagasse as fuel	
b)	Extra fuel % cane including bagasse	
c)	Steam % cane for sugar and other down stream industries. (Show separately)	
d)	Bagasse saving % cane / used as fuel for down stream industries (to be certified by Managing Director/General Manager)	
8.	**Down time**	5
a)	Including general cleaning	
b)	Excluding general cleaning	
9.	**Sugar quality (Grade wise)**	5
	Percentage of sugar produced	
i)	M-30 and above	
ii)	S-30 and above	
iii)	Color IU (Method followed)	
iv)	Premium quality sugar if any produced	
v)	Raw sugar / Sulphur less sugar / Refine sugar	
10.	**Effluent treatment plant**	10
a)	Waste water management	
	i) Quantity of effluent water discharged litre/tone of cane crushed (with documentary proof attested by pollution control board)	

ii) Analysis of discharged water analysis such as such pH, COD, BOD etc. (Attach certificate from pollution control board authorized laboratories)

b) Emission control

Particulate matter (analysis report certified by the pollution control board)

11. Energy conservation   10

a) Water, power and steam consumption per ton of cane crushed (attach certificate of authenticity)

b) Adoption of automization (Enclose automization equipment installed)

NOTE : Adoption of value addition, technological upgradation carries added weightage of marks as decided by the committee.

12. Value addition   10

i) Power generation/ton of cane crushed (Unit / ton of cane exported to the grid / third party sale for cogeneration unit only) and utilized for othe down stream industries.

ii) Steam and power configuration i.e. boiler pressure, generation capacity and T.G. set capacity

iii) Power turbine, back pressure mode, extraction cum back pressure condensing mode, double extraction cum condensing (DEC) etc.

iv) RS/Ethanol – production capacity

v) Bio-compost – Production and despatch in MT

FINANCIAL MANAGEMENT AWARD

PARAMETERS	**MARKS**

1. Surplus fund available for   35
    Utilization Index, SFUI
    $SFUI = SFU/ASMP \times 100$

    SFU : Surplus fund available for utilization (in Rs. Per tonne) including purchase tax, cess, harvesting and transport charges, if any, for the financial year

    ASMP: Average Statutory Minimum Cane price (in Rs. Per tonne) of the particular factory for the year as notified by the Central Govt. for the months of April, 2011 to March, 2012.

2. Sugar Sales Realization Index, K   10

    $K = \dfrac{AR}{ZA} \times 100$

    AR: Average actual free sale sugar realization for the financial year 2012-13 (1-4-2012 to 31-3-2013)

    ZA: Zonal average free sale sugar realization for the financial year 2012-13 (1-4-2012 to 31-3-2013)

3. Conversion Cost Index, CI   25

    $CCI = \dfrac{CC}{SP}$

    CC: Conversion cost for the financial year 2012-13

    SP: Net sugar produced in quintals in the financial year 2012-13

CONVERSION COST

CANE DEVELOPMENT
FUEL, OIL AND ELECTRICITY
CONSUMABLES & CHEMICALS
PACKINGS
SALARIES & WAGES
REPAIRS AND MAINTENANCE
OVERHEADS INCLUDING
INSURANCE & SELLING EXP.
INTEREST ON WORKING CAPITAL LOANS
SUB TOTAL

4. Net Worth Index, NWI   10

NWI = $\frac{NW}{SC} \times 100$

NW : Net worth as on 31-3-2013

SC : Share capital including NRD as on
       31-3-2012

NET WORTH   As on 31-3-2013
                                   Rs. In Lacs

i.   SHARE CAPITAL
ii.   NON REFU. DEPOSITS
iii. RESERVES & SURPLUS
iv.   ACCUMULATED PROFITS/ LOSSES
      Net Worth (i+ii+iii-/+iv)

Note:

i.   Share capital includes share suspense and share anamat duly paid.

ii. Reserve and surplus includes reserves created out of Profit & Loss Account and excluding depreciation fund.

iii. In case, net worth is negative it should be shown as (-).

5. <u>Current Ratio Index, CR</u>   10

   CR   : $\dfrac{CA}{CL}$

   CA   :   Current Assets include inventory, spares & stores, consumables, chemicals, finished stock, debtors, receivables, cash & bank balance and deposits etc. for the financial year 2012-2013.

   CL   :   Current Liabilities include creditors, outstanding payment, interest and instalments, cane arrears and other provisions etc. for the financial year 2012-2013.

6. <u>Inventory Control Ratio Index, ICR</u>   10

   ICR = $\dfrac{IC}{IP} \times 100$

   IC   =   Inventory including stores and spares, chemicals and allied materials as on 31st March, 2013.

   IP   =   Inventory including stores and spares, chemicals and allied materials as on 31st March, 2012.

   Note:

   i)   If the factory is in operation either on 31.3.12 or 31.3.13, then stock of empty gunny bags equivalent to 15 days production or actual running of plant whichever is lower, will be deducted from the respective inventory figures.

   ii)   In order to verify the above, please furnish statement of cost of production in the enclosed Proforma along with the audited balance sheet for 2011-2012 and 2012-2013.

   iii)   No audited balance sheet means no marks.

   ****