

**Smart Ganna
Kisan**



SMART GANNA KISAN (SGK)

Presented by:
**Sanjay R.
Bhoosreddy**
Additional Chief
Secretary

Coverage of SGK Project

Inception
Year - 2018

- Coverage Area - **2,50,000 sq.kms.**
- **120** Sugar Mills, **45** Districts.
- **168** Cane Co-operative Societies.
- **6** Million Sugarcane Growers.

Rs.35,000
Crore worth
of sugarcane
sold to
Sugar Mills



Problems & Constraints before SGK

- Cane Marketing was dominated by *Cane Mafias*.
- Effacement of Cane Co-operative Societies.
- Different Systems and Methodologies prevailing in Sugar Mills.



- Deliberate concealment of Vital Data

Disadvantages before **SGK** Partially Computerized.

- Data Sets in **Different** Formats and



- Data Sets were **Prone** to Errors.
- **Unnecessary** visits to Sugar Mills and different Offices.
- **Manipulation** of Data Sets.
- **Lack** of Transparency and Intermittent Communication.

Objectives of

SGK

➤ **Technology Driven and
Transparent Cane Marketing.**

➤ **Real-time Information
Dissemination.**

➤ **Elimination of Middlemen and
Cane Mafias.**

➤ **Reduction in Cut-to-Crush Time.**

➤ **Spreading Digital Awareness in**



Process Re-engineering with All Stakeholders

Engineering

➤ **Brain-storming** Sessions.

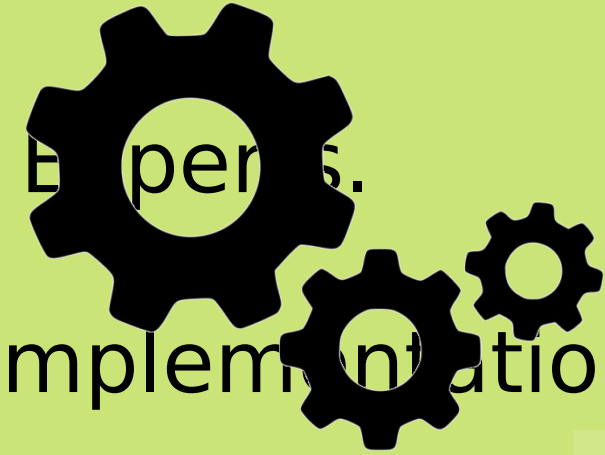
➤ **Discussion** with IT Experts.

➤ **Centralized** Implementation

Monitoring.

➤ **Co-operative** Development Societies - **Ag**

Change.



System Architecture

**Data Acquisition - HHCs
equipped with GPS**

Central Database

**Website
caneup.in**

**E-
Ganna
App**

SMS

**Enquir
y
Termin
als**

Paradigm Shift

- **Manual to Digital** - Cane Survey.
- **Paperless Work** - Digital Calendar and SMS Purchies.
- **Digital Revalidation** of Purchies.
- **Online** Randomized Transfers of Weighment Clerks.
- **Online** Verification and Correction of Data.

- **Transparency** - Complete and verifiable



Acceptability and Outreach



- **SGK Website Hits - 5.1 crore.**
- **SGK Website Grower Hits - 16.46 crore.**
- **E-Ganna App Downloads - 44.40 lakh.**
- **Mobile App Hits - 81.57 crore.**

Benefits to Farmers

➤ **Fresh** Sugarcane Supplies
Increased Weight.

➤ **More** Area under Sugarcane -
Higher Income.

➤ **Real-time** Information and
Transparency.

➤ **Additional** Income worth

Rs.2,752.00 crore due to

Increased Weight on Account of
Fresh Cane Supplies.



Benefits to Mills

of Fresh Sugarcane.

- **Better** Capacity Utilization.
- **Reduced** Cut-to-Crush Time.
- **Increase** in Sugar Recovery.
- **Additional** Income worth

Rs.3,332crore.



and **Better** Control.

Benefits to Government

iciency and



Effectiveness.

➤ **Effective** Complaint Redressal

Mechanism.

➤ **Cuts** Layers in Governance.

➤ **Minimized** Litigation between



➤ **3.63 lakh** Fake and Do **Smart Ganna Kisan**

Gains to all Stakeholders

New Members of Cane

Development Societies.

➤ **Paperless** and **Eco-friendly**.

➤ **Trust Ensured** - Increased Faith of Farmers in the System.

➤ Helped Foster **Covid Appropriate Behaviour** - Prevented gathering of Farmers.

➤ **Saving** of Time and **Drudgery** of Stakeholders.



Cost-Benefit Analysis

➤ Cost of the System -

5.65 crore

➤ Cost Benefit - **11,555**

crore

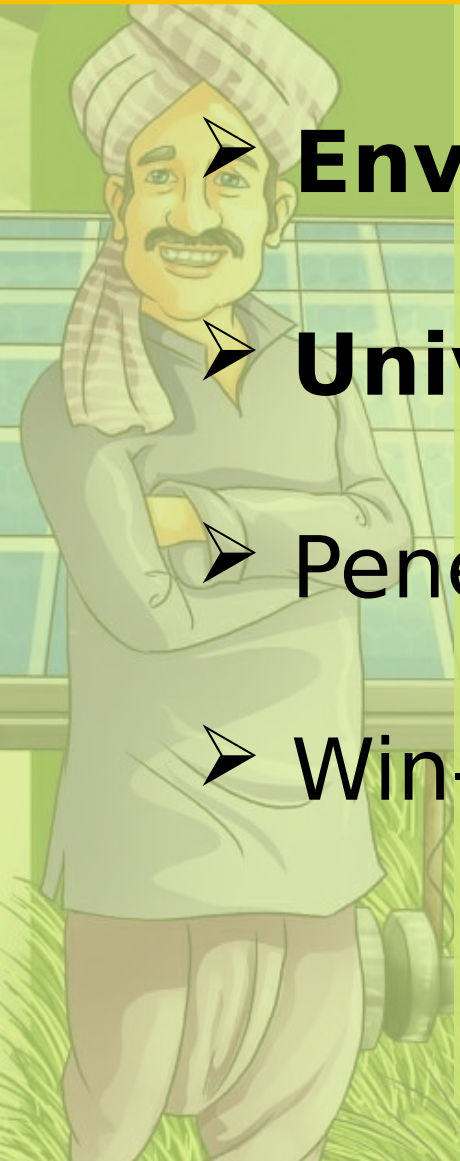
➤ CB Ratio : $5.65 \div$

$11,555 = \mathbf{1 : 2,04}$



Sustainability

- **Environment** Friendly.
- **Universal** Acceptability.
- Penetration of IT in **Rural Areas**.
- Win-win situation for **All Stakeholders**.





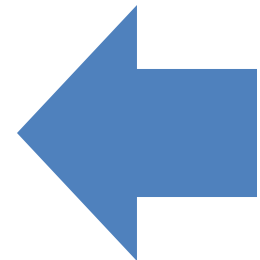
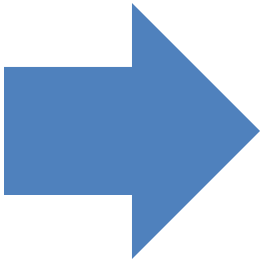
***THANK
YOU!***

1. Saving in Travel Cost of Farmers

Table - 1

Average number of Visit by Sugarcane Grower to Sugar Mill		Average Travel Cost Per Visit (Rs.)	No. of Sugarcane Grower in U.P.	Saving in Travel Cost in One Year Post ERP Period (Cr. Rs.)
Pre ERP	Post ERP			
1	2	3	4	5
12	0	75	45,00,000	405

Saving travel cost in two years = $405 \times 2 = 810$ Cr

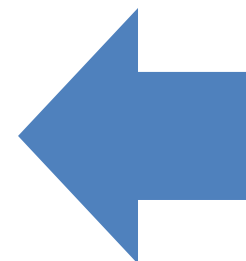
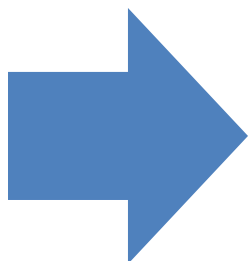


2. Profit of Sugarcane Grower due to Increase Supply of Sugarcane to Sugar Mills in place of Jaggery units Post ERP

Table - 2

Average Cane Crush		Increase in Crush (Lakh Ton)	Average Realization of Increase Crush Cane by Mills @ Rs.320* per/Qtl. (Cr. Rs.)	If Increase Crushed Cane Supplied to Jaggery Units @ Rs.255 per Qtl. (Cr. Rs.)	Average Profit Post ERPs @ Rs.100 per/Qtl. Col.4 – Col.5 (Cr. Rs.)
Pre ERP 2014-15 to 2016-17 (Lakh Ton)	Post ERP 2017-18 to 2019-20 (Lakh Ton)				
1	2	3	4	5	6
739	1,087	348	11,136	8,874	2,262

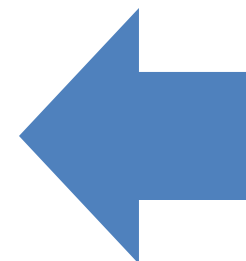
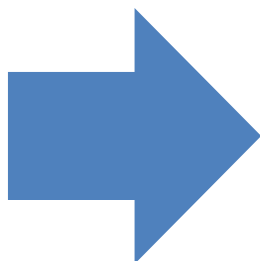
***Average SAP rate of last three years**



3. Additional Income due to Increase Weight on Account of Fresh Cane Supply

Table - 3

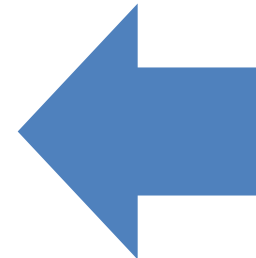
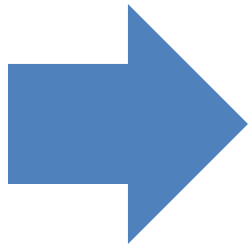
Season	Total Crush Post ERP (Lakh Ton)	Increase Weight due to Fresh Cane Supply @ 4% of Total Crush (Lakh Qtl.)	Avg. SAP Rate of Sugarcane (Rs./Qtl.)	Additional Gain due to Fresh Cane Supply (Cr. Rs.)
1	2	3	4	5
2018-19	1,031.67	412.67	320	1,320
2019-20	1,118.02	447.20	320	1,431
Total				2,751



4. Average Increase in Recovery due to Fresh Cane Supply Post ERP

Table - 4

Season	Total Crush Post ERP (Lakh Ton)	Increase in Sugar Production due to reduced cut to crush, 0.5% (Lakh Qtl.)	Average Sugar Rate (Rs./Qtl.)	Total Additional Income due to Increase in Recovery (Cr. Rs.)
1	2	3	4	5
2018-19	1,031.67	51.58	3,100	1,598
2019-20	1,118.02	55.90	3,100	1,732
Total				3,330



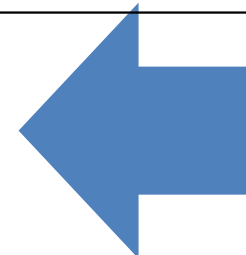
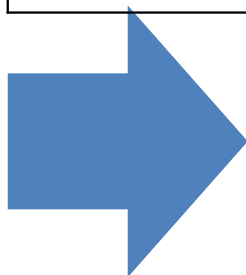
5. Avg. Profit when Farmers are Cultivating Sugarcane instead of Paddy and Wheat Pre ERP and Post ERP period

Table -5

Pre ERP Avg. Sugarcane Area 2014-15 to 2016-17 (Lakh Hect.)	Post ERP Avg. Sugarcane Area 2017-18 to 2019- 20 (Lakh Hect.)	Increased Area in Post ERP (Col.2 – Col.1) (Lakh Hect.)	Average Profit (Rs./Hect.)*	
			Paddy Cultivation	Wheat Cultivation
1	2	3	4	5
2079	25.9	5.11	29,062	38,384
Yearly Average Profit (Rs./Hect.)			Post ERP	
Paddy + Wheat Cultivation (Col.4 + Col.5)	Sugarcane Cultivation **	Yearly Net Profit (Rs./Hect.)	Total Profit due to Increased Sugarcane Area 5.11 lakh Hect. (Col.3 X Col.8) (Cr. Rs.)	
6	7	8	9	
67,446	90,551	23,105	1,180	

*Source CACP Marketing Season 2019-20.

**Source U.P. Council of Sugarcane Research 2019-20



6. Average Profit in Conversion Cost of Sugar due to Increase in Gross Days of Sugar Mills Post ERP

Table-6

Season	Sugar Production (Lakh Qtl.)	Average Reduction in Conversion Cost of Sugar (Rs./Qtl.)	Total Saving in Conversion Cost. (Cr. Rs.)
1	2	3	4
2018-19	1,182	50	591
2019-20	1,263	50	631
Total			1,222

Total Gain to Sugarcane Growers in a Year is Rs.7,303 Cr.

Total Gain to Sugar Mills in a Year is Rs.4,252 Cr.

Total Gain is Rs.11,555 Cr

