





# SMS Based Mid-Day Meal Monitoring System



# Objective



- ▶ Tracking of mid-day meal will decipher the loop holes of the scheme and solve the monitoring issue. This program would help in central monitoring of the scheme thus increasing the transparency in scheme. This would have a direct impact in the proper delivery of mid-day meals in the school.
- ▶ It will enable tracking of monitoring of the mid-day meal scheme effectively and disproportionate food.
- ▶ Stock management can be done to maintain the inventory on the basis of meal consumption.

# Project Features



SMS based Mid Day Meal monitoring application



Online Monitoring of distribution of Mid Day Meal in schools through the Mid Day Meal portal.



Online attendance report of students



Stock and Cooking Cost Management

SMS Number



51969

# Types of SMS



## ATTD

प्रतिदिन वद्या र्थयों की उपस्थिति (Daily Attendance Marking)

## STKU

प्रतिसप्ताह उपलब्ध अनाज और कु कंग कॉस्ट (Weekly Stock Update)

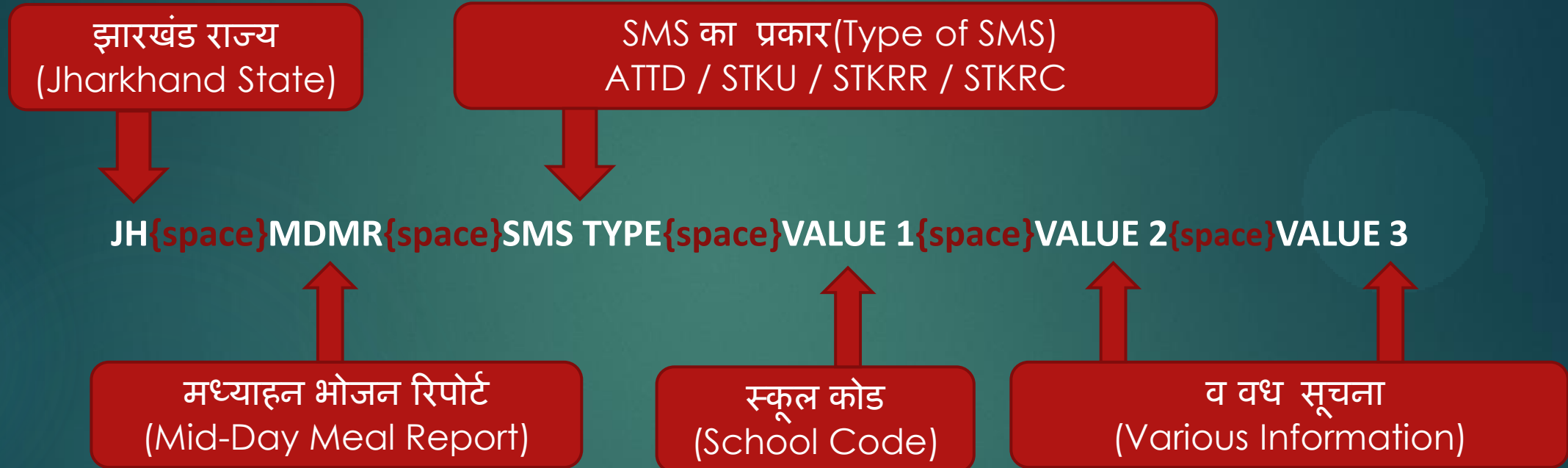
## STKRR

प्राप्त अनाज की मात्रा (Stock Received for Rice)

## STKRC

प्राप्त कु कंग कॉस्ट (Amount Received for Cooking Cost)

# SMS Format



# SMS Example



ATTD

- JH MDMR <SMS Type> <School Code> <I –V Students > <VI – VIII Students>
- JH MDMR ATTD 1234567 20 30

STKU

- JH MDMR <SMS Type> <School Code> <Rice> <Cooking Cost> <Add. Cost>
- JH MDMR STKU 1234567 200 300 400

STKRR

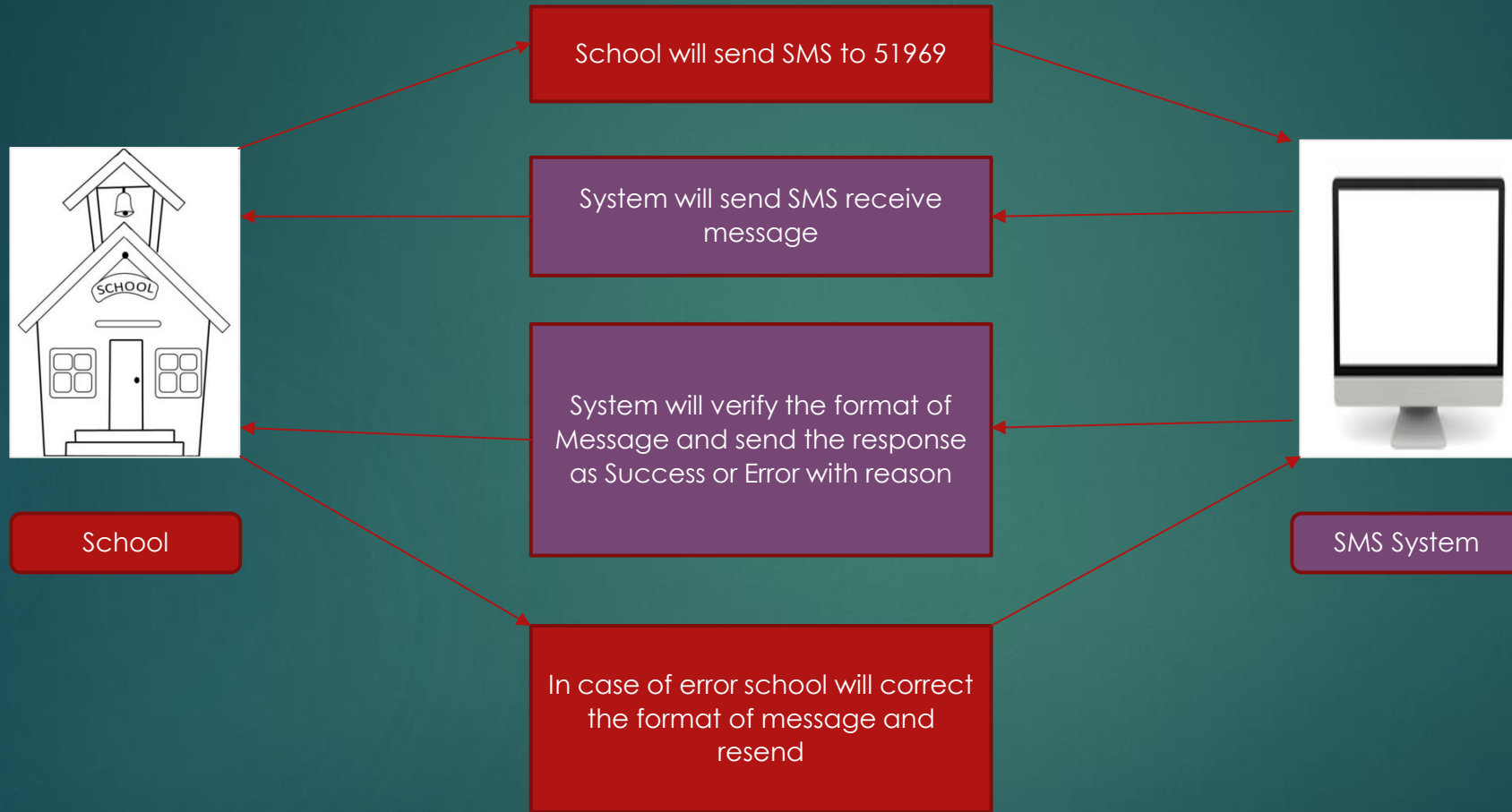
- JH MDMR <SMS Type> <School Code> <Received Quantity of Rice>
- JH MDMR STKRR 1234567 2000

STKRC

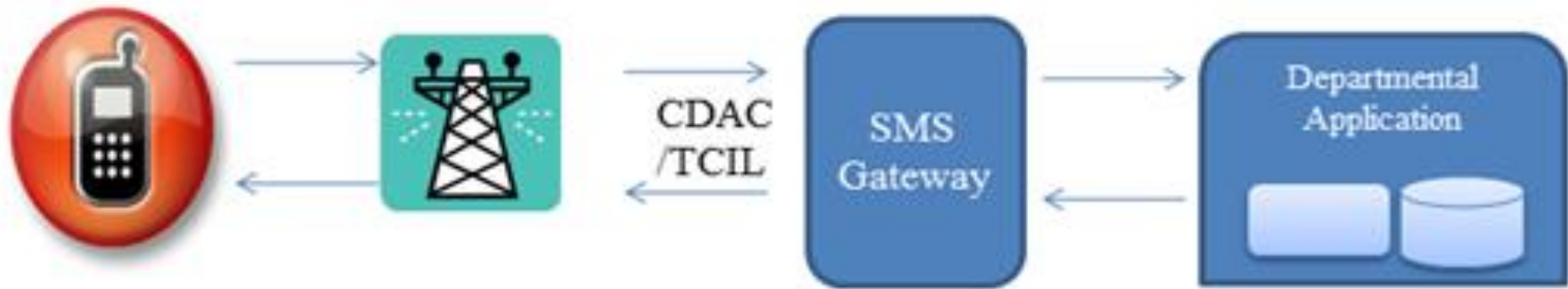
- JH MDMR <SMS Type> <School Code> <Received CC> <Received AC>
- JH MDMR STKRC 1234567 2000 3000



# SMS Process



# SMS Pull Service



<u>Keyword</u>	<u>Sub Keyword</u>	<u>Parameter/ Argument</u>
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**Send Message to 51969**

JH	MDMR	ATTD 1234 34 56
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**Message**

# Process Flow



## Send SMS

- School Authority will Send SMS From Registered Mobile Number to 51969



## Receive Message

- SMS Gateway will call MDMR web service which will create plain text files of received messages at local server



## Process Message

- MDM scheduler which is running every minute will process the text file and insert records in the database and then it will be available on the portal



# Monitoring Portal



<http://mdmreport.jharkhand.gov.in>



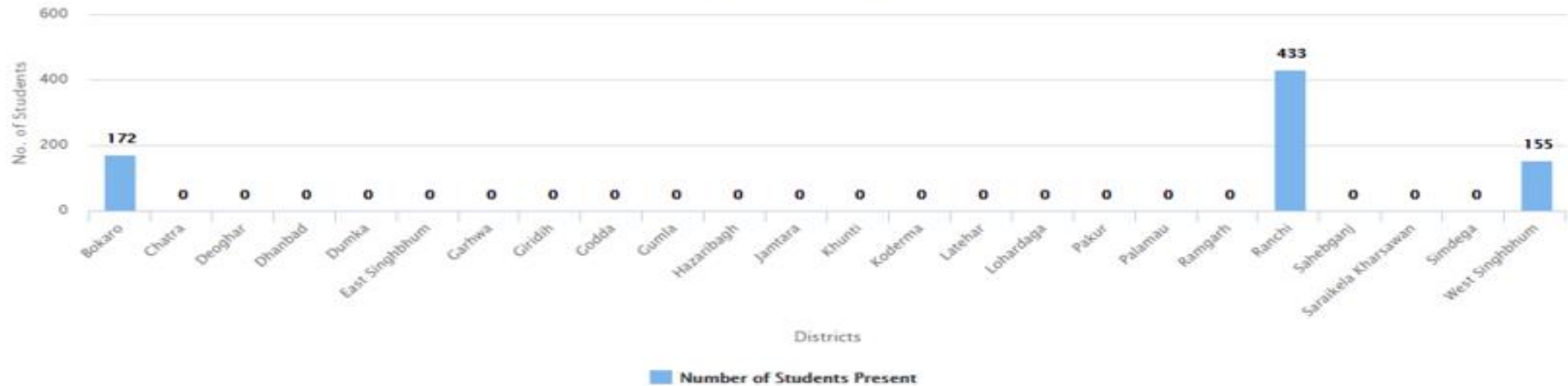
# Monitoring Dashboard



Number of SMS Received Today <b>21</b>	Number of Schools Sent Attendance Today <b>13</b>	Number of Schools Not Sent Attendance Today <b>41987</b>
Number of Schools Sent Available Stock Today <b>1</b>	Number of Schools Received Rice Today <b>4</b>	Number of Schools Received Cooking Cost Today <b>3</b>

☰ District Wise Daily Attendance Of Students Based on Received SMS

### District Wise Representation



# Daily Attendance Detail



Today's Attendance Received from SMS

DISTRICT NAME	BLOCK NAME	SCHOOL NAME	CLASS I TO V	CLASS VI TO VIII	TOTAL
RANCHI	KANKE	GOVT MIDDLE SCHOOL BMP DORANDA RANCHI-2	30	40	70

# Stock Consumption Calculation

SN	Food Item	Class 1 to 5	Class 6 to 8
1	Rice	100 gm	150 gm
2	Cooking Cost	3.86 Rs	5.78 Rs

Daily Rice consumption = # students present (1 to 5) X 100 + # students present (6 to 8) X 150

Daily Cooking Cost = # students present (1 to 5) X 3.86 + # students present (6 to 8) X 5.78

Available Stock = Current Stock - Daily consumption

Available Cooking Cost = Current Cooking Cost - Daily Cooking Cost

# Stock Status



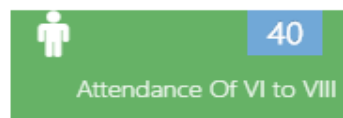
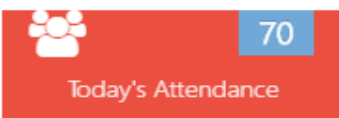
Stock Status			
	CURRENT STATUS OF RICE AND COOKING COST		
SCHOOL NAME	STATUS	RICE	COOKING COST
GOVT MIDDLE SCHOOL BMP DORANDA RANCHI-2	✓	1003.00 Kg	922.90 Rs
SSA P. S. TAPKOCHA	✗	86.00 Kg	960.20 Rs
MIDDLE SCHOOL SEGOISAI	✗	500.00 Kg	5000.00 Rs



# Report - District Wise



MDM Summary of JHARKHAND on April 28, 2016

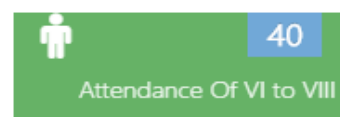
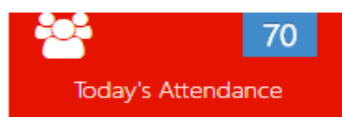


District	Attendance	Attendance of Class I to V	Attendance of Class VI to VIII	Rice Consumed (Kg)	Cost Consumed (Rs)
Bokaro	0	0	0	0	0.00
Chatra	0	0	0	0	0.00
Deoghar	0	0	0	0	0.00
Dhanbad	0	0	0	0	0.00
Dumka	0	0	0	0	0.00
East Singhbhum	0	0	0	0	0.00
Garhwa	0	0	0	0	0.00
Giridih	0	0	0	0	0.00
Godda	0	0	0	0	0.00
Gumla	0	0	0	0	0.00

# Report – Block Wise



MDM Summary of District: RANCHI on April 28, 2016



District	Attendance	Attendance of Class I to V	Attendance of Class VI to VIII	Rice Consumed (Kg)	Cost Consumed (Rs)
Angara	0	0	0	0	0.00
Bero	0	0	0	0	0.00
Bundu	0	0	0	0	0.00
Burmu	0	0	0	0	0.00
Chanho	0	0	0	0	0.00
Itki	0	0	0	0	0.00
Kanke	70	30	40	9	347.00
Khelari	0	0	0	0	0.00
Lapung	0	0	0	0	0.00
Mandar	0	0	0	0	0.00
Nagri	0	0	0	0	0.00

# Report – School Wise



MDM Summary of District: RANCHI and Block: KANKE on April 28, 2016

404 Number of Schools	70 Today's Attendance	30 Attendance Of I to V	40 Attendance Of VI to VIII	Deficit Stock	Deficit Cooking Cost
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School Name	Present	Class I to V	Class VI to VIII	Available Stock (Kg)	Available Cooking Cost (Rs)
GOVT MIDDLE SCHOOL ASHOK NAGAR RANCHI-2	0	0	0	0.00	0.00
GOVT MIDDLE SCHOOL BAJRA	0	0	0	0.00	0.00
GOVT MIDDLE SCHOOL BIT MESRA	0	0	0	0.00	0.00
GOVT MIDDLE SCHOOL BMC URDU SITHIYO	0	0	0	0.00	0.00
GOVT MIDDLE SCHOOL BMP DORANDA RANCHI-2	70	30	40	3570.0	19443.4
GOVT MIDDLE SCHOOL BOREYA	0	0	0	0.00	0.00
GOVT MIDDLE SCHOOL CHADRI	0	0	0	0.00	0.00
GOVT MIDDLE SCHOOL CHANDWE	0	0	0	0.00	0.00
GOVT MIDDLE SCHOOL CHURCH ROAD URDU	0	0	0	0.00	0.00

# Features



Easy to implement & use

Minimal user training required

Messages are authenticated on the basis of whitelisted numbers

Real Time online reporting system

Stock Management and Alert Mechanism



# Analysis



Features	SMS Based System	IVRS System
<b>Scalability</b>	The reach of SMS system is not dependent on the number of users which makes it highly scalable.	Effective IVRS system is dependent on the number of lines which will be acquired by the system.
<b>Flexibility</b>	Very easy to accommodate changes as only message parameters need to be updated.	Lengthy process to update menu and scripting.
<b>Cost Effective</b>	Minimal cost is involved as only the SMS cost of the service provider will be charged.	Initial setup of server will cost significant amount.
<b>Hassle Free user Interaction</b>	User just have to type a message and send as per his/her convenience. The sent message can be used as a template which can be reused after changing the values.	User have to go through all the menu and wait for the desired option to prompt for necessary action.
<b>Easy to setup and roll-out</b>	This system uses existing SMS gateway which will require just a web-service call to get the messages for processing.	Designing of menu, voice overs and scripting will take significant amount of time and effort

# Disadvantages of IVRS



- ▶ A lot of people don't like talking to machines.
- ▶ Older adults may have a hard time following telephone menus and lengthy instructions. And younger callers get frustrated with the slowness of multiple phone menus.
- ▶ Menus that is too long or difficult to understand
- ▶ Messages containing too much info to remember or irrelevant content.
- ▶ Voice prompts that are hard to understand because the voice talent doesn't produce the words clearly or correctly.

ॐ सह नावतु सह नौ भुनक्तु ।  
सह वीर्यं करवावहै तेजस्विनावधीतमस्तु मां वद्वषावहै।  
ॐ शान्तिः शान्तिः शान्तिः ॥

Let us protect each other. Let us eat together. Let us  
work together. Let us study together to be bright and  
successful. Let us not hate each other.  
Om Peace, Peace, Peace

