



Mid Day Meal Automated Reporting & Management System

*A Program of Department of School Education and Literacy
Ministry of Human Resource and Development*

**Application Developed by
National Informatics Centre
for
Department of Elementary Education, Himachal Pradesh &
Department of School Education & Literacy, MHRD, GoI**

Pre-Requisites for “MDM-ARMS” Implementation at <http://mdmhp.nic.in>

A. Assumptions and Dependencies

- Main Mode: **SMS, back-up through OBD/Mobile App/Web portal**
- Single figure of “**number of meals served**” per school to be received daily, and in case no meals are served, the reasons thereof.
- Availability of at least one teacher (respondent) for each school with mobile phone (*provision to tackle multiple schools by teacher*).
- **Default User Id:** Mobile number – On verification of Mobile number, password will be set/ informed to the teacher.
- **Creation of Master Data**-State, District, Education Block, School at Department level in pre-defined format –using Standard Codes at National or State level
- **Call center** at the Department level for resolving queries of teachers on phone
- NIC set up to be used for **SMS communication** modes, PI to be generated through NICS based on the estimated number of SMS to be sent/received, as per approval of TRAI/DOT.
- Data transmission on real time basis to National MDM Portal.
- In case of schools running in **shift modes**, the user will provide unique respondent mobile number for each shift (per shift uniquely identified teacher).
- A school level respondent can be mapped to the multiple school of same cluster only, if cluster concept is available.
- In case single teacher is mapped for multiple roles in a school, the application will map their mobile number for highest role only.

- During **delayed or non-reporting**, the application will escalate the alert by sending periodical group SMS to respondents as per their role/hierarchy instead of sending 3 SMS to same respondent.
- Respondent **Data Access Hierarchy** – State (all Districts) – District (all Blocks) – Block (all Clusters) – Cluster (all schools in same cluster) – School (all school mapped to the respondent).
- The transactions related to respondent **master data changes** due to new registration, transfer, activation and deactivation will be done only through web portal. However, mobile number can be changed through SMS mode.
- Full working of MDM is dependent on the availability of Internet and mobile connectivity.
- The New teacher/respondent will first be register through MDM portal along mapping of his/her schools.
- There would be no onus on the system if applicant provides incorrect details
- In case of repatriation, officer shall be responsible for knowledge transfer and handing over the functions being carried out by him to the next officer
- It is assumed that the officials will get sufficient training (hands on) on the solution
- The User/Respondent/Teacher has given an option to update their default password
- The Web application has been designed such that the application can be rendered in commonly used web browsers like Internet Explorer, Mozilla Firefox, and Google Chrome etc.

B: Steps to be followed for new State implementation

1. State Enrollment Request

New States first need to register their State in the MDM application by sending the duly filled request form to sio-hp@nic.in with copy to dg@nic.in (**State on-boarding request Form can be downloaded from the portal itself**).

2. Creation of Important Masters (It requires involvement of Nodal officer at the Head office Level)

• Location Masters – State specific master data

Master Name	Role to which accessible	Data Porting/Entry Modes	
		Backend	Web Interface
<ul style="list-style-type: none"> • State Master • District Master • Education Block Master • Education Cluster • Panchayat Master • Village Master 	State User	One time Initial Data Porting possible through data collection in pre-defined data fields in Excel sheets (please refer Annexure-I)	Insertion and modification

• MDM Masters

Master Name	Role to which accessible	Data Porting/Entry Modes	
		Backend	Web Interface
School Category	State User	One time through	Insertion and

		excel sheet (please refer Annexure-I)	modification
School Type	State User		Insertion and modification
School Master	State User		Insertion and modification
GIS Parameters	State User	One time District Boundaries Layer and School point data (latitude and longitude)	School Point Data insertion and modification (latitude and longitude)
MDM Reason Master	State User	Centralized fixed entries as per the requirement of the Ministry.	
MDM Sub-Reason Master	State User		
Deactivation code Master	State User		
Holiday Master	State, District, Block , Cluster, CHT/principle	To capture list of Holidays up to school level. Holidays entered at Higher level will automatically reflected in lower levels.	

3. Respondent/User Details

Respondent Types/Roles: State, District, Block, Cluster, CHT/Principle, Senior Teacher and MDM In-charge

Activity Name	Role to which accessible	Data Porting/Entry Modes	
		Backend	Web Interface
Respondent Enrolment	State User	One time Initial Data Porting possible through data collection in pre-defined data fields in Excel sheets (please refer Annexure-I)	Insertion and modification
Respondent-School mapping	State, District, Block , Cluster, CHT/principle	One time Initial School mapping at the time of Data Porting is possible.	Mapping and un-mapping is possible through web
Respondent Activation/Deactivation	State, District, Block , Cluster, CHT/principle	One time Back End or Through SMS	Activation/Deactivation

4. MDM Real time Data Reporting Modes.

Modes	Role to which accessible	Function to be performed
SMS	Cluster, CHT/Principle, MDM-incharge	School wise Daily and Monthly Data reporting on predefined SMS Formats (please refer Point No:7)
Mobile APP – Android platform	Block, Cluster, CHT/Principle, MDM-incharge	School wise Daily and Monthly Data reporting of their respective mapped schools, inspection data.

Web	State, District, Block, Cluster, CHT/Principle, MDM-incharge	School wise Daily and Monthly Data reporting of their respective mapped schools, inspection and modification of reported data. State User can generate and send the MDM Daily Data XML on National Portal.
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5. MDM State Specific Customization:

Activity covered	Role to which accessible	Web Mode Only
Customized Menu Name	State User	Edit Menu name as per the State requirement.
Manage Form Labels	State Users	Modify application labels as per State local language by default is English.
Notification	State User	Upload State Specific notification in the MDM Portal
Contact Details	State User	Upload State Specific notification in the MDM Portal

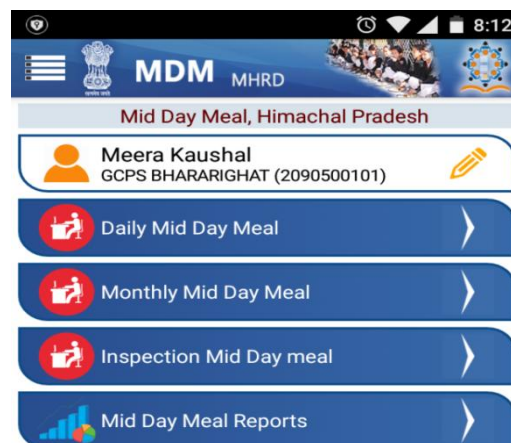
6. MDM Mobile APP (Android Platform)

- The android based Mobile APP can be downloaded from the Google Play Store
- The application can be access only through registered/authentic users.
- The BEO and DEO will have additional features of exception/Inspection through which they can send the SMS to their respective Blocks and districts.
 - MDM Mobile Application will Perform Following functions:-
 - Daily Mid-Day Meal Reporting
 - Monthly Mid-Day Meal Reporting
 - Inspection Mid-Day Meal Reporting
 - Mid-Day Meal Reports



The user can also perform following functions under the Settings tab:-

- Change Password
 - Change Mobile Number
 - Choose reporting School
 - Choose language
- ❖ If the user doesn't have an Internet connection, the user can still report the data by using the SMS option in Mobile Application. The option will allow user to send the free SMS through the mobile app in which the message format will be predefined and the user just need to enter the value.



7. Application Platform (Hosted on NIC Cloud)

- Visual Studio 2012
- .Net Framework 4.0 and above
- Database as SQL Server 2012
- Web Server IIS 6 and above
- SRS Reporting Server
- Postgres 9.1 database with PostGIS.

8. SMS Pre-requisite and Formats

- 5-digit single non-metered operator independent number **15544** to receive MDM SMS from respondents registered mobile number.
- SMS will be through a registered mobile number only.
- Mobile number of the respondent must be mapped to at least one school in the database
- In case of multiple school mapping, the respondent should mention the school order in SMS format
- SMS should be in predefined and correct format.
- SMS should be sent with-in defined time period.
- **MDM H (Help)** to know about the SMS format and respondent mapped school detail.
- **MDM** – Keyword for daily data
- **MDM M** - Keyword for monthly data
- **MDM A** – Keyword for mobile verification
- **MDM P** – Modification of already registered mobile number
- **MDM 45** - Daily Data for single mapped school – In case multiple school mapping – SMS followed by School order as D1 or D2 or D3 etc.
- **MDM 0 1 2** – Daily data with reason(1-4) and sub reason (1:1-3,2:1-3,3:1-3,4:1-2)
- **MDM 0 5** – Daily data with reason (5-6)

ANNEXURE-I

Master Data Collection – Field detail

Sr. No.	Data Field	Type	Mandatory	Remarks (All codes as per DISE)
1.	State Code	Char(2)	Yes	
2.	District Name	Varchar(50)	Yes	
3.	District code	Char(4)	Yes	StateCode+Char(2)
4.	Block Name	Varchar(50)	Yes	
5.	Block Code	Char(6)	Yes	DistrictCode+Char(2)
6.	Cluster Name	Varchar(50)	Yes	
7.	Cluster Code	Char(10)	Yes	BlockCode+Char(4)
8.	Village Name	Varchar(50)	Yes	
9.	Village Code	Char(9)	Yes	BlockCode+Char(3)
10.	School Name	Varchar(100)	Yes	
11.	School Code	Char(11)	Yes	VillageCode+Char(2)
12.	Panchayat Name	Varchar(50)	Yes	
13.	Panchayat Code	Char(9)	Yes	BlockCode+Char(3)
14.	School Category	Varchar(50)	Yes	
15.	School Category Code	Int	Yes	
16.	School Type	Varchar(50)	Yes	
17.	School Type Code	Int	Yes	
18.	Pin Code	Varchar(6)	Yes	
19.	Name of BEEO	Char(50)	Yes	
20.	Mobile number	Char(10)	Yes	
21.	Name of CHT/Principle	Char(100)	Yes	
22.	Mobile number	Char(10)	Yes	

23.	Name of Senior Teacher	Char(50)	Yes	
24.	Mobile number	bigint	Yes	
25.	Name of MDM Incharge	Char(50)	Yes	
26.	Mobile number	Char(10)	Yes	
27.	School Shift for which respondent detail belong	number	Yes	
28.	School Longitude	Varchar(20)	No	
29.	School Latitude	Varchar(20)	No	

**Mid-Day Meal Automated Reporting & Management
System Collection of Master Data of Locations and
Schools/Teachers**

Instruction for filling data in the Excel Sheet:

1. **One worksheet** of Excel Workbook must contains data for **one District** Only
2. **Name** of the worksheet can be set to the Name of the District whose data is present in the worksheet
3. Excel Sheet Contains **29 Columns**. These are:
 - a. SNO Serial Number for the record
 - b. StateName Name of the State
 - c. StateCode Code of the state **as per DISE**
 - d. DistrictName Name of the District
 - e. DistrictCode Code of the district as per DISE
 - f. Block Name Name of the Block
 - g. BlockCode Code of the block as per DISE
 - h. ClusterName Name of the School Cluster (*may not be available*)
 - i. ClusterCode Code of the cluster as per DISE
 - j. VillageName Name of the Village in which School falls
 - k. VillageCode Code of the village as per DISE
 - l. SchoolName Name of the School (e.g. GPS XYZ or GMS ABC)
 - m. SchoolCode Code of the School as per DISE
 - n. PanchayatName Name of the Panchayat in which School falls
 - o. PanchayatCode Code of the Panchayat as per DISE

p. SchoolType Type of the School (e.g. Primary, Middle etc)

q. SchoolTypeCode Code of the School Type as per list below

i. List of the options as records in our database

SchoolTypeCode SchoolType

1. 1	Government
2. 3	Government Aided
3. 4	EGS/AIE Centres
4. 5	NRBC
5. 6	SPC

r. SchoolCategory Category of School (e.g. State Department Owned, Govt Funded etc.)

s. SchoolCategoryCode Category Code of the School as per list below

i. List of the options as records in our database

SchoolCategoryCode SchoolCategory

1. 1	Primary
2. 2	Upper Primary
3. 50	Primary with Upper Primary

t. Pincd Pin code of the area where the school falls

u. BEEOName* Name of the Block Level Officer

v. BEEOMobile Mobile number of the Block Level Officer

w. ClusterInchargeName* Name of the School Cluster Incharge

x. ClusterInchargeMobile Mobile number of the Cluster Incharge

y. CHTName* Name of CHT(Center Head Teacher)/Principal of School

z. CHTMobile Mobile number of CHT/Principal

aa. STName* Name of Senior Teacher of school

bb. STMobile Mobile number of the Senior Teacher

cc. MDMInchargeName* Name of the School MDM(Mid Day Meal) Incharge

dd. MDMInchargeMobile Mobile Number of School MDM Incharge

ee.

4. **Name for Each Designation** (*fields marked with **) must be followed by his/her valid mobile number where SMS can be sent or updates can be received.
5. If Some designation* is vacant in the school then both the corresponding column Name and Mobile should be kept blank (*Please do not mention vacant or missing or such phrases in such cases*)
6. Block level officer cannot be a part of any of the school designations i.e. Cluster In-charge/CHT/ST/MDM In-charge
7. A Block must be mapped to only one person.
8. Similarly a Cluster In-charge cannot be a part of any of the school

- designations i.e. CHT/ST/MDM In-charge
9. If a person holds more than one charge of the school, his/her entry must be done in the highest charge columns
 10. **Fields from A-V are mandatory** and are strictly required to be filled
 11. All Mobile numbers must be valid and **please don't fill landline** numbers in place of mobile numbers
 12. The **cell must be formatted as text** in Excel sheet.
 13. Header column are pre defined and are to be used for data porting, so please do not change any of them.
 14. There must be a **block level officer attached to each block**
 15. Fill the Mobile number with special consideration as all the communication of the school has to be come through registered mobile number
 16. CHT/Principal can have charge of multiple school so such entries should be marked in each of the schools where they are linked
 17. One person should be mapped with only one mobile number in the whole State
 18. **Avoid dragging** the records among the sheet as it may leads to incorrect data in the sheet

Data collection Excel Sheet format

#	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Sr. No.	State	DISTRICT	district code	Block Name	blkcd	Cluster Name	Cluster Code	Village Name	Village Code	School Name	School Code	Panchayat Name	Panchayat Code
2	1	2	3	4	5	6	7	8	9	10	11	12	13	14
3	1	HP	SOLAN	209	DHUNDAN	20905	DHUNDAN	209050001	DHUNDAN	20905054	GSSS DHUNDAN	2090505401	DHUNDAN	20905008
4	2	HP	SOLAN	209	DHUNDAN	20905	BHARARIGHAT	209050020	BHARARIGHAT	20905001	GCPS BHARARIGHAT	2090500101	BHARARIGHAT	20905001
5	3	HP	SOLAN	209	DHUNDAN	20905	BHARARIGHAT	209050020	DASERAN	20905002	GPS NALAG	2090500201	DASERAN(BHARARIGHAT)	20905004
6	4	HP	SOLAN	209	DHUNDAN	20905	BALERA	209050002	JOBRI	20905003	GPS JOBRI	2090500301	SARMA	20905039
7	5	HP	SOLAN	209	DHUNDAN	20905	BANI MATERNI	209050018	JAINAGAR	20905004	GPS PANJAL	2090500401	MATERNI	20905003
8	6	HP	SOLAN	209	DHUNDAN	20905	BHARARIGHAT	209050020	CHANARARI	20905005	GPS GATER	2090500501	DASERAN(BHARARIGHAT)	20905004
9	7	HP	SOLAN	209	DHUNDAN	20905	SARYANJ	209050004	LODOG	20905006	GPS LADOG	2090500601	KUNHER	20905005
10	8	HP	SOLAN	209	DHUNDAN	20905	GHARIACH	209050015	LODOG	20905006	GMS LADOG	2090500602	KUNHAR	20905041
11	9	HP	SOLAN	209	DHUNDAN	20905	SARYANJ	209050004	PUMBER	20905007	GPS PUMBER	2090500701	SARYANJ	20905006
12	10	HP	SOLAN	209	DHUNDAN	20905	SARYANJ	209050004	GARURNAG	20905008	GPS GARURNAG	2090500801	SARYANJ	20905006
13	11	HP	SOLAN	209	DHUNDAN	20905	SARYANJ	209050004	DHARTH	20905009	GPS DHARTH	2090500901	SARYANJ	20905006
14	12	HP	SOLAN	209	DHUNDAN	20905	SARYANJ	209050004	SARHECH	20905010	GPS SARHECH	2090501001	KUNHER	20905005
15	13	HP	SOLAN	209	DHUNDAN	20905	DHUNDAN	209050001	DHUNDAN	20905011	GCPS DHUNDAN	2090501101	DHUNDAN	20905008
16	14	HP	SOLAN	209	DHUNDAN	20905	DHUNDAN	209050001	CHAMAKARI	20905012	GPS CHAMAKARI	2090501201	DHUNDAN	20905008
17	15	HP	SOLAN	209	DHUNDAN	20905	DHUNDAN	209050001	CHAMAKARI	20905012	GMS CHAMAKARI	2090501202	DHUNDAN	20905008
18	16	HP	SOLAN	209	DHUNDAN	20905	DHUNDAN	209050001	PASSAL WALA	20905013	GPS PASSAL	2090501301	DHUNDAN	20905008
19	17	HP	SOLAN	209	DHUNDAN	20905	DHUNDAN	209050001	TUIRU	20905014	GPS TUIRU	2090501401	DHUNDAN	20905008
20	18	HP	SOLAN	209	DHUNDAN	20905	DHUNDAN	209050001	AER	20905015	GPS AER	2090501501	DHUNDAN	20905008
21	19	HP	SOLAN	209	DHUNDAN	20905	DHUNDAN	209050001	MEANA	20905016	GPS GHAYANA-MAYANA	2090501601	DHUNDAN	20905008
22	20	HP	SOLAN	209	DHUNDAN	20905	KANSWALA	209050005	KANSTAWALA	20905017	GPS KANSWALA	2090501701	PARNOO	20905009
23	21	HP	SOLAN	209	DHUNDAN	20905	KANSWALA	209050005	RAURI	20905018	GPS RAURI	2090501801	DARLA GHAT	20905024
24	22	HP	SOLAN	209	DHUNDAN	20905	DARLA GHAT	209050011	RAURI	20905018	GHS RAURI	2090501802	DARLA GHAT	20905024
25	23	HP	SOLAN	209	DHUNDAN	20905	KANSWALA	209050005	SARDAMRAS	20905019	GPS SARDAMRAS	2090501901	PARNOO	20905009
26	24	HP	SOLAN	209	DHUNDAN	20905	KANSWALA	209050005	SERA	20905020	GPS SERA	2090502001	KASLOG	20905012
27	25	HP	SOLAN	209	DHUNDAN	20905	DARLA GHAT	209050011	SERA	20905020	GMS SERA	2090502002	KASLOG	20905012

O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC
School Category	School Category	School Type	sctype	pincd	Name of BEEOs	Contact No.	Name of CHT/Principal/ Incharge of School	Contact No.	Name of Senior Teacher	Contact No.	Name of Teacher (MDM Incharge)	Contact No.	School Longitude	School Latitude
15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Upper Primary	2	Department of Educatio	1	173235	Sehdev Lal	9459028256	Joginder Singh	9882789503	Babu Ram Sharma	9418138268	Kanshi Ram	8628024460	38.898556	38.898556
Primary	1	Department of Educatio	1	173235	Sehdev Lal	9459028256	Meera Kaushal	8894347181	Meera Kaushal	8894347181	Meera Kaushal	8894347181	38.898557	38.898557
Primary	1	Department of Educatio	1	173235	Sehdev Lal	9459028256	Meera Kaushal	8894347181	Bhupender	9882935809	Bhupender	9882935809	38.898558	38.898558
Primary	1	Department of Educatio	1	173221	Sehdev Lal	9459028256	Indira Devi	9805505162	Ishwar Singh	9418679950	Babu Ram	9459243816	38.898559	38.898559
Primary	1	Department of Educatio	1	173221	Sehdev Lal	9459028256	Vinod Kumar	9805354842	Shayam Lal	9418628948	Shayam Lal	9418628948	38.898560	38.898560
Primary	1	Department of Educatio	1	173235	Sehdev Lal	9459028256	Meera Kaushal	8894347181	Prakash Chand	9882406570	Prakash Chand	9882406570	38.898561	38.898561
Primary	1	Department of Educatio	1	173221	Sehdev Lal	9459028256	Rakesh Soni	9736608404	Padam Dev	9816580054	Gyan Chand	9817039909	38.898562	38.898562
Upper Primary	2	Department of Educatio	1	173221	Sehdev Lal	9459028256	Yash Pal Verma	9805392725	Bal Dev	9816461054	Krishan Kant Gau	9418371301	38.898563	38.898563
Primary	1	Department of Educatio	1	173235	Sehdev Lal	9459028256	Rakesh Soni	9736608404	Mansa Ram	9805675754	Mansa Ram	9805675754	38.898564	38.898564
Primary	1	Department of Educatio	1	173235	Sehdev Lal	9459028256	Rakesh Soni	9736608404	Pawan Kumar	9736350156	Pawan Kumar	9736350156	38.898565	38.898565
Primary	1	Department of Educatio	1	173235	Sehdev Lal	9459028256	Rakesh Soni	9736608404	Jagdish Chand	9816565202	Jagdish Chand	9816565202	38.898566	38.898566
Primary	1	Department of Educatio	1	173221	Sehdev Lal	9459028256	Rakesh Soni	9736608404	Hemchand	9816294672	Hemchand	9816294672	38.898567	38.898567
Primary	1	Department of Educatio	1	173235	Sehdev Lal	9459028256	Shashi Kiran	9318076374	Shashi Kiran	9318076374	Duni Chand	9418120300	38.898568	38.898568
Primary	1	Department of Educatio	1	173235	Sehdev Lal	9459028256	Shashi Kiran	9318076374	Jai Mala	9418101112	Jayoti Bala	9817339499	38.898569	38.898569
Upper Primary	2	Department of Educatio	1	171102	Sehdev Lal	9459028256	Lalit Kumar	9816045072	Kamal Kumar	9817117240	Lalit Kumar	9816045072	38.898570	38.898570
Primary	1	Department of Educatio	1	173235	Sehdev Lal	9459028256	Shashi Kiran	9318076374	Purnima	9418050201	Purnima	9418050201	38.898571	38.898571
Primary	1	Department of Educatio	1	173235	Sehdev Lal	9459028256	Shashi Kiran	9318076374	Rakesh Kapila	9418384593	Bhuvneswar	9459231999	38.898572	38.898572
Primary	1	Department of Educatio	1	173235	Sehdev Lal	9459028256	Shashi Kiran	9318076374	Dinesh	8091407771	Dinesh	8091407771	38.898573	38.898573
Primary	1	Department of Educatio	1	173235	Sehdev Lal	9459028256	Shashi Kiran	9318076374	Kiran Bala	9459557106	DharmaPal	9882184862	38.898574	38.898574
Primary	1	Department of Educatio	1	171102	Sehdev Lal	9459028256	Ravinder Kumar	9816305096	Ravinder Kumar	9816305096	Pankaj Thakur	9816095735	38.898575	38.898575
Primary	1	Department of Educatio	1	171102	Sehdev Lal	9459028256	Ravinder Kumar	9816305096	Mohinder Lal	8894321418	Mohinder Lal	8894321418	38.898576	38.898576
Upper Primary	2	Department of Educatio	1	171102	Sehdev Lal	9459028256	Indu Sharma	9418028768	Rekha Rathor	9459158460	Maya Devi	9418435298	38.898577	38.898577
Primary	1	Department of Educatio	1	171102	Sehdev Lal	9459028256	Ravinder Kumar	9816305096	Anupama	9805457865	Hem Raj	9816181264	38.898578	38.898578
Primary	1	Department of Educatio	1	171102	Sehdev Lal	9459028256	Ravinder Kumar	9816305096	Heera Devi	9459348395	Heera Devi	9459348395	38.898579	38.898579
Upper Primary	2	Department of Educatio	1	171102	Sehdev Lal	9459028256	Vijay Kumar	9418048211	Kamla Devi	9459740403	Vijay Kumar	9418048211	38.898580	38.898580
Primary	1	Department of Educatio	1	171102	Sehdev Lal	9459028256	Nand Lal	9805840173	Nand Lal	9805840173	Veena Kumari	9459040193	38.898581	38.898581
Primary	1	Department of Educatio	1	171102	Sehdev Lal	9459028256	Nand Lal	9805840173	Sunita Gautam	9418534562	Sunita Gautam	9418534562	38.898582	38.898582
Primary	1	Department of Educatio	1	171102	Sehdev Lal	9459028256	Nand Lal	9805840173	Jagat Ram	9817016351	Amar Dev	8679500309	38.898583	38.898583
Primary	1	Department of Educatio	1	171102	Sehdev Lal	9459028256	Nand Lal	9805840173	Ashwani Kumar	9459863797	Ashwani Kumar	9459863797	38.898584	38.898584

Contact

State Informatics Officer
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राष्ट्रीय
सूचना - विज्ञान केंद्र
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