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D.O. No. W-11011/21/2015-Water I (Pt.I)
Dated the 18th December, 2015

Subject: Successful model of Interactive Voice Response System for hand pump maintenance by the State of Madhya Pradesh

Madam / Sir,

I am happy to intimate you that the State of Madhya Pradesh has started an **"Interactive Voice Response System for Hand Pump Maintenance"** in their State to attend to the complaints regarding functioning of hand pumps installed in the State. Recently, I have visited a few villages in Indore Division of Madhya Pradesh and personally verified the same. This system is running satisfactorily and most of the complaints are attended to within a maximum period of three days.

2. A brief note on the Interactive Voice Response System for hand pump maintenance is enclosed for your ready reference. Since in your State too, water supply is predominantly provided through hand pumps, I request you to replicate the same in your State, as many a times, public representatives complain about non-functioning of hand pumps at various forums. Since, National Informatics Centre (NIC) has developed this in Madhya Pradesh, you can also approach them in your State and funds required for this may be used from NRDWP Support component after taking approval from the SLSCC.

With regards,

Yours sincerely,

[SATYABRATA SAHU]

To

Principal Secretary / Secretary in-charge of Rural Drinking Water Supply in the States of Assam, Bihar, Chhattisgarh, Jharkhand, Orissa, Rajasthan, Uttar Pradesh and West Bengal.

Copy to:

1. PS to Hon'ble Minister, MDWS
2. PPS to Secretary, MDWS

[SATYABRATA SAHU]
Sustainable Drinking Water and
Sanitation for all in Rural Areas

ग्रामीण क्षेत्रों में
पेयजल स्थायित्व एवं सम्पूर्ण स्वच्छता

INTERACTIVE VOICE RESPONSE SYSTEM FOR HAND PUMP MAINTENANCE IN THE STATE OF MADHYA PRADESH

(Interactive Voice Response (IVR) is an automated telephony system that interacts with callers, gathers information and routes calls to the appropriate recipient.)

There are about 5.28 Lakh Handpumps installed in the entire state. Prior to IVRS based complaint readdressal system, complainant has to make complaint to the concerning Handpump Mechanic/Sub Engineer/Assistant Engineer either on telephone or in the complaint registers maintained in the Janpad Panchayat / Jila Panchayat Office. In the absence of the telephone no. of the concerned PHE Officials the Villagers were facing lot of problems to make the handpumps working. This process of lodging complaints in the Office, was time consuming and required physical appearance. On the contrary, some times due to wrong information provided by the complainant, Departmental Staff was getting confused regarding the real problem and location of Handpumps.

To overcome these issues, it was felt that identity of each handpump is necessary. After detailed survey and enquiry from the software professionals it had been concluded that GIS mapping of each handpump is necessary. For GIS mapping of Handpumps, Tablet PCs were purchased and a software was developed, through which a Unique ID of each handpump (in 10 digits) is created after GIS mapping by Tablet PC.

After GIS mapping and generation of Unique ID of each Handpump of the State a GSM sim bearing no. 9200067890 was integrated with the above software. This Software was further modified for the IVR System. Complainant has to make a call on this no. and after entering the 10 digit Unique ID of Handpump the software registers the complaint and sends information to the concerned Handpump Mechanic/Sub Engineer/Assistant Engineer about the exact location of the Handpump and type of problem within few seconds. The handpump is repaired by the departmental officials within 3 days time. After repair complainant is also informed to know about his satisfaction on the complaint resolution.

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