

Program monitoring and quality assurance using real -time monitoring checklist during National Deworming Day program (February 2019)

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Introduction



According to world health organization estimates, 220 million children in India between the ages of 1 and 14 are at risk of parasitic intestinal worms, also known as soil transmitted helminths (STH).



They can cause anemia and under-nutrition, thereby impairing mental and physical development. In areas where parasitic worms are endemic, administering safe, effective deworming drugs to children at schools and anganwadis is a development best buy due to its impact on educational and economic outcomes and low cost.



In India, almost 7 in 10 children in the 6-59 months age group are anaemic. Nearly half of children under five in India are stunted and approximately 43% are underweight and the prevalence of anaemia in girls and boys of the age group 15-19 years is 56% and 30% respectively.



Children with the highest intensity of STH infestation are often too sick or tired to concentrate at school or attend school at all. Subsequent life outcomes of these children are also considerably impacted due to lower lifetime incomes.

NDD – National Deworming Day



- It is a fixed day mass *anganwadi* and school based deworming approach which has the potential to ensure maximum coverage with optimal utilization of resources, by leveraging existing programs and infrastructure.
- NDD is observed in all states/UTs of the India on 10 February every year. It is followed up by mop-up day on 15 February, with the intent to deworm children who missed the dose of NDD due to sickness or absenteeism. (*NDD operational guidelines*)
- **Goal of NDD** – the objective of NDD is to deworm all pre-school and school age children between the ages of 1-19 years (enrolled in schools, registered in anganwadis, unregistered and out-of-school) through the platform of schools and anganwadis in order to improve their overall health, nutritional status, access to education and quality of life.

Monitoring and Supervision plan

M&E is a critical component of the Evidence Action technical assistance to the Government program at both national and state level, which helps to track progress and facilitate timely decision making for program improvements and strengthening.

Key components of this strategy is rolled out during and after each deworming round, when the program is monitored through:

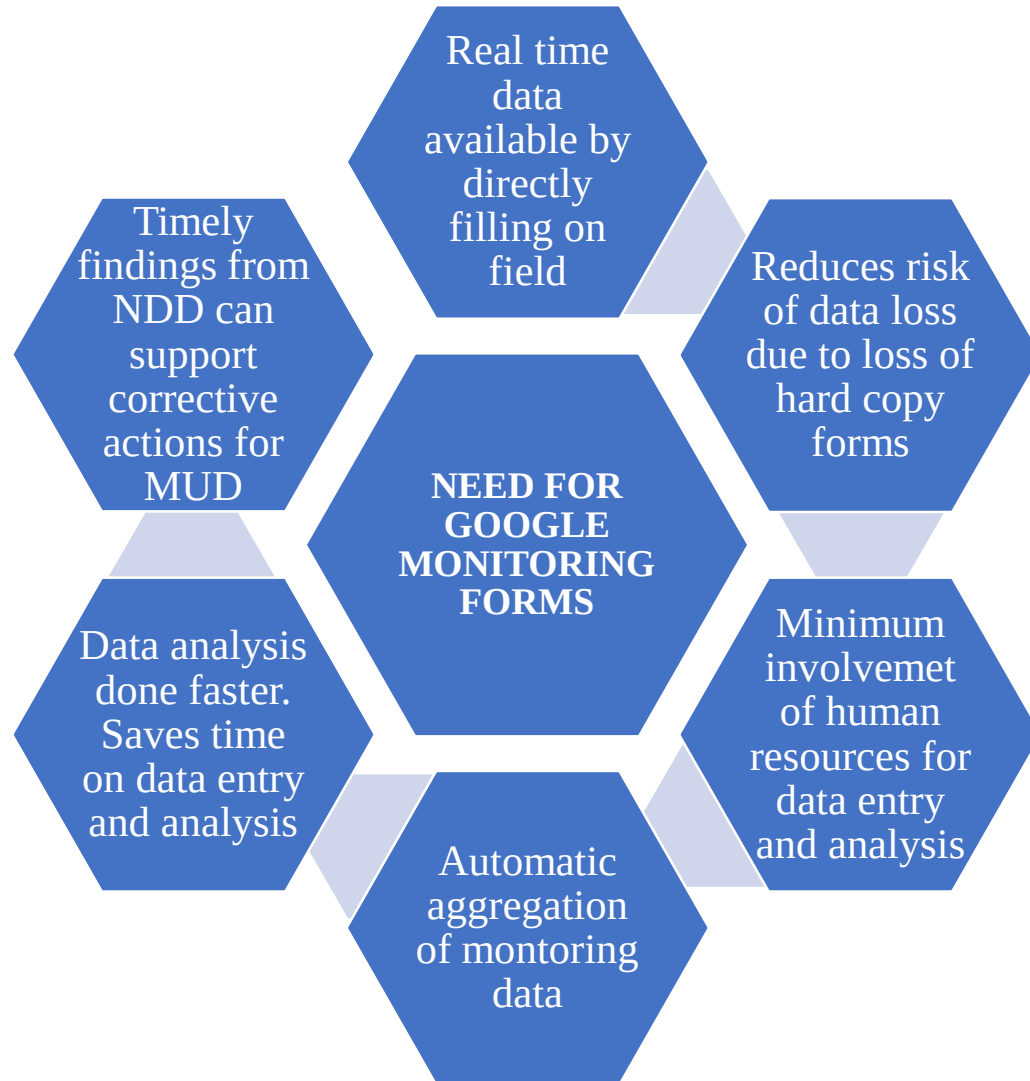
Process monitoring

- NDD Mobile App
- [NDD Google Monitoring form](#)

Coverage validation



NDD Google Monitoring forms



As a single fixed-day program, it is important that real time monitoring information from National Deworming Day is collected and analysed for corrective action on mop-up day. An efficient way of doing this was via Google forms, which is easy, can be customized easily, is free-of-cost, and can be accessed via any smartphone or laptop with internet connection.

Rationale

Google monitoring forms are process monitoring tools which allow automatic aggregation of monitoring data and gauging of results from real-time monitoring during NDD and mop-up day. It facilitates real time access to summary reporting and for timely dissemination of corrective actions to the concerned authorities for the gaps found in the field, thereby aiding in evidence based management of program implementation and quality assurance.

The purpose of this study is to understand the use of Google Monitoring forms in Program Monitoring and review its role in improvement of program quality

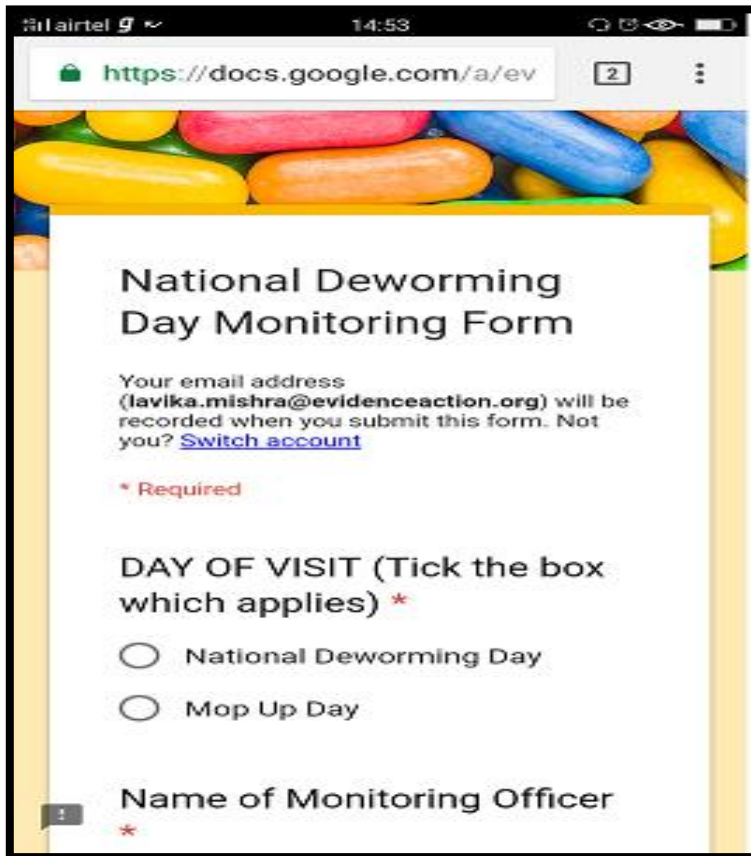
Objective

- To understand the use of Google Monitoring forms in Process Monitoring
- To review the role of Google Monitoring forms in improvement of program quality

Methodology

- **Study design** – Observational cross-sectional descriptive study
- **Study setting** - India Evidence Action states
- **Duration** – 3 months (4th Feb – 3rd May 2019)
- **Method of data collection** – google preparatory checklist tracker, google monitoring forms response sheet, training monitoring tracker and documented communication with responsible authority for real time corrective actions
- **Study tools** – training monitoring forms, preparatory checklist, NDD/MUD monitoring form
- **Analysis plan** - Desk review, Field visit to Schools and *Anganwadis*, Close support to the Evidence Action team towards technical assistance support in program monitoring, Analysis of NDD field monitoring data

Objective 1 - To understand the use of Google Monitoring forms in Process Monitoring



The image shows a mobile browser interface displaying a Google Form titled "National Deworming Day Monitoring Form". The form is overlaid on a background image of colorful, bean-shaped pills. The form includes a header section with the title, a privacy notice about email recording, and a "Required" label. Below this is a section titled "DAY OF VISIT (Tick the box which applies) *" with two radio button options: "National Deworming Day" and "Mop Up Day". At the bottom, there is a text input field for "Name of Monitoring Officer *" with a red asterisk indicating it is required.

airtel 14:53
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National Deworming Day Monitoring Form

Your email address (lavika.mishra@evidenceaction.org) will be recorded when you submit this form. Not you? [Switch account](#)

* Required

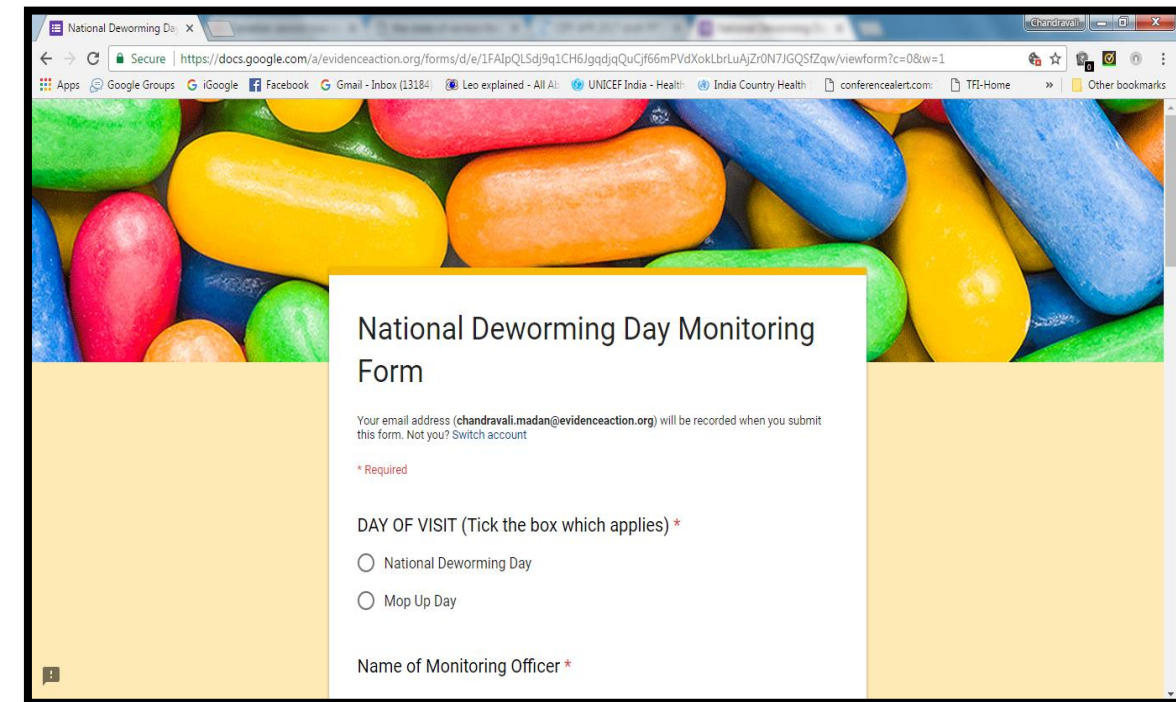
DAY OF VISIT (Tick the box which applies) *

☐ National Deworming Day

☐ Mop Up Day

Name of Monitoring Officer *

MOBILE
VIEW



The image shows a laptop browser interface displaying the same Google Form. The form is centered on the screen, and the background image of colorful pills is visible. The form content is identical to the mobile view, including the title, privacy notice, "Required" label, "DAY OF VISIT" section with radio buttons, and the "Name of Monitoring Officer *" field.

National Deworming Day X
Secure | https://docs.google.com/a/evidenceaction.org/forms/d/e/1FAIpQLSdj9q1CH6JgqdgQuCj66mPVdXokLbrLuAjZr0N7/GQSFZqw/viewform?c=0&w=1
Apps Google Groups iGoogle Facebook Gmail - Inbox (13184) Leo explained - All AI UNICEF India - Health India Country Health conferencealert.com TFI-Home Other bookmarks

National Deworming Day Monitoring Form

Your email address (chandravali.madan@evidenceaction.org) will be recorded when you submit this form. Not you? [Switch account](#)

* Required

DAY OF VISIT (Tick the box which applies) *

☐ National Deworming Day

☐ Mop Up Day

Name of Monitoring Officer *

LAPTOP VIEW

Use of Google forms



Training quality assessment - used at district and block level to assess the level of training provided thereby facilitating training quality assessment



Preparedness monitoring - tool used during the preparatory phase of the round, to analyze the level of preparedness for NDD. It consists of a set of questions covering the following aspects - awareness, training, drug availability, IEC material, adverse event reporting form



Monitoring visits on NDD/MUD
Used to monitor the program implementation at schools and *anganwadis*. The tool is divided into following components – NDD observations, training aspects, adverse events, community awareness and IEC material



District coordinators monitoring
Daily monitoring of DCs i.e – key activities to be undertaken on that day. Helps in management and decision making

Process flow



Google forms filled in the field

- Training monitoring form
- Preparatory checklist
- NDD/MUD monitoring form

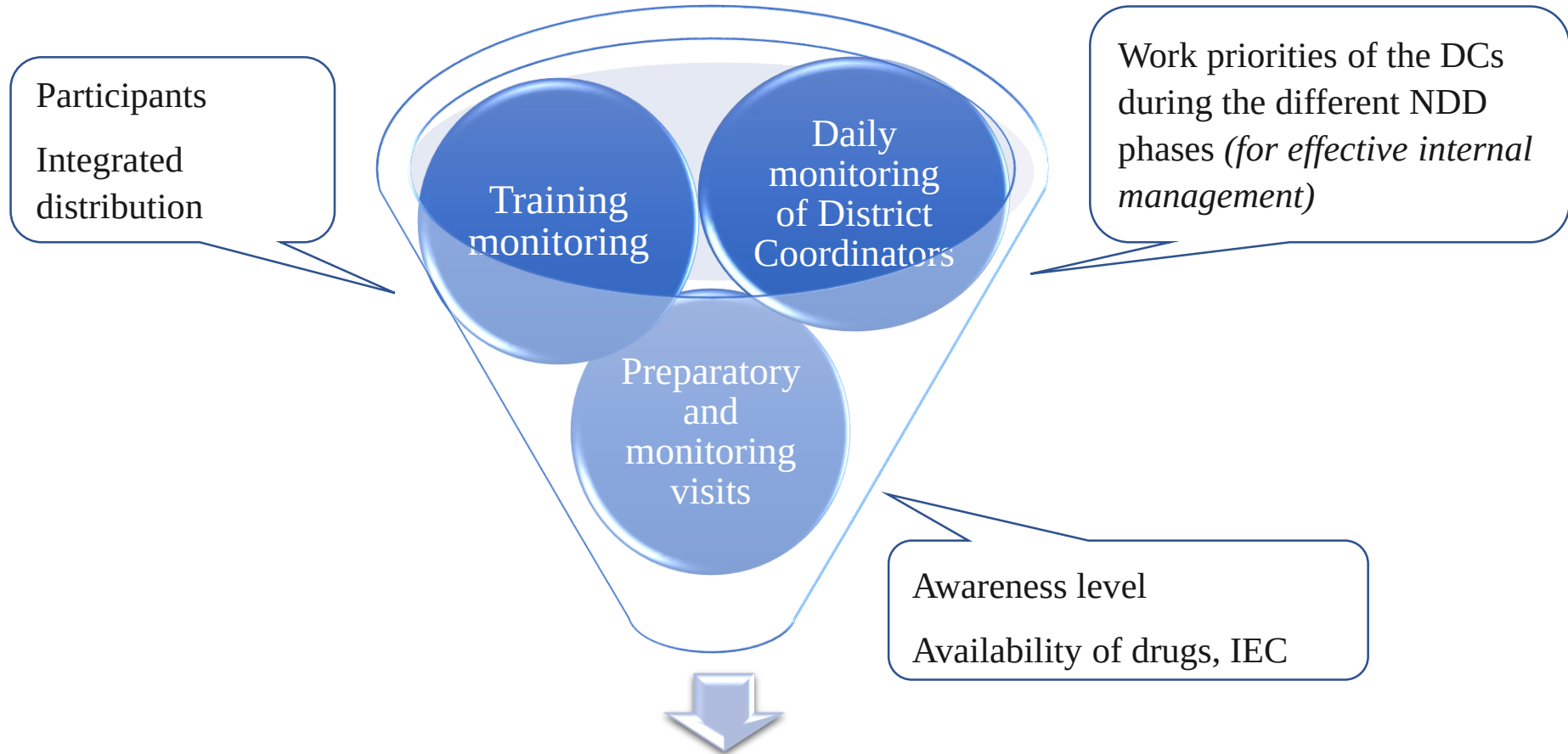
Data reaches state
M&E team by
3:00pm

Data cleaning done

Corrective actions
tracker addressing the
gaps identified shared
with the government by
evening

Device	Data collection tool	Data Transmission	Data Visualization
Mobile Devices Laptops/Computers	Google forms	Real time	Dashboards, Reports, summary tables, graphs

Corrective action



On the basis of the findings from these key performance indicators, government takes corrective actions in the form of release of program directives, letters, conducting refresher training, follow up SMSes

Annexure No. 2: Key observations from school and *anganwadi* centers on NDD February 8 and February 11, 2019

S. No.	Name of the district	Name of the block where monitoring was done	Number of schools visited / contacted	Number of anganwadi center visited / contacted	Findings/ Gaps observed
1	Udham Singh Nagar	Gadarpur, Jaspur, Sitaarganj and Bajpur	42	12	Aganwadi center Bidhaura -I, Teerath Nagar Dipiyata-3 Bhogpurdam, Jaspur; Maheshpura-4, Bijpuri, Bajpur does not have reporting form Bidhaura -I Sitaarganj; Nawgawanj Patiya, Khatima; Teerath Nagar Dipiyata-3, Jaspur; Bhagwanpur-I, Rudrapur; Pachachawala-1, Kashipur; Maheshpura-4, Bajpur were not administering drugs to OOSC and unregistered children 2 schools does not have drugs and reporting forms 5 schools does not have reporting forms
2	Chamoli	Ghat, Dasholi	38	56	Kanda Gouth Anganwadi does not conducted deworming, as they have not received drugs Dewarkhareda2 Dasholi; Anganwadi Kendra Gadoth Gairsain; Kanda Gouth Anganwadi; Anganwadi kendra mal Naryana Bazar; Lolti 2 Anganwadi Tharali were not administering drugs to OOSC and unregistered children 1 anganwadi center does not have reporting form 2 schools does not have drugs 2 schools does not have reporting forms
3	Garhwal	Pauri, Yamkeshwar	17	20	Aganwadi center Chandolarai (Prem Nagar), Awanwadi center Village Kandi does not have reporting form Aganwadi kendra Bareth, EKESHWAR; Gangotri Devi Aganwari kendra Kamoda KHIRSU; Anganwadi Kendra Chandolarai (Prem Nagar) Pauri; Anganwadi Kendra Pokhari I Thalishain; Awanwadi Kendra Village Maganpur Dugadda; Awanwadi Kendra Village Kanda Dwarikahal; Awanwadi Kendra Village Reda Jaiharikhal; Awanwadi Kendra Village Aegohakhal Rikhanikhal; Awanwadi Kendra Village Aegohakhal, Rikhanikhal; Awanwadi Kendra Village Kandi Yamkeshwar were not administering drugs to OOSC and unregistered children Govt PS Chandolarain does not have reporting form
4	Hardwar	Roorkee, Dwarikhal	29	12	2 schools does not have reporting forms 1 anganwadi center does not have drugs and reporting form

Field visit to Schools and *Anganwadis*

- Preparatory visits (N=20)
 - Gaur and Badkhalsa in Sonapat district of Haryana during pre NDD phase
- Monitoring visits (N=30)
 - Sonapat district (Haryana) and Ghaziabad district (Uttar Pradesh) during NDD/MUD

Geography covered	
Total number of sites monitored	50
Total number of blocks covered	5
Total number of Anganwadis visited	25
Total number of Schools visited	25
Total number of Government schools	16
Total number of private schools visited	5
Total number of ITI/College visited	4

Observations and findings

Benefits

- Real-time data from the point of collection
- Cost effective - no paper, printing costs
- Easy to manage and analyze large amounts of data
- Reduces intermediate levels of data transmission
- Almost instantaneous reporting
- Direct reporting
- Field-level checks on quality incorporated

Challenges

- Local language compatibility: Being developed for all languages
- Typing may be slower: learning may take time (scribbling on paper is faster)
- Lack of connectivity: on field limits real-time transmission of data
- Potential Challenges with Digital Data Collection

FINDINGS

- Color coded state specific trackers developed for preparatory and monitoring visits gave a live insight of the situation and aided greatly in taking corrective actions by sharing them with government
- Gap identified in the form on field was that the interlinked questions could accept values which had discrepancies (Number of children enrolled in schools and number of children present on day of visit)

Objective 2 - To review the role of Google Monitoring forms in improvement of program quality

Training quality assessment (key indicators)

- Age specific doses and way of consuming deworming drugs
- Availability of training kit
- Participants in the training
- Recording protocol and reporting timelines

Monitoring visits (key indicators)

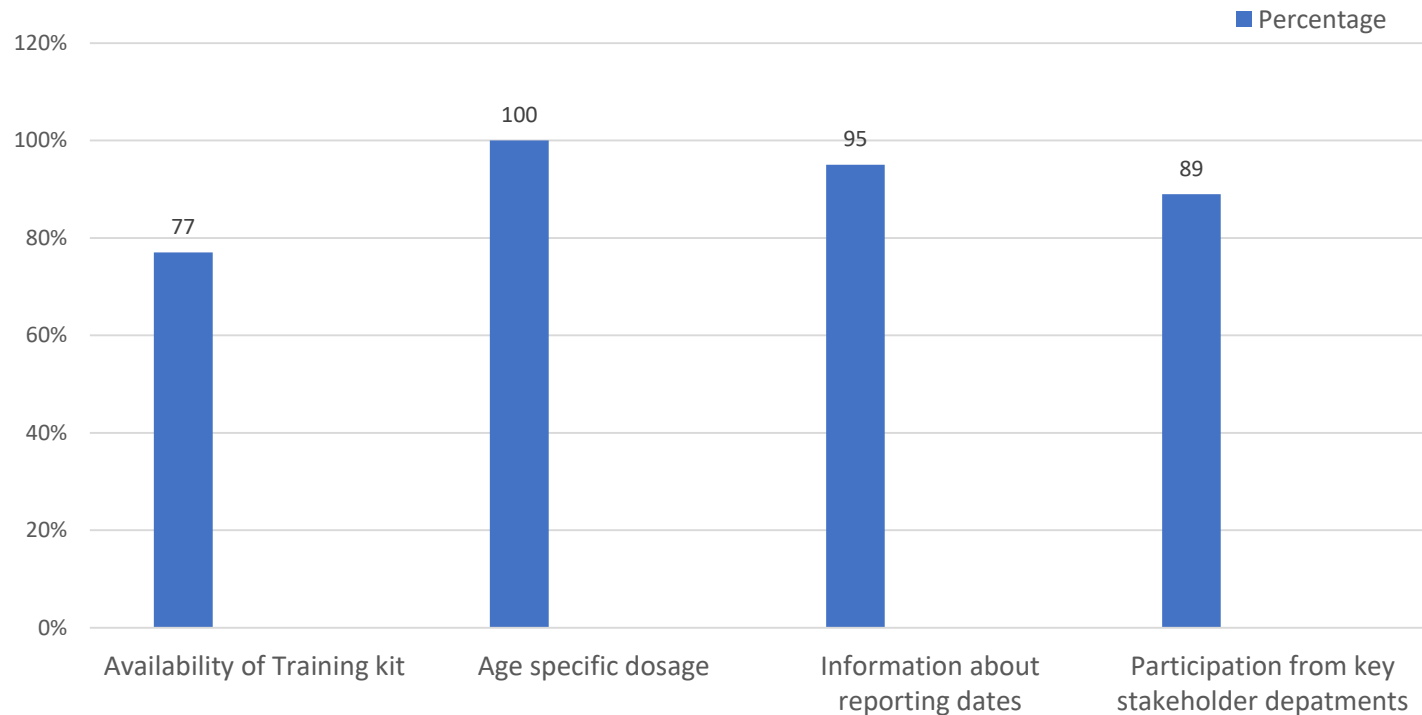
- Provision of deworming in schools and *anganwadis*
- Training participation and integrated distribution
- Awareness generation through type of community mobilization activities
- Special focus on private school participation in districts during NDD

Preparatory visits (key indicators)

- School/Anganwadi having knowledge of dates of NDD/MUD
- Teacher/Anganwadi workers attended NDD training
- Was the following available
 - Albendazole tablets
 - Posters
 - Handouts/Reporting forms

Observations and result

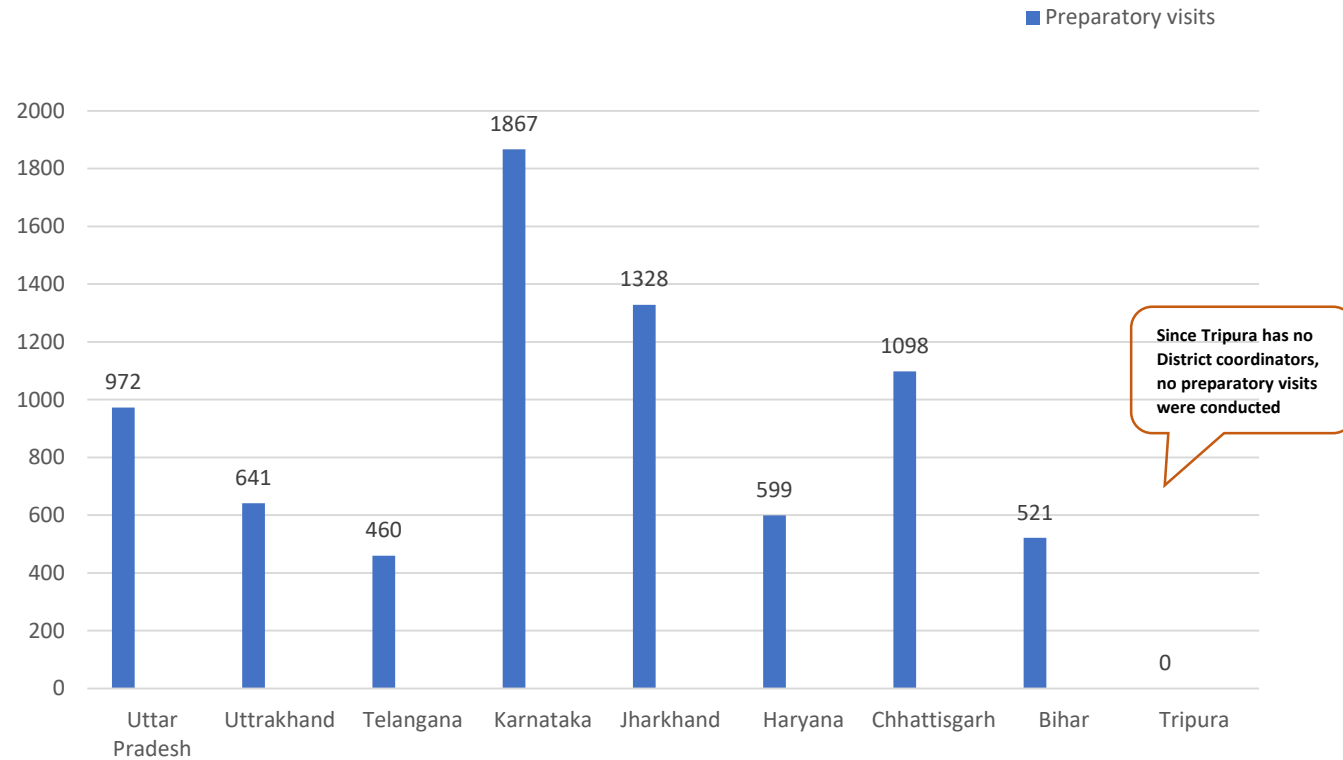
- Training quality assessment



Training Quality Assessment of NDD February 2019 round

Assessment of Training monitoring data was used to get insight into the participation from key stakeholder departments, timely organization (using time stamp), lacunas in the training and identification of key focus areas for refresher training or essential communication with stakeholders in the form of letters/emails.

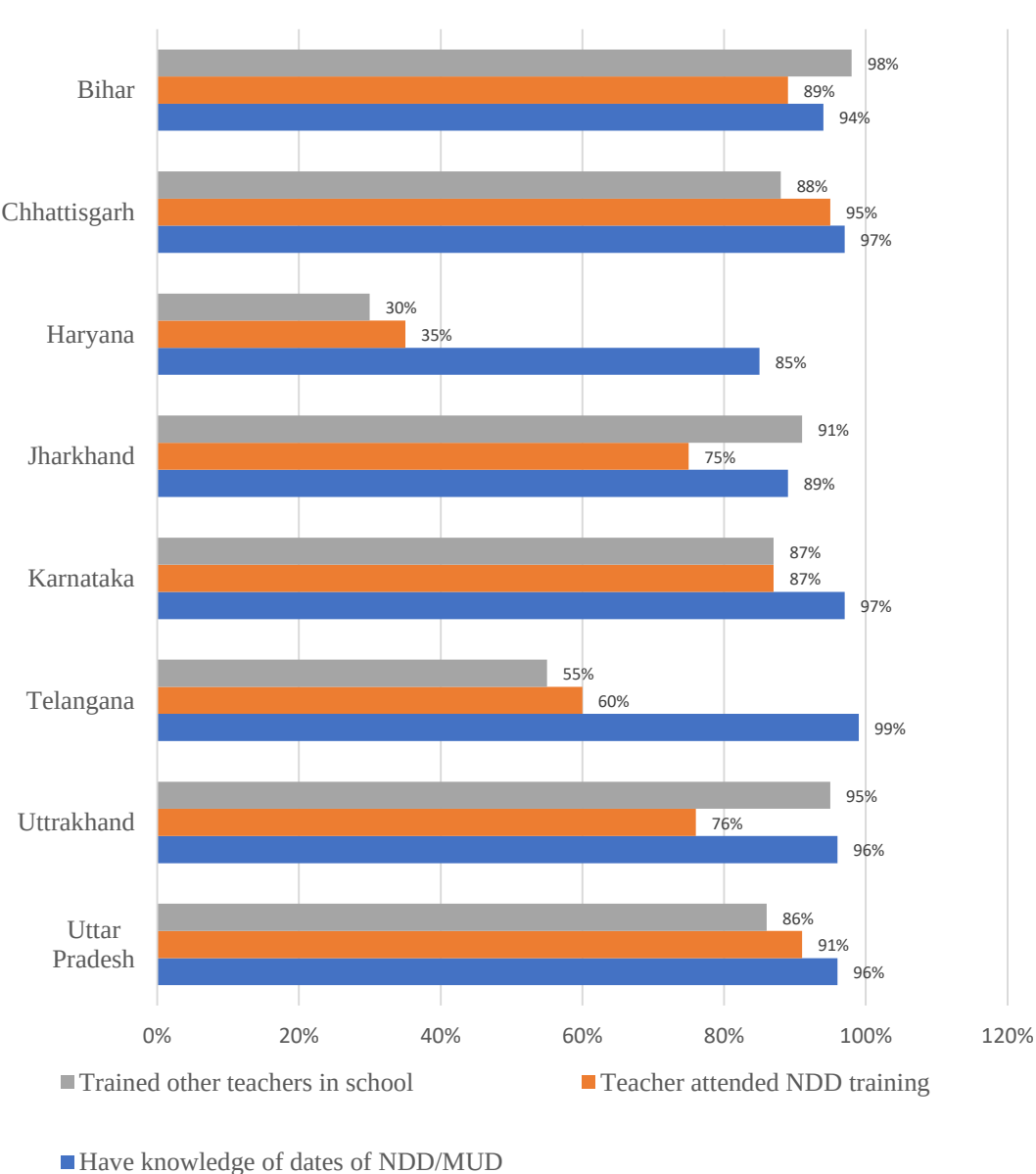
Preparatory visits



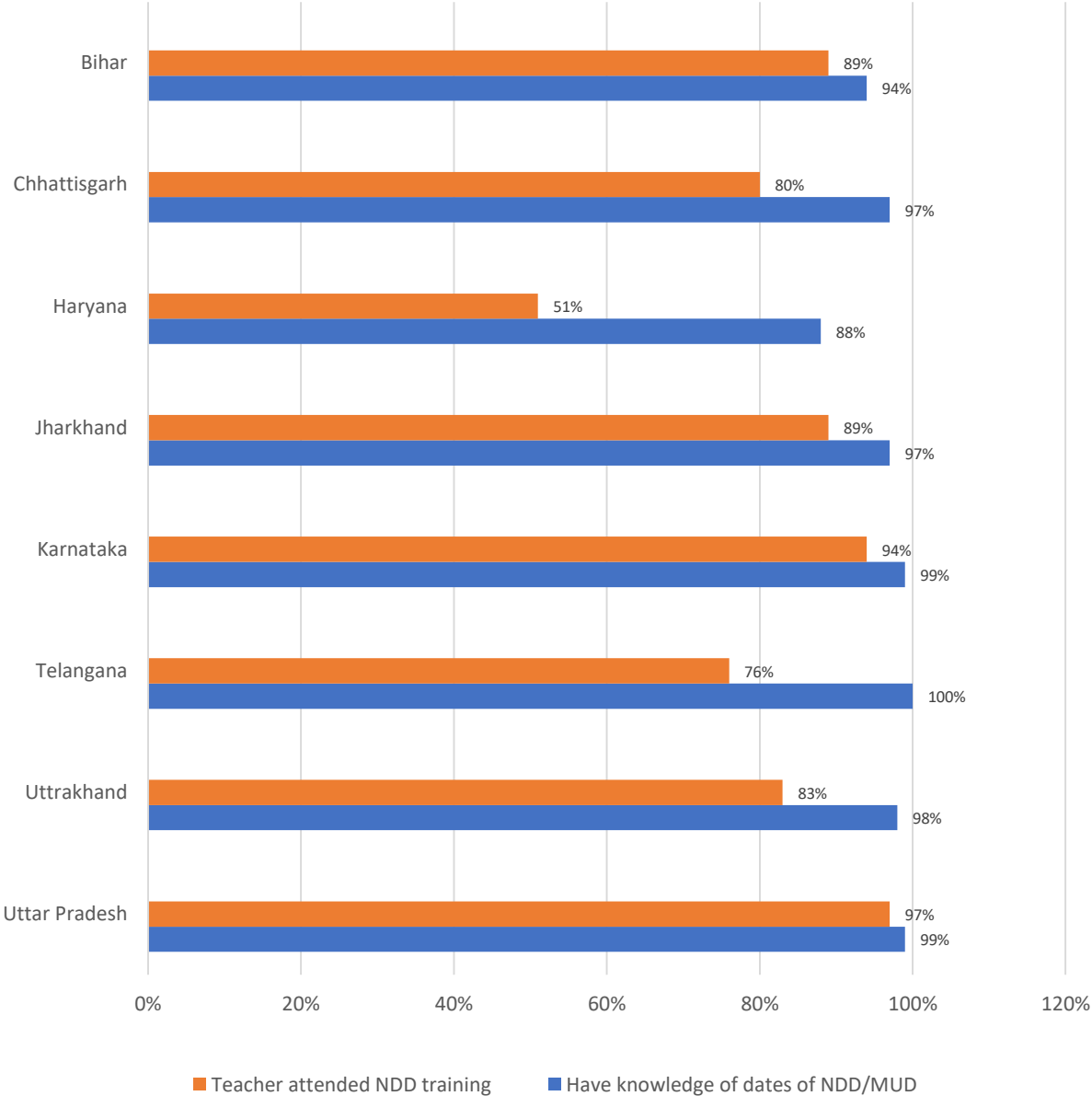
A total of 7,486 google forms were filled during the Preparatory visits for NDD February round – 2019. Out of these, 4,616 forms were filled for school visits and 2,870 forms were filled for *Anganwadi* visits.

Summary of Preparatory Monitoring Visits, National Deworming Day -
February 2019

A. Level of Awareness and Training in Schools

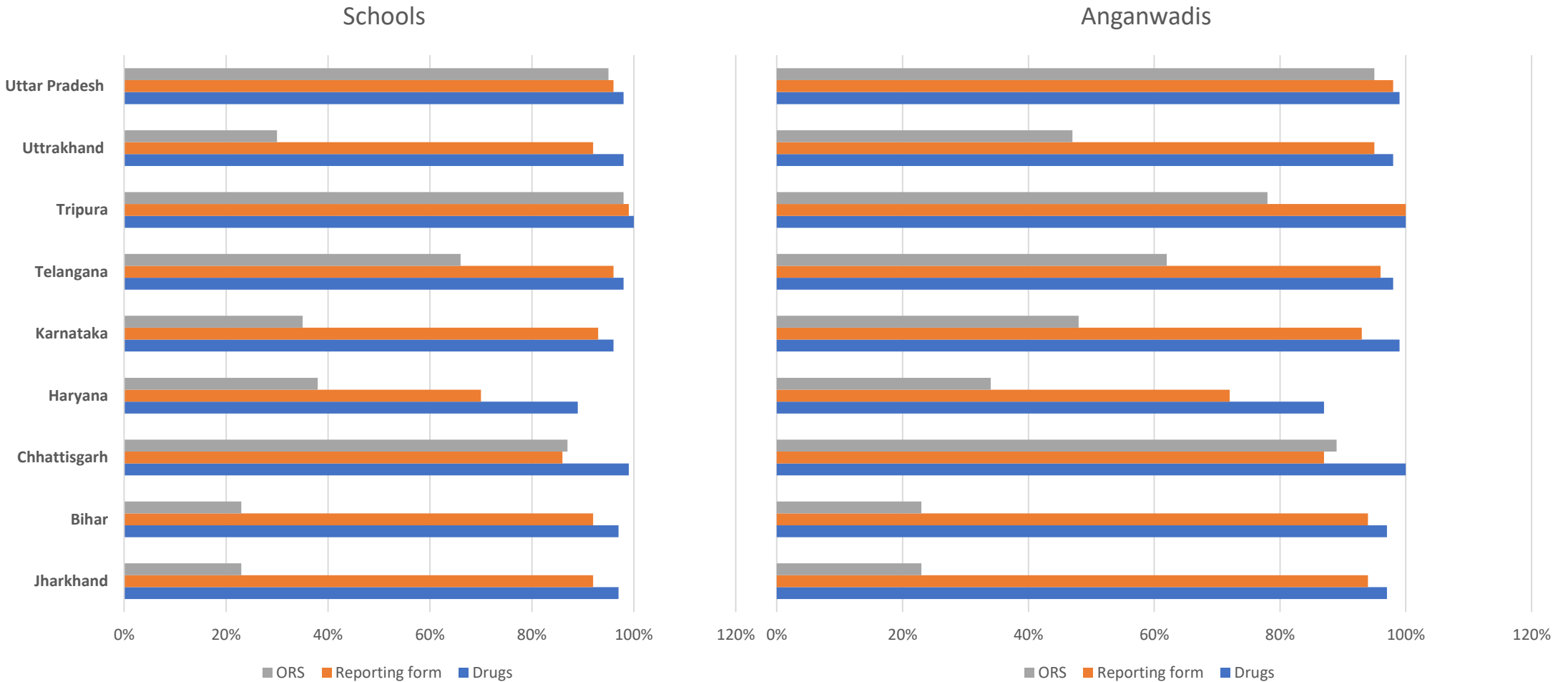


B. Level of Awareness and Training in Anganwadis

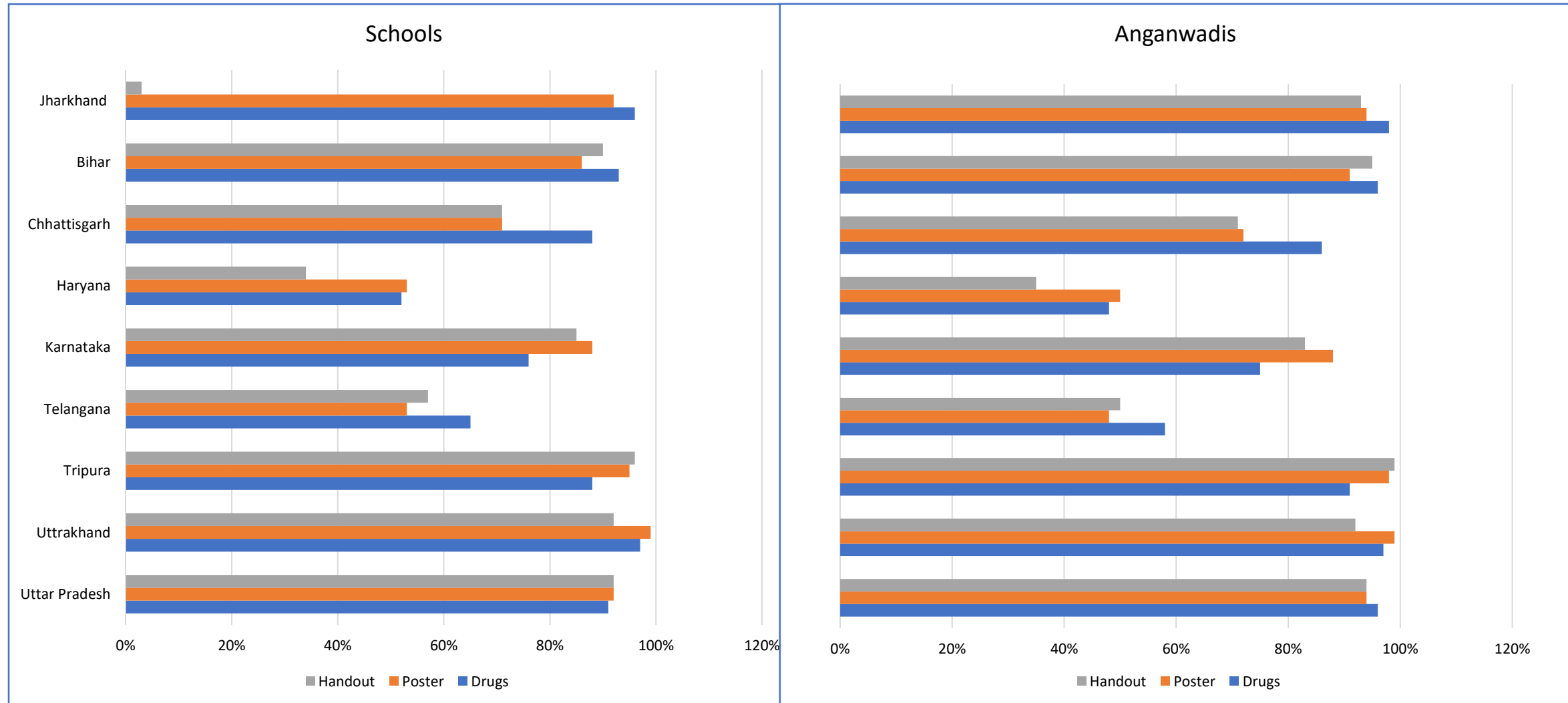


Monitoring visits

- **Availability of provision of Deworming:**



Integrated distribution during training



Corrective actions taken based on real time information

Letters issued to district and block officials for corrective actions for MUD on:

- Ensuring availability / sufficiency of albendazole tablets at schools and *Anganwadis*
- Facilitating availability of reporting formats for timely reporting
- Facilitating drug administration at schools and *anganwadis* on MUD where deworming was not conducted on NDD
- Ensuring coverage of left out children schools and *anganwadis* on MUD
- Identifying need for increase in community level awareness through miking activity till MUD



Key Findings:

- Training quality assessment revealed that discussion on drug dosage had a positive trend with 100%, but the distribution of training kit still has a low percentage of 75%
- Color coded state specific trackers developed for preparatory and monitoring visits gave a live insight of the situation and aided greatly in taking corrective actions by sharing them with government
- Gap identified in the form on field was that the interlinked questions could accept values which had discrepancies (Number of children enrolled in schools and number of children present on day of visit)



Conclusion:

- Live tracking enabled and suggest mid-course/ end course corrective actions – online forms have enabled the sharing of gaps identified on the field in real time which are shared with the responsible authority in a time efficient manner to make corrective actions.
- Process streamlined making it simple – human resource required for data collection and entry is reduced making the entire process simple and convenient. Earlier Evidence Action team had to manually fill the information from the hardcopies of the forms which was a time consuming a strenuous activity.
- Data visualization dashboard/ tracker – all the google forms have a dashboard which displays the information on key performance indicators that help us focus on the areas needing additional attention during the program.
- Efficient systems – quick analysis, uniformity across the systems. Errors are reduced as internal checks within the form exist (eg – numerical values and no vacant response space) and time management has been enhanced.

Recommendations –



Additional features like – adding more internal checks within the form will help in bringing further efficiencies.



Use of google forms in areas with low internet connectivity may continue to be a challenge which can be mitigated efficient planning of use of hard copies of these forms.

Way forward



With the establishment of MIS system, these forms can be integrated within the modules leading to enhance use of data for program improvement.



Uptake of google forms by national and state government for NDD program improvements reiterates the value addition of using these tools for meeting larger program goal to improve health and education outcomes of millions of children.

References

- National Deworming Day- Operational Guidelines 2019
- World Health Organization. Soil-transmitted helminthiases: eliminating as public health problem soil-transmitted helminthiases in children: progress report 2001-2010 and strategic plan 2011-2020.
- Parasuraman S, Kishor S, Singh SK, Vaidehi Y. A profile of youth in India. National Family Health Survey (NFHS-3) India 2005-06.
- Guideline: Preventive chemotherapy to control soil-transmitted helminth infections in at-risk population groups. WHO 2001-2010
- Monitoring and Evaluation Strategy for National deworming day.
- Vendetti JA, McRee BG, Del Boca FK. Development of the SBIRT checklist for observation in real-time (SCORE). *Addiction*. 2017 Feb;112:34-42.