

## Notes from GiveWell site visit to India to visit the Deworm the World Initiative in October 2013

### Participants

- Deworm the World Initiative staff: Sharad Barkataki (Strategy and M&E Associate Director), Christina Riechers (Director of Strategic Initiatives, Evidence Action), Anirban Majumdar (Project Coordinator, Rajasthan), Nagendra Singh Rajawat (Program Manager, Rajasthan), Priya Jha (Country Director, Rajasthan)
- GiveWell: Timothy Telleen-Lawton (Research Analyst), Holden Karnofsky (Co-Executive Director), Josh Rosenberg (Research Analyst)
- Other interviewees are identified below.

### Summary

GiveWell visited the Deworm the World Initiative (DtWI) in the state of Rajasthan in India. On Day 1, we spoke with DtWI staff about recent developments in deworming programs in Bihar and Delhi. On Day 2, we visited a training session for school representatives responsible for implementing the deworming program, spoke with a DtWI quality monitor, spoke with two school principals about the deworming program in their schools, and had extensive interviews with DtWI staff about DtWI's training model, drug distribution procedure, and monitoring and evaluation program. On Day 3, we spoke with three government officials in the state of Rajasthan about how the decision was made to do a deworming program, DtWI's role in the program, and how the deworming program compares to other school health programs. We continued to have extensive conversations with DtWI staff about the value-add of their charity.

**Note:** This set of notes was compiled by GiveWell and gives an overview of major points made by Deworm the World and other interviewees during our conversations on the site visit. It is intended to capture the statements made by the people we spoke with, and has not been vetted or corrected for precise accuracy of the statements.

### Notes from Day 1: Monday, September 30, 2013

GiveWell traveled with Deworm the World Initiative staff (Christina Reichert and Sharad Barkataki) from Delhi to Jaipur, which is in the state of Rajasthan. While traveling, we spoke about recent developments in DtWI's deworming programs in Delhi and DtWI's plans for prevalence surveys.

#### *General*

DtWI would like to do prevalence surveys after every 3 years or so. Ideally, prevalence surveys would be carried out after every third round of treatment immediately prior to the following round.

#### *Deworming in Delhi*

There has been controversy in Delhi surrounding the Weekly Iron and Folic acid Supplementation (WIFS) program due to suspected adverse effects from recent treatments. Due to these issues and politicians' wariness of potential controversy before the upcoming election, Delhi had initially delayed the 2nd round of deworming 'indefinitely'. However, two weeks before this visit, the Ministry of Health decided to schedule a deworming day separate from the WIFS day. DtWI staff's persistence may have

played a role in this decision.

### *Deworming in Rajasthan*

Preliminary evidence from the 2nd prevalence survey suggests that there is hookworm in Rajasthan, but further details are not yet available.

### **Deworming in Bihar**

- Historically, the governmental steering committee for deworming has operated on the state level. Recently, it expanded operations to the district level in order to improve its response to local issues with implementing the program.
- Recently, the government added the deworming program as a line item in the state budget, which makes the funding for deworming programs more secure. DtWI has advocated for this change for many years. Sharad is unclear as to whether this was a legislative or executive decision, how it was made, and whether the decision included other changes such as the addition of other line items.

### *Schedule for deworming treatment and prevalence surveys*

- The last round of deworming (which was the second round to take place in Bihar) was in September 2012.
- The current round (Bihar round 3) was originally scheduled for September 2013, but it was postponed until January 2014 because of delayed reporting on the results from round 2 and numerous holidays in October. Program results were delayed because it did not have enough staff capacity to maintain consistent communication with government officials whom were responsible for sending DtWI the government reporting forms.
- Bihar is interested in doing a second prevalence survey to see whether the prevalence of worm infections and/or intensity of worm infections has decreased after 3 rounds of treatment. The best month to do this would probably be June 2014. However, because of the above delays, that would be only 5 months after the most recent treatment, which could bias the results against detecting worm infections.

### **Notes from Day 2: Tuesday, October 1, 2013**

We traveled for 2 hours by van from Jaipur to surrounding rural areas. We visited a training session for deworming day for about 50 school principals and teachers (1 per school), interviewed an independent monitor who evaluated the training, and spoke with two “Nodal Headmasters,” who oversee schools in their area while working as a principal at one of the schools. “Blocks” in India are similar to counties in the U.S. While traveling, we asked DtWI staff many questions about DtWI’s core operations, including: its training model, its monitoring and evaluation, and how it delivers drugs.

### ***Van ride interview #1 — Interview with Anirban Majumdar about DtWI’s training model and the aspects of the training framework that we would see that day.***

#### *Background on the government officials who lead deworming trainings*

- 1) There are 2 Resource Persons (RPs) per block.
  - a) RP is a full time government position in the Department of Education focused on implementing

- school based health programs. RPs spend most of their time doing trainings and monitoring of trainings for school health programs.
- b) One RP is in charge of trainings and becomes a block-level trainer. Blocks are sub-units of districts. There are 257 blocks in Rajasthan.
  - c) The other RP is in charge of program administration activities, such as delivering and following up on training materials, deworming drugs, and the appropriate forms.
  - d) RPs act as partners on the school based health programs in their block.
  - e) RPs tend to have enough capacity that adding further school health programs would not take away from the work they do for other school-based health programs.
- 2) 1 Community Development Project Officer (CDPO) per project
- a) CDPOs have a similar role to RPs, but they are responsible for working with anganwadis. Anganwadis are community day-care/education/community organizing centers for pre-school aged children.
    - i) Children are supposed to attend anganwadis every day. Attendance at anganwadis may not be very high.
    - ii) In wealthier areas, parents send their children to more education-focused pre-schools.
  - b) There are 302 projects in Rajasthan. Sometimes projects have the same boundaries as blocks, and other times they do not.
  - c) CDPOs oversee 2,004 Lady Supervisors. Lady Supervisors are women who are paid by the government to oversee anganwadi workers at 54,000 anganwadis in Rajasthan

#### *The structure of the “training cascade”*

- 1) DtWI coordinates with the state government to find and train 7 “Master Trainers”, who will be responsible for training other officials throughout the state at the district level.
  - a) Once selected, Master Trainers undergo additional training based on a curriculum that DtWI developed in cooperation with the government.
    - i) Trainers were taught using a Flip Chart (a book of large posters with information that can be hung on the wall). Each Master Trainer was given a Flip Chart to use during his or her own trainings.
    - ii) At this session, Master Trainers were trained on how to manage district-level trainings. Master Trainers were taught enough information about deworming to be able to answer frequently asked questions that trainees might have.
    - iii) There are 4 key pieces of information to communicate during trainings:
      - (1) The date of deworming day
      - (2) Deworming pills must be chewed, not swallowed, by students
      - (3) Deworming pills should only be taken after a meal
      - (4) Deworming pills should not be distributed to sick children
        - (a) This is not because deworming pills could harm sick children. It is because DtWI wants to avoid people (and potentially the media) blaming the deworming pill for a child’s illness.
- 2) Then, Master Trainers lead district-level trainings for all districts in Rajasthan.
  - a) DtWI created 7 routes that would reach all 33 districts (2 routes had 4 districts, 5 routes had 5 districts). One Master Trainer was assigned to each route.
    - (1) There are 2 Resource Persons (RPs) per block.
      - (a) RP is a full time government position in the Department of Education to implement school based health programs. RPs spend most of their time doing trainings and monitoring of trainings for school health programs.
      - (b) RPs act as partners on the school based health programs in their block.
    - (2) 1 Community Development Project Officer (CDPO) per project

- (a) CDPOs have a similar role to RPs, but they are responsible for working with anganwadis. Anganwadis are community day-care/education/community organizing centers for pre-school aged children.
  - (b) CDPOs oversee 2,004 Lady Supervisors. Lady Supervisors are women who are paid by the government to oversee anganwadi workers at 54,000 anganwadis in Rajasthan
- 1) Block-level trainings
    - a) Each RP pair conducts 6-7 days of block-level trainings (for a total of 300-400 people).
    - b) Ideally, RPs would train 2 representatives from each school (which would require RPs to hold twice as many trainings). However, there was a shortage of time to train school representatives this year due to a delay in the delivery of deworming drugs.
      - i) Drugs were delayed due to an inflationary spike in India, which caused confusion about how the drugs should be priced.
      - ii) The state government is responsible for procuring the drugs.
    - c) Since there can only be 50 people at each training, DtWI decided that only one representative from each school would be trained so that 50 schools could be represented at each training.
      - i) There are 80,000 public schools in Rajasthan.
    - d) The school representative is often the principal of that school, but it could also be a teacher.
    - e) There are four main aspects of the block-level training:
      - i) Drugs and materials, such as training manuals, are delivered
        - (1) Schools receive ~10% more drugs than they are estimated to need, in case of under-counting.
        - (2) Anganwadis use syrups instead of pills as the treatment mechanism because syrup is easier for pre-school-aged children to digest. However, the syrup is much more expensive on a per dose basis. Each school receives a training manual. Training manuals are only delivered in the first year of the deworming program.
      - ii) School representatives are taught the material in the Flip Chart
      - iii) School representatives have the opportunity to ask questions
      - iv) There is an oral group quiz
  - 2) Nodal-level meeting
    - a) Approximately every 12 schools are part of a node led by a nodal headmaster. The nodal headmaster is typically also a principal of one of the schools in the node.
    - b) Each node has monthly meetings. After the block-level training, they review the material taught by deworming trainers at the monthly nodal meeting.
    - c) If any principals cannot make the meeting, they send a teacher to the meeting.
  - 3) Teacher sensitization
    - a) Before deworming day, the principal of each school instructs his or her school's teachers about deworming day using a training manual.
    - b) On deworming day, the principal is responsible for distributing the appropriate amount of drugs to each class, collecting the leftover medicine, and collecting teachers' records about who was dewormed.
    - c) The principal compiles a school-level report about how many children were dewormed and sends this report to the block level.
  - 4) Parent sensitization
    - a) Principals hold school committee meetings with parents each month. In the month before deworming day, principals teach parents about the deworming program at this meeting.
  - 5) Student sensitization
    - a) Teachers teach students about the deworming program one week before deworming day.

***GiveWell observed a block-level training***

#### Our observations:

- The training was conducted in Hindi, which GiveWell staff do not speak, so all quotes from the training below are based on asking one of the people we were with to translate for us.
- The Flip Chart was relatively small, and we couldn't see the images or text well from halfway back in the room. However, it seemed useful as a reference for the RP.
- We did not see anyone looking at his or her training manual while the RP was speaking. We saw a few (3-5) people taking notes.
- We recorded 31 people in the room 5 minutes after the training had started, 36 people at 15 minutes, 42 people at 25 minutes, 50 people at 38 minutes and 56 people when it ended at 50 minutes. The District Coordinator (a monitor paid by DtWI) recorded 32 trainees at the beginning and 46 trainees at the end on his report form. (This is not inconsistent because we were counting all people in the room, including trainers.)
- Attention level: most people seemed to be paying attention but also did not seem to us to be very engaged or interested. A couple of people were watching us or sleeping for a significant portion of the time.
- At 25 minutes, someone asked the first question: "Is this the same thing we did last year?" Answer: "Yes"
- Soon after, someone asked, "How long after the food should we give the pill?" and it was answered.
- People paid more attention during the instructions than they did during the background on soil-transmitted helminthes.
- At the end of the training, the District Coordinator conducted an oral quiz, shouting out questions to the classroom as a whole. Some people in the classroom shouted back answers, roughly in unison; it was hard to tell what proportion of the people in the classroom was answering. There were significant numbers of people both answering and not answering. The DC recorded that "90% of the trainees got the questions right."

#### ***Interview with Nodal Headmaster #1***

- He oversees 12 public schools (and he is a principal of one public school) and dozens of private schools. He oversees 2,500 students in public schools and ~7,000 students in private schools in grades 1-8. He also oversees ~6,000-7,000 students in private schools in grades 9-12.
- Deworming programs are only carried out in public schools.
- He says that the deworming program is excellent and parents are very happy with it.
- Parents' most common questions are about the side effects of deworming pills.
- Some parents have children in both private and public schools. If they ask about deworming for their private school students, he recommends that they visit a primary health center to receive the drug.
- He has received awards for his work.

#### ***Interview with Ajman Lal, Nodal Headmaster #2***

- He oversees 500 students in 11 public schools and 700 students in 7 private schools.
- He implements 10-12 health programs in the school each year.
  - He says that the implementation process is similar for all health programs.
  - He says deworming is not better- or worse-managed than other school health programs.

- The most common questions that teachers have about the deworming program are whether to administer the deworming pills before or after a meal and what to do with leftover deworming pills.
- We saw his school's report from deworming day last year, as well as his leftover albendazole (deworming drugs) from last year and his new albendazole for this year.
  - 159 children were dewormed and 3 children were sick. A "mop-up day" is held 3 days after the original deworming day for children who missed school on the first day.
- He says that the deworming distribution takes one hour in total.
  - The distribution process is: Students line up, the teacher calls one of the student's names from the register, hands them a pill, watches them chew it, the student goes back to the line.
  - His teachers did not make any mistakes last year. He visited every classroom while deworming was happening and did not see any issues.
- He says that most aspects of the program are excellent, but he had 2 suggestions:
  - Deworm students in private schools as well (even though they have more money and can often buy treatment, they will often not do so)
  - Reduce the number of health programs throughout the year; it takes away from teaching time. His school has school health programs on 40 to 42 days each year.

***Interview with Ramlal Jakhar, a District Coordinator (independent monitor managed by DtWI) who monitored the block-level training that we observed***

- He heard about the District Coordinator position from a newspaper ad for last year's campaign
- Last year's job was 45 days. This year it is 60 days because there is an added layer of training.
- We asked him what could have gone better with the block training we saw. He said it could have been more interactive.
- At trainings, he monitors when the training started, how many people were there, that the appropriate materials are there, and that 4 key points were covered.
  - The 4 key points are:
    - The date of deworming day
    - Children must chew the deworming tablets
    - Children must have a full meal before taking the tablets
    - Tablets should not be given to sick children
      - This is not because deworming tablets are unsafe for sick children. It is because DtWI wants to avoid people (and potentially the media) blaming the deworming pill for a child's illness.
- We asked him about common errors in trainings. He said that one time an RP did not have an attendance sheet for the training.
- He has never seen a trainer forget to mention one of the 4 key points.
- On deworming day, one of the most important things he did was to tell teachers to demonstrate taking the tablet for students. Kids do not like to take pills—they feel better if they see the teacher take the tablet first.
  - He did not see any teachers who did not demonstrate taking the tablet.

***Van ride interview #2 — Interview with Anirban Majumdar about drug delivery***

- DtWI's local NGO partner in Rajasthan) received the packaged albendazole at their Jaipur office

- DtWI hired 40 temporary employees for 5 days to repack the drugs into the appropriate amounts for each school. Drugs are delivered directly to the block level, where school administrators can find them at block-level trainings.
- Drugs must be kept in a cool, dry place.
- The government runs chemical testing on the drugs to ensure that they are effective. The government sends the results of this testing to DtWI.

Background on the District Coordinator (DC) position:

- 1) This position is hired, trained, and managed by DtWI to monitor and oversee the deworming program implementation.
  - a) Specific responsibilities of a District Coordinator:
    - ☞☞☞☞☞ Coordinates with all district and block-level officials (especially RPs, CDPOs)
    - ☞☞☞☞☞ Sets up district-level training venue
    - ☞☞☞☞☞☞ Ensures the Flip Chart and other training materials are ready for district training
    - ☞☞☞☞☞☞ With RPs, chooses block-level training dates
    - ☞☞☞☞☞ Attends and monitors block level training
    - ☞☞☞☞☞☞ Monitors schools during preparation phase (3 to 4 schools per day for 7 days)
    - ☞☞☞☞☞☞☞ Finds principal/teacher that attended block training; confirms that the materials and drugs are available; asks whether the teacher sensitization has occurred, and asks two to three teachers whether they have been sensitized.
    - ☞☞☞☞☞☞☞ Monitors deworming in 2 schools
- 2) When monitoring a phase of the process, the intention is both to give DtWI a sense of how well things are going (a monitoring/evaluation role, but this is independent of the M&E program DtWI sets up), and to correct things as they come up.
- 3) There is usually one DC per district, but 1 was fired, so there are only 32 DCs this round (one DC is covering two districts)
- 4) DCs were trained on August 28<sup>th</sup> in the Jaipur DtWI office

**Notes from Day 3: Thursday, October 3, 2013**

We interviewed three state government officials in Jaipur, Rajasthan about how they decided to do the deworming program, how the quality of the deworming program would differ without DtWI’s support, and how the quality of the deworming program compares to other school health programs. We also had extensive discussions with DtWI staff about what they see as the key areas of DtWI’s impact and other topics.

***Discussion with Anirban Najumbar, DtWI Project Coordinator for Rajasthan, about the Rajasthan government***

Background on the government officials whom we would interview later in the day:

- Bhaskar Sawant, Education Department Commissioner, is the head of health and learning programs for primary education in Rajasthan. Mr. Sawant manages and oversees school health programs in all 67,000 public primary schools in Rajasthan.
- Girish Bharbwag is a Nodal officer in the Education Department in Rajasthan who is closely involved with the implementation of all school health programs in Rajasthan.
- Veenu Gupta is the Principal Secretary to Government in the Education Department. There is one Principal Secretary for each government department. She was appointed to her position. Of

the three, Ms. Gupta is the highest-ranking official, Mr. Sawant is the second highest-ranking, and Mr. Bharbwag is the third highest-ranking.

DtWI works closely with three government departments in Rajasthan:

- Medical and Health Department
- Education Department
- Department of Women and Children

Deworming program responsibilities, by department:

- The Education Department is primarily responsible for implementing the deworming program.
- The Medical and Health Department provides deworming syrup treatments for anganwadis and does advocacy to support deworming. Advocacy involves alerting health centers about deworming day and preparing them to give support. It also sensitizes doctors to the program.
- Both the Education and the Medical and Health Departments need to approve the deworming program in order for it to be implemented.
- The Department of Women and Children implements the deworming program in anganwadis.
  1. For administrative activity, DWC is not highly engaged
  2. Anganwadi Department: deputy director has CDPOs under them
  3. Head of DWC in Jaipur doesn't have contact details of any lady supervisors
    1. Through their DC's, DtWI has 80% contact info of Lady Supervisors
    2. Government wants DtWI's database
    3. Other departments more organized. DtWI got all data (contact info) from them.

### ***Interview with Sharad Barkataki and Nagendra Singh Rajawat about monitoring and evaluation***

In general, DtWI's preparedness monitoring and evaluation works to ensure that schools:

- Know the date of deworming day
- Have received the correct amount of drugs for their school
- Have received forms that they can use to report how many children were dewormed
- Understand that deworming should take place after all children have eaten a full meal, that sick children should not be given deworming pills, and that deworming pills should be chewed not swallowed

Independent monitors carry out three phases of monitoring:

1. Before deworming day, DtWI pays independent monitors to visit schools to ensure that they are adequately prepared.
2. On deworming day, monitors stay at randomly selected schools for the entire day to watch the full deworming process. District Coordinators visit several schools on deworming day as part of their monitoring responsibilities, so they do not watch the entire deworming day process.
3. After deworming day, monitors spend three days following up with different schools than the one they observed to see if deworming took place at those schools.

The value of independent monitors is:

- When people know someone is going to check their work, compliance is increased
- When independent monitors find problems, they are trained to be able to fix them

- Reports from independent monitors help DtWI improve the deworming program in future rounds

#### Telecaller monitoring

- As part of its monitoring process, DtWI hires part time “telecallers.” Telecallers call schools before deworming day, on deworming day, and after deworming day to collect information and offer guidance when issues arise.
- Telecallers begin their monitoring process a few months before deworming day. During these calls, they are checking on whether there are problems with any stage of the process. For example, they ensure that schools have the deworming drugs, that schools have the proper forms, that schools know the date of deworming day, and that schools have received training materials.
- During the entire telecalling process, approximately 8,000 schools are called.
- Telecalling is valuable because it enables schools to take corrective action, which improves the implementation of deworming.
  - Typical problems include: the drugs did not arrive on time, some teachers did not receive training books, and deworming information is not well understood by teachers.
  - DtWI compiles reports that show how many times these problems have occurred.
  - DtWI has regular communication with the education department of Rajasthan about common issues for schools
  - Problems are corrected through government channels or by DtWI

#### Important lessons from monitoring

The important lessons that DtWI learned from its previous round of monitoring are:

- Many teachers thought the drugs caused side effects. Therefore, in training, DtWI emphasized that the drugs have limited side effects.
- DtWI used to have independent monitors go to 2 schools on preparedness days. Sometimes schools were too far apart. Now just go to one school. Training now emphasizes that students grades 9-12 should bring and eat a meal; they should not take pills home.
- Improved information on the coverage forms about when to turn in those forms and to whom.
- This year, independent monitors will be trained for two days instead of one.

The monitoring data also helped to convince government officials that a second year of training was necessary. Typically, the government only supports one year of training for health programs.

Monitoring data did not lead to any major changes in the process on deworming day itself.

***Interview with DtWI staff (Sharad Barkataki, Christina Riechers, Nagendra Singh Rajawat, Anirban Majumdar, and Priya Jha) at DtWI offices in Jaipur, Rajasthan***

#### *DtWI's key areas of impact*

We asked DtWI staff about which of DtWI's activities it believes have the greatest impact.

1. Advocacy (causing deworming programs to exist where they otherwise would not exist)
  - a) DtWI puts substantial effort into explaining the benefits of deworming to governments and showing governments that they are capable of implementing the program with DtWI's help.
  - b) DtWI ensures that the deworming program will receive funding each year, since programs are often in danger of being discontinued. Wherever possible, DtWI works to get deworming added as a line item in the budget. Otherwise, it is difficult to ensure that long-term funding will exist for the program.
2. Trainings. DtWI's improvement of the quality of trainings plays a crucial role in the success of deworming programs.
  - a) Some school health programs, such as the WIFS program in Delhi, are rolled out too quickly and their trainings are carried out poorly. Then they receive negative media attention because of students' adverse reactions to treatments. Negative media can cause delays or cancellation of school health programs. The WIFS program has also received negative media attention in the states of Haryana and Odisha.
    - i) In Andhra Pradesh, a child choked on a deworming tablet and died because she did not know the tablet should be chewed.
  - b) There have been very few adverse reactions to deworming treatments in DtWI-supported states because of the quality of DtWI's trainings.
  - c) DtWI's assistance in developing training materials is an important aspect of its training support. DtWI ensures that the content presented about deworming is clear and concise.
  - d) DtWI ensures that trainings are carried out beyond the first year of the program. The Rajasthan government would have said that training should not be required for the 2<sup>nd</sup> round of deworming if not for DtWI's persistence.
3. Monitoring
  - a) DtWI's independent monitoring, through its District Coordinators, independent monitors, and tele-callers, is key to the success of its deworming programs. DtWI's monitors intervene at many stages of the program: they make sure that trainings are carried out well and that school representatives attend trainings, they ensure that the correct amount of deworming drugs are delivered, and they deal with unforeseen operational issues.
4. Technical expertise
  - a) DtWI's technical expertise causes many aspects of the deworming program to happen that may not happen otherwise, such as prevalence surveys, multi-level training, preparation for adverse events, public/community awareness and data collection.
  - b) The national-level and state-level Indian governments do not know the guidelines for an effective deworming program. State governments often ask the national government how to run the deworming program, but the national Indian government does not have established processes for program implementation. In addition, national policy is to deworm biannually regardless of worm prevalence; this is inconsistent with WHO guidelines, which DtWI follows and advocates for with governments to ensure cost-effective programming.

### *Deworming in Rajasthan*

DtWI agrees with Mr. Bharbwag's account of how the deworming program began in Rajasthan:

- The Rajasthan government became interested in doing its own deworming program after Veenu Gupta and other government officials read about the success of Delhi's DtWI-assisted deworming program.
- Government officials conferred, decided that they wanted to do the program, and then contacted DtWI.

Though the Rajasthan government wanted to do a deworming program, it may have been unable to do it without DtWI's assistance. As Girish Bharbwag said, DtWI helped the Rajasthan government with every step of the deworming program.

The rollout of the deworming program in Rajasthan has been one of DtWI's fastest rollouts of a deworming program. In June 2012, the memorandum of understanding (MoU) was signed among the 5 partners for the program (DtWI, the Rajasthan Education Department, the Rajasthan Department of Medical Health and Family Welfare, the Rajasthan Department of Women and Children, and UNICEF), and in October 2012 the first round of deworming was completed.

The deworming program in Rajasthan was intended to reach 16 million children who attend 80,000 public primary and secondary schools and 61,000 anganwadis (public pre-schools) throughout the state. The rollout in Rajasthan was successful, with very few adverse events.

DtWI provided funds in Rajasthan to develop content for trainings, provide materials (such as flip charts) for trainings, and to repackage and transport drugs.

How will DtWI know when the Rajasthan government is ready to manage the deworming program on its own?

- DtWI's strategy is to have the government do as much as possible on its own. Because of DtWI's assistance, the government will have many materials it can reference in future years.
- This year, DtWI put the Rajasthan government in touch with the WHO. The Rajasthan government communicated with the WHO for 10 days.
- If funding for deworming were "clubbed," or grouped, with funding for Vitamin A or WIFS in Rajasthan, deworming would become a line item program and it would be secure in the long term.
  - DtWI has already made its costs clear to the government, so the government would know the budget for a full deworming program if DtWI were to leave.
  - DtWI hopes that the Rajasthan government will bear more of the costs for next year's program.
    - The government would also be capable of funding independent monitors and prevalence surveys.
      - However, it may be difficult to find the necessary capacity for prevalence surveys; last year, DtWI recruited and trained local parasitologists to do the survey. However, DtWI is planning to help the government understand how to do this.

What needs to happen to make the program sustainable?

- If there are a few rounds of deworming with few adverse events, and the government gains more experience, the government would likely be able to carry out deworming programs on its own.

### *Deworming in Delhi*

Due to problems with WIFS and the success of deworming in Delhi, the Delhi government asked DtWI to assist them with the implementation of WIFS. When DtWI declined, the Delhi government delayed the deworming program 'indefinitely' and said it would not continue the program until DtWI assisted Delhi with WIFS. After DtWI staff's persistence in communicating with key government officials,

deworming day was scheduled for October 3, 2013.

#### *Deworming in Bihar*

In Bihar, initial interest in deworming developed in 2010 because of a J-PAL conference where the evidence for deworming as a very cost-effective program was presented. Once the government of Bihar was interested, J-PAL put it in touch with DtWI.

#### *Deworming in Andhra Pradesh*

In Andhra Pradesh, DtWI advocated with government officials for the adoption of a school-based deworming program and school health policy that included deworming. DtWI then provided technical support for the launch of the program.

#### *Deworming in Assam*

In Assam, the state government tried to initiate a deworming program in 2010 but was unable to carry out the program. Assam still does not have a universal deworming program, but doctors can prescribe deworming pills.

#### *Deworming mandate*

National funds for deworming are part of the WIFS program and the national government mandates that states should adopt the WIFS program. Indian national policy indicates that deworming should take place biannually.

#### *Payment for services*

Instead of using DtWI's funds on prevalence surveys, could DtWI ask governments to pay for them?

- Critical to succeeding in this request would be a) a strong case for the importance of prevalence surveys in developing a targeted treatment strategy, and b) developing and/or engaging appropriate technical resources within the government, which DtWI is currently in the process of doing

#### *DtWI's plan for deworming programs in other Indian states*

DtWI is continuously looking for new states to go into and updating its list of potential states to work in.

#### *Potential areas of future improvement*

DtWI is considering how it might be able to improve its trainings. For example, it may be possible to use mobile technology to train teachers instead of training them in person.

#### *Next deworming rounds*

Delhi round 2 occurred Thursday October 3<sup>rd</sup>, 2013, and Rajasthan round 2 occurred October 15<sup>th</sup>, 2013.

### *School-based MDA deworming programs*

The only states in India currently running school-based MDA deworming programs are AP, Bihar, Delhi, Rajasthan, and possibly Punjab and Assam. It appears that Assam may have delayed its plans again and not yet completed any statewide rounds.