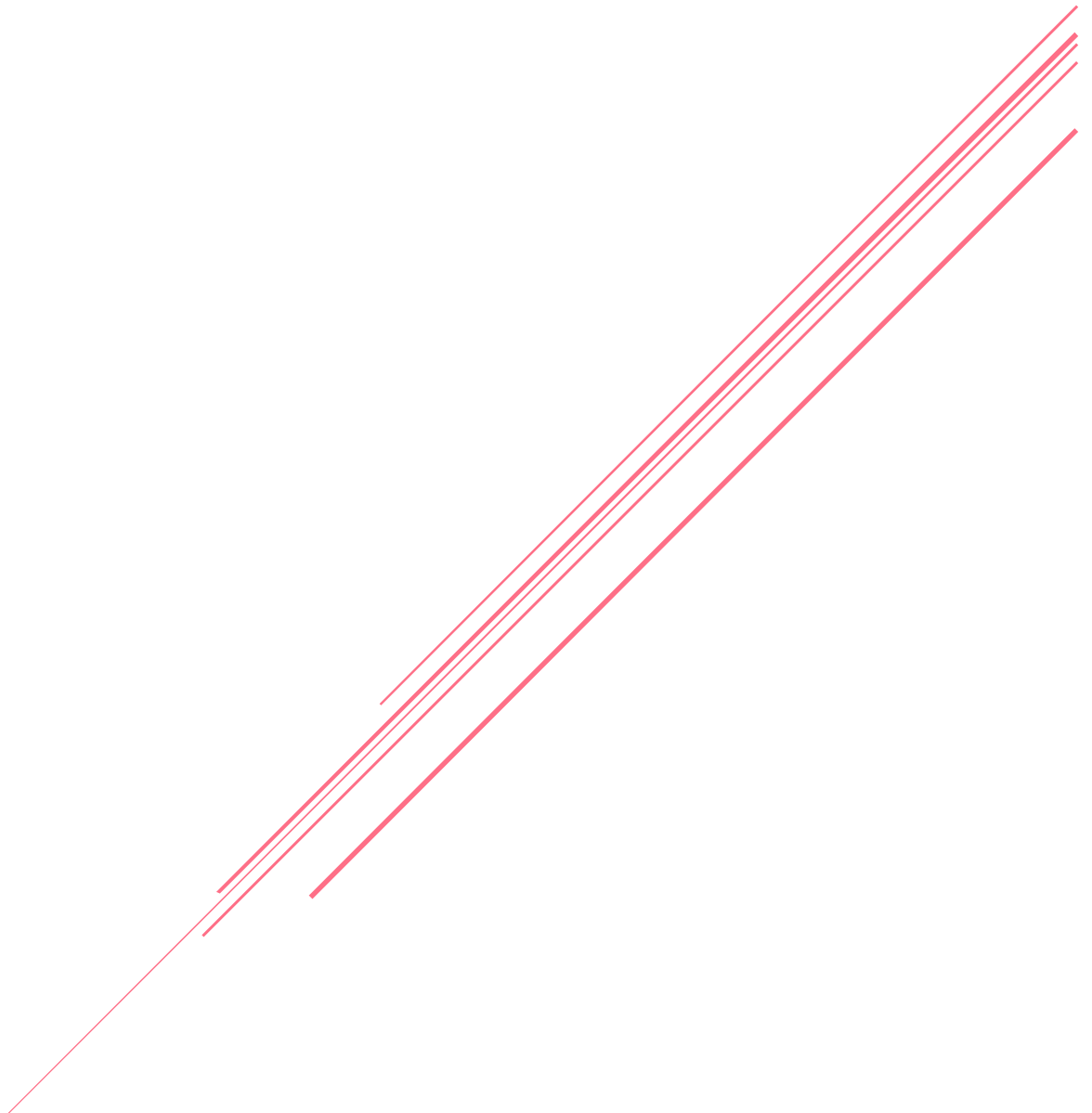


# CIFF PMCV REPORT

Year 4



Prepared for Review, 21 July, 2016

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## Executive Summary

The following report details the process monitoring and coverage validation [PMCV] activities conducted by the Deworm the World program in Kenya for deworming of Year 4 in CIFF funded regions. The aim of PMCV is to measure the successful roll-out of the program by observing and reviewing the quality and impact of sub-county training, teacher training, community health extension worker [CHEW] activities, community sensitization and deworming day procedures. In addition to reporting on PMCV activities throughout Year 4, a comparison will be made between Wave 1 and Wave 2 outcomes. PMCV field officers visited a random sub-set of all deworming activities in the CIFF Fund regions for deworming activities during this Year.

PMCV metrics for Year 4 of the program in these regions indicated consistently high performance in the distribution of materials and drug delivery, sub-county training information delivery, and deworming coverage. However, with regard to topic coverage in trainings and knowledge retention among parents, there were differences between deworming activities of Wave 1 and Wave 2.

Of those parents aware of deworming, 69% knew the correct Deworming Day date, 75% knew the correct target population, and 54% knew the correct age group. These results show that parents retain knowledge after community sensitization, however there is a difference between Wave 1 and Wave 2. With regard to knowing the correct date of deworming, in Wave 1 regions 75% of parents remembers the correct date, while in Wave 2 regions this is only 52%. This indicates that the majority of parents in regions of Wave 2 deworming did not have the adequate information on the date of deworming. This means that community sensitization on information on deworming day was lower in Wave 1 than Wave 2.

Of the target schools, 96% were observed to have the appropriate drugs in place prior to deworming day. This corresponds with only 6% of schools that were observed to have run out of drugs on deworming day for both enrolled and non-enrolled children. During deworming day 90% of the teachers observed that children were actually swallowing the tablets. In 79% teachers were given the correct dose of drugs to children. This indicates a high performance in teacher sensitization and drug administration of teachers.

## Sampling

The following PMCV analysis summarizes results in detail beginning with a description of the process and performance of training sessions, CHEW activities, community sensitization efforts and deworming day observations. PMCV field officers observed events according to a pre-determined sample sizes. The table below shows the CIFF Year 4 grant deworming activities to date. This is also the NSBDP Year 4 implementation period. All monitoring or observed events were randomly sampled from a list of planned events.

**Table 1. PMCV Activities and Sample Sizes**

Activity	Planned Sample	Actual Sample	Reason Fewer Sample
<b>Sub County Trainings</b>			
Wave 1	28	28	
Wave 2	11	11	
Year total	39	<b>39</b>	
<b>CHEW Forum</b>			
<b>Wave 1</b>	28	23	<ul style="list-style-type: none"> <li>• Delayed communication regarding change of activity dates</li> <li>• Only separate CHEW training was conducted in Year 4, Wave 1 deworming</li> <li>• During Wave 2 CHEWs were trained during SCT</li> </ul>
<b>Wave 2</b>	0	0	
<b>Teacher training</b>			
Wave 1	43	29	<ul style="list-style-type: none"> <li>• Change of activity dates to new dates resulting to high sample size than man power</li> <li>• 14 samples could not be monitored on 19<sup>th</sup> Feb since the PMCV team was attending a training.</li> </ul>
Wave 2	23	23	
Year 4 total	66	<b>52</b>	
<b>Pre-deworming</b>			<ul style="list-style-type: none"> <li>• Less staff after some casuals dropped off</li> </ul>
Wave 1	200	196	
Wave 2	85	82	
Year 4 total	285	<b>278</b>	
<b>Deworming</b>			
Wave 1	200	192	
Wave 2	85	83	
Year 4 total	285	<b>275</b>	
<b>Post-deworming</b>			
Wave 1	200	192	
Wave 2	85	83	
Year 4 total	285	<b>275</b>	

### Sub County Training Observations

The intent of Sub County Training [SCT] sessions is to ensure that sub-county and division level trainers understand the purpose and procedure of deworming. During Wave 2, CHEWs trainings were combined with SCTs. CHEWs are given the responsibility to use the knowledge gained during training for community sensitization on dates and purpose of deworming. The successful completion of this activity allows the division trainers to then conduct the same activity with teachers in their divisions.

The PMCV field officers observed 39 SCTs of which 25 focused on Soil-Transmitted Helminths [STH] treatment only and 14 focused both on STH and Schistosomiasis [SCH] treatment.

At the training, 38% of participants arrived before the start of the training on day 1, while 25% arrived before start of training on day 2. Sub County Training booklets were distributed at 97% of the trainings.

For SCH treatment, teachers require a tablet pole to measure the dosage of drugs for each child. In 5 training for SCH the tablet pole was used for demonstration. The use of this tablet pole should be stressed, while it is an important tool in measuring the height of children and thereby determining an accurate drug dosage during deworming. Although the tablet pole was not available during the demonstration, *Drugs & Dosage* was discussed in detail during 90% and 91% of the training sessions in both Wave 1 and Wave 2 of deworming. The section *Drugs & Dosage* covers the topic of tablets per child for praziquantel depending on the height of the child using the tablet pole.

### Coverage of Content

During the training, coverage of topics was recorded. Some topics were covered in detail more than others, with *Drug & Dosage* and *Reverse Cascade* achieving the highest coverage percentage (**Table 2**). It is worth noting that topic coverage on certain topics in training of Wave 2 was lower than in Wave 1. Especially the topics, *STH form* and *Worms* were covered less in Wave 2 compared to Wave 1.

**Table 2. Topics covered during Sub County Trainings**

Topics	Coverage Wave 1	Coverage Wave 2
Drugs and Dosage	90%	91%
Reverse Cascade	80%	83%
STH Forms	97%	69%
Worms	97%	61%
SCH Forms	74%	56%
Drug Administration	84%	53%

### Knowledge Pre and Post-Training

In total 303 interviews were conducted at SCTs for knowledge on STH treatment, of which 156 before the training and 147 after the training. For knowledge on SCH treatment, 64 interviews were conducted before the training and 70 after the trainings.

Participants were assessed pre- and post-training on their ability to identify the correct STH or SCH drugs, correct dosage, and appropriate age groups for treatment. The results of these interviews are presented in **Table 3**. Percentages represent the percent of people able to report the correct answer. Although almost all participants for SCH treatment reported having previously attended training, only 18% of participants could recall the correct answers when asked questions regarding SCH. This percentage is much higher for STH knowledge. According to these results, there is strong support for annual trainings on sub-county level for those receiving SCH training.

**Table 3. Participants’ Knowledge of Deworming Pre and Post Sub-Country Training**

Knowledge Area	STH Knowledge (N <sub>interviewed</sub> = 156)	Pre-Training	STH Knowledge (N <sub>interviewed</sub> = 147)	Post-Training
STH Drugs	87%		99%	
STH Dosage	90%		99%	
STH Age Groups	60%		97%	
<b>Overall Knowledge</b>	<b>79%</b>		<b>98%</b>	
	SCH Knowledge Pre-Training (N <sub>interviewed</sub> = 64)		SCH Knowledge Post-Training (N <sub>interviewed</sub> = 70)	
SCH Drugs	19%		98%	
SCH Dosage	21%		96%	
SCH Age Groups	13%		98%	
<b>Overall Knowledge</b>	<b>18%</b>		<b>97%</b>	

### Teacher Training Observations

PMCV field officers visited a total of 52 Teacher Trainings [TT] sessions, 10 of which also focused on training for SCH treatment. Of all the TT visited, 90% received *all materials* (i.e., posters, monitoring forms, tablet poles, training booklets etc.) and 93% received drugs. All teachers attending received monitoring forms and 96% of all teachers received posters. However, in only 5 out of 10 SCH trainings tablet poles were available for demonstration. Although it is not a requirement to use them, the tablet poles are helpful to determine an accurate the drug dosage for SCH treatment. Teachers are explained about the tablet pole during the section *Drugs & Dosage* in the training booklet.

Observations of trainings also assessed the extent to which training content was covered “in detail”. **Table 4** shows that there is a difference between topic coverage of TT between Wave 1 and Wave 2. Wave 1 has a higher topic coverage on all topics compared to Wave 2.

**Table 4. Compared topic coverage in Teacher Trainings between Wave 1 and Wave 2**

Topic	Wave 1	Wave 2
Meetings where information on <b>WORMS</b> was covered in detail	95%	80%
Meetings where information on <b>DRUG &amp; DOSAGE</b> was covered in detail	90%	67%
Meetings where information on <b>DRUG ADMINISTRATION</b> was covered in detail	100%	79%
Meetings where information on <b>REVERSE CASCADE</b> was covered in detail	92%	76%
Meetings where information on <b>FORMS</b> was covered in detail	87%	53%

### Knowledge Pre and Post-Training

In total 439 interviews were conducted at TTs for STH treatment only, of which 221 before the training and 218 after the training. For training for SCH treatment, 37 interviews were conducted before the training and 39 after the trainings.

Only 50% of participants could recall the correct answers when asked questions regarding SCH treatment and 68% for STH (Table 5). According to these results, there is strong support for continuous training every year for teachers, on STH and SCH treatment.

**Table 5. Participants’ Knowledge of Deworming Pre and Post Sub County Training**

Knowledge Area	STH Knowledge Pre-Training (N <sub>interviewed</sub> = 221)	STH Knowledge Post-Training (N <sub>interviewed</sub> = 218)
STH Drugs	67%	99%
STH Dosage	85%	100%
STH Age Groups	53%	97%
<b>Overall Knowledge</b>	<b>68%</b>	<b>99%</b>
	SCH Knowledge Pre-Training (N <sub>interviewed</sub> = 37)	SCH Knowledge Post-Training (N <sub>interviewed</sub> = 39)
SCH Drugs	57%	100%
SCH Dosage	54%	100%
SCH Age Groups	41%	92%
<b>Overall Knowledge</b>	<b>50%</b>	<b>97%</b>

### Pre-Deworming CHEW Interviews

In addition to observing CHEW forums, PMCV field officers also interviewed 114 CHEWs in the community prior to deworming day. A total of 96% of those interviewed were aware of deworming day and 86% had attended a session with NSBDP on deworming in the last 15 days.

In the regions treated in Wave 1, CHEWs indicated that they monitor approximately 1255 households in their community unity, while in regions treated during Wave 2 this number is much lower with 1000 households per CHEW. However, the average number of schools monitored by CHEW for deworming is similar with 20 schools per CHEW in Wave 1 regions and 19 schools per CHEW in Wave 2 regions.

### CHEW Responsibilities

When asked “*What are your responsibilities as a CHEW in National School based Deworming Program?*” Table 6 shows that 80% of CHEWs responded they conducted community sensitization and 56% support teachers on Severe Adverse Events [SAE].

**Table 6. Responsibility of CHEWs in NSBDP**

Topic	Percentage
Community Sensitization	80%
Support Teachers on SAE	56%
Conduct Town Announcement	16%
Others:	14%
- Technical, Monitoring and Supervision support	8%
- Drug Supply and distribution	4%
- None	2%
Don't know	5%

The **primary sensitization activities conducted** by CHEWs **prior to deworming** include displaying posters by 62% of CHEWs, 52% discussed Deworming Day at Barazas, 28% discussed Deworming Day at Health Day, 26% conducted health education in classes and 22% conducted early childhood development [ECD] outreach activities in communities. Only 8% of the 30 CHEWs reported having conducted no community sensitization activities prior to deworming.

It is interesting to note that 26% of CHEWs conduct health education in classes (or schools), while teachers are responsible for school-level health education. CHEWs are responsible for community-level health education.

The percentage of CHEWs reporting the use of **sensitization materials** is as follows:

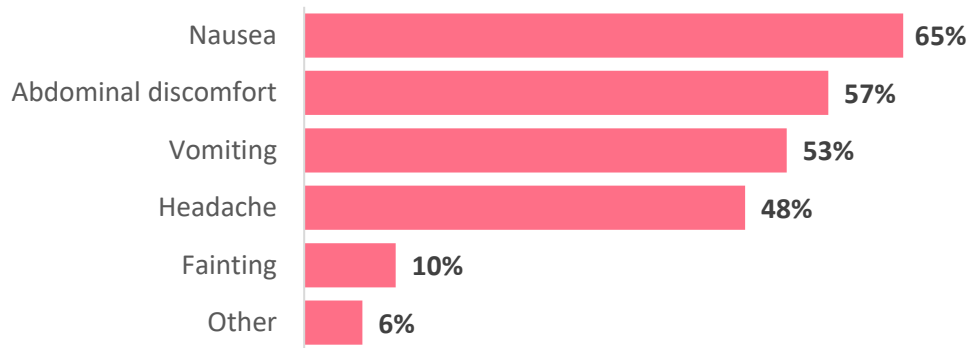
- 68% used the Posters
- 35% used the CHEW checklist
- 21% used the Community Sensitization Supplement
- 15% used the SAE protocol

### Severe Adverse Effects

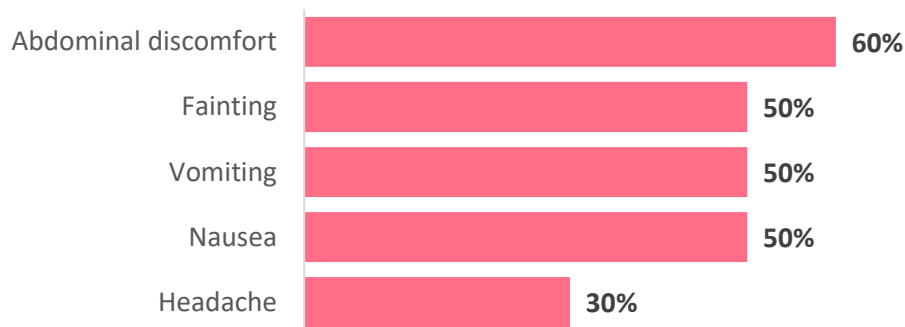
PMCV field officers probed CHEWs on their knowledge of mild effects considered normal while treating for STH with Albendazole and expected side effects for SCH treatment with Praziquantel. During both waves of deworming.



**Figure 1. CHEWs responses to side effects considered normal while treating for STH**



**Figure 2. CHEWs responses to expected side effects for SCH treatment with Praziquantel**



After administering STH and/or SCH the side effects that can occur include; nausea, vomiting, stomach pain and/or fainting. **Figure 1** and **2** indicate that the majority of CHEWs are aware of the side effects while treating for STH and SCH. It is important for children to eat treatment to reduce chances of side effects. CHEWs further mentioned *feeding children before treatment* (80%) as a measure to minimize the side effects of SCH treatment with Praziquantel.

### Pre-Deworming Parent Interviews

PMCV field officers interviewed a total of 779 parents with children during Year 4 of deworming in CIFF regions. Of these, 506 were parents of enrolled children in Early Childhood Development [ECD] or Primary Schools [PI] and 273 were parents of non-enrolled children. The average age of those children reported to be enrolled (by their parents) was 8 years, whereas the average age of non-enrolled children was 4 years.

#### Awareness

Overall, 73% of the total interviewed parents were *aware* of Deworming Day. Of the parents who reported to be *aware* of Deworming Day, 90% are reporting to send their child for deworming. Seventy-four percent of parents with enrolled children planned to send or take their child to be dewormed and 94% of parents of non-enrolled planned the same.

These parents were also asked when they heard about the deworming project for the first time. Forty-three percent reported hearing about it ‘this year’, with 31% ‘last year’ and 13% ‘two years ago’. There was also 9% of parents who said they never heard about the deworming program.

A group of 236 parents had taken their child for deworming before. Of this group, 78% took their children to deworming last year and 15% this year. When asked where this deworming had taken place, the majority, 59% of the parents answered at a nearby primary school, 33% answered at a health facility and 7% said it was at home. Seventy-nine percent of the parents reported to have accompanied their child for this previous deworming.

### Information sources

A number of activities are conducted within NSBDP aimed at raising awareness of Deworming Day. To date such activities have included; using CHEWs to promote Deworming Day, use of the media, promotion by government officials and school-based promotional activities. In addition to these activities, a radio campaign was also used. The following represents the results of interviews conducted in communities prior to Deworming Day.

Error! Reference source not found.7 presents the sources by which parents received their sensitization information. These sources were not prompted but suggested by interviewees.

**Table 7. Information Sources reported by parents during community visits prior to Deworming Day**

Information source	Percentage
Primary School Teacher	46%
Other	31%
- Not heard	16%
- Community members	7%
- Nearby school	5%
- Market	2%
- Hospital	1%
CHEW	21%
Child/Children	18%
Town Announcer	12%
Posters	7%
Radio	5%
Friends/Relatives	3%
Government Officials	2%

### Knowledge retention

Although there are community sensitization activities undertaken, the knowledge retention among parents is low on specific information regarding Deworming Day. **Of those parents aware of deworming, only 69% knew the correct Deworming Day date**, 75% knew the correct target population, and 54% knew the correct age group. Although these results shows that parents do have remembered information after community sensitization methods, there is a difference between Wave 1 and Wave 2. **Table 8** indicates that 48% of parents in regions of Wave 2 deworming do not know the correct date required to attend deworming.

**Table 8. Comparison on parent’s knowledge on Deworming Day between Wave 1 and Wave 2**

Parent’s knowledge of Deworming Day	Wave 1	Wave 2
Parents knew the correct Deworming Day date	75%	52%
Parents knew the correct target population	79%	65%
Parents knew the correct age group	59%	40%

### Pre-Deworming School Interviews

A total of 278 schools were visited prior to deworming of which 99% confirmed as participating in deworming day. Of those schools planning to deworm, 56% will perform deworming inside the classroom, whereas 42% is planning to deworm outside the classroom, 4% outside the school and 10% mentioned other places. Schools were able to give multiple answers to these questions. Therefore, schools can have multiple places for deworming.

#### Treatment of ECD and Non-enrolled children

Of 278 visited schools, 97% have an ECD centre attached. Of the schools planning to deworm, 60% reports that the Head teachers will inform the stand-alone or the linked ECD centre about deworming. Thirty-four percent of interviewed schools mentioned that the Head teachers will delegate someone to inform the ECD centres, 8% other MOEST/MOH officials and 5% DICECE program officer will inform the ECD centres. Off all the schools planning to deworm, 70% has already notified the attached or stand-alone ECD centre regarding Deworming Day.

When asked *“What the plan is to treat the children?”* 61% of schools report that the ECD teachers will treat the ECD children and 34% will assign a designated teacher to treat the children. Schools were asked the same question for non-enrolled children. The majority of schools (83%) will assign a designated (not an ECD teacher) to treat children on deworming day, 2% will use the ECD teacher and 15% replied to not have any specific plans yet.

#### Teacher sensitization

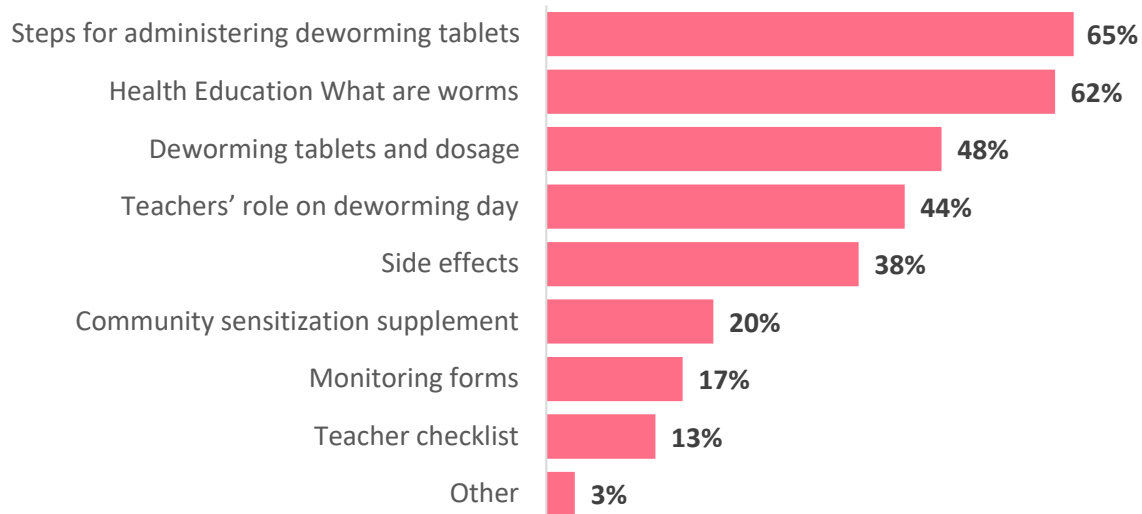
Of the schools planning to deworm, 98% attended a training session and 93% already sensitized other teachers on how to administer drugs. **Table 9** shows that the Teacher Training booklet was the most used type of material to conduct sensitization of other teachers. When asked if the Teacher Training booklet was useful, teacher scored its usefulness a 4.9 out of 5.

**Table 9. Material used to conduct the training**

Material	Percentage
Teacher Training booklet	92%
My own material	22%
District training booklet	12%
Other	11%

Teachers indicated the most useful sections of the teacher training booklet. **Figure 3** gives an overview of what section to be found most useful.

**Figure 3. MOST USEFUL sections of the teacher training booklet indicated by teachers prior to deworming.**



When asked what the least useful, 16% of teachers mentioned the Side effects and also 16% mentioned the monitoring forms. It is worth noting that Side effects were to be found most useful by 38% of the teachers, while it was also to be found least useful. Although Side effects and Monitoring form were found least useful, the monitoring forms and side effects are very important topics for deworming. Therefore, teachers should be made aware of their importance and usefulness.

Teachers were also asked ***“What can you remember from the community sensitization?”***

- 51% remembered that deworming tablets are free by the government and are safe
- 38% could recall that trained teachers will administer the tablets
- 38% remembered that all children aged 2-14 will be treated in nearby primary schools
- 15% remembered that children should eat before bilharzia treatment
- 18% recalled that health officers will support on deworming day

### Materials/Drugs

Of schools planning to deworm, 95% of schools reported receiving deworming tablets prior to deworming day. Of these schools that received tablets, 93% received drugs during a teacher training, 69% collected drugs from AEO and 31% received drugs by drug delivery to school. On the whole, 88% of schools planned to deworm received sufficient drugs. In only 8% of schools were not all monitoring forms present.

### Deworming Day CHEW Interviews

A total of 239 CHEWs were interviewed by PMCV field officers. Of these CHEWs, 26% was interviewed in person during deworming day and 28% after deworming day. A group of CHEWs, 43% were also interviewed over the phone, a day after deworming day.

CHEWs indicated approximately 3 community units were under their management while each unit had approximately 1200 households and monitored an average of 12 primary schools.

### CHEW Knowledge of Responsibilities

In order to gauge awareness and prioritization of their roles, CHEWs were specifically asked, **“What are your responsibilities as a CHEW in the National School Based Deworming Program?”** These are their responses:

**82% Community Sensitization**      **67% Support Teachers on SAE**      **30% Conduct Town Announcements**      **13% Other**

Given that community sensitization is one of the CHEW’s responsibilities, they were asked about the activities conducted regarding community sensitization. **Table 10** illustrates that community sensitization activities used are similar between interviews taken with CHEWs *prior to* and *during deworming day*. It’s worth noting that *prior to* deworming day 10% of CHEWs report to have conducted no community sensitization activities, while during Deworming Day this percentage is 22%. This a large number of CHEWs that did not sensitize the community, while this part of their responsibilities.

**Table 10. Activities conducted by CHEW’s on community sensitization around schools**

Topics	Pre-deworming	During deworming
Display Posters	<b>73%</b>	<b>62%</b>
Discuss Deworming day at Barazas	<b>40%</b>	<b>51%</b>
Discuss Deworming day at Health day	30 %	<b>22%</b>
Conduct Health Education Class	<b>37 %</b>	22%
None	10 %	22%
Other	10 %	18%
Conduct ECD Outreach	17 %	18%

### Engagement with Teachers

In the course of deworming day activities, 66% of CHEWs were contacted by teachers concerning NSBDP with each CHEW receiving calls from an average of 3 teachers. CHEWs were asked by field officers **“What support was required from you?”**. The nature of support requested by teachers was mostly on additional drugs (55%).

**Table 11. Nature of support requested by teachers**

Requests by teacher	Percentage
Additional Drugs	55%
Drug Administration	24%
SAE Management	15%
Other	17%
- Posters	8%
- What to do in case of any complications	9%

### Severe Adverse Events

Evidence Action field officers probed CHEWs on their knowledge of mild side effects considered normal while treating for STH treatment with Albendazole and expected side effects for SCH treatment with Praziquantel. **Table 12** and **Table 13** provide more insight into their responses. These tables indicate that CHEWs are aware of the side effect for both STH and SCH treatment.

**Table 12. CHEWs responses to side effects considered normal while treating for STH**

Side Effects CHEWs consider normal	Percentage
Nausea	74%
Abdominal discomfort	66%
Vomiting	60%
Headache	44%
Fainting	11%
Other	7%

**Table 13. CHEWs responses to expected side effects for SCH treatment with Praziquantel**

Expected Side Effects	Percentage
Abdominal Pain/discomfort	84%
Vomiting	72%
Nausea	64%
Fatigue	48%

In total 23 CHEWs that are working with schools that treat both STH and SCH, mentioned *feeding children before treatment* as measures to minimize the side effects of SCH treatment with Praziquantel. Of all CHEWs only 1 correctly stated the steps to be taken in case of SAE. Although this number seems low, it has to be noted that many CHEW knew the correct steps, only not in the correct order. However, SAE are important to treat and therefore CHEW’s should be aware of all the correct steps to take and the order to take them in. Only 9% of CHEWs interviewed observed any SAE or other issues during the deworming activities.

### Deworming Day ECD Teachers Interview

A total of 273 schools were monitored; 87% that treat STH only and 13% that treat both STH and SCH. Among these schools 130 ECD teachers were interviewed regarding deworming day. The average enrolment in the ECD Centers is 52 children and the average daily attendance rate stood at 46 children. On deworming day an average of 46 children were present at the ECD Centre with the youngest aged 3 years while the oldest was 6 years.

Of the ECD teachers, 3% had primary school level, 27% had secondary school level, 36% had a certificate course level, 22% had Diploma level and 2% university level as their highest level of education.

#### Transport to deworming venue

Overall, 92% of the interviewed ECD teachers brought children from the ECD center to the primary school for deworming. In 94% of the cases, they brought the child to the primary school located near ECD centers with an average distance of 500 meters. Majority of the children, 90% arrived at the primary school by walking, 5% used public transport and 5% arrived through other means of transport.

#### Awareness

Of ECD teachers, 69% learnt about the deworming program happening at school mainly from Primary school teachers, 15% from posters and 14% from their child/children.

**Table 14. Sources of Information on Deworming Day**

Sources of information	Percentage
Primary School Teacher	69%
posters	15%
Child/Children	14%
CHEW/CHW	13%
Radio	6%
Other	6%
Government Officials	5%
Town Announcer	3%
Friends/Relatives	2%

#### Knowledge of roles

PMCV field officers probed the ECD teachers on their role in deworming activities, to which 71% saw their primary activity to supervise the ECD children. This corresponds with the main role that is requested of ECD teachers, to supervise the children during deworming day and to take children to the closest primary school where deworming is happening.

**71% Supervise ECD children**

**46% Administer drugs**

**21% Take children to primary school**

## Deworming Day Parent Interviews

On Deworming Day, a total of 418 parents were interviewed at schools regarding their knowledge of deworming and the source of that knowledge. The intention behind this exercise was to compare the information source to those interviewed prior to deworming as a measure of consistency. The intention behind this exercise was to compare the information source to those interviewed prior to deworming as a measure of consistency. In **Table 15**, the results of the interviews pre-deworming day are compared with those parents interviewed on deworming day. **The majority of parents, 47% report receiving information about Deworming Day from their children**, followed by 31% reports from the primary school teacher and 23% from friends and relatives. These figures do not correspond with interviews taken with parents *prior to deworming day*.

**Table 15. Information sources reported by parents**

Source of Information	Pre-deworming	During deworming
<b>Primary School Teacher</b>	<b>46%</b>	<b>31%</b>
<b>Other</b>	<b>31%</b>	4%
- Not heard	16%	-
- Community members	7%	-
- Nearby school	5%	-
- Market	2%	-
- Hospital	1%	-
<b>Child/Children</b>	<b>18%</b>	<b>47%</b>
<b>Town Announcer</b>	12%	2%
<b>Posters</b>	7%	15%
<b>Radio</b>	5%	8%
<b>Friends/Relatives</b>	3%	<b>23%</b>
<b>Government Officials</b>	2%	2%
<b>Bazaras</b>	-	3%
<b>Church/Mosque/Temple</b>	-	3%

### Adult deworming

Out of all parents interviewed, 62% of parents (adults) had previously taken deworming medication. Of these parents, 42% took them at the health clinic, 38% at school and 15% at a pharmacy/chemist. Of the parents interviewed 80% of the parents were dewormed during a deworming day.

Parents mentioned the following symptoms to make them think they had worms; 28% mentioned abdominal pain, 14% feeling tired, 10% diarrhoea and 6% headaches. It is worth noting that 36% of parents reported that they do not know the symptoms of having worms.

Of all parents interviewed, 58% percent of the parents feel that worms can be found in anyone, 37% would feel embarrassed or shame if they would have worms and 28% of all the parents think it is embarrassing to take deworming medication. When asked where the most convenient place for adults to be dewormed would be, 67% mentions a local health centre and 10% a pharmacist or chemist.



## Deworming Day School Observations

PMCV field officers observed one class at each of the 265 schools conducting deworming in Year 4 for CIFF regions for STH. Field officers were looking to not only confirm the occurrence of deworming and the presence of materials (i.e., drugs/monitoring forms) but also to observe deworming day procedures. The total registered population of the 265 schools was 94,608. Evidence Action directly observed an estimated 9,390 children being dewormed for STH. Of the 265 schools, 43 were also deworming for SCH treatment. This amounted to a registered population of 18,199.

Of the target schools, 96% were observed to have the appropriate drugs in place (albendazole [ALB] for STH and praziquantel [PZQ] for SCH) prior to deworming day. In only 6% of the schools observed were running out of drugs on deworming day. Of the schools only treating for SCH, 22% reported that they did not have enough PZQ tablets for the *non-enrolled* children (in addition to enrolled children).

### Treatment observations

During deworming day it is important that certain processes are followed in order to contribute to a successful deworming. One important part is that children swallow the tablets and teacher check this. During deworming day 90% of the teachers observed that children were actually swallowing the tablets. In 79% teachers were given the correct dose of drugs to children and in 99% of schools deworming was considered to proceed systematically. Of the deworming activities at schools, 53% of deworming, happened in class, while 47% was conducted outside the classroom, but still on the school compound.

#### *Treatment of Non-Enrolled & ECD*

Non-enrolled children were being treated *on-campus* in 72% of the observed schools. Indeed, 72% of schools were determined to be “prioritizing” non-enrolled children. However, 100% of observed were found to be prioritizing their ECD children, while 94% of the field officers observed ECD treated on campus.

### Teacher sensitization

In 85% of all schools observed, teachers reported that they had trained others at the school following their own training in the weeks before. The majority, 90% of these “trained teachers” used the teacher training guide to sensitize others to deworming procedure, followed by 51% using the posters, 38% used monitoring forms, 31% used their own notes from the training, 12% used their own materials and 9% used tablet poles. Multiple responses were allowed for this question.

#### *Teacher Training Booklets*

For the most part, 95% of teachers found training booklets very useful, while only 3% found them to be somewhat useful and another 2% not to be useful. When asked which sections were the most useful, teachers favored sections on steps for administering medication and health education. **Table 16** reports on the most useful section of the training booklet before and after deworming.

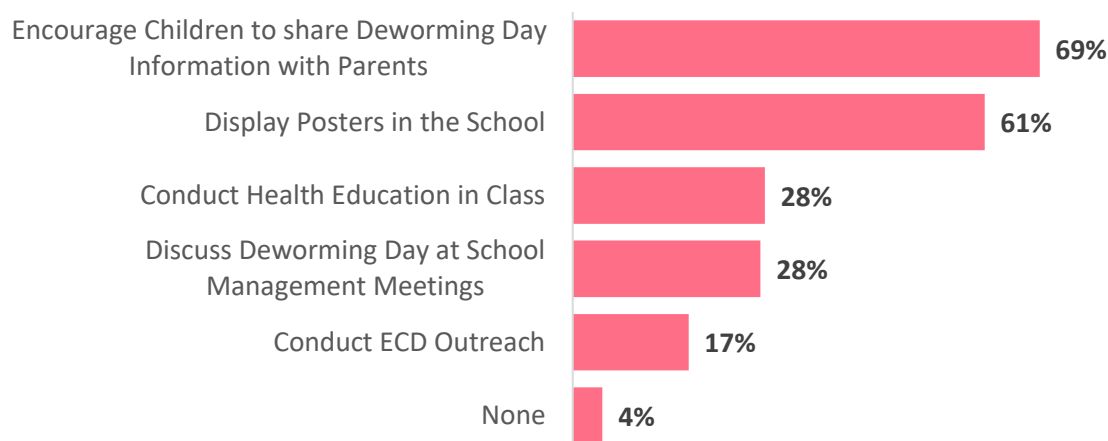
**Table 16. Reported most useful sections of Teacher Training Guides**

Sections	Pre-deworming	During deworming
Health Education What are worms	62%	55%
Steps for administering deworming tablets	65%	47%
Deworming tablets and dosage	48%	47%
Teachers’ role on deworming day	44%	45%
Side effects	38%	32%
Community sensitization supplement	20%	20%
Monitoring forms	17%	13%
Teacher checklist	13%	9%
Other	3%	0%

### Community sensitization activities conducted by schools

Teachers were also instructed to engage in activities that sensitize the community on deworming (Figure 4). The majority of teacher, 69% report to encourage children to share Deworming Day information with their parents. Another popular activity was displaying posters in the school, done by 61%. This sensitization methods can be rated as successful, while 47% of the parents mention their child as primary source of information regarding deworming day information (Table 16).

**Figure 4. Sensitization activities reported to be conducted by schools**



When asked what information they can recall from the community sensitization supplement, 69% of teachers could recall that “All children aged 2-14 will be treated in nearby primary schools”, followed by 61% recalling that deworming tablets are free and safe, 28% trained teachers will administer the tablets, 28% feeding before SCH treatment and 17% that health officers are to support deworming.

### Use of Materials

While 61% of schools indicated that they had used posters to sensitize the community to deworming, in actually 73% of schools were found to be displaying posters on deworming day.

Although tablet poles were only available in 5 teacher trainings out of 10, 93% of schools treating for SCH were observed to correctly using tablet poles. This indicates that the use of tablet poles was explained during the training.

A total of 98% of schools indicated that they had a sufficient supply of Forms for documenting treatment of enrolled children (517C), however only 85% had pre-entered information as is required according to deworming procedure.