

# Targeting, Discretionary Funding, and the Provision of Local Public Goods: Evidence from Kenya

Online Supplementary Materials – not for print publication

## Script for Interview

*Enumerator instruction: text in italics should not be read aloud to the respondent.*

*Materials you will need:*

1. SWP dispenser flyer
2. IPA flyer
3. Map of Kenya displaying DCE Project area.
4. Map of East and West areas
5. Pictures of “Maji Wazi” and “Maji isiyo Wazi”
6. Dispenser Choice Booklet
7. Lottery bag and marked pieces of paper (East and West)
8. Water Source Information Booklet

Hello, my name is \_\_\_\_\_. I work for Innovations for Poverty Action.

**IPA** is an American organization that operates in more than 25 countries around the world. IPA works to understand why some development projects work and others don't. We then attempt to expand those projects that are successful. **IPAK** is the Kenyan branch of IPA; it is the biggest IPA branch in the world. Our main office is located in Kisumu, but we are now expanding nationally.

I work for IPA on a project that is called Dispenser Choice Evaluation, or DCE, Project. This is a chlorine dispenser. *Show picture of dispenser on cover of IPA flyer to councilor.*

1. Have you heard about IPA's chlorine dispensers before? (Codes: 1=Yes, 2=No)
- a. If **YES**, where did you hear about IPA's chlorine dispensers (describe):  
\_\_\_\_\_

A chlorine dispenser is a device that has been installed at many shared water sources in Western, Nyanza, and around Nairobi. Households collecting water can use the dispenser to add an appropriate amount of chlorine to their jerricans of drinking water.

What is chlorine? Chlorine is a product that easily and quickly kills the little bugs in water and makes it safe to drink. Chlorine is used all over the world to treat water. Many cities use chlorine to treat the water that comes out of pipes. When households in many

cities and towns use water from their household taps, this water has been treated by chlorine. The chlorine kills different bugs that cause diseases like cholera and typhoid. So many cities are willing to add chlorine to water because it makes water safe to drink, and yet has no harmful side effects. If chlorine accidentally gets onto your skin, you can easily rinse it off.

To make it easy and convenient for households to use chlorine to treat water, IPA is providing a chlorine dispenser at many shared water sources. A shared water source can be a tap, shallow well, borehole, protected spring, stream or a river that at least 10 families fetch water from. Because it is installed right next to the water source, the dispenser is a visible reminder to treat your water with chlorine. It also makes it easy to know how much chlorine to use – the dispenser automatically measures out the correct amount of chlorine for one jerrican of water. The dispenser, and the chlorine needed to keep it working, are provided for free by IPA

*Hand SWP flier to councilor.* More information about chlorine dispensers, including information about how they are used, is in here.

The DCE Project is installing chlorine dispensers in many areas of Kenya. Your ward is one of the areas that may receive a dispenser. *Show map of Kenya displaying DCE Project area.* In April of this year, we'll be selecting 40 of the wards in this area to receive dispensers. We'll explain how IPA will choose which wards will receive a dispenser a little bit later on.

***Restart here in event of confusion.***

Today, we are going to ask you some questions about how you prefer to see dispensers installed and managed in your ward. We're going to describe a number of different plans for installing and managing dispensers. We'll ask you to choose between these different options. Please listen carefully and take these decisions seriously since they will decide which dispenser plan your ward will receive if your ward is chosen to receive a dispenser. We are asking these questions to find out about what you like the most – there are no right or wrong answers. The information will be used to provide your ward with the type of dispenser most suited to the needs of the ward.

In each question, you will be asked to choose between two options and tell us which you would prefer to receive in your ward. You will make choices between dispensers that vary on two different characteristics – where the dispenser will be installed, and how the refilling of chlorine will be managed. Now, I'm going to describe each of these in detail. You can see the different possible ways that dispensers can be installed and managed

here. *Hand councilor Dispenser Choice Booklet.*

### **First, who will choose where the dispenser will be installed?**

*Point out the installation options on the cover of the Dispenser Choice Booklet as you read this.* IPA uses three different ways of choosing the water source where chlorine dispenser will be installed:

- 1) DCE's staff can choose the location based on our knowledge of which water sources work best with chlorine dispensers.
- 2) You, the councilor, can decide where to put the dispenser. Dispensers can only be installed at suitable shared water sources such as springs, but you can select which water source receives a dispenser based on your knowledge of the ward and its needs.
- 3) The District Public Health Officer can decide where to put the dispenser based on his or her knowledge of the ward and its needs.

In each dispenser plan that we'll describe to you today, we'll indicate whether **DCE** staff, **you**, or the **District Public Health Officer** will decide where to install the dispenser.

### **Second, who will arrange for chlorine to be delivered to the dispenser?**

*Point out the chlorine management options on the cover of the Dispenser Choice Booklet as you read this.* In all the dispenser plans that we'll describe to you today, DCE will provide free chlorine for two years after the dispenser is installed. However, there are two different ways that the chlorine can be delivered to the dispenser when it needs to be refilled:

- 1) DCE can provide the chlorine: we can hire someone to bring chlorine refills to the dispenser, and we can monitor that person to make sure that the chlorine is refilled regularly. DCE is then responsible for guaranteeing that the dispenser is always stocked with chlorine.
- 2) DCE can transfer 650 Ksh. to you every month, and you can hire someone who will deliver chlorine to the dispenser. In this case, DCE will pay for the chlorine, but you are responsible for getting it transported and guaranteeing the dispenser is always stocked with chlorine.

So, either **DCE** or **you** will use the DCE funds to arrange for the delivery of chlorine to

the dispenser when it needs to be restocked.

To review, there are three ways that we might choose where to install a dispenser in your ward: DCE Project can choose the location, you can choose the location, or the district public health officer can choose the location. There are also two ways that we can make sure that the dispenser is always stocked with chlorine: DCE can manage the chlorine or we can transfer you 650 Ksh. per month to manage restocking the dispenser with chlorine.

These are the only ways in which the dispenser plans that you'll be choosing from today will be different from each other. All the dispensers will be installed by the same contractor, and DCE will purchase the chlorine to restock the dispenser for two years. All dispensers will be installed between June and September of 2012.

Do you have any questions so far?

*Record any questions asked by the councilor in the Comments section at the bottom of the page.*

For each of the dispenser choices in the first part, I'll show you a pair of dispenser packages that looks like this. *Open Dispenser Choice Booklet to example decision. The booklet cover should depict the following sample choice.*

Plan A		Plan B	
<b>Installed where?</b>	DCE chooses location	<b>Installed where?</b>	You choose location
<b>Chlorine delivered how?</b>	DCE is in charge of chlorine delivery to dispenser	<b>Chlorine delivered how?</b>	You receive 650 Ksh. per month to arrange for delivery of chlorine to dispenser

We'll ask you to look at the two dispenser plans shown and decide which one you like better, and would prefer to receive for your ward. Now I'm going to ask a few questions about this example to make sure you understand the different choices you will be making.

2. If you choose Plan A, who will decide where to install the chlorine dispenser in your ward? (Codes: 1=DCE , 2=Councilor , 3=District Public Health Officer, 4=Other)

  - a. If OTHER, describe: \_\_\_\_\_

***If councilor DID NOT indicate that DCE chooses the location in Plan A, point to Plan A in the flip book and read the following:*** you can see who will choose the chlorine under Plan A by looking here. *Point.* If you want to know who will choose the location

under Plan B, you can look here and see that in Plan B, you will choose the location for the dispenser. *Point to Plan B as you read this.*

3. If you choose Plan B, who will be in charge of making sure that chlorine is delivered to the dispenser? (Codes: 1=DCE, 2=Councilor, 3= Other)

a. If OTHER, describe: \_\_\_\_\_

***If councilor DID NOT indicate that he/she will be in charge of restocking the chlorine under Plan B, point to Plan B in the flip book and read the following:*** you can see who will manage the delivery of chlorine to the dispenser by looking here. *Point.* If you want to know who will be in charge of arranging the chlorine deliveries under Plan A, you can look here and see that in Plan A, DCE will manage the delivery of the chlorine for the dispenser. *Point to Plan A as you read this.*

***If councilor gets Question 2 wrong, re-read instructions from “Restart here in event of confusion” on page 2.***

***Read:*** So, I’ll ask you a series of questions about which of two dispenser plans you prefer. I’ll ask you a total of 20 questions. Your answers to these questions will decide what sort of dispenser your ward will receive if you are chosen to get a dispenser from the DCE Project.

In each question, I’ll show you two dispenser Plans, A and B. For each set of two dispensers that I show you, you can tell me that you like Plan A better, you like Plan B better, you like both plans the same, or you wouldn’t want your ward to receive either of them.

Before we begin, I will explain how we will we choose the 40 wards that will receive the dispensers, and which of the questions you answer today will determine which dispenser your ward will receive, if you are one of the councilors chosen to receive a dispenser for your ward.

Since the DCE project does not have enough funding, we can’t install dispensers in all the wards that participate in the project. To decide which wards will receive dispensers, DCE will be holding an open meeting on May 23, 2012 in Thika. You are welcome to attend this meeting. However, we know that councilors are very busy, so you are also welcome to send someone else to observe the meeting, or you can watch a video of the meeting after it takes place on [www.youtube.com](http://www.youtube.com).

If you decide to attend the meeting or send a representative, you or the representative will

be entitled to a reimbursement on transportation expenses. If you provide us transportation receipts from your area to Thika – we will double that amount and reimburse you for your expenses. If you do not provide us transportation receipts – we will reimburse you the amount set by DCE for your area.

At the meeting, we'll determine which wards will receive dispensers through the DCE Project, and which dispenser plan each ward will receive. All the councilors who answer the questions I'm about to ask you have an equal chance of receiving a dispenser for their ward. We will choose which wards will get dispensers in four steps.

**Step 1.** At the meeting, we will start by choosing one of the two halves of the DCE Project area to receive dispensers. *Show map of East and West areas.* Because we do not have the funds to install dispensers across the entire DCE Project area, we've divided the project area into East and West. *Show this on map of DCE Project area.* You can see that your ward would be part of the \_\_\_\_\_ Area. We'll choose either the East Area or the West Area in which to install dispensers.

To decide which area will receive dispensers through the project, we will put 10 pieces of paper – like these – into a bag. *Show councilor two pieces of paper with words "East" and "West" printed on them and a sample bag.* Five of the pieces of paper will say "East" and five will say "West." Without looking, we'll pull one piece of paper from the bag to decide whether we'll install dispensers in the East side or the West side of the DCE Project area. Since the number of pieces of paper that say "East" is the same as the number of pieces of paper that say "West," the East Area and the West Area have the same chance of receiving dispensers.

So, first, we'll decide whether the East Area or the West Area will receive dispensers by taking one slip of paper from a bag without looking.

**Step 2.** Within each area, there are about 100 councilors, but right now we only have the funding to install dispensers in 40 wards. So, we've given each councilor a number between 100 and 300. Your number is \_\_\_\_\_. *Show councilor his/her number on the front of the survey.* At the meeting in Thika in May, we'll put 100 numbered pieces of paper into the bag, and we'll take out 40 numbers. The numbered pieces of paper that we put into the container will represent the 100 councilors on the side of the DCE Project area chosen to receive dispensers – there will be one piece of paper for each councilor, so every councilor will have an equal chance of being chosen. The councilors whose numbers we pull out will receive dispensers for their wards.

So, our second step will be to choose the 40 councilors who will receive dispensers for

their wards. We'll do this by pulling 40 numbers from a bag containing one number for every councilor in the part of the DCE Project Area chosen to receive dispensers.

**Step 3.** We're going to ask you 20 questions in this part of the activity. These questions will decide what type of dispenser your ward will receive. For each councilor who is chosen to receive a dispenser in their ward, we'll put pieces of paper numbered 1 through 20 into the bag, and we'll pull out one piece of paper. The number on the piece of paper that we pull out will tell us which question, and which dispenser, your ward will receive.

For example, if we pull out the piece of paper with the number 20 on it, we'll turn to the last question that we asked you. *Flip to the end of the booklet and point out Question 20.* If, when you answered Question 20, you had indicated that you wanted Plan A for your ward, then your ward would receive Plan A: \_\_\_\_\_ would decide where to install the dispenser, and \_\_\_\_\_ would be responsible for arranging for the delivery of chlorine to the dispenser so that it would always be full. On the other hand, if you had indicated that you wanted Plan B for your ward, then your ward would receive Plan B.

Remember that we also said you could answer the questions by saying that you liked both plans the same, or that you didn't want either plan for your ward.

If, on the question that is chosen to decide which dispenser your ward receives, you told us that you don't want either dispenser package for your ward, then your ward won't receive any dispenser package from the DCE Project.

If, on the question that is chosen to decide which dispenser your ward receives, you told us that you like both plans the same, we'll continue to **Step 4:** we'll put a piece of paper with "A" written on it and a piece of paper with "B" written on it into the bag, and then we'll pull one out without looking. Whichever letter we pull out, that is the dispenser plan your ward will receive.

To review: on May 23, we'll hold a meeting to decide which wards will receive chlorine dispensers through the DCE Project. First, we'll decide whether the East Area or the West Area gets dispensers. Then, we'll choose 40 councilors from that part of the DCE Project area to receive dispensers for their wards. The last thing we'll do is determine which dispenser package each one of the 40 councilors will receive for their wards; we'll do this using the choices you make now.

Do you have any questions? *If there are no questions, start working through the choices with the councilor.*

For each question, I would like you to tell me: I prefer Package A for my ward, I prefer Package B for my ward, I like them both equally, or I don't want to receive either for my ward.

*For each question, read the following while pointing out the plans in the councilor's booklet:* In Package A, \_\_\_\_\_ chooses where to put the dispenser, and \_\_\_\_\_ manages the chlorine refills. In Package B, \_\_\_\_\_ chooses where to put the dispenser, and \_\_\_\_\_ manages the chlorine refills. Which plan would you like your ward to receive?

*Sample sequence of decision problems:*

Decision	Package A		Package B	
	Who chooses location?	Who restocks chlorine?	Who chooses location?	Who restocks chlorine?
1	NGO	NGO	NGO	Councilor
2	Councilor	Councilor	DPHO	Councilor
3	Councilor	Councilor	NGO	NGO
4	DPHO	Councilor	NGO	Councilor
5	NGO	NGO	DPHO	Councilor
6	Councilor	NGO	NGO	Councilor
7	Councilor	Councilor	Councilor	NGO
8	NGO	NGO	DPHO	NGO
9	DPHO	Councilor	NGO	NGO
10	Councilor	Councilor	DPHO	NGO
11	Councilor	NGO	DPHO	Councilor
12	DPHO	Councilor	Councilor	Councilor
13	DPHO	Councilor	DPHO	NGO
14	NGO	Councilor	DPHO	Councilor
15	NGO	Councilor	Councilor	Councilor
16	NGO	NGO	Councilor	NGO
17	NGO	Councilor	DPHO	Councilor
18	DPHO	NGO	Councilor	NGO
19	NGO	NGO	Councilor	Councilor
20	NGO	Councilor	NGO	NGO



# Additional Tables and Figures

Table 1: Conditional Logit Model of Heterogeneity in Dispenser Package Choices

	<i>Specification:</i>	LOGIT	LOGIT	LOGIT	LOGIT
		(1)	(2)	(3)	(4)
Ward receives a dispenser		1.682***	1.713***	2.233***	2.317***
... × registered voters (quartile)		(0.309)	(0.328)	(0.337)	(0.357)
... × voter turnout (quartile)		-0.175**	-0.204***	-0.345***	-0.371***
... × first term in office		(0.069)	(0.073)	(0.071)	(0.075)
... × major party candidate		0.003	0.013	-0.002	-0.015
		(0.069)	(0.074)	(0.068)	(0.073)
Councilor decides location		0.8***	0.735***	0.729***	0.66***
... × registered voters (quartile)		(0.156)	(0.166)	(0.158)	(0.169)
... × voter turnout (quartile)		0.012	-0.072	-0.026	-0.118
... × first term in office		(0.18)	(0.19)	(0.181)	(0.192)
... × major party candidate		0.884***	0.876***	0.546**	0.474
		(0.237)	(0.321)	(0.254)	(0.344)
Public health official decides location		0.045	0.096	0.047	0.091
... × registered voters (quartile)		(0.054)	(0.073)	(0.054)	(0.074)
... × voter turnout (quartile)		-0.107**	-0.111	0.016	0.04
... × first term in office		(0.054)	(0.074)	(0.053)	(0.073)
... × major party candidate		-0.353***	-0.197	-0.337***	-0.173
		(0.124)	(0.169)	(0.125)	(0.171)
Councilor manages chlorine funds		0.227*	0.397**	0.259*	0.439**
... × registered voters (quartile)		(0.135)	(0.183)	(0.135)	(0.183)
... × voter turnout (quartile)		-0.26	-0.389	-0.343	-0.586
... × first term in office		(0.227)	(0.349)	(0.244)	(0.374)
... × major party candidate		0.032	0.088	-0.019	0.027
		(0.052)	(0.078)	(0.052)	(0.079)
Councilor decides location × councilor manages chlorine funds		0.103**	0.066	0.195***	0.211***
... × registered voters (quartile)		(0.052)	(0.079)	(0.052)	(0.078)
... × voter turnout (quartile)		-0.529***	-0.421**	-0.558***	-0.44**
... × first term in office		(0.119)	(0.181)	(0.12)	(0.183)
... × major party candidate		0.218*	0.38*	0.227*	0.404**
		(0.131)	(0.201)	(0.131)	(0.202)
Councilor manages chlorine funds × councilor decides location		0.37*	0.3	0.358*	0.186
... × registered voters (quartile)		(0.198)	(0.299)	(0.212)	(0.322)
... × voter turnout (quartile)		-0.098**	-0.034	-0.1**	-0.043
... × first term in office		(0.045)	(0.068)	(0.045)	(0.069)
... × major party candidate		0.054	0.036	0.072	0.098
		(0.045)	(0.068)	(0.045)	(0.068)
Councilor manages chlorine funds × councilor decides location × councilor manages chlorine funds		-0.304***	-0.147	-0.341***	-0.173
... × registered voters (quartile)		(0.103)	(0.157)	(0.104)	(0.159)
... × voter turnout (quartile)		-0.418***	-0.224	-0.426***	-0.217
... × first term in office		(0.113)	(0.172)	(0.114)	(0.172)
... × major party candidate		.	0.023	.	0.143
			(0.448)		(0.481)
Councilor manages chlorine funds × councilor decides location × councilor manages chlorine funds × councilor manages chlorine funds		.	-0.105	.	-0.093
... × registered voters (quartile)			(0.102)		(0.103)
... × voter turnout (quartile)		.	0.002	.	-0.052
... × first term in office			(0.102)		(0.101)
... × major party candidate		.	-0.334	.	-0.349
			(0.235)		(0.237)
Councilor manages chlorine funds × councilor decides location × councilor manages chlorine funds × councilor manages chlorine funds × councilor manages chlorine funds		.	-0.354	.	-0.373

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Table 1 – Continued from previous page

	<i>Specification:</i>	LOGIT	LOGIT	LOGIT	LOGIT
		(1)	(2)	(3)	(4)
Public health official decides location × councilor manages chlorine fund	.		(0.257) 0.219	.	(0.257) 0.424
... × registered voters (quartile)	.		(0.458) -0.107	.	(0.491) -0.091
... × voter turnout (quartile)	.		(0.103) 0.061	.	(0.105) -0.03
... × first term in office	.		(0.104) -0.233	.	(0.103) -0.254
... × major party candidate	.		(0.238) -0.318	.	(0.241) -0.346
Control for lotteries	Yes		(0.264) Yes	Yes	(0.264) Yes
Attribute Interactions	No		Yes	No	Yes
Observations		13824	13824	13824	13824

Standard errors in parentheses. Columns 1 and 2 (3 and 4) include quartiles (within-county quartiles) of continuous characteristics, interacted with dispensers package attributes. Columns 2 and 4 also include interactions between dispenser package attributes (who chooses the location and who manages chlorine refills) and councilor and ward characteristics.