This survey investigated greywater users and perceptions of their greywater system. It was delivered in person to 66 households for a total of 83 systems by trained enumerators, using PDAs and the ODK form program, between May and June, 2012. Respondents were asked only the questions that applied to the systems in use at their residence.

		Text	Type of entry
		Blue text: Notes for investigators to	
		read. Red text: Notes for programmer	
1		Site number	Text entry
2		City	Text entry
3		Investigator- your name	Select from the list.
4		Date	
5		Start time	
ว			
6		Name of person being interviewed	Text entry.
7		How many people live in your home?	First question to be asked inside the household. Text entry
8		How many children (under 18)?	Text entry
		Note: if $Q \ge 0$, ask $Q \ge 0$ and start	
		with the youngest child, "What is the childs age? Note: Q 9 repeats for	
9		each child.	Text entry
		How many people lived in your home	
		when your greywater system was	
10		installed? Enter 99 if "don't know"	Text entry
11		Do you own or rent?	Single selection
		own	
	2	rent	

		What is your age range? Read	
12		choices.	Single selection
	1	18-24	
		25 to 34	
		35 to 44,	
		45 to 54	
		55 to 64.	
		Over 64	
13		What is your occupation?	Text entry
		How many bathrooms are in the	
14		house?	Single selection
	1	1	
	2	2	
	3	3	
	4	4 or more	
15		How many showers do you have?	Single selection
	0		
	1	1	
	2	2	
	3	3	
	4	4 or more	
	5	0	
16		How many bathtubs?	Single selection
10	0		
		1	
	1	1	
	2	2	
	3	3	
	4	4 or more	
	5	0	
17		Do you own a washing machine?	Single selection
	1	yes	
	2	no	
		How many greywater systems do you	
18		have?	Single selection
		one	
		two	
		three	
	4	more than three	
19		Do you also harvest rainwater?	Single selection
		Yes	
	.2	No	
		Note if Q19 = 1 then ask Q 20,21,22, 23. How is the rainwater	
20		stored?	Multiple selection
20	1	in barrels	
		in a cistern	
		in a rain garden / swale	
		Other	

		How much rainwater can you	
21		store?	Single selection
	1	1-100 gallons	
		101-300 gallons	
		301-600 gallons	
		601-2,000 gallons	
		more than 2,000 gallons	
		Please describe where rainwater is	
22		used:	Multiple selection
	1	for irrigation	
		for washing or cleaning	
		to flush toilets	
		in the washing machine	
		for emergency supply	
		for drinking	
		Other	
		Do you plan to install a larger system	
23		in the future?	Single selection
	1	Yes	
	2	No	
	3	maybe	
24	2 3 4	Describe your [insert "first, second or third" if Q18 >1] greywater system(s). (Investigator asks probing questions to see what kind of system the person has.) [radio button] Note: Repeat question 24 up to 3 times depending on # of systems reported in Q 18. ODK should assign each system a # 1, 2, or 3. laundry to landscape branched drain pumped system- no filters pumped system- with filters constructed wetland system	Single selection
		-	
		laundry barrel system bucket system	
		manufactured system	
		other (please describe)	
		Which fixtures in your house are connected to your greywater system? Note: Insert 1 st , 2nd, 3rd, if Q 18 > 1. Repeat question 25 up to 3 times depending on # of systems	
25		reported in Q 18.	Multiple selection
	1	Shower / bath	
		Washing machine	
		Kitchen sink	
		1	I

	5	Dishwasher	
		Other	
	0	Now I'm going to ask a few questions	
		about the process of installing your	
		first greywater system. How did you	
		first learn about greywater reuse?	
26		Enter 99 for "don't know"	Multiple selection
		Media- newspaper article, magazine	
	1	article, news show	
	2	Book	
	3	Friend/colleague	
		Class or workshop	
		Other	
		Was there a particular event that	
		motivated you to install this system?	
		Describe. (mark all that apply)	
27		Enter 99 for "don't know"	Multiple selection
	1	Incentive program	•
		Class or workshop to do it	
		Drought	
		Water rationing	
	5	General desire to save water	
		Limited local water supply (drying	
	6	wells, drying creeks/rivers)	
	7	Other	
	8	None	
		What goals did you have for your	
28		system?Enter 99 for "don't know"	Multiple selection
	1	Save water	
	2	Reuse- not waste	
	3	Reduce flows to sewer/septic	
	4	Be more ecological in home	
		Have automatic watering system in	
		place	
	6	Other	
		About how much time passed	
		between when you first learned	
		about greywater and the	
20		installation of your system?Enter	Cingle coloction
29	1	99 for "don't know"	Single selection
├		Less than 1 year	
├		1-3 years	
\vdash		4-6 years	
\vdash		6-10 years	
\vdash	5	More than 10 years	
		Now I am going to ask you some	
		questions about how satisfied you are with your greywater system.	

		Overall, how satisfied are you with	
		yourgreywater system? [note: If Q 18 > 1 insert name of	
		system from Q 25] Note: If Q 25= 1	
		enter "shower", if Q $25 = 2$ enter	
		"washer", if Q 25 = 3 enter "kitchen	
		sink". Note: If Q 18 > 1 repeat Q 30-	
		33 for each system (up to 3 times	
		depending on # of systems	
30		reported in Q 18). Read all options.	Single selection
		Very satisfied	
		Satisfied	
		Neutral	
		Dissatisfied	
	5	Very dissatisfied	
		How satisfied are you with your	
		greywater system's	
		reliability or need for	
		maintenance?[note: If Q 18 > 1 insert name of system from Q 25	
		Note: If Q 25= 1 enter "shower", if Q	
		25 = 2 enter "washer", if Q $25 = 3$	
		enter "kitchen sink". Note: If Q $18 > 1$	
		repeat Q 30- 33 for each system (up	
		to 3 times depending on # of	
		systems reported in Q 18).] Read	
31		all options.	Single selection
		Very satisfied	
		Satisfied	
		Neutral	
		Dissatisfied	
	5	Very dissatisfied	
		How satisfied are you with how	
		well your[note: If Q 18 > 1	
		insert name of system from Q 25 Note: If Q 25= 1 enter "shower", if Q	
		25 = 2 enter "washer", if Q = 25 = 3	
		enter "kitchen sink".]greywater	
		system waters your plants?Read	
32		all options.	Single selection
	1	Very satisfied	
	2	Satisfied	
	3	Neutral	
	4	Dissatisfied	
	5	Very dissatisfied	

		Would you recommend your	
		greywater system to	
		others?note: If Q 18 > 1 insert	
		name of system from Q 25] Note: If	
		Q 25= 1 enter "shower", if Q 25 = 2	
		enter "washer", if Q 25 = 3 enter	
		"kitchen sink"Note: If Q 18 > 1 repeat	
		Q 30- 33 for each system (up to 3	
22		times depending on # of systems	Cingle coloction
33	1	reported in Q 18).] Yes	Single selection
		No	
		-	
		Yes, with modifications	
	4	Not sure	
		To your knowledge, have any of your friends or family members	
		installed a greywater system after	
34		hearing about yours?	Single selection
	1	Yes	
	-	No	
	~	What type of reactions, if any, have	
		you encountered from others when	
		you talk about your greywater	
		system? Do not read choices. Mark	
35		all that apply.	Multiple selection
		Positive comments	
	1	excited	
	2	good idea	
	3	jealous	
	4	interested	
	5	wants to do it too	
	6	other positive comments	
		Negative comments	
	7	yuck	
	8	step backwards	
	9	lowers property value	
		other negative comments	
		What benefits, if any, have you had	
		from your greywater system? Do	
		not read choices, ask probing	
36		question: "anything else"	Multiple selection
		Water savings	
		Time savings	
		Plants health improvement	
	4	Money savings	
	_	Knowledge of keeping water out of	
	5	sewer system	
	~	Ability to grow new / specialized	
		plants	
		Use healthier products	
		Other	
	9	none	

Sheet1

		What problems or hassles, if any,	
		have you had from your greywater	
37		system?	Multiple selection
	1	clogging	
		broken parts	
		bad smells/odors	
	-	Not irrigating properly	
		Pooling greywater	
		Attracting pests (ants, racoons, etc)	
		a lot of work	
		unpleasant maintenance	
		Other	
	10	None	
		Note: If Q 18 > 1 repeat Q 38, 39,	
		40a-c, for each system (up to 3	
		times depending on # of systems	
		reported in Q 18). How old is the [note: If Q 18 >	
		1 insert name of system from Q 25]	
		greywater system? Note: If Q 25= 1	
		enter "shower", if Q $25 = 2$ enter	
		"washer", if Q 25 = 3 enter "kitchen	
38		sink". Enter 99 for "don't know"	Single selection
LI	1	Less than 1 year	
	2	1-3 years	-
	3	4-6 years	-
		6-10 years	-
		More than 10 years	-
		Who installed the [note: If	
		Q 18 > 1 insert name of system	
		from Q 25] system? Allow for	
		multiple answers. [radio buttons]	
		Note: If Q 25= 1 enter "shower", if Q	
		25 = 2 enter "washer", if Q 25 = 3	
20		enter "kitchen sink". Enter 99 for	Multiple coloction
39		"don't know"	Multiple selection
		Self	
		Family member	
		Through a class or workshop	
		Professional installation	
	7	Other	
		How much did the[note: If	
		Q 18 > 1 insert name of system from Q 25] system cost you	
		overall? I'll ask the breakdown of	
		costs shortly.[drop down	
		menu]Note: If Q 25= 1 enter	
		"shower", if Q $25 = 2$ enter "washer",	
		if Q 25 = 3 enter "kitchen sink". Enter	
40a		99 for "don't know"	Single selection
	1	0-\$100,	
		\$101-200	
		\$201-300	
	3	1	

		\$301-500	
	5	\$501-700	
	6	\$701-1,000	
	7	\$1001-3,000	
	8	More than \$3,000	
		What was included in that amount?	
		(mark all that apply) Enter 99 for	
40b		"don't know"	Multiple selection
		Plumbing supplies (Pipes, valves,	
		fittings)	
		Pump(s)	
		Filter(s)	
		Tank(s)	
		Irrigation components	
	6	Plants	
	_	Landscaping supplies (compost,	
		mulch, gravel)	
	-	Labor	
	9	Permits	
		Other prep work ie. Removing	
	10		
		Note: If 40b = 8 (labor) ask Q 40c. What was the labor cost? Enter	
40c		99 for "not sure"	Single selection
		0-\$100,	
		\$101-200	
		\$201-300	
		\$301-500	
	-	\$501-700	
		\$701-1,000	
		\$1001-3,000	
	8	More than \$3,000	
		Did you receive a rebate or	
40d		incentive for installing the system?	
		Yes	
	2	No	
		Note: If Q 40d = 1, then ask Q 40e	
40e		Who gave you the rebate?	Single selection
		water district/department	
		city (not water department)	
	3	Other	
		Note: If Q 32d = 1, then ask Q 40f	
		How much was the rebate or	
40f		incentive?	Single selection
		0-\$100,	
		\$101-200	
	3	More than \$200	

Note: If Q18> 1, ask: "Which system was this rebate for?" Radio button shower, laundry, kitchen sink, 41 other 1 shower 2 laundry 3 kitchen sink 4 Other	
41shower, laundry, kitchen sink, otherMultiple selection41showerMultiple selection1showerIaundry2laundryIaundry3kitchen sinkIaundry	
41otherMultiple selection1shower	
1 shower 2 laundry 3 kitchen sink	
1 shower 2 laundry 3 kitchen sink	
3 kitchen sink	
3 kitchen sink	
4 001	
"May I please see the shower that is	
connected to your greywater	
system?" This screen should only pop	
up if Q 25=1.	
Note: If Q 25 = 1, ask Q 42-48	
How many showers per week are	
42 taken in this shower? Text entry	
How many times a week does	
43 someone take a bath? Text entry	
What is the flow rate of your	
shower head? Enter 99 for "don't	
know". Observe showerhead for	
44rating.Single selection	
1.5 gpm	
2 gpm	
2.5 gpm	
> 2.5 gpm	
other (if showerhead showes another	
flow rate enter it here) Text entry	
How many minutes would you say	
45 an average shower lasts? Text entry What bathing products do you use in	
the system? [Ask to observe	
bathroom photograph products]	
Note: Take photograph of	
shampoo, conditioner, make sure	
labels are visible. Note: Insert	
46 photo prompts, photo 1, photo 2 Photo entry	
What products are used to clean the shower / sink / bathtub? Note:	
47 Insert photo prompts Take photo Photo entry	
Did you change the products used in the shower/sink after installing	
48 the system? Single selection	
1 Yes	
2 No	
3 Some products	
Note: if Q 25= 2, ask Q 49- 58	
"May I please see the washing machine that is connected to your	
greywater system?" This screen	
should only pop up if Q 25=2.	
49 Is this washing machine Single selection	

	1	(a) top loader	
		(b) front loader	
	2	What brand of washing machine do	Single selection I ook at
50		you have?	machine if they don't know.
	1	Amana	
	2	Bosch	
	3	Electrolux	
	4	Fisher & Paykel	
	5	Frigidaire	
	6	GE	
	7	Kenmore	
	8	LG	
	9	Maytag	
	10	Miele	
	11	Samsung	
	12	-	
	13	Other	
		Approximately how old is your	
51		machine?	Single selection
		Less than 1 year	
		1-3 years	
		4-7 years	
		8-15 years	
		Over 15 years	
		How many loads of laundry per	
52		week are done in this machine?	Text entry
53		Do you typically do large, medium, or small loads of laundry?	Single selection
55	1	large	
		medium	
		small	
		What laundry products do you use	
		in the system? [[Ask to observe	
		products photograph products]	
		Note: Take photo of detergents and	
		other products. Note: Insert photo	
54		prompts, photo 1, photo 2	Photo entry
		Brand of detergent: Observation.	
		Mark what brand of detergent you	
55		see.	Single selection
	1	Oasis	
	2	Biopac	
		ECOS	
	4	Other	
		Observation. Mark what other	
56		products you observe	Multiple selection
		Chlorine bleach	
		hydrogen peroxide bleach	
		Stain remover -note brand	
	4	Other	

		Did you change your clothes	
		washing products after you	
57	- 1	installed your system?	Single selection
		Yes	
		No	
	3	Some products	
		Observation. Do you see a diverter	
58		valve near machine?	Observation
		Yes	
	2	No	
		Note: If Q 58=1, ask Q 59.	
		Observation. Do you see a sign	
59		near the valve indicating how to operate it?	Observation
59	1	Yes	Observation
		No	
	2	INO	
		Note: Repeat Q 60 if Q $18 > 1$ and	
		insert type of system. If Q 25= 1 enter "shower", if Q 25 = 2 enter	
		"washer", if Q 25 = 3 enter "kitchen	
		sink". If Q 58 = 2, ask Q 60 . If Q 25	
		= 1 or 3, ask Q 60 Is there a way to	
		redirect yourgreywater to	
		the sewer or septic system? Enter	
		99 for "don't know". Note: If they	
		need to disconnect and reconnect	
60		pipes mark "no".	Single selection
	1	Yes	-
	2	No	
		When, if ever, have you directed	
		your greywater to the sewer or	
61		septic system?	Multiple selection
		Rainy season	
	2	unhealthy products for plants	
	3	problems with system	
	4	washing diapers	
	5	other	
	6	Never	
		To your knowledge, have any	
		substances that could harm your	
		plants entered the greywater	
		system? (Mark yes for any	
62		substances on clothes)	Single selection
		Yes	
	2	No	
		Note: If Q62=1 Ask Q 63. What	
63		substances?	Single selection
	1	paint/chemical/ on clothes/body	
		dirty diapers	
		bleach	
	4	"wrong" detergent or products	
. I.		-	1

	5	Other	
64		[Note: If Q62=1 Ask Q 64] Why did this occur?	Multiple selection
	1	forgot to turn valve,	
	2	visitors/guests did it	
		noticed it occurred because of ill	
	3	health of plants	
		Didn't think it really mattered if the	
	4	products went outside a few times	
	5	Didn't have a way to redirect greywater to sewer/septic.	
		Other	
	0	To your knowledge, has any	
		person or pet come into direct	
		contact with the greywater, other	
		than when someone was doing	
65		maintenance?	Single selection
		Yes	
	2	No	
		[Note: If Q 65= 1 ask Q 66] How did	
66		this contact occur?	Multiple selection
	1	while gardening	
	2	child playing in/near system	
		greywater entered pathway or other	
		similar location	
	4	Other	
		How would you describe your level of understanding of how	
		your greywater system	
		works? [note: If Q 18 > 1 insert	
		name of system from Q 25, If Q 25=	
		1 enter "shower", if Q 25 = 2 enter	
		"washer", if Q 25 = 3 enter "kitchen	
		sink" Note: If Q 18 > 1 repeat Q 67, 68, 69, 70, 73 for each system (up to	
		3 times depending on # of systems	
67		reported in Q 18). Read options.	Single selection
	1	Very well	-
		well	
		neutral	
		not well	
		not well at all	
		Do you have an owners manual	
		describing the[note: If	
		Q 18 > 1 insert name of system	
		from Q 25] greywater system?	
		Note: If Q 25= 1 enter "shower", if Q $25 = 2$ optor "washer", if Q $25 = 2$	
		25 = 2 enter "washer", if Q 25 = 3 enter "kitchen sink" Enter 99 for	
68		"don't know".	Single selection
	1	Yes	

	2	No	
		Does your greywater	
		system have multiple zones? (you	
		can direct it to different areas of	
		the landscape) [note: If Q 18 > 1	
		insert name of system from Q 25]	
		Note: If Q 25= 1 enter "shower", if Q $25 = 2$ enter "washer", if Q $25 = 3$	
		enter "kitchen sink" Enter 99 for	
69		"don't know".	Single selection
	1	Yes	
	2	No	
		Now I'm going to ask you some	
		questions about how your system	
		works . Have any parts broken in	
		yourgreywater system?	
		[note: If Q 18 > 1 insert name of	
		system from Q 25] Note: If Q 25= 1 enter "shower", if Q 25 = 2 enter	
		"washer", if Q 25 = 3 enter "kitchen	
70		sink" Enter 99 for "don't know".	
	1	Yes	
	2	No	
		[Note: If Q 70 = 1 ask Q 71-72] What	
71		parts?	Multiple selection
		Valve	
		Pipe or tubing	
		Filter	
		Pump	
	5	Other	
		How many times has this	
72		happened? Enter 99 for "don't know"	Single selection
12	1	once	
		2-5 times	
		6-10 times	
		more than 10 times	
		[Note: If Q 73 = 1 ask Q 74-76] Have	
		you ever noticed clogging in the	
73		system?	Single selection
		Yes	
	2	No	
74		Where? [Show labeled diagram of each system to aid in recall]	Multiple selection
	1	Drain	
	2	Valve	
	3	Outlet	
	4	Branch	
	5	Other	
	5		

75		How often does this occur?	Single selection
		only once	
		Every 1-2 months	
		Once every 3-6 months	
		Once a year	
	5	Once every two years	
	6	Less than once every two years	
76		What did you do to fix the problem?	Multiple selection
	1	Unclogged it myself,	
	2	hired someone,	
	3	turned off the system and haven't turned it back on,	
	4	redesigned system	
	5	Other	
77		How often do you check on the greywater outlet pipes?	
		Never,	
		when I notice a problem,	
		more than 1/year,	
		about 1/year,	
	5	less than 1/year	
78		Do you have mulch basins?	
		Yes	
	2	No	
		[Note: If Q 78 = 1 ask Q 79] What maintenance, if any, have you done	
79		to the mulch basins?	Multiple selection
	1	Nothing,	•
		dug out area around greywater	
	2	outlet and replaced mulch,	
	3	added new mulch to top of basin,	
	4	other	
80		[Note: If Q 78 = 2, ask Q 80] What maintenance, if any, have you done to the area under the greywater outlets?	Multiple selection
00	1	Nothing,	
		dug out soil, replaced it	
		Other	
81		Have you noticed any changes in the soil around or under the greywater outlets or mulch basins?	
	1	Yes	
	2	No	
82		[Note: If 81=1 ask Q 82] Describe what you noticed.	Multiple selection
	1	more earth worms	

		less earthworms	
		poorer looking soil	
		richer looking soil	
		tighter, less friable soil	
		looser, more friable soil	
	7	Other	
		Have you ever noticed ponding on	
~~		the surface of the ground where	
83	- 1	your greywater is used?	Single selection
		Yes	
	2	No	
		Have you ever noticed runoff on	
84		the surface of the ground where your greywater is used?	Single selection
04	1	Yes	
		No	
	2	[Note: If Q 18> 1 AND Q 83 = 1 or Q	
		[10016: 11 Q 18 > 1 AND Q 83 = 1 01 Q 84 = 1 ask Q 85]. Which greywater	
85		system had ponding or runoff?	Multiple selection
00	1	shower system	
		washing system	
		kitchen sink system	
		combined system	
		[Note: If Q 83= 1 or Q 84 =1 ask Q	
		86, 87, 88] When did this ponding	
86		or runoff happen?	Multiple selection
	1	During rainy time	
		Larger then normal greywater	
	2	production (ie. Visitors)	
	3	During regular use	
	4	Didn't switch zones	
	5	Other	
		Approximately how many times	
87		did this happen?	Single selection
	1	only once	
	2	Every 1-2 months	
		Once every 3-6 months	
		Once a year	
	5	Once every two years	
	6	Less than once every two years	
		What actions, if any, did you take	
88		to fix this?	Multiple selection
		Replaced mulch,	
		make mulch basin larger	
	3	hired someone,	
		turned off system and haven't turned	
		it back on,	
		redesigned system	
	6	Other	

		After you installed your groupster	
		After you installed your greywater	
		system, have you or anyone in your household made any other	
		changes in how you use water?	
		[mark all that apply; probe only	
89		generally]	Multiple selection
05	1	no changes	
	Т	installed low flow fixtures (e.g.	
	2	showerheads, faucet aerators)	
	2	installed high-efficiency appliances	
	2	(e.g. clotheswasher, dishwasher)	
	3	installed, upgrade landscaping and	
	1	irrigation system to be water efficient	
		installed rainwater harvesting system	
	5	Installed failwater harvesting system	
	6	installed additional greywater systems	
		took shorter showers or less baths	
	1	Captured "clear water" in bucket in	
	8	shower	
		Installed (or started using) shower	
	9	shut off valve	
		Turned off water when not using it (ie	
		when washing dishes or brushing	
		teeth)	
	11	Other	
		To estimate how much water you	
		may be saving from your	
		greywater system we would like	
		your permission to have access to	
		your water records from the water	
		company. Do you authorize us to look at the past water records?	
90		(have them sign form)	Single selection
	1	Yes	
		No	
	2		
		Based on your experience of living	
		with a greywater system, do you	
		think that anyone could get sick	
91		from your greywater system?	Single selection
		Yes	.
		No	
		Now we'll be going outside to look	
		at the plants irrigated with	
		greywater.	
		Please show me the area of your	Record on site map, not in
		yard that you irrigate.	ODK
		Please show me the area that is	
		irrigated by your greywater	Record on site map, not in
		system(s).	ODK. Measure later.
·			

		Before you installed your	
		greywater system, what kind of	
00		landscaping did you have here?	
92		Enter 99 for "don't know"	Multiple selection
		Hardscape / no landscaping	
		Partially landscaped area	
	3	Lawn	
		Edible landscaping (fruit trees, fruiting	
	Л	vines, bushes, shrubs, etc but not- vegetables)	
		Vegetable garden	
		Drought-tolerant landscaping	
	1	Water-intensive landscaping	
		[Note: If more than one response for 92 ask Q 93. For each type	
		mentioned in Q 92 ask, "What %	
		" and pop up as many	
		times as they have responses to Q	
93		92]	
		Please describe how you irrigated	
		this area before your greywater	
94		system was installed.	Multiple selection
	1	no supplemental water	
	2	hand watered by hose	
	3	in ground irrigation system	
	4	automatic timer/controller	
	5	manual control	
	6	with a drip irrigation system	
	7	with a spray irrigation system	
	8	with a soaker hose	
	9	with rainwater	
	10	other	
		How would you describe the	
		summer soil moisture level in your	
		landscape before you began	
		irrigating with greywater? Enter 99	
95		for "don't know"	Single selection
		Consistently moist	
		often dry	
	3	very dry	
		Did you start to irrigate this area	
		with greywater immediately after it the system was installed? Enter 99	
96		for "don't know"	Single selection
- 30	1	Yes	
├ ── ├		No	
	2		
		Note: If Q 96= 2 ask Q 97] How long	
		after installing the system did you	
97		begin to irrigate with greywater?	Single selection
	1	Less than on month	
		1-6 months	
	2	1-6 months	

3	7months-1 year	
0		
4		
	I see you have	
	plants in this area being irrigated	
	Observation. (enter number of	
	plants on the system) ,	Text entry
		Single selection. Record on
		site map any information
		about how much water
1		each plant is getting.
2		
	getting two outlets, while others	Record on site map, not in
	are only getting one outlet.	ODK
		Multiple colection
1		Multiple selection
	-	
	-	
	irrigated with greywater after they	
	begin receiving greywater	
- 1		Multiple selection
	-	
-		
	· · ·	
	What is the source of your	
	irrigation water?	Multiple selection
	Municipal water (write in name of	•
1		
2	On-site well	
3	Rainwater	
	4 1 2 3 4 1 2 3 4 4 5 6 7 7 8 9 10 11 1 2 1 2	with the greywater system Observation. (enter number of plants on the system),Do you think these plant are all receiving equal amounts of greywater?1 Yes2 No[Note: If Q 99 = 2 ask Q 100]. Ask more about how greywater is distributed to the plants and record on the site map (ie. If one tree is getting two outlets, while others are only getting one outlet.When you installed your greywater system, how old were the plants? Mark all that apply. Enter 99 for "don't know".1 Just planted2 1-2 years3 3-4 years4 more than 4 yearsWhat types of changes, if any, did you notice in the plants that are irrigated with greywater after they begin receiving greywater irrigation? Enter 99 for "don't know".1 No change2 Plants died3 Plants wilted4 Plants grew bigger5 Plants grew more leaves6 Plant leaves turned a weird color7 Color of plant improved8 Plants fruited more than before9 Plants fruited less than before9 Plants fruited less than before10 other positive affects11 other negative affects11 other negative affects12 other negative affects13 other negative affects

	4	Other (explain)	
		What month do you typically begin	
		irrigating this yard? [Note: drop	
104		down with months] [select month]	Single selection
		What month do you typically stop	
		irrigating this yard? [Note: drop	
		down with months] [select month]	Single selection
		Since the greywater system was	
		installed how often do you water	
		the other plants in your yard	
		during the irrigation season that	
		are not receiving greywater? (excluding new starts or any plants	
105		in pots)	Single selection
105	1	never	
		less than once a month	
	-	1/month	
		2 times a month	
	-	Once a week	
	6	twice a week	
	7	three times a week	
	g	4-6 times a week	
	-	every day	
	9	every day	
		[Note: If Q 104 = 2-9 ask Q 105 (ask	
		for all responses except 1)] When	
		you water the other plants in your	
		yard that are not receiving greywater	
		how long do you typically water them	
106		for? [enter response in minutes]	Text entry
		Are there any plants in this	
1		greywater irrigated area that are	
107		receive supplemental irrigation?	Single selection
107		receive supplemental irrigation? Yes	Single selection
107		receive supplemental irrigation? Yes No	Single selection
		receive supplemental irrigation? Yes No [note: If Q105= 1 ask Q 106] How	
107		receive supplemental irrigation? Yes No [note: If Q105= 1 ask Q 106] How many?	Single selection Text entry
108		receive supplemental irrigation? Yes No [note: If Q105= 1 ask Q 106] How many? Have you done anything to	Text entry
	2	receive supplemental irrigation? Yes No [note: If Q105= 1 ask Q 106] How many? Have you done anything to improve the soil in this area?	
108	2	receive supplemental irrigation? Yes No [note: If Q105= 1 ask Q 106] How many? Have you done anything to improve the soil in this area? Yes	Text entry
108	2	receive supplemental irrigation? Yes No [note: If Q105= 1 ask Q 106] How many? Have you done anything to improve the soil in this area? Yes No	Text entry
108 109	2	receive supplemental irrigation? Yes No [note: If Q105= 1 ask Q 106] How many? Have you done anything to improve the soil in this area? Yes No [Note: If Q 107=1 ask Q 108] what	Text entry Single selection
108	2	receive supplemental irrigation? Yes No [note: If Q105= 1 ask Q 106] How many? Have you done anything to improve the soil in this area? Yes No [Note: If Q 107=1 ask Q 108] what exactly did you do?	Text entry
108 109	2	receive supplemental irrigation? Yes No Inote: If Q105= 1 ask Q 106] How many? Have you done anything to improve the soil in this area? Yes No INote: If Q 107=1 ask Q 108] what exactly did you do? add compost	Text entry Single selection
108 109	2	receive supplemental irrigation? Yes No [note: If Q105= 1 ask Q 106] How many? Have you done anything to improve the soil in this area? Yes No [Note: If Q 107=1 ask Q 108] what exactly did you do?	Text entry Single selection
108 109	2 1 2 1 2	receive supplemental irrigation? Yes No Inote: If Q105= 1 ask Q 106] How many? Have you done anything to improve the soil in this area? Yes No INote: If Q 107=1 ask Q 108] what exactly did you do? add compost	Text entry Single selection
108 109	2 1 2 1 2 3	receive supplemental irrigation? Yes No [note: If Q105= 1 ask Q 106] How many? Have you done anything to improve the soil in this area? Yes No [Note: If Q 107=1 ask Q 108] what exactly did you do? add compost add fertilizer	Text entry Single selection
108 109	2 1 2 1 2 3	receive supplemental irrigation? Yes No [note: If Q105= 1 ask Q 106] How many? Have you done anything to improve the soil in this area? Yes No [Note: If Q 107=1 ask Q 108] what exactly did you do? add compost add fertilizer add coffee grounds Other	Text entry Single selection
108 109	2 1 2 1 2 3	receive supplemental irrigation? Yes No [note: If Q105= 1 ask Q 106] How many? Have you done anything to improve the soil in this area? Yes No [Note: If Q 107=1 ask Q 108] what exactly did you do? add compost add fertilizer add coffee grounds Other [Note: If Q 107=1 ask Q 109] when	Text entry Single selection Multiple selection
108 109 110 110	2 1 2 1 2 3 4	receive supplemental irrigation? Yes No [note: If Q105= 1 ask Q 106] How many? Have you done anything to improve the soil in this area? Yes No [Note: If Q 107=1 ask Q 108] what exactly did you do? add compost add fertilizer add coffee grounds Other	Text entry Single selection
108 109	2	receive supplemental irrigation? Yes No Inote: If Q105= 1 ask Q 106] How many? Have you done anything to improve the soil in this area? Yes No INote: If Q 107=1 ask Q 108] what exactly did you do? add compost	Text entry Single selection
108 109 110 110	2 1 2 1 2 3	receive supplemental irrigation? Yes No [note: If Q105= 1 ask Q 106] How many? Have you done anything to improve the soil in this area? Yes No [Note: If Q 107=1 ask Q 108] what exactly did you do? add compost add fertilizer add coffee grounds Other [Note: If Q 107=1 ask Q 109] when	Text entry Single selection Multiple selection
108 109 110 110	2 1 2 1 2 3 4	receive supplemental irrigation? Yes No [note: If Q105= 1 ask Q 106] How many? Have you done anything to improve the soil in this area? Yes No [Note: If Q 107=1 ask Q 108] what exactly did you do? add compost add fertilizer add coffee grounds Other [Note: If Q 107=1 ask Q 109] when was the last time you did this?	Text entry Single selection Multiple selection

	2	within a year	
		within a year	
	4	longer than a year ago	
		To your knowledge, have any of plants in this area of the garden	
		died unexpectedly in the last 2	
112		years? Enter 99 for "don't know"	Single selection
	1	Yes	
		No	
		[Note: If Q 110 = 1 ask Q 111] Did	
		this plant die after you began	
		irrigating it with greywater? Enter	
113		99 for "don't know"	Single selection
		Yes	
	2	No	
		Are any of your plants showing	
114		signs of disease or stress now?	Single selection
		Yes	
	2	No	
		[Note: If Q 112 = 1 ask Q 113] Can	
		you show me this plant? [observe plant note symptoms, photograph	
115		plant]	Observation
110		[Note: If Q 112 = 1 ask Q 114] Is	
		this plant irrigated with greywater?	
		if yes Use this plant for one of the	
116		detailed plant question form	Single selection
	1	Yes	
	2	No	
		NEW FORM	
		Do one for each type of plant (ie.	
		Tree, bush, annual, etc.) Do one for any plant showing	
		signs of disease.	
		Signs of discusci	
1		Plant #	Text entry
		Now I'm going to ask you some	
		detailed questions some of your	
		plants. Please answer to the best	
		of your ability and tell me if you	
		aren't sure of any answers.	
2		Plant category [observation]	Single selection
		tree	
		bush	
		vine	
		perennial	
	5	annual	
		What kind of plant is this?	
3		(common name and Latin name) Enter 99 for "don't know"	Text entry
3			Text entry
		common name	

			leal of the interview i
4		Latin name (look up if needed)	look up after interview is over
		Take a photograph of the plant with	
		the numbered flag. [Note: insert	
5		photo prompt]	
		Approximately how large was this	
		plant when it was planted? Enter	.
6		99 for "don't know"	Single selection
		Seed	
		from 4 or 6 pack	
		1-3 gallon pot	
		larger than 5 gallon	
	5	bare root tree,	
	6	other	
		Approximately how long ago was	
		this plant planted? Enter 99 for	
7		"don't know"	
		Less than 1 year,	
		1-2 years,	
		2-5 years,	
	4	more than 5 years	
		When did this plant begin	
8		receiving greywater? Enter 99 for "don't know"	Single selection
	1	immediately after it was planted	
		6 months-2 years after it was planted	
		over 2 years after it was planted	
		Approximately how much	
		greywater is this plant receiving?	
		(fraction of the system) Enter 99	
9		for "don't know"	Text entry
		Since the greywater system was	
10		installed, do you water this plant	Cinale coloction
10	- 1	with supplemental irrigation water?	Single selection
		Yes	
	2	No	
		[Note: If Q 10= 1 ask Q 11, 12] How often do you water this plant with	
11		supplemental irrigation water?	Single selection
	1	less than once a month	
		1/month	
		2 times a month	
		Once a week	
		twice a week	
		three times a week	
		4-6 times a week	
		every day	
	2	,,	

Sheet1

		How long do you water this plant	
		when you water it with	
10		supplemental irrigation water?	Tout ontro
12		[enter in minutes]	Text entry
13		How was this plant irrigated before it was irrigated with greywater?	Multiple selection
15		it has always received greywater	
	1	irrigation	
		hand watered	
	3	irrigation system	
		no supplemental water	
		[Note: If Q13 = 2 or 3 ask Q 14-15]	
		How often did you water this plant	
		during the irrigation season before	
14		it was irrigated with greywater?	Single selection
		less than once a month	
		1/month	
		2 times a month	
		Once a week	
		twice a week	
		three times a week	
		4-6 times a week	
	8	every day	
		How long did you water this plant	
15		each time you watered it? [enter in	Tout ontry
15		minutes]	Text entry
16		Describe the sun exposure of this plant. Read choices.	Single selection
	1	Full sun (6 or more hours direct sun)	
		Morning sun,(at least 3 hours)	
		Afternoon sun (at least 3 hours)	
	5	Mostly shade (less than 3 hours sun	
	4	a day)	
		Was this plant in good health prior	
		to greywater irrigation? Enter 99	
17		for "don't know"	Single selection
		Yes	
		no	
	3	not sure	
18		Enter site number for house	Text entry
		Note: Allow this form to be repeated	
		several times (up to 4)	