Pretesting Report 26th – 27th March 2007. Buba District

Pretesting team:	**Topics and picture numbers covered**	**Total # done**
Augusto Joan Mendes:	Handwashing 1-16; Malaria 9-18; Water Storage 20-30	= 36
Irineu Lencastre Fiuza:	Water Storage 1-13 : Taking water 27-30; Water Source 9-18; HIV 14-20	=33
Mussa fal Kamara:	Water Source 1-8; Water Storage 13-20; Malaria 20-30	= 26
Nelson Neves:	HIV 1-10; Handwashing 25-30 = 25; Taking water 9-19	= 25
Carlos Da Silva:	Malaria 1-7; Handwashing 17-24; HIV 20-22; Taking water 20-27	= 25
Cristovao Correia Dayves:	Taking water 1-8; HIV 11-14; Water Source 19-30	= 23

Observers

Mamadu Balde, Effective Interventions Translator

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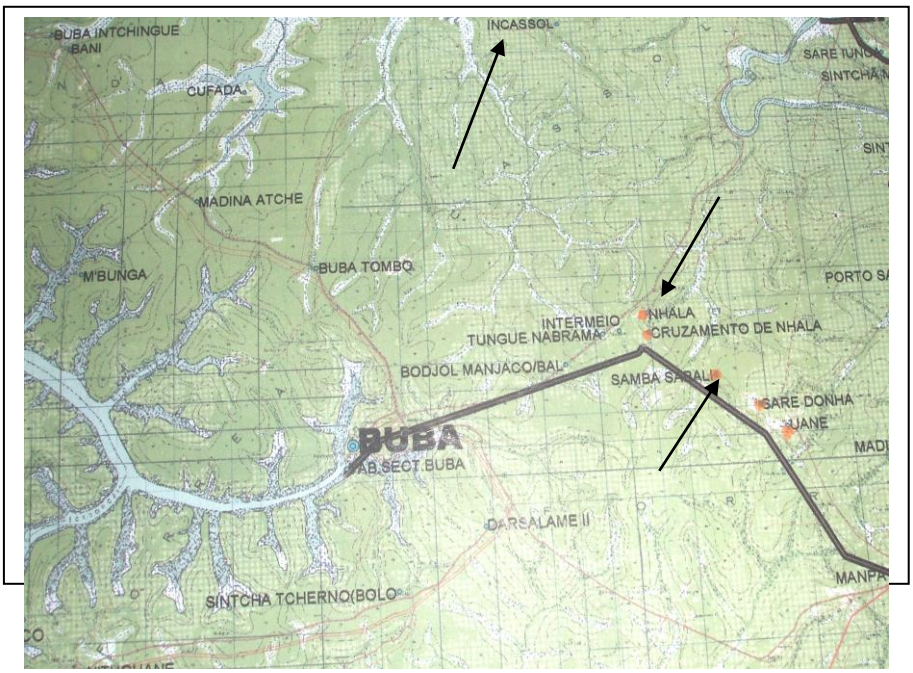
Pre-testing in Villages in Buba District

26th March: Nhala, 12 kms east of Buba, on main road to Bissau

Samba Sambali, 13 kms east of Buba, on main road to Bissau

27th March Incasoli 24 kms off main Buba road, from Nhala north west on tracks

Duto Djara, 5 kms further on from Duto Djara, on tracks



Criteria for selection of villages:

- Must be within the project area
- Must be large enough to find enough respondents for 6 pre-testers
- Must be multi-ethnic to allow cross section of respondents
- Must be within easy access from Buba to avoid wastage of time

Introduction of pre-testing within villages

The headman of the village was contacted the previous day with explanation

Each respondent was carefully briefed as follows:

- The pretesting is part of the development of posters that will be available in this area within the year
- We have illustrations which we want to represent this area accurately and ask your advice

- Please look at each picture and tell us what you see happening and if it happens here
- There is no right or wrong answer and you are not being tested for your knowledge
- No information on the health topics was given to the respondents; only answers taken
- No promises were made to work in the area, provide resources or start health clubs

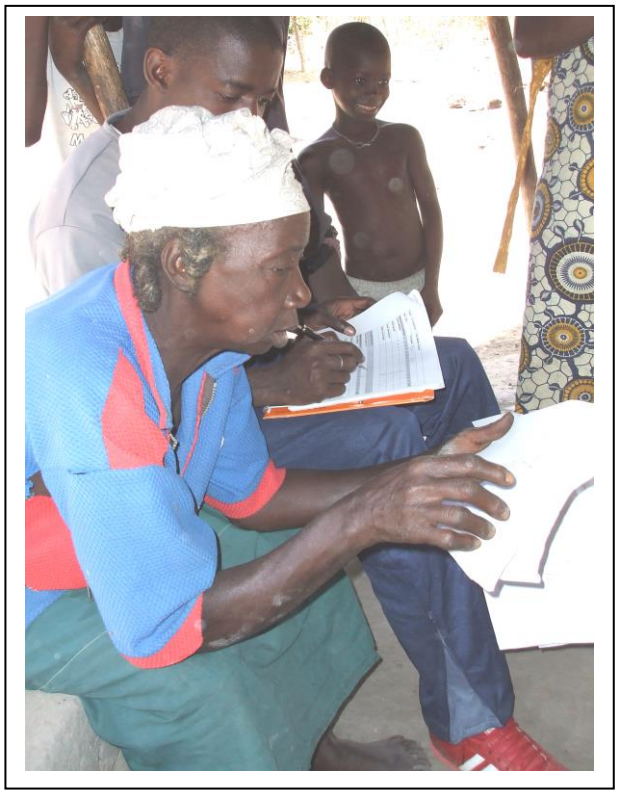
Selection of respondents

Respondents were purposefully selected to ensure a representation of a broad range of ethnic groups, different ages, different levels of education and an equitable number of men and women. Anyone in the community who would be likely to join a health club and use the card sets, or be exposed to the illustrations that will be found on the posters. This includes most people in the villages. There was no resistance to participating and people were queuing to be tested as they were all interested to see the pictures. No incentives were given to the respondents. (See Table 1)

Method of pretesting

Each pre-tester having briefed the local leadership, found a shady place in the village and asked individuals to come forward for the pretesting, one at a time. The respondents were encouraged to answer individually and any interruption from others was discouraged. If on lookers came and hovered, they were asked to keep their distance and wait for their turn. Each pre-test took between

30 and 40 minutes depending on the complexity of the topic and the speed of the respondent. They were shown a booklet of between 10-15 illustrations, photocopies of the original black and white pencil sketches done by the artist. Each picture was shown, and the respondent was asked, 'What do you see here?' The pre-tester had a form for each picture, with each key element of the picture listed. As the respondent noted the key element, the appropriate box was ticked. If they failed to notice, the pre-tester pointed to items and asked again, 'What do you think this is?' If the respondent could not identify the item, a cross was noted in the appropriate box. All interesting misinterpretations were noted below. Each picture was tested 30 times, with different respondents. Due to time constraints the HIV section was only tested 24 times, as it took longer than the other easier hygiene topics.



Method of assessing the comprehension rate

The results for each picture were obtained by adding the correct elements of each picture and multiplying by the number of respondents. This total was divided by the number of possible correct replies, giving an average for each picture, which when put together indicated the average comprehension rate for the topic set. However each element in every picture was also tested to ensure we were able to pinpoint the particular problems in each case. Thus while a picture may achieve an overall comprehension rate of 80%, one element may have been problematic to the majority of respondents and would have to be changed if it was not clear to at least 80% of the respondents. Thus although the overall average is a guideline, the details should be changed according to the pre-testers observations as noted below the forms in the quantitative data. (See Table 3)

Method of assessing the appropriateness of the illustration

The respondents were asked if the subject matter depicted in the illustration was seen locally. If they responded that it ***was*** a local practice or was seen 'sometimes', the pre-tester noted an 'affirmative' tick or symbol representing 'sometimes'. The average for each picture was calculated. However it is to be expected that some technologies or methods/practices that are being advocated will of course not be recognised, but may be included as these will be new recommended practices. However if the pictures are not appropriate due to cultural difference in habits the pictures may be withdrawn or redrawn.

Feed back Session from the pre-testers

RESULTS

The selection of respondents was a representative cross-section of the population and a total of 172 respondents were pretested in two days in four villages typical of the project area. Only one respondent was not able to complete the pre-test due to senility. Only one women was tested by interpretation, all others were tested in Creole or Fulani.

Profile of the Respondents

Of the 172 respondents 53% were male and 47% were female. The average age was 33.5 years, with the oldest being 83 years and the youngest being 16 years old. The largest ethnic group represented was Fula with 50% of the respondents speaking Fulani, whilst there were 25.6% Biafada, 16% Mandingo and 4.6% Balanta. Smaller ethnic groups, such as the Djacanca, Manjaco,Bijaco, Mansenca and Nalu were representedby one or two people, all of whom could speak Creole. Literacy levels

were exceptionally low in all villages with exactly 70% being totally illiterate and 44% having had no schooling at all. Although 53% had attended some primary school 17% of these were now illiterate whilst 3% had attended only Moslem school and could read only Arabic for the Koran. Only 6% had attended any secondary school. Of those who were functionally literate, 21% could read both Portuguese and Creole, whilst 9% could read only Portuguese, the language used in schools.

Results of the pretesting

A total of 69 (A4 size) pencil sketches were pre-tested (one was left out by mistake). The illustrations to be pretested in this round were divided into topics as follows: Water Source (9), Water Storage (13), Taking water (9), Handwashing (14), Malaria (10), HIV/AIDS (14).

The detailed results of the pretesting of each picture can be seen in the Table 2 below. Some indications of the high rate of comprehension can be shown by the high average of each topic: as Water Source (90%), Water Storage (82%), Taking water (88%), Handwashing (84%), and HIV/AIDS (88%). The least successful were the Malaria illustrations achieving only 63%, which lowers the total average for all 69 illustrations. However it should be appreciated that four scored less than 50%, only 5 scored below 59%, and 11 between 60 and 70%. A very respectable average comprehension rate is shown by the fact that 54 scored out of 69 illustrations achieved a score of above 80%. Although theoretically these could have been left unchanged, it has been decided by the team, to achieve maximum comprehension rate, and therefore any details that were confusing are being changed, based on feed back from the pre-testers (See Photo above). This means that, taking into account both the qualitative and quantitative data, only 18 illustrations do not need any changes, whilst 9 are being discarded or redrawn completely. In addition 6 new pictures have been proposed to fill the gaps, based on community feedback (See Table 3).

Comprehension of illustrations

With such a high rate of illiterate respondents (70%) it is surprising that the rate of comprehension was so high, with a total of 82% for the whole set. That so many pictures were well understood is attributable to the ability of the artists the twin illustrators well known in Guinea Bissau, called Manuel and Julio. They successfully followed the guidelines given to them in my last trip. Successful ethnographic illustration depends on a number of well known tricks in the illustration: people should be drawn clearly in profile wherever possible, using no foreshortening technique. The artist should avoid drawing people against other objects, and no perspective should be used as it confuses the relative sizes of the objects depicted. As requested the artists minimised background detail, and no horizon lines, or superfluous detail were included in the illustrations, which only depicted a single key message on each page. As regards the style, all lines were to be clearly drawn in a continuous strong line rather than using a sketchy stroke. Despite the fact that the photocopies were weak and difficult to see in many cases, the respondents were able to pick up the key messages surprisingly easily, and for this the artists should be congratulated.

Cultural Appropriateness of illustrations

For the illustrations to be accepted by the target population, they must be a true representation of the area and the cultural practices of the people who live there. As we have seen there is a cross-section of ethnic groups and associated religions and this affects hygiene practices. For example, the Fula who are generally staunch Moslems, stand out from the other groups in many ways, with more organised compounds, more careful storage of drinking water, more hand-washing and the use of water after defecation.

In addition to the cultural appropriateness of the illustrations, certain technologies are common in the area whilst others are unknown, and this was refected in the answers the respondents gave.

Of the 70 illustrations, 32 pictures scored a high level of above 90% and 11 pictures were rated as between 80-89%, showing that in 61% of the picture were highly representative of the area. Of the other 39% of the illustrations, 18 were between 60-79%, showing they were also well recognised. Only 9 illustrations (13%) scored less than 50%, and this was largely related to uncommon technology. For example, 70% the villagers recognised unprotected wells as this the most common source of their water, and only 13% claimed that they had protected wells. Only one village, representing 20% of the respondents had a handpump, which was in fact dysfunctional. Only 3% had seen a spring (protected or unprotected), whilst only 7% knew the technique of rain water harvesting . Therefore the three illustrations depicting protected and unprotected spring, and rain water harvesting are being withdrawn. Whilst only 10% said they had piped water in the area, this picture is being retained as it is seen when they go to town. The handpump, river water and rain water are being retained for discussion purposes. Three malaria pictures (28, 29 and 34) are being withdrawn as they could not be understood and are being redrawn in a different way, based on suggestions from the field. In the HIV section, two pictures on shared razors, (177, 179) are being withdrawn and replaced with another clearer idea. Two pictures of blood transfusion are being redrawn, and the two pictures of the sharing of needles also adapted with children instead of adults. Other than these changes, the illustrations are fine as the pretesting has shown that the illustrations are culturally appropriate for the target population.

Evaluation of pre-testers

As the pre-testers could be potentially become future health promoters in the programme, I was asked to assess their ability for this job, as well as their effectiveness with the community. I am unable to judge fully if they are suitable as I cannot understand the language and therefore miss any comments they may make. I would however support any observations that Albino may make as he was able to hear what they said and how it was delivered. I know that he is concerned that they are from 'town' and that their urban perspective is a disadvantage when working in the field. However young men can be enthusiastic and adaptable if they are taught the issues, and how to behave acceptably in the rural areas. All of them showed their willingness to try and all the technique they learnt in the training on how to approach the community was followed well by them all.

Printing of training Material

As there are over 250 pictures to be printed, the costs of colour printing are likely to be out of proportion to the general cost of the programme. It is clear that even poorly reproduced photocopies have achieved a high rate of comprehension. It would be entirely acceptable for the target population to use black and white illustrations, once the pictures have been properly finished in strong black outlining. However if the funds for colour are available it would of course be more interesting for the community. Having seen a sample of how the artists would colour the pictures I would suggest that the colouring be done by computerising and dropping in poster colour by photoshop or coral draw. This could be done by scanning in the b/w pictures, having made sure there is no gaps in the outlines, and giving the scans to a graphic studio in UK. The final quality will be much better if this is done. Perhaps the training cards could remain in b/w and some of the pictures made into colour for the posters.

Conclusion

The pretesting of 69 pictures has been carried out in a completely satisfactory way according to a sound methodology for extracting detailed data as to the level of comprehension and the appropriateness of each picture. The results show that if the recommended changes are made to the pictures as noted in Table 3, and the illustrations finished to a standard as agreed with the artists, (solid black and white line drawings) these training materials will provide a very acceptable tool kit for participatory (PHAST)activities to be used in this community health promotion programme. The artists and the pre-testers are to be commended for their attention to detail and their diligence. It has been a pleasure working with the Effective Intervention team.

Future Planning

The cost - effectiveness of the Community Health Club methodology has been shown to depend on three important aspects of a health promotion programme: namely well trained trainers of good caliber, appropriate training materials and reliable transport. This pre-testing exercise has ensured that the training material will be of the highest quality. The next stage is to ensure that the training of the trainers is done effectively and that the power of the methodology is not undermined by lack of transport. Based on past experience it can be demonstrated that the cost of providing motorcycles to each health promoter can be economical when factored into the projects costs. The programme will still be one of the most cost-effective interventions when estimated per beneficiary as long as the number of beneficiaries are high.

Table 1: Profile of Respondents

Topic	%	Malaria	Hand wash	HIV/AIDS	Taking Water	Water Storage	Water Source	Total
# Respondents		30	30	22	30	30	30	172
Gender								
Male	3	21	16	13	14	14	14	92
Female	47	9	14	9	16	16	16	80
Ethnicity								
Djacanca	0.6		1					1
Balanta	4.6		1	1	2		4	8
Fula	50	18	20	9	13	16	10	86
Mandingo	16.2	9	2	3	4	7	3	28
Biafada	25.6	3	6	8	9	6	12	44
Manjaco	1.2			1	1			2
Bijaco	0.6				1			1
Mansenca	0.6						1	1
Nalu	0.6					1		1
Schooling								
zero	44	15	14	10	10			49
primary school	53	13	15	10	20			58
Arabic	3	2	1					3
secondary	6	2	1	2	2	3		10
Literacy level								
cant read	70	20	20	16	18	24	22	120
Portuguese	9	2	4	3	4	1	2	16
Portug / Creole	21	8	6	3	8	5	6	36
Age								
Average	33.5	36.6	31	33	31	35.4	34	

Table 2: Results of Pre-testing

#	Topic	Title	Comprehension Rate	If seen here
	Water Storage			
94	1	Bucket	100%	93%
95	2	Dirty Bucket	44%	93%
96	3	Filled Bucket	56%	90%
97	4	Bucket with lid	88%	97%
98	5	Insecticide Bottle	24%	64%
99	6	Rain Water Storage	80%	90%
100	7	Indoor Water Container	90%	83%
101	8	Trad pot, no lid	80%	63%
102	9	Trad pot lid & cup	89%	90%
103	10	Trad pot with filter	84%	97%
104	11	Bucket bad lid	83%	87%
105	12	Bucket with lid &cups	88%	77%
106	13	Trad pot lid, ladle & 4 cup	89%	77%
		AVERAGE	82%	85%
	Malaria			
29	1	Mosquito laying eggs	46%	80%
28	2	Eggs hatching	60%	83%
30	3	Man sick with malaria	58%	87%
31	4	Child bitten by mosquito	91%	90%
32	5	Child is sick	57%	90%
33	6	Woman clearing vegetation	84%	97%
34	7	Family clearing standing water	33%	77%
36	8	Covering up in the evening	53%	87%
37	9	Mother & baby under net	73%	23%
39	10	Man taking medicine	76%	93%
		AVERAGE	63%	81%
	Water Source			
85	1	Hand pump	96%	20%
86	2	Unprotected well	95%	70%
87	3	Covered well	98%	13%
88	4	Rainwater	97%	60%
91	5	Unprotected spring	91%	3%
90	6	Protected spring	84%	3%
91	7	River water	100%	43%
92	8	Rain water harvesting	52%	7%
93	9	Piped water	98%	10%
		AVERAGE	90%	25%
	Hand-washing			
117	1	Shared hand washing	75%	77%
118	2	Common bowl with soap	82%	93%
119	3	Pouring method, no soap	85%	90%
120	4	Pouring method with soap	71%	87%
122	5	Child defecating	81%	90%
127	6	Clearing up faeces	83%	87%
129	7	Wiping child's bottom	87%	77%
130a	8	Mother cooking	97%	97%
125	9	Children sharing food	89%	97%

126	10	Girl with diarrhoea	77%	93%
130b	11	Mother washing hands	85%	93%
137	12	Boy defecating	91%	97%
138	13	Boy handing water to girl	87%	97%
139	14	Woman helps child wash hands	91%	97%
		AVERAGE	84%	71%
	HIV/AIDS			
170	1	Man meeting woman	99%	91%
171	2	Man and woman having sex	94%	91%
172	3	Man refusing woman	95%	68%
173	4	Man showing condom	88%	68%
174	5	Man going home	90%	95%
175	6	Man and wife having sex	96%	91%
176	7	Woman breastfeeding baby	97%	100%
177	8	Man shaving 1	75%	71%
178	9	Man shaving 2	70%	82%
179	10	Man shaving 3	77%	95%
180	11	Men each with own razor	75%	95%
181	12	Men sharing needles	90%	55%
182	13	Men with own needles	94%	95%
183	14	Blood transfusion	88%	100%
		AVERAGE	88%	
	Taking Water			
108	1	Boy taking water with water	85%	83%
109	2	Boy taking water with ladle	88%	80%
110	3	Woman giving water with ladle	85%	77%
111	4	Water giving water with jug	88%	70%
112	5	Giving water from bottle	100%	77%
113	6	Boy drinking from ladle	84%	73%
114	7	Boy drinking from jug	99%	100%
115	8	Boy drinking from a bottle	84%	90%
116	9	Woman boiling water	80%	77%
		AVERAGE	88%	

Table 3: Recommended Changes based on field observations and pretesting results

#	Title	Changes recommended
Water Storage		
94	Bucket	No change
95	Dirty Bucket	Rope redrawn
96	Filled Bucket	Water not seen
97	Bucket with lid	No change
98	Insecticide Bottle	Show local label/larger symbol
99	Rain Water Storage	No change
100	Indoor Water Container	No change
101	Trad pot, no lid	Cant see that there is no cover
102	Trad pot lid & cup	No change
103	Trad pot with filter	No change
104	Bucket bad lid	Lid moved off bucket more
105	Bucket with lid &cups	No change
106	Trad pot lid, ladle & 4 cup	No change
New	Covering with cloth	Water pot on stand covered with sheet
Malaria		
29	Mosquito laying eggs	Redraw as rainy scene, potholes, large bucket and tin with water
28	Eggs hatching	Two large jars showing mosquito laying eggs, eggs hatching into lava
	New picture	Two jars as above, showing pupa and mosquitoes flying off
30	Man sick with malaria	Man lying on side, covered, dry mouth, sweat trickling down
New picture	Reducing fever	Child lying on back, no cover, with wet towel and being fanned
31	Child bitten by mosquito	No change
32	Child is sick	Child lying on side shivering, covered, sweat trickling off
New picture	Overgrown compound	Compound like 29, thick grass, bananas, and bush around
33	Woman clearing vegetation	Man clearing bush, boy pruning banana leaves, clearing grass
34	Family clearing standing water	Redraw like 29 above: 3 people, one emptying bucket, one a tine, one filling holes, drainage
36	Covering up in the evening	Man with trousers and shoes, floppy broom swishing mosquitos, no child, woman fully covered throwing leaves on fire in corner, smoke blowing over them.
New pic	Mosquito repellents	Close up of leaves, cowdung, mosquito coil
37	Mother & baby under net	Take off head scarf, turn mother and child on side
39	Man taking malaria tablets	Change hands around, show pill clearly
New	Traditional tea	Mother with leaves, making tea
New	Traditional prevention	Mother taking child to clinic, nurse

		giving medicine with spoon
Water Source		
85	Clean Hand pump	
new	Dirty handpump	Child with hand on mouth of handpump, no fence, standing pools, pigs in mud, dog shitting, garbage, general garbage
86	Dirty unprotected well	No fence, cow shitting, garbage, well higher, child putting one foot on rope
87	Clean protected well with pulley	Cover hanging on hook on side of stand, fence, rope on ground
new	Clean protected well with windlass	Bucket hanging off windlass, no rope on ground, wooden cover with hinge open, clean, hedge around
88	Rainwater	Show rain coming down
89	Unprotected spring	Withdraw
90	Protected spring	Withdraw
91	River water	No change
92	Rain water harvesting	Withdraw
93	Piped water	No change
Hand-washing		
117	Shared hand washing	No change
118	Common bowl with soap	Change soap
119	Pouring method, no soap	Show full fingers, take out bowl
120	Pouring method with soap	Change soap, take out bowl
122	Child defecating	No change
127	Clearing up faeces	Girl should be squatting
129	Wiping child's bottom	
new	Washing child's bottom	Woman pouring water over child's bottom with plastic kettle
130b	Mother cooking	Mother cutting up papaya
125	Children sharing food	Extra toddler eating, take out flies
126	Girl with diarrhoea	No change
130a	Mother washing hands	Lower woman's hands, take out bowl
137	Boy defecating	No change
138	Boy handing water to girl	No change
139	Woman helps child wash hands	Change soap, take out bowl
HIV/AIDS		
170	Man meeting woman	Modern woman, not holding hands, eyes flirting
171	Man and woman having sex	Modern woman, having fun
172	Man refusing woman	Woman still dressed, man leaving through door, hand showing 'No!'
173	Man showing condom	Larger condom, black cat 'pante'
174	Man going home	Women with headscarf, children, hands both held out wide
175	Man and wife having sex	Wife as above, not happy
176	Woman breastfeeding baby	No change
177	Man shaving 1	Withdraw (too many)
178	Man shaving 2	One man shaving with blade and

		mirror, other waiting for blade
179	Man shaving 3	Withdraw (too many)
180	Men each with own razor	Both men shaving, each with own blade and mirror
181	Men sharing needles	Change to women and children
182	Men with own needles	Change as above
183	Blood transfusion	Man with goatee, giving blood, lying down with clenched fist, and tourniquet
new	Infected blood	Another man coming in wounded loosing and needing blood from goatee man, medicine cupboard, hospital sign, more like nurse
Taking Water		
108	Boy taking water with water	Hand right in water, change to bucket
109	Boy taking water with ladle	Change to bucket
110	Woman giving water with ladle	Change to bucket
111	Water giving water with jug	Change to bucket
112	Giving water from bottle	Cooking oil bidon, adjust hands
113	Boy drinking from ladle	Change to drinking out of kettle
114	Boy drinking from jug	Change to bucket
115	Boy drinking from a bottle	Cooking oil bidon
116	Woman boiling water	Woman clapping, girl dancing, bucket near fire, good covered water storage behind woman
New	Carrying water safely	3 women carrying water in covered containers
New	Carrying water badly	Same 3 with uncovered water