### **Tufts-IDMC Urban IDP Study -- Methods Annex**

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The methodology used in each of the Tufts-IDMC three case studies was a survey of heads of households, using a random, two-stage systematic sample drawn from a designated area of the city. In some cities we used a stratified approach (see below under *Sampling*). The survey utilized GIS in the sampling strategy, and Google Earth to supplement map information.

This annex describes the two phases of the research in each city, the sampling strategy and questionnaire design, and the limitations of the data. A brief summary table outlining the timetable for the research precedes two annexes. Annex A is the English version of the questionnaire (for Abidjan). Annex B sets out the steps for conducting PPS. Detailed description of our research approach in each city is included in the case studies.

### Phase 1

The first phase was devoted to:

- Meeting stakeholders with an interest in the study, including UNHCR and other relevant UN agencies, government ministries, and local community organizations working with IDPs:
- identifying and gathering existing statistical or census data and maps from municipal offices and government statistics offices;
- identifying a local NGO or university to assist with the research and data collection;
- adapting the questionnaire and sampling strategy to the local context.

The consultant worked with government statistical offices and the UN Office of the Coordination of Humanitarian Affairs (UNOCHA) to obtain existing statistical data and maps, in particular census lists of households in each district and sub-district, as well as detailed maps of the city. Our budget constraints did not allow us to use commercially available data sets which would have simplified matters. Census household lists were then used to generate a random (systematic) sample according to PPS (see below) and once our selected sub-districts were identified, we created maps of each sub-district, using GIS and Google Earth.

Also in the first phase, we identified a local community organization or university department that knew the city well and had experience doing household surveys. We preferred that this organization had worked with IDPs in the city, but it was not necessary. The organization was sub-contracted to provide a team of enumerators and supervisors, and to help translate, refine and adapt the questionnaire to make it culturally appropriate. Once the questionnaire was customized, it was tested, translated and back-translated.

### Phase 2

### 1. Training and testing.

Once the questionnaire and the sampling strategy were ready, we conducted a three-day training session with the enumerators and supervisors, and field tests of the questionnaire and the sampling approach (part of the training). Both training and testing are very important and should not be cut short. Enumerators should be fully familiar with the questionnaire and with interview techniques. The questionnaire should be well tested in the field to ensure that questions are appropriate. Last minute adjustments should be made before data collection begins.

### 2. Data collection.

Once training and testing were satisfactory, data collection began and lasted approximately 20 days. The survey route was plotted out ahead of time using the maps of the selected sample areas to plot out the route the enumerators would take. During data collection, the role of the supervisor was key, both to take GPS points and to check and approve each completed questionnaire in the field.

### 3. Data entry.

The survey data were entered into the data base on a daily basis. We used both Excel and Access. While Access is actually a data base program, it is unwieldy, error-prone and difficult to learn. Excel is easier to use, but there is more possibility for data mistakes and subsequent cleaning of the data can take more time. The completed data were checked, translated if necessary, then to the senior researcher. The senior researcher and her team cleaned the data, then used Stata or SPSS to analyse and write up the data.

### Questionnaire design

The questionnaire was designed to gather three types of information about the respondent:

- basic demographic information (age, language, ethnicity, marital status, education, household size, place of birth, etc)
- displacement and migration experience if any (date of arrival, reasons for coming, mobility within the city, etc)
- livelihood experience and protection problems (employment status, housing situation, identity dox, problems in area, etc).

All questions were structured and fully coded. The English version of the questionnaire used in Abidjan can be found at the end of this document (Annex A). For each study the questionnaire was translated and customized as appropriate for each city.

### Sampling Strategy

The sampling strategy employed a two-stage, random systematic sample of households, with a goal of 1000 households. We over-sampled to address design effects and also because we anticipated significant attrition.

### **Step 1 (Optional stratification)**

In cities where there is significant clustering IDPs in particular areas, it is useful to stratify the city into three or four types of areas according to expected differing levels of IDPS. (In this case, the sample generated will also be a stratified one.) In cities where IDPs are more evenly distributed throughout the city, a simpler random sampling approach may be preferred, depending on time and resource constraints.

### Stratifying the city

Based on discussion with local key informants, NGOs, and IDP leaders, identify areas of different IDP densities. For example, in Khartoum we identified the following four strata:

• Stratum I: old settlements including old popular settlements and class one old completed settlements (expected IDP density: low)

- Stratum II: First and second class settlements under construction (expected IDP density: low-medium (IDPs sometimes live in these areas for employment such as construction site guards or other construction jobs)
- Stratum III: IDP resettlement areas (expected IDP density: medium-high)
- Stratum IV: areas surrounding IDP camps. (expected IDP density: high)

The sample will then be weighted accordingly. In high density strata, the sample should be larger, and in low density strata the sample should be smaller.

### Step 2. First sampling stage: Selection of primary sampling units

- 1. Delineate the survey area on a map (possibly a census map) by drawing a border around what is considered to be "the city". If desired, stratify this area as described in Step 1.
- 2. Decide on the sample size. For our surveys we used a target of 1000, and ended up with ~950.
- 3. Select the desired number of primary sampling units, also called enumerator areas. We divided the survey area into fifty enumerator areas, each of which would have 20 households each (selected in Stage 2). Enumerator areas are administrative sub-districts of the city, such as quartiers in Abidjan, or barrios in Santa Marta, that are used by the census.

To randomly select the fifty enumerator areas, we used a systematic sampling technique known as **probability proportional to size** (PPS). This is a common sampling technique used in surveys, and gives a probability sample. The probability of selecting a primary sampling unit is proportional to the size of that unit's population. If a sampling unit's population is very large or dense, it is more likely that the unit will be selected. For our sampling frame we used the household populations for the enumerator areas from the most recent national census. For a detailed explanation of the steps involved in PPS, see Annex B at the end of this document.

### Step 3. Second sampling stage: Selection of households in each enumerator area.

1. Generate maps. Once our fifty enumerator areas (EAs) were identified, we generated Google maps of each of them.

2. We now need to randomly select twenty household units in each EA. (If stratification is being used, EAs that fall into high density IDP areas could have more selected households) We used different approaches to select these households. In Abidjan, we divided each selected EA

<sup>&</sup>lt;sup>1</sup> PPS is useful when sampling units vary in size because it ensures that households in larger units have the same probability of getting into the sample as those in smaller ones, and vice verse. Using PPS also helps in planning fieldwork because a pre-determined number of respondents is interviewed in each selected unit, and staff can be allocated accordingly.

<sup>&</sup>lt;sup>2</sup> In a national census, the entire territory is divided into enumerator areas composed of one or more neighbouring blocks and used for distributing questionnaires to households and dwellings. In our survey we drew the sample from the EAs used by the most recent national census (or update). EA boundaries follow visible features such as streets and rivers. It is best to have EAs as compact as possible, and in urban centers, the optimal number of dwellings in an EA is around 650 but they can be larger.

(quartier) into quadrants (using Google Earth maps, or a street map), then chose a random starting point and counted off houses according to our sampling interval, until we had five houses in each quadrant. In Santa Marta, we randomly selected five-six GPS points in each EA, then randomly selected 3-4 dwellings around each point to interview. (See Appendices in each case study for a more detailed description of the sampling strategy in each city.)

### Study Constraints and Limitations of the Survey Data

The use of a survey methodology to explore the situation of urban IDPs compared to their non-IDP counterparts is still very much in its experimental stages, and our study findings are subject to a number of validity threats, including sample bias and response validity. The study also raised security concerns, although none of the studies experienced any security problems for enumerators, and to our knowledge, no problems for respondents. In addition, like all non-panel surveys, our data gave a 'snapshot' view of the situation in each city, and given, the dynamic and mobile nature of IDP populations, may soon be out of date.

### The hidden research population

Unlike camp settings, where IDPs are more easily identified and located, there are many logistical obstacles confronting researchers seeking to find IDPs (or refugees) in urban areas. Some IDPs choose "invisibility" by keeping a low profile and not identifying themselves as IDPs, while others falsely claim to be IDPs, believing that humanitarian resources will come their way. IDPs in urban areas comprise a hidden population that seeks anonymity for security reasons. They often choose not to register with government authorities for fear of being rounded up or targeted. We circumvented this problem because we generated a random sample of the urban area (not just IDPs). In our survey we did not mention the word 'IDPs' but simply asked about the respondent's migration movements. In general, it would be difficult to obtain a random sample of IDPs only, not least because there is unlikely to be an adequate sampling frame. Snowball samples are widely used, but researchers must guard against selection bias when using this method.

The questionnaire should not contain references to IDPs since some respondents will want to read the questionnaire before answering, and reference to IDPs could bias responses. It is important to position sensitive question towards the middle of the questionnaire, to allow the respondent's confidence and trust to be established. Enumerators should be well trained and have good communication skills so that they are able to handle potential distrust and aggression from respondents. These skills are particularly important in situations where there are real or perceived collective prejudices against the enumerators' ethnicities or political affiliations.

### Response validity

Our questions attempted to capture each respondent's experience, including their migration history and movement with the city, however our data were constructed from subjective recall, and we had few ways of validating the information. Like all surveys, respondents can be unwilling to reveal information that could potentially get them or their families in trouble either with the authorities or locally dominant groups. Although the general response to our survey was good, there was some reluctance arising from the way the survey was publicized and the interview itself. The survey was not advertised in the media (radio, posters, TV), which has frequently been done in other places, so people were unaware of it and therefore suspicious. In some enumerator areas in Abidjan, the local neighbourhood leader was hostile to the survey and enumerators quit the area because of threats and insecurity. 'Survey fatigue' meant some of the

population were reluctant to participate because prior surveys never made any difference to their lives. Also, in some areas of Abidjan, residents are subject to fake surveys where so-called 'NGOs' try to extort money for "registration", interviews, etc. Our survey team carried university ID and while this sometimes helped, official letters from local authorities would reduce respondent suspicions. Some of our questions elicited suspicion and reluctance both from non-nationals or IDPs. In particular, our response rates were lower for questions that asked about security, ethnicity, and identity documents. Asking the date of arrival sometimes led to problems because most people don't have good date recall unless specific events are associated.

Given these constraints, it is likely that at least some of our respondents held back information about their displacement or migration experience, and about any problem they were currently experiencing. The information we gathered about respondents' protection problems, both past and present, might thus be incomplete. We sought to monitor this by sensitizing our enumerators to this issue, and asking them at the end of each interview whether they thought the respondent was holding back information. In only a few cases, did the enumerator report this problem, mainly in Khartoum.

As a way to address the suspicion problem, it may be helpful to introduce the survey through a media campaign using the radio or posters. Such a campaign may not be possible or appropriate in all cities, and should first be checked out with local sources. In addition, the field team should carry documentation that includes a letter from a Professor of the local University, a copy of all clearances from authorities, and a detailed description of the survey objectives. This documentation should only be offered to those respondents who ask to know more about the survey before they consent to be interviewed.

### Selection bias

We sought to generate population estimates of IDPs based on extrapolation from a random sample, however sampling problems arose related security problems. In Santa Marta we were unable to sample over the entire study area, because security concerns created 'no-go' parts of the city. Coverage was constrained by the field team having to negotiate difficult urban terrain. Many cities in Africa are not well zoned, and residential, administrative, commercial and industrial areas are often mixed together. Small shantytowns where IDPs live can spring up within settled residential areas, as well as on the outskirts of towns, or along highways. This complex mix of housing creates sampling challenges, and these are aggravated by the difficulties of physical navigation: roads peter out, flooded areas occur in rainy seasons, and newly constructed shanties or shanty settlements block access. We found it helpful to use Google Earth to preview the areas where we intended to work. The available imagery from Google Earth is highly detailed, especially in urban areas, and the download is free, making it a valuable resource to assist with survey preparation. When the Google Earth imagery was not adequate or up to date, we physically checked out the survey sites the day before, to ensure that no surprises would confront the enumerators.

While the sample is fairly representative of the bounded survey area, in most cities the census will not fully cover unincorporated shanty areas that spill over the municipal limits. When the census data does not include these areas, we cannot include these areas in the overall population estimation.

Our sample was also subject to selection bias because the security situation in some areas required us to survey during the daytime, which meant we were less likely to interview people who worked outside the home. In Santa Marta, for example, we got an unequal gender

distribution in our sample as the majority of our respondents are female housewives. We tried to counter this problem by interviewing during the weekend too. However some areas of the city were 'no-go' areas because of crime and insecurity. These areas (relatively few in number) were eliminated from our sample, as we chose not to risk the safety of our team.

### Working with local organizations

If an aid agency is conducting the survey, the organization's field monitors should be extensively consulted both to adapt the questionnaire to local conditions, and to work out the sampling strategy. It is important to determine well in advance which areas of the city are likely to be difficult to access or which might have political or security issues that could create problems for the enumerators, and take steps to address these difficulties.

### Plan and Timetable for Survey (Country Director's perspective)

Period	Phase and External Personnel needed	Main activities	
Months 1-2	Planning (initial contact with external personnel)	Review of study objectives with team, Selection of consultants and/or field managers Engagement with stakeholders (government, community organizations, other aid agencies) to get buy-in and find out about other studies being done (or completed)	
	Design sampling strategy and questionnaire (Research Expert)	Engage expert (if lacking necessary technical expertise) to: assist with sampling or design PPS Design questionnaire Provide GIS Translation and testing of the questionnaire	
Month 2-3	Pilot test and training (Consultant)	Revision of questionnaire Recruitment/ Selection of data collectors (enumerators) Training Preparation of identification cards for the enumerators, liaison documents, download GIS maps Field test of sampling and questionnaire (as part of training)	
Month 3	Field Data Collection & Entry (Consultant)	Interviews (two-three weeks in the field) Data entry (ongoing during data collection) Data cleaning Focus groups with Enumerators	
Month 3-4	Data Analysis (Research Expert)	Send cleaned data (or raw data for cleaning) for expert for analysis.  Review findings, revise report	
Month 4	Dissemination of findings	Make report available Workshop on findings	

## **Annex A: Questionnaire**

## URBAN IDPS PROFILING SURVEY: ABIDJAN

(то ве	FILLED IN AHEAD OF TI	ME AND ASSIGNED TO ENUMERA	TOR)			
1. For	m number (unique id)		2. Enumerator's Code:			
3. Dat	e of Interview:					
4. Co	mmune code:	5. Quartier code:	6. Strat	um code:		
Inforn	nation specific to sel	ected household:				
7.	Dwelling type of ma	terial:				
	1	Concrete				
	2	Red Bricks				
	3	Mud				
	4	Temporary Shelte	r (shack)			
To be	read to respondent	before beginning interview:				
'right' remen This s eventu Abidja other ( partici	or 'wrong' answers. Inber. You are free to rurvey is not related to ually help us to develon. What you say will be group. Your name will pation except my appoint this survey shou	uld take 30-45 minutes to com the appropriate box below: )	life and what you ho p the interview at an rian program. Your re e experiences of pec t be given to the gov . I cannot promise you	onestly think and y time. esponses will ople living in rernment or any our anything for your		
	Yes		No			
8.	Respondent's sex:	Male 1 Female 2				
9.	Who is present at be	eginning of interview?				
	Respon	dent is alone	1	7		
		is present	2			
	Other a	dult is present	3			
		an one adult	4			
	Children	1	5			

Begin interview:

### I DEMOGRAPHIC PROFILE OF RESPONDENT & COHABITERS

# 101-3. How many people do you <u>now</u> consider to be part of your household? I mean people with whom you regularly share food and other resources, even if you don't live with them all the time.

101	TOTAL NUMBER OF HOUSEHOLD MEMBERS (INCLUDING RESPONDENT)	
102	No of Children under eighteen (IF 0, GO TO Q. 110)	
103	No of adults over eighteen, including respondent	

## 104-113 Please tell me about the children under eighteen:

member   (number)   school?   naissance) for them?	Do you have birth certificates (Acte de naissance) for them?		
Boys 104 105			
under 5 (number) Yes for all of them 1			
Yes for some of them 2→	How many have them?		
No, for none of them			
DK/Unsure 8			
RA 9			
Girls under 106			
5 (number) Yes for all of them 1	** 1		
$\begin{array}{ c c c c c c }\hline \text{Yes for some of} & 2 \rightarrow \\ \hline \end{array}$	How many have		
them	them?		
No, for none of 3			
them			
DK/Unsure 8 RA 9			
Boys 5-18   108   109   110			
(number) Yes, all attend 1 Yes for all of them 1			
No, none 2 Yes for some of $2 \rightarrow$	How many have		
attend them	them?		
Some attend 3 No, for none of 3			
but not all them			
DK         8         DK/Unsure         8			
RA 9 RA 9			
Girls 5-18 111 112 113			
(number) Yes, all attend 1 Yes for all of them 1			
No, none 2 Yes for some of 2 → them	How many have them?		
Some attend 3 No, for none of them			
DK 8 DK/Unsure 8			

RA	9	RA	9	

## 114-119 Please tell me about yourself and your spouse (if there is one)

	Age (in years)	Place of birth (See code sheet)	Ethnic group (see Code Sheet)
Respondent	114	Region + dept code	116
116a. Are you married or living with someone?	1 husband 2 wife 3 other 99 NA		
Spouse	117 age	118 place of birth  Region + dept code	119 ethnic group

# 120-121 Which of the following documents do you and your spouse have? (Ask all and write in all mentioned)

		120 Respndnt	121 Spouse
Birth certificate (Acte de naissance)	1		
Jugement supplétif	2		
Consular card (Carte consulaire)	3		
Resident's permit (Carte de séjour)	4		
Certificate of nationality (Certificat de nationalité)	5		
National ID card (Carte d'identité nationale)	6		
Voter card	7		
Acte de notoriete valant acte de naissance	8		
Fiche individuelle	9		
Driver license	10		
DK	0		
RA	99		

## 122 Are there any other adults (older than 18) living in your household?

NO (Go to Q.)	1
YES	2
DK Unsure	9

## If answer to Q 122 is yes, ask:

Family member	How many? (write number; NA=99)	Relationship? (list all) 1=sibling (sister or brother of respondent or spouse) 2= parent or grandparent 3= other relative 4= non-relative 99=NA
Women 16-50	123	124

Women over 50	125	126
Men16-50	127	128
Men over 50	129	130

## 131-132. What level of education have you completed? And your spouse?

		131 Respndnt	132 Spouse
1	Illiterate/No school		
2	Quranic/Church Education		
3	Primary School		
4	Secondary school		
5	University		
6	Other		
	Specify		
7	vocational training (eg.		
	carpentry, hair-dressing or		
	mechanics		
	Specify		
0	DK/RA		
99	NA		

# 133. What languages do you speak in your household? (tick all mentioned, and prompt with "any others?")

French	1
Boalé	2
Agni	3
Dioula	4
Senoufo	5
Yacouba	6
Bété	7
Moré	8
Other	9
Specify:	
DK/RA	0

## 134-135 Please tell me about you and your spouse's current economic activities:

	What is your present job situation?	134 Respondent	135. Spouse
		(describe activity)	(describe activity)
1	Unemployed/looking for work		
2	Working part-time		
3	Working full-time		
4	Casual employment/temporary worker		
5	Self-employed (small business, trader)		
6	Housewife/look after children		
7	Student		
9	Other (specify)		

98	DK/RA	

# 136. Are you presently renting, squatting, living with other family, or do you own your dwelling?

Own house (Go to Q 137)	1
Renting	2
Hosted by another family	3
Guard living on site of his employment	4
Living here temporararily (for a few days or weeks)	5
Homeless	6
Other	7
DK/RA	0

### 137. If respondent owns house, How did you come to own the house?

Government allocation	1
Purchase	2
Inheritance	3
Self-built house/shelter	4
Other (write in)	5
DK/RA	0
NA	9

### 138. What is your access to potable water?

Direct water pipe connection to house	1
Illegal connection	2
Open well	3
Hand pump	4
Rain water collection	5
Water vendors	6
Other(Specify)	7
DK/RA	0
NA	9

### How close are the following from your house?

		139. Children's school	140. Health facility	141. Water source	142. Police station	143. Transport (bus, taxi)
Within 1km	1					
2-5km	2					
6-10km	3					
+10km	4					
Don't know	9					
where one is						

# 144 What difficulties if any does your household experience living here? (Tick all mentioned)

		Describe more fully
Cannot find work	1	
Too far from transportation	2	
Harassment from authorities	3	

Local community is unfriendly	4	
Area is unsafe (crime)	5	
There is no water	6	
Other	7	
DK/RA	0	

# 145. Have you or your household ever received any assistance from the government or an aid agency?

NO (Go to Q. 201)	1
YES	2
DK/Unsure	3

### If Yes or unsure:

146 What kind of assistance was it? (List all that are mentioned)

,		Describe:
Food aid	1	
Housing assistance	2	
Health services	3	
Advise about rights, protection, legal matters	4	
Other (specify)	8	

### 147. Please tell me from whom and when you received this assistance. (List all mentioned)

Organization		147 Name	<b>148. When received?</b> (Indicate period of time, eg. May 02 to August 02)
international aid agency (UN, NGO)	1		
Government office	2		
Community based organization	3		
Other (specify)	8		

### 149 Are you receiving any assistance now?

NO	1	
YES. Same as before	2	
YES, but different than before	3 →	Describe

### II MIGRATION AND RESIDENCE EXPERIENCE

### 201. How long have you lived in Abidjan?

	201 Rspndnt	202. Spouse
Born in Abidjan (GO TO Q. 211)	1	1
I came as a child (before 18 yrs)	2	2
More than 8 yrs	3	3
5-8 years	4	4
3-4 years	5	5
1-2 years	6	6
Less than one year	7	7
DK/RA	99	99

	Respondent	Spouse		
203 When did you come to Abidjan?	203 Month Year	204 Year		
205 Where were	205	206		
you living before	Region +	Same as 1		
you came to	dept code	spouse		
Abidjan?		Different   2   Region +		
(see code sheet)	Name of place:	from   →   _dept code		
		spouse Name of place:		
		NA 99		
		DK 00		
Did you live in a	207	208		
town, village, or in a	Ville/city/town 1	Same as 1		
rural area?	village 2	spouse		
	other 3	Different from 2 Write in:		
	DK/RA 0	spouse		
		NA 99		
		DK   00		

## 209. Which members of your family came with you?

All of them	1
My spouse only	2
None	3
Some, (others joined me later, or are still there)	4
DK/RA	0

## 210 Why did you come to Abidjan? (mark all that are mentioned)

To find work	1
To escape the conflict	
For education	
To join my family	4
Because my livelihood failed	
Other (write in)	
DK	8
RA	99

## 211. Have you lived in other parts of Abidjan before coming to this place?

No ( <b>go to Q. 215 )</b>	1
Yes	2
RA	9

If Yes, ask:

212. Where were you living in Abidjan before you came to this place? (see Code Sheet)	Locality 1 code Quartier 2 code		
213. When did you leave that place to come here?	Month Yea	r	
214 Why did you leave that place to come and live here?	Find work Last area not safe Evicted from house Join family Other (write in) DK/RA	1 2 3 4 5 →	

215. Have you ever been forced to move or evicted?

No	1
Yes	2
DK	8
RA	9

216. IF YES, Why were you evicted?

Government relocation	
Could not pay rent	
Owner did not want us there	
Other (describe)	
DK/RA	
NA	99

## 217 Do you and your family hope to leave this place to go and live elsewhere?

Yes, we want to return to our home area	1	Region + dept code	
Yes, we want to resettle in another part of Abidjan	2	Locality code:	
Yes, we want to resettle in another part of Cote d'Ivoire	3	Region + dept code	
Yes, we want to go to another country	4	Ghana	1
		BurkFas	2
		Mali	3
		Guinea	4
		Liberia	5
		Another cntry in Africa	6
		US or Europe	7
		Other	8
		DK	99
No, we will remain in current area of Abidjan	5		
Don't know/Unsure/Not yet decided	8		
RA	9		

## 218. Why do you want to go there? (Do not read. Tick all responses mentioned)

Will be able to find work	1
Health services	2
Education services	3
Family reunification	3
Availability of land	4
Availability of housing	5
Security	6
Other (write in)	7
DK/RA	9
NA	99

### 219. When do you hope to leave to go there?

Immediately (June-Sept 2007)	
Oct-Dec 2007	
Jan - May 2008	
Much later (after one year)	
Don't know/undecided	

# 220. What are the main challenges you face should you return to your home or area of resettlement? (Circle all that apply)

Finding food in return area	1
Finding water in return area	2
Education in return area	3
Health care in return area	4
Occupied or destroyed property	5
Housing in return area	6
Access to land in return area	7
Employment in return area	8
Insecurity in return area	9
Hostility by receiving (home) community	10
Integration with family and community members who stayed behind	11
Lack of means to return	12
Lack of information about area of return or resettlement	13
None	14
Other (write in)	15
DK	98
RA	99

# 221 What information would be useful to assist you in making a decision on return or resettlement?

Info on Safe routes	1
Info on Cost of travel	2
Info on Access to land in area of return	3
Info on Health services	4
Info on Education services	5
Info on Functioning of government administration	6
Info on Possibility of reclaiming occupied or destroyed property	8

Info on Security	9
Info on Employment	10
Other (write in)	11
DK	98
RA	99

Thank you that is the end of the interview. Are there any comments you would like	e to
make, or anything you would like to know about the study? (write in box below)	

Thank you very much (Interview ends here.)				
Enumerator should fill out the following:				
10. WHo is present at end of interview?				
Respondent is alone 1				
Spouse is present 2				
Other adult is present 3				
More than one adult 4				
Children 5	5			
11. How long did the interview take?minutes				
12. Was the respondent willing to answer all questions? YES NO				
13. Were there any problems during the interview?				
14. How does condition of the household compare with others in neighborh Same =1 Worse=2 Better=3	nood?			
15. Do you think this person was an IDP? If yes, why?				
16 Other Comments:				

### Instructions for Probability Proportional to Size Sampling Technique

Note: our unit of analysis for sampling purposes is the **household**.

In each stratum we will select a PPS sample of 30 EA sites, and then randomly select 8 households in each of these EAs for a sample of 250 households in each stratum, and a total sample of  $4 \times 250 = 1000$  households.

### Steps in Applying PPS Sampling

- 1. Divide up the city into four strata (according to IDP density) and designate where the strata are on the map. Each stratum will consist of X number of EAs. Eg, Stratum I consists of 73 EAs. Work separately for each stratum as follows:
- 2. For each stratum, list all EAs in Column A and the number of households (Column B).
- Calculate the running cumulative population (Column C). The last number in this
  column is the total no. of households in the stratum. In the example, the total is
  40,678.
- 3. We want to select 30 EA sites with a sample of 250 households. Thus, 8-9 households (250/30) will be interviewed in each of the 30 sites. Divide the total no. households in the stratum (40,678) by 30, the desired number of sites. The result, 1355, is called *the Sampling Interval (SI)*.
- 5. Choose a number between 1 and the SI at random. This is the *Random Start* (RS).Eg, the RS is 201.
- Calculate the following series: RS; RS + SI; RS + 2SI .... RS + 29SI.
   Example: Where RS = 201, and SI = 1356, the series begins as follows: 201 1556 2911 4266 ....
   38141
- 7. Each of these 30 numbers corresponds to an EA site in the stratum list of EAs. The EAs selected are those for which Column C, the cumulative population, contains the numbers in the series we calculated.

For example, the first number in the series, 201, is contained in EA 1, which hold numbers 1-1170. The second number in the series (1556) is contained in EA 4, which holds numbers 1350-1850.

Continuing in this manner, the desired sample size is reached. In this example, the selected EAs are numbers 1,4, 7,9,12....49 (Col.D).

Note: It can happen that a very large EA contains more than one of the series of

numbers. In this case, that village counts as two sites and twice the allocated number of interviews should be conducted there. (See example below)

- 8. As planned, 8 interviews will be conducted in each of the 30 selected EAs, for a sample of 250 households in each stratum. Selection of households within the EA should be done randomly, preferably from a list of eligible names or a map of households. If these are not available, estimate the number of households in the EA from the population figures, then divide that number by 8, the number of respondents desired. This is the interval, *n*. Starting from a random household, count every nth household and interview all eligible respondents in that household.
- Eg. in the first EA, Hilat Koko, there are a total of 1170 households. 1170/8= 146 = SI. Starting from a random household, you would count every 146*th* household and interview that household.

In the second EA, **Geref East- 1 North**, there are 500 households. The SI = 500/8= 62. Starting from a random household, you would count every 62*nd* household and interview that household.

It is better to exceed the sample size than not to reach it.

### **Example: Drawing a Sample Using Probability Proportional to Size Sampling**

No. of desired sites in stratum = 30 Sampling Interval (SI) = total households/no.desired sites: 40,678/30 = 1355 Random Start No. = 201

Col.A	Col.B	Col C	Col.D	
<b>Enumerator Areas</b>	(no.	Cum	Selected EAs	Series
(EAs)	households)	tot	(from series)	RS+SI
Hilat Koko	1170	1170	201	201
Almuhafiza	100	1270		1556
Almuhafiza	80	1350		2911
Geref East- 1 North	500	1850	1556	4266
Geref East-1 South	500	2350		5621
Geref East- 1 west	335	2685		6976
Geref East- 2 east	840	3525	2911	8331
Geref East- 2west	670	4195		9686
Geref 3- Alsalam	800	4995	4266	11041
Sarhan East	650	5645	5621	12396
Sarhan West	750	6395		13751
Karkog North 1	750	7145	6976	15106
Karkog North 2	750	7895		16461
Karkog North 3	785	8680	8331	17816
Karkog South-West	816	9496		19171
Karkog Wasat	978	10474	9686	20526
Karkog West	685	11159	11041	21881
Um Dom North	1170	12329		23236
Um Dom Wasat	1150	13479	12396	24591
Um dom South	2182	15661	13751, 15106	25946

Hai Al Mustafa	85	15746		27301
Hai El faroug	85	15831		28656
Hai Al Nasr	50	15881		30011
Hai Al Huda	735	16616	16461	31366
Dar Al salam Al				
Magarba1	325	16941		32721
Dar Al salam Al				
Magarba 2	335	17276		34076
Dar Al salam Al				
Magarba 3	170	17446		35431
Dar Al salam Al				
Magarba 4	345	17791		36786
Dar Al salam Al				
Magarba 5	140	17931	17816	38141
Hai al Faihaa	58	17989		
Hai Iskan al Shurta	165	18154		
Al Iskan Al Shabi	97	18251		
Al Mansora	50	18301		
Hai al saleheen	35	18336		
Hai Al Baraka East	225	18561		
Hai Al Baraka South	270	18831		
Hai al Baraka North				
West	585	19416	19171	
Hai Al Barak Wasat	665	20081		
Al Faki Hashim	50	20131		
Wad Dafeyaa	652	20783	20526	
Al Shirog	666	21449		
Haj Yousif East	2258	23707	21881, 23236	
Hai Al Falah	2250	25957	24591, 25946	
Haj yousif North	1670	27627	27301	
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