WHS

World Health Survey

GPS data collection Protocol

GPS Data Collection Protocol

This report contains the views of experts, and does not necessarily represent the decisions or the stated policy of the World Health Organization.

1. Introduction

This document describes the steps to follow in order to fill the section 0100 (Sampling Information) and 0200 (Geocoding Information) of the 2002 World Health Survey questionnaire.

These two section have two be filled for each household being interviewed. The section 0100 has to be filled by the supervisor, the section 0200 being filled by the person in charge of the GPS unit in the field.

2. Section 0100. Sampling Information

At the same time the questionnaire is prepared for the field it is important that the supervisor enter the information of the section 0100 as presented in the Figure 1. This will help to make the link between the Geocoding Information (section 0200 of the questionnaire) and the correct sampling unit.

0100. Sampling Information   (To be filled in by the supervisor)

	Sampling				
Q0100	Primary Sampling Unit (PSU) Name/Code	Province of Gauteng / ZAF003			
Q0101	Secondary Sampling Unit (SSU) Name/Code	Pretoria Metropolitan Council / ZAF003005			
Q0102	Tertiary Sampling Unit (TSU) Name/Code	Cluster n° 001			
Q0103	Quartemary Sampling Unit (QSU) Name/Code				
	Additional Information				
Q0104	Setting	Urban 1	Peri-urban / Semi-urban X 2	Rural 3	
		Other 4	Specify: _ _ _ _ _ _ _ _ _ _ _ _ _		

Figure 1 - Example showing how the section 0100 should be filled in the questionnaire

Here are some explanation about the information contained in each of the fields mentioned:

Q0100- Q0103   Sampling Unit Name/Code: Indication of the name and/or code of each sampling frame level. This information will be used to identified at which cluster the geocoding information belongs to.

Q0104   Setting: Indication of the urbanisation level observed around the household. Three levels are proposed. As this concept is difficult to define we propose the definitions reported in Table 1 in order to help making the distinction. In case this nomenclature would not correspond to the one used in your country please mark the box n° 4 and specify the urbanisation type for the cluster.

Urban	Peri_urban/ Semi-urban	Rural
An *urban* area has been legally proclaimed as being urban. Such areas include towns, cities and metropolitan areas.	A Peri or Semi-urban area is not part of a legally proclaimed urban area, but adjoins it. This definition includes (but is not limited to) the following human settlement names from around the world: Barrio, bidonville, bustee, edge city, favela, gecikondu, informal settlement, illegal settlement, kampung, legal settlement, pueblo invisible, pueblo joven, shanty town, squatter settlement, tugurio, villa miserere, or whatever term that may be used to describe persons on the peripheries or edges of the usual, acknowleged official city zones	All other areas that are not classified as being Urban or Peri-urban. This included commercial farms, small settlements, rural villages and other areas which are further away from towns and cities.

Table 1 - Definition of the type of setting

3. Section 0200. Geocoding Information

This section (Figure 2) has to be filled in the field by the person designated for using the GPS unit.

Figure 2 - Example showing how the section 0200 should be filled in the questionnaire

The following steps have to be performed:

1) Use the Document "Test and use of the GPS in the field" in order to obtain the household latitude and longitude. If it is the first location that you take in the cluster, **make sure that the GPS receiver has been turned on in an open sky place before taking the reading for the household. This initialisation is compulsory in order to synchronise the receiver with the satellites signal**.

2) Control that the latitude and longitude obtained are within the ranges mentioned in the country information document.

3) If it is the case, enter the latitude and longitude in the questionnaire under section 0200 (Geocoding Information) following the example presented on Figure 2.

3

Here are some explanation about the information contained in each of the fields for this section:

Q0200 Latitude: This information corresponds to the first line of the Waypoint Coordinate reading that you have on the GPS device (for example: S 25.75090 in the Figure 3).

Q0201 Longitude: This information corresponds to the second line of the Waypoint Coordinate reading that you have on the GPS unit (for example E 028.16090 in the Figure 3).
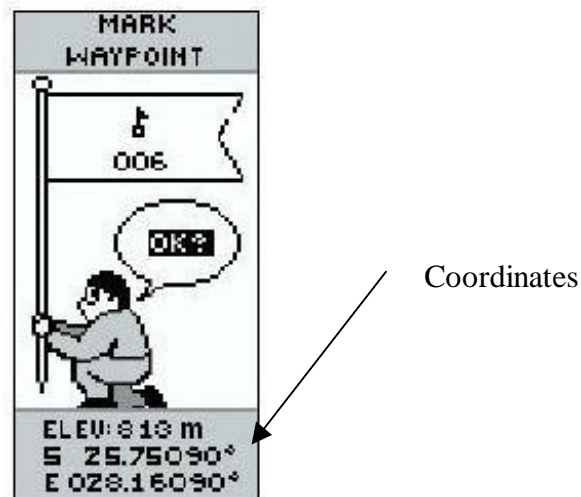

Coordinates

Figure 3 - Example of Waypoint coordinate reading

Q0202 Waypoint: It is the place where you are located taking the reading.
When using the GPS, depending on your location, you have to mark **one of the two following choices only**:

> Box n°2 "In front of the household": corresponds to a location very close to the household as the front door or on the roof if possible.

> Box n° 3 "Nearby location (park, parking)": corresponds to a close location offering an open view of the sky in case it was not possible to obtain an accurate reading "In the front of the household". Then indicate in the cell the estimated distance, in meters, between the household and your reading location.

The first box named "center of gravity of the cluster" will be filled after the survey at the WHO HQ based on the information collected in the field. The center of gravity of the cluster will correspond to the point within the cluster where there is equal weight all around it.

3) The last operation in the field consists in controlling if the type of setting mentioned under point 0105 (Figure 1) corresponds to the situation observed around the household.

To do so please use the information reported in Table 1. If the situation observed around the household does not correspond to the type of setting mentioned, use an other symbol (as O for example) to mark the cell that would correspond to the right type of setting you have observed.

4 After going to the field

If the supervisor is not the person in charge of the GPS in the field it is important that the supervisor checks that the geocoding information has been filled correctly once the survey has been conducted in the field

She/he will have to check if the coordinates indicated in the questionnaire are really within the range reported in the Country information document and if there is a clear indication of the waypoint location.

It is also necessary to check if the setting type has been confirmed by the people in the field. If this is not the case it will be necessary to discuss with the interviewer in order to take the final decision.