Comparing HEA with a Randomised Household Survey

HEA techniques

Most HEA practitioners use rapid appraisal techniques for the collection of baseline data. These include definition of livelihood zones, purposive sampling of villages, interviews with key informants and other respondents, definition and identification of wealth groups by these key informants, and finally interviews with representatives from each wealth group in focus group discussion format. It is during these wealth group interviews that baseline data on total food, cash income and expenditure are collected.

How reliable are HEA baseline results?

Decision makers often ask how HEA techniques hold up when compared with random sample, statistical household surveys. An opportunity to make a comparison between the results of the two methods presented itself when two separate studies in Malawi and Zambia were conducted on the same population across a similar time period (in 2015). A comparison of the results showed very good agreement between the two studies, indicating that the standard rapid appraisal techniques used in HEA are indeed reliable.

The purpose of the comparison was not to compare the two methodologies per se, rather the final results that each methodology produced. This means that although the results are not exactly comparable, they are sufficiently comparable to help answer the question of how reliable HEA baseline data is.

Results from the studies

The results for per person monthly income are summarised in the tables below. Overall, the results obtained by the two methods are very similar. Taking the sample as a whole, the difference between the two sets of results was only 2% in both countries. This is a striking level of agreement given the different methodologies used and the different timeframes for the two studies.

OMPARISON OF TOTAL INCOME – Malawian Kwacha pppm*				
	Very Poor & Poor	Middle	Better-Off	Whole sample
HEA	3,533	4,345	6,198	4,533
Random Household Survey	3,739	4,372	5,594	4,457
Difference: Survey/HEA (as %)	106%	101%	90%	98%

COMPARISON OF TOTAL INCOME – Zambian Kwacha pppm*					
	Very Poor	Poor	Middle	Better-Off	Whole sample
HEA	60	103	131	270	99
Random Household Survey	68	101	127	283	102
Difference: Survey/HEA (as %)	112%	98%	97%	105%	102%

*per person per month

Differences between the studies

The HEA baseline study was designed to capture household livelihoods data, whereas the random household survey was the first in a series of studies designed to monitor and evaluate project impacts. There were three important differences between the two studies.

Random Household Survey	HEA
1) Method used to estimate total household cash income	
Concerns about the reliability of income data collected via a household survey meant that total expenditure was used as a proxy for total income.	Data on household income was collected *directly*, both in terms of amount and by source (in addition to total expenditure data). This breakdown of income by source is considered essential in HEA studies, for the purpose of determining the effects of changes in access to various sources of income (outcome analysis).
2) Recall period	
The recall period was one month for most items, including food (mid-May to mid-June 2015) and 6-months for some non-food items (mid-Jan to mid-June 2015).	HEA always uses a 12-month recall period. This is considered essential for the outcome analysis described above, in that normal seasonal variation is captured.
3) Timeframe	
The household survey was not designed to cover exactly the same period as the HEA baseline. It was carried out after the baseline and covered 6 months (mid Jan to mid June, 2015).	The HEA baseline covered April 2014 to March 2015. There is some, but not perfect, overlap.

Notes on the household survey:

Malawi: The total sample size was 226. Twenty-six records were excluded because one or more components of the data required to estimate total income was missing. A further 13 were excluded because they had total incomes that were considered unrealistic outliers (total incomes equivalent to less than 50% or more than 500% of minimum food needs). Final sample size of very poor and poor was 85 households, middle 45 households, better-off 57 households (total 187 households).

Zambia: The total sample size was 142. Five records were excluded because one or more components of the data required to estimate total income were missing. A further 4 were excluded because they had total incomes that were considered unrealistic outliers (total incomes equivalent to less than 50% or more than 1500% of minimum food needs). Final sample size of very poor was 55 households, poor 53 households, middle 17 households, better-off 8 households (total 133 households).