

# Client Outcome Performance (COPE) Indicator Database

Instructions for Use

Database version 1.0



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for Database v1.0

## Background

Between 2013 and 2015, Freedom from Hunger and the Microcredit Summit Campaign, with the support of an educational grant from Johnson & Johnson, collaborated with four microfinance institutions (MFIs) across India, the Philippines, and Peru to test a set of simple health outcome performance indicators, known as the HOPI,<sup>1</sup> to help assess changes in client well-being over time. While one main obstacle to understanding changes in client well-being for MFIs is choosing strategically among many indicators, another obstacle that MFIs face is in timely data-analysis and interpretation. Therefore, with additional support from Johnson & Johnson, a simple Microsoft Excel-based tool was developed to assist with data collection, data analysis, and interpretation. While the use of the HOPI inspired the development of the database, it was ultimately designed to incorporate any chosen client outcome indicator, whether it be health, women's empowerment, resilience, assets, etc. This new tool has, therefore, been named the Client Outcome Performance (COPE) Indicator Database. The construction of this particular database assumes that the MFI is using Grameen Foundation's Progress out of Poverty Index® (PPI®).<sup>2</sup>

## Acknowledgements

Many thanks go to those who made this database possible: Anne-Laure Behaghel, Independent consultant; Bobbi Gray, Freedom from Hunger; and DSK Rao and Sabina Rogers, Microcredit Summit Campaign. We would like to thank Johnson & Johnson for investing in this tool as well as our collaborators whose ideas were important in seeing this tool to fruition: Mark Schreiner of Microfinance Risk Management, L.L.C. and Frank Ballard and Julie Peachey of Grameen Foundation.

## Introduction

This database file is aimed at helping microfinance institutions (MFIs) track and monitor their client outcome performance indicators.

It is built to

- ◊ compile clients' poverty levels using the PPI and other user-defined data collected through a survey and
- ◊ provide a general analysis of those indicators as well as a detailed analysis of the possible correlations between those indicators.

The database contains the following tabs:

◊ My survey questions	> where you set up your question-and-answer options
◊ My PPI questions	> where you set up your PPI question-and-answer options
◊ My PPI look-up table	> where you set up your country's poverty-likelihood table (it is an extract from the PPI Simple Data Intake Tool previously developed by the Grameen Foundation)
◊ Database	> where you enter the data you collected through your survey

<sup>1</sup>Gray, B. (2015). *Healthy, Wealthy and Wise: How Microfinance Institutions Can Track the Health of Clients. Health Outcome Performance Indicators (HOPI) Project Report*. Freedom from Hunger. Davis, CA. Available at: <https://www.freedomfromhunger.org/healthy-wealthy-and-wise-how-microfinance-institutions-can-track-health-clients-health-outcome>

<sup>2</sup> Learn more about the Progress out of Poverty Index here: <http://www.progressoutofpoverty.org/>.

◇ Control	> where you check whether your Database is properly completed
◇ General results	> where you will find the full statistical results of your survey
◇ Dashboard	> where you will find graphs generated from the General results
◇ Detailed results	> where you will find each client outcome indicator broken down by the variables of your choice
◇ PPI & Food Security	> where you will find the breakdown of your clients below a given poverty line broken down by Food Security status
◇ PPI & Q1 etc.— <i>there is one tab per indicator</i>	> where you will find a more detailed analysis of each client outcome indicator for people below a given poverty line
◇ [hidden] Lists	> structural sheet—should not be used



Please note that in the entire file, only **tan cells** are where you can enter your custom information. All other cells are links or formulas, which means that **you should not make any changes to any cell, row or column unless they are tan**. Making changes to non-colored cells risk breaking a link or a formula, which may result in altered data that does not reflect reality.

Most tabs are “protected” to avoid mistakenly typing in a cell and changing a formula or link. Although it is not recommended, if you encounter the need to, you can unprotect each tab separately, there is no password (“Review”—>“Unprotect sheet”).

## Initial Assumptions

- You are using MSEXcel 2007 or higher
- You have a PPI questionnaire and a PPI-likelihood table for your country
- You have a survey questionnaire with 1 to 10 questions and 1 to 10 answer options
- You are familiar and comfortable with the Excel Pivot Table basic features.

## Prepare Your File For The Analysis

Always use a **new and empty file**; deleting previous data may lead to errors. Make sure you **enable macros**.



1. On “My survey questions” tab, insert the MFI name at the top of the sheet.
2. Enter for each question of your survey a generic indicator name (that will appear in the graph titles) and enter your question-and-answer options.
  - This tab is linked to the “Database” tab to allow the data-entry user to select in a drop-down menu the answer given by the client
  - It is absolutely essential that you use the drop-down menu to register the survey answers so that they are properly coded in the database. Copy/pasting may generate errors in statistics.
3. In “My PPI questions” tab, enter the PPI questions, answer set and score/numeric weights.
  - The PPI score for each surveyed person will calculate automatically based on the scores you define here.
4. Go to “My PPI look-up table” and enter the poverty lines that you want to track in the headers of the table.

***“Database” uses the “Table” MSEXcel feature (version 2007 or higher). As you enter your survey data row after row, your table grows, and characteristics are automatically entered. This translates in the row changing colors.***

5. Copy and paste the poverty likelihoods that you have for your country in the table, and add the national benchmarks in the smaller table on the right.
  - The calculated PPI score will pick in this table the poverty likelihoods for each poverty lines that you have defined.
6. Enter the data collected during your survey in the “Database” tab. **Make sure you enter the Client ID** since this information is the basis of all further results, because it is the only unique identifier of a person. If you do not have specific IDs, you can also number each row in this column from 1 to xxx.

To add a new row, place your cursor in the cell below your last Client ID, enter the new Client ID and press Enter. The whole row should change color. If the row does not change colors, check your “Table” feature settings: File—> Options—>Proofing—>AutoCorrect Options—>AutoFormat as you type—>Include new rows and columns in table.

7. Go to the “Control” tab to see whether any error messages appear. Return to “Database” to correct any mistake that were highlighted.
  - This tab makes some control checks on the database entries to ensure the reliability of your results.

## Analyze Your Data

Update of all pivot tables is automatic and occurs when you go to the following:



### ◇ “General results” tab

#### 1. Selected client outcome indicators

The first results’ table stems from an exhaustive pivot table (hidden in columns B, C, D) with all possible answer options listed there. You may not want to see all results in one graph. First, you can simply use the filter on the MFI column (G) to filter out all zero values or simply **hide** the rows and columns you do not want to see on the graph.

For instance, you may not need to show both percentages, clients who are Food Secure **and** Food Insecure, and just want to show the percentage of food-insecure people in your sample. When you hide the rows with the answers you do not need, your dashboard graph will update accordingly.

#### 2. Estimated share of people below the various poverty lines

This table shows the same results as at the top of the previous one, but as a stand-alone. Note that it is not a pivot table so that it can capture the national benchmark that you entered in the “My PPI look-up table” tab.

#### 3. Food Security Status

This table controls the chart on the “Dashboard” tab. You can change the results you want to see by using the pivot table features.

### ◇ “Detailed results” tab

This tab presents each survey indicator (PPI likelihood, Food Security status and each user-defined indicator + Satisfaction results) in separate pivot tables with corresponding graphs on the right.

Here you can:

1. Break down the survey results by (i) Branch/Region, (ii) Age range, (iii) Membership length, (iv) Food Security Status and/or (v) Gender.

Place your mouse cursor inside the pivot table and you will see the Pivot Table fields appear on the right. Scroll down in those fields to change the column pivot field, which will affect the breakdown. This tab is built to allow two concomitant breakdowns.

2. Use the graphs on your dashboard or your reports.

The graph titles are linked to the bold and underlined table titles. They update automatically with the two tan cells below where you select the breakdown that you have set in the pivot table.

Update those tan cells according to the breakdown you have chosen in the first step, so that your graph shows the right title.

Then copy and paste the graphs that you want to show on your dashboard.

◇ **“PPI & [indicators]” tabs**

These tabs focus more specifically on the people below the various poverty lines. Each of the outcome indicators is presented in a separate tab.

1. Profile of people below the various poverty lines

For a given indicator and a given poverty line, the graphs show you the estimated breakdown of people below this poverty line according to the answer they gave.



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*Please keep in mind that it is an “estimation” because it is a weighted average across all those who gave a particular answer, where the weight is the percentage that is likely to be below the given poverty line.*

*For example, one person who has a likelihood of 75 percent to be below a given poverty line, and who answered “Yes,” will count in this breakdown as 0.75 of a “Yes” answer (and will count as 0.25 of a “Yes” answer in the population living above the poverty line).*

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By scrolling down, you will find the table used for the graphs, presenting this detailed breakdown of your “likely-to-be-poor” population.

2. Poverty rates

The poverty rate looks at your total surveyed population and estimates, for each answer, the likelihood of those who gave this answer to be poor.

3. Profile of people **above** the various poverty lines [advanced users only]

This table is hidden below the poverty rates. If you need it, you can unhide and use.

## Appendix—Examples of Analysis

### Poverty rate

Let us examine the detailed poverty rate of the sources of drinking water:

Poverty line	Number of answers	Tube well or				
		Answers→ Piped water (32 clients)	borehole (258 clients)	Dug well (108 clients)	Surface water (4 clients)	Rainwater (1 clients)
\$1.25 Poverty Line	Poverty rate(<\$1.25 Poverty Line)	37%	45%	46%	61%	42%
\$2.50 Poverty Line	Poverty rate(<\$2.50 Poverty Line)	75%	82%	84%	92%	85%
National Poverty Line	Poverty rate (<National Poverty Line)	29%	37%	39%	51%	31%

Thirty-seven (37) percent of the people who use piped water are likely to be below the US\$1.25 poverty line; 61 percent of those who use surface water are likely to be below the \$1.25 poverty line.

### Detailed results

This table below shows the results of 400 clients who answered the question as to whether they treat water or not. Here, we have chosen to analyze the correlation of water treatment with the food security status and gender.

Treats water—breakdown by Food Security Status and Gender (403 clients)

Breakdown by and by: Food Security Status, Gender

What 1st breakdown did you choose in your Pivot Table? #answers: 403

What 2nd breakdown did you choose in your Pivot Table?

Client Name	Food Insecure		Total Food Insecure	Food Secure		Total Food Secure	MFI TOTAL
	Female	Male		Female	Male		
Doesn't know	3.8%	15.4%	19.2%	-	-	-	19.2%
Doesn't treat water	15.4%	7.7%	23.1%	7.7%	11.5%	19.2%	42.3%
Treats water	19.2%	19.2%	38.5%	-	-	-	38.5%

Client Name	Female		Total Female	Male		Total Male	MFI TOTAL
	Food Insecure	Food Secure		Food Insecure	Food Secure		
Doesn't know	3.8%	15.4%	19.2%	-	-	-	19.2%
Doesn't treat water	15.4%	7.7%	23.1%	7.7%	11.5%	19.2%	42.3%
Treats water	19.2%	19.2%	38.5%	-	-	-	38.5%

You can see for instance that:

- 42.3 percent of the 403 people answered that they don't treat water
- 23.1 percent of the total sample are food insecure and don't treat water
- 15.4 percent of the total sample are food insecure females who don't treat water.

Then by playing with the pivot table columns, you can also see it that way:

Client Name	Female		Total Female	Male		Total Male	MFI TOTAL
	Food Insecure	Food Secure		Food Insecure	Food Secure		
Doesn't know	3.8%	-	3.8%	15.4%	-	15.4%	19.2%
Doesn't treat water	15.4%	7.7%	23.1%	7.7%	11.5%	19.2%	42.3%
Treats water	19.2%	-	19.2%	19.2%	-	19.2%	38.5%

Or simply:

Client Name	Female	Male	MFI TOTAL
Doesn't know	3.8%	15.4%	19.2%
Doesn't treat water	23.1%	19.2%	42.3%
Treats water	19.2%	19.2%	38.5%

## PPI & each outcome indicator

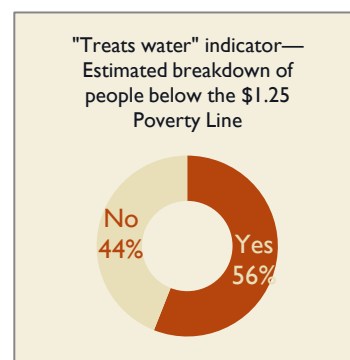
Let us say you want to analyze whether there is a **correlation between the poverty rate and water treatment**. A correlation would suggest that a change in one indicator, will mean a change in the another.

Your “General results” tab shows that 44.7 percent of the surveyed people are likely to be below the \$1.25 poverty line. These 44.7 percent represent the new total population you are looking at.

	MFI X
Below the \$1.25 Poverty Line	44.7%
Below the \$2.50 Poverty Line	82.4%
Below the National Poverty Line	36.7%

In your detailed PPI results tab, you find that of those living below the \$1.25 poverty line (the 44.7 percent living below the \$1.25 poverty line) the share of them who treat their water is 56 percent. This means, 56 percent of the very poor (total population living below the \$1.25 poverty line) treat their water.

You compare this to your general results, where you see that among the 403 people surveyed (the total population) 38.5 percent answered “Yes” to the question whether they treat water:



### I. Selected client outcome indicators

Treats water	MFI X
Don't Know (77 clients)	19.2%
No (171 clients)	42.3%
Yes (155 clients)	38.5%

This indicates that within the 44.7 percent of people who are likely to be below the \$1.25 poverty line, 56 percent would be likely to treat their water. This rate is higher among your total surveyed population (38.5%). There is a potential correlation between poverty and the of treating water suggesting that the poorer the person, the more likely they treat their water.

Please direct any questions regarding this database to Bobbi Gray at [bgray@freedomfromhunger.org](mailto:bgray@freedomfromhunger.org).