

## USAID Poverty Assessment Tools Implementation Training

### Example on Individual and Collective Poverty Assessment: The Importance of Balanced Errors

Assume ten microenterprise clients. Three of them (clients 1-3) are very poor (“True” VP); seven of them (clients 4-10) are not very-poor (“True” NVP), as determined by the benchmark survey. All clients take part in a poverty assessment exercise, and the tool predicts their poverty status as follows: clients 1-7 are classified as not very-poor, and clients 8-10 are classified as very poor, as indicated in the graph below:

	“True” VP			“True” NVP						
Clients:	1	2	3	4	5	6	7	8	9	10
	Predicted NVP							Predicted VP		

Thus:

- Number of “true” VP clients correctly predicted by the tool = 0
- Number of “true” VP clients incorrectly predicted as NVP by the tool = 3 (clients 1, 2, 3)
- Number of “true” NVP clients correctly predicted by the tool = 4 (clients 4, 5, 6, 7)
- Number of “true” NVP clients incorrectly predicted as VP by the tool = 3 (clients 8, 9, 10)

Therefore, the tool:

- correctly predicts the poverty status of four clients (4, 5, 6, 7) (total accuracy is 40%)
- incorrectly predicts the poverty status of six clients: it misidentifies all three very poor clients (1, 2, 3) (poverty accuracy is 30%) and misidentifies three out of seven not very-poor clients (8, 9, 10).

The tool is therefore a very poor predictor of individual poverty, and an unreliable targeting instrument.

As a predictor of the total number of very poor clients among the sample, the tool does better: although it individually misclassified all three very poor clients, the tool correctly indicates that there are three very poor clients in the sample. This observation results from the fact that the number of VP clients misclassified as NVP (“Undercoverage Error”), i.e., three, is exactly equal to the number of NVP clients misclassified as VP (“Leakage Error”).

IRIS has built on this fact and developed statistical methods that identify the group of poverty indicators that equalize the two errors.