MEASURING EQUITY

Implementers’ Approach to Assessing How Well Social Franchising Reaches the Poor

USAID, Washington DC
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on behalf of the Social Franchising Metrics Working Group
SOCIAL FRANCHISING

- Branding
- Training
- Standards
- Commodities
SOCIAL FRANCHISING

SOCIAL FRANCHISING IN 2013
>> 75 Programs
>> 40 Countries
>> 45,000 Clinics and Pharmacies
>> 32,000,000 Clients

SERVICES
>> Family Planning
>> HTC & treatment
>> TB
>> Malaria
>> Pneumonia
>> Safe Delivery
>> STI Care
GOALS OF SOCIAL FRANCHISING

Health Impact: Improving population health
Equity: Enabling the poorest to access services
Quality: Assuring adherence to clinical standards
Health Market Expansion: Delivering services that would otherwise not be provided
Cost-effectiveness: Providing services at equal or lower cost to the alternatives
DIFFERING PRIORITIES – DIFFERING ATTRIBUTES

Program Managers:
- Easy to collect (fast, inexpensive)
- Easy to interpret by managers and field staff

Agency Headquarters:
- Standardized
- Comparable across countries
- Easy to explain

Other Stakeholders:
- Comparable to global standard
- Rigorous
FIRST COMMON METRIC: EQUITY

Traditional
“I know I reach the poor because I work in poor areas”

Improved
“I know I reach the poor because X% of my clients are...”

METRIC ATTRIBUTES
>> Easy to collect and interpret
>> Low cost
>> Comparable to national context
>> Comparable across countries
POSSIBLE METRICS: IDENTIFY, PILOT, VOTE

PPI – Progress out of Poverty Index
Wealth Index
Multidimensional Poverty Index

>> 3 candidate measures considered
>> MPI dismissed: not feasible to collect
>> PPI and Wealth Index piloted in 5 countries in 2012
>> Pilot results measured against selection criteria
# PPI: DATA COLLECTION

## Benin Progress out of Poverty Index® (PPI®): Scorecard

<table>
<thead>
<tr>
<th>Question</th>
<th>Responses</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Atakora</td>
<td></td>
<td>14</td>
</tr>
<tr>
<td>2. Main material of the exterior walls of the main building (as observed)</td>
<td>A. Earth, stone, wood/planks, palm leaves/bamboo, or other</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>B. Mud plastered with cement</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>C. Bricks</td>
<td>4</td>
</tr>
<tr>
<td>3. How many household members are there?</td>
<td>A. Eight or more</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>B. Seven</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>C. Six</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>D. Five</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>E. Four</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>F. Three</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>G. Two</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>H. One</td>
<td>48</td>
</tr>
<tr>
<td>8. Does your household have a motorcycle, scooter, or automobile?</td>
<td>A. No</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>B. Yes</td>
<td>5</td>
</tr>
<tr>
<td>9. How many mobile telephones does your household have?</td>
<td>A. None</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>B. One</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>C. Two or more</td>
<td>9</td>
</tr>
<tr>
<td>10. Has the household owned (including as an inheritance) or rented any sub-divided, developed, or irrigated land in the past 12 months?</td>
<td>A. Does not own etc.</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>B. Does own etc., but land is not sub-divided, developed, or irrigated</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>C. Does own etc., and some land is sub-divided, developed, or irrigated</td>
<td>5</td>
</tr>
</tbody>
</table>

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Microfinance Risk Management, L.L.C., microfinance.com

This PPI was created in March 2012 based on data from 2010. For more information about the PPI, please visit [www.progressoutofpoverty.org](http://www.progressoutofpoverty.org).
PPI: DATA ANALYSIS

- Sum score from survey responses
- Look up score on table
- Sample average = proportion poor in sample

### Benin PPI°: Lookup Tables

Use the following look-up tables to convert PPI scores to the poverty likelihoods below each

<table>
<thead>
<tr>
<th>PPI Score</th>
<th>National 100% (%)</th>
<th>National 150% (%)</th>
<th>National 200% (%)</th>
<th>USAID ‘Extreme’ (%)</th>
<th>International $1.25 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4</td>
<td>87.1</td>
<td>100.0</td>
<td>100.0</td>
<td>49.7</td>
<td>94.0</td>
</tr>
<tr>
<td>5-9</td>
<td>82.6</td>
<td>93.9</td>
<td>100.0</td>
<td>49.7</td>
<td>85.8</td>
</tr>
<tr>
<td>10-14</td>
<td>68.7</td>
<td>88.1</td>
<td>95.4</td>
<td>41.1</td>
<td>74.6</td>
</tr>
<tr>
<td>15-19</td>
<td>64.8</td>
<td>87.5</td>
<td>95.3</td>
<td>35.1</td>
<td>70.4</td>
</tr>
<tr>
<td>20-24</td>
<td>53.2</td>
<td>83.3</td>
<td>92.9</td>
<td>25.3</td>
<td>62.2</td>
</tr>
<tr>
<td>25-29</td>
<td>44.4</td>
<td>74.6</td>
<td>89.6</td>
<td>20.4</td>
<td>49.4</td>
</tr>
<tr>
<td>30-34</td>
<td>33.4</td>
<td>67.9</td>
<td>85.3</td>
<td>12.8</td>
<td>39.4</td>
</tr>
</tbody>
</table>
### WEALTH QUINTILES: DATA COLLECTION

**Table 110**

<table>
<thead>
<tr>
<th>Does your household have: (4)</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity?</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>A radio?</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>A television?</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>A mobile telephone?</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>A non-mobile telephone?</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>A refrigerator?</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

[Add additional items. See footnote 4.]

**Table 114**

**Main material of the floor. (3)**

<table>
<thead>
<tr>
<th>Natural floor</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earth/sand</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Dung</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rudimentary floor</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood planks</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Palm/bamboo</td>
<td>22</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Finished floor</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parquet or polished wood</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>Vinyl or asphalt strips</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>Ceramic tiles</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>Cement</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>Carpet</td>
<td>35</td>
<td></td>
</tr>
</tbody>
</table>

**Table 118**

<table>
<thead>
<tr>
<th>Does any member of this household own:</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>A watch?</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>A bicycle?</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>A motorcycle or motor scooter?</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>An animal-drawn cart?</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>A car or truck?</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>A boat with a motor?</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

**Table 119**

<table>
<thead>
<tr>
<th>Does any member of this household own any agricultural land?</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>NO</td>
<td>2</td>
<td>121</td>
</tr>
</tbody>
</table>

Social Franchising for Health
innovate • demonstrate • replicate
WEALTH QUINTILES: ANALYSIS

● Principal Components Analysis on DHS data
  ● Capture factor scores for each asset
  ● Standardize Client data to DHS data
  ● Multiply each asset by factor score
  ● Sum (Std value*factor score) for each client
  ● Place clients within DHS quintiles
PILOT RESULTS: METRIC CHARACTERISTICS

Wealth Index

>> Relative measure
>> Uses DHS data to compare client sample to national wealth quintiles
>> Low-cost because DHS data is publicly available

<table>
<thead>
<tr>
<th>Quintile</th>
<th>India</th>
<th>Madag.</th>
<th>Benin</th>
<th>DRC</th>
<th>Mali</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=797</td>
<td>n=853</td>
<td>n=535</td>
<td>n=242</td>
<td>n=293</td>
<td></td>
</tr>
<tr>
<td>1 (Poorest)</td>
<td>27.9</td>
<td>2.1</td>
<td>3.4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2 (Poorer)</td>
<td>22.5</td>
<td>9.3</td>
<td>2.4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3 (Middle)</td>
<td>21.7</td>
<td>25.4</td>
<td>4.3</td>
<td>0</td>
<td>0.3</td>
</tr>
<tr>
<td>4 (Richer)</td>
<td>15.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 (Richest)</td>
<td>12.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PPI

>> Absolute measure
>> Bespoke asset list gives likelihood that a client is under World Bank $1.25/day poverty thresholds
>> Expensive: unique asset weights developed for each country

Example: Benin

- Only 6% of clients are from the bottom 40% of the population

Example: Benin

- 19% of franchise clients living under the $1.25/day threshold vs. 47% of the national population
## SELECTION CRITERIA

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Wealth Index</th>
<th>PPI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Easy to Collect and Interpret</strong></td>
<td>✅ Easy to collect</td>
<td>✅ Easy to collect</td>
</tr>
<tr>
<td></td>
<td>✗ Difficult to calculate</td>
<td>✅ Easy to calculate</td>
</tr>
<tr>
<td></td>
<td>✅ Quintiles widely used/understood</td>
<td>✅ Easy to calculate poverty threshold</td>
</tr>
<tr>
<td></td>
<td>✗ Somewhat difficult to interpret</td>
<td>✅ Easy to interpret poverty threshold</td>
</tr>
<tr>
<td><strong>Low Cost</strong></td>
<td>✅ Inexpensive</td>
<td>✗ $20,000 - 25,000 USD/country</td>
</tr>
<tr>
<td></td>
<td>✅ Based on publicly-available DHS</td>
<td>✗ High upkeep costs</td>
</tr>
<tr>
<td><strong>Comparable to National Context</strong></td>
<td>✅ Wealth quintiles accurate and validated comparison to national distribution</td>
<td>✅ Percent of clients under poverty line easily comparable to national poverty rate</td>
</tr>
<tr>
<td></td>
<td>✅ Easy subgroup analysis</td>
<td>✗ Difficult/impossible subgroup analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✗ e.g.: just urban, or just FP clients</td>
</tr>
<tr>
<td><strong>Comparable Across Countries</strong></td>
<td>✅ Can discuss percentage of clients that fall within bottom 40%, but measure is relative to a country</td>
<td>✅ Percentage of clients under $1.25/day standard across countries</td>
</tr>
</tbody>
</table>
Randomly select 30-60 social franchise clinics
   >> Sample should be generalizable to entire network

Conduct exit surveys among 400 or more clients
   >> Primary survey outcome probably not equity; power survey for primary outcome
   >> Within facility sampling depends on facility volume and other characteristics

Integrate DHS asset questions for every country into survey
   >> Assets and household characteristics
   >> Exact list of questions can be procured from ICF Macro
   >> Adds approximately 10 minutes to each interview
APPLYING WEALTH INDEX: GOING FORWARD

Data analysis – centralized, or done in country after creation of toolkit

Analytic approach
  >> Recreate asset index from DHS and multiply asset weights by client data
  OR
  >> Use data files from ICF Macro which record asset weights used to create DHS quintiles

Build capacity through tool kits and standard syntax files

Ensure quality of analysis across social franchisors

Conduct surveys on annual basis
WEALTH INDEX ROLLOUT: TIMELINE

February 2013: Selection
  >> Metrics Working Group vote: 13 for Wealth Index, 1 PPI, 2 abstentions

June 2013: Prepare rollout
  >> Publish toolkits and guidelines for country-level surveys, analysis, and interpretation

July 2013: Phase I rollout
  >> First adopter programs begin to integrate equity measure into program reporting

Q1 2014: Phase II
  >> Implementers at 2nd Global Conference on Social Franchising will present findings and host trainings for other programs
THANK YOU!

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AUXILARY SLIDES
DHS data available for 90 countries: Free
  >> DHS missing for 2 countries: Somaliland and Myanmar
  >> Workarounds possible: MIS, AIDS Indicator Surveys
  >> Labor for each country’s analysis: approx $450 per country

Initial investment (data collection + analysis) to cover every social franchising program: approximately $27,000
  >> Annual update costs: approximately $6,300

Compared to PPI:
  >> Initial investment to cover every social franchising country (12 additional countries): at least $240,000