Volume 9.1: Target Setting for Reducing the Prevalence of Poverty

Note: This is the first part of guidance on target setting and is focused only on poverty targets. Separate guidance on nutrition targets is forthcoming.

January 17, 2013

Overview

The U.S. Government's Feed the Future (FTF) initiative's high-level goal is to sustainably reduce poverty and hunger. As described in the FTF Results Framework, achievement of this goal is measured through the prevalence of poverty and the prevalence of underweight and stunted children. The purpose of this guidance and its accompanying tool is to present the method used by the Bureau for Food Security (BFS), in consultation with the Bureau for Economic Growth, Education and Environment (E3), to recommend **aspirational targets for reducing poverty** in each FTF focus country. This method represents a uniform approach to target setting that can be applied across all countries. Additional guidance on nutrition targets will be issued separately.

Based on recent data and trends, the Bureau for Food Security is recommending an **overall aspirational target of reducing poverty by an average of 20 percent across all FTF focus country zones of influence (ZOI) over 5 years**. Twenty percent represents an aggressive yet achievable goal for FTF ZOIs given historical national trends in poverty reduction. Given the variability among focus countries, individual countries may have targets that are higher or lower than 20 percent. These *aspirational* targets, which are outside the direct manageable interest of FTF programs alone, represent an ambitious goal to be achieved through the collective effort of partner countries, development partners, and other key stakeholders.

Poverty Targets

BFS and E3 staff have analyzed national trends in poverty reduction and GDP growth to inform recommended poverty reduction targets for each mission. As each FTF focus country mission completes a baseline survey of their selected ZOI, they will input the ZOI-specific population and poverty data into the accompanying spreadsheet. Using the BFS/E3 recommended targets and ZOI baseline survey data, the spreadsheet projects the poverty rate and number of people living in poverty in future years of the initiative.

The notes below describe how the recommended targets were developed and how missions can use the accompanying spreadsheet. Missions are invited to consult with BFS and E3 staff to discuss this methodology and adjust or revise specific targets based on data, context, and other information specific to their country or ZOI. Based on these consultations, Missions may deviate from the recommended targets by five percentage points in either direction.

Key Terms and Parameters

Poverty: For the purposes of this analysis, poverty refers to the World Bank's definition of extreme poverty, or living on less than $1.25 per day. This is the global standard for measuring poverty and is consistent with the Millennium Development Goal indicator.

Timeframe: The baseline year for these targets will be 2012, mid-term year will be 2015, and final year will be 2017. Since the FTF initiative began in 2010, 2015 poverty levels may also be compared with estimated poverty levels in 2010, if available.

Proportional and Percentage Point Poverty Reduction: A proportional poverty reduction is calculated relative to the prevalence of poverty observed at the start of the five-year period. The same proportional (percent) reduction in different poverty rates result in different percentage point reductions. It is important to clearly define and differentiate between the two. To illustrate, a 20 percent proportional reduction in a 15 percent initial poverty rate cuts that rate by 3 percentage points to 12 percent [0.15 –(0.15*0.2)=0.15-0.03= 0.12], while a similar proportional reduction in a 60 percent initial poverty rate cuts that rate by 12 percentage points to 48 percent [0.60 – (0.60*0.20) = 0.60 – 0.12 = 0.48].

Elasticity of Poverty Reduction (or Growth Elasticity of Poverty): The "elasticity of poverty reduction" is the percentage reduction in the poverty rate that will result if per capita consumption increases by 1 percent. For the purposes of this model, the elasticity is used to estimate the effect of GDP growth on poverty reduction. That is, if a country's elasticity is -1.5, a 1 percent increase in GDP is expected to decrease poverty by 1.5 percent.

Poverty Target Setting Methodology

The poverty targets recommended by BFS and E3 were informed by two factors, one based on poverty and the other based on GDP growth.

FACTOR 1 (Poverty): The actual annual percentage point reduction (APPR) in the national poverty rate between the last two available data points in each country (source: PovcalNet[1]) was compared with the targeted APPR in the poverty prevalence that would be required to meet the five-year 20 percent reduction target. Factor 1 is the difference between the recent poverty trend and the poverty reduction required to meet the target. **In the chart below, Factor 1 is formatted green if the country has been reducing poverty fast enough to meet the 20 percent target equivalent (i.e. Factor 1 greater than zero).** Green indicates greater confidence that there is national momentum in poverty reduction that should be a positive factor for reducing poverty in FTF zones of influence and that a 20 percent or greater reduction can be achieved.

FACTOR 2 (GDP Growth): The required national GDP growth rate needed to meet the targeted five-year 20 percent poverty reduction target was compared with projected national GDP growth rates. The required level of *per-capita* GDP growth to meet the target was calculated based on each country's elasticity of poverty reduction (explained above, source: PovcalNet[1] or the Martin Ravallion Pro-Poor Growth model[2]). The sum of the required per capita GDP growth rate and

---

[1] PovcalNet: the on-line tool for poverty measurement developed by the Development Research Group of the World Bank. http://iresearch.worldbank.org/PovcalNet/index.htm
[2] Ravallion, Martin. Pro-Poor Growth: A Primer. http://web.usal.es/~bustillo/RavallionPPGPrimer.pdf. The model referenced in this paper was used only for countries for which the elasticity was not available in PovcalNet.

recent population growth rate (source: World Development Indicators database[3]) yields the required rate of overall, national GDP growth needed to reach the poverty reduction target. The required national GDP growth rate was then compared with projected GDP growth rates for 2012 to 2017 (source: International Monetary Fund World Economic Outlook Database[4]). Factor 2 is the additional growth above the projected growth rates required to reach the 20 percent poverty target. **If the required additional growth was less than 1 percentage point over projected rates, Factor 2 was colored green to signal that growth is at an adequate level to reach or exceed the targeted 20 percent proportional poverty reduction.** Green indicates greater confidence that the higher rates of growth needed to achieve the poverty targets can be achieved.

BFS/E3 recommended targets are shown in Table 1 below. These two factors were used to inform the BFS/E3 recommended targets based on the best available evidence of poverty and growth at a national level. Higher targets were recommended for countries for which we have greater confidence in achieving significant results given the country's direction and momentum, per the following general guideline.

- High targets (30 percent) are recommended for countries with **two green factors**.
- Moderate targets (25 percent) are recommended for countries with **one green factor**
- Lower targets (15-20 percent) are recommended for countries with **no green factors**

As noted earlier, these targets are based on national, country-wide data. After baseline data are collected specific to a ZOI, Missions are invited to consult with BFS and E3 staff to adjust or revise targets based on information specific to their country or ZOI. For example, if a mission has data showing that poverty trends have declined faster in the ZOI in recent years compared with national rates, they may wish to consult with BFS/E3 to possibly select a more aggressive target than the recommendations. Based on these consultations, Missions may deviate from the recommended targets by five percentage points in either direction.

---

[3] World Bank's World Development Indicators database. http://databank.worldbank.org/data/home.aspx
[4] International Monetary Fund World Economic Outlook Database.
http://www.imf.org/external/pubs/ft/weo/2012/02/weodata/index.aspx

Prevalence of Poverty 5-Year Targets			
Targeted Proportional Reduction in 20%	Factor 1 Average Annual Reduction in Poverty between two latest surveys (green indicates >=0 pct pts growth)	Factor 2 Additional annual growth needed to achieve poverty reduction target over 5 years (green indicates less than 1 pct pt needed)	FTF/BFS Suggested Proportional Reduction in Poverty Rate (percent)
Aardvarkia	0.07	1.36	25%
Bangladesh	-0.05	-2.42	25%
Cambodia	8.57	-3.53	30%
Ethiopia	7.02	-0.24	30%
Ghana	0.99	-0.11	30%
Guatemala	-0.35	6.23	20%
Haiti	-2.28	2.51	15%
Honduras	2.72	5.24	25%
Kenya	-0.69	2.82	20%
Liberia	-2.62	7.06	15%
Malawi	-0.49	5.14	20%
Mali	-1.75	3.80	15%
Mozambique	-0.01	0.52	25%
Nepal	3.55	1.06	25%
Rwanda	-1.03	2.64	20%
Senegal	1.76	2.39	25%
Tajikistan	3.91	-1.46	30%
Tanzania	-1.56	2.45	20%
Uganda	4.88	2.50	25%
Zambia	-1.53	5.72	15%
Average	1.04	2.13	23%

Target Setting Tool

The accompanying Microsoft Excel spreadsheet is a tool to calculate and adjust country-specific targets. It includes the calculations supporting these recommended five-year poverty reduction targets. Each of the tabs, or worksheets, is described below.

Poverty Targets: This worksheet provides a summary of poverty reduction targets and can be modified with ZOI-specific baseline data. Please only modify the columns labeled with "EDIT HERE".

Mission Action: Once ZOI baseline surveys are complete, Missions should input the **baseline ZOI population and poverty rate** in the yellow highlighted cells for their country in Columns E and F. The spreadsheet automatically calculates the projected poverty rates, numbers of people in poverty, and the decrease in number of poor people in the ZOIs in 2012, 2015, and 2017, based on the BFS/E3 recommended target. Missions may test different targets in Column L.

Column AA shows the APPR in the poverty rate. This is included to demonstrate the importance of looking at both percent and percentage point changes in poverty. The former USAID Chief Economist, Steve Radelet, advises **not to set APPR targets that exceed 3 percentage points**. Historically, reduction of this magnitude is uncommon even under the best of circumstances.

Poverty Analysis: This worksheet presents the underlying calculations for determining Factors 1 and 2, which inform the BFS/E3 recommendations.

Factor 1*:* First, the worksheet presents the two most recent data points for national poverty rates and the data year (source: PovcalNet). These data are either based on recent population-based surveys or on imputed or extrapolated values. The average APPR in poverty rate is then calculated and referred to as the "Poverty Trend" (Column G). Then, the worksheet calculates the APPR in poverty rate required to achieve a 20 percent five year target (Column J). Factor 1 (Column K) is the difference between the Poverty Trend and the poverty reduction necessary to achieve the 20 percent target. If the difference is greater than zero, Factor 1 is colored green.

Factor 2: The worksheet presents the International Monetary Fund's projection for GDP growth rates between 2012 and 2017 (Column M, source: International Monetary Fund World Economic Outlook Database) as a base and calculates the additional GDP growth needed to achieve a 20 percent reduction in poverty over five years. To calculate this, the worksheet utilizes the elasticity of poverty reduction (source: PovcalNet or the Martin Ravallion Pro-Poor Growth model). This elasticity is used to calculate the per-capita growth needed to achieve a five-year 20 percent reduction in poverty which, when added to the population growth rate (source: World Development Indicators database), results in the national GDP growth required to achieve the 20 percent target. If the additional growth need to achieve the target was less than 1 percent, Factor 2 was colored green.

Background Data: All original data used for these calculations are presented in the remaining worksheets, with information on the source.

Questions and Additional Support

Mission staff are encouraged to view a recorded webinar that describes this methodology in more detail through Agrilinks (http://www.agrilinks.org/). In addition, BFS and E3 staff are available to walk through the data, analysis and suggested targets by video- or tele-conference as requested. To ask a question or request a consultation, missions may contact their CSI Country Support Officer.