



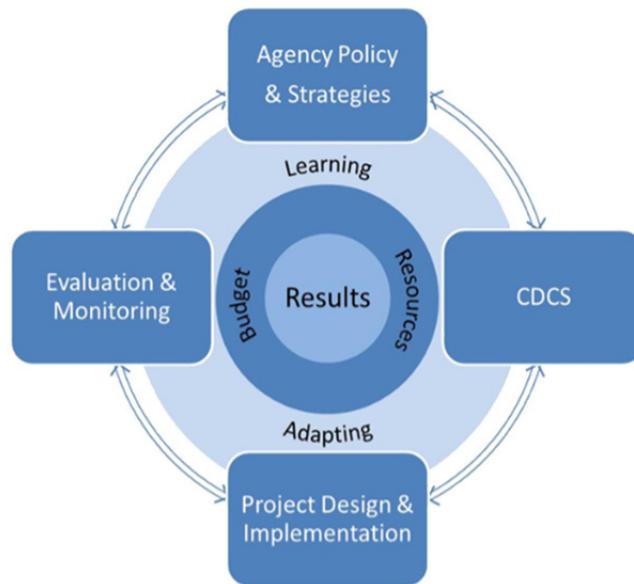
M&E Insights: Setting Targets

Introduction

This guide is a summary of issues and a suggested approach for setting performance targets. It was developed in response to a need identified by USAID/Ethiopia’s technical teams and draws on best practices in the field.

A performance target is defined as “a specific, planned level of result to be achieved within a specific time period.” USAID guidance requires targets to be set for program- and project-level indicators¹. Over the past few years, USAID has moved toward integrating more rigorous, evidence-based approaches to implement elements of the program cycle (figure 1), including target setting.

FIGURE 1: USAID’S PROGRAM CYCLE



The Importance of Targets

Results are at the core of USAID’s program cycle. Targets help managers understand, in specific terms, what will be delivered as a result of development interventions. This is an essential element for effectively managing foreign assistance programs and achieving maximum program impact.

Targets:

- Bring the program or project purpose into sharp focus
- Convey, in concrete terms, what the program or project is expected to achieve
- Provide justification for a program
- Assist in understanding the relationship of budgets to results
- Orient and motivate stakeholders toward specific results

¹ The definitions of *project* and *activity* come from [ADS 200](#). A *project* is “a set of executed interventions, over an established timeline and budget intended to achieve a discrete development result through resolving an associated problem.” An *activity* is “a sub-component of a project that contributes to a project purpose. It typically refers to an award (such as a contract or cooperative agreement), or a component of a project such as policy dialogue that may be undertaken directly by mission staff.”

Using Targets within a Learning Culture

A learning culture is one where managers use targets, as one tool among others, to ultimately improve development programming. Thus, it is optimal to use a multi-pronged approach to analyze performance and set targets.

Targets function as useful indicators within a performance management context. If targets are not met, managers are prompted to analyze in-depth the reason why. For example, it is possible that external or unforeseen circumstances may have affected the program's ability to achieve the target. If this occurs, the operative questions are:

- Do we understand why the target was not met?
- What can the program do to address the issue?
- Does the indicator or target need to be adjusted?
- If there appears to be a broader problem, does the development hypothesis need to be reconsidered?
- What can we learn and improve?

Monitoring and evaluation (M&E) experts do not recommend using the achievement of targets to judge the success or failure of a program. When organizations do this, they misunderstand important nuances of why programs succeed or fail and inadvertently create an incentive to lower targets.

Balancing Ambition with Reality

One key challenge related to setting targets is balancing ambition with reality. There is no question that this can be tricky. This can be addressed by:

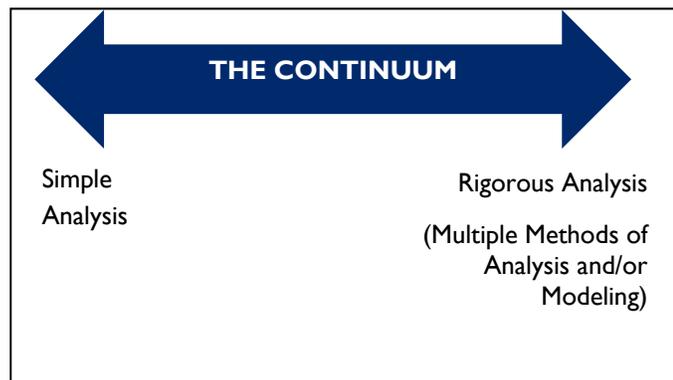
1. **Setting Aspirational Targets.** USAID has recently begun to use “aspirational targets,” which signify that the targets are ambitious. They convey the sense that an organization is willing to push itself to achieve a specific result. Aspirational targets, while achievable, are intended to stretch the organization.
2. **Using Target Bands.** Another approach that has been used is to establish a target band. A target band establishes a target range that represents achievement. This is useful in cases where program planners have less precision in forecasting what can be achieved. Setting target bands also reflects reality — it is often improbable that a project will achieve most performance targets precisely.
3. **Clearly Articulating Assumptions.** Planners often base targets on critical assumptions. This is particularly true for targets where programs depend on a variety of factors to achieve success (e.g., a decline in the total fertility rate as opposed to the number of people trained), it is important to be clear about the assumptions that underlie the target. These assumptions should be included along with the target. This facilitates better analysis when targets are not met or are greatly exceeded.

The Level of Rigor Required for Target Setting

Not all targets require the same level of rigor. The minimal requirement is to provide simple analysis or rationale to support the target (figure 2 below). On the other end of the continuum, a manager may need more rigorous analysis, including a combination of multiple analytical methods or modeling techniques (see figure 3 below).

Deciding the level of rigor required for target setting is a key management decision that depends on a number of factors:

FIGURE 2: THE LEVEL OF RIGOR ASSOCIATED WITH TARGET SETTING



1. **Management Need.** If the indicator represents a fundamental aspect of program performance or represents an area with a high level of investment, then it may be worthwhile to invest more time and resources to attain greater rigor in developing targets. For example, if a program’s central purpose is focused on creating jobs, then establishing credible targets for “the number of jobs created” is critical to understanding and conveying performance to stakeholders. As a result, this indicator would warrant more investment in target setting.
2. **Available Information and Data.** In practice, the forms of analysis that can be done are often constrained by the available information. For example, using historical trends to forecast targets is one useful method. However, this is premised on the availability of data, optimally over a 10-year period, from which to calculate a future trend.
3. **Complexity and Uncertainty.** Some targets are relatively easy to establish. Output indicators, such as the number of workshops, fall into this category. Setting targets for output indicators rarely requires complex analysis. On the other hand, it is more difficult to set targets for impact indicators because change at this level is more complex and likely to be affected by multiple external factors, such as the economic environment or host-country policies. An example of this type of indicator is the value of exports. In addition, outcome (or impact) indicators, by their very nature, reflect important elements of a program and high-dollar investments. These are generally the types of indicators that require more rigorous analytic methods.
4. **The Point in the Program Cycle.** Targets are important to establish in planning or project design to convey the magnitude of impact expected when compared to the investment. As managers move down an implementation path, they learn more about opportunities and challenges that affect target setting. This learning should be incorporated to adjust targets accordingly. This may be an iterative process. Once activities begin, Mission staff and implementing partners should have an opportunity to reassess and confirm targets based on the development of an activity-level M&E plan and fuller knowledge of the context. Sometimes, changing targets requires approval or official notification. One example is when targets are

AN EXAMPLE OF SIMPLE ANALYSIS

A manager needs to set a target for “the number of workshops to be held.” The Mission is targeting all 42 local governments for training on the development of local economic development plans. Because this training establishes the foundation for economic planning, it is important for the training to occur in Year 1. The initial goal is to train two key staff members from each local government, resulting in the need to train 84 participants (2 x 42). Managers want to limit workshops to between 20 and 25 participants as the optimal number to allow participation and learning. As a result, the target should be to hold a total of four workshops (with 20 to 22 participants each) during Year 1.

reported for select indicators chosen for annual reporting purposes, such as the performance plan report (PPR). In that case, check with the Program Office to determine the appropriate process for making adjustments.

5. **New or pilot areas of programming.** In this case, managers may want to invest more effort in researching what is possible to achieve. Questions regarding what can be achieved given particular investments may be essential to judge the success of the pilot and contribute to effective impact evaluation (see USAID's [evaluation policy](#); this is required for pilots programs).

Analytic Methods for Target Setting

Managers should identify the most rigorous method (or combination of methods) practical, balancing resources and management need. Where there is greater complexity or uncertainty (e.g., an outcome indicator associated with high investment levels), it is advisable to use multiple analytical methods to set sound targets. This allows managers to build a base of evidence for projecting a more realistic, evidence-based target or target range. Annex I summarizes a range of analytic methods that can be employed to set targets. It also contains practical suggestions for how to conduct such analysis. Annex II contains an example of target setting, step-by-step, using historical trend analysis. While this example draws on setting targets for Feed the Future (FTF), the approach can be used across different sectors.

Common Approaches for Target Setting

Once analysis is completed there is still a step between moving from that analysis to recommended targets. The following summarizes some of the approaches that can be used to get to the final target figure (or range):

1. **Project a future trend and determine the value-added by USAID interventions.** This entails projecting a trend, generally for outcome indicators, and then adding whatever gains can be expected as a result of USAID efforts. This can certainly be a tricky process. However, when based on rigorous analysis, it tends to be one of the most credible approaches.
2. **Establish a final performance target for the end of the planning period and then consider how progress will develop from the baseline level.** This approach focuses on determining the program's performance target for the final year and then defining a path of progress for the interim years. Final targets may be developed based on one or more of the analytic methods process outlined in Annex I.

Progress is not always a straight, upward line. More often than not, results take time to demonstrate in early phases of a project. Results sometimes hit plateaus. During the final phases, early work comes to fruition so that performance may be accelerated at particular points in time or at the end. All targets — final and interim — should be based on a careful analysis of what is realistic to achieve, given the stage of program implementation, resource availability and technical constraints. Also important are country or contextual factors, such as seasonal changes, projected changes in the operating environment and potential conflict situations.

3. **Set Annual Performance Targets.** Similar to the previous approach, judgments are made about what can be achieved each year based on the analytical process presented in the summary table, instead of starting with a final performance level and working backward.

4. **Doing, Learning and Adjusting.** Another approach, which is important over the longer term, is to set targets, assess performance in a collaborative manner and make adjustments accordingly. This approach can be a powerful way to set more effective targets over time and makes target setting more meaningful to front-line managers. It also reflects USAID’s recent emphasis on incorporating collaboration, learning and adapting and is important for ensuring that targets are a tool for effective management.

The Importance of Establishing Baselines

While this guidance focuses more on target setting, there are some indicators, for which, targets cannot be established until the baseline is known. An example is “the percent of citizens who are satisfied with target services.” In this case, a survey has to be done to establish the baseline. Where it is not yet possible to establish the baseline, program managers should, at a minimum, identify the approach and timeline for obtaining baseline and target data in the performance management plan (PMP) or M&E plan. USAID [TIPS No. 8](#) on baselines and targets provides a fuller discussion of this topic.

Common Errors in Setting Targets

Some of the most common errors associated with target setting are described below.

1. **Lack of Analysis.** In a fast-paced and busy environment, targets are often set without much supporting analysis. If indicators are correctly chosen, then targets are your commitment to change. It is critical as a team to consider what targets are appropriate for your program. Once analysis is completed, ensure that the rationale behind the target be explained in the performance data table (or wherever you record your targets).
2. **Lack of Consultation.** Key stakeholders, including host-country representatives or implementing partners, bring important and informed opinions about the type of change that can be achieved. Stakeholders, as part of an implementation team, often have a perspective that is important to consider to improve accuracy, accountability and shared commitment to targets.
3. **Assuming that Progress is a Straight, Upward Line.** Progress in development work is rarely represented by a straight upward line. We don’t often see significant change during the start-up phase. Performance may hit plateaus or take off points where performance is accelerated. During the final years, early work should come to fruition and one would expect much more progress. Ensure that these factors are taken into account.
4. **Lack of Readjustment over Time.** In a learning organization, it is essential to use what is learned when reviewing performance to make readjustments. If targets are set too low or too high, they need to be revised and the reasons appropriately documented.

Potential Process for Setting Robust Targets

The following outlines one possible set of steps that can be used (or adapted as needed) to set targets. It is based on a common scenario, where several implementing mechanisms are in place and contribute sub-targets to one indicator that is rolled up for program reporting as a cumulative target (figure 3).²

Step 1. Identify the list, by development objective, of indicators for which targets have to be set.

Step 2. Hold a target-setting planning session. The first session could focus on planning and setting up the process. This session should include the critical technical and M&E staff who can contribute to the target-setting process. It should also include implementing partners if possible. The more the Mission is able to build ownership and consensus around targets as key guideposts for the program, the more useful those targets will be as management tools (as opposed to focusing on targets only for reporting).

- Review the list of indicators and determine the set of indicators and targets that require more rigorous analysis (more than simple analysis).
- Identify who will be tasked with recommending targets. For targets that require more rigor, identify an individual or a sub-team who will identify the analytic methods to be used along with the recommended targets based on that analysis (see Annex I).
- Identify a timeline for providing target recommendations. If more rigorous methods are required for indicators, the team will have to plan a process that realistically allows enough time for that analysis to be conducted.

Step 3. Conduct analysis. The appropriate individual or team will first identify how much rigor is required and then identify the appropriate method (or combination of methods) to provide a recommendation. The team then conducts the analysis, selecting the analytical methods appropriate to the context. These methods are summarized in Annex I and can be used in any combination, starting with a review of the project details, budget and overall implementation plan. The choice of analytical method is dependent on the availability of information that is required for use of that method.

FIGURE 3: THE RELATIONSHIP BETWEEN ACTIVITY-LEVEL TARGETS (BY IMPLEMENTING MECHANISM) TO THE PROJECT AND PROGRAM LEVEL



² It is important to acknowledge that there could be other scenarios as well. Not all indicator data come from multiple implementing partners. It may be one implementing partner, or USAID may obtain the data directly from another entity (e.g., the host-country government). However, this is a common scenario within the Mission that has not really been explored before in terms of target setting.

CONSIDER AN ITERATIVE APPROACH TO SETTING TARGETS DURING PROJECT DESIGN

How one sets targets depends on at which point one is in the programming cycle. Targets are often developed at different points, such as during the Country Development Cooperation Strategy (CDCS) development, project design or as a part of ongoing activity management. Some of the same criteria discussed above in “The Level of Rigor Required for Target Setting” can be considered during project design. However, during project design, USAID staff are not able to consult with implementing partners (although host country representatives may be an option). Generally, a project design team, which includes technical staff, is tasked with identifying the appropriate indicators and targets for the project-level M&E plan. The challenge is that, after approval of the CDCS, the Mission enters an intense phase of project design. There may be practical limitations in resources (time, workload, staff) and knowledge.

Consider an iterative approach for target setting. Initial estimates should be based on the team’s best analysis at the time (and balancing the other factors discussed, such as management need). In cases where an award is made, the implementing partner will normally be required to develop an M&E plan and targets for the activity (to feed into the larger project M&E plan). This provides an opportunity for the additional technical staff associated with the implementing partner to examine the project implementation plan, consult with key stakeholders, and reexamine the environment and critical assumptions in the process of finalizing the M&E plan. Earlier targets should be reconfirmed to ensure that they remain appropriate (particularly for outcome indicators, where there is more uncertainty and potential influence of external factors). The first time that performance is assessed (e.g., prior to a semi-annual or annual report or in preparation for the Mission’s portfolio review) is another important juncture for reassessing targets. If targets are high or low, it is important to understand why and reassess.

Step 4. Prepare recommended targets.

Each individual or team tasked with developing targets should prepare recommendations, based on the analysis conducted. This may include implementing partners or host-country representatives as part of the process because they are responsible for achieving targets (or sub-targets, which are those targets set for each discrete activity or project that represent one contribution, among others, to a cumulative target at the program level). If more rigorous analytic methods have been used, a synthesis of that analysis should be provided. This should be submitted in writing prior to the target review session.

Step 5. Hold a target review session. This session can be used to review targets, consider cross-cutting issues that affect the target-setting process and make final decisions on targets.

Step 6. Document. Most often, missions maintain data tables to track indicator data as well as targets. This is commonly done in spreadsheets or in a database (such as AIDTracker; a centralized database system developed by the Bureau for Policy, Planning and Learning in partnership with the Chief Information Officer). In either case, key assumptions or the approach used to calculate a target should be recorded in the data table.

Clearly, this process may have to be modified or adapted appropriately, depending on where the Mission is in the project cycle as well as time or resource constraints.

***M&E Insights: Setting Targets* was developed by the USAID-funded Ethiopia Performance Management System project (AID-663-C-12-0003). It is intended to provide practical insights on specific M&E issues that assist the Mission with improving M&E in the field or implementing new Agency policies. In addition, it draws on practical lessons learned from doing this work. Setting Targets was written by an M&E team consisting of Michelle Adams- Matson; Rosern Rwampororo, Ph.D.; Patricia Vondal, Ph.D.; and Rufael Fassil, Ph.D., of Management Systems International.**

Annex I: Summary of Analytic Methods for Target Setting

The following summarizes the analytic methods that can be used for target setting. Many of these methods overlap or are complementary.

Analytical Method	Brief Description	Major Sources of Information/Data	How Do I Do It?
Strategy Analysis	A review and analysis of the development hypothesis (or theory of change) that drives a program and its implementation. Understanding the basic strategy is most often an initial step. This approach can be combined with other techniques, such as an analysis of implementation planning. Strategy analysis (at the program or project level) is also a good starting point for identifying the factors within the enabling environment that affect performance (contextual analysis).	<p>CDCS</p> <p>Results Frameworks</p> <p>PMP</p> <p>Logframe</p> <p>Project Design Documentation</p> <p>Activity-Level Contract or Agreement</p> <p>M&E Plan</p>	<ul style="list-style-type: none"> ▪ Review relevant strategy and performance monitoring documents (as referenced under Major Sources of Information/Data) to understand the underlying development hypothesis (or theory of change), critical assumptions and expected results. ▪ Identify significant factors that affect performance within the development context (see also contextual analysis). ▪ Identify the scope of coverage, e.g., national/regional/targeted districts or communities. Clarify which segments of the population or private sector the program is targeting.
Analysis of Implementation Planning	An analysis of the implementation approach, including activity details and the allocation of resources to understand the scope and potential level of anticipated results. This is most frequently used at the project or activity level (when implementation plans are most complete). Analysis focuses on developing targets in light of (1) planned implementation (e.g., work plan), (2) activities (sequencing, roll out, underlying approach) (3) resources levels (budgets and staffing), (4) capacity of key partners; and (5) projected coverage.	<p>Annual Work Plan or Implementation Plan</p> <p>Budget</p>	<ul style="list-style-type: none"> ▪ Analyze the proposed implementation plan and the planned roll out of activities. Identify how this affects target setting. For example, most activities require some time initially to get started, but in the later phases the culmination of previous activities may come to fruition. ▪ Examine the overall project, the budget allocations (per component) and each year in relation to the implementation plan to help forecast targets. ▪ Review implementation plans of complementary activities, if relevant.

Analytical Method	Brief Description	Major Sources of Information/Data	How Do I Do It?
Past Performance Analysis	<p>Analyze the performance demonstrated by a strategy, project or activity in previous years. This works particularly well if the new program is a follow-on or extension of the previous program.</p>	<p>Documentation from the prior program, including:</p> <p>Evaluations</p> <p>PMP or M&E Plans</p> <p>Past reports (annual, quarterly, or final reports)</p> <p>Performance Data and Final Annual Report from Previous Project</p>	<ul style="list-style-type: none"> ▪ Review past trends. ▪ Consider whether any factors are similar or different in the new program in comparison to the old that must be considered, e.g., policy and regulatory environment, recent election, other new USAID projects that are designed to be complimentary, etc. ▪ If the new program is a follow-on, review final evaluation report of the previous project and end-of-project targets and actual data. ▪ Determine if any of the final data values could serve as baseline for the new project and if evaluation findings and conclusions can contribute to target setting. ▪ Conduct a trend analysis of performance.
Contextual Analysis	<p>An analysis of key factors in the development environment that are likely to enhance or constrain performance. Examples of common contextual factors include:</p> <ul style="list-style-type: none"> • Host-country priorities, strategies or reform activities, as well as the political will for change. • The policy and regulatory environment or the strategies and programs of other donors in related areas. • The strategy and activities of other donors in related areas. 	<p>Strategy Documentation (CDCS, Project Design Documentation or Contracts/Agreements)</p> <p>Recent Sector Assessments</p> <p>Analyses of Policy Conducted by USAID or Other Donors</p> <p>Conflict Assessments, Gender Assessments, etc., as Applicable to Program</p> <p>Related Donor and Host-Government Strategies and Plans</p>	<ul style="list-style-type: none"> ▪ First, identify the key contextual factors that will affect performance. Strategic analysis (as described earlier) can be an important starting point. ▪ Conduct a detailed review of recent assessments to identify the key contextual factors relevant to the project. ▪ Determine how the enabling environment will constrain or boost performance. Is policy dialogue to promote favorable changes in the enabling environment likely? When is this likely to occur and how could it affect target setting? ▪ If policy reform is part of the strategy to increase the performance of the program, estimate at which points

Analytical Method	Brief Description	Major Sources of Information/Data	How Do I Do It?
			<p>favorable change is likely to occur and how this might affect performance.</p> <ul style="list-style-type: none"> ▪ Review other donor and host-government strategies and plans related to the program to identify how these may create complimentary or synergistic effects that can further boost performance. ▪ Meet with representatives from identified donors and government agencies/offices as necessary to ground truth results of this analysis.
Analysis of Applied Research & Evaluation Findings	An analysis of recent applied research and evaluation findings that relate to the current status of the situation related to the program and its implications for target setting.	<p>Evaluation Reports</p> <p>Research Reports</p>	<ul style="list-style-type: none"> ▪ Identify recent evaluations and applied research documents relevant to the project ▪ Examine findings and conclusions from documents to determine how this could affect project performance and specific implications for target setting.
Analysis of Historical Trends to Calculate Projections	Analyze historical trends and projected performance on key variables related to the program, such as the value of exports, employment, and maternal and child mortality, etc. Using this method depends on the availability of the same or similar (and highly correlated) macro-level data that USAID intends to use to measure its program.	<p>Reports</p> <p>Records</p> <p>Statistics on Indicators (e.g., host government, World Bank, UN agencies)</p>	<ul style="list-style-type: none"> ▪ Determine whether appropriate historical data is available for the indicator or closely related phenomena. ▪ Identify potential data sources, such as reports, records or statistics. ▪ Consider exploring the government's statistics office or other international donors, such as the World Bank and UN Food and Agriculture Organization. ▪ Determine whether multiple data sets can be collected on the same or similar indicators to cross-check their validity. ▪ If available, review projected performance based on donor contributions and government budget allocation. ▪ Analyze what the net effect will be based on the dollar contribution of the

Analytical Method	Brief Description	Major Sources of Information/Data	How Do I Do It?
			project and any other complimentary USAID programs (see Annex II) to guide target setting.
Analysis of the Potential Effects of Complementary Projects and Cross-Cutting Activities	<p>Assess the effect of complementary projects and cross-cutting activities in the Mission portfolio to determine if they can increase the level of targets. Include an analysis of complementary host government or other donor programs if applicable.</p>	<p>USAID Portfolio of Projects</p> <p>Activities that Cut Across USAID Portfolio</p> <p>Documentation of Host Government or Other Donor Programs, Projects or Activities</p>	<ul style="list-style-type: none"> ▪ To identify project complementarities and synergies, map out (or review Mission maps) where and how the Mission’s portfolio overlaps and where and how collaborative or complementary host-government and other donor programs overlap with the Mission’s portfolio. ▪ Review the project purpose, theory of change, critical assumptions, indicators and targets of identified complimentary projects (supporting the same development/activity objectives or from other Mission development objectives) to determine if and how implementation of these projects can boost project-level results. How much higher can project targets be set based on this analysis? At what point in the life of the project can these boosts be anticipated? ▪ How can the projected outcome and pace of policy and regulatory reforms affect targets? ▪ Meet with the contracting/agreement officer’s representatives of identified projects to ground truth results of this analysis. ▪ If the new project is part of a tightly coordinated donor strategy, follow the same steps to determine how these projects or activities can potentially boost targets.

Analytical Method	Brief Description	Major Sources of Information/Data	How Do I Do It?
Expert Judgments	Consultation with experts about what is possible or feasible with respect to a particular indicator in a given country context.	Experts in Particular Topic Areas	<ul style="list-style-type: none"> Interview experts or set up a discussion session to get their input on targets and the factors that affect performance. Consider experts in government agencies, other donor organizations, local universities and research institutions. Alternatively, set up an expert panel.
Benchmarking	Using targets from several similar programs to determine targets. For higher-level outcome indicators (i.e., the number of jobs created)-, it is important to understand the contextual factors that affect performance. In these cases, it is even more important to complement benchmarking with other methods. For a valid comparison, program variables have to be as similar as possible.	Program Descriptions, Performance Reports and Performance Data of Similar Programs	<ul style="list-style-type: none"> Identify other similar programs that could be used for comparison. Determine the key similarities and differences between programs. These factors may be related to policy environment, climate, geography or other aspects of the enabling environment. Identify the caveats that need to be noted in making the comparison.
Expectations and Accountability	Analyzing how expectations and accountability for specific results can affect targets.	<p>Millennium Development Goal Targets</p> <p>Organizational Priorities (e.g., targets for USAID initiatives such as USAID Forward) and Associated Plans</p>	<ul style="list-style-type: none"> Identify programming areas where larger expectations affect target setting and associated target expectations and the source of the expectation (e.g., commitments related to the Millennium Development Goals, presidential initiatives, host-country priorities). Review documentation where relevant or set up a session to review these expectations with stakeholders. Determine how those expectations cascade down to your program. What does your program need to contribute to those higher expectations? What is your program willing to be held accountable for?

Annex II: Setting a Target Using Historical Trend Analysis

Methodology for Estimating Targets Using Historical Trend Data Analysis — Number of Jobs Created as a Result of U.S. Government Assistance³

The following is an example of a process (laid out step-by-step) to set rigorous, evidence-based targets. It draws on lessons learned from the Ethiopia Performance Management System Project's (EPMS) analysis of targets for Ethiopia's Economic Growth Program. While this represents an example from one sector, the overall approach could be applied to other sectors. This type of approach is more applicable to target development for outcome level indicators.

EPMS was asked to analyze targets for “the number of jobs created as a result of U.S. Government assistance.” The analysis was premised on estimating the future trend without USAID's program and then adding whatever gains can be expected as a result of USAID's efforts. This is no simple task; projecting the future can be challenging unless supporting analysis is undertaken based on an analysis of program strategy, program complementarities within the portfolio, the enabling environment and sector assessments to further inform and ground-truth this macro-level analysis. Indeed, other forms of analysis were undertaken prior to conducting the analysis of historical trend data to first determine if raising existing targets for jobs created was warranted. The approach relies on the availability of historical data that can be used to establish a trend line. A model was then developed to calculate recommended target bands based on the following three steps.

Step 1: Analyze Historical Trends. Historical trend analysis is dependent on the availability of the same or highly correlated secondary data. The analyst should prepare a spreadsheet with **time series data** to generate a trend for the past 10 years or more for those indicators where equivalent data is available. In this case, such data includes but is not limited to: **a) GDP; b) Investment in agriculture; and c) Agricultural employment (tables II.1–3).**

- A forecast of the **GDP** up to 2015 (end of USAID/Ethiopia Country Development Cooperation Strategy) was determined based on the assumption of 10 percent increment each year as proposed by Ministry of Finance and Economic Development (**see table II.1, second column**).
- A ratio of **agricultural expenditures** to total Government of Ethiopia (GOE) expenditures was determined based on a nonlinear model (logarithmic) and forecasted up to 2015 based on this trend to determine agricultural investment over the years (**see table II.1, fourth column**).
- The trend on **employment in the agricultural sector** as a result of agricultural investment is proportional to and based on the investment anticipated without any USAID contribution (**see figure II.1**).

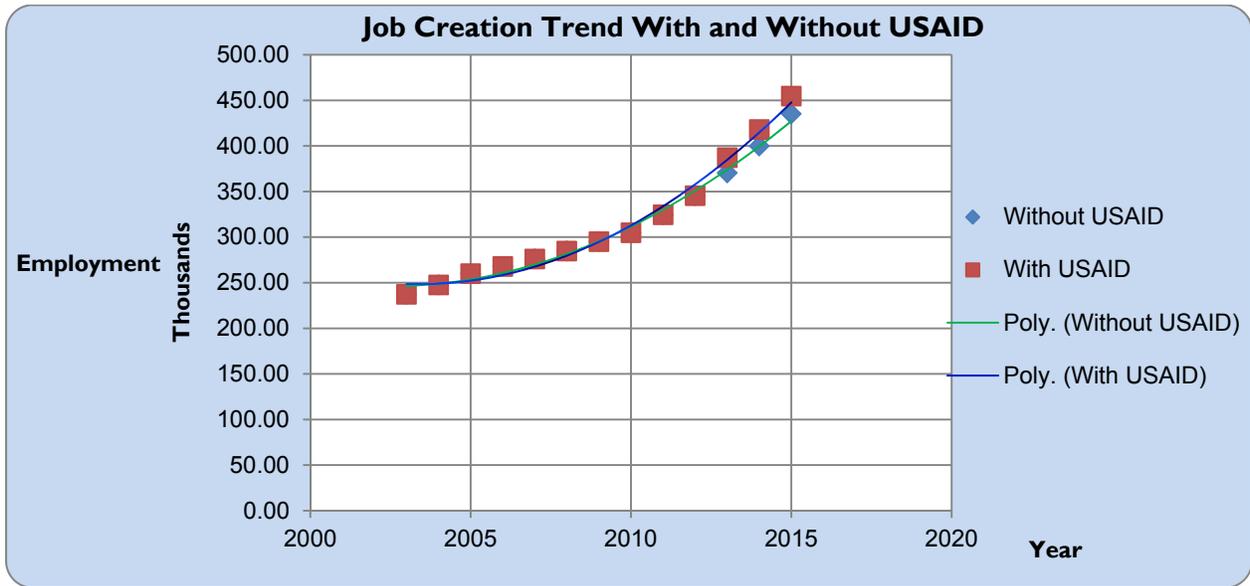
Step 2: Use Trend Lines to Forecast Targets. Based on the rate of change, agricultural employment is extrapolated to extend the trend data to 2015 without considering USAID's interventions (**see table II.3**).

- To determine how the USAID budget contributes to jobs created, the “with” and “without” scenarios are analyzed and USAID's attribution is summarized. A forecast of number of jobs created as a result of FTF is made for the years 2013-2015 (**see table II.4**).

The difference in the trend lines between jobs created with and without USAID assistance reflects the desired change as targets for each year from USAID investment in agriculture (**see figure II.1**).

³ This example is based on an analysis of targets for job creation supported by USAID/Ethiopia's FTF Program. Multiple projects within the Mission's FTF strategy contribute to the indicator on the number of jobs created through USAID assistance.

FIGURE II.1: THE JOBS CREATION “WITH” AND “WITHOUT” USAID ASSISTANCE



Step 3: Set Target Bands. To set a target band, the analyst estimated that the target could fluctuate from 3–5 percent for reporting purposes, which depends on many other factors such as context and budgets. In this case, +/- 3 percent has been applied to determine the low and high end figures respectively. An average from the range can be used for setting the actual target for reporting purposes. The high end of the range can be used as a “stretch” target (see table II.1).

TABLE II.1: SUMMARY AND CALCULATING TARGET BAND

Indicator	Proposed Aggregated Targets and Target Bands for 2013-2015	2013	2014	2015
I.Number of jobs attributed to FTF Implementation	54,509.18	16,725.37	18,123.45	19,660.36
Percent Change		0.03	0.03	0.03
Target band				
Lower	52,873.91	16,223.61	17,579.74	19,070.55
Upper	56,144.46	17,227.14	18,667.15	20,250.17

TABLE II.2: BUDGET RELATED DATA AND FORECAST

Based on the proposed 10 percent increment, a GDP forecast is extended to 2015.

Year	GDP Amount in Birr	National Budget for Agriculture	Ratio of Agricultural Expenditures as % of Total GOE Expenditures	USAID Budget Portfolio	Total B (GOE + FTF)
1997					
1998					
1999					
2000					
2001					
2002					
2003					
2003/2004	81,421,066,000.00	1,466,542,104.25	1.8	0.00	1,466,542,104.25
2004/2005	91,044,094,000.00	3,384,754,284.69	3.72	0.00	3,384,754,284.69
2005/2006	100,908,384,000.00	4,493,295,651.45	4.45	0.00	4,493,295,651.45
2006/2007	112,468,464,000.00	4,844,053,751.71	4.31	0.00	4,844,053,751.71
2007/2008	124,590,539,000.00	6,159,149,732.47	4.94	0.00	6,159,149,732.47
2008/2009	135,450,497,000.00	6,793,140,185.87	5.02	0.00	6,793,140,185.87
2009/2010	148,995,546,700.00	7,341,010,585.91	4.93	0.00	7,341,010,585.91
2010/2011	163,895,101,370.00	8,591,381,213.82	5.24	0.00	8,591,381,213.82
2011/2012	180,284,611,507.00	9,931,879,247.92	5.51	0.00	9,931,879,247.92
2012/2013	198,313,072,657.70	11,385,153,501.28	5.74	0.00	11,385,153,501.28
2013/2014	218,144,379,923.47	12,968,683,386.45	5.95	1,000,000,000.00	13,968,683,386.45
2014/2015	239,958,817,915.82	14,702,276,773.70	6.13	1,000,000,000.00	15,702,276,773.70
2015/2016	263,954,699,707.40	16,608,029,705.59	6.29	1,000,000,000.00	17,608,029,705.59

Data Source: Data are collected from the Ministry of Finance and Economic Development and Ministry of Agriculture and Rural Development documents, May 3, 2010.

Note:

- Actual Data: 2003/2004-2008/2009
- Forecast Data: 2009/2010-2015/2016

Critical assumptions in estimating the average rate of growth of employment in agriculture include the following:

- Extra jobs (employment) created are as a result of agricultural investment.
- The vast majority of employment in agriculture is attributed to the increasing population rate as more and more people join the agriculture labor force.
- To get rid of the part of labor force which is as a result of increasing population, the average rate of growth in population in Ethiopia is 0.029 percent. The average rate of growth in the agricultural employment rate is 0.04 percent.
- To determine employment or jobs that are attributable to the agricultural investment (**Column E**), the rate of 0.04 percent is multiplied with the overall estimated employment in agriculture. Similarly, employment due to population rate is determined using 0.029 (**Column F**).

The trend and forecasting of employment in agriculture due to investment by removing the effect of population growth rate is determined by using the average employment in agriculture (Column E) less that due to population growth rate (Column F).

TABLE II.3: AGRICULTURAL EMPLOYMENT RELATED DATA AND FORECAST

Year	Employment in Agriculture (A)*	Rate of Growth in Ag Employment (B)	Average Rate of Growth in Ag Employment (C)	Average Rate of Growth in Population (D)	Employment in Agriculture (Average) (E) = (A*C) + Base Value	Employment (as a result of population growth) (F) = (A*D) + Base Value	Employment (as a result of agricultural investment) G = E - F
1997	16,444,553.88		0.04009	0.029			
1998	17,081,708.21	0.039	0.04009	0.029	17,103,784.82	16,921,445.94	182,338.88
1999	17,539,190.17	0.027	0.04009	0.029	17,766,481.45	17,577,077.74	189,403.71
2000	18,650,718.02	0.063	0.04009	0.029	18,242,303.00	18,047,826.69	194,476.32
2001	19,532,025.77	0.047	0.04009	0.029	19,398,389.89	19,191,588.84	206,801.05
2002	20,406,584.88	0.045	0.04009	0.029	20,315,027.60	20,098,454.52	216,573.08
2003	21,407,375.91	0.049	0.04009	0.029	21,224,646.11	20,998,375.84	226,270.28
2003/04	22,331,110.36	0.043	0.04009	0.029	22,265,556.96	22,028,189.81	237,367.15
2004/05	23,457,731.19	0.050	0.04009	0.029	23,226,322.17	22,978,712.56	247,609.61
2005/06	24,158,958.89	0.030	0.04009	0.029	24,398,107.10	24,138,005.40	260,101.70
2006/07	24,897,900.53	0.031	0.04009	0.029	25,127,445.68	24,859,568.70	267,876.98
2007/08	25,679,101.07	0.031	0.04009	0.029	25,896,010.09	25,619,939.65	276,070.44
2008/09	26,609,989.93	0.036	0.04009	0.029	26,708,527.47	26,423,795.00	284,732.47
2009/10	27,491,724.05	0.033	0.04009	0.029	27,676,733.90	27,381,679.64	295,054.26
2010/11	28,492,890.52	0.036	0.04009	0.029	28,593,815.07	28,288,984.05	304,831.02

***Note:** Figures on employment in Agriculture (column A) represent the actual figures up to 2010/2011, which are the historical data used for making projections.

A. Without USAID Program

- For forecasting the jobs created up to the end of project, is on the assumption that the extra number of jobs created (**Column D**) is as a result of the investment in agriculture (**Column B**)
- Based on the trend, the jobs created by GOE agricultural investment for the years 2013-2015 without USAID is determined (**Column D**).

B. With USAID Program

As USAID /Ethiopia is the largest donor in the DAG's RED&FS group, hence it is important to determine what proportion of FTF investment to the overall GOE budget for agriculture. Using the total dollar value of the USAID FTF portfolio (\$250,000,000), a second trend line that shows the percent increase in employment is estimated.

TABLE II.4: FORECASTING THE JOBS CREATED WITHOUT USAID AND WITH USAID/FTF PROGRAM CONTRIBUTION

Year	USAID Budget (2013-2015) (A)	National Budget for agriculture Forecasted (B)	National Budget for agriculture including USAID/FTF (C)	Employment (as a result of GOE agricultural investment) Forecasted (D)	Employment (as a result of agricultural investment) Forecasted also considering USAID/FTF (E)	Employment Created as a result of USAID/FTF (2013-2015) (F)
2003/04	0.00	1,466,542,104.25	1,466,542,104.25	237,367.15	237,367.15	
2004/05	0.00	3,384,754,284.69	3,384,754,284.69	247,609.61	247,609.61	
2005/06	0.00	4,493,295,651.45	4,493,295,651.45	260,101.70	260,101.70	
2006/07	0.00	4,844,053,751.71	4,844,053,751.71	267,876.98	267,876.98	
2007/08	0.00	6,159,149,732.47	6,159,149,732.47	276,070.44	276,070.44	
2008/09	0.00	6,793,140,185.87	6,793,140,185.87	284,732.47	284,732.47	
2009/10	0.00	7,341,010,585.91	7,341,010,585.91	295,054.26	295,054.26	
2010/11	0.00	8,591,381,213.82	8,591,381,213.82	304,831.02	304,831.02	
2011/12	0.00	9,931,879,247.92	9,931,879,247.92	324,585.20	324,585.20	
2012/13	0.00	11,385,153,501.28	11,385,153,501.28	345,598.22	345,598.22	
2013/14	1,000,000,000.00	12,968,683,386.45	13,968,683,386.45	370,433.70	387,159.07	16,725.37
2014/15	1,000,000,000.00	14,702,276,773.70	15,702,276,773.70	399,941.51	418,064.96	18,123.45
2015/16	1,000,000,000.00	16,608,029,705.59	17,608,029,705.59	435,176.35	454,836.72	19,660.36

54,509.18

Note:

- The total amount (\$250,000,000) is divided into the five year period and amount converted to local currency. The resulting sum would be 1,000,000,000 Birr per year is added (**Column A**) to the GOE budget for the years 2013-2015 to forecast the jobs created with and without USAID investment.
- Deducting the number of jobs created as a result of employment with USAID contribution (**Column E**) to the one without USAID/FTF (**Column D**) will get us to the forecasted contribution of USAID only (**Column F**).

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