



PERFORMANCE MONITORING & EVALUATION

TIPS

SELECTING PERFORMANCE INDICATORS

ABOUT TIPS

These TIPS provide practical advice and suggestions to USAID managers on issues related to performance monitoring and evaluation. This publication is a supplemental reference to the Automated Directive System (ADS) Chapter 203.

WHAT ARE PERFORMANCE INDICATORS?

Performance indicators define a measure of change for the results identified in a Results Framework (RF). When well-chosen, they convey whether key objectives are achieved in a meaningful way for performance management. While a result (such as an Assistance Objective or an Intermediate Result) identifies what we hope to accomplish, indicators tell us by what standard that result will be measured. Targets define whether there will be an

expected increase or decrease, and by what magnitude.¹

Indicators may be quantitative or qualitative in nature. Quantitative indicators are numerical: an example is a person's height or weight. On the other hand, qualitative indicators require subjective evaluation. Qualitative data are sometimes reported in numerical form, but those numbers do not have arithmetic meaning on their own. Some examples are a score on an institutional capacity index or progress along a milestone scale. When developing quantitative or qualitative indicators, the important point is that the indicator be

Selecting an optimal set of indicators to track progress against key results lies at the heart of an effective performance management system. This TIPS provides guidance on how to select effective **performance indicators**.

constructed in a way that permits consistent measurement over time.

USAID has developed many performance indicators over the years. Some examples include the dollar value of non-traditional exports, private investment as a percentage of gross domestic product, contraceptive prevalence rates, child mortality rates, and progress on a legislative reform index.

¹ For further information, see TIPS 13: Building a Results Framework and TIPS 8: Baselines and Targets.

WHY ARE PERFORMANCE INDICATORS IMPORTANT?

Performance indicators provide objective evidence that an intended change is occurring. Performance indicators lie at the heart of developing an effective performance management system – they define the data to be collected and enable actual results achieved to be compared with planned results over time. Hence, they are an indispensable management tool for making evidence-based decisions about program strategies and activities. Performance indicators can also be used:

- To assist managers in focusing on the achievement of development results.
- To provide objective evidence that results are being achieved.
- To orient and motivate staff and partners toward achieving results.
- To communicate USAID achievements to host country counterparts, other partners, and customers.
- To more effectively report results achieved to USAID's stakeholders, including the U.S. Congress, Office of Management and Budget, and citizens.

FOR WHAT RESULTS ARE PERFORMANCE INDICATORS REQUIRED?

THE PROGRAM LEVEL

USAID's ADS requires that at least one indicator be chosen for each result in the Results Framework in order to measure progress (see ADS 203.3.3.1)². This includes the Assistance Objective (the highest-level objective in the Results Framework) as well as supporting Intermediate Results (IRs)³. These indicators should be included in the Mission or Office Performance Management Plan (PMP) (see TIPS 8: Preparing a PMP).

PROJECT LEVEL

AO teams are required to collect data regularly for projects and activities, including inputs, outputs, and processes, to ensure they are progressing as expected and are contributing to relevant IRs and AOs. These indicators should be included in a project-level monitoring and evaluation

² For further discussion of AOs and IRs (which are also termed impact and outcomes respectively in other systems) refer to TIPS 13: Building a Results Framework.

³ Note that some results frameworks incorporate IRs from other partners if those results are important for USAID to achieve the AO. This is discussed in further detail in TIPS 13: Building a Results Framework. If these IRs are included, then it is recommended that they be monitored, although less rigorous standards apply.

(M&E) plan. The M&E plan should be integrated in project management and reporting systems (e.g., quarterly, semi-annual, or annual reports).

TYPES OF INDICATORS IN USAID SYSTEMS

Several different types of indicators are used in USAID systems. It is important to understand the different roles and functions of these indicators so that managers can construct a performance management system that effectively meets internal management and Agency reporting needs.

CUSTOM INDICATORS

Custom Indicators are *performance indicators* that reflect progress within each unique country or program context. While they are useful for managers on the ground, they often cannot be aggregated across a number of programs like standard indicators.

Example: Progress on a milestone scale reflecting legal reform and implementation to ensure credible elections, as follows:

- Draft law is developed in consultation with non-governmental organizations (NGOs) and political parties.
- Public input is elicited.

PARTICIPATION IS ESSENTIAL

Experience suggests that participatory approaches are an essential aspect of developing and maintaining effective performance management systems. Collaboration with development partners (including host country institutions, civil society organizations (CSOs), and implementing partners) as well as customers has important benefits. It allows you to draw on the experience of others, obtains buy-in to achieving results and meeting targets, and provides an opportunity to ensure that systems are as streamlined and practical as possible.

- Draft law is modified based on feedback.
- The secretariat presents the draft to the Assembly.
- The law is passed by the Assembly.
- The appropriate government body completes internal policies or regulations to implement the law.

The example above would differ for each country depending on its unique process for legal reform.

STANDARD INDICATORS

Standard indicators are used primarily for Agency reporting purposes. Standard indicators produce data that can be aggregated across many programs. Optimally, standard indicators meet both Agency reporting and on-the-ground management needs. However, in many cases, standard indicators do not substitute for performance (or custom indicators) because they are

designed to meet different needs. There is often a tension between measuring a standard across many programs and selecting indicators that best reflect true program results and that can be used for internal management purposes.

Example: Number of Laws or Amendments to Ensure Credible Elections Adopted with USG Technical Assistance.

In comparing the standard indicator above with the previous example of a custom indicator, it becomes clear that the custom indicator is more likely to be useful as a management tool, because it provides greater specificity and is more sensitive to change.

Standard indicators also tend to measure change at the output level, because they are precisely the types of measures that are, at face value, more easily aggregated across many programs, as the following example demonstrates.

Example: The number of people trained in policy and regulatory practices.

CONTEXTUAL INDICATORS

Contextual indicators are used to understand the broader environment in which a program operates, to track assumptions, or to examine externalities that may affect success, failure, or progress.

INDICATORS AND DATA—SO WHAT'S THE DIFFERENCE?

Indicators define the particular characteristic or dimension that will be used to measure change. Height is an example of an indicator.

The data are the actual measurements or factual information that result from the indicator. Five feet seven inches is an example of data.

They **do not** represent program performance, because the indicator measures very high-level change.

Example: Score on the Freedom House Index or Gross Domestic Product (GDP).

This sort of indicator may be important to track to understand the context for USAID programming (e.g. a severe drop in GDP is likely to affect economic growth programming), but represents a level of change that is outside the manageable interest of program managers. In most cases, it would be difficult to say that USAID programming has affected the overall level of freedom within a country or GDP (given the size of most USAID programs in comparison to the host country economy, for example).

WHAT ARE USAID'S CRITERIA FOR SELECTING INDICATORS?

USAID policies (ADS 203.3.4.2) identify seven key criteria to guide the selection of performance indicators:

- Direct
- Objective
- Useful for Management
- Attributable
- Practical
- Adequate
- Disaggregated, as necessary

These criteria are designed to assist managers in selecting optimal indicators. The extent to which performance indicators meet each of the criteria must be consistent with the requirements of good management. As managers consider these criteria, they should use a healthy measure of common sense and reasonableness. While we always want the "best" indicators, there are inevitably trade-offs among various criteria. For example, data for the most direct or objective indicators of a given result might be very expensive to collect or might be available too infrequently. Table 1 includes a summary checklist that can be used during the selection process to assess these trade-offs.

Two overarching factors determine the extent to which performance indicators function as useful tools for managers and decision-makers:

- The degree to which performance indicators accurately reflect the process or phenomenon they are being used to measure.
- The level of comparability of performance indicators over time: that is, can we measure results in a consistent and comparable manner over time?

1. DIRECT

An indicator is direct to the extent that it clearly measures the intended result. This criterion is, in many ways, the most important. While this may appear to be a simple concept, it is one of the more common problems with indicators. Indicators should either be widely accepted for use by specialists in a subject area, exhibit readily understandable face validity (i.e., be intuitively understandable), or be supported by research. Managers should place greater confidence in indicators that are direct. Consider the following example:

Result: Increased Transparency of Key Public Sector Institutions

Indirect Indicator: Passage of the Freedom of Information Act (FOIA)

Direct Indicator: Progress on a milestone scale demonstrating enactment and enforcement of policies that require open hearings

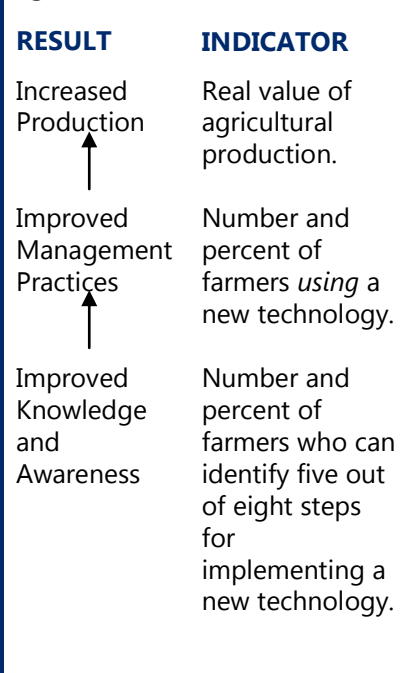
The passage of FOIA, while an important step, does not actually measure whether a target institution is more transparent. The better example outlined above is a more direct measure.

Level

Another dimension of whether an indicator is direct relates to whether it measures the *right level* of the objective. A common problem is that there is often a mismatch between the stated result and the indicator. The indicator should not measure a higher or lower level than the result.

For example, if a program measures improved management practices through the real value of agricultural production, the indicator is measuring a higher-level effect than is stated (see Figure 1). Understanding levels is rooted in understanding the development hypothesis inherent in the Results Framework (see TIPS 13: Building a Results Framework). Tracking indicators at each level facilitates better understanding and analysis of whether the

Figure 1. Levels



development hypothesis is working. For example, if farmers are aware of how to implement a new technology, but the number or percent that actually *use* the technology is not increasing, there may be other issues that need to be addressed. Perhaps the technology is not readily available in the community, or there is not enough access to credit. This flags the issue for managers and provides an opportunity to make programmatic adjustments.

Proxy Indicators

Proxy indicators are linked to the result by one or more assumptions. They are often used when the most direct indicator is not practical (e.g., data collection is too costly or the program is being implemented in a conflict zone). When proxies are used, the

relationship between the indicator and the result should be well-understood and clearly articulated. The more assumptions the indicator is based upon, the weaker the indicator. Consider the following examples:

Result: Increased Household Income

Proxy Indicator: Dollar value of household expenditures

The proxy indicator above makes the assumption that an increase in income will result in increased household expenditures; this assumption is well-grounded in research.

Result: Increased Access to Justice

Proxy Indicator: Number of new courts opened

The indicator above is based on the assumption that physical access to new courts is the fundamental development problem—as opposed to corruption, the costs associated with using the court system, or lack of knowledge of how to obtain legal assistance and/or use court systems. Proxies can be used when assumptions are clear and when there is research to support that assumption.

2. OBJECTIVE

An indicator is objective if it is unambiguous about 1) what is being measured and 2) what

data are being collected. In other words, two people should be able to collect performance information for the same indicator and come to the same conclusion. Objectivity is critical to collecting comparable data over time, yet it is one of the most common problems noted in audits. As a result, pay particular attention to the definition of the indicator to ensure that each term is clearly defined, as the following examples demonstrate:

Poor Indicator: Number of successful firms

Objective Indicator:

Number of firms with an annual increase in revenues of at least 5%

The better example outlines the exact criteria for how “successful” is defined and ensures that changes in the data are not attributable to differences in what is being counted.

Objectivity can be particularly challenging when constructing qualitative indicators. Good qualitative indicators permit regular, systematic judgment about progress and reduce subjectivity (to the extent possible). This means that there must be clear criteria or protocols for data collection.

3. USEFUL FOR MANAGEMENT

An indicator is useful to the extent that it provides a

meaningful measure of change over time for management decision-making. One aspect of usefulness is to ensure that the indicator is measuring the “right change” in order to achieve development results. For example, the number of meetings between Civil Society Organizations (CSOs) and government is something that can be counted but does not necessarily reflect meaningful change. By selecting indicators, managers are defining program success in concrete ways. Managers will focus on achieving targets for those indicators, so it is important to consider the intended and unintended incentives that performance indicators create. As a result, the system may need to be fine-tuned to ensure that incentives are focused on achieving true results.

A second dimension is whether the indicator measures a rate of change that is useful for management purposes. This means that the indicator is constructed so that change can be monitored at a rate that facilitates management actions (such as corrections and improvements). Consider the following examples:

Result: Targeted legal reform to promote investment

Less Useful for Management: Number of

laws passed to promote direct investment.

More Useful for Management: Progress toward targeted legal reform based on the following stages:

Stage 1. Interested groups propose that legislation is needed on issue.

Stage 2. Issue is introduced in the relevant legislative committee/executive ministry.

Stage 3. Legislation is drafted by relevant committee or executive ministry.

Stage 4. Legislation is debated by the legislature.

Stage 5. Legislation is passed by full approval process needed in legislature.

Stage 6. Legislation is approved by the executive branch (where necessary).

Stage 7. Implementing actions are taken.

Stage 8. No immediate need identified for amendments to the law.

The less useful example may be useful for reporting; however, it is so general that it does not provide a good way to track progress for performance management. The process of passing or implementing laws is a long-term one, so that over the course of a year or two the AO team may only be able to report that one or two such laws have passed when, in reality, a high degree of effort is

invested in the process. In this case, the more useful example better articulates the important steps that must occur for a law to be passed and implemented and facilitates management decision-making. If there is a problem in meeting interim milestones, then corrections can be made along the way.

4. ATTRIBUTABLE

An indicator is attributable if it can be plausibly associated with USAID interventions. The concept of “plausible association” has been used in USAID for some time. It *does not* mean that X input equals Y output. Rather, it is based on the idea that a case can be made to other development practitioners that the program has materially affected identified change. It is important to consider the logic behind what is proposed to ensure attribution. If a Mission is piloting a project in three schools, but claims national level impact in school completion, this would not pass the common sense test. Consider the following examples:

Result: Improved Budgeting Capacity

Less Attributable: Budget allocation for the Ministry of Justice (MOJ)

More Attributable: The extent to which the budget produced by the MOJ meets

established criteria for good budgeting

If the program works with the Ministry of Justice to improve budgeting capacity (by providing technical assistance on budget analysis), the quality of the budget submitted by the MOJ may improve. However, it is often difficult to attribute changes in the overall budget allocation to USAID interventions, because there are a number of externalities that affect a country's final budget – much like in the U.S. For example, in tough economic times, the budget for all government institutions may decrease. A crisis may emerge that requires the host country to reallocate resources. The better example above is more attributable (and directly linked) to USAID's intervention.

5. PRACTICAL

A practical indicator is one for which data can be collected on a timely basis and at a reasonable cost. There are two dimensions that determine whether an indicator is practical. The first is time and the second is cost.

Time

Consider whether resulting data are available with enough frequency for management purposes (i.e., timely enough to correspond to USAID performance management and reporting purposes). Second, examine whether data are current when available. If

reliable data are available each year, but the data are a year old, then it may be problematic.

Cost

Performance indicators should provide data to managers at a cost that is reasonable and appropriate as compared with the management utility of the data. As a very general rule of thumb, it is suggested that between 5% and 10% of program or project resources be allocated for monitoring and evaluation (M&E) purposes. However, it is also important to consider priorities and program context. A program would likely be willing to invest more resources in measuring changes that are central to decision-making and less resources in measuring more tangential results. A more mature program may have to invest more in demonstrating higher-level changes or impacts as compared to a new program.

6. ADEQUATE

Taken as a group, the indicator (or set of indicators) should be sufficient to measure the stated result. In other words, they should be the minimum number necessary and cost-effective for performance management. The number of indicators required to adequately measure a result depends on 1) the complexity of the result being measured, 2) the amount of information needed to make reasonably confident decisions, and 3) the

level of resources available. Too many indicators create information overload and become overly burdensome to maintain. Too few indicators are also problematic, because the data may only provide a partial or misleading picture of performance. The following demonstrates how one indicator can be adequate to measure the stated objective:

Result: Increased Traditional Exports in Targeted Sectors

Adequate Indicator: Value of traditional exports in targeted sectors

In contrast, an objective focusing on improved maternal health may require two or three indicators to be adequate. A general rule of thumb is to select between two and three performance indicators per result. If many more indicators are needed to adequately cover the result, then it may signify that the objective is not properly focused.

7. DISAGGREGATED, AS NECESSARY

The disaggregation of data by gender, age, location, or some other dimension is often important from both a management and reporting point of view. Development programs often affect population cohorts or institutions in different ways. For example, it might be important to know to what extent youth (up to age 25) or

adults (25 and older) are participating in vocational training, or in which districts schools have improved. Disaggregated data help track whether or not specific groups participate in and benefit from activities intended to include them.

In particular, USAID policies (ADS 203.3.4.3) require that performance management systems and evaluations at the AO and project or activity levels include gender-sensitive indicators and sex-disaggregated data if the activities or their anticipated results involve or affect women and men differently. If so, this difference would be an important factor in managing for sustainable program impact. Consider the following example:

Result: Increased Access to Credit

Gender-Sensitive Indicator: Value of loans disbursed, disaggregated by male/female.

WHAT IS THE PROCESS FOR SELECTING PERFORMANCE INDICATORS?

Selecting appropriate and useful performance indicators requires careful thought, iterative refining, collaboration, and consensus-building. The

following describes a series of steps to select optimal performance indicators⁴. Although presented as discrete steps, in practice some of these can be effectively undertaken simultaneously or in a more iterative manner. These steps may be applied as a part of a larger process to develop a new PMP, or in part, when teams have to modify individual indicators.

STEP 1. DEVELOP A PARTICIPATORY PROCESS FOR IDENTIFYING PERFORMANCE INDICATORS

The most effective way to identify indicators is to set up a process that elicits the participation and feedback of a number of partners and stakeholders. This allows managers to:

- Draw on different areas of expertise.
- Ensure that indicators measure the right changes and represent part of a larger approach to achieve development impact.
- Build commitment and understanding of the linkage between indicators and results. This will increase the utility of the performance management system among key stakeholders.

⁴ This process focuses on presenting greater detail related specifically to indicator selection. Refer to TIPS 7: Preparing a PMP for a broader set of steps on how to develop a full PMP.

- Build capacity for performance management among partners, such as NGOs and partner country institutions.
- Ensure that systems are as practical and streamlined as possible. Often development partners can provide excellent insight on the practical issues associated with indicators and data collection.

A common way to begin the process is to hold working sessions. Start by reviewing the Results Framework. Next, identify indicators for the Assistance Objective, then move down to the Intermediate Results. In some cases, the AO team establishes the first round of indicators and then provides them to other partners for input. In other cases, key partners may be included in the working sessions.

It is important to task the group with identifying *the set of minimal indicators necessary and sufficient* to manage the program effectively. That is, the group must go through a process of prioritization in order to narrow down the list. While participatory processes may take more time at the front end, they almost always result in more coherent and effective system.

STEP 2. CLARIFY THE RESULT
Carefully define the result desired. Good performance

indicators are based on clearly articulated and focused objectives. Review the precise wording and intention of the objective. Determine what exactly is meant by the result. For example, if the result is "improved business environment," what does that mean? What specific aspects of the business environment will be improved? Optimally, the result should be stated with as much specificity as possible. If the result is broad (and the team doesn't have the latitude to change the objective), then the team might further define its meaning.

Example: One AO team further defined their IR, "Improved Business Environment," as follows:

- Making it easier to do business in terms of resolving disputes, obtaining licenses from the government, and promoting investment.
- An identified set of key policies are in place to support investment. Key policies include laws, regulations, and policies related to the simplification of investment procedures, bankruptcy, and starting a business.

As the team gains greater clarity and consensus on what results are sought, ideas for potential indicators begin to emerge.

Be clear about what type of change is implied. What is expected to change—a situation, a condition, the level of knowledge, an attitude, or a behavior? For example, changing a country's voting law(s) is very different from changing citizens' awareness of their right to vote (which is different from voting). Each type of change is measured by different types of performance indicators.

Identify more precisely the specific targets for change. Who or what are the specific targets for the change? For example, if individuals, which individuals? For an economic growth program designed to increase exports, does the program target all exporters or only exporters of non-traditional agricultural products? This is known as identifying the "unit of analysis" for the performance indicator.

STEP 3: IDENTIFY POSSIBLE INDICATORS

Usually there are many possible indicators for a particular result, but some are more appropriate and useful than others. In selecting indicators, don't settle too quickly on the first ideas that come most conveniently or obviously to mind. Create an initial list of possible indicators, using the following approaches:

- Conduct a brainstorming session with colleagues to draw upon the expertise of

the full Assistance Objective Team. Ask, "how will we know if the result is achieved?"

- Consider other resources. Many organizations have databases or indicator lists for various sectors available on the internet.
- Consult with technical experts.
- Review the PMPs and indicators of previous programs or similar programs in other Missions.

STEP 4. ASSESS THE BEST CANDIDATE INDICATORS, USING THE INDICATOR CRITERIA

Next, from the initial list, select the best candidates as indicators. The seven basic criteria that can be used to judge an indicator's appropriateness and utility described in the previous section are summarized in Table 1. When assessing and comparing possible indicators, it is helpful to use this type of checklist to *guide* the assessment process. Remember that there will be trade-offs between the criteria. For example, the optimal indicator may not be the most cost-effective to select.

STEP 5. SELECT THE "BEST" PERFORMANCE INDICATORS

Select the best indicators to incorporate in the performance management system. They

should be the optimum set of measures that are useful to management and can be obtained at *reasonable cost*.

Be Strategic and Streamline Where Possible. In recent years, there has been a substantial increase in the number of indicators used to monitor and track programs. It is important to remember that there are costs, in terms of time and money, to collect data for each indicator. AO teams should:

- Select indicators based on strategic thinking about what must truly be achieved for program success.
- Review indicators to determine whether any final narrowing can be done. Are some indicators not useful? If so, discard them.
- Use participatory approaches in order to discuss and establish priorities that help managers focus on *key indicators* that are necessary and sufficient.

Ensure that the rationale for indicator selection is recorded in the PMP. There are rarely perfect indicators in the development environment—it is more often a case of weighing different criteria and making the optimal choices for a particular program. It is important to ensure that the rationale behind these choices is recorded in the PMP so that new staff, implementers, or auditors understand *why* each indicator was selected.

STEP 6. FINE TUNE WHEN NECESSARY

Indicators are part of a larger system that is ultimately designed to assist managers in achieving development impact. On the one hand, indicators must remain comparable over time but, on the other hand, some refinements will invariably be needed to ensure the system is as effective as possible. (Of course, there is no value in continuing to collect bad data, for example.) As a result, these two issues need to be balanced. Remember that indicator issues are often flags for other

underlying problems. If a large number of indicators are frequently changed, this may signify a problem with program management or focus. At the other end of the continuum, if no indicators were to change over a long period of time, it is possible that a program is not adapting and evolving as necessary. In our experience, some refinements are inevitable as data are collected and lessons learned. After some rounds of data collection are completed, it is often useful to discuss indicator issues and refinements among AO team members and/or with partners and implementers. In particular, the period following portfolio reviews is a good time to refine PMPs if necessary.

TABLE 1. INDICATOR SELECTION CRITERIA CHECKLIST

Criteria	Definition	Checklist	Comments
1. Direct	<p>Direct. The indicator clearly represents the intended result. An outsider or an expert in the field would agree that the indicator is a logical measure for the stated result.</p> <ul style="list-style-type: none"> • Level. The indicator reflects the right level; that is, it does not measure a higher or lower level than the stated result. • Proxies. The indicator is a proxy measure. If the indicator is a proxy, note what assumptions the proxy is based upon. 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
2. Objective	The indicator is clear and unambiguous about what is being measured.	<input type="checkbox"/>	
3. Useful for Management	The indicator is useful for management decision-making.	<input type="checkbox"/>	
4. Attributable	The indicator can be plausibly associated with USAID interventions.	<input type="checkbox"/>	
5. Practical	<p>Time. Data are produced with enough frequency for management purposes (i.e. timely enough to correspond to USAID performance management and reporting purposes). Data are current when available.</p> <p>Cost. Data are worth the cost to USAID managers.</p>	<input type="checkbox"/>	
6. Adequate	The indicators, taken as a group, are sufficient to measure the stated result. All major aspects of the result are measured.	<input type="checkbox"/>	
7. Disaggregated, as necessary	The indicators are appropriately disaggregated by gender, age, location, or some other dimension that is important for programming. In particular, gender disaggregation has been considered as required (see ADS 203.3.4.3).	<input type="checkbox"/>	

For more information:

TIPS publications are available online at [insert website].

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Comments can be directed to:

Gerald Britan, Ph.D.

Tel: (202) 712-1158

gbritan@usaid.gov

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