



MONITORING AND EVALUATION SERIES

Guidelines for Project Baseline studies

November 2010

1. Background

The Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA) is sub-regional organization that coordinates agricultural research for development initiatives covering ten countries namely; Burundi, D.R. Congo, Eritrea, Ethiopia, Kenya, Madagascar, Rwanda, Sudan, Tanzania, and Uganda. ASARECA research for development portfolio is managed through seven programmes namely: Staple Crops, High value Non-staple Crops, Livestock and Fisheries, Agro-biodiversity and Biotechnology, Natural Resource Management and Biodiversity, Policy Analysis and Advocacy, and Knowledge Management and Up-scaling. In addition, it has five core service units namely: Finance; Human Resources and Administration; Planning, Monitoring and Evaluation; Information and Communication; and Partnerships and Capacity Development.

The ASARECA Planning, Monitoring and Evaluation (PM&E) Unit is responsible for developing and managing a results-based monitoring and evaluation system for tracking the overall performance of ASARECA, particularly focusing on: strengthening capacity for M&E; establishing appropriate systems and structures, as well as tracking impacts of ASARECA initiatives.

In order to facilitate evaluation of ASARECA's contribution to research for development, there is need for **evidence of results**. This requires a comparison of the situation before the start of the operational plan with the situation afterwards, and a **control** for other factors that may influence the changes that are observed during the implementation period. The ASARECA M&E strategy spells out the minimum required operational procedures for all ASARECA initiatives that support provision of data upon which ASARECA's progress on generation of outputs, contribution to outcomes and impacts will be assessed. These include: development of baselines; development of performance monitoring plans; performance reporting; portfolio reviews and ex post evaluations.

This document specifies guidelines for project baseline studies that will be applied for all ASARECA supported initiatives. The focus of this guideline is socioeconomic baseline studies, which are not a substitute for, but a complement to, physical science or environmental baseline studies in many activities. The guideline also provides the basic requirements for baseline study, and implementing partners are free to include other aspects that they feel are critical for their research.

2. What is Baseline Data?

Baseline data is basic information gathered before a **program/project** begins. It is used later to provide a comparison for assessing the net effect of the program/project. There are two main kinds of baseline data: **Determinate** and **Indeterminate** baseline data. ASARECA shall mainly concentrate on Determinate Baseline Data, i.e. all the data closely related to the proposed program/project. For example, if the project aims at "*Generating gender responsive demand driven technologies or innovations*", then the appropriate determinate baseline data would assess "*Number of gender-responsive demand driven technologies or innovations under research, under field testing, and made available to uptake pathways*".

3. Purpose of a baseline study

The purpose of baseline studies is to provide an information base against which to monitor and assess an activity's progress and effectiveness during implementation and after the activity is

completed. The baseline provides data upon which projects' progress on generation of outputs, contribution to ASARECA outcomes and impacts is assessed. Being effectively the first step in the activity's M&E system, the baseline study is an early element of the activity monitoring plan. The baseline study gathers the information to be used in subsequent assessments of how efficiently the activity is being implemented and the eventual results of the activity, and forms a basis for setting performance targets and ensuring accountability to partners and other stakeholders.

The monitoring of activity progress, which also gathers and analyzes data using the logical framework should be consistent with, but not repeat the baseline study. Mid-term reviews, project completion reports and other evaluations judge progress largely by comparing recent data with the information from the baseline study. A 'needs assessment study', which collects information during the design of an activity, is not a baseline study and this guideline does not address the requirements of needs assessment studies.

4. How to conduct Baseline Studies

For conducting a baseline study, the following steps need to be taken:

- Prepare a Baseline Plan
- Conduct the Baseline Study according to the Baseline Plan
- Analyze the collected data and review the generated results
- Formulate the Baseline Report and Share the results. *A baseline study should be meaningful, relevant, cost effective and not too academic!*

4.1. Baseline Plan

The Baseline Plan should be developed to illustrate what information is needed, and how, where and by whom it can be collected. The framework for a Baseline Plan is as indicated:

Baseline Focus Change/Expected results:	Indicators	Data Collection Methods	Data Source and Quantity	Location of Data Collection	Means of Analysis	Time needed
Impact						
Outcomes						
Outputs						
Optional: <i>Secondary changes</i>						
Optional: <i>Underpinning assumptions/theories of change</i>						

Baseline focus: What is the primary focus of the intended baseline study? The key intention is **to determine the change that the intervention aims to bring about (i.e. expected results)**. At this stage, secondary changes and underpinning assumptions may be assessed.

Indicators: ASARECA aims at ensuring that before baseline studies are conducted, indicators may need to be developed. These indicators are developed for the different levels of the results chain. The use of these indicators will ensure that the anticipated changes due to the intervention are easily tracked. This is because the baseline study will have established the indicator values prior to starting activities. The baseline study will also serve to test indicators

and determine whether refinements are necessary. Setting indicators prior to project implementation will guard against mid-course alterations of these indicators.

Data Collection Methods: This part of the plan describes the way in which the data will be collected (e.g. interviews, Focus Group Discussions, direct observation, analysis of statistics). The choice of methods is dependent on the anticipated information. The selected methods should be qualitative and quantitative. Participatory methods are suggested whenever possible. An inventory of existing information is vital. The methods used in the study need to be explained and justified in detail in the baseline plan and in the baseline reports. When selecting data collection methods, the context of the intervention need to be taken into consideration – e.g. cultural aspects (i.e. conduct separate Focus Group Discussion for men and women).

Data Source and Quantity: It is vital to show where the data will be accessed, and how many data sources will be used.

Location of Data Collection: Indicate where the data will be collected (e.g. during training, in peoples' homes, in the place of work or via email).

Means of Analysis: Indicate which tools and methods will be used to analyze data. Commonly used social science research tools include: SPSS, Nvivo, among others.

Time needed: Indicate the probable number of days needed to implement each aspect of the baseline including data analysis. A budget for the baseline study should also be attached to the baseline plan.

5. When to conduct baseline studies

In relation to the program cycle, a baseline study should be conducted prior to the onset of operation activities in order to establish the pre-operation exposure conditions of the outcome level indicators. However, it is not uncommon for baseline studies to be conducted after activities have already begun. It should be noted that, for most operations, there is a delay between output delivery activities and their measurable effect on outcome performance indicators. As a result, baseline studies still provide an accurate estimate of pre-operation conditions even after the operation has begun, as long as the outcome performance indicators have not yet been affected. However, this time lag varies from a few days to a few months, according to the type of operation and the environment in which it is being implemented. For many operations it is difficult to estimate exactly how long this time lag will be. Delays in conducting baseline studies, especially when an operation's activities have already influenced the outcome and impact performance indicators, are costly and likely to lead to an underestimation of the operation's overall impact. All ASARECA initiatives should therefore aim at conducting baseline studies before operation activities begin. When this is not possible, baseline studies must take a high priority and data should be collected very close to the beginning of the operation, at the latest.

Sometimes the data needed for a baseline, against which to measure the degree and quality of change during an activity's implementation, will already exist. In such cases the only task is to collate the data and ensure that it can be updated in the longer term. So it is important to find out what information is already available, though most times it will require supplementation and further disaggregated depending on the nature of the indicators.

6. Considerations before undertaking a baseline study

The following should be put into consideration when planning baseline studies;

1. **Devote Time:** Time devoted to research and planning at the beginning will help to minimize the risk of squandered effort and dissatisfied partners later on. The implementing partner is responsible and accountable for thinking through and ensuring that the baseline study will be meaningful, relevant, cost effective and not overly academic.
2. **Linkage with Planned Activities:** The study should be closely linked with the critical aspects of the activity monitoring plan so that the data collected can be replicated if necessary during ongoing activity monitoring and any subsequent evaluations. Baseline data should provide the minimum information required to assess the quality of the activity implementation and to measure the development results.
3. **Clear Goals and Objectives:** It is advisable to review the project logical framework to ensure that it is clear and well structured. Logical and precisely expressed outputs, component level objectives, purpose and goal for an activity will assist data collection because they make clear what needs to be measured.
4. **Preparedness for External and Internal Environmental Changes:** Although the context of the proposed activity is analyzed during its design phase, circumstances can change significantly between the design and start of an activity. It's important to understand the conditions in which the baseline study will be undertaken – for example, the season of the year, the prevailing political conditions, the state of the economy, any cultural divisions, and recent or expected extraordinary events such as natural disasters, political upheavals or economic shocks. If such conditions are not clear, the meaning of the data generated by the baseline study might be misunderstood.
5. **Plans for Data Management Systems:** Planning should include adequate provision for data collation and analysis, including appropriate staff, materials such as computer software and recording forms, data storage facilities and a clear picture of who will need to access data and in what form.

7. Reconstructing Baseline Data

In case there was no baseline study conducted, thus no baseline data available, the following are some key steps to take in order to reconstruct the baseline data.

1. **Using Secondary Data:** Types of data can include:
 - Census and other surveys by government agencies
 - Special studies by NGOs/donors
 - University research studies
 - Mass media (newspapers, radio, TV)
 - External trend data that might have been monitored by implementing agency
2. **Using Internal Project Records:** Types of data can include:
 - Feasibility/planning studies
 - Registration forms (e.g. for trainings)
 - Periodic Monitoring/Performance/Progress Reports

- Management Information System (MIS) data
- Program/Project Review Meeting Reports
- Partner Meeting Minutes
- Training and other implementation records, including costs

3. Assessing the Reliability of Project Records

In cases involving the review of project records, the reviewer or researcher should look at the following questions:

- Who collected the data and for what purpose?
- Were they collected for record-keeping or to influence policymakers or other groups?
- Do monitoring data only refer to project activities or do they also cover changes in outcomes?
- Were the data intended exclusively for internal use? For use by a restricted group? Or for public use?
- How accurate and complete are the data? Are there obvious gaps? Were these intentional or due to poor record-keeping?
- Might there have been potential biases with respect to the key indicators required for the impact evaluation?

4. Recall

Knowledge about Recall is greatest in areas where most research has been done on the validity of recall.

This includes:

- Income and expenditure surveys
- Demographic data

The types of Questions to use during recall fall into these categories:

- Yes/No – needs facts
- Scaled
- Easily related to major events

In order to **improve the validity of Recall:**

- Conduct small studies to compare recall with survey or other findings
- Ensure all relevant groups interviewed
- Triangulation
- Link recall to important reference events
 - ✓ Elections
 - ✓ Drought/flood/tsunami/displacement
 - ✓ Construction of road, school, etc

5. Key Informant

- Don't focus on just officials and high status people. Everyone can be a key informant on their own situation. For example:
 - ✓ Youths and School Pupils could provide information of whether their parents or they use the availed technologies.
 - ✓ Users of technologies may vary by sex and socioeconomic attributes.
 - ✓ Local Administrative Officers
- In order to use Key Informants, the following guidelines for are useful in conducting key-informant analysis:
 - ✓ **Triangulation:** In the absence of rigorous controlled trials, and in a complex environment such as adoption of technologies or innovations, data triangulation procedures will be applied to substantiate a link between interventions and observed outcomes. ASARECA is careful to clarify that simply asserting clear attribution of change as being solely due to ASARECA's work is an unrealistic claim in a multi-faceted human environment – thus triangulation procedures should be applied to help ensure the validity and reliability of information.

- ✓ Include informants with different experiences and perspectives. It is important to understand how each informant fits into the picture.
- ✓ Carefully manage ethical issues

6. Participatory Rapid Assessment (PRA) and related participatory techniques

Given that PRA and PLA techniques enable the collection of data at the group or community [rather than individual] level, its use is encouraged. However, there is need to watch out for **Risk of bias**: Are only certain sectors of the community participating? Are there certain people who dominate the discussions?

Some of the key **time-related PRA techniques** useful for reconstructing the past include:

- Time line and Trend analysis
- Historical transect
- Seasonal diagram
- Daily activity schedule
- Participatory genealogy
- Dream map
- Critical incidents

8. Research methods

It's important to select **appropriate baseline study methods** that will provide adequate data for the selected project indicators. Of central importance in choosing a research method is the reliability of the data to be ultimately collected. It is therefore desirable to combine the methods in a way that maximizes the reliability of the data. **Good sampling** helps improve the reliability and quality of data, and can save time and resources. Sampling should be 'representative', but the key is to know of what it is to be representative. Therefore, *chose appropriate sampling methods accordingly*.

Many research methods can be used in baseline studies, but their strengths and weaknesses should be analyzed and matched against the needs of the specific activity, the time and resources available, and the context in which the baseline study will be conducted. In some situations the beneficiaries of the activity will influence the research methods used. *Chose appropriate research methods accordingly*. You may use Face-to-face interviews with separate focus groups of women and men, and/or have same gender interviewers/facilitators; conduct experiments; develop questionnaires; conduct focus group discussions; use Direct Observations, among others. There may be similar implications for different ethnic, age or socioeconomic groups.

Given that ASARECA aims at promoting the replication of appropriate baseline studies, it is therefore important that whatever methods you use should be explained and justified in detail in the baseline study plans and subsequent reports. This will help to assess the reliability and suitability of the approach taken, and to reproduce the study in any future review, evaluation or extension of the activity.

A **quality-control** process should be built into each method used in the baseline study to ensure that the data are collected according to the principles and criteria on which the study was planned. If there is a pilot study, the methods and quality-control procedures should be thoroughly tested to allow for any modifications before the full study begins.

A combination of both quantitative and qualitative methods gives better results. Visual items, including photographs, maps and diagrams, are important pieces of data and should not be neglected or underused in a baseline study. It is often necessary to be creative and innovative about the data sources used.

9. What indicators to use

Indicators are a first, but important, step towards understanding the quality and effectiveness of an activity and thereby understanding how to improve management of the activity. An indicator is a unit of information measured over time that can help show changes in a specific condition. An indicator can be a quantitative or qualitative factor or variable that provides a simple and reliable basis for assessing achievement, change or performance. An indicator is a measurement that communicates change, such as change in human conditions or well-being (impact), change in systems or behavior (objectives), change in results from project inputs and/or activities (outputs). An indicator does not explain change. For example, sex-disaggregated indicators will not explain gender issues, but will provide data that allow gender issues to be explained and addressed. Similarly, information on time travelled to markets does not explain participation in a local economy, but does provide data that will help in the analysis of issues of participation and in more effectively targeting disadvantaged groups.

Indicators should be clearly linked to the various levels of the activity logical framework – goal, purpose, component level objectives and outputs. A clear distinction should be made between indicators that can be used in:

- a) **Process indicators** - Monitoring the quality of activity implementation, including assessing the progress in achieving objectives and the professionalism of activity management in terms of specific actions, contractual deliverables and outputs, and
- b) **Performance indicators** - Measuring development results, such as the achievement of the activity's component-level outcomes and its goal and purpose-level impacts as specified in the logical and results frameworks.

Baseline studies therefore should concentrate on *performance indicators* as stated in the logical framework. Indicators must specify the unit of study clearly in order to ensure that the same unit can be applied in baseline and follow-up studies (mid-term and final evaluations) for comparability. The primary unit of study refers to the unit of interest defined in the M&E indicators listed in the project logical framework as measures of whether or not design elements occur as planned (e.g. *percentage increase in area under new technology or management practice*). The unit of measure in this sample indicator is *percentage*, and should be maintained even for subsequent evaluations. However, the data elements for computing this indicator are what will be gathered during the study e.g. total area, area under new technology.

Indicators should also consider cross-cutting concepts such as access, gender, participation, discrimination, poverty or capacity. For example, an activity to improve access to agricultural information might require indicators of time, service delivery and communications infrastructure, as well as indicators to compare 'central' and 'remote' communities. Similarly, an activity to improve household wealth will need indicators such as cash income, seasonal employment levels and in-kind exchanges, as well as indicators of different types of household or of households of different ethnic groups.

Note: In most cases, implementing partners may wish to conduct large scale studies considering several attributes. It should be noted that if it's within the interests of the partner, the study may be carried out but must clearly indicate results related to performance indicators for the initiative/project.

10. Getting started – checklist for baseline study

i. Planning

- Focus of the study – ensure the study is going to measure the right things, define information needed to measure the activity
- Baseline study should be integrated into the activity's monitoring and evaluation system (performance monitoring plan).
- Ensure a clear logical framework for the project/initiative, select key performance indicators to be measured. Indicators should be adequate or sufficient in combination to measure the expected change (Box 1)
- Avail logistics and resources required for the study; for collecting, analyzing, storing and sharing data
- Availability of inherent skills for conducting the study, or possibility for out sourcing

ii. Methodology

- Analyze strengths and weaknesses of the research methods to be used. Plan for a variety of methods to improve reliability.
- Ensure the method selected clearly measures progress and results achieved against the aims of the project. The methods should also be replicable during implementation or after the activity is completed.
- Ensure the methodology is explicit and recorded. Plan for data analysis, and report preparation.
- Ensure that the methods selected are cost effective and represent value for money when compared with the total size of the activity
- Define the sampling techniques to be employed, and the sample should be representative of the total population
- Design data collection tools and if possible pre-test them

iii. Adequacy of indicators

- Indicators should be SMART (specific, measurable, attainable, reliable and timely)
- Indicators should cover each level of the activity's logframe and should enable judgments to be made about impacts on gender and marginalized and other important groups in society
- Indicators should help to explain the cause of observed changes, and means of verifying the indicators should be practicable
- Select only key performance indicators, not necessarily the whole range of indicators in the project logical framework.

iv. Implementation of baseline study

- Ensure adequate expertise for conducting the study, data analysis and report preparation in place
- Plan for regular analysis of data over the course of the activity (where necessary)
- Plan for sharing and dissemination of baseline data among implementing partners and other stakeholders

Standardized Report Format for Baseline Results

Results of a baseline assessment should be interpreted and narrated in standard, easy-to-read report formats. These should enable all the stakeholders and other users to understand the current situation of the selected performance indicators and clarify subtleties which cannot be explained quantitatively. The following is the proposed Outline of the Baseline Report:

Title page

The report should have the project title, and the title page should include the names of the assessment team and the dates on which the assessment was carried out.

Acronyms

Acronyms used in the text should be spelled out here for easy reference.

Executive summary

The executive summary should be a brief presentation on the project focus, the context under which the baseline assessment was done, general findings and general conclusions.

Table of contents

In the table of contents, the section headings should follow the numbering format suggested in these guidelines but this can be adapted where necessary.

Introduction and background

This section should include some background information on the project, objectives, an overview of the expected results, the extent of its activities, its geographic scope, the situation in which it operates. Include a brief on the project results and performance indicators that have been assessed. Issues to include are the context in which the assessment is conducted (e.g. socio-economic, physical, cultural, political etc which might have bearing on expected results), implementing partners, and target stakeholder categories. The purpose and objectives of the baseline assessment should be presented and clarified.

Methodology

This section should include discussion of the following:

- (a) The general framework of the assessment
- (b) Techniques employed in information gathering
- (c) The participative methodology used
- (d) Tools used to collect and analyze the information
- (e) The composition of the assessment team
- (f) The range of stakeholders involved
- (g) The limitations or constraints in terms of information gathering, the tool or other constraints faced by the evaluation team.

Analysis of the findings

This section should include an interpretation of the results within the context in which the assessment was conducted. Key performance indicators should be elaborated in detail clearly indicating the data elements, data source, analytical tools used, the data and interpretation. Identify components which may need further assessment.

Conclusions

Conclusions sum up the findings of the assessment. They facilitate the formulation of general and specific recommendations for tracking the indicators, modifying and / or developing new performance indicators.

Annexes/appendices

This section should include relevant documents, data, tables, assessment ranking, a glossary and other information the assessment team deem necessary. Each annex/appendix should be numbered and listed by title in the table of contents.

ASARECA Logical Framework MATRIX (2009 - 2013)

Objective statement	Verifiable Indicators	Sources of Verification	Assumptions
Logical Framework Matrix Period: 2009 - 2013			
Association for Strengthening Agricultural Research in Eastern and Central Africa			
Super Goal			
Increased economic growth and improved livelihoods in the ECA while enhancing the quality of the environment	6% annual increase in GDP from agricultural sector by 2015 50% increase in people living on more than 1\$ per day by 2015 10% increase in biodiversity and forest cover by 2015 These indicators will be tracked by NEPAD and the UN	<ul style="list-style-type: none"> - Government statistics - FAO and World Bank, ADB, Economic Commission for Africa statistics and reports - COMESA and other regional organization reports - UN COM-TRADE statistics and reports - UNEP statistics and reports 	
Goal			
Enhanced Competitiveness of the sub-regional agricultural systems	<ul style="list-style-type: none"> A. Rate of change in total factor productivity B. Percent change in the value of agricultural output C. Percent change in yield of selected crops D. Percent of total livestock units of improved breeds E. Percent of agricultural land area under improved technologies (crops, forestry) ASARECA will not track this set of indicators: Instead we shall rely on activities of partner organizations such as COMESA and NEPAD	<ul style="list-style-type: none"> - Government statistics - Economic Commission for Africa statistics and reports - FAO statistics - COMESA and other regional organization reports - Selected CGIAR reports and publications: - External evaluation and impact assessment - Appropriate UN organizations 	<ul style="list-style-type: none"> - Relevant regional and national policies are implemented - Governments continue to support agriculture and poverty reduction as priorities - Equitable distribution of benefits occurs - Agricultural transformation occurs in the ECA region occasioned by technical change
Purpose			
Enhanced utilization of agricultural research and development innovations in eastern and central Africa	<ul style="list-style-type: none"> A. % of stakeholders adopting new technologies and management practices in selected development domains B. No. of policy options implemented by stakeholders 	<ul style="list-style-type: none"> - ASARECA impact evaluation reports - COMESA reports - East African Community - ILRI SAKSS - FARA 	<ul style="list-style-type: none"> - Presence of effective innovation platforms in the ECA region - Availability of inputs - Targeted financial services for agriculture exists - Appropriate knowledge and technology delivery mechanisms operational - Functional advisory systems in place - Efficient marketing systems in place
Results/Outputs			
1. Strengthened Gender-Responsive Governance and Management Systems in ASARECA	<ul style="list-style-type: none"> 1.1. Pluralistic decision making process 1.2. Compliance with organizational operational procedures and standards 1.3. % increase in funding from development partners and/or private sector 	<ul style="list-style-type: none"> - ASARECA: <ul style="list-style-type: none"> ▪ Annual Reports ▪ Constitution and Governance Manual ▪ Operational Manual ▪ Evaluation reports ▪ Priority Setting Documents ▪ Special Studies Reports ▪ Information and communication strategy - Client Satisfaction Survey Reports - NARS Annual Reports 	<ul style="list-style-type: none"> - Adequate human, financial and physical resources are maintained within the NARS and other partner organizations - Agricultural innovations paradigm is adopted by ASARECA member countries - Adequate stewardship and oversight provided by the governance body - Regional and national mechanisms for approval of technologies/innovations/policies exist.
2. Enhanced Generation of Demand Driven Agricultural Technologies and Innovations	<ul style="list-style-type: none"> 2.1. Number of demand driven technologies / innovations generated 2.2. Number of demand driven gender responsive technologies made available to uptake pathway 	<ul style="list-style-type: none"> - ASARECA Evaluation Reports - Programme annual reports - NARS annual reports 	<ul style="list-style-type: none"> - Partnerships with adequate capacity for generation and uptake of technologies and innovations exist. - Adequate human, physical and financial resources

Logical Framework Matrix Period: 2009 - 2013	Association for Strengthening Agricultural Research in Eastern and Central Africa		
Objective statement	Verifiable Indicators	Sources of Verification	Assumptions
3. Enhanced Adoption of Policy Options by Decision-Makers to improve performance of the Agricultural sector in ECA	3.1. Number of Policy options that enhance access to and use of resources by women, men and youth recommended to policy makers 3.2. Number of Policy options presented for legislation or decree	<ul style="list-style-type: none"> - ASARECA information and communication priority setting document 	<ul style="list-style-type: none"> - are maintained within NARS and other partners. - Government, non-government, regional and national organizations operate effectively at appropriate levels.
4. Strengthened Capacity for Implementing Agricultural Research for Development in ECA sub-region	4.1. Number of stakeholders who have acquired knowledge and skills in applying AIS as a result of ASARECA support 4.2. Number of stakeholders trained based on the identified capacity building needs (includes both short term and long term training) 4.3. Number of institutions benefiting from infrastructure development initiatives	<ul style="list-style-type: none"> - ASARECA Evaluation Reports - Program annual reports - NARS annual reports - ASARECA information and communication priority setting document 	<ul style="list-style-type: none"> - Partnerships with adequate capacity for generation and uptake of technologies and innovations exist. - Adequate human, physical and financial resources are maintained within NARS and other partners. - Government, non-government, regional and national organizations operate effectively at appropriate levels.
5. Enhanced Availability of information on agricultural technologies and innovations in ECA sub-region	5.1. Number of appropriate information packages produced 5.2. Number of appropriate information delivery pathways used 5.3. Access to disseminated information by various stakeholder categories 5.4. Number of publications on: policies for sustainable agricultural husbandry, marketing chains, extension systems, early warning systems		

BOX 1: SEVEN CRITERIA FOR ASSESSING PERFORMANCE INDICATORS

- 1. DIRECT.** A performance indicator should measure as closely as possible the result it is intended to measure. It should not be pegged at a higher or lower level than the result being measured. For example *contraceptive prevalence rate* is a direct measure of the result *increased use of family planning methods*. But *number of service providers trained* would NOT be a direct measure of the result *improved service delivery*. Just because people are trained does not necessarily mean they will deliver services better. If using a direct measure is not possible, one or more proxy indicators might be appropriate. For example, sometimes reliable data on direct measures are not available at a frequency that is useful to managers, and proxy indicators are needed to provide timely insight on progress. Proxy measures are *indirect* measures that are linked to the result by one or more assumptions. For example, in rural areas of Africa it is often very difficult to measure income levels directly. Measures such as percentage of village households with tin roofs (or radios or bicycles) may be a useful, if somewhat rough, proxy. The assumption is that when villagers have higher income they tend to purchase certain goods. If convincing evidence exists that the assumption is sound (for instance, it is based on research or experience elsewhere), then the proxy may be an adequate indicator, albeit second-best to a direct measure.
- 2. OBJECTIVE.** An objective indicator has no ambiguity about what is being measured. That is, there is general agreement over interpretation of the results. It is both unidimensional and operationally precise. To be *unidimensional* means that it measures only one phenomenon at a time. Avoid trying to combine too much in one indicator, such as measures of both access and use *operational precision* means no ambiguity over what kind of data would be collected for an indicator. For example, while *Number of successful export firms* is ambiguous, something like *number of export firms experiencing an annual increase in revenues of at least 5 percent* is operationally precise.
- 3. ADEQUATE.** Taken as a group, a performance indicator and its companion indicators should adequately measure the result in question. A frequently asked question is "how many indicators should be used to measure any given result?" The answer depends on a) the complexity of the result being measured, b) the level of resources available for monitoring performance, and c) the amount of information needed to make reasonably confident decisions. For some results that are straightforward and have tried and true measures, one performance indicator may be enough. For example, if the intended result is *increased traditional exports*, the indicator *dollar value of traditional exports per year* is probably sufficient. Where no single indicator is sufficient, or where there are benefits to be gained by "triangulation" -- then two or more indicators may be needed. However, avoid using too many indicators. Try to strike a balance between resources available for measuring performance and the amount of information managers need to make reasonably well informed decisions.
- 4. QUANTITATIVE, WHERE POSSIBLE.** Quantitative indicators are numerical (number or percentage of dollar value, tonnage, for example). Qualitative indicators are descriptive observations (an expert opinion of institutional strength, or a description of behavior). While quantitative indicators are not necessarily more objective, their numerical precision lends them to more agreement on interpretation of results data, and are thus usually preferable. However, even when effective quantitative indicators are being used, qualitative indicators can supplement the numbers and percentages with a richness of information that brings a program's results to life.
- 5. DISAGGREGATED, WHERE APPROPRIATE.** Disaggregating people-level program results by gender, age, location, or some other dimension is often important from a management or reporting point of view. Experience shows that development activities often require different approaches for different groups and affect those groups in different ways. Disaggregated data help track whether or not specific groups participate in and benefit from activities intended to include them. Therefore, it makes good management sense that performance indicators be sensitive to such differences.
- 6. PRACTICAL.** An indicator is practical if data can be obtained in a timely way and at a reasonable cost. Managers require data that can be collected frequently enough to inform them of progress and influence decisions. USAID operating units should expect to incur reasonable, but not exorbitant, costs for obtaining useful performance information. A rule of thumb, given in the reengineering guidance, is to plan on allocating 3 to 10 percent of total program resources for performance monitoring and evaluation.
- 7. RELIABLE.** A final consideration in choosing performance indicators is whether data of sufficiently reliable quality for confident decision-making can be obtained. But what standards of data quality are needed to be *useful*? The data that a program manager needs to make reasonably confident decisions about a program is not necessarily the same rigorous standard a social scientist is looking for. For example, a low cost mini survey

may be good enough for a given management need.

Source: USAID Center for Development Information and Evaluation (2006).

11. References

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