



**Sustainability Assessment for Project Design**  
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# Sustainability Assessment for Project Design<sup>1</sup>

## Description:

Designing a project that holds the potential for sustaining benefit flows to intended client groups following project termination requires a different type of analysis from that for a project with a time-bounded cluster of activities and production targets. The difference is in the attention to sustainability, which can be defined as the ability of a system (or organization) to produce outputs that are sufficiently well valued so that enough inputs are provided to continue production. Sustainability assessment consists of a set of analyses that concentrate upon the links among project performance, capacity for future performance, and the project environment with a particular focus on benefit continuation. The assessment can be conducted at various levels of comprehensiveness, depth, and formality. Rapid reconnaissance techniques can be used, or more elaborate questionnaires, interviews, and site visits, depending upon the specific situation.

## Uses:

Sustainability has taken on increasing significance as evidence mounts that, while individual development efforts have achieved some measure of success, the expected transition to self-sustaining progress has stalled in many countries. As foreign assistance budgets from donor agencies plateau or shrink, and as debt burdens grow, developing countries and international donors together are concerned with sustaining the benefits of project and program investment. Focusing on sustainability encourages donors to address the long-term interests and needs of the developing countries rather than their own short-term priorities, and it encourages the developing countries to make better use of both national and external resources to avoid increasing debt and dependency.

The longer timeframe and closer integration of

external assistance objectives with national goals and resources greatly increases the complexities and risks in project design and implementation. Sustainability assessment can be used to analyze these complexities and reduce the risks. Sustainability assessment does not replace the sectoral and technical analyses that contribute to the project or program design process; rather it should be added to them to focus directly on sustainability issues associated with the proposed investment.

The presentation of sustainability assessment here is oriented toward its use for project design. However, sustainability assessment can also be used during implementation and/or post-project evaluation. Periodic reassessments during implementation can identify changes in the project's environment or in its internal organization that could require decisions to modify and adapt project content and activities. For evaluation, sustainability assessment can serve to test the effectiveness of the initial assessment, document important changes over the life of the project, and derive lessons for designing and implementing sustainable projects in other settings.

## Guidelines for Sustainability Assessment:

Sustainability assessment is composed of two types of analysis. The first is a specification of the project's expected long-term benefits. The second is a reconnaissance of the project's external environment along two dimensions: direct influences on the project's long-term benefit flows, and indirect influences. The combined results of these analyses will help project staff both to develop a design with a high probability of generating sustained benefits and to manage implementation so that performance and capacity-building targets are achieved.

The sustainability aspect of the assessment enters in the examination of the linkages among the

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<sup>1</sup> Adapted from: Derick W. Brinkerhoff and Janet C. Tuthill, La gestion efficace des projets de developpement: Un guide a l'execution et l'evaluation. East Hartford, CT: Kumarian Press, 1987.

analyses. The benefit specification analysis provides the reference point for the other. The project's planned long-term benefits bound: a) the interactions with the environment by focusing the analysis on a particular set of external factors and stakeholders as distinct from all possible factors or interest groups, and b) the performance-capacity dimension of project implementation by specifying the type(s) of benefits. Each of the analyses is described in more detail below. The intent is to provide general guidelines for sustainability assessment. Specific situations may require modifications and some shifts in analytic focus.

### **A. Specification of Benefits to be Continued**

This analysis is the starting point for sustainability assessment and is the prerequisite for the other steps. It consists of a preliminary elaboration of the project's intended benefit continuation. To highlight sustainability issues, the long-term benefits should be expressed in terms of behavioral and other substantive changes the project is aimed at initiating. The analysis should include a view of the future, i.e. what will occur after the project succeeds in accomplishing its intended purpose. This is essentially a preliminary project identification with an emphasis on expected long-term impacts.

For example, if an agricultural project aims to increase cassava production, the specification should elaborate not simply research and extension objectives and yield production targets during the life of the project, but long-term production targets and such items as expected shifts in farmer behavior, changes in consumer demand, potential effects on cassava prices, presence/responses of processing and marketing facilities, etc.

### **B. Environmental Reconnaissance**

This analysis looks outside the project boundary to assess the nature and degree of probable influence of key factors in the environment on the sustainability potential of the planned project. The aim is to arrive at a determination of the overall level of environmental support or hostility likely to confront the project. High levels of hostility reduce the chances of sustainability. There is a feedback

loop between the environmental reconnaissance and the specification of benefits to be continued. Based on what is learned, the initial project elaboration can be modified to include actions to intervene and change certain environmental factors. It is important to recognize that the environment is composed of some elements that project managers can influence in their favor as well as fixed constraints.<sup>1</sup>

Environmental sustainability reconnaissance can be treated as a sequence of discovering answers to three key overarching questions:

1. **What does the project need from its environment to sustain its intended benefits?**
2. **Who controls what the project needs?**
3. **How can the project obtain what it needs for sustaining long-term benefit flows?**

To answer the questions means advancing through the following eight steps.<sup>2</sup>

**Step 1:** Classify the key factors in the project's environment. These can be divided into those the project has the potential to influence and those it cannot. This first group includes organizations (public sector, private sector, local, regional, national, or international); informal social groupings (rural-urban, peasant-bourgeoisie, etc.); associations, political parties, etc. They are the project's so called stakeholders. Non-influenceable factors include commodity prices, term of trade, inflation rates, regime stability, ethnic divisions, resource endowments, etc.

**Step 2:** Specify the necessary project-environment transactions. The systems perspective sees projects as carrying out exchanges with elements of their environments; they obtain inputs and produce outputs. These exchange relations can be termed transactions. Typical types of transactions are: financing, physical input supply, political support, bureaucratic approval, service delivery, technical assistance, public relations, etc.

**Step 3:** Inventory the project's major sustainability stakeholders. Categories of stakeholders include: clients and beneficiaries, suppliers, collaborators, supporters, competitors, opponents, and the general public.

**Step 4:** Identify the resources that sustainability stakeholders control and their interests. It is important for sustainability concerns to distinguish between tangible, quantifiable resources and intangibles. Examples of the former are funds, goods and services, legal authority, physical force, etc. Intangible resources are information and knowledge, prestige, legitimacy, moral/religious authority, etc.

**Step 5:** Prioritize sustainability stakeholders in terms of their importance for benefit continuation following project completion. In the process of identifying what resources various stakeholders control and what their potential interests in the continuation of benefit flows might be, the most important stakeholders relative to sustainability can be enumerated. This step and the previous one basically take place in tandem.

**Step 6:** Prepare a sustainability stakeholder-transactions matrix. Based on the information developed in steps 1 through 5, list priority stakeholders on the vertical axis and key transactions categories across the horizontal axis. The resulting matrix, once filled in, illustrates the exchanges the project needs with its stakeholders to become sustainable. An illustrative matrix is shown on the following page.

**Step 7:** Formulate strategy options for effective transactions with each group of key stakeholders. For each filled-in box in the matrix, the project needs to develop a strategic response to increase the probability of sustainability. This step is the main link back to the benefit continuation analysis for the preliminary project design.

**Step 8:** Consider the structural implications of the required transactions. The configuration of transactions with key stakeholders will have implications for the way the project is organized and implemented. Several kinds of transactions are standard to almost any project, and mechanisms

for conducting them are structured in similar ways; for example, financial transactions are usually handled by establishing a budget unit in the project organization or by using an existing financial office. Other types of transactions are specific to particular projects; for example, farming system research and extension projects need to effectively manage transactions between research institutes and extension agencies. There are various options for structuring these transactions that project designers and managers need to consider.

# A Stakeholder-Transactions Matrix

STAKEHOLDERS	TRANSACTIONS	Financing	Physical Inputs	Political Support	Approvals	Technical Assistance	Service Delivery	Publicity
Donor agency								
Supervising ministry								
Finance ministry								
Collaborators								
Competitors								
Beneficiaries								
PVO/NGOs								
Prof'l. Associations								
Political Parties								
General Public								

1. Environmental factors can be thought of as ranging along a continuum from those the program can control, through those it can influence, to those that must be appreciated as fixed constraints on actions. See William E. Smith, Francis J. Lethem, and Ben A. Thoolen, The Design of Organizations for Rural Development--A Progress Report. Washington, DC: World Bank, Staff Working Paper No. 375, March 1980.

2. Adapted from Marc Lindenberg and Benjamin Crosby, Managing Development: The Political Dimension. West Hartford, CT: Kumarian Press, 1981, p.26.