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**IMPROVING PROJECT MANAGEMENT FOR SUSTAINABLE DEVELOPMENT**

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## PROJECT INFORMATION

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## IMPROVING PROJECT MANAGEMENT FOR SUSTAINABLE DEVELOPMENT

Sustainable development is a widely used term that is defined in many ways [note 1]. While its breadth of interpretation makes it politically appealing, it also makes the concept confusing as a point of reference for any concrete project activity.

Most discussions focus on political or policy level issues and global concerns. However, the needs are just as important, although less dramatic, at the project level. This policy brief focuses on the elements of a policy framework to improve the contributions of projects to sustainable development [note 2].

### The Role of Projects in Sustainable Development

Governments set the "rules" and the boundaries for economic and social activity. They guide development by providing subsidies and levying taxes to redistribute costs and benefits of development. They also invest in various public activities to provide the basic infrastructure for development. This includes research and training that can contribute to sustained increases in local capacity to direct and manage development. Governments, and donor agencies that assist them, carry out most of these activities through "projects" (see box 1).

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#### Box 1.

A project is an identifiable set of inputs that is transformed through activities into a definable set of outputs, such as goods and/or services.

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Projects tend to have defined space and time boundaries -- they cover a certain area and begin and end on some specified dates. We use them as tools for development because they can be assessed and prioritized. We can assign them to personnel. We can also hold personnel accountable for their implementation and results since we can define the scope of projects and their impacts.

The same characteristics of projects that make them appealing in terms of organizational accountability often make them unattractive in terms of pursuing paths toward more sustainable development. For example, the fixed termination date for projects often means that personnel do not worry about the continuity of project benefits beyond the lives of the projects [note 3].

## A Policy Framework To Guide Project Activity

The general principles discussed below for dealing with sustainability issues at the project level are perhaps obvious, yet often not applied in practice.

A policy framework is needed to guide project activity more towards the objectives of sustainable development.

As we develop such a framework, it is important to keep in mind the basic reality that we cannot know the future.

Thus, we cannot know for certain whether the benefits from a given project are sustainable or not.

However, we can pick up early warning signs of "unsustainable" benefits. And, in many cases, we can act to avoid the potential problems.

Thus, while we should have the conceptual goal of promoting sustainable development, at an operational level we should avoid project activities that lead to unsustainable development.

With this reality in mind, an appropriate framework should include policies that:

- \* change the traditional approach by broadening the responsibility and focus of project personnel and by removing elements that discourage them from being concerned with sustainability; and

- \* establish incentives that motivate project personnel to adopt this expanded project approach.

### Change Project Focus and Responsibilities

The traditional natural resources project approach used by most development agencies envisions a limited project life and set of activities.

For project planners and managers, rewards are based on how well they perform within these boundaries. What happens beyond those boundaries tends to be of little concern to them.

Further, building local capacity to manage once the project ends often is not given adequate emphasis during project implementation.

Changing the project approach to assure more sustainable benefit flows requires 6 different steps from project personnel.

1. Organize activities so that project benefits can continue after the project ends.

It is better to focus on sustaining the benefits and positive ideas introduced by projects, not on sustaining the projects themselves.

This means that the goal of continuity should be an integral part of planning and implementation for all new activities. It means developing ways to cover recurrent costs in the future when the project ends.

It also means being concerned with the benefits derived by project beneficiaries and not necessarily with sustaining the direct outputs from the project.

We can secure continuity only if there is strong beneficiary participation in planning and implementation right from the start.

A project has achieved one major step toward sustaining benefits, once beneficiaries begin to adapt project technology and institutions to their own needs and begin to innovate on their own.

2. Internalize and become accountable for key external impacts of projects.

We need to be more sensitive to the impacts of a project beyond its defined boundaries and decision framework. What appears to be a contribution to sustainable development in a narrow project context may actually be contributing to unsustainable development in a broader social context.

For example, an export development project that includes price supports for an agricultural export may unintentionally result in farmers clearing and moving onto otherwise economically marginal lands to produce that crop.

Often these lands are steep and critical in terms of watershed protection. After clearing, erosion increases, creating problems downstream from siltation and consequent reduction of irrigation capacity and flood protection.

We need to forge institutional arrangements to account for such external linkages as formalizing upstream-downstream relationships in land and water use [note 4].

3. Become concerned with diffusion of positive project ideas and impacts beyond the project boundaries.

Project agencies and personnel need to know what is happening in regions surrounding their project areas.

Unsustainable development in such regions eventually could negatively impact the otherwise successful project.

We can be winning isolated battles but losing the overall war to secure sustainable development.

Projects can increase awareness by encouraging linkages between groups in and outside the project boundaries.

Projects can provide training that includes people from surrounding areas.

Also, projects can encourage institutional linkages that help transfer positive project ideas outside the project boundaries.

4. Consider how the project impacts different groups of stakeholders.

When focusing on ways to avoid unsustainable development associated with a project, we need to:

- \* understand the various dimensions of possible project impacts on various groups;
- \* assess the relative importance of the various dimensions;
- \* design ways to adjust the project impacts on different stakeholders; and then
- \* assign responsibility for making the necessary changes, emphasizing accountability and rewards in terms of outcomes.

The main dimensions of project impacts are shown in box 2 below.

5. Monitor and assess the indicators of potential unsustainable developments within a broad context.

For example, drawing down the water table in an area by one meter or more per year is a sign of unsustainable development if there is no potential to obtain water from elsewhere.

On the other hand, trees removed from a forest may not be an indicator of unsustainability of a region's welfare. There may be investment in plantations.

Also, there may be ample opportunities to import needed wood once the forest is gone.

Too, the returns from harvesting may be reinvested in the region in other income-generating activities. In monitoring indicators of potential unsustainability, we need to consider the larger context and factor those indicators into the interpretation.

6. Treat uncertainty in an appropriate fashion, recognizing that sometimes early warning signs of unsustainability fail.

There are always cases where we will not be able to find early warning indicators of negative events, such as floods, fires, and miscalculated technical impacts.

In these cases, the resiliency of the affected development system becomes a key factor in determining sustainability. Can it bounce back on a positive path of development after temporary setbacks?

Safeguards and contingency plans should be an explicit part of every development project. They often mean the difference between failure and sustainability.

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Box 2. Consider these Dimensions of Project Impacts

- Is the impact sustainable?

Is the impact positive or negative in terms of its contribution to sustainable development (or its contribution toward avoiding unsustainable development)?

- What is the incidence of the impact?

How do location, timing, and groups affect the impact?

\* "Where" are the impacts felt, upstream or downstream?

\* "When" are the impacts felt, right now or next generation?

\* "What groups" are affected, us/them or poor/wealthy?

Are impacts direct or indirect, primary or secondary?

- What is the scale of the impact?

How do extent, duration, and intensity affect the impact?

\* "How widespread" are the impacts?

\* "How strong" are they per unit area and time?

\* "How long" do they last?

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### Establish Incentives for Project Personnel

We need economic, social, and political incentives to guide practitioners in their work toward applying these principles and improving projects for sustainable development.

Most development professionals are well aware of the concepts that can help avoid unsustainable development at the project level.

What they lack are the organizational incentives and the specific knowledge needed to actively apply the concepts. Changing the project approach to assure more incentives for project personnel requires 3 different steps.

1. Improve training opportunities and encourage application of results.

Motivation depends on knowing what to do and what the likely results will be. It is important that policies provide for training to explore the whats, whys, hows, and whens of



sustainability-related issues and activities.

Equally important, policies must include incentives to apply what is learned.

No matter how good a training program is technically, if personnel do not apply what they learned, then the program has limited practical value [note 5].

We need to develop incentives to insure that people effectively apply what they learn.

2. Improve incentives for project personnel to innovate and adapt to local conditions.

We need to reward project planners and implementors for flexibility in following outcome-based management strategies.

Such strategies involve adapting general principles to specific cases to reduce chances of unsustainable development and to achieve desired outcomes.

3. Reward personnel for building institutional and individual capacity to innovate and survive beyond project boundaries.

Here we can make a variation on the old saying: "Give people fish and they eat for a day; teach them how to fish and they can 'sustain' themselves." Sustainable development depends on projects helping people to learn and to develop their own capacity to innovate and produce.

Such results are often less visible and certain than those that show the number of fish caught or the number of trees planted.

However, we must find ways to reward project planners, implementors, and agencies for teaching and for building local capacity.

## Conclusions

Ultimately, improved projects for sustainable development will depend on broad reforms that take place in a society's institutions. Concerns for sustainability need to become people's way of life.

We need to devote resources at all levels to the principles of sustainability. And changes need to take place on both the consumption and the production sides of the equation.

In this policy brief, we merely suggest some first steps toward improving projects for sustainable development.

Specific policies needed to support this framework for guiding project activity will vary among countries and agencies.

However, we should focus on policies that will encourage planners and implementors to adjust traditional approaches.

We need to build the advantages of the project approach into planning and management systems that are more sensitive to sustainability issues and conditions.

We need to treat projects as means and not ends unto themselves. The desired ends are long-term benefits and outcomes. We need policies to encourage outcome-based management [note 6] (see box 3).

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Box 3. To Improve Projects for Sustainable Development:

Internalize and become accountable for key external impacts of projects.

Become concerned with diffusion of positive project ideas and impacts beyond the project boundaries.

Consider how the project impacts different groups of stakeholders.

Monitor and assess the indicators of potential unsustainable developments within a broad context.

Treat uncertainty in an appropriate fashion, recognizing that sometimes early warning signs of unsustainability fail.

Improve training opportunities for personnel and encourage application of results.

Improve incentives for project personnel to innovate and adapt to local conditions.

Reward personnel for building institutional and individual capacity to innovate and survive beyond project boundaries.

Organize activities so that project benefits can continue after the project ends.

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#### NOTES

1. Some references that discuss the concept at the broader level are:

Brown, B. J., M. E. Hanson, D. M. Liverman, and R. W. Meredith, Jr. 1987. "Global Sustainability: Toward Definition." ENVIRONMENTAL MANAGEMENT 11(6):713-19.

Dixon, J. A., and L. A. Fallon. 1989. THE CONCEPT OF SUSTAIN-ABILITY: ORIGINS, EXTENSIONS, AND USEFULNESS FOR POLICY. The World Bank Environment Department, Washington, D.C.

Rees, W. E. 1989. DEFINING SUSTAINABLE DEVELOPMENT. Human

Studies Research Bulletin. Vancouver, British Columbia, Canada: University of British Columbia.

World Commission on Environment and Development. 1987. OUR COMMON FUTURE. OXFORD, United Kingdom: Oxford University Press.

2. The research underlying this publication was supported by the U.S. Agency for International Development, the United Nations Environment Programme, and the University of Minnesota Agricultural Experiment Station and the College of Natural Resources.

3. Available evidence on sustainability of development projects is discouraging. For example, Paul Harrison, in his book, GREENING OF AFRICA (1987, New York: Penguin Books), cites a 1985 World Bank study of longer term impacts of agricultural projects.

Of the 25 projects, all seemed successful in project completion audits, but after 5 to 10 years, more than half had not sustained initially-introduced benefits.

A 1986 assessment of 212 USAID projects (1988, SUSTAINABILITY OF DEVELOPMENT PROGRAMS: A COMPENDIUM OF DONOR EXPERIENCE. USAID Program Evaluation Discussion Paper 24) found that only 11% had a strong probability of being sustained after U.S. assistance ended and 25% had poor prospects for sustainability.

4. These types of arrangements have been developed in Japan and Colombia. Other countries are considering them.

5. A number of EPAT activities are exploring this idea. See for example:

White, T. A. 1993. INTEGRATING SUSTAINABILITY INTO AGROFORESTRY PROJECTS: A WORKSHOP FRAMEWORK FOR NGO PROGRAM MANAGERS. U.S. Agency for International Development, Environmental and Natural Resources Policy and Training project/Midwest Universities Consortium for International Activities, Manual No. 2. Arlington, Virginia.

6. This policy brief is adapted from:

Gregersen, H., and A. Lundgren. 1990. FORESTRY FOR SUSTAINABLE DEVELOPMENT: CONCEPTS AND A FRAMEWORK FOR ACTION. University of Minnesota, Forestry for Sustainable Development Program Working Paper 1. St. Paul, Minnesota.