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## **Capacity Building Requirements for Global Environmental Protection**

John F. E. Ohiorhenuan  
Stephen M. Wunker

Working Paper  
Number 12



THE WORLD BANK



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This paper attempts to distill a clear methodology for capacity building interventions that aim to strengthen a country's ability to deal with environment and development issues. Such programs can be particularly complex since they involve an interplay between the sociocultural, political, economic, and technical facets of any society.

The paper focuses on capacity building interventions in the area of environmental protection, which forms the mandate of the Global Environment Facility (GEF). The authors draw on the texts of the Convention on Biological Diversity and the United Nations Framework Convention on Climate Change, for which the GEF is the interim financial mechanism. They also synthesize the capacity building implications of recommendations made by the Scientific and Technical Advisory Panel (STAP) of the GEF. Drawing on the project portfolio of GEF's Pilot Phase, they develop a preliminary generic categorization of the types of capacity building efforts that could help countries address global environmental concerns.

A Capacity Building Requirements Table (CART) is created by cross-tabulating the objectives of GEF capacity building interventions with the larger goals of capacity building. With further refinements, a CART could prove a valuable tool both in project design and project evaluation. By incorporating an easy-to-use checklist approach, it could help determine whether a project meets the criteria of both GEF and the conventions, and so help to define more clearly the role of the GEF in capacity building.

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## **Abbreviations**

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BAP	Biodiversity Action Plan
CART	Capacity Building Requirements Table
CBD	Convention on Biological Diversity
DAC	Development Assistance Committee
FCCC	Framework Convention on Climate Change
GEF	Global Environment Facility
GHG	Greenhouse gas
IUCN	International Union for the Conservation of Nature and Natural Resources (now World Conservation Union)
OECD	Organization for Economic Cooperation and Development
STAP	Scientific and Technical Advisory Panel of the Global Environment Facility
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme

# Introduction

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Capacity building has played a major role in the three-year Pilot Phase of the Global Environment Facility (GEF). Funds from the Facility are available for investment, technical assistance, and—to a lesser degree—research.<sup>1</sup> To the extent that technical assistance is used mainly as an instrument of capacity building, over 50 percent of GEF's portfolio in December 1993 can be attributed to capacity building activities.<sup>2</sup> Among the Facility's three implementing agencies, the technical assistance program of the United Nations Development Programme (UNDP) constitutes the largest capacity building portfolio with 55 projects, costed at US\$242.5 million, at various stages of implementation in December 1993. Although the World Bank's major responsibility under GEF is investment, capacity building components form an important part of its GEF activities, accounting for 26 percent of the total costs of projects appraised at the same date.<sup>3</sup> The small portfolio of GEF projects implemented by the United Nations Environment Programme (UNEP) is also addressed mainly to capacity building issues.

While the meaning of capacity building is clear in general terms, it may still be useful, for several

reasons, to examine its meaning and scope in the context of the GEF. First, capacity building could be narrowly or broadly defined and is, therefore, sensitive to the particular operational approach adopted (for example, project vs. program perspective). Second, the specific focus of the GEF on global environmental issues requires that special attention be paid to the interface between national and global concerns. With GEF's renewed emphasis on placing its interventions within national priorities, it would be useful for all stakeholders at the national level to understand as clearly as possible the boundaries of the Facility's operational interests. Third, since in its evolution within development cooperation, capacity building has sometimes been used synonymously with technical assistance, it is useful to differentiate the two and highlight the defining characteristic of capacity building, namely, its special focus on the long-term sustainability of results.

The aim of this paper is twofold. First, it develops a preliminary generic categorization of the types of capacity building interventions that could help countries address global environmental concerns. This typology is based on a review of the two global

<sup>1</sup> The GEF funds projects in four focal areas: climate change, loss of biodiversity, pollution of international waters, and depletion of the ozone layer. Land degradation issues—primarily desertification and deforestation, as they relate to the focal areas—may also be funded.

<sup>2</sup> The enabling instrument for the Pilot Phase does not use the term "capacity building." However, in recognizing that GEF resources would be distributed between "investment funding, project preparation, institution building, training, and scientific and technical support activities," it covers the major aspects of capacity building (see World Bank 1991). The *Instrument for the Establishment of the Restructured Global Environment Facility* mentions capacity building explicitly (see paragraph 11(a), page 31).

<sup>3</sup> *GEF World Bank Operations: Pilot Phase Business Review* (Washington, D.C.: World Bank, 1994). A conservative estimate suggests that the capacity building component of the full basket of the World Bank's Pilot Phase portfolio is at least 15 percent.

conventions for which GEF is the interim financial mechanism—the Convention on Biological Diversity and the United Nations Framework Convention on Climate Change—and on the “Analytical Frameworks for Global Warming, Biodiversity, and International Waters” prepared by GEF’s Scientific and Technical Advisory Panel (STAP).

Second, building on this framework, the paper introduces the notion of a Capacity Building Requirements Table (CART) as a general tool for the disaggregation and analysis of the principal components in GEF capacity building interventions. The task is not to describe in depth the various activities which have been undertaken so far. Since very few projects are at an advanced stage of

execution, the frame of reference is derived mainly from the promise of Pilot Phase activities, as well as the general attributes of capacity building as it has evolved in development cooperation practice.

Chapter 1 provides some background clarification of the notion of capacity building, highlighting its many dimensions. Chapter 2 describes the parameters of capacity building for addressing global environmental concerns, as derived from the two global environmental conventions and the recommendations of STAP. Chapter 3 develops a preliminary typology of capacity building under the GEF, and chapter 4 presents the idea of a Capacity Building Requirements Table. Chapter 5 summarizes the main elements of this paper and offers some conclusions.

# Capacity Building, Institutional Development and Technical Assistance

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Capacity building is concerned with creating or enhancing a society's ability to perform specific tasks and attain development objectives. Appropriately, capacity building for sustainable development received considerable attention at the Rio Earth Summit. A broad description of the scope of capacity building is provided in paragraph 37.1 of *Agenda 21* (see Johnson 1993: 481):

*Specifically, capacity building encompasses the country's human, scientific, technological organizational, institutional and resource capabilities. A fundamental goal of capacity building is to enhance the ability to evaluate and address the crucial questions related to policy choices and modes of implementation among development options, based on an understanding of environmental potentials and limits and of needs as perceived by the people of the country concerned.<sup>4</sup>*

Capacity building can be related to the older notion of "institution building" or "institutional development." Many activities related to strengthening the administrative and technical capabilities of devel-

oping country governments used to be referred to as institution building. The increasingly popular use of the term "capacity building" to describe this kind of activity, among others, has arisen from a heightened awareness that the enabling or disabling characteristics of a particular organization can be attributed as much to its environment as to its internal processes. Implicit in the term capacity building is a recognition of the dual meaning of "institution" as both a structural and a sociological category. In the narrower, structural sense, an institution is a socially recognized human organization providing a service that is valued by society.<sup>5</sup> Sociologically, an institution is a matrix of socially sanctioned norms and rules of conduct that govern individual and group behavior—the "rules of the game," according to the New Institutional Economics.<sup>6</sup> As currently understood, capacity building encompasses both meanings of "institution."

Capacity building in its narrow sense refers to the process of enhancing individual skills, or strengthening the competence of a particular organization or set of organizations (for example, the civil service). In the broader sense, it refers to the process of

<sup>4</sup> Following the Earth Summit, the Development Assistance Committee (DAC) Working Party on Development Assistance and Environment set up a Task Force on Capacity Development in Environment in October 1992, to clarify a common approach and develop tools and guidelines for aid agencies. The recommendations of the Task Force include the need for a broad definition of capacity building and the adoption of a systemic approach to technical cooperation for capacity building (see OECD/DAC 1994a, 1994b).

<sup>5</sup> It is sometimes true, of course, that an organization continues to exist long after it has ceased to be useful to most of society. Such an organization's continued existence is mainly due to the relative power of the small segment of social interests which continues to benefit from the status quo.

<sup>6</sup> "The institutional environment is the set of fundamental political, social and legal ground rules that establishes the basis for production, exchange and distribution" (Davis and North 1971: 5).

nurturing relatively stable patterns of social relations (as in the notion of the market as an economic institution). The present-continuous tense of the term emphasizes the underlying belief that institutional change can be induced. The accent of development cooperation support for capacity building is on nurturing human and organizational capabilities with a view to achieving a permanent transfer of skills and know-how. To do this properly requires that, in addition to strengthening individual skills and organizational competence, attention be paid to the normative framework within which individuals and organizations function (such as conventions, laws, regulations, policies, and social processes in general).

It is also useful to clarify the relationship between technical assistance and capacity building.<sup>7</sup> As a working definition, technical assistance is “the transfer or adaptation of ideas, knowledge, practices, technologies or skills to foster economic development” (World Bank 1991).<sup>8</sup> In essence, it is a means to an end and is perceived by the donor community as the main instrument for supporting capacity building. However, not all technical assistance builds capacity. Technical assistance may compensate for inadequate local capacity in the short term, or it may focus on enhancing skills and institutions toward self-sustained development. For instance, technical assistance may be provided to undertake a detailed design study of a large and technically complex project. In this case, while not seeking the permanent transfer of particular skills, it provides immediate access to the services from such skills (gap-filling). Technical assistance may also be concerned with supporting actions and processes (from the very narrow to the broad) aimed at ultimately generating self-sustained development. It is this latter kind of activity which is the main concern of capacity building as used in this paper.<sup>9</sup>

Over the past few years, the processes involved in capacity building have become clearer as international development agencies have sought to reassess their technical assistance activities. In December 1991, for instance, the Development Assistance Committee (DAC) of the Organization for Economic Cooperation and Development (OECD) adopted a new set of guidelines for technical assistance. The guidelines reaffirmed the primacy of capacity building as an objective of technical assistance. The capacity of core government agencies for policy analysis and development management was considered of special importance. The guidelines' real thrust, however, was in reorienting the instruments and modalities of technical assistance. It proposed giving more priority to training, with particular emphasis on strengthening local training institutions. The use of expatriate personnel solely for project construction and implementation was to be discouraged, and greater efforts devoted to eliciting local ownership of programs. Greater collaboration with non-governmental organizations (NGOs) and volunteer programs was also to be sought (OECD/DAC 1991).<sup>10</sup>

Similarly, the World Bank recently issued a new operational directive (OD) on technical assistance (OD 8.40, 1992) that reflects the changing interpretation of the term. Traditionally, the Bank classified its technical assistance activities into four categories: supervision of works and detailed engineering; training; providing managerial and financial advisory services; and conducting technical and feasibility studies. The new guidelines classify technical assistance by outcomes: policy support; project preparation and implementation support; and institutional development. While institutional development is obviously capacity building, the other categories may also involve some degree of

<sup>7</sup> The terms technical assistance and technical cooperation are essentially synonyms, although the latter is becoming the more preferred because of its implicit suggestion of a relationship between equals.

<sup>8</sup> See also the *Handbook on Technical Assistance* by the World Bank's Operations Policy Department (Washington, D.C., 1993a).

<sup>9</sup> An example may be useful. A mechanism such as the GEF could provide technical assistance for a country to undertake a climate change country study. The country study in itself is not a capacity building exercise except indirectly, to the extent that its results add to the stock of knowledge. If, however, the design and implementation of the project were such that indigenous skills were strengthened, then it could reasonably be described as a capacity building project.

<sup>10</sup> This has since been followed by a joint meeting on technical cooperation by UNDP, OECD and the World Bank (June 20, 1994) at which issues of capacity building were further articulated.

capacity building. In its *Handbook on Technical Assistance* (World Bank 1993a), the Bank identifies five types of capacities involved in ensuring long-term organizational competence. To be effective, organizations must possess the capacity to set goals, evaluate options and exercise leadership; interact inter-institutionally; make effective use of human and financial resources to meet client needs; mobilize social support for long-term effectiveness and legitimacy; and be able to learn and adapt to changing circumstances. This categorization clarifies actions expected of institutional role players which is an essential element of an analytical framework. With some modification to incorporate the “sociological” aspects of capacity building, it could be of considerable value in conceptualizing GEF capacity building.

UNDP has, perhaps, gone furthest in attempting to clarify the processes involved in capacity building. A review of the major constraints impeding its capacity building efforts was undertaken in preparation for UNDP’s Fifth Cycle Programme (1992-96). A comprehensive policy framework paper was also prepared in response to a United Nations (UN) General Assembly resolution requesting a more coherent approach to capacity building in the UN system. Several other policy papers have been prepared on the subject.<sup>11</sup> In one such paper, three components of capacity building were identified:

education and training, organizational strengthening, and development culture. Six types of capacity were also identified: macroeconomic management, professional education, public sector reform, private sector development, popular participation in national decision-making, and national development culture (see North 1992). In developing a framework for assessing effectiveness in capacity building, UNDP’s Central Evaluation Office advocated a “functional focus” approach to capacity building. This called for attention to be focused on the development functions to be carried out before the tackling of any organizational issues. Accordingly, it identified three critical functional capacities (UNDP 1993):

- The capacity to define a long-term vision that would lead to sustainable development
- The capacity to formulate sound policies, and design programs to support the long-term strategy
- The capacity to implement and manage effectively the various programs and projects.

These functional capacities are indeed critical for the effective management of the development process. With further disaggregation and adaptation to suit the specific thematic focus of the GEF, this framework, along with a list of capacity building types, can provide critical inputs for the creation of a typology.

<sup>11</sup> Continuing these efforts, UNDP has now commissioned a major empirical research project by the Harvard Institute of International Development (HIID). The focus of this effort is on how governments and donors can help strengthen the managerial, professional, and technical capacity of public sector institutions (see Cohen 1993).

## **2 The Parameters of GEF Capacity Building Activities**

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To a large extent, the boundaries for GEF support of capacity building are demarcated by the Convention on Biological Diversity (CBD) and the Framework Convention on Climate Change (FCCC). These two conventions, which were opened for signature at the United Nations Conference on Environment and Development in Rio, are themselves to be placed in the context of *Agenda 21* adopted at that conference as a framework for action on environment and development.

During the Pilot Phase, GEF global warming and biodiversity projects were guided by a focus on innovative and cost-effective approaches to securing global environmental benefits, as well as by the expectations of the two conventions.<sup>12</sup> In the post-Pilot Phase (also termed GEF1), it is expected that the guidance of the conventions will be formalized. The Conferences of the Parties of the conventions will set policies, priorities, and eligibility criteria to guide GEF activities in the areas of biodiversity and climate change. Building on the conventions and, for international waters and ozone, on previous guidelines and legal documents, STAP provided some recommendations concerning the types of projects which might be undertaken in each focal area. The parameters established by these developments for GEF capacity building activities may be described briefly.

### **Biodiversity**

The CBD requires its contracting parties to undertake several measures for the protection of biological resources, with developed countries pledging to provide financial support to developing nations in implementing these measures. The convention's objectives are the conservation of biodiversity, the sustainable use of its components, and the equitable sharing of benefits. To achieve these objectives, contracting parties commit themselves to undertake, as far as possible and as appropriate, certain actions which have important capacity building dimensions. Such actions include:

- Developing national strategies, plans, and programs for the conservation and sustainable use of biological resources, and integrating considerations of conservation and sustainable use into national decision-making instruments
- Identifying and monitoring components of biodiversity, and adopting measures for their conservation *in situ* and *ex situ*
- Identifying and eradicating harmful introduced species
- Promoting and encouraging relevant research, establishing programs for scientific and technical education, and promoting international technical and scientific cooperation

<sup>12</sup> "Expectations" because the ratification of the two conventions took place only after GEF's Pilot Phase was well advanced. Indeed, the first meetings of the Conferences of the Parties took place in November/December 1994 for the CBD, and March/April 1995 for the FCCC.

- Promoting public education and awareness
- Assessing the impact of projects likely to have adverse effects on biodiversity, and minimizing such outcomes
- Ensuring the safe development and application of biotechnology.

The achievement of the objectives of the CBD requires capacity building at several levels. First, many developing countries need to put in place or strengthen certain structures and processes, as well as build up and enhance the necessary human resources to participate effectively in implementing the convention. For instance, developing a strategy requires basic information and some scientific and policy analysis skills, as well as a system for converting these inputs into policy-framework papers.

Second, once plans have been prepared, their execution requires the existence or creation of implementation mechanisms. Such mechanisms may involve, for instance, strengthening ministries of agriculture and forestry, modifying the curricula of training institutions, upgrading units of ministries of national planning, or even modifying laws and regulatory frameworks. In addition to these kinds of organizational and systemic changes, training at several levels of various categories may be required.<sup>13</sup> These two levels are prerequisite capacity building activities and could be regarded as “enabling activities.”<sup>14</sup>

Third, over the longer term, countries require systems for the continuous assessment and improvement of performance, and the sustainability of results. Capacity building in this context may involve more in-depth training, and more far-reaching organizational and social reforms. Perhaps more important, the long-term sustainability of gains in conservation would depend on building an active constituency in the local research and scientific community, among policy-makers and

civil society organizations, and within local communities in areas of important biological assets. Activities such as establishing specialized training institutions, enhancing faculty skills in research institutes, and launching comprehensive extension-service schemes are required for the long-term sustainability of biodiversity conservation programs.

STAP reinforces the importance of capacity building for biodiversity conservation. In its “Analytical Frameworks for Global Warming, Biodiversity, and International Waters,” it recommends that the GEF help accomplish CBD goals by focusing on projects that address both direct and indirect causes of biodiversity loss. Projects that address direct causes:

*should test new approaches and methodologies for conserving particular threatened areas of significant biological importance or endangered species. Even if the “preventive” approach to biodiversity conservation is more cost-effective, it tends to be longer term in focus and there is a need for short-term solutions to acute problems of ecosystems or species loss.*

Projects that address indirect causes would be concerned mainly with improving the capacity of countries to plan and develop efficient conservation strategies, measures, and programs in the medium and long term.<sup>15</sup> Such projects would include:

*the incorporation of biodiversity conservation issues within the economic development framework of the countries; correcting economic distortions that adversely affect against biodiversity; facilitating the “capture” of global value; testing innovative institutional, financial and legal schemes, planning tools, research and education programmes at all levels.*

<sup>13</sup> There is some agreement that three categories of people may need to be targeted for effective conservation: professionals, technicians, and users of biological resources, particularly, local communities, business, and industry (IUCN, UNEP and WWF 1980).

<sup>14</sup> While the convention expects each party to be fully involved in implementing its provisions, “enabling activities” would vary according to a country’s level of development, the extent of its biodiversity assets, and the degree to which it already had the infrastructure to conserve its biodiversity and sustainably use its biological resources.

<sup>15</sup> See Article 12, paragraph 1, of the FCCC (Johnson 1993: 70).

Clearly, both types of projects involve capacity building of some kind. STAP further recommends that targeted research activities be undertaken within both types of projects. The analytical framework also notes that developing countries need to improve their scientific infrastructure in order to meet the goal of conservation.

### **Climate change**

The FCCC too creates certain obligations in pursuit of the stabilization of greenhouse gas concentrations at acceptable levels. The main obligation on contracting parties is to communicate to the Conference of the Parties the following information:

- A national inventory of sources and sinks of anthropogenic emissions of greenhouse gases
- A general description of steps taken or envisaged to implement the convention
- Any other information deemed relevant by the party.<sup>16</sup>

The obligation to communicate certain information implies some capacity building for many developing countries. If a country has not already conducted an inventory, it needs to do so, and may require the harnessing of some scientific skills, as well as the establishment of a mechanism for conducting the inventory and processing the information. Similarly, even a general listing of steps toward implementing the convention requires some capabilities in the areas of scientific and policy analysis. The staggered compliance schedule is a partial recognition of the capacity implications even of simply providing information.<sup>17</sup> Accordingly, the convention provides for the Conference of the Parties to arrange for technical and financial support to developing countries in compiling and communicating information, and in identifying the technical and financial implications of proposed projects and response measures. Similarly, the Intergovernmental Negotiating Committee accorded priority to enabling activities such as planning, endogenous

capacity building (including institutional strengthening), training, research, and education.

In addition to the communications obligation on all parties, the FCCC recognizes that to address the climate change problem effectively, all countries would need to take further action “taking into account their common but differentiated responsibilities.”<sup>18</sup> Such actions include:

- Formulating and implementing national and regional programs for mitigating climate change
- Integrating climate change considerations into social, economic, and environmental policies
- Promoting the development of practices and processes that control, reduce, or prevent greenhouse gas emissions
- Promoting the sustainable management of sinks and reservoirs of greenhouse gases
- Promoting relevant research and cooperating in the exchange of information
- Promoting education, training, and public awareness.

The convention’s desiderata also include the need to develop programs and networks for research, data collection, and systematic observation relating to climate change, and to strengthen national scientific and technical research capacities.

For most developing countries, full and effective participation in the convention would involve a major effort at capacity building. As with the CBD, three levels of capacity building are indicated. At the simplest level, countries must put in place the capacity for compiling information regularly and identifying appropriate response measures. At the next level, they could establish the capacity to develop and implement strategies and programs in line with Article 4 of the FCCC. Over the medium to long term, countries would need to invest in scientific research and in the development or adaptation of appropriate technologies.

<sup>16</sup> See Article 12, paragraph 1, of the FCCC (Johnson 1993: 70).

<sup>17</sup> Article 12, paragraph 5, of the FCCC states that developed countries are to provide initial communication within six months of the convention’s entry into force, developing countries within three years of either the convention’s entry into force or of the availability of financial resources, and least developed countries at their discretion (Johnson 1993: 70).

<sup>18</sup> Article 4, paragraph 1, of the FCCC (Johnson 1993: 63).

Indeed, the convention refers explicitly to the importance of capacity building at all these levels. It obligates developed country parties to:

*take all practicable steps to promote, facilitate and finance, as appropriate, the transfer of, or access to, environmentally sound technologies and knowhow to other Parties, particularly developing country Parties, to enable them to implement the provisions of the Convention. In this process, the developed country Parties shall support the development and enhancement of endogenous capacities and technologies of developing country Parties. Other Parties and organizations in a position to do so may also assist in facilitating the transfer of such technologies.”<sup>19</sup>*

The analytical framework developed by STAP does not explicitly address the question of capacity building in the context of climate change. However, it provides a pointer in its discussion of the cost-effectiveness of climate change projects. According to STAP, a major dimension of cost effectiveness lies in maximizing the long-term reductions in greenhouse gases secured with a given sum of money. The analytical framework stresses that:

*it is important to see as a global benefit any GEF contribution to (a) learning and innovation, and cost reductions in the new technologies; and (b) reducing transaction costs in the introduction of new technologies.*

Enhancing the skills and strengthening the institutional and policy frameworks which would make such benefits attainable is clearly a capacity building activity.

### **International waters**

There is no comprehensive global framework for the protection of international waters comparable to the conventions on biodiversity and climate change. However, several guidelines and rules have been negotiated in the past which provide a context for GEF activities. Drawing on these, STAP has indicated possible interventions for GEF support:

- Constructing treatment plants for sewage and industrial waste
- Developing alternative waste disposal systems
- Promoting no/low-waste alternative technologies
- Promoting non-erosive agricultural practices
- Facilitating control of chemicals at source
- Supporting coastal and riverine development management
- Contingency planning
- Land-use planning controls on non-point sources of pollution
- Environmental impact assessments and cost-benefit studies
- Periodic environmental audits of existing industrial plants.

As with biodiversity and climate change, a number of capacity building activities could be envisaged under each of these areas of intervention. More specifically, STAP underlines the importance of capacity building in its recommended eligibility criteria for international waters projects. It recommends that such projects should meet at least two of the following criteria:

- Improving institutional capability to enhance human well-being
- Promoting sustainable maintenance of water-based biodiversity
- Facilitating adaptation of water-based ecosystems to global warming
- Developing basin-wide monitoring and inventories of pollution sources
- Designing and implementing management plans for pollution reduction
- Monitoring and assessing port and traffic-based pollutants.

### **Ozone**

During the Pilot Phase, only two GEF projects addressed the focal area of ozone depletion because most developing countries that have ratified the Montreal Protocol on Substances that Deplete the Ozone Layer are eligible for assistance through the protocol’s Interim Multilateral Fund. Nevertheless, substantial capacity building activities are indicated under the criteria of the Interim Multilateral Fund. STAP expects the same criteria to apply

<sup>19</sup>

Article 4, paragraph 5, of the FCCC (Johnson 1993: 65).

to GEF projects. Under the Multilateral Fund, countries are expected to develop country programs that include:

- A national inventory of production, imports, application, and use of controlled substances
- Descriptions of the institutional and policy frameworks
- A description of government and industry responses to the protocol
- An action plan covering technical assistance, and pre-investment and investment activities
- A timetable and financing plan for the relevant activities.

## **3 A Typology of Capacity Building Activities for the Global Environment**

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As discussed in the previous chapter, capacity building interventions include actions aimed at strengthening individual skills, enhancing the competence of organizations, promoting inter-institutional interaction, and/or nurturing appropriate “rules of the game”. To date, GEF projects have addressed issues related directly to strengthening human capabilities and organizational competence, as well as improving the environment within which institutions function. Activities such as technology transfer, demonstration initiatives, and research have also been undertaken. What is missing, however, is a framework around which to organize these capacity building activities.

A typology is a useful first step in the development of an analytical framework. A quick review of the GEF portfolio during the Pilot Phase suggests several approaches for viewing capacity building and developing a classification. Projects could be classified, for instance, by major inputs, by target of intervention, or by expected outcome. We consider each of these approaches in turn.

### **Classification by inputs**

The most common instruments or methods adopted in GEF projects have been threefold: providing technical advisory services via experts and consultants; financing the local or overseas training of selected personnel (including workshops); and supplying the necessary equipment. Institutional twinning arrangements are an important instrument for building capacity which is yet to be fully

exploited by the GEF. This kind of classification may be useful in determining such important questions as the net financial implications of capacity building technical assistance for recipient countries, or the distribution of consultancy assignments between local and foreign experts. However, it does not permit an easy linking of capacity building activities with the overall objectives of the GEF, or within the requirements of the conventions.

### **Classification by target of intervention**

GEF projects may also be classified by the individual or collective entity which receives assistance. GEF capacity building projects have focused on strengthening institutions (in the structural and sociological senses, as described in chapter 1). Projects have been initiated to strengthen specific organizations, modify the social and political environments in which organizations function, and introduce new technology and know-how via selected organizations for broader diffusion. The main targets of GEF assistance have been government departments, parastatals, research/academic institutions, NGOs, grassroots organizations, and local communities. The private sector is another target of capacity building which may be expected to become important in GEF1. At this point, however, its relationship to GEF operations is still evolving. The choice of targets of capacity building is an important determinant of its effectiveness. Capacity building initiatives involving government alone, for example, may be limited in

their outreach and benefits for an entire society. Moreover, some types of activities, such as generating public awareness, may work best through non-governmental channels. Classification by targets appears to be more robust than classification by inputs. It permits an immediate analytical link between GEF expenditures and the object of these expenditures. However, it has the limitation, as in the earlier approach, of not permitting the easy linkage of operational activities to GEF objectives or convention expectations.

### **Classification by objective of intervention**

GEF projects have supported applied research on specific problems, the development of environmental strategies and policies, and demonstration projects to highlight new possibilities. Social interaction and dialogue have also been facilitated, with civil society organizations and the academic community playing an important role in numerous projects. Typically, however, the business sector has not yet become actively involved. Many projects have supported public outreach and fostered new modes of intra-governmental cooperation. Training has been an important and integral part of all these forms of capacity building, although assisting institutions with developing their own training programs has played a central role in only a few GEF projects. A close scrutiny of the GEF Pilot Phase portfolio shows that, while GEF projects have typically been multi-objective endeavors, eight major *types* of projects may be identified on the basis of their main objective. Depending on the context, certain expected outcomes which could ordinarily be primary objectives, enter a project to facilitate the attainment of another objective. For instance, better intra-governmental coordination on environmental matters is a worthwhile goal for the GEF. But it could also be seen as a necessary, but not sufficient, instrument toward the effective design and implementation of an environmental strategy.

The eight major objectives identified are:

- Design and implementation of environmentally-sensitive macroeconomic policy and programs
- Development of environmental strategies, policies, and plans of action

- Establishment or enhancement of specific environmental management capabilities
- Promotion of scientific and socioeconomic research
- Modification and adaptation of legal and normative frameworks
- Facilitation of dialogue and consensus building within government and among different interest groups
- Promoting the transfer of environmentally-sound technology
- Promoting outreach and enhancing public awareness about global environmental issues.

While these objectives are interlinked (for example, environmental strategy and policy development can facilitate intra-governmental cooperation), the categories are sufficiently exclusive to allow for the systematic analysis of projects in the GEF portfolio.

These objectives, which are not presented in any hierarchical order, are to be interpreted generically. They are not necessarily the objectives of any particular project. Rather, they represent a heuristic classification of the actual objectives identified in GEF capacity building projects. As generic groups, this typology is independent of focal area, although the specific content within each type would differ by focal area. For example, “development of environmental strategies, policies, and plans of action” would include formulating a biodiversity action plan or an energy sector plan. Similarly, “establishment or enhancement of specific environmental management capabilities” would include establishing a protected area management system, strengthening the Department of Wildlife Conservation or the Planning Division of the Ministry of Energy, or undertaking a community-based rangeland rehabilitation program for carbon sequestration.

In abbreviated form, the eight objectives derived above can be expressed as:

- Macroeconomic strategy
- Environmental strategy and policy
- Environmental management capacity
- Scientific and socioeconomic research
- Normative and legal frameworks

- Consensus building
- Technology transfer
- Public outreach.

These objectives may be cross-classified with convention desiderata to show the main kinds of capacity building interventions which would address global environmental concerns. In tables 3.1 and

**Table 3.1 Biodiversity convention desiderata and objectives of GEF capacity building interventions**

Convention desiderata										
<i>Objectives of GEF capacity building interventions</i>		Nat'l plans/strat.	Identifica-tion/monitoring	Conserve/restore in situ	Conserve ex situ	Research	Sc. and tech. training	Public educ.	Int'l sc. coop./info. exchange	Impact assess-ment Bio-tech.
Macroec. strat.	x	x	x					x	x	x
Env. strat.	x	x	x	x	x	x	x	x	x	x
Env. mgmt. capacity			x	x		x				
Research	x	x	x	x	x	x			x	x
Normative								x	x	
framework	x	x	x	x				x	x	
Consensus										
building	x	x	x	x	x	x	x	x	x	x
Tech. transfer		x	x	x	x	x	x	x	x	x
Public educ.	x	x	x	x			x		x	

**Table 3.2 Climate change convention desiderata and objectives of GEF capacity building interventions**

Convention desiderata									
<i>Objectives of GEF capacity building interventions</i>		Develop inventories	Mitigation programs	Appropriate tech. and practices	Manage GHG sinks	Plan for adaptation	Integrate cl. ch. into policy	Research/ data banks	Information exchange Public awareness
Macro strat.	x	x		x	x	x	x	x	x
Env. strat.	x	x	x	x	x	x	x	x	x
Env. mgmt. capacity	x	x	x	x	x	x	x	x	x
Research	x	x	x	x	x				
Normative framework		x		x			x		x
Consensus									
building		x		x			x		x
Tech. transfer	x	x	x	x	x	x		x	
Public educ.	x	x	x	x				x	

3.2 these objectives are listed down the rows, while the requirements of the conventions are listed across the columns. The tables present a first cross-tabulation for the biodiversity and climate change conventions respectively.

The tables may be interpreted as follows: consider, for instance, Article 6 of the biodiversity convention, which is concerned with developing national strategies and integrating conservation into plans, programs and policies. This objective forms the heading of the first column under

“Convention desiderata” in table 3.1. The “x” under this column indicates that capacity building interventions which incorporate the objective shown on the left (macroeconomic strategy) could contribute to achieving the convention’s aim of integrating biodiversity into national plans and strategies. This could happen directly or indirectly. For instance, an intervention with the main objective of developing an environmental strategy fits directly, while an intervention to support research could help indirectly by providing the necessary information.

## 4 The Capacity Building Requirements Table (CART)

We develop here the idea of a Capacity Building Requirements Table (CART) which could have some potential as an operational tool in programming capacity building efforts. A CART serves to focus attention in project design and implementation on the multi-dimensional nature of capacity building. Multi-dimensionality is implicit in the notion that capacity building embraces the narrow and broad definitions of institutional development. For its results to be sustained, a capacity building initiative must be grounded within a multi-dimensional strategic focus.

Operationally, capacity building may be oriented toward a specific organization or toward the broader legislative and normative framework of a country. However, a narrowly focused initiative, such as restructuring the Ministry of Finance, must assess and address the ministry's "enabling environment." Similarly, any efforts to sustainably reform a country's legal framework in order to allocate property rights in land would also need to deal with the ability of the courts to protect property and enforce contracts.<sup>20</sup>

CART is a simple matrix which cross-tabulates the primary objectives of GEF capacity building interventions against the major dimensions of capacity building. To construct this matrix, it is again neces-

sary to list, as row headings, the primary objectives derived in the previous chapter from the classification based on the objectives of an intervention.

The column headings list four critical dimensions of capacity building which should be explicitly incorporated into project design and implementation. Other dimensions could be added, but these four should suffice to provide a fairly rigorous and pragmatic programming tool:<sup>21</sup>

- *Human resources.* This would include technical, administrative, professional, and management skills as well as support skills, and a general orientation to new ways of delivering a product or service. Education and training, which are often major components of capacity building projects, are obviously a part of this dimension. For greater effectiveness, however, the human resources dimension should be defined to include an analysis (and adaptation, if necessary) of the reward and incentive system to ensure that personnel is appropriately motivated.
- *Organizational process.* This refers to systems management capabilities, and internal organizational procedures and processes, including the assignment of accountability. It also covers the processes through which the entity deals with, and grants the public access to, its services.

<sup>20</sup> As the World Bank Operations Evaluation Department puts it, "The norms and rules of behavior [institutions] embody cannot be sustained without a network of organizations that promote, codify, enforce and defend them" (World Bank 1993b).

<sup>21</sup> This typology has benefitted from the ongoing UNDP/HIID research (Cohen 1993), the World Bank's *Handbook on Technical Assistance* (World Bank 1993a), and Esman (1990).

- *Physical resources.* This dimension addresses the direct material aspects of capacity building, including the budgetary and financial ability of an organization to deliver on its objectives. Capacity building efforts would address not only the initial capital outlay but also the operation and maintenance requirements.<sup>22</sup>
- *External support.* This involves eliciting the support and commitment of significant outside individuals and groups for the goals of an institution. Any capacity building intervention should consider the social forces which may be conducive or hostile to the long-term survival of the enterprise. In this way, it is possible to build into project design and implementation mechanisms to seize opportunities and neutralize threats.

In developing a capacity building initiative, the main stakeholders would work together to identify all the possible organizations and entities which could be targets for strengthening in order to attain specified immediate goals. From the list of all possible targets, the vital ones would be highlighted and their needs under each dimension of capacity building would be assessed. Various levels of aggregation are possible. At the most disaggregated, each row could represent the objective of a specific project. At a higher level of aggregation, the row could represent a summing-up of the objectives of all projects required to fully attain the stated primary objective. The actual character of the CART would depend on the specific circumstances of the intervention.

In the World Bank's *Handbook on Technical Assistance* (World Bank 1993a) and in Cohen's analysis (1993), these dimensions are thought of mainly as sources of organizational vigor. Here, a slightly different interpretation is called for: the targets of

capacity building interventions need not be organizations in the formal sense. They could range from a government department (a formal organizational entity) to a local community (only loosely an organization). Let us consider a case of the latter, since community participation is becoming a vital aspect of GEF interventions. In a project aimed at developing community-based rangeland rehabilitation (under the primary objective of "establishment of specific environmental management capabilities"), neighboring communities would form an immediate focus of project activities.<sup>23</sup> Whether or not a formal or recognized community organization exists, it would be useful to categorize activities in terms of the various dimensions of capacity relevant to organizing and training community members and ensuring their long-term commitment and ability to sustain the project's results.

A basic CART is shown in table 4.1 with eight rows and four columns. Reading down a column, each row focuses on one of the primary objectives which may be tracked across the various dimensions of capacity building. This approach is useful in project design to ensure that all ramifications are taken into account. It may not always be necessary to address every cell, but it is important to be aware of the rationale for any gaps. Gaps may exist in a particular case because there is no obvious connection or because the link is considered too weak to merit further attention. In any case, all assumptions need to be made explicit.

Reading along any row, each column highlights one critical dimension of a whole program. Although the elements would need to be more rigorously specified case by case and by theme, it would become possible, in program design, to consider the total requirements and, under certain condi-

<sup>22</sup> The physical dimension is not merely a question of money, but of the plans, materials, and equipment required to provide a service. It should also be stressed that no expectation of direct budgetary support is implicit in this category. The concern is with ensuring that an entity has the capacity to effectively address these critical issues.

<sup>23</sup> There may be some confusion in this example about whether the primary objective is rangeland rehabilitation or the enhancement of management capacities. The conventions do not specifically call for the rehabilitation of rangelands. But in recognizing the importance of developing environmental management capacities, they accommodate a rehabilitation activity that enhances indigenous skills. However, rangeland rehabilitation is not necessarily a capacity building exercise (the rehabilitation could be achieved by contracting the services of an outside firm). It is the inculcation of the skills for such rehabilitation that constitutes capacity building. An approach that depends on the full involvement of the affected communities in designing and implementing the rehabilitation would be a capacity building effort. If the four dimensions of capacity building are fully addressed by this project, the results should be sustainable and replicable elsewhere with less support from the GEF.

tions, the total cost of achieving the intended objective, such as developing the necessary human capacity. In an ideal situation a program, such as a national biodiversity conservation program, could be summarized in the form of this matrix.

Each column would then show the full requirements under one of the four critical dimensions. Starting with a complete picture of requirements, it would become easier to prioritize by juxtaposing these requirements against budget constraints. Having the entire picture would also help in determining the best entry point or, at least, the line of least resistance.

The CART could prove useful as a budgetary guide and as a reliable project/program development and monitoring instrument. As a monitoring tool, the table could focus attention on the major elements of a project or program, allowing weak links and bottlenecks to be more easily located, and corrective action taken. By the same token, the matrix could be of some use as an evaluation instrument. The cross-mapping of objectives with the different dimensions of capacity building would allow an evaluator to easily identify poor performance points.

The analysis in this section illustrates how capacity building interventions require the simultaneous consideration of at least three sets of variables: inputs, targets and process elements. Each of these variables is, in turn, affected by the other dimensions of capacity building. For example, a project

which seeks to develop an environmental strategy must specify all the proximate objectives, assess all possible targets, specify the critical processes in these targets, and determine the various inputs. Since GEF projects typically comprise more than one type of capacity building objective, the many interactions among relevant variables highlight the need to tailor interventions to specific situations and plan for the multiple leveraging effects of capacity building projects. (In the appendix, we apply the idea of CART to a typical GEF Pilot Phase project.)

The matrix developed in this section is intended to clarify the many ways in which the GEF can fulfil its capacity building functions. It highlights the interplay of various factors in the design, monitoring, and evaluation of capacity building initiatives. The matrix is a tool and does not in itself prioritize institutions deserving support or projects to be undertaken. Neither can it indicate the amount of GEF funds that should be committed, as this will depend on incremental cost estimates. However, it does suggest a way to determine the types of interventions most appropriate to specific national circumstances. With some creativity, it could prove useful as a starting point in prioritizing GEF interventions, and as an input in the dialogue on costs and funding. The preliminary nature of this instrument should be underscored. With experience, it may be found necessary to disaggregate each cluster of objectives, although the need to keep the tool simple should be continuously borne in mind.

**Table 4.1 A Capacity Building Requirements Table**

<i>Objectives of GEF capacity building interventions</i>	<i>Dimensions of capacity</i>			
	<i>Human resources</i>	<i>Organizational process</i>	<i>Physical resources</i>	<i>Support generation</i>
Macroeconomic strategy				
Environmental strategy and policy				
Environmental management capacity				
Scientific and socioeconomic research				
Legal and normative framework				
Consensus building				
Technology transfer				
Public outreach				

## 5 Conclusion

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This paper has distilled some important capacity building implications from the texts of the CBD and the FCCC, and from STAP's analytical framework, and developed a typology for GEF capacity building. It has also introduced the notion of a Capacity Building Requirements Table as a method of collating and analyzing information in the design, monitoring, and implementation of capacity building operations. It is hoped that some groundwork has been laid for the further elaboration of policies, priorities, and requirements for capacity building projects for GEF1. The CART may be of particular value in view of the determination of GEF's three implementing agencies to ensure that the Facility's projects are fundamentally demand-driven. It could also prove useful as a project management tool by providing a framework for assessing the capacity of developing countries, and relating GEF and convention objectives directly to critical capacity-process elements. In any event, it should have some utility as a pedagogical instrument in the expected wide-ranging dialogue among GEF project managers, implementing agency field offices, governments and other stakeholders.

Further work clearly remains to be done. Capacity building projects are particularly demanding, involving a complex interplay of sociocultural, political, economic and technical considerations. The GEF would need to support further work in better specifying the "what" and "how" of capacity building. Intensive dialogue on the substance of

capacity building for the global environment is required between the GEF Council, the GEF Secretariat, STAP, the implementing agencies, the GEF member country Participants, the policy organs of the two conventions, and the major social groups as defined in *Agenda 21*. The purpose of the dialogue would be to go beyond the general issues discussed in this paper to specifying appropriate interventions, given the GEF context of competing ends and limited means. The issue of GEF's interface with the whole range of desirable institutional and human capacities for sustainable development is critical.

On process, GEF is perhaps uniquely placed to explore new forms of partnerships, and experiment with new vehicles for capacity building. For instance, in a world where transnational corporations play a fundamental economic role, it may be useful for the GEF to understand private sector successes and failures in enhancing capacity in developing countries, and apply such lessons toward its own objectives. Similarly, GEF's capacity building efforts can seek to take maximum advantage of recent advances in computer-mediated technology. The characteristics of the new informatics technology—compact size, high capability, and low-cost storage—offer great promise in access to information to support policy analysis, research and investment decision-making. GEF can be a leader in seeking cost-effective ways of expanding the arsenal of capacity building instruments.

## **Appendix**

### **An Illustrative Capacity Building Requirements Table**

#### **Conservation Training and Biodiversity Action Plan—Viet Nam**

This US\$3 million project, implemented by UNDP, was approved during the first tranche of GEF's Pilot Phase. It aims to strengthen the capacity of the Government of Viet Nam to implement national and local programs to protect areas of high biodiversity. The project builds on previous planning documents to produce a focused Biodiversity Action Plan (BAP) that outlines the specific actions, timeframes, and budgets necessary to preserve Viet Nam's biodiversity and protect its remaining natural forests. The BAP combines a system of protected areas, community buffer zones, ex situ conservation measures, and the sustainable utilization of natural living resources outside of the protected areas.

The project expedites implementation of the BAP programs by providing training in up-to-date biodiversity conservation methods and techniques for provincial officials, protected area managers, community leaders from adjoining communes and villages, local forest guards, district forestry technicians and central government staff. Field training has been designed for in-country delivery at three national park locations in the northern, central and southern regions of the country. In addition, the

project will support overseas training fellowships and protected area and forest management study tours to model programs in South and Southeast Asia.

The emphasis of the project is on developing human capacity and inter-institutional relationships to create macro-level policy, as well as complementary action and capacity in the field. It has a relatively tight focus on conserving biological diversity through protected areas. Broader goals also exist, though, and will be achieved through a combination of project activities (BAP and protection of the three sample areas) with in-country follow-up of this initiative. These goals include replication of the protected areas initiative and enhancement of Viet Nam's capacity to undertake its own initiatives in biodiversity conservation.

The following table presents the CART spreadsheet for this project to highlight the critical capacity building dimensions corresponding to the project's objectives. This initiative is one of the more straightforward in the Pilot Phase portfolio, and CARTs for other projects may be significantly more complex. For heuristic reasons, certain issues which are only implicit in the original project document have been made explicit.

**Table A.1 CART for Conservation Training and Biodiversity Action Plan—  
Viet Nam (Summary of table A.2)**

<i>Dimensions of capacity</i>				
<i>Objectives of capacity building</i>	<i>Human resources</i>	<i>Organizational process</i>	<i>Physical resources</i>	<i>Support generation</i>
Macroeconomic strategy	—	—	—	—
Environmental strategy and policy	How to develop BAP	Coordination to formulate BAP	Funds for BAP formulation	Obtain support of State Planning Committee and Council of Ministers
Environmental management capacity	How to manage protected areas	Coordinate area management with policy guidance and economic activities	Catalogue of costs of actions needed for enhanced area management	Coordinate area management with BAP
Scientific and socioeconomic research	How to conduct field surveys	Build on previous work by other institutions	Funds for research	—
Legal and normative framework	—	—	—	—
Consensus building	How to process information and ideas from other ministries and research institutes	Review and modification of organizational interaction procedures	—	—
Technology transfer	How to use a geographic information system (GIS)	—	Funds for installation of GIS	—
Public outreach	Uses and techniques of public outreach	—	Funds for public outreach	—

**Table A.2 CART for Conservation Training and Biodiversity Action Plan—Viet Nam**

<i>Dimensions of capacity</i>				
<i>Objectives of capacity building</i>	<i>Human resources</i>	<i>Organizational process</i>	<i>Physical resources</i>	<i>Support generation</i>
<b>Env. strategy and policy</b> Formulation of a Biodiversity Action Plan to set strategy for biodiversity conservation through establishment and management of protected areas, ex situ conservation, and other means. The BAP will also outline costed actions in a specific timeframe that will achieve these goals	Activity—training in how to develop BAP <b>Min. of Science, Tech. &amp; the Env. (MOSTE)</b> Needs—understanding of research; interplay of social, economic and environmental goals; means of preparing BAP; how to outline related costed actions Feedback from activity—understanding of strategy facilitates its application at project level, training with MOF staff develops relations <b>Ministry of Forestry (MOF)</b> Needs—understanding of research; interplay of social, economic and environmental goals; means of preparing BAP; how to outline related costed actions Feedback from activity—understanding of strategy facilitates its application at project level, training with MOSTE staff develops relations	Activity—enhance coordination among MOF, MOSTE, and others <b>MOSTE</b> Needs—review of procedures for organizational interaction, establishment of institutional mechanisms for interaction and collective decision-making Feedback from activity—cooperation on BAP facilitates cooperation on environmental management, future research and public outreach <b>MOF</b> Needs—review of procedures for organizational interaction, establishment of institutional mechanisms for interaction and collective decision-making Feedback from activity—cooperation on BAP facilitates cooperation on environmental management, future research and public outreach	Activity—provide funds for planning process and other elements of BAP formulation <b>MOSTE</b> Needs—funds for undertaking BAP formulation Feedback from activity—BAP provides framework for action on wide variety of biodiversity issues <b>MOF</b> Needs—funds for undertaking BAP formulation Feedback from activity—BAP provides framework for action on wide variety of biodiversity issues	Activity—obtain support of State Planning Committee and Council of Ministers <b>MOSTE</b> Needs—put BAP in overall national development framework, enhance means of working-level coordination with these bodies Feedback from activity—support and relationships built toward meeting biodiversity goals can facilitate meeting other environmental objectives in manner consistent with economic development <b>MOF</b> Needs—put BAP in overall national development framework, enhance means of working-level coordination with these bodies Feedback from activity—support and relationships built toward meeting biodiversity goals can facilitate meeting other forestry objectives in manner consistent with economic development

(continued on the next page)

**Table A.2 (continued)**

<i><b>Objectives of capacity building</b></i>	<i><b>Dimensions of capacity</b></i>			
	<i><b>Human resources</b></i>	<i><b>Organizational process</b></i>	<i><b>Physical resources</b></i>	<i><b>Support generation</b></i>
<b>Env. management capacity</b> Management of three sample protected areas in northern, central and southern areas of country in improved manner consistent with BAP	Activity—training through in-country seminars and overseas study tours and fellowships for Ministry of Forestry (MOF)  Needs—management of three protected areas in various regions of country, training in protected area management  Feedback from activity—multiplier effect passing on knowledge within MOF, State Committee for Science, other environmental institutes, and villagers and local officials living and working in and around forest reserve areas	Activity—coordinate management with policy guidance and economic activities  <b>MOF</b>  Needs—improved district-level linkages with MOF policy staff and district-level officials of other ministries, such as agricultural extensionists  Feedback from activity—improved execution of other forestry projects	Activity—catalogue actions needed for enhanced management of sample areas, and their costs  <b>MOF</b>  Needs—catalogue of costs and actions needed in managing sample areas beyond project duration  Feedback from activity—catalogue can serve as model for similar efforts in other protected areas	Activity—coordinate area management with BAP  <b>MOF</b>  Needs—improved linkages between district-level staff, MOF policy-makers, and MOSTE  Feedback from activity—coordination in sample areas can be extended to other parts of protected area network
<b>Scientific and socio-economic research</b> Field surveys of country for BAP and detailed analysis of three sample areas with regard to biodiversity and human interaction with ecosystems	Activity—training to conduct surveys  <b>MOSTE</b>  Needs—improved understanding of survey techniques, human/ ecosystem interaction, role of forestry practices in biodiversity conservation  <b>MOF</b>  Needs—improved understanding of survey techniques, human/ ecosystem interaction, role of environmental concerns in forestry  Feedback from activity enhanced future surveys of nation and particular protected areas	Activity—build on work by Institute for Ecology and Bio. Research, the Nha Trang Marine Institute, and several regional inst. in the south  <b>MOSTE</b>  Needs—linkages with these institutions, means to educate staff about this work  Feedback from activity—improved interaction on other initiatives  <b>MOF</b>  Needs—linkages with these institutions, means to educate staff about this work  Feedback from activity—improved interaction on other initiatives	Activity—provide funds for research  <b>MOSTE</b>  Needs—funds for research  Feedback from activity—research can inform future initiatives  <b>MOF</b>  Needs—funds for research  Feedback from activity—research can inform future initiatives	

**Legal and normative framework**

**Consensus building**

Consensus on BAP and action on sample protected areas will facilitate BAP implementation and replication of protected areas initiative

Activity—training to process information and ideas from other ministries and research institutes  
**MOSTE**

Needs—understanding of other ministries' structures and mandates

Feedback from activity—improved coordination on other projects  
**MOF**

Needs—understanding of other ministries' structures and mandates

Feedback from activity—improved coordination on other projects

Activity—review of organizational interaction procedures and suggested revisions  
**MOSTE**

Needs—improved means of interacting with ministries and research institutes  
Feedback from activity—

understanding of how such interactions might be improved in other projects  
**MOF**

Needs—improved means of interacting with ministries and research institutes  
Feedback from activity—

understanding of how such interaction might be improved in other projects

**Tech. transfer**

Installment of GIS at MOF

Activity—training in how to use GIS  
**MOF**

Needs—what is a GIS, how does it work with sample areas, how to use in other areas, how to turn information provided into recommendations  
Feedback from activity—use of

Activity—installation of GIS  
**MOF**  
Needs—GIS equipment  
Feedback from activity—use of GIS in other contexts

(continued on the next page)

**Table A.2 (continued)**

<i>Objectives of capacity building</i>	<i>Dimensions of capacity</i>			
	<i>Human resources</i>	<i>Organizational process</i>	<i>Physical resources</i>	<i>Support generation</i>
Obtain input into and build understanding and support for BAP and protected areas initiative	GIS in other protected areas Activity—training about public outreach uses and techniques <b>MOF</b> Needs—how to assess need for public outreach, how to undertake public outreach, how to coordinate public outreach with other institutions Feedback from activity—improved use of public outreach in other contexts		Activity—provide funds for public outreach <b>MOF</b> Needs—funds for public outreach Feedback from activity—public outreach may build support for biodiversity objectives outside of BAP rubric and may facilitate replication of protected areas initiative	

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