# Appendix 1

### I. Medium-Term Strategic Framework

The Asian Development Bank (ADB) is a multilateral development financing organization that is committed to sustainable development in the Asian and Pacific region. The past agenda for the ADB focused primarily on economic growth. In the late 1980s a high-level external panel recommended a strategic agenda for the 1990s and produced a report entitled *The Asian Development Bank in the 1990s.* The report called for a need to balance ADB's focus on the economic growth of its DMCs through added support for: (i) social infrastructure development, (ii) improvement of the living standards of the poorest people, (iii) protection of the environment, and (iv) a reorientation of the public sector to meet these new priorities. These recommendations led to ADB's first Medium-Term Strategic Framework (MTSF 1992-1995).

ADB's emerging development agenda, reflected in the MTSF. Its crosscutting concerns are poverty reduction, women in development, population planning, and environmental protection with economic growth as a necessary concern. The MTSF was initially introduced in December 1992 and over time it has evolved in the following directions:

- 50 percent of the total number of ADB projects should have social and environmental objectives in the near future,
- 40 percent of the total ADB lending volume should have social and environmental objectives by 1998,

- projects should strengthen the ADB and its developing member countries' (DMCs') capacity to deal with social and environmental issues,
- enhanced sector and subsector strategies for institution building, and
- more in-depth sector and subsector analysis.

### ADB's Achievements in Environmental Improvement

*Environmental Lending as a Percentage of Total ADB Lending and Environmental Technical Assistance (TA) Program* 

Year	Environmental Lending (\$ million) (A)	Total ADB Lending (\$ million) (B)	Percentage (A/B)	Total TA Amount (\$'000)
1985	61.4	1,808.00	3.40%	885
1990	40.0	3,893.00	1.03%	7,852
1991	817.5	4,983.73	16.40%	11,924
<i>1992</i>	604.6	5,109.39	<i>11.83%</i>	13,626
1993	1428.8	5,281.33	27.05%	17,350
1994	461.2	3,686.51	12.51%	25,759
1995	631.0	5,504.39	11.46%	15,047
1996	819.8	5,489.00	15.00%	29,317
1997	562.8	5,100.00	11.00%	23,603
1998	842.2	5,846.40	14.41%	23,967

Investment in Projects with Primary and Secondary Environmental Objectives: 1991- 97 (\$ million)

Year	Primary	Secondary
1991	125.0	692.5
<i>1992</i>	268.9	335.1
1993	159.3	1,269.5
1994	157.0	304.2
1995	376.0	255.0
1996	604.8	260.0
1997	380.8	182.0
1998	445.0	397.2

The MTSF of 1995-1998 reiterates the above objectives and has further refined the earlier approach to population planning to the broader concept of human development. Human development is not limited to population planning but addresses the basic issues of primary health, education, water and sanitation, and housing. Compliance with the conditions stipulated in the MTSF will result in 50 percent of the ADB-funded projects having social and/or environmental objectives by the year 2000. Details regarding ADB's achievements in this area are shown in the box below.

Facing the challenge of promoting environmental strategic objectives of the ADB has not been an easy task. Although there has been a dramatic increase in environmental investments from 3.4 percent in 1995 to 14 percent in 1998, continuing such levels of investment requires greater attention at every stage of the Project cycle. One way to increase environmental investments is to examine all vertical and horizontal linkages of projects at the earliest stage possible. For example, in an irrigation project, one should not only look at irrigated agriculture, but also upstream watershed protection, afforestation, soil conservation, downstream drainage, salinity, possible hydropower generation, waterborne disease control, and fish production as possible project components.

ADB's efforts in TA grants have also increased from a mere \$0.89 million in 1985 to \$24 million in 1998. Most of these TA grants were for institutional strengthening and capacity building in environmental management of DMCs. As a result, the environmental impact assessment process has become central in the environmental operations of all DMCs. Many DMCs have developed their environmental programs such as the National Agenda 21. ADB's TA No. 5669-REG: Capacity Building in Environmental Economics, is assisting six DMCs in strengthening environmental economics activities. ADB's emerging role in environmental economics is also moving towards strengthening environmental policy reform analysis and institution building. TA No. 2591-PRC and TA No. 3013-THA: Promotion of MBIs for Environmental Management are good examples that demonstrate this positive shift. To operationalize the MTSF—and to achieve its underlying objectives—ADB introduced several innovative steps on its overall operations. One of the modifications is a new project-classification system. The following principles govern the project-classification system of the ADB:

- 1. All public-sector projects are covered.
- 2. A project should be classified on the basis of its components, including those financed by organizations other than ADB. In other words, project classification uses information beyond the boundaries of project economic analysis.
- 3. Projects are assigned a maximum of two objectives, one primary and one secondary. However, the secondary objective is optional.
- 4. Social and environmental objectives might be claimed only if projects are designed specifically to address human development, poverty, the status of women, or environmental improvement.

The new classification system enables ADB to assess whether the combination of pipeline projects is in line with ADB's development agenda (MTSF) and the priorities of its DMCs. It further allows ADB to make appropriate adjustments, if necessary, such that the objectives of the MTSF are achieved as expected.

ADB-funded projects are classified as integral parts of the country programming and processing cycle. The classification process starts at the project identification stage and ends at the project approval decision by the Board of Directors. The Projects Departments are responsible for classifying both the current year and pipeline projects. The Office of Environment and Social Development (OESD) is responsible for advising the Projects Departments concerning the classification of projects pertaining to social and environmental concerns. The following table presents the summary of the project classification criteria for environmental objectives of ADB. Similar criteria have been developed for classifying projects to claim other objectives such as poverty reduction and human development. Economic growth is a primary objective, while other concerns can supplement as primary or secondary objectives. If for some reason the cost criteria (50 percent for primary and 20 percent for secondary) are not met, yet the project produces substantial benefits, objectives can still be claimed provided that there is a strong justification. Therefore, there are provisions to classify project objectives both by considering investment (project cost), and benefits of the project.

> Criteria for the Promotion of Sound Management of Natural Resources and the Environment

Primary Objective—Environment

A project will be classified in this category IF its PRIMARY aim is to promote sound management of natural resources and the environment THROUGH ONE OR MORE OF THE FOLLOWING

- protection or improvement of the local, regional and/or global environment;
- conservation of or increasing the net stock of natural resources (excluding minerals);
- strengthening of environmental policies and institutions, and promotion of environmental education;

#### AND IF

 one or more components for sound management of natural resources and/or the environment account for more than 50 percent of the total project costs.

This category is for specific environment projects. It excludes the mitigation of incremental adverse effects since this is mandatory for all ADB-financed projects. All project components should have acceptable residual impacts on the environment. Secondary Objective—Environment

A project will be classified in this category IF a SECONDARY objective of the project is to promote sound management of natural resources and the environment THROUGH ONE OR MORE OF THE FOLLOWING

- protection or improvement of the local, regional and/or global environment;
- conservation of or increasing the net stock of natural resources (excluding minerals);
- strengthening of environmental policies and institutions, and promotion of environmental education;

#### AND IF

• one or more components for sound management of natural resources and/or the environment account for at least 20 percent of total project costs.

This category is for projects that incorporate secondary features to address environmental concerns. It excludes the mitigation of incremental adverse effects since this is mandatory for all ADB-financed projects. All project components should have acceptable residual impacts on the environment. The DMC, rather than ADB, remain primarily accountable for the achievement of these objectives. ADB is accountable for the delivery and quality of the programs and projects of support that it will develop and implement in collaboration with each borrowing DMC. This support should be seen as a continuing process over an extended period of time, rather than simply a specific project or program. There is, of course, a need to take longer-term perspectives to ensure the integration and continuity of ADB's work programs.

In summary, it is clear that ADB is undergoing important changes in the way it works with DMCs to foster economic development and environmental protection. A number of new initiatives have been implemented, while some are still being developed. These new approaches call for a longerterm perspective for policy reforms and also a new modality for sectordevelopment programs which include sector investment and fast disbursement for reform-based components. Technical Assistance operations are also being revised to capture better development impacts. ADB's role is evolving from that of a development institution for resource transfer, to a broad-based development institution that focuses on policy reforms, capacity building and institutional strengthening in tandem with DMC governments, the private sector and nongovernment organizations. In this process, environmental protection and natural resource management have been identified as one of the prime areas where the ADB wishes to play a critical role. In this regard, environmental economics has a lot to offer.

### II. Economic Analysis and Environmental Impacts

Traditionally, the Environmental Assessment  $(EA)^1$  was meant to be an independent report related to the environmental impacts of a development project; it usually had very few links with the economic analysis of proposed projects. Recently, there have been a number of discussions on how to measure the economic dimensions of environmental impacts. This section focuses on the emerging role of economic evaluation of environmental impacts in the process that starts with project identification and

<sup>&</sup>lt;sup>1</sup> Includes the preparation of an Initial Environmental Examination and/or an Environmental Impact Assessment.

ends in project implementation. Specifically, the concern here is to incorporate such information into a more complete assessment of development programs and projects.

The economic analysis of development projects has had a relatively long history. For most of this history, the environmental impacts of development projects were deemed external (and thus immaterial) to such projects and were therefore excluded from the analysis and economic assessment. When the environmental implications of projects became too important to ignore, they began to be described in qualitative terms, or they were quantified in some way (e.g., tonnage of air emissions, hectares of wildlife habitat destroyed by a highway, hectares of wetlands inundated by a reservoir).

Since the mid-1980s there has been a growing interest in assigning monetary values to environmental impacts and incorporating them into the economic evaluation of projects. In this regard, ADB's publication *Economic Analysis of Environmental Impacts of Development Projects* (1987) can be considered a step in that direction. The analysis and methods described in this book, however, have not been widely applied to development projects. In March 1996, ADB published the *Economic Evaluation of Environmental Impacts: A Workbook* as a follow-up to the 1987 work, which provides step-by-step procedures for carrying out the environmental evaluation of ADB projects. A more recent ADB publication, *Guidelines for the Economic Analysis of Projects* (March 1997), documents how the economic evaluation of environmental impacts can be integrated into project economic analysis.

The revised guidelines constitute an integrated approach to enhance project quality during the early stages of project processing. It emphasizes the need to include an assessment of the sustainability of project efforts to ensure: (i) that the project provide sufficient incentives for producers, (ii) that sufficient funds are available for project maintenance and operation, (iii) the least cost means of providing project benefits, (iv) consistency between project objectives and distribution of benefits/costs, and (v) incorporation or internalization of environmental impacts in project-economic analysis. Although project-economic analysis work has been considerably strengthened, it is important to note at this point that it is not a perfect

#### Economic Analysis of Projects as a Decision Tool

The standard method of measuring project benefits in the economic analysis of projects does not only involve the calculation of economic internal rate of return (EIRR) and net present value (NPV). There is an increasing trend to incorporate sustainability analysis, distributional impact assessment, economic evaluation of environmental impacts of development projects, and poverty impact analysis as well. If the economic benefits and costs are properly identified, economic analysis is one of the best tool that can by used by project planners for decision making.

However, despite continued efforts to improve the approach, it is not without its weaknesses. For one, economic analysis of projects cannot be applied to all projects. Projects such as primary education for hilly tribes, basic health provision to poor rural communities, or protection of critical areas or endangered species, may not provide sufficiently justifiable EIRRs or NPVs because of the difficulties in assessing the monetary values of economic benefits. Even though qualitative analysis can be used to supplement economic analysis, the use of monetized values is necessary for the proper appreciation of projectlevel economic analysis.

Another weakness lies in the difficulties associated with monitoring project impacts. Project benefits and costs are projected over the lifetime of the project. However, expected values are very difficult to verify or monitor during the project's implementation. This is even more controversial when project costs (e.g., changes in watershed yield, spread of tropical diseases like malaria) are incurred long after construction is completed.

One of the more serious weaknesses of economic analysis of projects is that although it is based on economic welfare, significant amounts of environmental and social impacts may not be captured in the quantification of welfare. This is in spite of recent developments in valuation methods, upon which the cases in this book are primarily based on. For example, the use of willingness-to-pay or contingent valuation approach may pose difficulties in placing monetary values for traditionally nonmarketable items or for items that rural or remote communities do not classify as marketable goods and services. Therefore, sufficient care is needed to bring qualitative information on costs and benefits of environmental impacts that cannot be expressed in monetary terms, to supplement economic indicators such as EIRR or NPV generated by the economic analysis of projects. methodology. The box expounds on several weaknesses of project-economic analysis.

Although increasing, it has not been very long since environmental considerations were brought into project design and analysis. ADB's role is evolving. With the vision of an Asian and Pacific region free of poverty, the reduction of poverty is now ADB's overarching goal. Hence its strategic objective of sound environmental management will be pursued in ways that contribute most effectively to poverty reduction. Environmental economic analysis can help in this evolution, promoting sound environmental management with social considerations. In other words, prudent environmental economic analysis can pave the way towards accounting for, and thereby assuring poverty reduction impacts of development projects.

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