



AEO 2001

APPENDIXES



ABSTRACTS OF BACKGROUND PAPERS

ECONOMIC

TITLE: *POLICY INTEGRATION – ENVIRONMENT AND DEVELOPMENT IN ASIA**

AUTHORS: DAVID P. ANGEL AND MICHAEL T. ROCK

For the twin goals of environmental improvement and poverty reduction to be met within developing Asia there is a need for greater pro-active management of the economy-environment interface than occurs under existing policy approaches. Many observers are now calling for policy integration – for the internalization of environmental concerns within core economic development strategies and policies. Significant obstacles to the adoption and implementation of effective systems of environmental protection within developing Asia exist, including weak and under resourced institutions of environmental regulation, and a shortage of political will to implement necessary reforms. Policy integration appears to offer a way forward to overcome these obstacles. In this paper, policy integration is examined as a way of enhancing environmental protection by more closely aligning efforts to improve environmental quality and economic performance in developing Asian economies. Experience of East Asian newly industrializing economies are drawn upon to provide practical examples of policy integration in action. The implications of the East Asian experience are used for other developing countries in the region to explore ways in which organizations of environmental protection and economic development can work together without compromising their individual autonomy.

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TITLE: *NATURAL RESOURCES MANAGEMENT AND THE ENVIRONMENT*

AUTHOR: S. TAHIR QADRI

CONTRIBUTORS: DELFIN GANAPIN, JR., JAVED HUSSAIN, JOSE PADILLA, AND DARIUS TETER

Sustainable development requires continuous economic growth with minimal stress to the environment. It is therefore necessary to overcome problems related to growing populations, depletion of natural resources, and the growing economic gap between industrialized and the developing countries. This paper discusses the need for a clear understanding of the concept of ecological resilience, its linkage to the sustainability of natural resources, and constraints in the application and adoption of these concepts in order to overcome such problems.

The Asia and Pacific region is one of the most vigorous and dynamic regions in the world in terms of natural resources. Because of demographic pressure, inequality and poverty, inappropriate policies, development biases, and exploitative approaches, these natural resources are not being sustainably managed.

The continuing degradation and pollution of natural resources has far reaching implications on the poor. Solutions must be localized but undertaken under national policy, and institutional arrangements must be developed through participatory processes. Water resources must be sustainably used through proper national water programs, functional river basin organizations, and the use of cost recovery practices. Fisheries and coastal and marine resources likewise need better and more effective management through holistic national coastal policies, wider use of coastal resource economic values, development of information and knowledge networks, institutionalization of coastal management at the local government level, and mainstreaming of coastal management in the national social agenda.

ADB's natural resources sector attempts to make investments that operationalize a landscape ecology concept, resulting in integrated ecosystem and area-based natural resource conservation and development. The purpose of this approach is to link the sector with overall economic strategic goals and make ecological and ecosystem spatial scales compatible (or whenever possible, congruent) with administrative, developmental planning, local use, and management scales. This approach ensures that benefits from such management are felt beyond specific localities. An ecosystem approach also will more closely reflect mainstream development planning methods.

TITLE: *URBANIZATION*
AUTHOR: J. WARREN EVANS

The most striking difference between the Asia and Pacific region today and 25 years ago is the shift of people and economic activity from rural agrarian communities to urban and industrial centers. This change has been most dramatic in low- and middle-income nations in East Asia and the Pacific regions. From 1970 to 1997, the agriculture share of the gross domestic product (GDP) in the region from agriculture dropped from 35 percent to 18 percent, while urban populations grew from 19 percent to 33 percent. The economic growth resulting from this transition had major impacts on poverty. In 1975, almost 60 percent of Asians and Pacific islanders lived in poverty. By 1995, poverty declined to 33 percent. Despite explosive population growth, the absolute number of poor declined by 28 percent, from 1,149 million in 1975 to 824 million in 1995.

With these improvements notwithstanding, urbanization and industrialization have created a host of social, economic, and environmental problems, or have exacerbated existing ones. This paper discusses such problems and possible solutions in the context of responsive approaches to urban planning, development, and management. Problems in major cities include: a proliferation of slum areas; traffic congestion; uncontrolled industrial growth; unprecedented degradation of air quality; encroachment on natural systems; and public health degradation from water pollution, poor drainage, and solid waste disposal practices. This paper presents strategies to overcome these challenges.

TITLE: *ENERGY AND THE ENVIRONMENT*
AUTHOR: CUTLER CLEVELAND
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Energy plays a crucial role in the economies of the Asia and Pacific region. Rapid expansion of commercial energy use has increased reliance on energy imports, particularly crude oil; and electrification of the region has increased at an average of 16 percent annually. Commercial energy use in developing member countries (DMC) is increasing at an average of 7 percent per year, and energy providers rely heavily on nonrenewable fuels. Biofuels also play an important role in DMCs, accounting for 40 percent of total energy use.

Increased energy use, especially fossil fuel and tradition biofuel use, is contributing to environmental degradation at local, regional, and global levels. Fuel extraction disrupts terrestrial and aquatic ecosystems, and conversion and combustion is the principal source of greenhouse gases (GHG) and other air pollutants in the region. To mitigate these impacts, increased attention must be paid to energy efficiency and alternative forms of energy — the topic of this paper.

This paper discusses energy-related policy issues and presents a case that in the Asia and Pacific region, energy use is not only rising because of increased demand but also because of inefficiencies in energy supply and use. Energy efficiency remains very low throughout the region as a result of institutional, technological, and policy problems. The key is to delink the use of energy from the production of goods and services within economic, technological, political, and social constraints. This paper recommends approaches to promote a shift to policies that encourage more effective and equitable use to meet human needs through a pro-poor focus, a strengthened private sector, full-cost pricing, increased use of renewable energy, and rational trade in energy.

TITLE: *MARKET-BASED INSTRUMENTS FOR ENVIRONMENTAL MANAGEMENT IN ASIA*
AUTHORS: P. ABEYGUNAWARDENA, NESSIM J. AHMAD AND T. PANAYOTOU

Today, in many countries, use of incentive-based approaches for environmental management is an important component of overall environmental policies. Yet their use cannot be discussed in isolation of the existing regulatory and administrative arrangements, or without due regard to the institutional readiness. In other words, there are many factors that affect environmental outcomes, and it is impossible to single out one of them as being the real reason for environmental success or failure.

This paper investigates the economic instruments for environmental management to include (i) review of the existing institutional framework for environmental management; (ii) discussion of the role of different policy tools; (iii) assessment of the experience of using incentive-based policy tools on a sector specific manner; and (iv) problems with administrative, legislative and other institutional aspects of the policy tools. It describes and compares current and recent uses of market-based instruments for environmental management in several Asian countries.

INSTITUTIONAL

TITLE: *THE FUTURE OF ENVIRONMENTAL INSTITUTIONS IN ASIA*
AUTHOR: DAVID MCCAULEY

Considerable investment has been made in establishing and strengthening national environmental management institutions in the Asia and Pacific region over the past two decades. This has resulted in the creation of cabinet-level environmental bodies in most of countries in the region. Particular attention has been given to assessing and mitigating the environmental impacts of government-sponsored development projects and industrial production. During this same period, there has been an increase in public awareness of the environmental dimensions of economic development.

The focus on strengthening national environmental management agencies has resulted in relatively less attention being given to other important institutions with a stake in promoting sustainable development. These include planning authorities, sectoral development agencies, transnational and subnational environmental and development bodies, legislative and judicial authorities, the media, private sector associations, nongovernment organizations, the scientific community, and other elements of civil society.

This paper discusses the establishment of robust, honest, and effective environmental management institutions in the Asia and Pacific region. To achieve this objective, better capacity and fuller engagement of a much wider range of agencies than just national environmental authorities are required. An important element is integration of environmental considerations into the work of agencies responsible for urban and regional planning as well as those promoting key development sectors, such as industry, mining, water, and transportation sectors. Government entities cannot possibly be successful in promoting sustainable development without the full engagement of all elements of civil society and the transparency and accountability that such collaboration necessitates. This paper presents approaches to strengthen the interphase between environmental management and economic development at institutional levels.

TITLE: *CLEANER PRODUCTION IN ASIA: OBSTACLES TO CHANGE A REGIONAL STRATEGY FOR RAPID ADOPTION*
AUTHORS: J. WARREN EVANS AND RICHARD STEVENSON

Industry has adversely impacted human health and the natural environment for almost two centuries. From the beginning, the impact has been concentrated in urban areas, where the combination of industrial pollution and

urban wastes pose immediate threats to human health and welfare. If recent trends prevail, the growing congestion and pollution in the vast urban centers of the Asia and Pacific region will overwhelm urban infrastructure and may lead to strong resistance to industrial expansion, particularly in the urban areas. This resistance would have serious implications on the economic growth of the region. Some view pollution as a cost of economic development, but an increasing number see an alternative future path in which industry is both more productive and less polluting through better technology and management; new roles for the marketplace; and partnerships among industry, government, and communities.

Concepts of cleaner production, including the use of cleaner technology, are now widely recognized as effective in increasing the efficiency of industry and reducing environmentally damaging pollutants, the consumption of natural resources, costs, and risks while leveraging the global economy. And yet, despite the enormous resources expended in both donor and nationally funded programs in the last decade to promote the use of cleaner production, the rate of adoption has been disappointingly slow, particularly among small and medium enterprises (SME).

Most cleaner production programs have used same capacity-building and technology diffusion techniques, including in-plant demonstrations, training, and information dissemination, together with limited efforts toward public transparency and financial incentive. This paper discusses barriers to change, including limited awareness, absence of effective information networks, distorted pricing of natural resources, insufficient number of trained personnel, poor compliance monitoring, and environmental regulatory regimes that promote end-of-pipe solutions. The most serious obstacle, however, is a lack of strong public policy that is mainstreamed into all aspects of the economy. This paper presents the necessary policy and economic tools to motivate change in the behavior of industry decision makers in their own perceived best interests.

GOVERNANCE

TITLE: *FROM BYSTANDERS TO COLLABORATORS: NEW ROLES FOR CIVIL SOCIETY IN URBAN-INDUSTRIAL ENVIRONMENTAL GOVERNANCE IN ASIA*
AUTHOR: LYUBA ZARSKY

The Asia and Pacific region is in the midst of an industrial and agrarian revolution. Over the next two decades, people in the region will undergo massive changes in where and how they live as well as how they make their livelihoods. Asian “megacities” will become centers of economic, social, and political life, and will enormously impact the region’s ecosystems and resources. Within these urban-industrial agglomerations, growing middle and lower classes will increasingly demand political voice.

The key to the Asia and Pacific region’s environmental future lies in the evolution of governance. The key to good environmental governance depends largely on how effectively an increasingly organized and vocal civil society is able to demand social and environmental accountability from the government and industries. In the past, citizen and community groups have largely been bystanders in environmental policy making and policy implementation in the region.

This paper explores an emerging approach to environmental governance characterized by the institutionalized and strategic engagement of civil society groups. It focuses particularly on the roles of civil society in improving environmental performance in an urban-industrial setting by monitoring, prodding, encouraging, and partnering with government and private sector institutions. Part I of the paper outlines current urban-industrial and civil society growth in the Asia and Pacific region and argues that the critical variable in terms of environmental impact is the evolution of governance. Part II outlines six functional roles for civil society groups and considers new roles for government in a “multiple agent” model, including helping communities monitor industry environmental performance. Part III presents three designs for collaborative governance: community partnership, constructive engagement, and stakeholder consultation. Part IV examines the influence of international nongovernment organizations (NGO) on the region’s civil society and environmental norms, including “social

responsibility” norms for business. Part V concludes that a shift of civil society groups from bystanders to collaborators in environmental governance could result in significant benefits to society as a whole.

TITLE: *PUBLIC AWARENESS, EDUCATION, AND MOBILIZATION FOR THE ENVIRONMENT*
AUTHOR: LISA HOPKINSON

Civil society has responded to environmental change by forcing environmental issues onto national policy agendas, changing its behavior, and creating a new environmental social consciousness in the Asia and Pacific region. This paper discusses the roles that civil society can play in promoting better environmental governance.

Although governments continue to play the central role in developing and implementing environmental policy, civil society can play an increasing role in overcoming obstacles faced by governments. In the Asia and Pacific region, these obstacles are often related to the lack of political will, fiscal constraints, lack of regulatory capacity, and competitive pressures from globalization. Civil society groups in the region can promote better environmental governance through a variety of roles (often multiple). Failure to enlist or encourage civil society in protection of the environment can lead to exacerbation of environmental problems, loss of international funding, and deterioration of environmental quality and security.

Mobilizing civil society on environmental issues requires awareness of environmental problems, motivation, and action. Awareness is facilitated by access to information, effective environmental education, a free and informed media and increasingly, access to the Internet. Civil society is typically motivated by impacts on livelihood or health, and popular figures, cultural characteristics, and religious beliefs also play an important part in motivating civil society. The capacity of communities to cooperate and organize environmental issues closely correlates with political and civil rights.

The relative importance of these factors is illustrated in the case studies presented in this paper. For example, India, which has one of the oldest and most diverse environmental movements in the Asia and Pacific region is in stark contrast to the People’s Republic of China, where an emerging civil society has been effective in educational and awareness-building activities but where it has a more limited advocacy or “watchdog” role.

Perhaps the most important roles of civil society are to promote social change and provide a political mandate for action on environmental issues. To properly integrate environmental issues into development programs and policies requires changing the mind-set of key decision makers and society by raising awareness, engaging citizenry in the political and development process, and institutionalizing public participation in the decision making process. A strong environmental movement will strengthen the accountability of government and business on environmental matters, thereby ultimately benefiting the environment and people in the region.

TITLE: *EMERGING ENVIRONMENTAL GOVERNANCE*
AUTHORS: FRANCES SEYMOUR AND GEORGE FARADAY

Good environmental governance is increasingly recognized as central to sustainable development and natural resources management. Although countries in the Asia and Pacific region are diverse, their political systems share common elements—this concentration of power in centralized bureaucracies and a disjuncture between formal structures of authority and customary social institutions. Natural resources management regimes in the region share the characteristics. This mode of environmental governance has frequently proven unsatisfactory from social, ecological, and economic standpoints and today faces intensified challenges from general trends in globalization and democratization. This paper highlights the ways in which institutions are changing to satisfy the demand for improved natural resources management in the Asia and Pacific region.

The paper focuses on institutional change at many levels, with an emphasis on the transfer of authority to newly empowered institutions such as local governments, national legislatures, and the judiciary. The paper also discusses the changing roles of business and civil society organizations in environmental governance. The paper considers the development of transboundary institutions and the need for international cooperation in global

APPENDIX I: ABSTRACTS OF BACKGROUND PAPERS

environmental policy making. Seymour and Faraday argue that the state will continue to have an important role in providing the infrastructure required for good environmental governance and the mechanisms for enhanced stakeholder engagement. As such, the state will need to develop new modes of collaboration with non-state actors, a process that will require recognition of the explicitly political character of natural resource issues. Finally, leaders within the region will need to constructively channel the pressures towards transparency, participation, and accountability in environmental decision making in the context of Asian and Pacific conditions.

TITLE: *NATIONAL SUSTAINABLE DEVELOPMENT PLANNING*
AUTHOR: PETER KING

Successive global conferences on sustainable development, such as the 1992 Earth Summit, have called for environment and economic dimensions to be planned at the same time and in the same institutions, without elucidating how this should be done. Over the past decade, ADB has been developing a conceptual framework for organizing the various approaches for integrated economic and environmental planning, and their supporting tools and techniques. This paper presents an analysis of the past efforts and recommends a conceptual framework for vertical linkages and integrated planning. The conceptual framework derived from this analysis illustrates the importance of vertical linkages between planning levels and highlights the paucity of integrated economic and environmental plans at the subnational level in Asia. Both of these weaknesses need to be addressed by ADB and its member countries if a nested hierarchy of integrated economic and environmental plans is expected to contribute to the achievement of sustainable development.

AEO WORKSHOP PARTICIPANTS



THAILAND WORKSHOP, JANUARY 17-19, 1999 BANGKOK, THAILAND

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Ackerman, Richard - The World Bank
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MIYUN COUNTY, BEIJING

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Rong Peikang - State Administration of Building Material
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Shi Quichi - Ministry of Water Resources
Tan Weiping - China Development Center for Poverty
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Wang Guanghui - Department of Electricity
Yang Jienan - Tianjin EPB
Yang Jinlin - Ministry of Finance
Ye Huihai - Ministry of Communication
Zhao Wei - Peking Royalstone, Ltd.
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INDONESIA WORKSHOP, JANUARY 24-25, 2000

JAKARTA HILTON

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Aboejoewono - DKI Jakarta
Adiwibowo, Soeryo - PPLH-IPB
Coutrier, P.L. - Indonesian Mining Association
Dahuri, Rokhmin - Coasts and Small Islands
Habir, Ahmad - Indonesian Institute for Management
Development
Hadad, Ismid - Indonesian Biodiversity Conservation Insti-
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Haeruman, Herman - Deputi Bidang Regional dan
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Hafild, Emmy - WALHI Indonesian Forum for the Environ-
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Iskanadar, Untung - Bureau of Foreign Cooperation and
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Lumbantobing, Sharon - Tetra Tech EM Inc.
Makarim, Nabil - Ministry of Trade and Industry
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Purnomo, Agus - WWF
Qadri, S. Tahir - Asian Development Bank
Rooyani, Firouz - Tetra Tech EM Inc.
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SRI LANKA WORKSHOP, FEBRUARY 29 - MARCH 1, 2000

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Hewage, T. - Ministry of Forestry and Environment
Idanan, Annie - Asian Development Bank
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tion in Development
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ASPEN WORKSHOP, SEPTEMBER 13-15, 2000
ASPEN MOUNTAIN LOUNGE, COLORADO

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 & Information Network, Columbia University
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 Juniper, Christopher - Rocky Mountain Institute
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 Qadri, Tahir - Asian Development Bank
 Rabago, Karl - Rocky Mountain Institute
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JAPAN WORKSHOP, SEPTEMBER 20-21, 2000
TOKYO, JAPAN

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SAMOA WORKSHOP, SEPTEMBER 25-26, 2000
SPREP HEADQUARTER, APIA, SAMOA

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