23. ASIAN DEVELOPMENT BANK (ADB)

23.1 Water Resources Management Policies and Actions

Asian Development Bank (ADB) has intervened actively in the water sector and financed projects for irrigation, drainage, flood control, water supply and sanitation, hydropower, fisheries, forestry and watershed management, navigation, or multiple uses.[370] In 2003, it has published "Water for All – The Water Policy of the Asian Development Bank", stating its strategy on water resources management. Its water policy is premised on the Asia and Pacific region's urgent need to formulate and implement integrated, cross-sectoral approaches to water management and development. The policy has the following principal elements:[371]

- Promote a national focus on water sector reform
  ADB will support developing member countries (DMCs) in ensuring their water projects are guided by effective national water policies that link water to national development goals and protection of the environment. DMCs were assisted in initiating water sector reforms, through sector assessments, development of strategic frameworks, and establishment or strengthening of water sector apex bodies.

- Foster the integrated management of water resources
  Integrated water resource management (IWRM) is a process to improve the planning, conservation, development, and management of water, forest, land, and aquatic resources in a river basin context, to maximise economic benefits and social welfare in an equitable manner without compromising the sustainability of vital environmental systems. It addresses quantity and quality concerns for surface and groundwater, and opportunities for their conjunctive use. ADB will help DMCs introduce the IWRM and undertake comprehensive water resource assessments in river basins as a basis for future water investment projects.

- Improve and expand the delivery of water
  Private sector initiatives and marketoriented behavior are expected to improve performance and efficiency, particularly in service delivery. ADB will seek to provide innovative financial packages to enable commercial lenders and promoters to manage the risks involved with investing in water-related projects.

- Foster the conservation of water and increase system efficiencies
  The expansion of access to water and the improved provision of water services require that capital costs be funded by accessing debt markets and developing appropriate tariff structures. Consumers will be expected to meet the full operation and maintenance costs of water facilities and service provision in urban and rural water supply and sanitation schemes subject to subsidy considerations.

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370 Extracted from the "Water For All – The Water Policy of the Asian Development Bank", http://www.adb.org/Documents/Policies/Water/water-policy.pdf, page 11

371 Extracted from the "Water For All – The Water Policy of the Asian Development Bank", http://www.adb.org/Documents/Policies/Water/water-policy.pdf, page 13-30

ADB will consistently make advice to DMCs the need to adopt cost recovery principles in their water policies and strategies, and promote the inclusion of environmental externalities and the recovery of resource management costs in tariff systems adopted by DMCs.

- Promote regional cooperation and increase the mutually beneficial use of shared water resources within and between countries
  By assisting with water sector assessments in riparian countries, and helping with the exchange of data, ADB will promote awareness and understanding of water resource issues and needs within each country. Currently, ADB is involved through regional technical assistance programmes in supporting the Southeast Asia and the South Asia water partnerships in exchanging information and ideas on national water sector reforms.

  Besides, ADB will support joint projects for the planning, development, and management of shared water resources, including the mapping of physical and institutional resources, information sharing, and establishment of a regional legal regime encompassing dispute resolution mechanisms. Given its ability, neutrality, and comparative advantage in providing assistance of this nature, ADB will assist governments in developing collaborative frameworks with riparian stakeholders. These will include an assessment of the downstream impact of any ADB-financed water project, in a river basin context.

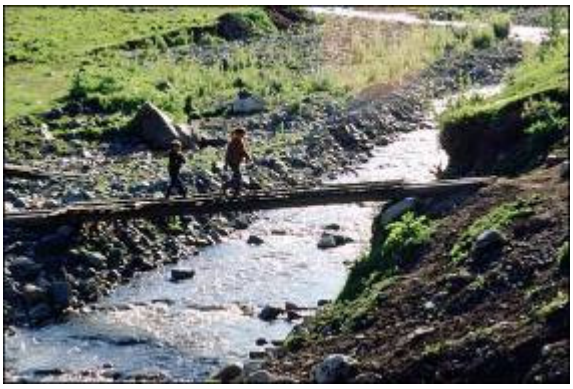
- Facilitate the exchange of water sector information and experience
  Participation is necessary to ensure that conflicting interests are harmonised and that inequities are removed. Communities and individuals that are underserved—including the urban poor and the socially excluded, such as ethnic minorities and indigenous peoples—need to be mainstreamed, ADB will promote the recentering of such communities and individuals. Given the essential nature of private sector participation, without which there will be little infusion of capital and expertise, and of much needed technology, ADB will seek to draw private enterprise into participating in a higher quality of water service provision. Simultaneously, ADB recognises that women are important water users, clients, and beneficiaries, as well as managers of water for family nutrition, hygiene, health, and community activities. Thus, ADB will strengthen women's ability to participate more effectively through discrete programmes and enabling their involvement in community-based decision making.

- Improve governance
  The finite nature of water requires ADB to promote the governance of its conservation and management to the highest possible standards. Legal and regulatory systems in DMCs need to ensure that water service providers and resource managers are held accountable for their performance relative to prescribed standards. The allocation of water to high-value uses is a matter of economic accountability and ADB will support DMCs in developing appropriate methodologies for improved efficiency.

Activities and programmes related to water resources management

To increase all official and private capital flows to the water sector, ADB formulated the Water Financing Programme (WFP), which seeks to make water a core investment area for ADB. Under the WFP, ADB proposes to increase its water investments to well over $2 billion annually. More information can be found in Section 23.5.[372]

Effective management of water resources in Bangladesh integrates diverse stakeholder needs.[373]



Improvement of Flood Protection in Azerbaijan[374]

[372] Extracted from the official website of Asian Development Bank, http://www.adb.org/Water/Operations/WFP/about.asp

[373] Source: http://www.adb.org/media/Articles/2003/2291_Bangladesh_Preparing_a_Water_Resources_Management_Project_/

[374] Source: http://www.adb.org/Documents/Photos/AZE/Improve-Flood-Protection/story01-09.asp

23.2 Environmental Evaluation/SEA in ADB

In 2002, an environment policy[375] was introduced in the ADB which strengthened the consideration of the environment at the ADB. The policy was prepared through a broad consultation process with governments and civil society within the region and with many major donor countries. It mandates the integration of environmental considerations in all ADB operations at various stages of project and programme cycles, including planning, preparation, implementation and evaluation. The policy requires environmental assessment of all project loans, programme loans, sector loans, sector development programme loans, financial intermediation, and private sector investment operations.

Key aspects introduced by the policy include:[376]

- environmental assessment as an on-going process throughout the project cycle;
- increased emphasis on environmental management plans to ensure mitigation during project implementation;
- strengthened environmental screening procedures; and
- strengthened disclosure and public consultation requirements.

For which, SEA is a tool for use in the environmental assessment of programme loans and sector loans, which covers policy, plan and programme. For programme loans, SEA can be used to help preparing the matrix of environmental impacts of policy and institutional actions, mitigation measures, and the institutional basis for implementing mitigation measures and monitoring programme. It can also be used to review environmental sustainability objectives of the programme and propose a set of criteria, targets or indicators for evaluating the effects of the loan. For sector loans, SEA can help with the cumulative impact assessment for all projects envisioned as a part of the loan. Also, it can enhance the efficiency of subproject-level Initial Environmental Examinations (IEEs) by avoiding the need to redo analyses for issues covered adequately in a SEA for the entire sector.[377]

Below shows the generic steps in conducting a SEA: [378]

- **Screening** – screening exercise is undertaken to determine whether there is any environmental issues for the proposed policy, plan or programme
- **Scoping** – scoping exercise is conducted to ensure that all high priority issues relevant to the decision being made are addressed in the SEA. There is wide agreement that both direct and indirect (or "secondary") effects of a proposal should be examined and that cumulative impacts should be included in a SEA.

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375 Environment Policy of the Asian Development Bank, Asian Development Bank, 2002, http://www.adb.org/Documents/Policies/Environment/environment_policy.pdf, page 15

376 Extracted from the "Strategic Environmental Assessment: A sourcebook and reference guide to international experience", Barry Dalal-Clayton and Barry Sadler, 2004, http://www.iied.org/Gov/spa/documents/SEAbook/Chapter4_Oct04.pdf, page 123

377 Referenced to the Environmental Assessment Guidelines by the Asian Development Bank, 2003, http://www.adb.org/Documents/Guidelines/Environmental_Assessment/Environmental_Assessment_Guidelines.pdf, page 100

378 Referenced to the Environmental Assessment Guidelines by the Asian Development Bank, 2003, http://www.adb.org/Documents/Guidelines/Environmental_Assessment/Environmental_Assessment_Guidelines.pdf, pages 98-99

- **Identification, Prediction and Evaluation of Effects –** SEA is concerned with the both direct and indirect impacts. The impacts of policies, programmes, and plans on the environmental components are normally indirect. That is, the policy, programmes, or plans are designed to bring about changes in social and economic behaviour. These social and economic changes may in turn lead to potential direct and indirect impacts on the environment. The process of forecasting and evaluating environmental effects in a SEA can employ some of the same methods and procedures used in project-level EIA.
- **Integration –** integration of environmental, social and economic effects must be part of the impact prediction and evaluation process. This joint consideration of environmental social and economic effects is essential because some proposals will yield direct economic (or social) impacts that will then lead to indirect (or "higher order") environmental effects. While most countries emphasize environmental effects in SEAs, some are beginning to experiment with appraisals that integrate environmental, social and economic effects in a balanced way.
- **Mitigation –** a SEA should include measures that eliminate, reduce or offset adverse environmental effects. The term "mitigation" refers to the "elimination", reduction or control of the adverse effects of the policy, plan or programme, and includes restitution for any damage to the environment caused by such effects through replacement, restoration, compensation or any other means.
- **Monitoring –** a SEA should include a plan for monitoring environmental effects so that mitigation measures can be implemented if unforeseen effects occur. In addition a SEA should include a plan for ensuring that agreed upon mitigation measures are actually carried out.
- **Independent review –** it provides a check on the quality of the assessment. Results from the review should be considered in preparing the final SEA and in making final decisions. Researchers have developed criteria for reviewing and evaluating SEAs.
- **Influence on Decisions –** the SEA (including results of the independent review) should be made available to decision makers at a time when those results can inform debate on the proposal and alternatives to the proposal.

23.3 Environmental Evaluation/SEA on Water Resources Management in ADB

For ADB, SEA is a tool for use in the environmental assessment of programme loans and sector loans, which covers policy, plan and programme which related to water resources management.

Details of the requirements should refer to Section 23.2.

A summary table for both the water resources management policies and actions and SEA status in ADB is presented in **Exhibit ADB-1:**

Exhibit ADB-1 Summary of Water Resources Management (WRM) Policies and Actions and SEA status in ADB	
(a) WRM Policies and Actions	
WRM Policies and Actions	Policies ● Water For All – The Water Policy of the Asian Development Bank Actions ● Water Financing Programme
Guidance/Legislations in WRM	N/A
(b) Environmental Evaluations / SEA Status in WRM Policies and Actions	
Type of Assessment	SEA
Requirement Mechanisms	Administrative
Legislation for Environmental Evaluation / SEA	N/A
Applications	Policies, Plans and Programmes

23.4 Analysis and Conclusions

WRM Policies

The ADB outlined its vision for integrated water management in the region in its "Water for All" water policy. The policy recognises the Asia and Pacific region's need to formulate and implement integrated, cross-sectoral approaches to water management and development.

The principal elements of the water policy are as follows:

- Promote a national focus on water sector reform
- Foster the integrated management of water resources
- Improve and expand the delivery of water services
- Foster the conservation of water and increase system efficiencies
- Promote regional cooperation and increase the mutually beneficial use of shared water resources within and between countries
- Facilitate the exchange of water sector information and experience
- Improve governance and capacity building

Unlike a country or city, the ADB is an institution providing loans for borrowers to improve their water resources according to their own WRM policies. No direct comparison is made between Hong Kong's WRM policies with that of the ADB.

EE/SEA

For the SEA/EE system of ADB, it is administratively required for the borrowers to conduct environmental assessment for policies, plans and programmes, in which SEA is used as a tool. As mentioned in the environment policy issued by the ADB, environmental concern has been strengthened. It mandates the integration of environmental considerations in all ADB operations at various stages of project and programme cycles, including planning, preparation, implementation and evaluation. The policy requires environmental assessment of all project loans, programme loans, sector loans, sector development programme loans, financial intermediation, and private sector investment operations.

For programme loans, SEA can be used to help preparing the matrix of environmental impacts of policy and institutional actions, mitigation measures, and the institutional basis for implementing mitigation measures and monitoring programme. It can also be used to review environmental sustainability objectives of the programme and propose a set of criteria, targets or indicators for evaluating the effects of the loan. For sector loans, SEA can help with the cumulative impact assessment for all projects envisioned as a part of the loan. Also, it can enhance the efficiency of subproject-level Initial Environmental Examinations (IEEs) by avoiding the need to redo analysis for issues covered adequately in a SEA for the entire sector.

Currently in Hong Kong, there are both statutory and administrative systems for PPP projects. While the statutory requirements govern primarily large scale development projects (i.e. over 20 ha of area or population over 100,000), the administrative counterpart has been applied to land use planning, transportation and sectoral PPP.

The concept of the SEA system for ADB would be relatively similar to the administrative system in Hong Kong. It is only advised to put environmental impacts into considerations in any PPP proposals by conducting SEA.

23.5 Examples of Water Resources Management Policies / Actions or their Environmental Evaluation/SEA

Example ADB-1	**Water Financing Programme**[379]
Description of the Programme	The Water Financing Programme (WFP) guides all institution in responding more effectively to the Asia-Pacific region's critical water investment needs. The Programme ensures the delivery of a substantial investment, reform, and capacity development programme in three key areas: ● Rural water services to improve health and livelihoods in rural communities, including investments in water supply and sanitation, and irrigation and drainage ● Urban water services to support sustained economic growth in cities, including investments in water supply, sanitation and wastewater management, and environmental improvement; and ● Basin water management to promote integrated water resources management and healthy rivers, including investments in the infrastructure and management of multifunctional water regulation and hydropower facilities developed in a basin context, flood management, and the conservation and improvement of watersheds, wetlands, and ecosystems.
Outcome of the Programme	In long term, WFP will result in five major outcomes: ● Sustainable access to safe drinking water and improved sanitation for approximately 200 million people, and a significant contribution to meeting the water MDGs through targeted project components for the unserved rural and urban poor. ● More productive and efficient irrigation and drainage services, affecting the livehoods of 40 million people. ● Reduced risk of flooding, affecting about 100 million people in rural and urban areas and reducing recurring damage to vital infrastructure. ● Introduction of integrated water resources management in 25 river basins, including reduced wastewater pollution, and improved river ecosystems. ● Improved water governance through national water sector reforms and capacity development.

[379] Full document can be obtained at http://www.adb.org/Water/Operations/WFP/WFP-Summary-6-Aug-06.pdf. Paragraphs are extracted from page 1-3.