

3. JAPAN

3.1 Water Resources Management Policies and Actions

In Japan, the national government is responsible for formulating and implementing water resources policies at the national level. It formulates an overall plan of water resources development and environmental conservation. The Comprehensive National Water Resources Plan is the national basic plan for water resources development under which dams and water systems are developed. The Basic Environment Plan clarifies long-term and comprehensive environmental policies related to water quality and quantity, including water conservation.²⁹ Brief descriptions on both plans are summarised below.

The Comprehensive National Water Resources Plan (the Water Plan)

The Water Plan, prepared by the Ministry of Land, Transport and Infrastructure, is formulated and revised in accordance with the Comprehensive National Development Plan, which is stipulated in the Comprehensive National Land Development Act and approved by the Prime Minister's cabinet. The Water Plan is a multi-year plan and addresses basic medium to long-term planning issues regarding water resources development, conservation and utilisation, as well as makes forecasts of long-term water demand. The Ministry of Land, Transport and Infrastructure uses the Water Plan to formulate more detailed annual development plans and their related budgets. The latest Water Plan, Water Plan 21, stresses the efficient utilisation of existing water resources facilities rather than the development of new water resources.³⁰

The Basic Environment Plan

The Cabinet, under the Basic Environment Law, approves the Basic Environment Plan in December 1994.³¹ In 2006, an outline of the revised Basic Environment Plan has been published, in which the government gives priority to 10 priority fields for implementation.

Among the 10 priority fields mentioned in the new Basic Environmental Plan, the government plans to put efforts to secure an environmentally sound water cycle, more concerns on:

- Conservation and sustainable use of the water environment including water quality, water quantity, aquatic life and waterside areas, and creation of a rich community through contact with accessible water environments;

²⁹ Extracted from "Water Resources Management in Japan (Policy, Institutional and Legal Issues)", http://siteresources.worldbank.org/INTEAPREGTOPEENVIRONMENT/Resources/WRM_Japan_experience_EN.pdf, Page 4

³⁰ Extracted from "Water Resources Management in Japan (Policy, Institutional and Legal Issues)", http://siteresources.worldbank.org/INTEAPREGTOPEENVIRONMENT/Resources/WRM_Japan_experience_EN.pdf, Page 6

³¹ Extracted from "Water Resources Management in Japan (Policy, Institutional and Legal Issues)", http://siteresources.worldbank.org/INTEAPREGTOPEENVIRONMENT/Resources/WRM_Japan_experience_EN.pdf, Page 6

- Formulation of a plan by regions that is consistent with water utilisation and flood control;
- Maintenance and improvement of storage penetration and recharge performance throughout all basins; and
- International dissemination of the efforts and contribution to solving the world's water problems.

Examples of actual indicators:

- Maintenance and achievement status of environmental quality standards of public water and groundwater
- Number of creation and revision of the plan on the building of an environmentally sound water cycle by basins

3.2 Environmental Evaluation/SEA in Japan

In Japan, no formal provision has been made for a national system of SEA of policies, plans or programmes. However, the concept of SEA for policies, plans and programmes is taking into consideration for national and local governments. A proposed approach to environmental consideration for establishing master plans and other plans was presented in **Exhibit JP-1**. The Basic Environmental Plan, agreed by the cabinet decision in 2000, addressed SEA, describing the need to consider the content and methods of consideration of environmental matters in plans and policies; to accumulate examples at national and local governments; and to consider the establishment of rules for SEA if necessary.³²

The Basic Environmental Plan (2000), provided mandates to:

- Carry out a review of the content and methods for including environmental considerations in decision-making on policies, plans, and programmes.
- Evaluate the effectiveness and practicability of such measures by reviewing cases and formulating guidelines based on the review.
- Consider the framework for including environmental consideration in decision-making on policies, plans and programmes, if necessary.³³

The design of the Basic Environmental Plan is to engage all sectors of the society in a concerted effort to protect the environment. The Plan maps out the basic approach of environmental policies with the mid-21st century in view and identifies four long-term objectives (1) environmentally sound material cycle (2) harmonious coexistence (3) participation (4) international activities. It also sets the direction of measures to be implemented by the early 21st century for achieving these objectives.³⁴

Ministry of Environment government of Japan has been conducting research work on SEA for several years and examining the appropriate way of implementing SEA in Japan. In addition to that, several local governments, such as, Tokyo metropolitan government and Saitama Prefecture, and Ministry of Land, Infrastructure and Transport have already introduced the idea of SEA into their environmental related plans and programmes.³⁵

In 2003, the Ministry of Environment issued preliminary guideline on SEA in the formulation of municipal waste-management plans. The Ministry of Land, Infrastructure and Transport also introduced guidelines for promoting public

³² Extracted from the pamphlet titled "Environmental Impact Assessment of Japan" by the Ministry of Environment, Japan, <http://www.env.go.jp/en/policy/assess/pamph.pdf>, page.17

³³ Referenced to "Environmental Impact Assessment Regulations and Strategic Environmental Assessment Requirements – Practices and Lessons Learned in East and Southeast Asia" by the Environment and Social Development Unit (EASES), April 2006, <http://siteresources.worldbank.org/INTEAPREGTOPENVIRONMENT/Resources/EIA&SEA-regional-review.pdf>, pages 37-41 – Annex 5 Japan

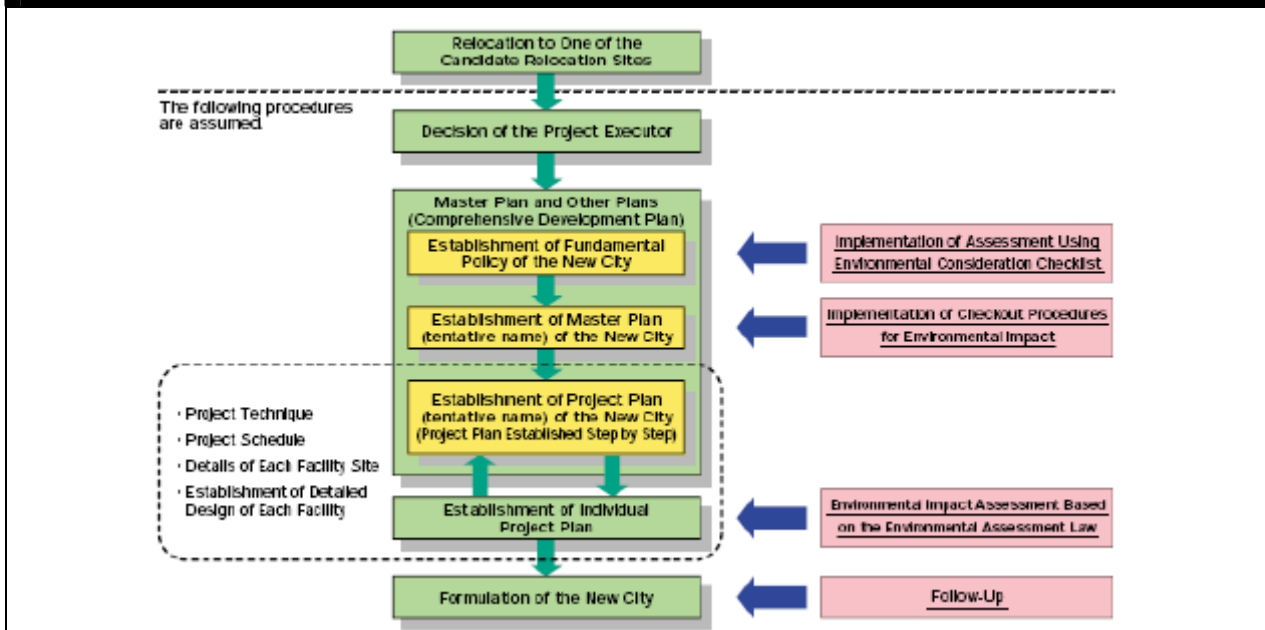
³⁴ Extracted from the web site of the Ministry of the Environment, Government of Japan, http://www.env.go.jp/en/laws/policy/basic_lp.html

³⁵ Referenced to the "Effective SEA system and case studies" by the Ministry of the Environment Government of Japan and Mitsubishi Research Institute, INC of Japan, Jun 2003, http://www.eia.nl/ncea/pdfs/sea/casestudies/japan_effective_sea_and_cases_6xnl_6xee_4xuk_03.pdf, page 3

involvement in road, airport, and harbor planning and for taking into consideration alternatives in an early stage of the planning process. In addition local governments are taking leading role in SEA applications in Japan, with totally 47 prefectures and 12 big cities having applied SEA under their jurisdictions mainly in the areas of regional, land use and development planning, etc. However, some common problems are summarized as (1) poor alternative studies in both conduction and adoption of the recommendations, and social and economy comparison; and (2) weak public participation and later disclosure.³⁶

In April 2006, a new Basic Environment Plan (the third plan) was decided upon by the Cabinet. The plan sets out comprehensive and long-term government policies for environmental conservation under the Basic Environment Law. The new plan sets six new directions for future environment policy development, such as “Integrated Improvements of the Environment, the Economy, and the Society.” The new plan also includes policy programmes for 10 strategic fields to advance the efforts toward a sustainable society. Furthermore, the new plan establishes numeric indicators in every programme and sets “Comprehensive Environmental Indicators” for an effective enforcement of the plan.^{37 38}

Exhibit JP-1 Approaches to Environmental Consideration at Each Stage of Establishing the Master Plans and Other Plans³⁹



³⁶ Referenced to “Environmental Impact Assessment Regulations and Strategic Environmental Assessment Requirements – Practices and Lessons Learned in East and Southeast Asia” by the Environment and Social Development Unit (EASES), April 2006, <http://siteresources.worldbank.org/INTEAPREGTOPENVIRONMENT/Resources/EIA&SEA-regional-review.pdf>, pages 37-41 – Annex 5 Japan

³⁷ <http://www.env.go.jp/en/headline/headline.php?serial=45>

³⁸ Details of the new Basic Environmental Plan can be found in this link:

http://www.env.go.jp/en/policy/plan/3rd_basic/outline.pdf

³⁹ <http://www.mlit.go.jp/kokudokeikaku/iten/English/html/ne-e-20.pdf>

3.3 Environmental Evaluation/SEA on Water Resources Management in Japan

In Japan, the concept of SEA for policies, plans and programmes including those related to water resources management is provided under the Basic Environmental Plan, which administratively describes the need to consider the content and methods of consideration of environmental matters in plans and policies. Details of the requirements should refer to section 3.2.

A summary table for both the water resources management policies and actions and SEA status in Japan is presented in **Exhibit JP-2**:

Exhibit JP-2 Summary of Water Resources Management (WRM) Policies and Actions and SEA status in Japan	
(a) WRM Policies and Actions	
WRM Policies and Actions	Policies <ul style="list-style-type: none"> • The Comprehensive National Water Resources Plan • The Basic Environment Plan Actions <ul style="list-style-type: none"> • N/A
Guidance/Legislations in WRM	<ul style="list-style-type: none"> • For the Comprehensive National Water Resources Plan, it is stipulated in the Comprehensive National Land Development Act and approved by the Prime Minister’s cabinet. • For the Basic Environment Plan, it is forced by the Basic Environment Law
(b) Environmental Evaluations / SEA Status in WRM Policies and Actions	
Type of Assessment	Strategic Environmental Assessment
Requirement Mechanisms	Administrative
Legislation for Environmental Evaluation / SEA	Basic Environmental Plan
Applications	Policies, Plans and Programmes



Restored waterway⁴⁰



The Shimanto River⁴¹

⁴⁰ Source: <http://www.env.go.jp/en/water/wq/pamph/index.html>

⁴¹ Source: <http://www.jnto.go.jp/tourism/en/79.html>

3.4 Analysis and Conclusions

WRM Policies

In Japan, the Comprehensive National Water Resources Plan is the national basic plan for water resources development under which dams and water systems are developed. Besides, the Basic Environment Plan clarifies long-term and comprehensive environmental policies related to water quality and quantity, including water conservation, which recently put efforts to secure an environmentally sound water cycle.

Compared to Japan, Hong Kong's two main sources of water are from rainfall from natural catchment and supply from Guangdong. It is Water Supplies Department's (WSD) scope of work to cover the whole process from the collection of natural yield from rainfall, the reception of raw water from Guangdong to the provision of a supply with a quality of accepted international standards to the users' taps. WSD also supplies sea water for flushing purposes to over 80% of the population. For protection against flooding, sewage collection, treatment and disposal, it is under Drainage Services Department's (DSD) jurisdiction.

For the sustainable development of Hong Kong, WSD has initiated a *Total Water Management programme* comprising key elements of new water resources, water reclamation, water conservation and water resources protection and management was initiated for better utilization of the different water resources.

EE/SEA

The concept of SEA for policies, plans and programmes in Japan is provided under the Basic Environmental Plan, which administratively describes the need to consider the content and methods of consideration of environmental matters in plans and policies.

While SEA is administratively requirement in Japan, there are both statutory and non-statutory systems for PPP projects in Hong Kong. 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. It may be a logical next step to consider:

- Combining the administrative requirements into the statutory system; and
- Providing further specific SEA requirements under the category of water resources management

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

Example JP-1	International Network for Water and Ecosystem in Paddy Fields (INWEPF) 2004 – 2005 ⁴²
Description of the Programme	The INWEPF is established to provide a forum in order to realise three challenges: (i) Food security and poverty alleviation; (ii) Sustainable water use; and (iii) Partnership by promoting good practice of water management in paddy fields with due consideration for conservation and sustenance of rice-based ecosystems by cooperating with all stakeholders.
Proposed Themes for the Programme	<p>There are 12 themes for possible scope for future activities of the INWEPF. The first 6 would be more major items after prioritisation exercise:</p> <ul style="list-style-type: none"> ● Efficient and sustainable water use ● Equitable and optimal water allocation/use to address poverty alleviation and food security at the global, regional and local levels ● Multiple use and ecosystem functions (e.g. biodiversity conservation) of paddy fields, including social/cultural aspects and governance arrangements ● Governance, including Participatory Irrigation Management to increase capacity for integrated water resource management ● Policies and strategies for good governance for improving sustainable management of rice based systems with specific attention to water, land and environment ● Promoting farmers' and other stakeholders' participation in policy formulation, decision-making and project management ● Measures to mitigate environmental degradation associated with paddy field production ● Field-level rice production systems for improving water productivity through rice varieties and farming practices ● Managing risks against flood, drought and salinisation ● Building stakeholders' capacity ● Promoting the application of countries' experience and innovative research results ● Creating and enhancing partnerships
Related Actions of the Programme	<p>During 2004 – 2005, the following actions were planned to be held:</p> <ul style="list-style-type: none"> ● Steering Meeting – decision on plans for activities ● Virtual Meeting – discussion on the above three prioritised themes for the year ● Workshop – to provide members with opportunities to compliment and strengthen activities deliberated at the Virtual Meetings and other relevant international forums ● Open Forum – An Inaugural Symposium titled “Sustainable Water Use: INWEPF Way” will be held to raise public awareness of the multiple roles and values of agricultural water use in paddy fields ● Ad-hoc Working Group – set up ad-hoc Working Groups to prepare inputs

⁴² Full document can be obtained at

http://www.maff.go.jp/inwepf/documents/steering/strategic_action_plan.pdf. Paragraphs are extracted from page 2, 4-5, 7.

<p>Example JP-1</p>	<p>International Network for Water and Ecosystem in Paddy Fields (INWEPF) 2004 - 2005 ⁴²</p>
	<p>(papers, presentations) to international forums related to water and environment in paddy fields</p> <ul style="list-style-type: none"> ● Website and Newsletter - make up website and newsletter to disseminate the outcomes of the INWEPF; newsletter will be distributed to members
<p>Expected Outcome of the Programme</p>	<p>The 2004-2005 INWEPF activities are expected to have the following results:</p> <ul style="list-style-type: none"> ● Better understanding of water management in various contexts ● Better understanding of governance of water use in paddy fields including participatory irrigation management and multi-stakeholder involvement ● Develop a good practices and formulate a common understanding in sustainable water use in paddy fields towards future international discussions on water sustainable