A Comparative Study of EIA Systems and SEA Requirements in China and Japan

Jing Du[1], Sachihiko Harashina[2], Fenglin Yang[1]

[1] Key Laboratory of Industrial Ecology and Environmental Engineering, MOE. Dalian University of Technology.

[2] Department of Environment Science and Technology, Interdisciplinary Graduate School of Science and Engineering. Tokyo Institute of Technology.

Abstract

The Environmental Impact Assessment (EIA) Law of P.R.China was approved in 2002 and has been put into effect since September 1, 2003. Although it has involved the concept of Strategic Environmental Assessment (SEA) at plan and program level, the rapid socioeconomic development in China calls for policy-based SEA. In Japan, although EIA system now is well established, the current system is regarded as only at project level. In this case, some local governments have undertaken SEA while the central government is in process of introducing SEA at the national level. Aiming at reviewing EIA systems and analyzing the prospects of SEA systems in two countries, this paper firstly clarifies the difference of EIA systems between China and Japan on various aspects such as coverage, administration, and public participation etc. And then some comments on SEA requirements and proposals for promoting the implementation of SEA in two countries are presented.

keywords: comparative study, EIA, SEA requirements

1. Introduction

It is well recognized that Environmental Impact Assessment (EIA), mainstreaming environment and social issues into development project level is of crucial importance to identify the environmental and social impacts of a project prior to decision-making since it was used. However, due to its limited scope and function which can result in difficulties in meeting new challenges at a more strategic level, Strategic Environmental Assessment (SEA) as a formalized, systematic and comprehensive process, to a large extent, based on existing EIA systems, has been attached more and more importance not only in Japan but also in China.

This paper mainly reviews three items of EIA systems in China and Japan. According to the comparison with well-established EIA system in Japan, some comments on the weakness of existing EIA system in China are presented. Then, based on the analysis of the requirements and prospects of SEA systems in two countries, some proposals are given.

2. Comparative study of EIA systems between China and Japan

Following the enactment of the National Environmental Policy Act in 1969 in the United State, many countries have established similar EIA systems. EIA, in its various forms, is now being applied in different countries.

In China, after more than 20 years of experience with EIA, the government of the People's Republic of China approved an EIA law in 2002 which has been put into effect since September 1, 2003. To implement the EIA law, the State Environmental Protection Agency (SEPA, now renamed the Ministry of Environmental Protect) issued several ordinances and technology guideline. Compared with EIA system of China, EIA system is well established in Japan and there is a wealth of experience. In addition to the national EIA law, 47 prefectural governments and 13 municipalities maintain their own EIA ordinances or guidelines.

This paper mainly focuses on the differences of there items of EIA systems between China and Japan, namely, coverage, administration of EIA and public participation as follows.

2.1 Coverage

The current EIA system in China covers two large areas: construction project and plan which is the expansion of coverage to the original EIA system. The construction project section includes various concrete projects and the categories of the construction projects are classified by types, scales and the other relevant aspects according to the List of Environmental Protection Classified Management for Construction Projects in China. In addition, three different EIA reports have to be prepared depending on the size of impact. To the plan section, it is further divided into two categories, a) plans for land use, regional, watershed and offshore development, and b) "specific plans" which include for agriculture, industry, livestock breeding, forestry, natural resources, cities, energy, transportation, tourism, etc. (*Word Bank, 2006)* And the EIA must be conducted in parallel with the process of plan formulation and the plan will not be evaluated without submission of the EIR.

In Japanese EIA system, thirteen types of projects are subject to the EIA law including the construction of roads, dams, railways, airports and power plants etc. Among them, large-scale projects that could have a serious impact on the environment are categorized as "category 1" projects and are required to prepare an Environmental Impact Statement (EIS). The project with a scale smaller than the threshold but larger than a certain scale should be categorized as "category 2" project and will be presented to a screening process where the responsible authorities determine the necessary of EIS.

2.2 Administration of EIA

SEPA has the highest authority and there are two more tiers, provincial, autonomous region or

municipal Environmental Protect Bureaus (EPBs) and city or county EPBs in Chinese EIA system, as shown in the Fig 1. SEPA is authorized to handle the review and approval of EIA documents for the construction projects that: (1) confidential projects; (2) straddle a border between provincial-level regions; (3) projects approved by the State Council or by departments authorized by the State Council. Apart from these cases, provincial-level governments are authorized to set examination and approval authority limits.

Administration of EIA is more effective in Japan because of the mechanism of the authorizing agencies. The authorizing agencies are different in accordance with projects. The decision on EIA implementation is made individually on a case-by-case basis. For example, decisions on road projects are made by the Ministry of Infrastructure, Land and Transport, and opinions from the prefectural governor and the municipal mayors who are well-acquainted with the local situation are also taken into account. The Environmental Agency can express opinions on all projects, and the local government can submit opinions at each stage of procedure.

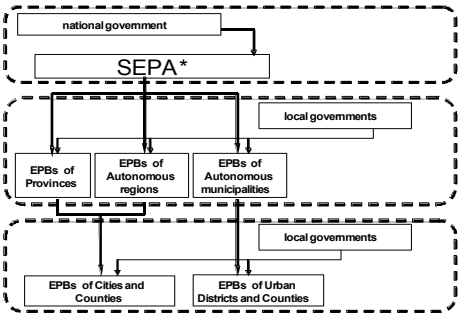

Fig. 1. Administrative framework for environmental protection in China

It can be seen from Fig.1 that in theory, EPBs are answerable to higher-level EPBs and ultimately SEPA, but in fact they receive their budgetary resource from local government in China which was called dual leadership system by *Wang et al.*. This arrangement can cause a conflict that when the local governor takes environmental protection seriously, the EPB will receive both financial and political support. EPBs can be affected by local governor's attitudes towards environmental protection (Glasson et al. 1999). The Chinese government has been addressing these issues, and it will take time for real change.

2.3 Public participation in EIA

It is being increasingly recognized that public participation is of crucial importance as an enforcement procedure in the EIA system. The Chinese EIA law requires public participation in the work and demands appraisal meetings or hearings be held or other form be taken for any plan or construction project that may cause an unfavorable impact on the environment to collect the opinions of the relevant authorities, experts and the public in the EIS preparation phase. But from the comparative flowchart of EIA procedure between China and Japan, as shown in the Fig.2, it can be seen that compared to Japanese EIA procedure, the level of public participation is much lower in China in terms of time and method of disclosure. Public participation is involved in scoping and EIS preparation phases in Japan and much information is made available for the public.

In the context of China's institutional system and the reality of experiencing huge reform, there

are gaps between law and practice. Recognizing this fact, in February 2006, a new regulation--Interim Measures on Public Participation in EIA, which clearly stipulates the scope, procedure and form of organization regarding public participation, was promulgated by SEPA in China and was effected from 18 March to enhance the implementation.

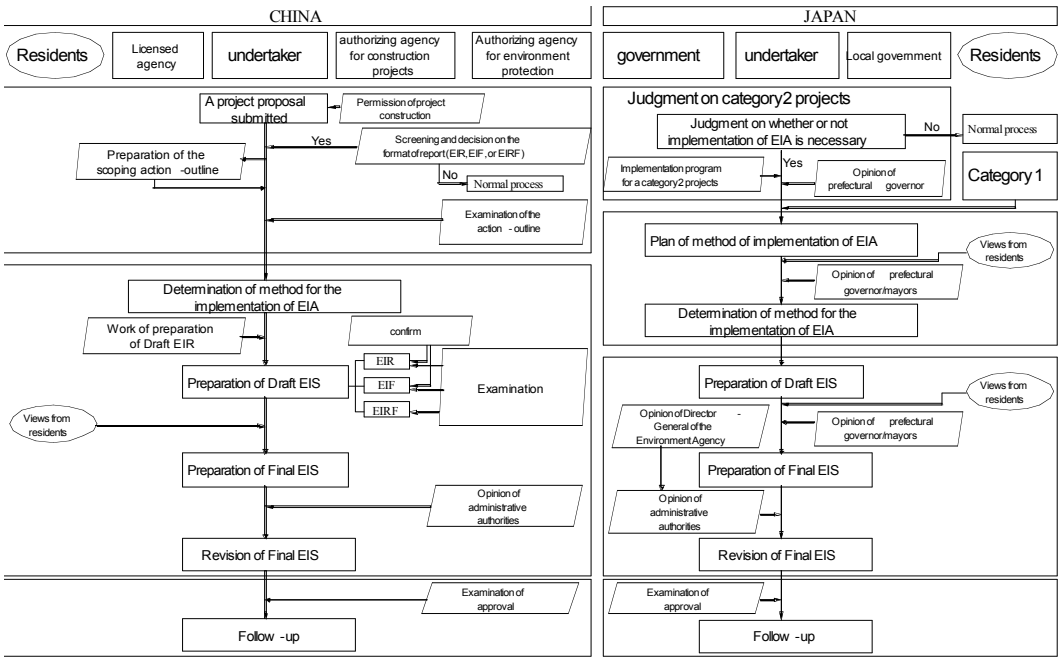

Fig. 2. The comparison of EIA procedure at project level between China and Japan

3. SEA prospects in two countries

As the inherent limitations of evaluating cumulative and indirectly induced environmental effects by EIA have come to light, SEA has been attached more and more importance, as a tool which can be applied at the very earliest stage of decision-making both to help formulate policies, plans and programs and to assess their potential development effectiveness and sustainability.

The introduction of SEA in the EIA Law marks a real step forward for EIA in China although it appears to exclude policies. China has adopted SEA-type assessment in some plans and projects and undertaken some pilot research since 1995 (*Bao, 2004*). Although the work of policy-excluded SEA has gained partial headways since its application on some plans and programs, it would be very difficult for further advancement. That is because SEA pays more attention to long-term and holistic interest, which conflicts with the immediate and local interests pursed by some local governments, giving rise to the unwillingness of full support to this work and even elusion of the responsibility of SEA of many local governments with every possible excuse. To set up an effective SEA in China, enforcement is a key factor, especially on legal mandate of policy-based SEA, commitment

education for political leaders and extending technical capacity for SEA implementation.

Different from China, local governments are taking leading role in SEA applications in Japan. There are a number of innovative schemes and examples available for SEA adoption in Japan to improve the environmental consideration of the plans in local governments. At the time of the enactment of the Environmental Impact Assessment Law, the need for SEA was pointed out in the decision of the Diet. Many studies were conducted on the international experience of SEA with some pilot applications although not available nationwide. It can be easily seen that Japan has strong willingness for SEA application. 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 (*Harashina, 2005*). So although Japan is actively considering establishing a SEA system, more work should be undertaken effectively.

4. Conclusion

Based on the review and comparative study of EIA systems between China and Japan on three items shown in this paper, it can be concluded that the conflict between environmental protection agencies and local governments needs to be solved and the implementation of public participation needs to be markedly enhanced in China. On SEA aspect, Japan has undertaken a significant amount of work in studying and introducing international SEA and some local governments have carried out SEA. Based on the well-established EIA system, Japan is at advanced age in establishing a SEA system, but more work should be done. The SEA system in China is grafted onto the existing EIA process, which needs to be promoted not only on the legislation process but also on the basis of effective enforcement of EIA system.

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