



Available online at [www.sciencedirect.com](http://www.sciencedirect.com)

SCIENCE @ DIRECT®

Environmental Impact Assessment Review  
25 (2005) 307–317

---

---

Environmental  
Impact  
Assessment  
Review

---

---

[www.elsevier.com/locate/eiar](http://www.elsevier.com/locate/eiar)

# Strategic environmental assessment can help solve environmental impact assessment failures in developing countries

Habib M. Alshuwaikhat\*

*Department of City and Regional Planning, King Fahd University of Petroleum & Minerals, PO Box 1632, Dhahran 31261, Saudi Arabia*

Received 1 July 2004; received in revised form 1 September 2004; accepted 1 September 2004  
Available online 21 November 2004

---

## Abstract

The current trend of industrialization and urbanization in developing nations has a huge impact on anthropogenic and natural ecosystems. Pollution sources increase with the expansion of cities and cause contamination of water, air and soil. The absence of urban environmental planning and management strategies has resulted in greater concern for future urban development. This paper advocates the adoption of strategic environmental assessment (SEA) as a means to achieve sustainable development in developing countries. It investigates project-level environmental impact assessment (EIA) and its limitations. The exploration of SEA and its features are addressed. The effective implementation of SEA can create a roadmap for sustainable development. In many developing countries, the lack of transparency and accountability and ineffective public participation in the development of the policy, plan and program (PPP) would be mitigated by the SEA process. Moreover, the proactive and broadly based characteristics of SEA would benefit the institutional development of the PPP process, which is rarely experienced in many developing countries. The paper also explores the prospects for SEA and its guiding principles in developing countries. Finally, the paper calls for a coordinated effort between all government, nongovernment and international organizations involved with PPPs to enable developing countries to pursue a path of sustainable development through the development and application of strategic environmental assessment.

© 2004 Elsevier Inc. All rights reserved.

*Keywords:* Strategic environmental assessment; Sustainable development; Developing countries

---

\* Tel.: +966 3 860 2824; fax: +966 3 860 4972.

*E-mail address:* [habibms@kfupm.edu.sa](mailto:habibms@kfupm.edu.sa).

## 1. Introduction

Developing countries are accepting more responsibility for the environmental impacts that result from their development activities, and many have developed environmental impact assessment (EIA) legislation as a management tool for these impacts in the last two decades. EIA is now practiced in more than 100 countries worldwide (Donnelly et al., 1998). Today, EIA is firmly established in the planning process in many of these countries (Momtaz, 2002). In 1989, the World Bank ruled that EIA should normally be undertaken for major projects by the borrower country under the Bank's supervision. The United Nations Environment Program (UNEP) also made recommendations to member states regarding the establishment of EIA procedures and established goals and principles for EIA. It subsequently issued guidance on EIA in developing countries (UNEP, 1988).

Despite the existence of good EIA guidelines and legislation, environmental degradation continues to be a major concern in developing countries. In many cases, EIA has not been effective due to legislation, organizational capacity, training, environmental information, participation, diffusion of experience, donor policy and political will. EIAs have not been able to provide 'environmental sustainability assurance' (ESA) for these countries (Sadler, 1999). This failure and the inherent limitations of EIA lead to the consideration of strategic environmental assessment (SEA). It is the proactive assessment of alternatives to proposed or existing PPPs, in the context of a broader vision, set of goals or objectives to assess the likely outcomes of various means to select the best alternative(s) to reach desired ends (Noble, 2000).

## 2. Limitation of EIA and the role of SEA

### 2.1. Limitations of project-level EIA

In the early 1990s, researchers were studying the limitations of project-level EIA. Their findings called for the introduction of something other than project-level EIA to encompass environmental considerations. They realized the need for the environmental assessment of policy, plan or program:

“The requirements for the content of an EIS as laid down in the Environmental Protection (General Provisions) Act are suitable for application to project EISs. Problems may arise, however, if we try to draw up certain parts of an EIS, for plans and programs of a fairly abstract nature, in precisely the same way. (Verheem, 1992)”

In the first half of the 1990s, researchers emphasized the limitations of project-level EIA. The limitations stated by Glasson et al. (1994) and Lee and Walsh (1992) can be summarized as follows:

- (1) Project EIAs react to development proposals rather than anticipate them, so they cannot steer development towards environmentally “robust” areas or away from environmentally sensitive sites.

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات