

## **Learning from good EIA practice: Allow the environmental imperatives to inform project planning and design.**

TC Meyer

Centre for Environmental Management, North-West University

Environmental impact assessment (EIA) is the assessment of the possible impacts that a proposed project may have on the environment; considering natural, social and economic aspects. It is defined as "the process of identifying, predicting, evaluating and mitigating the biophysical, social, and other relevant effects of development proposals prior to major decisions being taken and commitments made. The purpose of the assessment is to ensure that decision makers consider the ensuing environmental impacts to decide whether to proceed with the project.

It primarily involves three distinct activities:

- Scoping – to identify potential environmental impacts associated with the proposed development;
- Impact assessment – to determine the significance of identified environmental impacts;
- Mitigation – to prevent or mitigate significant negative and enhance positive environmental impacts.

Mitigation in EIA is aimed at preventing adverse impacts from happening and keeping those that do occur within acceptable levels. It has a critical role to play in encouraging positive development planning and in steering the development process in order to:

- enable better protection of environmental assets and ecosystem services;
- encourage prudent use of natural resources; and
- avoid costly environmental damage, thus also making economic sense.

The basic tenets of environmental assessment suggest that mitigation and compensation should be considered in a hierarchy, consisting of avoidance, minimization, rectification, compensation and enhancement measures. It is important that in project planning, mitigation, compensation and enhancement measures are considered throughout the preparation process.

Adopting sensitive design for construction of project related physical infrastructures can be a useful approach to avoid impacts at the project planning stage itself. In South Africa, IEM is described as a procedure designed to ensure that the environmental consequences of developments are understood and adequately considered in the planning process. It is supposed to facilitate refining and improving project proposals through a series of procedures that are linked to the development process. These procedures aim to amongst others stimulate creative thinking in the planning and initial design stage. A key concept in IEM is that its underlying principles should be incorporated into the planning proposals, rather than being considerations to be addressed after the proposal has been planned.

However, there is agreement locally and internationally that the EIA process is not very effective in securing improvements to project design. The approach of starting an EIA with an already-designed development project is very common in professional practice. Clients frequently only consider design modifications once they have been refused authorization or encountered problems with a development.

This paper will provide a case study where environmental imperatives were allowed to inform project planning and design. It will provide details on how this was done for a major shopping mall development. It will also reflect on the advantages of the approach and provide suggestions on improving the EIA process in South Africa in this regard.