

The Assessment of Cumulative Effects in a Developing Country Context: the Case of South Africa

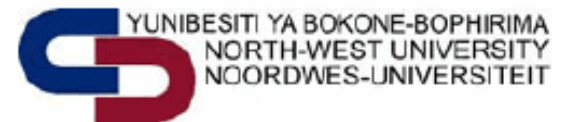
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Funding contribution by



Introduction

- Part of ongoing research:
 - Overall aim: opportunities and constraints for improving the assessment of cumulative effects in EA practice in the developing country context of South Africa
 - Basis for a second (ongoing) phase - in-depth analysis of specific case studies
- Two aspects
 - Legislation and requirements
 - Practice – overview of 25 selected EAs

A. CEs in South African environmental law and policy

- Systematic analysis of key past, existing and suggested future environmental legislation, policies and guideline documents in SA
- Aimed to explore:
 - Broad characteristics of the approach to CEs
 - Direct and implied references to CEs
 - Aspects that may facilitate or encumber ‘cumulative thinking’

One stimulus and four contexts for cumulative effects

- Focus on sustainable development is the foundation for a concern with CEs
- In SA law and policy, four contexts/approaches for addressing CEs can be distinguished
 - CEs as part of EIA
 - CEs as part of SEA
 - CEs addressed as part of approach to resource management
 - CEA as an independent instrument – acknowledged but not promoted

Some shortcomings/constraints

- Linkage between sustainable development, the integrity of resources and cumulative effects often not explicitly acknowledged
- Very few direct references to CEs - recent changes to the NEMA?!
- Ambiguity and inconsistency in the requirements for consideration of CEs
- Lack of guidance – 2001 CSIR Practitioners Handbook, 2003 IEM
Information Series 7: CEA

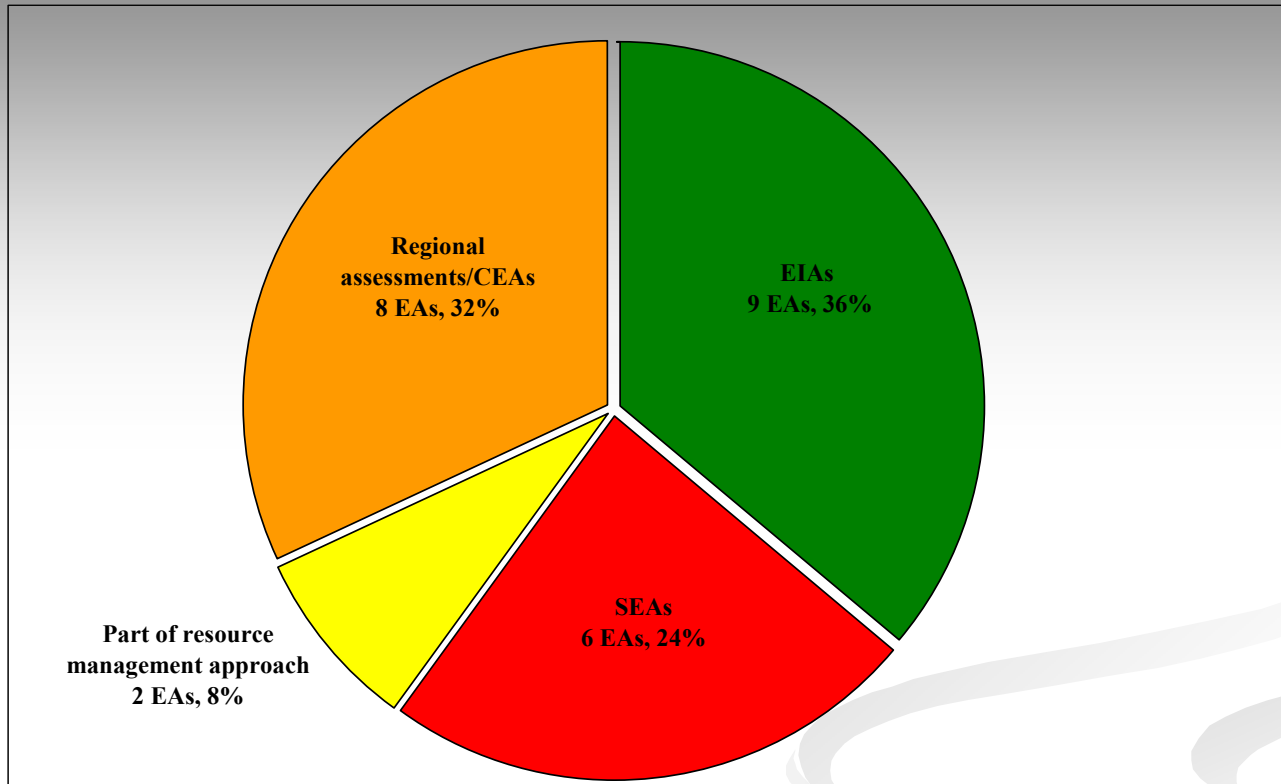
B. CEs in South African EA practice

- Analysis of a selection of 25 EAs
 - Two broad categories of EAs :
 - CEs addressed to the satisfaction of all parties involved (18 EAs)
 - Failure to address CEs had negative ramifications for the development initiative (3 EAs)
- * (ongoing EAs – 4)

Seven issues analysed

- Approach to CEs and their assessment (as identified in analysis of law and policy)
- Level of decision making
- Nature of the development
- Understanding of cumulative effects
- How cumulative effect issues arose in the assessment
- Nature of activities included in the assessment of CEs
- Treatment of CEs in the assessment

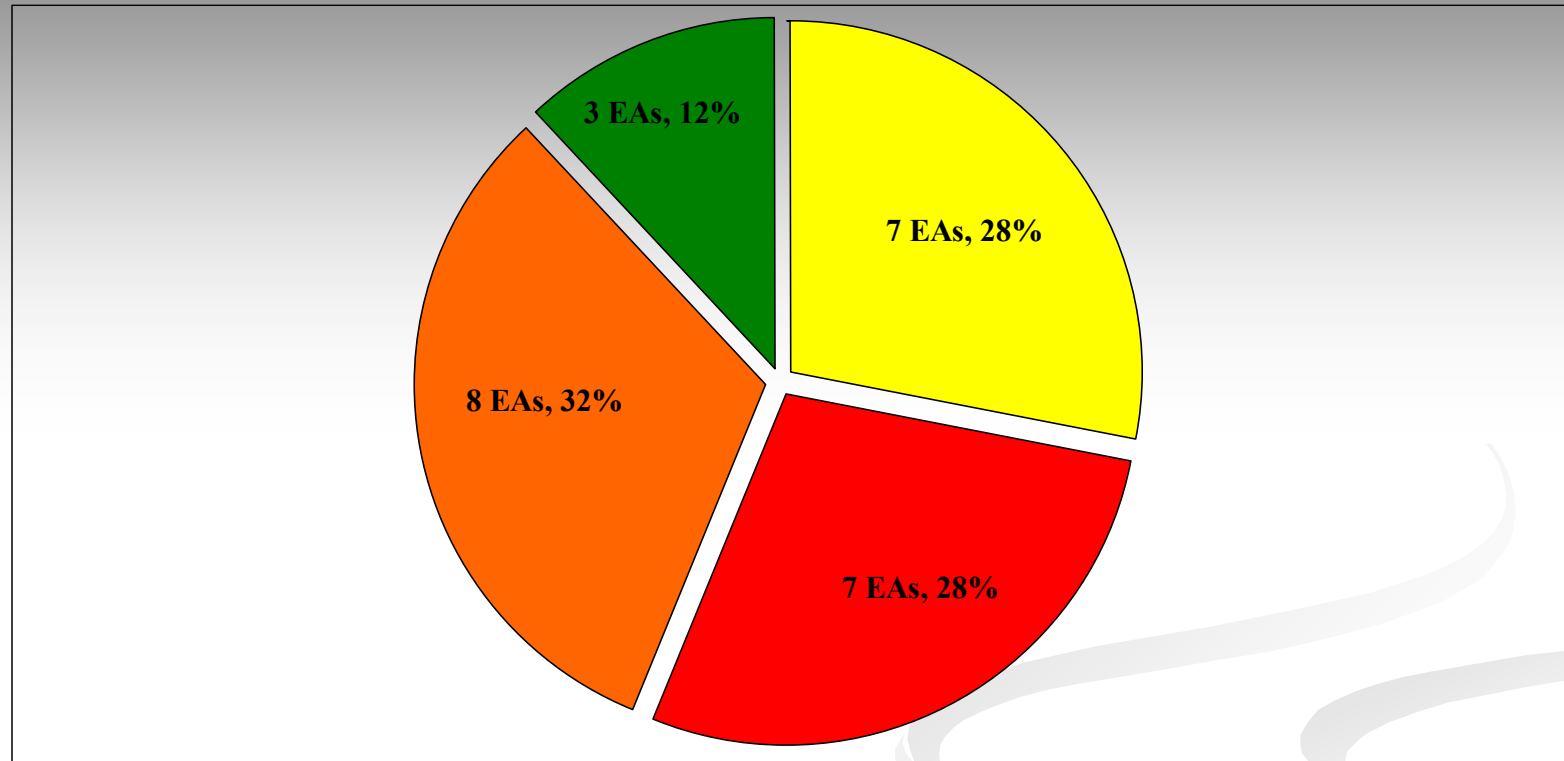
1. Approach to cumulative effects







- Relatively even distribution of EAs over three approaches
- CEs arise, and often need to be dealt with at the project level – can not be limited to strategic level – evidence for a tiered approach to CEA
- Practice shows that the use of CEA as a stand alone instrument is both possible and often considered as the most appropriate approach for dealing with these effects
- Only two EAs directly related to resource management activities

2.

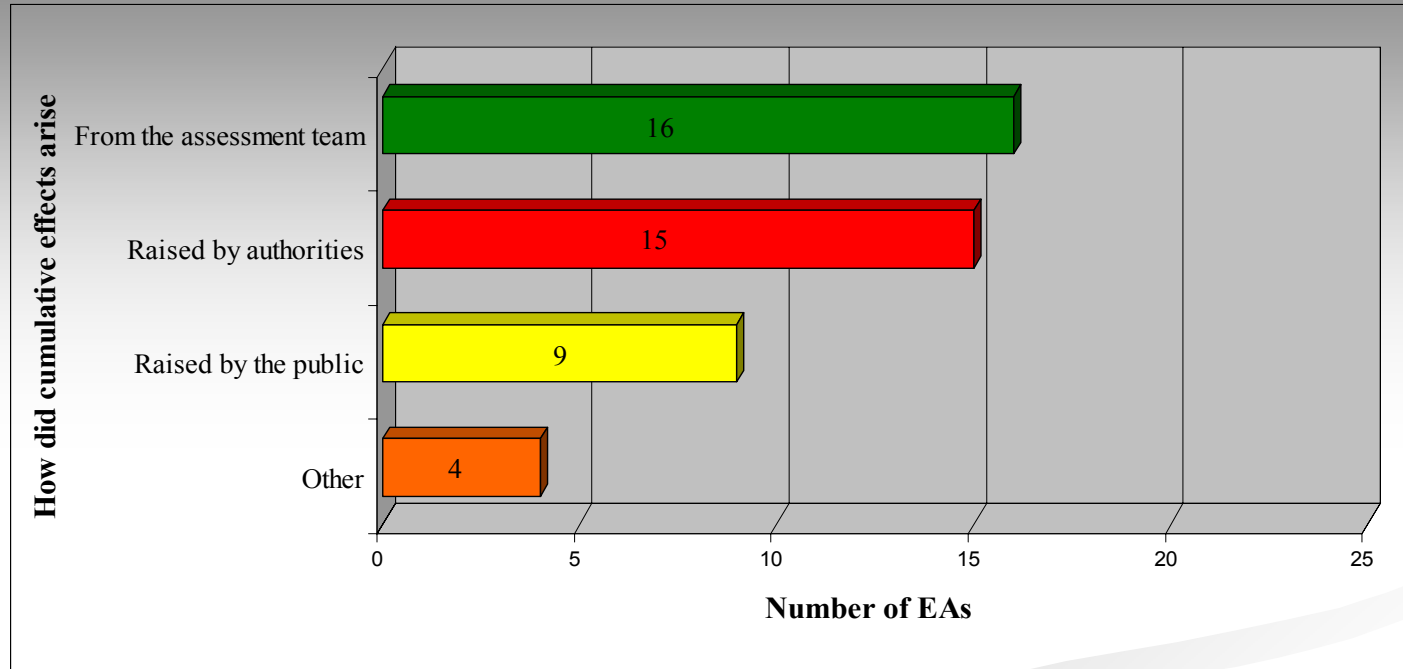
Understanding of cumulative effects



Four different interpretations of cumulative effects:

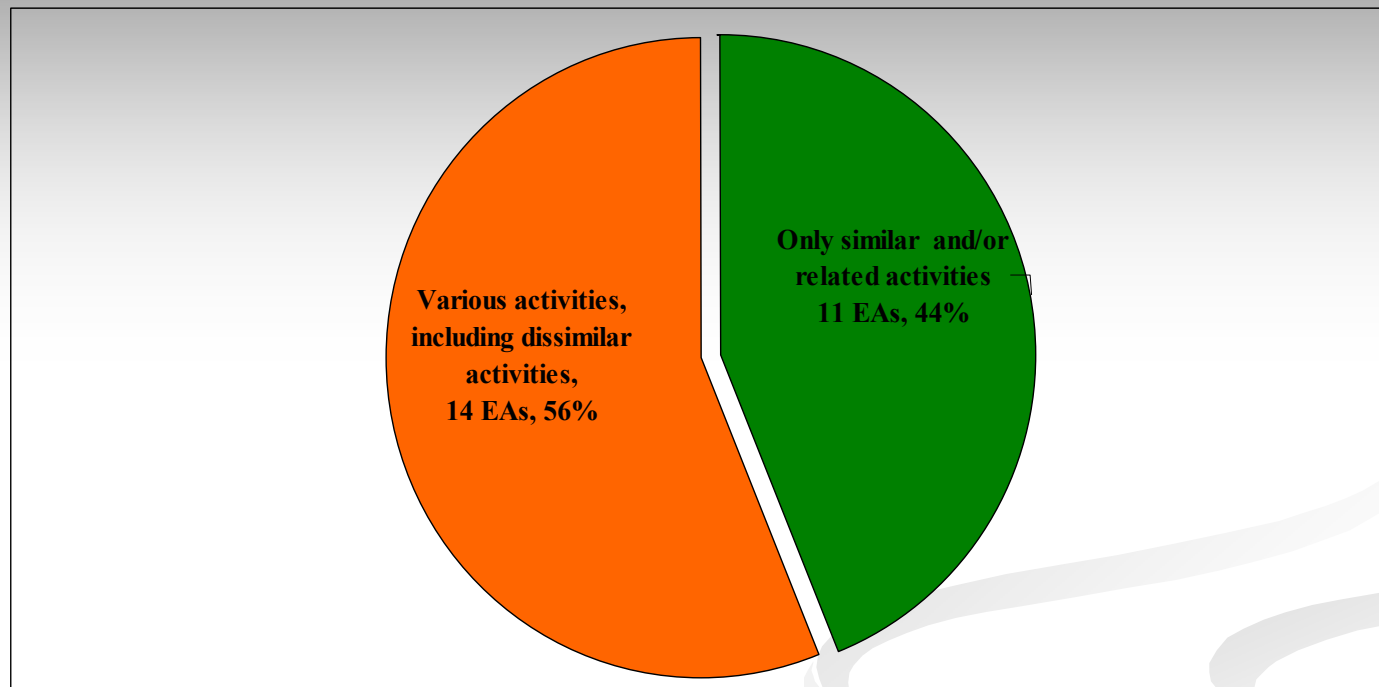
-  the resultant effects when the impacts of a specific activity is combined with those of other activities that affect the same resources
-  the combined effects of a predetermined combination of activities
-  the combined/net effect of all the activities in an area or resource boundary
-  the sum of effects of all the different components or parts of a development

3. Emergence of CEs in assessments



- The developer/assessment team clearly plays an important role in recognising and acknowledging the need to assess CEs – especially in strategic level assessment – voluntary
- Requirements by authorities the main driver for taking CEs into account in project level assessments
- Public are becoming increasingly aware of CEs issues – increasing pressure on developers/EA practitioners to account for CEs – can be used as ‘leverage’

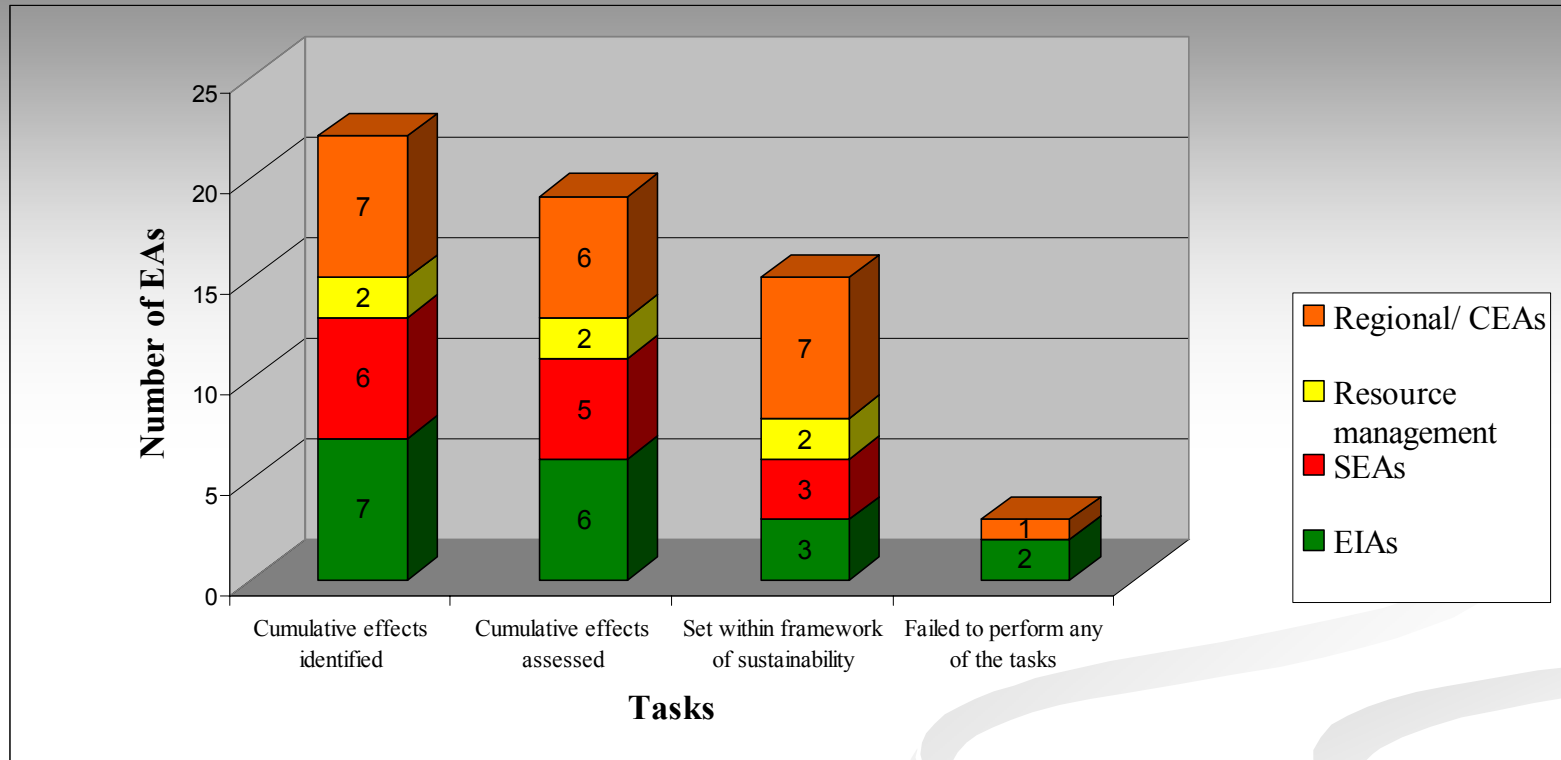
4. Nature of activities included in the assessment of CEs



- Only similar or related activities were included in the assessment of CEs – 11 EAs
- Various, unrelated activities included - 14 EAs
- Type of activities included closely related to the understanding of CEs in the assessment – cause-effect relationship not always clear

5.

Treatment of CEs

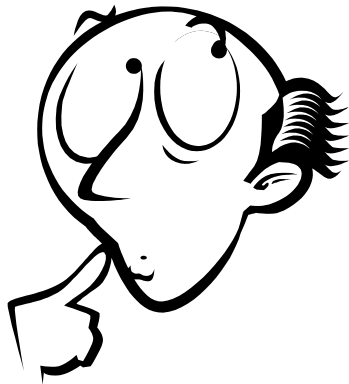


- Decline from identification, to assessment, to setting of effects within a framework of sustainability/assimilative capacity
- Paucity of data, limitations in terms of reference and, time/cost constraints given as the main reasons for the lack of assessment of CEs
- Setting of CEs into a framework of resource capacity and sustainability is more readily achieved at the strategic level

The way forward

- Capitalise on opportunities created by resource management approaches - data
- Tiered decision making - 'streamline' and focus assessments
- Acknowledge and promote the application of CEA as an independent instrument
- Clear requirements to protect EA practitioners and ensure 'adequacy' of assessment of CEs – guidance to be linked

Questions?



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Constitution

- Section 24

National Environmental Management Act (1998)

- Principles in Chapter 2
- Implicit in s13
- Principles of IEM s24
- Direct requirement in s27 – Removed by NEMA Second Amendment Act

Sectoral/Resource Management

- National Water Act (1998)
- Marine Living Resources Act (1998)
- MPRDA (2002)
- National Forest Act (1998)
- *The National Environmental Management: Air Quality, Protected Areas and Biodiversity Bills, 2003*
- *White Paper on Integrated Pollution and Waste Management 2000*
- *White Paper for Sustainable Coastal Development, 2000*

EIA and SEA

- DEAT EIA guideline document (under ECA) – direct requirements
- DEAT and DWAF SEA guideline documents - Key objective of SEA
- Focus on limits of acceptable change and thresholds of significance

CEA focussed documents

- 2001 CSIR CEA practitioners Handbook
- 2003 DEAT IEM information series 7: CEA