HOW OFTEN AND WHY ARE ALTERNATIVES ABSENT IN ENVIRONMENTAL ASSESSMENT PRACTICE IN NAMIBIA?

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Abstract

An investigation to establish how often alternatives are absent from environmental assessment reports in Namibia and the reasons why they are absent, was undertaken. External reviews of environmental assessments and questionnaire interviews of practitioners and reviewers were conducted. Identification and assessment of alternatives are absent in over 90 percent of the EA reports in Namibia. The reasons why alternatives are absent include late commissioning of EA in the project cycle, land ownership precluding alternative sites, investors uninterested in project alternatives, geology precluding alternative sites for mining, and telecom-technology not allowing for alternative locations. The findings suggest that the statutory requirement for identification and assessment of alternatives in EA needs to be reconsidered. The statutory requirement for alternatives may be deregulated; alternatively, regulatory requirements can be made more practical. Broad indications are provided for practical amendments of EA regulations.

Introduction

The IAIA15 conference call notes a decline in identification and assessment of alternatives in Environmental Assessment (EA) practice. Literature testifies to this lack of alternatives in EA (e.g. De Montis 2013; Gerber 2009; Kruopiene et al. 2009). Only in EA of linear infrastructure alternatives appear regularly (e.g. Geneletti 2005; Keshkamat et al. 2009; Hanssen et al. 2012). In many countries, including EA's place of birth (USA) and Namibia, identification and assessment of alternatives is a statutory requirement (GRN 2012). Nonetheless, in Namibia alternatives often appear to be absent in EA reports, raising the questions of how often and why identification and assessment of alternatives are frequently absent in current EA practice. These two questions are analysed from three perspectives: external second opinions, the competent authority for EA (Department of Environmental Affairs; Ministry of Environment & Tourism), and EA practitioners (EAPs) in the private sector. The external perspective is sourced from a recent report. Insiders, EA reviewers and EAPs, received questionnaire surveys by email. The information from the report and questionnaires is tabulated, analysed and discussed. Finally, alternative courses of corrective action are suggested for dealing with our findings.

Namibia is a mid-income country with a large surface area, low population, the highest inequality (Gini) index worldwide and high unemployment (>20%). The natural resource-based economy of Namibia is built on diamond mining and export, but uranium, zinc, copper, coal and gold contribute as well. In addition, the marine Exclusive Economic Zone (EEZ) contains phosphate and hydrocarbons. Further, Walvis Bay Port is an international logistic hub, with road and rail spokes to the neighbouring land-locked countries. Second in Namibia comes the export-oriented deep sea fishing industry. Beyond the mining and fishing industries, nature-based tourism is the third largest contributor to GNP. Due to aridity, farming is relatively insignificant in terms of GDP. The extreme inequality combined with very high unemployment makes a resource-based industrial sector and commercial agriculture a national priority (Namibia Vision 2030).

Methods

External reviews of 6 complete Strategic Environmental Assessments (SEAs) (Dalal-Clayton & Hipondoka, 2014) and the results of two questionnaire surveys were used as data input. The 6 SEAs represented about half of the SEAs completed in Namibia at the time. Questionnaires were emailed in February 2015 to all EIA reviewers (n=7) at the competent authority (Department of Environmental Affairs; DEA) for reviews carried out during the preceding two months. Further, questionnaires were sent to the major Namibian EAP firms (n=15) for their EIA reports prepared in 2014. The information extracted from these written sources is presented in Tables 1, 2 and 3.

Results

All EIA-reviewer questionnaires (n=7) were completed; six EAP questionnaires (n=15) were returned. The great majority of EA reports, both SEAs (Table 1) and EIAs (Table 2 and 3), described neither identification of alternatives, nor impact assessment of alternatives. Most (about 90%) do not provide a convincing justification for the absence of alternatives (Table 2).

Reviewers report the justifications in EIA documents as follows (Table 2): "capital" - the proponent will only invest in the specified project, not in any alternative, "land" - the proponent has purchased land for the project before commissioning the EIA and will therefore not consider an alternative project site, "geology" - the targeted mineral deposit or ore body will not allow for alternative sites nor alternative mineral processing technologies, or siting is determined by technology requirements (e.g. telecom-towers). Often EIA reports mention a "No-Go" alternative that was rejected *a priori* for socio-economic reasons, mostly employment benefits. Such a "No-Go" alternative was never assessed for its environmental impacts.

EAPs provided justifications *ex post* (Table 3). In order of frequency these reasons are, (i) EA is commissioned late in the Project Cycle, after alternatives have been considered by the proponent; (ii) Land was obtained for the project before the start of the EA (a particular case of the project cycle argument), (iii) the proponent will only invest capital at the proposed site with the proposed technology as he knows his business best and carries the investment risks, (iv) configurations of terrain, residential areas and roads combined with IT do not allow alternative siting of telecom-towers. One of the five large EAP firms was of the opinion that project alternatives were always superfluous. Adherence to environmental standards and best practice were considered to be sufficient to prevent unacceptable environmental impacts. A second EAP argued that alternative sites are an SEA issue; however, we have seen no siting alternatives in the reviewed SEAs either. Finally, a single case was reported of a project proposal that was assessed as having a high negative environmental impact and was rejected by the EAP prior to submission of the EA report to the competent authority for approval (Table 3). No alternative could sufficiently mitigate the high environmental impact,

The SEA review document contains more details on the absence of alternatives than the questionnaire on EIA. The reviewers were able to identify plausible alternatives in each case, which the EAP was unable or unwilling to identify and assess. One of the reviewed SEAs identified alternative trends in market prices of uranium (SAIEA, 2011). A limited budget was provided as justification in another SEA (Table 1). The remaining SEAs neither identified an alternative nor provided a justification for the lack thereof.

The contrast between the perceptions of the EAPs and those of the EA reviewers, was striking. EAPs were of the opinion that alternatives had been frequently identified and considered by the proponent, but the best alternative was selected prior to commissioning the EA. On the other side of the table, EA reviewers were reluctant to approve the submissions when no alternatives were included in the report. The reviewers were equally hesitant to reject the EA reports for the lack of justification for the absence of alternatives, as few precedents for such rejection were available. Project delays resulting from rejection are considered in effect an implicit and serious sanction to be used sparingly. Such delays are perceived widely as compromising the achievement of the national priority of creating employment by industrialisation and commercialisation of farming.

Our findings demonstrated a number of features beyond the assessment of alternatives. Each EIA reviewer could process between 2-6 EIA reports per month. EAP consultancy firms delivered up to 33 EIA reports per year; single person consultancies 4-5 per year. Further, the bulk of EIA business in Namibia is on infrastructure and mining with EAPs specialized in either one or the other sector. Such specialisation is less obvious among reviewers.

Table 1. Alternatives in six reviewed SEAs per SEA

SEA title keywords	Object	Sector	Alternative	Justification	Year
Millennium Challenge Account; MCA	Public Program	Infra	None	None	2008
Bush Encroachment; CBEND	Program Design	Energy	None	Low budget	2009
Uranium Rush	Project Cluster	Mines	Partial	n.a.	2010
Karas Rural Land Use Plan; KIRLUP	Regional Zoning	Farming*	None	None	2011
City of Windhoek & Townlands	Municipal Zoning	Housing	None	None	2011
Coastal Erongo & Kunene	Policy Design	Biodiversity**	None	None	2013

***livestock; game; horticulture; **terrestrial

Table 2. EIA-reviewer questionnaire results per person

No of EIAs	Project Mine/Infra/Other	Alternative	Justification lack of alternative
10	3 5 2	None	Capital
8	3 5 0	None	None
12	3 4 5	4	Land/Geology
5	0 4 1	None	None
9	6 3 0	None	Capital
8	3 3 2	None	None
20*	5 10 5	None	Capital/Technology/Geology
72	23 34 15	4	4 categories

*4 months

Table 3. EAP questionnaire results per person

No of EIAs	Sector Mine/Infra/Other			Alternative Identified/Assessed		Alternatives 2 versus 3		Justification lack of alternative
33	0	31	2	n.a.	n.a.	n.a.	n.a.	Project cycle; Land
30	21	4	3	30	10	n.a.	n.a.	Project cycle; 20x
25	7	6	14	14	?	9	5	Project cycle;
20	0	20	0	10		7	3	Technology; 8x
5	2	2	1	1		2	0	Immitigable Impact
4	3	1	0	2		?	?	Land/Project cycle
117	33	64	20	13		18	8	3 categories

Discussion

The overwhelming lack of compliance with the statutory requirement for identification and assessment of alternatives in both EIA and SEA, without reported justifications, seems not to raise

concerns on the quality of the EAs among the reviewers. Further, EAPs provided *ex post* practical and fundamental reasons for not assessing alternatives. Among these, the geology that did not allow for site alternatives is only a half-truth. Often the mine tailing, mineral processing plant, access road, energy and water supply infrastructure, and other accessory structures leave ample space for alternative siting. The why question in the title can, therefore, be answered as: the support for identification and assessment of alternatives is low among both EAPs and reviewers. The low support may be explained at the procedural level by EA occurring too late in the project cycle for identification of meaningful alternatives. In addition, land ownership, investment capital and technology or combinations thereof present boundary conditions, leaving narrow margins for identification of alternatives. If we accept these reasons for non-compliance in EIA of projects, why should SEAs for policy, program or plan (PPP) also fail to identify alternatives? In PPPs the project cycle, land ownership and technology are not of imminent interest; only geology is. A closer look shows that three of reviewed SEAs deal with mega-projects (Table 1: MCA, CBEND, Uranium Rush); only the CBEND was early enough in the project cycle to seriously consider strategic alternatives, but missed the opportunity. The remaining two SEAs (Table 1: City of Windhoek; Karas Region) are zoning plans in effect recording the status quo, rather than strategically zoning or planning for development trends over the decade(s). In addition, the Karas Region SEA was hampered by the absence of a statutory framework for a regional land use zoning tier.

Should, therefore, the requirement for identification and assessment of alternatives be deregulated? Alternatively, should regulation become sector specific and detail how alternatives within projects have to be identified? A potential addendum to the Regulations could be to specify that site alternatives do not apply to the drilling or excavation component of mining and petroleum projects, but do apply to associated infrastructure such as tailings, processing plants, residences, access roads, power-lines, water pipes and perimeter fences. The requirement of alignment alternatives for public linear infrastructure (roads, power-lines, canals, veterinary fences etc.) could be made explicit for EIAs and SEAs, including an exemption for EIAs based on a SEA including assessment of strategic alternatives for the particular infrastructure. Similarly, it could be regulated that industry and housing projects within dedicated zones in municipalities do not require site alternatives when the zoning process already included environmental assessment of alternatives.

The dominance of the infrastructure (energy; transport) and spatial planning sectors in SEAs in Namibia (Table 1) reflects a worldwide trend (Lobos & Partidario 2014). Lessons from Namibia may therefore apply elsewhere and vice versa.

Conclusion

Our findings suggest that the statutory requirement for assessments of alternatives should be either abolished or regulated in more detail. In practice, private and public proponents, EAPs and the regulator appear to all consider explicit assessment of alternatives superfluous and consequently non-compliance is widely tolerated. Inclusion of identification and assessment in the EA process may be obtained by more detailed regulation.

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