MEETING ETHICAL CHALLENGES IN ENVIRONMENTAL DECISION-MAKING: PERSPECTIVES FROM AN ETHICS SURVEY IN CAPE TOWN AND SURROUNDS

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ABSTRACT

The Unit for Environmental Ethics of the University of Stellenbosch recently completed an extensive survey of ethical issues in environmental decision-making in Cape Town and surrounds. Key ethical concerns emerged with reference to the following areas:

- Capacity and competency of decision-makers
- Unethical relationships between stakeholders
- Lack of strategic vision and prioritisation in decision-making
- Ineffective co-operation between stakeholders

In this paper, we address the causes, nature, extent and implications of these problem areas. We also make recommendations that can be used within the framework of co-operative governance to resolve ethical dilemmas in these areas.

1. INTRODUCTION

During 2002, the Ethics Survey of the Unit for Environmental Ethics of the University of Stellenbosch was conducted, focussing on ethical issues in environmental decision-making in Cape Town and surrounds. In the first part of the year we concentrated on free-flowing focus-group discussions. Nine homogenous groups were constituted, representing particular stakeholders or sectors including community based NGOs, politicians at provincial level, businessmen and developers, consultants, researchers and scientists, officials from local authorities, provincial officials predominantly dealing with environmental matters, and provincial officials primarily responsible for development planning. In order to observe the interaction between stakeholder groups, two further heterogeneous groups were constituted from all these sectors. In all cases between 8 and 12 persons participated in the respective discussions, each taking between one and one and a half hours to complete. In each case the participants were asked to comment on the aspects of environmental decision-making in Cape Town and surrounds that were of ethical concern to them. A working definition of ethical concern was introduced at the start of each session, referring to it as those grey areas in the decision-making process where people can, and therefore tend to take chances or cut corners. All of the discussions were taped, and subsequently transcribed into typescript. These transcripts were then analysed with a view to identify issues and areas of concern that could be further scrutinised in the questionnaire survey that was conducted during the second part of 2002.¹

¹ The full text of this questionnaire was published in the 2002 Proceedings of the IAIAsa Conference.

This questionnaire consisted of a wide variety of questions that covered broad areas of concern, including the extent to which role-players in environmental decision-making took ethics seriously and adhered to legislation, their competency and effectiveness, the nature and causes of unethical behaviour within this sphere, professionalism, personal values, environmental values, environmental legislation, impact assessments, and measures suggested to overcome the problems that were identified. A comprehensive report interpreting the findings of our research in all of these areas is currently in the process of being completed. In this paper, we will restrict our focus to four levels of ethical concern regarding environmental decision-making in Cape Town and surrounds, with specific reference to the role of consultants and the decision-making authority. The shift from one level to another represents a deepening and radicalising of the governance issue, i.e. deeper and more fundamental challenges to environmental decision-making is posed as we move from one level of ethical concern to the next. We aim to show that while addressing ethical concerns related to structural, institutional and educational matters remain important for improved environmental decision-making, improved governance alone would not be able to address the challenges posed by value clashes amongst interest groups.

2. STRUCTURAL RELATIOSHIPS AND CONFLICTS OF INTEREST

On the first level of concern, we will focus primarily on the structural relationship that exists between consultants and developers, and then proceed to the wider question of conflicts of interest. The latter problem was not only the most hotly discussed topic in our focus group discussions, but also identified in our questionnaire survey as the most serious ethical concern of all. Many respondents in the survey and the focus group discussions were of the opinion that the relationship of financial dependence between the consultant and the developer discredited the Environmental Impact Assessment process by introducing an element of bias. They were of the opinion that because the developer paid the consultant this compromised the ability of the consultant to produce impartial reports in EIAs and made them vulnerable to manipulation by the client. The following comments were recorded:

"Consultants that do the EIA are paid by the developers and so are the consultants that do peer review. This can only result in recommendation(s) that are not neutral", said one local government respondent. One developer admitted that because the developer paid the client, this could influence the report: "The developer per se appoint that person who, even in the best world always comes under pressure from his employer to (a) get the decision to go in the employer's favour and (b) to speed it up as much as possible. I personally feel that if the process can be simplified so that the process is shorter, we will be less under pressure and less opportunity for cutting corners."

Consultants themselves also expressed concern: "I think part of the ethics is tied to the need and the way to be independent but being paid directly by the developer ... there are EIRs where consultants are put in positions because it is an outgoing client and you like to keep the business ...," said one. "I think we are vulnerable because clients insist on a fixed price. That is it – we have R20 000 and we want the EIA process done for that ... The goals shift and so on and then the consultants are locked in that", said another

A total of 96% of respondents in the survey supported the view that consultants should be appointed by an independent third party. Only 4% of respondents disagreed. There were also several suggestions about who that third party should be. They included the municipality, the province, an Environmental Protection Agency or the community themselves.

While, it is not the task of this paper to quantitatively assess the truth of this perception or bias, it is clear that regardless of whether most consultants act independently or not, there is a wide-ranging perception that they do not. This perception in itself could work against the ability of the

consultant to render a professional and ethical service. In order to avoid this kind of blanket discreditation of consultants, it would seem necessary to make structural changes to the way in which they are appointed and received payment. This structural change would give consultants the opportunity to conduct themselves in a more independent manner, in principle at least, whereas at present many find themselves compromised, not so much because of personal inclination, or lack of integrity, for that matter, but because of structural reasons.

If we take a look at the broader picture, this structural issue was picked up in our survey regarding a number of other crucial relationships within the process of environmental decision-making. For example, the integrity of the relationship between onsite environmental control officers (ECOs) was questioned in the same manner as the relationship between developers and consultants. Only 26% of the respondents stated that they trusted ECOs to give impartial evaluations of onsite environmental impacts, while 54% expressed strong to very strong concern.

The same kinds of figures emerged when other relationships were probed.

- 59% of the respondents were of the opinion that developers inappropriately make use of personal contacts in environmental decision-making structures to get projects approved.
- While 51% of the survey sample felt that the appeals of developers to the provincial minister were too easily upheld, our focus group discussions indicated a strong concern about a too close relationship between developers and political decision-makers. One local government official expressed it in this manner: "... I think another problem is that a lot of developers are linked to the City [of Cape Town] in a financial way. [They] offer support for various political parties. This is an open statement. I don't know it factually. They bring business to Cape Town, and I think that needs to be looked at." That there is something to this cautious statement was strongly borne out by a massive 96% of respondents indicating that political decision-makers need to be made more accountable for environmental decision-making.
- Revealing comments made in our focus group discussions and received in response to the questionnaire indicated grounds for serious concern in the relationship between officials responsible for environmental decision-making and developers. It was mentioned that some officials are known to have repeatedly advanced the interests of particular developers, while references were also made about "numerous rumours about the links of certain senior officials in the department to particular developments and particular developers". In certain cases this led to the "fast tracking" of certain development proposals, and this, it was pointed out, created "severe problems with public participation and the other steps that are meant to be taken" in a proper process of environmental decision-making. According to some respondents, these problems were exacerbated by former employees of government departments that are now employed by consultants or developers with a view to act as links with the departments.

Interpreting our role in this survey as that of showing up trends, rather than quantifying each statement made to the smallest margin of error, the figures and comments quoted above indicate a very strong ethical concern about conflicts of interests in the process of environmental decision-making in Cape Town and surrounds. This does not augur well for public trust in either the role-players involved in environmental decision-making, or confidence in the integrity of the decision-making process. It was therefore not surprising to find that 92% of the respondents expressed strong to very strong support for the suggestion that an audit of environmental decision-making procedures should be done in each of the three tiers of government.

3. FRAMEWORK ISSUES

The structural impediments and issues of conflict of interest briefly discussed above, however, were not the only level of ethical concern that emerged from our survey. Serious framework issues were also highlighted on what we consider to be a second level of more serious ethical concern.

These framework issues are linked to the topics conventionally placed under the general theme of governance. In our questionnaire these topics were covered with questions whether appropriate legislation is in place to enable effective environmental decision-making, whether this legislation was followed, whether officials from different departments of government effectively co-operate with one another, and whether there is inappropriate interference from politicians or those in higher authority in the decision-making process.

In the following table a summary is given of responses on key questions regarding the issues mentioned above. The figures indicate to what extent the respondents agreed or strongly agreed with the statement in the left-hand column.

TABLE 1	
GENERAL QUESTIONS	Agree
Political pressure causes hasty development decisions to be made which have negative environmental consequences	86%
Politicians promote development decisions that are politically motivated rather than environmentally informed	85%
Local authorities and provincial departments do not co-operate effectively in the environmental decision-making process	85%
Heads of departments within provincial government do not work effectively together in environmental decision-making	80%
LEGISLATION	Agree
Penalties for the enforcement of environmental legislation are not severe enough	77%
There is widespread confusion about how to implement the National Environmental Management Act (NEMA)	66%
Consultants are often ignorant about all the relevant legislation impacting on environmental impact assessments	65%
Judges are not sufficiently informed of environmental issues	64%
Officials are often ignorant about all the relevant legislation impacting on environmental impact assessments	62%
Current national environmental legislation is full of loopholes that make prosecution difficult	55%
Industry is ignorant about environmental regulations	51%
Current national environmental legislation is too vague to be properly implemented	51%
There is sufficient legislation available on a national level for adequate protection of the environment	49%
There is sufficient legislation available on a provincial level for adequate protection of the environment	42%
Environmental impact assessments are unnecessarily delayed because of a clash between the Land Use Planning Ordinance (LUPO) and the National Environmental Management Act (NEMA) processes	31%
There is excessive environmental legislation on a local government level	20%
Magistrates are well-informed of environmental issues	12%

There is no need to discuss these figures at length. They speak for themselves. It should be noted, though, that the disturbingly high figures in this table across so many issues clearly indicate that a comprehensive approach should be followed in addressing them, instead of singling out one area while neglecting others. We argue that Table 1 indicates a system-wide problem related to the whole of the legal and institutional framework currently in place for environmental decision-making. This calls for a systemic transformation, the details of which fell outside the scope of our survey. It should also be noted that the problems highlighted in this Table have a direct bearing on the capacity of role-players

working within this framework to deliver on their respective role expectations.

4. DELIVERING ON ROLE EXPECTATIONS

Our research revealed there to be yet another, deeper level of ethical concern, one that centered around the question whether consultants and officials, and for that matter, all role players in environmental decision-making, were in a position to effectively fulfil the roles they were assigned. In the survey, there was a general complaint that decision-makers (i.e. officials and politicians) in general were not properly qualified or experienced enough to make many of the important environmental decisions they were confronted with.

It was suggested that because decision-makers were generally poorly informed they were open to persuasion. This general lack of awareness among decision-makers, in addition to a specific lack of awareness and training about ethical issues, left them largely driven by political agendas or the most aggressive party. In the survey, a total of 53% of respondents were of the opinion that a lack of awareness among roleplayers about what constituted ethical behaviour was one of the causes of unethical behaviour in environmental decision-making in Cape Town. A total of 46% of respondents to the survey were of the opinion that unethical behaviour itself was caused by a lack of training among government staff who were implementing environmental policy.

As a general trend, our survey indicated low levels of confidence in the extent to which officials in provincial and local authorities take ethics very seriously in the process of environmental decision-making. Where provincial officials only attracted about 19% of the responses indicating a high level of confidence in this variable, consultants were placed significantly lower at 7%, a little higher than provincial politicians that attracted 6% of the response. Surprisingly, though, consultants scored the highest in the category of moderate confidence in the extent to which they take ethics seriously. Consultants were placed at 49%, comparing well with the 39% of provincial officials. If the categories of high and moderate confidence of these roleplayers are combined, provincial officials were rated at 58%, consulants at 56%, while politicians were placed significantly lower between 35% and 17%, depending at which level they were functioning.

Now, these figures of 58% and 56% seems to be unexpectedly high ratings. We ascribe this partly to the fact that officials and consultants participated in this survey, and therefore that they reported favourably upon themselves. A best case interpretation of ths bias would be that they really are convinced that they try their utmost to take ethics seriously in their respective roles. Another explanation could be that many participants in the survey, most of which were consultants and researchers, would not likely describe what they themselves do as unethical, while others would. This is borne out by the fact that there was almost a blanket rejection by all participants in their personal as well as their professional capacities of actions like the following:

- To proceed with a development project without proper approval by authorites.
- Consultants doing work outside their field of competency.
- Developers with personal contacts in decision-making structures.
- Officials "walking" reports through the environmental decision-making process for developers.
- Delaying a project so that it is to expensive to proceed.

The figures that were recorded in this regard fluctuated between 82% and 97%, indicating very high levels of unacceptability. This correllated with similarly high support in personal capacity that was expressed for the polluter pays principle (96%), the precautionary principle (93%), sustainable development (94%), and environmental justice (96%). Further evidence supporting the conclusion that role-players thought highly of themselves in ethical regard was found in the question where respondents were probed to admit whether they were ever put under pressure or out of own accord acted unethically.

86% of the respondents reported that they never compromised their personal principles to satisfy their clients or applicants (9% admitted to more than once, and 5% to once). Only 5% admitted that they more than once withheld information to get a project proposal approved (with 2% admitting to doing it only once). 95% indicated that they never have broken the law to satisfy a client/applicant, while 98% reported that they have never withheld information to get a project proposal rejected. Also, 94% reported that they have never compromised their professional code to satisfy a client or applicant.

This contrasted starkly with the very low figures that were recorded when local, provincial and national government were rated in terms of their effectivity to implement the polluter pays and precautionary principles, as well as the principles of sustainable development and environmental justice. The figures regarding the latter issue are shown below in Table 2.

Table 2								
Effectivity of provincial, local and national government in implementing principles of environmental management	Highly Effective	Effective	Ineffective	Highly Ineffective	N			
Provincial Dept of Environmental Affairs and Development Planning								
The polluter pays principle	5%	33%	46%	16%	78			
The precautionary principle	3%	42%	44%	11%	78			
Sustainable development	4%	33%	54%	9%	77			
Environmental justice	5%	28%	51%	16%	76			
Local Government								
The polluter pays principle	7%	22%	42%	29%	79			
The precautionary principle	0%	24%	49%	27%	78			
Sustainable development	1%	24%	44%	31%	78			
Environmental justice	1%	20%	55%	24%	79			
National Government								
The polluter pays principle	8%	26%	43%	23%	77			
The precautionary principle	5%	25%	44%	26%	77			
Sustainable development	1%	25%	52%	22%	77			
Environmental justice	0%	30%	47%	23%	77			

From these figure we conclude that the perceptions of non-delivery on the implementation of these values should not be ascribed to the lack of personal integrity or intentions of the various individuals in these departments (given the qualification that this was reported by the role-players themselves), but rather, as indicated above, to flaws in the framework of environmental decision-making, or to lack of capacity, training, or experience.

It is significant to note that in all cases, strong points of view on the lack of effectiveness were only based on the first hand knowledge of between 27 and 36% of the sample. Limited experience and perceptions accounted for the rest. In both cases, these figures are disturbingly high, although experience and perceptions clearly require different responses to rectify. In the case of experience, albeit first-hand or limited, where figures of between 42 and 80% of the sample were recorded, concrete action in terms of addressing framework, capacity and training issues would be required. While in the case of perceptions where figures of between 20 and 58% of the sample were recorded, issues of the communication of a public image will have to be addressed.

The issue of professionalism amongst officials and consultants was also touched on in the survey. One of the indicators of professionalism is competency, especially with regards to knowledge of the laws that are supposed to be adhered to in environmental decision-making. With regards to consultants,

there seemed to be confusion in the responses, since a total of 60% of respondents believed that consultants adhered to legislation. However, a total of 65% of respondents were of the opinion that consultants were ignorant about all the relevant legislation impacting on environmental impact assessments. Similarly, a total of 62% of the respondents believed that provincial officials were ignorant about relevant legislation in this context, while 55% were of the opinion that they were in fact implementing the law.

Other indicators regarding the professionalism of consultants were the following:

- 95% of all respondents were of the opinion that environmental consultants working on environmental impact assessments should ascribe to a professional code of conduct.
- 48% of all respondents were of the opinion that consultants conduct sham participation processes that did not allow for adequate public engagement with environmental issues.
- 42% of respondents were of the opinion that competition between consultants resulted in cheap and superficial environmental impact assessments.

Concerns like these, reflecting on the quality of work that was being produced by consultants had prompted officials to issue guidelines for EIA assessment, and this adds support to the conclusion that professionalism and what it means in practice amongst themselves as colleagues, as well as in the services that they provide, is not yet fully sorted out. Furthermore, respondents highlighted in comments that they were not convinced of the trustworthiness of all consultants. One claimed that consultants took advantage of the ignorance of people at public participation meetings. Another complained that consultants failed to bring anything new to the EIA process and they were prone to cheating. They were of the opinon that environmental organisations could do a better job than consultants.

But the picture is not all that bad. If we consider the responses when people were explicitly asked to comment on the effectivity of the role-players in environmental decision-making, 56% of the respondents indicated that provincial officials were competent, while 63% indicated that they were of the opinion that consultants were competent. On the other hand, only 38% indicated that local government officials were competent, which is grounds for serious concern. Furthermore, not everyone thought that consultants were always at fault: 54% of respondents were of the opinion that because government departments lacked capacity themselves they expected too much from consultants working on environmental impact assessments. Some consultants, said they were in a tight spot with the public and officials as well as developers because:

- The public had no capacity to understand the limitations of the "game" that consultants were "playing". A consultant said: "They expect us to solve the worlds' problems, but I mean we cannot do that."
- Officials suffered from capacity problems themselves and sometimes consultants had to educate officials and then get feedback from them, said one consultant.
- Consultants were sometimes confused when officials from the Provincial Department of Environmental Affairs and Development Planning were moved around from project to project because different officials treated the same sort of projects differently.
- Inexperienced officials with little experience were put in authority positions where they made decisions about other people's impact assessments.

All of this indicate that there are serious concerns that need to be addressed in the areas of role expectations, professionalism and effective service delivery in environmental decision-making. Throughout our research it was suggested that there was a real need for a critical review of the work and roles of officials and consultants. One consultant admitted there was not nearly enough questioning on what was actually going on in the field and not enough training exposure. Another said that environmental consultants were not prepared to critically review others. They were of the opinion that if this review happened it might be able to set some limits to unethical behaviour.

Strong supporting evidence in this regard was found in the survey when 76% of the respondents reported that they would not report a colleague to superiors if they noticed that that colleague behaved unethically, and 79% indicated they would not report that colleague to authorities. Instead of whistle-blowing, the option rather seemed to approach the colleague privately and explain the problem.

An International Association of Impact Assessors Board for peer review was another suggestion. It was suggested that this should occur before the work was subjected to other processes. However, it was also said that the status of IAIAsa would need to be rethought if it were to function as a certification body of professionals. Presently, there was no entrance criteria and nobody had any right to judge a fellow member.

Solutions to the problem of unethical conduct in environmental decision-making, seen from this angle, therefore lies in addressing structural relationship issues leading to conflicts of interests, addressing framework issues on the level of legislation, procedures and governance, and sorting out role expectations and functions with a view to effective, professional service delivery. A last point needed to be made, however, and this has to do with the capacity among role-players in environmental decision-making to address diverging and clashing values and interests during the course of their work.

5. ADDRESSING VALUE ISSUES

With this theme we venture into one of the most difficult areas of environmental decision-making: that is, to actually make a justifiable choice between diverging and often clashing values and interests. This clearly takes the issue of ethical conduct within the process of environmental decision-making to an even deeper level, since the focus here falls on the ethical quality of the decision reached. This begs the question what an ethically acceptable choice is, i.e. what the criteria are that should be applied in this regard, and how they should be applied. Which in turn confronts us with the problem of the lack of consensus in society about the standards that should be used in order to differentiate between what is ethically acceptable and what not.

This issue was touched upon in the survey in a number of questions. In response to one of the earlier questions in the survey, only 14% of respondents claimed that there was agreement among environmental decision-makers about what constituted ethical behaviour. This was confirmed by the distribution of responses when it was asked to what extent certain specifically formulated value-laden statements could be supported. This distribution is represented in Table 3, where it should be noted that the difference between strong and moderate support, whether positive or negative, is highly significant, since it indicates whether a certain value position is ascribed to in a strong or a moderate fashion. This is further important since strong or moderate support for a value position can lead to serious debates among role-players in environmental decision-making about which policy or course of action to choose, let alone serious debates with moderate or strong supporters of the opposite side. And to further complicate matters, different positions can be adopted with regards to different values, leading to an almost insurmountable number of permutations of possible and actual relationships between value positions.

Table 3						
Extent of agreement with the following value-laden statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Ν
Natural life is valuable in itself, regardless of its use for human beings	45%	28%	7%	14%	6%	84

Economic activity should stay within the confines of the supporting eco-systems of an area	33%	43%	16%	8%	0%	83
It is impossible to place an economic value on biological diversity	16%	20%	11%	39%	14%	85
Development that involves land-use change is often not compatible with sustainability	8%	38%	21%	26%	7%	85
Environmental issues are rich people's concerns; poor people have to worry about jobs	6%	16%	5%	35%	38%	85
The way in which we currently live in South Africa will ensure that our children inherit a clean and healthy environment	4%	4%	2%	54%	36%	85
Environmental benefits like clean air can always be traded like other economic benefits	3%	8%	11%	40%	38%	85
Ownership of land gives me the right to do anything on it	3%	0%	1%	29%	67%	85
Wilderness will have to be sacrificed to satisfy basic human needs in South Africa	2%	11%	5%	36%	46%	85
Technology will always come to the rescue in the solution of environmental problems	1%	2%	14%	51%	32%	85

Bearing in mind that the figures corresponding to the last three entries in this table should be read in reverse order to those above (following from the formulation of the statements), a significant aspect of this table is the clear "splits" between the categories of "strong", "moderate" and "neutral". These splits indicate well-defined differences between the participants in this survey, and if this is true of those who are professionally or in the role of advocacy involved in environmental-decision making, i.e. working in the same sector, it would not be surprising to find even deeper splits if other sectors or the broad public were involved.

We draw attention to this, since environmental decision-making would, in the eyes of interested and affected parties, as well as the public, not be regarded as legitimate if it cannot be demonstrated that value issues and clashing interests have been addressed adequately. To adequately address value issues, we argue, would, in the first place, require the capability of identifying and conceptualizing not only each value position, but also the differences between them in terms of assumptions, content, structure, implications and consequences. In addition, it would require competency in relating these value positions to specific contexts, and to deliberate in an accessible, transparent and justifiable manner what the merits and demerits of relevant value positions are: relevant, that is, to the context.

Now, let us suppose that all of the issues regarding structural relationships, framework, procedures, governance, professionalism, roles and functions, and effective service delivery have been addressed, then, at best, ethical deliberation about justifiable choices will still be an issue, but we are not sure, at least based on the evidence of the survey, whether the capacity exists among role-players in the process of environmental decision-making to address this problem. Special training, exposure and capacity building in this regard, seems expedient. However, if it is already difficult to reach a well-deliberated, justifiable decision, this difficulty of adequately addressing value issues and clashing interests, we further argue, is raised to the level of almost an impossibility if structure, framework, procedures, governance, professionalism, roles, functions and service delivery themselves are at issue. The irony of the matter is that a flawed system only adds to the extreme challenge of making ethically justifiable public decisions. And yet, we have to make decisions, whether we have a perfect system or not.

The importance of this is underlined if we consider further that an environmental value such as sustainable development has a core meaning, but that this core meaning is often neglected or ignored in some circles, and, as a matter of fact, interpreted differently from different value positions. This is not the place to argue for the distinctions in this regard, or to give lists of them, except to point out (with Jacobs) that at least eight different interpretations of sustainable development can be given without exhausting the list, and that they tend to polarize in radical and conservative points of view. And if we assume that the same is also true of other principles of environmental decusion-making such as the poluter pays, precaution, and environmental justice, it is clear to us that environmental decision-makers are faced here with a serious problem that will require urgent attention.

Our conclusion to this section is that even if all the structural and framework issues in environmental decision-making were removed, and even if institutional and personal capacity have been developed through sensitizing, education and training, environmental decision-makers across the spectrum, and especially officials, would still be faced with ethical dilemmas in decisionmaking. The nature of this challenge, we argue, lies at a deeper level than the first three which could potentially be resolved in either an organisational, educational or institutional response. To address this challenge would force decision-makers to make value judgements, and this, in turn, would require a kind of deliberation that is qualitative in nature rather then quantitative. We thus argue for a new kind of thinking within environmental decision-making that is open to value analysis and what it can bring to the process. To further develop what this entials, however, falls outside the scope of this paper.

6. CONCLUSION

In conclusion to this discussion, we would like to make three observations: Firstly, our research indicated that unethical behaviour in environmental decision-making is not so much a function of a lack of personal integrity or of malicious intentions. It rather is the result of structural problems leading to conflicts of interest, a legal and institutional framework that is deemed to be ineffective, lack of good governance, a lack of sensible procedures, under-defined roles and functions, professionalism that is currently not adequately institutionalised, and ineffective service delivery.

In the second place: as long as the problem areas alluded to above are in existence and not addressed, (a) it taints all of the actions and decisions made in the environmental sphere that have been made with the best of intentions and with integrity, and (b) it creates an ideal smoke-screen behind which ruthless and/or unscrupulous operators can take shortcuts.

In the third place, we argue that even if all of the structural, institutional, capacity and other problems mentioned above have been removed, there still would be no guarantee for ethically acceptable environmental decisions. This has to do with the fact that environmental decision-making in the last instance is faced with the hard challenge to weigh values and sort out clashes of interests. In order to do this, we argue, a process of qualitative deliberation and value analysis is required in which justifiable arguments on the basis of acceptable criteria have to be developed with reference to the complexities of the concrete context within which that decision has to be made. If a ready-made algorithm was available to do this work, we could have left ethical decision-making to computers. We all know, however, that no such algorithm exists.