

**EXTERNAL REVIEW OF THE  
PRELIMINARY ENVIRONMENTAL IMPACT  
ASSESSMENT REPORT  
FOR THE PROPOSED  
POPA FALLS HYDROPOWER PROJECT**



**Conducted by  
the Southern African Institute for Environmental Assessment  
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## This review is divided into the following sections:

1. Methodology utilised in compiling the EIA report
2. Description of the project
3. Assessment of alternatives to the project
4. Description of the environment
5. Description of impacts
6. Consideration of measures to mitigate impacts
7. Non-technical summary
8. General approach

### Review methodology:

1. For each question, the reviewer considers whether the information is relevant to the project. If not, the question is ignored and the reviewer proceeds to the following question.
2. If the information is relevant, that section of the report is read to establish whether the information provided is:
  - **Complete (C)** : all information required for decision-making is available. No additional information is required even though more information might exist.
  - **Acceptable (A)** : the information presented is incomplete, but the omissions do not prevent the decision-making process from proceeding
  - **Inadequate (I)** : the information presented contains major omissions. Additional information is necessary before the decision-making process can proceed.

Name of the project	Popa Falls Hydropower project (Preliminary EIA)
Country where the project is to be located	Namibia
Name of company which compiled the PEIA report	EcoPlan
Name of reviewer	P.Tarr
Date of review	11-14 January 2004

### Narrative report (reviewers general opinion of the Preliminary EIA report):

The report is of a good standard and it is the opinion of the reviewer that the consultant has met the Terms of Reference issued prior to the commencement of the work.

The methodology applied and the approach to the task was professional, reflecting well on both process and product. There were adequate opportunities for Interested and Affected Parties to make an input into the study and to raise concerns about the project, as well as to offer support. The project is controversial, given that it is to be located upstream of the world famous, ecologically sensitive and economically important Okavango Swamps. It might also impact negatively upon important ecological processes and biodiversity associated with the Okavango river. For this reason, a number of people and organizations have expressed criticism about the project. As far as can be ascertained, both the proponent and the consultant were at all times willing to provide information to all parties, and there has been no political interference in the study. Transparency is extremely important in any environmental assessment process.

The team that conducted the study was suitably qualified and experienced, and a considerable amount of work was done. It might have been useful though to have had more emphasis on social issues than was the case – focus group and village meetings, as well as household surveys should be done as part of the full EIA.

Given that this was merely a Preliminary EIA, it is acceptable for there still to be many unanswered questions and a need for additional work to be done. The consultant is cautious in his interpretation of some of the data and suggests that more data be gathered and modeling be done before accurate predictions can be made about the impacts and mitigation options. He correctly recommends adopting the precautionary principle in the event of uncertainty. If the proponent is interested in pursuing this project further, it is recommended that a full EIA be done before a final decision is taken.



Dr Peter Tarr  
Executive Director, SAIEA

## Summary appraisal of the Preliminary EIA report

	Judgment (C/A/I)	Comments
1. Methodology utilized in compiling the PEIA report	C	<ul style="list-style-type: none"> <li>• Good description of methodology. Considerable information has been included, especially on sediment sampling. This is important as this is not only a key issue, but also an area likely to be scrutinized scientifically. The consultant has clearly tried to ensure that his work is scientifically sound, and where uncertainties exist, these are noted. The report was compiled after extensive literature review, a number of field visits and consultation with various stakeholders and experts. It appears that more field work was done than was actually required by the Terms of Reference (TOR). The study was more rigorous than many full EIAs conducted in southern Africa</li> </ul>
2. Description of the project	C	<ul style="list-style-type: none"> <li>• The project is clearly described in the technical report, which provides considerable detail</li> </ul>
3. Assessment of alternatives to the project	C	<ul style="list-style-type: none"> <li>• The TOR did not require a strategic assessment of alternatives, as the idea of this pre-feasibility study (and the accompanying PEIA) was rather to obtain a first approximation of the key issues relating to this particular option. Nevertheless, the consultant has provided a concise synthesis of all the logical alternatives to this option.</li> <li>• Since it was not required, the consultant has not made a value judgment on the suitability or otherwise of this proposed project compared to the alternatives.</li> </ul>
4. Description of the environment	C	<ul style="list-style-type: none"> <li>• Although intensive field work was not required as part of this PEIA, the amount of information provided about the natural environment is extensive.</li> <li>• The specialists included in the team clearly have considerable first hand experience in the area, and their previous knowledge was complimented by some field visits. In addition, there has been a thorough review of the available literature, unpublished reports and interviews with knowledgeable people.</li> <li>• The report correctly recommends that more information should be gathered during the full EIA, and it gives a good indication of the gaps that exist.</li> </ul>
5. Description of impacts	C	<ul style="list-style-type: none"> <li>• The impacts are described in as much detail as can be expected in a PEIA. The report makes it clear that there are still a number of information gaps, and that considerably more work must be done before some of the impacts can be assessed with certainty. This is true for both ecological and social issues.</li> <li>• Nevertheless, the consultant has not been hesitant in raising concerns and strongly recommends additional research and modeling, especially to arrive at greater certainty regarding the issue of sediment transportation.</li> </ul>
6. Consideration of measures to mitigate impacts	C	<ul style="list-style-type: none"> <li>• Because of the preliminary nature of this assessment and the knowledge gaps mentioned above, the report has not provided clear-cut measures that should be adopted to mitigate impacts. Instead, it has considered various mitigation options, and on the basis of current knowledge and professional judgment, recommendations are given. This is the correct approach given that a full EIA will be done should the proponent decide to pursue this project further</li> </ul>

		<ul style="list-style-type: none"> <li>Because this is a PEIA, it is not possible to assess the impacts or costs of mitigation</li> </ul>
7. Non-technical summary	C	<ul style="list-style-type: none"> <li>The report is written in an easy-to-read style and is well illustrated</li> </ul>
8. General approach	C	<ul style="list-style-type: none"> <li>This is a good report, which exceeds the standards required by the TOR and the requirements of Namibian policy regarding preliminary EIAs. This PEIA is of a higher standard than many full EIAs that are produced in southern Africa.</li> <li>In future studies, it might be better for the environmental team to be contracted directly by the client, rather than to be a sub-contractor under the engineering team. This suggestion does not imply that the environmental consultant was in any way subservient to the engineers, but the respective teams need to be separate, even though they should work very closely with each other.</li> </ul>

**The overall report is graded as follows: (tick one box)**

**Excellent:** The Preliminary EIA report contains everything required for decision-making on the project at this preliminary stage. There are no gaps.

**Good:** The PEIA report contains most of the information required as far as it is relevant in the particular circumstances of the project; any gaps are relatively minor.

**Satisfactory:** The information presented is not complete; there are significant omissions but in the context of the proposed project, these are not so great as to prevent a decision being made on whether the project should be allowed to proceed.

**Inadequate:** Some of the information has been provided, but there are major omissions; in the context of the proposed project these must be addressed before a decision on whether the project should be allowed to proceed can be taken.

**Poor:** The information required has not been provided or is far from complete and, in the context of the proposed project, the omissions must be addressed before a decision on whether the project should be allowed to proceed can be taken.

**In the opinion of the reviewer:**

	<b>Yes</b>	<b>Don't know</b>	<b>No</b>
• Did the PEIA process include genuine public participation ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Were the consultants unduly influenced by the proponent or the Authorities ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Did the PEIA report focus on the 5 most important issues?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Is the PEIA report of acceptable quality?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Will the PEIA report help to make a more informed decision about the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<b>1. METHODOLOGY</b>		<b>Relevant? Yes/No</b>	<b>Judgment (C/A/I)</b>	<b>Comments</b>
1.1	Does the report clearly explain the methodology used and how these helped to reach the conclusions of the study ?	Y	C	Methodology is well described
1.2	Does the report indicate what data are inadequate or absent?	Y	C	Information gaps are noted
1.3	Did the PEIA process include genuine stakeholder consultation ?	Y	A	A number of meetings were held and stakeholders had ample opportunity to make an input, even outside the formal process
1.4	If so, were the general public and/or affected communities included in the consultation?	Y	A	Yes, all Interested and Affected Parties were included, though no intensive, local level consultations were held. This will need to be done during the full EIA
1.5	Have the views of stakeholders been meaningfully incorporated into the findings of the PEIA?	Y	A	The PEIA seems to have accurately recorded all the issues raised by the stakeholders, and their opinions about the proposed project. It remains to be seen whether these views will influence decision-making, either at the strategic level, or at the level of specific mitigation measures.

<b>2. DESCRIPTION OF THE PROJECT</b>				
<b>Land requirements</b>		<b>Relevant? Yes/No</b>	<b>Judgment (C/A/I)</b>	<b>Comments</b>
2.1	Has the land required for the project and any associated services, been described and clearly shown on a scaled map?	y	A	At this preliminary stage, 5 alternative sites are assessed, and an estimation has been made of how much land will be inundated by the weir at each site. This has been shown on a map in the PEIA report.  It is understood that, once a decision is taken on which alternative to study further, detailed mapping will be done so that a clear indication is given as to which areas will be inundated. This is important in the context of ecological impacts (e.g. islands inundated) and social impacts (homesteads and fields inundated).
2.2	For a linear project, has the land corridor and need for earthworks been described and shown on a scaled map?	N	N/A	Although the river is linear, the proposed project is not. As far as can be established, there is no requirement in this project for a land corridor. However, this might become an issue once power lines are

			planned.	
2.3	Has the re-instatement after use of temporary land-take been described?	N	N/A	There will be no temporary land-take, though there will be quarries where fill material will be sourced. This issue is mentioned briefly in section 7.2.14, but will have to be dealt with thoroughly in the full EIA.
<b>Waste and emissions</b>				
2.4	Have the types and quantities of waste generated during construction and operation been estimated?	N	N/A	Addressing this issue requires a number of other strategic decisions to have been taken first, such as the design of the weir, the location, the materials to be used, etc. Thus, waste management needs to be addressed in the full EIA
2.5	Have the ways in which these wastes will be handled or treated prior to disposal been explained?	N	N/A	As above
2.6	Has the receiving environment where such waste will be disposed, been identified and described?	N	N/A	As above
<b>Project inputs</b>				
2.7	Are the nature and quantities of materials needed during construction and operation, clearly indicated?	N	N/A	As above.
2.8	Are the sites where these materials will be sourced from, identified and assessed in terms of impacts, in the EIA report?	N	N/A	As above
2.9	Have the impacts of workers and visitors entering the project site during construction and operation been assessed?	Y	A-I	<p>The report concentrates on the biophysical impacts with less attention given to social impacts in the project area. In section 7.3.3 mention is made of the possible spread of HIV/AIDS as a result of an influx of workers. However, this and other social issues (e.g. crime, temporary economic distortions, cultural tensions, prostitution, etc.) need to be dealt with in much more detail during the EIA.</p> <p>The relative weakness of the current report in this regard is not considered serious given that much more information about the project is required before one can address this issue.</p>
2.10	Have the means of transporting materials, products, workers and visitors to and from the site during construction and operation, been explained?	Y	I	As above. At the full feasibility and full EIA stage, one can address these issues properly. At this preliminary stage, there would be too much speculation, since site-specific information is required before logistical implications can be assessed meaningfully.

3. ALTERNATIVES	Relevant? Yes/No	Judgment (C/A/I)	Comments
<b>Alternatives</b>			
3.1 Were alternatives to the project (including the “no-project” alternative) considered in the PEIA?	Y	C	<p>As noted earlier, the TOR did not require a thorough strategic assessment of alternatives, though there was a requirement for an overview of alternatives.</p> <p>It is understood that NamPower is currently in the process of considering ALL the alternatives through various studies, though it could be argued that solar is not being considered as seriously as, for example, gas and hydro.</p> <p>The proponent has advanced a number of technical arguments as to why solar is simply not a viable alternative (though it could supplement) to national power supply requirements.</p> <p>The report provides a very good summary of the alternatives – this should be expanded at the more strategic, policy level by NamPower.</p>
3.2 If alternatives were considered, are the reasons for selecting the proposed project adequately described?	N	N/A	<p>As noted above, this Pre-feasibility study is one of many being conducted by NamPower. Others are being conducted for other alternatives, but some of these are still in early stages of planning. Because of this, the PEIA was not able to draw extensively on these studies.</p> <p>The question of alternatives needs to be addressed at the strategic level.</p>
3.3 Does the PEIA assess various “within-project” alternatives (e.g. design, location)	Y	C	<p>This is one of the strengths of this PEIA, which has dealt with this issue in great detail.</p> <p>The PEIA considers 5 different weir sites, different methods of addressing the challenge of sediment flow, the need for diversion channels, weir filling options and a number of other issues.</p> <p>The well-articulated, though perhaps inconclusive discussion on in-project alternatives needs to be expanded and intensified as part of the full EIA.</p>

4. DESCRIPTION OF THE ENVIRONMENT	Relevant? Yes/No	Judgment (C/A/I)	Comments
4.1 Have the areas expected to be significantly affected by the various aspects of the project been indicated with the aid of suitable maps?	Y	A	The maps in the report show the areas referred to as likely to be affected by the project (e.g. Okavango swamps and upstream islands – figures 1-3). As part of the full EIA, one will need more detailed maps showing the area of inundation under the different weir site and weir height scenarios. These maps should also include human population distribution and different land uses.
4.2 Have the land uses on the project site(s) and in the surrounding areas been described and their use and non-use values adequately assessed?	Y	A	The land use in the project area has been well described, though details of values and non-use values will need to be quantified and assessed in the full EIA. This includes both the project area and the downstream Okavango Swamps.
4.3 Have the ecological components of the environment likely to be affected by the project been identified and described sufficiently for the prediction of impacts?	Y	C	<p>For the level of a PEIA, the description is excellent for the project area. The study team was well qualified and the specialists were clearly well versed with the area. The report provides a good synthesis of the specialist reports, the latter being available in full as appendices.</p> <p>However, the report points out that more work is required to enable a more accurate prediction of impacts. This is especially relevant in the context of plant species that could be endangered by the project, though none have been seen in the area in recent times. This higher level of detail will be required in the full EIA.</p>
4.4 Have the social components (including archaeological and historical) of the environment likely to be affected by the project been identified and described sufficiently for the prediction of impacts?	Y	A	<p>The social components of the PEIA are considerably weaker than the ecological, even though the report points out that international studies on big dams have raised a number of concerns regarding social impacts.</p> <p>However, the bias towards ecological issues is acceptable given the uncertainties associated with physical impacts, and the sensitivities around the importance of protecting the Okavango Swamps. Social impacts, however, need to be given more attention in the full EIA.</p>
4.5 Has the PEIA adequately consulted the latest literature and/or unpublished reports and/or data relevant to the study?	Y	C	The report provides a very good synthesis of the latest literature. The consultant has made a concerted effort to obtain information, both published and unpublished.
4.6 Have local, regional and national plans and policies been reviewed in order to place the project into	Y	A	The amount of information is acceptable for a PEIA, though much more is needed for a full EIA. For example, the next stage of assessment needs to consider Namibia's power policy in relation to the country's growth scenarios as well as the regional

context?			<p>(SADC wide) power supply situation.</p> <p>Some of these issues are dealt with in various sections of the main technical report, but it would be good if the reader could follow the line of argument regarding this project, through the assessment of alternatives, and then to the conclusion as to why this alternative is being pursued.</p> <p>The full EIA also needs to include more information on future land use in the project area, especially regarding new agriculture schemes. Even though new irrigation schemes may not be linked at all to the power project, there can be no doubt that cumulative impacts could be problematic and that they need to be dealt with in an integrated way by the Namibian authorities.</p> <p>It is highly likely that the international community and especially downstream Botswana will be critical of a sectoral approach, given the moves through SADC and OKAKOM, to adopt a more basin-wide approach.</p>
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5. DESCRIPTION OF IMPACTS		Relevant? Yes/No	Judgment (C/A/I)	Comments
<b><i>Impact Identification</i></b>				
5.1	Have direct and indirect/ secondary impacts of constructing, operating and, where relevant, after use or decommissioning of the project been clearly explained (including both positive and negative effects)?	Y	C	<p>The information and level of detail is acceptable given the fact that this is a PEIA, though the assessment pays little attention to positive impacts. However, it makes the point that positive impacts are more likely to be felt at a national level (improved power supply), while negative impacts are more likely to be local and downstream.</p> <p>Could be more attention to secondary social impacts – see comment 4.4</p>
5.2	Is the investigation of each type of impact appropriate to its importance for the decision, avoiding unnecessary information and concentrating mainly on the 5 key issues?	Y	C	<p>The report is very focused on the key issues, emphasising sediment movement, loss of habitat and species and impacts on the hydrograph. Other issues (e.g. evaporation and seepage) are noted with the suggestion that further research be done during the full EIA.</p> <p>As noted earlier, social issues are perhaps not given enough attention, though the full EIA will likely rectify this.</p>
5.3	Are cumulative impacts considered?	Y/N	A-I	<p>The issue of cumulative impacts needs careful consideration when planning the next phase of this project. There will be cumulative impacts, both ecological and social, since there are many other projects likely to be initiated in the area.</p> <p>At first glance, most of these projects (e.g. irrigation) will be unrelated to this project,</p>

			<p>since the proposed hydro scheme will not abstract water, for example. However, the combination of major water abstraction for irrigation and increased evaporation is a cumulative impact. Similarly, the combination of inundating pristine islands and land clearing for agriculture, also constitutes cumulative impacts.</p> <p>The same can be said for social impacts in the area. As noted in 4.6, cumulative impacts should be addressed in the full EIA, though ideally there should be a basin-wide assessment of development options and issues, so that limits of acceptable change can be established and all the basin states can agree on the best way to develop the Okavango system.</p> <p>In the absence of this type of strategic thinking, it is difficult for a proponent planning a distinct project, to predict what might happen along the river in the future. It could also be argued that unfair onus is being placed upon the current project to assess cumulative impacts. This point is open for debate.</p>	
5.4	Are transboundary impacts considered?	Y	A	<p>Many of the issues discussed in the PEIA are in fact transboundary issues. These include the need for uninterrupted sediment movement, maintaining a natural hydrograph, allowing for fish migrations, etc.</p>
5.5	Has consideration been given to impacts which might arise from non-standard operating conditions, (i.e. equipment failure or unusual environmental conditions such as flooding), accidents and emergencies? (i.e. risk assessment)	N	N/A	<p>Since this project will be a simple weir (as opposed to a storage dam), it is understood that water will continuously flow through the wall (where the turbines will be situated) and over the rim. This implies that risks of wall failure are low.</p> <p>However, the report points out that seismic activity is possible in the area, and that risks associated with this need to be addressed in the future.</p>
<b><i>Magnitude and significance of Impacts</i></b>				
5.6	Has the timescale over which the effects will occur been predicted such that it is clear whether impacts are short, medium or long term, temporary or permanent, reversible or irreversible?	Y	A	<p>The report has given a good idea of which impacts are likely to be short term, and which will be long. These impacts range from events of short duration (construction impacts), to impacts expected to last for possibly hundreds of years (erosion caused by sluicing). However, the consultant acknowledges the need for additional work to be done before there can be more certainty on impact prediction.</p> <p>One would not expect a PEIA to provide a definitive assessment of impacts, since its main purpose was to identify key issues and to provide a first approximation of the impacts. This having been done, it should make the task of conducting the full EIA considerably more efficient.</p>

5.7	Does the PEIA give a clear indication of which impacts may be significant and which may not?	Y	A	<p>In section 7, the report provides a clear analysis of the priorities that need to be given further consideration in the full EIA. At a PEIA level, one expects an extensive scoping exercise and then a preliminary assessment of impacts – this has been done.</p> <p>The level of assessment in a PEIA depends largely on the availability of data, since extensive field work is usually not catered for in the TOR. In this case, the consultants did a reasonable amount of field work, concentrating on the key issues of concern.</p> <p>The table in section 8 is concise, since it describes the issue, assesses the significance of the impacts, proposes practical mitigation measures and then offers suggestions on the future work required in the full EIA.</p>
5.8	Have the magnitude, location and duration of the impact been discussed in the context of the value, sensitivity and rarity of the resource or environment?	Y	A	See above

6. MITIGATION		Relevant? Yes/No	Judgment (C/A/I)	Comments
<b><i>Description of mitigation measures</i></b>				
6.1	Has the mitigation of negative impacts been considered and, where feasible, have specific measures been proposed to address each impact?	Y	A	<p>Mitigation measures that have been proposed in this PEIA report are provisional, since much more work is required in order to more accurately assess the nature and severity of expected impacts. Moreover, there still needs to be more clarity on the preferred location and design of the project.</p> <p>However, even at this early stage, the PEIA has been able to make a number of very important suggestions on how the project should be designed and managed in order to mitigate the more serious impacts. A good example is the issue of pumping sediment rather than sluicing.</p>
6.2	Is it clear to what extent the mitigation methods are likely to be effective?	Y	A	<p>Strictly speaking, one would not expect definitive answers in a PEIA, though it is necessary at this early stage in the planning process to get a rough idea of what is likely to work and what is not.</p> <p>On many issues (e.g. inundation of upstream islands), the report makes clear recommendations on what should be done (e.g. choice of site and lowering weir height), while on other issues (e.g. sediment transport) the report recommends further research, including modeling, to assess with more confidence, the likely success of mitigation. This combination of confidence and uncertainty is to be expected at this level of assessment.</p>

6.3	Has the PEIA report clearly explained what the costs of mitigation are likely to be, and compared these to the benefits (including the costs of non-mitigation)?	N	N/A	This level of detail can only be achieved during the next level of planning
6.4	Have details of how the mitigation will be implemented and function over the time span for which they are necessary, been presented?	N	N/A	As above
<b>Monitoring Proposals</b>				
6.5	Has the PEIA proposed practical monitoring arrangements to check the environmental impacts resulting from the implementation of the project and their conformity with the predictions made?	N	N/A	As above
6.6	Has the PEIA proposed Limits of Acceptable Change that the developer can use to track impacts and trigger management intervention?	N	N/A	As above
<b>Environmental Effects of Mitigation</b>				
6.7	Have any adverse environmental effects of mitigation measures been investigated and described?	Y	A	In some cases (e.g. sluicing of sediments), the consultant has expressed concern that the original proposal for mitigation will cause severe environmental impacts, and a counter proposal (pumping) is made. This is an issue of fundamental concern for the project proponent.  Other initially proposed mitigation measures appear to be less controversial, but all will need to be revisited in the full EIA

7. NON-TECHNICAL SUMMARY	Relevant? Yes/No	Judgment (C/A/I)	Comments
7.1 Does the PEIA contain a brief but concise non-technical summary that clearly explains the project and the environment, the main issues and mitigation measures to be undertaken, and any remaining or residual impacts?	Y	C	<p>The Executive summary is concise, easy to read and well illustrated. In addition, the main PEIA report is well written, well structured and well illustrated.</p> <p>The main issues are highlighted, being described in the text and then also summarized in tabular form.</p> <p>The rationale for the project is clearly explained.</p> <p>Many of the key issues are illustrated by photographs, which is useful for a reader not familiar with the area.</p>
7.2 Does the summary include a brief explanation of the overall approach to the assessment?	Y	C	<p>The methodology used in conducting the PEIA is clearly described.</p>
7.3 Does the summary provide an indication of the confidence which can be placed in the results?	Y	A	<p>As noted earlier, at the level of PEIA one cannot be definitive about mitigation measures, though the report presents well articulated options and preferences. It is only after full EIA level that predictions will likely be accurate, with, hopefully, high levels of confidence placed on both predictions and the expected effectiveness of mitigation measures.</p> <p>The report correctly recommends the application of the precautionary principle in the event that there is inadequate knowledge to enable a reasonable assumption to be made on both impacts and the effectiveness of planned mitigation. This is especially relevant as the project proceeds to the feasibility level and full EIA.</p>
7.4 Does the summary indicate whether the project is or is not environmentally acceptable	Y	A	<p>Whilst the PEIA was not expected to be able to make a firm judgment on this, it was hoped that the initial assessment would be detailed and thorough enough to give an indication of whether this project should proceed to the next level of planning or not. In this case, the consultants are clearly concerned about certain impacts, which, if not mitigated adequately, constitute a probable fatal flaw. However, they have suggested various mitigation options, which should be carefully considered in the full EIA.</p> <p>In spite of their various concerns, the consultants recognize the need for additional work which might show that it is indeed possible to overcome certain challenges (e.g. sediment movement). On the other hand, the report is clear that some impacts (e.g. habitat loss through inundation of upstream islands) are unavoidable.</p>

8. GENERAL APPROACH	Relevant? Yes/No	Judgment (C/A/I)	Comments
<b><i>Organisation of the information</i></b>			
8.1 Is the information logically arranged in sections?	Y	C	The report is well structured and information is easy to find
8.2 Is the location of the information identified in a table of contents?	Y	C	Table of contents is good
8.3 When information from external sources has been introduced, has a full reference to the source been included?	Y	C	References are standard
<b><i>Presentation of the information</i></b>			
8.4 Has information and analysis been offered to support all conclusions drawn?	Y	A	In most cases, conclusions are preliminary since this is a PEIA. Where more information is deemed needed, the report points this out.
8.5 Has information and analysis been presented so as to be comprehensible to the non-specialist, using maps, tables and graphical material as appropriate?	Y	A	The report is well illustrated, and the maps showing areas of inundation under different weir heights and different sites are interesting.
8.6 Has superfluous information (i.e. information not needed for the decision) been avoided?	Y	C	The report is concise, with good use of appendices
8.7 Have prominence and emphasis been given to severe adverse impacts, to substantial environmental benefits, and to controversial issues?	Y	A	The report has focused on the key issues
8.8 Is the information objective?	Y	A	The consulted has, in the opinion of the reviewer, applied his mind in a professional manner