



Department of Performance Monitoring and Evaluation

Report on the Assessment of Government Evaluations

The impact of State-of-Rivers reporting on people's attitudes towards river conservation: A case study of the Buffalo and Hartenbos & Klein Brak Catchments in South Africa.

Date Evaluation was completed: 01 March 2009

Name of assessor: Ray Basson

Evaluation Number: 62

Date Assessment Completed: 20 th February 2013

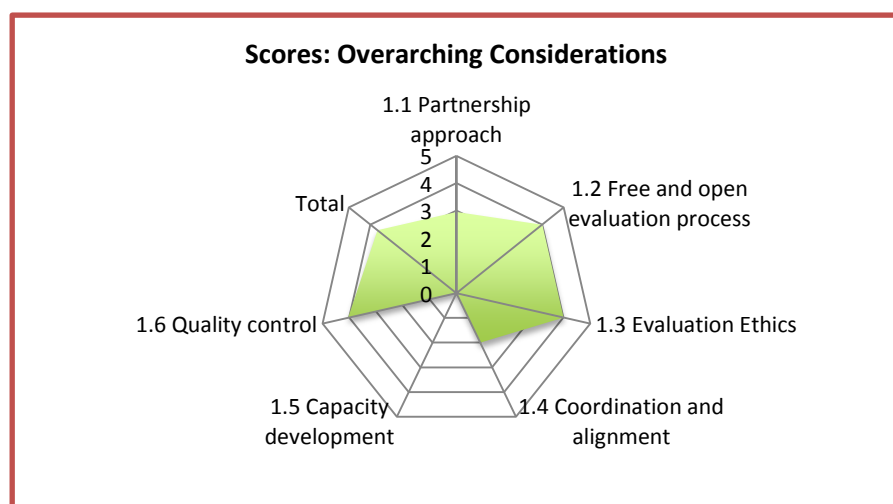
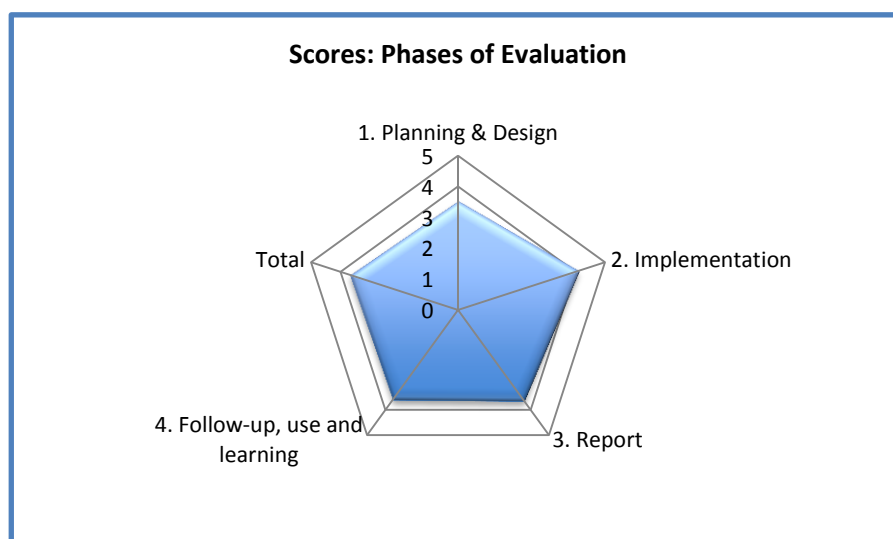
Evaluation Assessment Details

Title of evaluation report	The impact of State-of-Rivers reporting on people's attitudes towards river conservation: A case study of the Buffalo and Hartenbos & Klein Brak Catchments in South Africa.
Completion Date of Evaluation	01 March 2009
Name of Assessor	Ray Basson
Evaluation Number	62
Completion Date of Assessment	20 th February 2013
Initiated by	(CSIR)
Evaluation undertaken by	W Strydom, CSIR
Evaluation area / sector	Education
	Additional
National Outcome	Outcome 10
	Outcome 1 Additional
Type of Evaluation	Impact
	Additional
What is being evaluated	Programme
	Additional
Geographic Scope	Local
Period of Evaluation	2007-2009
Known Cost of Evaluation	Approximately R250,000-00

Quality Assessment Scores

Phase of Evaluation	Score
Planning & Design	3.52
Implementation	4.10
Report	3.62
Follow-up, use and learning	3.57
Total	3.75

Overarching Consideration	Score
Partnership approach	2.96
Free and open evaluation process	4.00
Evaluation Ethics	4.00
Coordination and alignment	2.00
Capacity Development	Not Applicable
Quality control	4.05



1. Planning & Design

1.1. Clarity of Purpose and Scope in TOR

STANDARD: *The evaluation was guided by a TOR with at least the following sections explicit: purpose, scope and objectives; expectations regarding design and methodology; resources and time allocated; reporting requirements; expectations regarding evaluation process and products.*

Comment and Analysis

The evaluation was guided by a research proposal which made explicit its elements: purpose, questions, design, methods, data analysis.

Rating 5

STANDARD: *The purpose of the evaluation was clear and explicit in the TOR*

Comment and Analysis

The purpose of the report is stated clearly: to gather information on the state of health in 2 river catchments in the country and communicate findings to adults and schools particularly, to gauge impact on peoples attitudes towards river conservation.

Rating 3

STANDARD: *The evaluation questions were clearly stated in the TOR and appropriate to addressing the evaluation purpose*

Comment and Analysis

The evaluation investigates the hypothesis that the current format of state-of-rivers reporting has a positive impact on the attitudes of people towards river management and conservation issues in South African river catchments. 2 questions are derived from the hypothesis and were stated clearly: [i] Do demographic attributes, geographic locality, and social and economic issues influence peoples' awareness of and attitudes towards river conservation issues? And, [ii] Do state-of-rivers reporting materials provide sufficient information in an appropriate format and language to improve peoples' understanding of the benefits that goods and services rivers provide, increase

Rating 5

STANDARD: The approach and type of evaluation was suited to the purpose and scope of the evaluation TOR**Comment and Analysis**

The study was referred to as an "impact" evaluation. Broadly speaking, the impact or effectiveness of materials provided to Grades 1-3 [Foundation Phase] in state primary schools in 2 catchment systems, was established by determining the level of understanding of human impacts on rivers pre- and post- the distribution of materials.

Rating 4***STANDARD: Intended users and their information needs were identified in the TOR*****Comment and Analysis**

Users and uses of the findings of the evaluation don't appear to be identified specifically in the ToR.

Rating 1***STANDARD: Key stakeholders were involved in the scoping of the TOR and determining the purpose of the evaluation*****Comment and Analysis**

Key stakeholders were involved in scoping the evaluation, as it arose out of ongoing research in the CSIR with DWAF and DEAT which wanted to see scientific reports made accessible to a wider audience, such as to schools, parents, and the general public.

Rating 4

1.2. Evaluation was adequately resourced

STANDARD: The evaluation was adequately resourced in terms of time allocated

Comment and Analysis

The evaluation was adequately resourced in terms of time: approximately 12 months [2007 and 2008] and submitted in 2009.

Rating 4

STANDARD: The evaluation was adequately resourced in terms of original budget

Comment and Analysis

The evaluation was CSIR funded by allying the evaluation with ongoing research, in part, and by finding additional funds to cover costs. Resources were sparse, but adequate in terms of the original budget.

Rating 3

STANDARD: The evaluation was adequately resourced in terms of staffing and skills sets

Comment and Analysis

The evaluation was adequately resourced in terms of staff: an evaluator, a translator, a supervisor, specialist data analyst, and support from the CSIR.

Rating 4

STANDARD: *Where appropriate, the evaluation planned to incorporate an element of capacity building of partners/staff responsible for the evaluand*

Comment and Analysis

Not known.

Rating N/A

1.3. Alignment to Policy Context and Background Literature

STANDARD: *There was evidence that a review of the relevant policy and programme environments had been conducted and used in the planning of the evaluation by the evaluators*

Comment and Analysis

There doesn't appear to be a review of relevant policies, or that this was used in planning the evaluation.

Rating 1

STANDARD: *There was evidence of a review of appropriate literature having been conducted and used in the planning of the evaluation by the evaluators*

Comment and Analysis

A valuable review of literature on attitude and behavioural change was conducted, and was used to make substantive claims about changing both. Two claims are made from the review: that public behaviour change is difficult to measure, and, no clear guidelines exist on how to change behaviour to ensure conservation of our natural resources. The evaluator used these in planning the evaluation

Rating 4

1.4. The evaluation methods planned were appropriate to the project

STANDARD: There was explicit reference to the intervention logic or the theory of change of the evaluand in the planning of the evaluation

Comment and Analysis

Not known.

Rating **N/A**

STANDARD: Key stakeholders were consulted on the design and methodology of the evaluation

Comment and Analysis

The CSIR and its funders as well as a university were consulted on the design and methodology of the evaluation.

Rating **4**

STANDARD: The planned methodology was appropriate to the questions being asked

Comment and Analysis

The planned methodology is appropriate for an impact evaluation of this kind. For question 1 [awareness of general water issues], data was collected using 2 questionnaires: a study, to establish the extent of SoR reporting material distribution; the main study, to establish attitudes and behaviour with respect to water. Question 2, drew on the pre-study. A pilot study in one school served to establish if: the methods worked; if there would be sufficient teacher co-operation; and, to check if instruments--questionnaire and "participatory evaluation" [poster annotated by learners]--were adequate. The evaluation design was called an "experimental research design" to "establish ...cause-effect relationship.." and referred to a pre- and post-design, data gathering before and after distribution of SOR materials, allowing sufficient time between the data gathering periods [4 months].

Rating **4**

STANDARD: Planned sampling was appropriate and adequate given the focus and purpose of evaluation***Comment and Analysis***

After discussion with the community, a sample of schools were selected as centers for distribution based on "location and learner representation", namely socio-economic background, race and language. In the larger Buffalo catchment system, random sampling was used to select a sample of state urban and rural primary schools [7 of 170] . How 2 of 19 river catchments were selected for study is not clear.

Rating 4***STANDARD: There was a planned process for using the findings of the evaluation prior to undertaking the evaluation******Comment and Analysis***

There doesn't appear to be a planned process for using the findings of the evaluation, prior to the evaluation.

Rating 1**1.5. Inception phase*****STANDARD: The inception phase was used to develop a common agreement on how the evaluation would be implemented******Comment and Analysis***

During the inception phase, agreement was reached on how the evaluation would be implemented.

Rating 4

2. Implementation

2.1. Ethical Review and Considerations

STANDARD: *Where data was gathered in contexts where ethical sensitivity is high, appropriate clearance was obtained through an ethics review board; e.g. in evaluation involving minors, institutions where access usually requires ethical or bureaucratic clearance, and situations where assurances of confidentiality was offered to participants*

Comment and Analysis

The evaluation was approved by the 2 provincial DOEs, [Eastern and Western Cape] and their protocols followed for research in schools under their jurisdiction. Confidentiality was upheld, and no proper names of individual participants or schools were used [a requirement of the respective DOEs].

Rating 4

2.2. Evaluator independence

STANDARD: *Where external, evaluation team was able to work freely without significant interference*

Comment and Analysis

The evaluator [external] was able to work freely and without significant interference.

Rating 4

STANDARD: The evaluation team was impartial and there was no evidence of conflict of interest

Comment and Analysis

Not known.

Rating N/A

2.3. Key stakeholder involvement

STANDARD: Key stakeholders were consulted through a formalised mechanism or institutional arrangement during the evaluation

Comment and Analysis

Key stakeholders were consulted, and a formal mechanism was in place which made it possible.

Rating 4

STANDARD: Where appropriate, an element of capacity building of partners responsible for the evaluand was incorporated into the evaluation

Comment and Analysis

Not known.

Rating N/A

2.4. Methodology

STANDARD: The methods employed in the process of the evaluation were consistent with those planned

Comment and Analysis

In the main, methods employed to gather data in the evaluation were consistent with those planned.

Rating 4

STANDARD: Data collection was not compromised by fieldwork-level problems or unplanned diversions from original intentions

Comment and Analysis

On the whole, data collection was not substantively compromised by fieldwork problems: 1178 learners participated in the study, and 1144 parents. One exception is the finding that materials were not adequately distributed which limited the response to question 1.

Rating 3

STANDARD: Forms of data gathering were appropriate given the scope of evaluation

Comment and Analysis

Forms of data gathering were appropriate given the scope of the evaluation.

Rating 4

STANDARD: The data analysis approach and methods were appropriate and sufficient given the purposes of the evaluation

Comment and Analysis

Data analysis methods were appropriate. Data was captured on Excel. STATISICA 2008 was used for analysis [Cronbach alpha scores, Spearmans correlations, p-values and AVOVA]. Mean scores were calculated for individual constructs, like: behaviour, attitude, knowledge, et al]. And, data was tested for reliability using Cronbach 1951.

Rating 5

STANDARD: Key stakeholders were significantly engaged as part of the methodology

Comment and Analysis

Members of the community as key stakeholders were consulted on a school-based mechanism for distributing materials. The DoE was consulted and provided data on schools and their GPS co-ordinbates for sample selection.

Rating 4

STANDARD: The methodology included engaging beneficiaries appropriately as a key source of data and information

Comment and Analysis

Key beneficiaries, learners and parents specifically, were included as sources of data and information.

Rating 4

2.5. Project management

STANDARD: The evaluation was conducted without shifts to scheduled project milestones and timeframes

Comment and Analysis

The evaluation was conducted within the scheduled timeframes: fieldwork in 2007, write-up in 2008.

Rating 5

3. Report

3.1. Report was well-structured and presentation was clear and complete in each of these areas

STANDARD: Executive summary captured key components of the report appropriately

Comment and Analysis

Abstracts, or executive summaries, appear in the evaluation report. The first is an overall abstract, and a second and a third provides a summary of studies and their findings, in relation to the 2 research questions.

Rating 4

STANDARD: The context of the development intervention was explicit and presented as relevant to the evaluation

Comment and Analysis

The background to this study is a decision at the Earth Summit meeting in Rio de Janeiro in 1992 on the need for scientifically credible environmental information, to support decision-making and to inform the public. Mirroring this decision, the DEAT initiated the first National State of Environment Report in 1999, some provinces following this lead. State of Rivers and other reports followed, as did the River Health Programme by the DWAF. Against this background, this study aims to test if such reports, when presented as materials for wider use, such as to schools and parents, are effective and change attitudes and behaviour towards rivers.

Rating 5

STANDARD: There was a clear rationale for the evaluation questions**Comment and Analysis**

The study explicitly tests the hypothesis that the current format of State-of-Rivers reporting, posters, materials and the like has a positive and sustained impact on the attitudes of people towards rivers. The 2 questions follow from the hypothesis, to test if these materials change attitudes. What is not clear is why this hypothesis and these questions, and not others stated explicitly, were studied in this report.

Rating 5**STANDARD: The scope or focus of the evaluation was apparent in the report****Comment and Analysis**

The local scope of the evaluation [2 of 19 river catchments], was apparent in the report.

Rating 5**STANDARD: A detailed methodology was outlined in the relevant section of a report (full report or 1/3/25) to the point that a reader could understand the data collection, analysis and interpretation****Comment and Analysis**

The Methodology section of the report states clearly the field methods which were used, the sampling techniques as well as how data was captured and analysed.

Rating 4**STANDARD: Key findings were presented in a clear way; they were made distinct from uncertain or speculative findings; and unused data was not presented in the body of the report**

Comment and Analysis

Key findings are presented in Chapters 3, 4, 5. In general, they found the materials were not adequately distributed. More specifically, the study found a positive correlation between education levels and understanding benefits from clean rivers, and a negative correlation between attitudes and awareness and negative human impact on rivers. The pre- post- study showed a slight increase in understanding river ecology. Numbering Findings in each chapter would make them readily accessible, as would a separate discussion of findings in relation to themes derived from the Literature. Unused data were not presented in the report.

Rating 3

STANDARD: Conclusions and recommendations were clear and succinctly articulated

Comment and Analysis

Conclusions are presented succinctly in Chapters 3 and 4. Overall Conclusions in the final chapter are succinct too, but include discussion on: sources of error in relation to research questions, dissemination of materials, learner facilitation, which were distracting. Recommendations are made [that a materials dissemination strategy be put in place], but appear more to point to related issues, such as: issues in the literature, importance of science education, water as theme in the curriculum, amongst others.

Rating 3

STANDARD: Acknowledgement of limitations of all aspects of the methodology and findings were clearly and succinctly articulated

Comment and Analysis

Two limitations, sometimes called "challenges", are referred to: inadequate dissemination of materials, translation of questionnaires into 2 other languages besides English. More were embedded in the text, such as: low levels of literacy and writing skills which affected learners expressing their ideas when completing questionnaires, and the like.

Rating 3

3.2. Writing and presentation

STANDARD: *Quality of writing and presentation was adequate for publication including: adequate layout and consistent formatting; complete sentences and no widespread grammatical or typographical errors; consistency of style and writing conventions (e.g. tense, perspective (first person, third person); levels of formality; references complete and consistent with cited references in reference list and vice versa; etc)*

Comment and Analysis

The quality of writing is very good, as is the layout of the report. Formatting is consistent too. There don't appear to be widespread grammatical, spelling and other errors in the report. Graphs present data clearly and referencing seems consistent.

Rating 5

STANDARD: *Appropriate conventions were used in presentation of data (e.g. use of appropriate statistical language; reporting of p-values where appropriate; not reporting statistically insignificant findings as significant; clarifying disaggregation categories in constructing percentages; not using quantitative language in reporting qualitative data, etc.)*

Comment and Analysis

The usual conventions were used in the presentation of data. Statistical language was used where appropriate, but the discussion was not always easily followed. Quantitative and qualitative language were used appropriately.

Rating 4

3.3. Presentation of findings

STANDARD: *The use of figures and tables was such that it supported communication and comprehension of results; and data reported in figures and tables was readily discernible and useful to a reader familiar with data presentation conventions*

Comment and Analysis

Tables were clear, well introduced and presented. Data reported in Figures and Tables were easily discernable, and useful in the main. Discussion of them at times is difficult to understand for a reader not readily familiar with measurement data presentation language and conventions.

Rating 4

STANDARD: Data analysis appeared to have been well executed**Comment and Analysis**

Data analysis appears to be well executed.

Rating 5

STANDARD: Findings were supported by available evidence**Comment and Analysis**

Findings were supported by available evidence from mainly quantitative sources.

Rating 4

STANDARD: The evidence gathered was sufficiently and appropriately analysed to support the argument

Comment and Analysis

Data analysis was sufficiently and appropriately analysed, to support the argument.

Rating 3

STANDARD: There was appropriate recognition of the possibility of alternative interpretations

Comment and Analysis

There was appropriate recognition of alternative interpretations, these being discussed at appropriate junctures in the study.

Rating 4

STANDARD: The report appeared free of significant methodological and analytic flaws

Comment and Analysis

In the main, the report seems free of significant methodological and analytic errors.

Rating 3

3.4. Conclusions

STANDARD: Conclusions were derived from evidence

Comment and Analysis

Conclusions were derived from evidence.

Rating 5

STANDARD: Conclusions took into account relevant empirical and/or analytic work from related research studies and evaluations

Comment and Analysis

Conclusions took into account relevant data gathered from other studies in the literature.

Rating 4

STANDARD: Conclusions addressed the original evaluation purpose and questions

Comment and Analysis

Conclusions in Chapters 3 and 4 focus on the 2 research questions respectively. Conclusions are less explicit in Chapter 5 [Conclusions].

Rating 4

STANDARD: Conclusions were drawn with explicit reference to the intervention logic or theory of change**Comment and Analysis**

Not known.

Rating **N/A**

3.5. Recommendations***STANDARD: Recommendations were made in consultation with appropriate sectoral partners or experts*****Comment and Analysis**

Recommendations were made with an expert in the field who supervised the evaluation.

Rating **2**

STANDARD: Recommendations were shaped following input or review by relevant government officials and other relevant stakeholders**Comment and Analysis**

Recommendations were shaped by the evaluator in the main, but with government officials and stakeholders in the catchment areas in mind.

Rating **2**

STANDARD: Recommendations were relevant to the policy context**Comment and Analysis**

Recommendations appear more relevant to issues in the literature, such as the importance of science, the curriculum, expanding the study of water to higher phases in schools, and future studies, than to national or local policies.

Rating 1

STANDARD: Recommendations were targetted to a specific audience sufficiently - were specific, feasible, affordable and acceptable**Comment and Analysis**

Recommendations, in the main, seem under developed. As these stand, they seem feasible, affordable. A closer focus on the issues for debate in the study is warranted.

Rating 2

3.6. Relevant limitations of the evaluation have been noted**STANDARD: Relevant limitations of the evaluation were noted****Comment and Analysis**

Limitations in the data were noted in the report. Two are made explicit, whilst others remain embedded in the text.

Rating 3

3.7 Protection of participants and risk considerations

STANDARD: *The full report documented procedures intended to ensure confidentiality and to secure informed consent where this was needed (in some cases this is not needed - e.g. evaluation synthesis - in which case N/A should be recorded)*

Comment and Analysis

The full report documented in part how confidentiality would be maintained. In the interview it was established that provincial education department protocols were followed to secure consent, and confidentiality maintained as mandated by the respective departments.

Rating 4

STANDARD: *There were no risks to participants in disseminating the original report on a public website*

Comment and Analysis

Besides the usual risks to participants when going public, there appear to be no, or limited, risks to them, with the dissemination of this report on a public website.

Rating 4

STANDARD: *There were no unfair risks to institutions in disseminating the original report on a public website*

Comment and Analysis

Besides the usual risks to institutions which participated in the evaluation, no unfair risks to institutions appear to be had in disseminating the report widely through a public website.

Rating 4

4. Follow-up, use and learning

4.1. Presentation to stakeholders

STANDARD: *Results were presented to all relevant stakeholders*

Comment and Analysis

The report has been presented to a university as partial fulfillment of the requirements for a degree, and as a poster [with CSIR logo].

Rating 3

4.2. Resource utilisation

STANDARD: *The evaluation was completed within the planned timeframes*

Comment and Analysis

The evaluation was completed within the planned time frame.

Rating 5

STANDARD: *The evaluation was completed within the agreed budget*

Comment and Analysis

The evaluation was completed within budget.

Rating 4

4.3. Transparency

STANDARD: *The report was publicly available (website or otherwise published document), except where there were legitimate security concerns*

Comment and Analysis

The report was made available on a university website, printed and archived.

Rating 4

4.4. Lessons learnt

STANDARD: *After completion of the evaluation, a reflective process was undertaken by staff responsible for the evaluation to reflect on what could be done to strengthen future evaluations*

Comment and Analysis

Not known.

Rating 4

4.5. Symbolic and conceptual value

STANDARD: *The evaluation study was seen by interviewed stakeholders as having added significant symbolic value to the policy or programme (eg raised its profile)*

Comment and Analysis

Not known.

Rating N/A

STANDARD: The evaluation study was of conceptual value in understanding what has happened and possibly in shaping policy and practice

Comment and Analysis

The evaluation study was of conceptual value to understanding the impact of the materials intervention on learners, and if materials used in schools are effective.

Rating 3

4.6. Utilisation of findings and recommendations

STANDARD: There was clear evidence of instrumental use - that the recommendations of the evaluation were implemented to a significant extent

Comment and Analysis

Not known. The SoR project was taken over by the DWA thus effectively ending CSIR and its researchers' influence in this work.

Rating N/A

STANDARD: There was clear evidence that the evaluation has had a positive influence on the evaluand, its stakeholders and beneficiaries over the medium to long term

Comment and Analysis

Project materials and the evaluation more generally had a positive influence on the evaluand, stakeholders and beneficiaries' understanding of rivers, in the short term at least.

Rating 4

References

Strydom, W.F and Esler, K.J. (undated]. Evidence of environmental effectiveness [a poster].

Strydom, W.F (2009). The impact of State-of-Rivers reporting on people's attitudes towards river conservation: A case study of the Buffalo and Hartenbos & Klein Brak Catchments in South Africa."

List of Interviewees

W.F Strydom, Researcher, Natural Resources and Environment , CSIR; Telephonic Interview, 20/2/2013.