

**Workshop Report:**  
**Choosing indicators for an evaluation of management effectiveness at Bunaken National Park**  
1-2 July  
Santika Resort, Tongkaina, North Sulawesi

**Summary of process and results**

The first workshop - choosing indicators – at Bunaken National Park (BNP) involved all the members of the management advisory board for BNP, including their executive secretariat, and several staff from the Natural Resources Management Program (NRM) office in Manado. The workshop took place on 1-2 July at the Santika resort.

**Background**

The workshop followed three weeks of semi-structured interviews and preparation focussed on determining the information needs and views on evaluation from a variety of stakeholders in and around BNP. Some of the results of these interviews were presented at the workshop to help the management advisory board to understand some of the issues that the evaluation team had encountered while talking to people around the park.

**Purpose**

The main purpose of the workshop was to discuss some of the results from the interviews, choose a target audience for the eventual evaluation results, to develop a list of indicators for an evaluation of management effectiveness of BNP, and to prioritise those indicators based on primary information needs for adapting management strategies.

**Participants**

Participants at the workshop included:

*Evaluation Team:*

Nancy  
Reinhart  
Irman  
Sonny  
Aco  
Tika  
Hetty

*BNP management advisory board members:*

Angelique Batuna, NSWA (North Sulawesi Watersport Association)  
Janny Lompoliu, FMPTNB (Forum of Bunaken NP Community)  
Andries Kakomore, FMPTNB  
Ismael Husen, FMPTNB-south  
Junus Kasehung, FMPTNB-islands  
Lucky Sangoendang, FMPTNB-north  
Roy Pangalila, WALHI  
O.M. Pontoh, Bapedal Sulawesi Utara (N.Sul. Environmental Impact Control Agency)  
Christine Saruan, DPK Sulawesi Utara (North Sulawesi Fishery and Marine Agency)  
Ventje Kjonggian, North Sulawesi Cultural and Tourism Agency  
Amos Kenda, Government of Manado City  
Arief Toengkagie, Head of Bunaken National Park  
Economy Bureau of Provincial Government  
Pangky Pangemanan, Sam Ratulangi University

*NRM staff:*

Mark Erdmann  
Zulhan Harahap  
Idham Arsyad  
Meity Mongdong  
Ruth Elverawaty  
Vyane Paendong

*and a number of others providing support, reporting and facilitation:*

Hanny Tioho, Executive Director of DPTNB Office  
Jane Manoppo, Secretary of DPTNB Office  
Maxi Wowiling, Program Manager of DPTNB Office  
Wahyu Rudianto, General Directorate PHKA Jakarta  
Ernie Tumengkol, Documentor  
Stevie Lestuni, Documentor  
Fabyanus Tuturlolobi, Documentor

## **The workshop process and results**

*Day 1 – started 3:00 pm*

Irman went through the agenda and goals for the workshop:

Workshop agenda and objectives:

- Examine and discuss some of the different ways to visualise and measure effectiveness of BNP (using drawings from scenarios exercise).
- Discuss why indicators are needed to measure effectiveness.
- Review and discuss methods for evaluating effectiveness.
- Discuss why evaluation is important.
- Look at some examples of different perspectives on what kind of evaluation results are useful.
- Develop a list of all stakeholders who may be interested in results from an evaluation and choose a target audience for the evaluation of BNP.
- Develop a set of specific, appropriate, realistic, time-bound and measurable objectives for evaluating BNP.
- Consider some important issues and recent lessons related to determining the focus of an evaluation.
- Develop a draft list of indicators for each of the six management categories. Prioritise the lists of indicators and rate the usefulness and feasibility of each indicator.
- Review and discuss the evaluation team's workplan for the upcoming phases of the evaluation project.

Target results from the workshop:

- The management advisory board has a better understanding of the adaptive management process and the role of evaluation in that process.
- There are clear and agreed objectives for the evaluation of BNP.
- There is a draft list of indicators that suits the objectives of the evaluation of BNP.
- The indicators on the draft list have been prioritised and rated according to how useful and feasible the board thinks they will be.

Nancy did a demonstration that focussed on the importance of each step in an overall process. The main point of the simple demonstration was that order matters and the process that is followed has consequences on the quality of the final product of that process. If shortcuts or mistakes are made, then the final results of the process will be less satisfactory.

Rein did a brief presentation on the roles of evaluation and reflection in the adaptive management cycle. He explained: some reasons for evaluating effectiveness, the adaptive learning cycle; the adaptive management cycle and each of the elements of management; and interview results regarding the kinds of questions that are important to ask in an evaluation of effectiveness. He also explained a flowchart of the evaluation project phases and showed where the workshop fit into the overall process. Most of the discussion and questions about Rein's presentation focussed on the adaptive learning cycle and the amount of time it could/should take to go through one cycle.

Tika lead a session on visualising an effective and successful park. The participants were divided into six small groups and assigned perspectives of various stakeholders from inside the park (teachers, government, fishers/farmers and women, tourists and tourism industry, management, and patrols). Each small group drew one picture representing the situation 'now' and one other picture representing their vision for a more successful park in the future. Each of the groups presented their drawings and explained why they illustrated their vision that way and how it was different than the current situation. The drawings and discussion illustrated the two main points of the session:

- there are many ways to define effective management; and
- there are many ways to try to measure effectiveness – either directly or indirectly.

Homework for the evening spare time was to do the questionnaire and to read or review the booklet on measuring management effectiveness.

## *Day 2*

Irman went over the main points and achievements from the first day:

- Each step in a process is important in order to strengthen the results.
- Review of the adaptive learning cycle and the adaptive management cycle.
- There are many different visions from the park's various stakeholders about what constitutes an effective park and how to measure that effectiveness.

Irman lead an open session for questions and answers from the homework assignment then a review of the agenda and targets for the day.

Aco did a presentation and lead a discussion on the reasons for evaluating. Each participant first wrote down one reason why the effectiveness of BNP should be evaluated. Then each of the responses were posted and discussed. Aco then presented interview results regarding why people think the park should be evaluated. There were three main points from Aco's presentation.

- There are many reasons or objectives to conduct an evaluation of BNP; each stakeholder has their own view on why the park should be evaluated (illustrated by the workshop exercise and the results from the interviews).
- An evaluation won't necessarily satisfy everyone's objectives or meet everyone's needs.
- The objective of an evaluation should suit the information needs of the stakeholders that will use the results.

Hetti lead a session to decide would be using the evaluation results. She explained some of the experiences from the interview process about talking to people from very different backgrounds and perspectives, and identifying different areas of conflict and concern. The team performed three skits illustrating some stakeholder views evaluation and definitions of 'success' (interviewer questioning pregnant woman from local village, tourist talking to

cashier at a ticket booth, and patrol confronting a traditional fisherman in protected zone). The two main points from Hetti's session were:

- there are a wide range of perspectives on the objectives and management strategies of BNP; and
- each stakeholder has a different opinion about what constitutes a successful BNP.

Irman lead a brainstorming session on 'who might use results from and evaluation of BNP?' The participants listed several main stakeholder groups (approximately 10) and then chose three main stakeholders as the target audience for the evaluation – in order of priority - 1. Advisory board, 2. Local communities, and 3. Donors (existing and potential).

### *Morning coffee break*

Irman lead a session on choosing objectives for the evaluation. The participants broke into three groups representing the three different target audiences – the community forum members represented 'communities', NRM and NSWA represented 'donors' and the rest represented 'the board'. Each group listed several recommendations for objectives and prioritised the top three from their group. Participants reviewed and discussed each recommended objective, then agreed on the following five multipart objectives :

**1. (Disseminate information)**

- a. Find out how much the local communities understand about conservation programs of BNP so that management can help communities to become more actively involved in conservation activities next year.
- b. Provide accurate information about the potential and condition of BNP so that management can implement conservation programs and help to empower/mobilise communities for the next five years.
- c. Understand community's information needs about conservation in order that conservation in BNP can be socialised widely in order to minimise illegal fishing practices.

**2. (Strengthen management processes)**

- a. Examine management performance of BNP so that objectives aimed at strengthening local community welfare are achieved in the next five years.
- b. Evaluate the structure of the management advisory board so that the board can be fine-tuned in a way that is appropriate to conditions and needs (of the park) next year.

**3. (Improve local community welfare)**

- a. Investigate how much park collaborative-management has contributed to communities so that increased earnings for local communities can be achieved next year.
- b. Obtain one form and type of work program that is appropriate in order to jointly conserve the ecosystems of BNP that support the welfare of local communities.

**4. Funding grants (not clear if this refers to funds from dewan to community grants program or funds from other donors to management).**

- a. Get information about the suitability of allocating/utilising funds by way of an MOU (agreement between donors and recipients);
- b. Find out if funds are being used efficiently and effectively during the process of implementing the program; and
- c. Find out about the results and impacts of assistance (financial, technical, in-kind, cooperative) on park management

so that :

- i. can carry out adjustments on follow-up actions for the next period, and
- ii. create a more open-access funding network from different stakeholders.

After the workshop, this list of objectives were discussed by the evaluation team and condensed to the following set of actions:

1. Investigate all aspects of park management (contextual issues, planning activities, resources, structure and processes of management, outputs and outcomes from management activities) to determine how efficient and effective management has been over the past 3 years.
2. Identify aspects of management that are already strong and aspects of management that need to be adapted in order to improve overall performance.
3. Communicate the results of the evaluation to all stakeholders:
  - a. to increase stakeholder awareness about management's progress and challenges;
  - b. to encourage more transparency of management processes; and
  - c. to facilitate wider participation in management activities in the future.
4. Provide accurate and relevant information that will improve reports to existing donors and applications to potential donors.
5. Improve transparency and effectiveness of management by establishing a reiterative system for monitoring and evaluation that will continue to provide information that can be used to refine management strategies and programs over time.

### *Lunch Break*

Sonny did a presentation on the information requirements for an evaluation. He summarised the responses from interview respondents regarding their 'vision of a successful BNP'. He also showed the results of last year's responses from the board to the same interview question and pointed out some interesting comparisons between the two sets of data. There was a lot of discussion about the implications of the results and the comparisons. Sonny clarified points with examples from the questionnaires and emphasised that the results were indications of the kinds of issues that people were/are focussed on, rather than direct measures of their information needs. Sonny explained how the results were related to the selection of indicators for an evaluation and gave some examples of indicators.

Participants formed six small groups. Each was assigned one of the following key questions and asked to list what kind of information they would need to answer it (what issues would need to be investigated, what things would need to be counted or measured).

1. What is the current status of the values, threats and management issues in the park? (context)
2. How adequate are current plans and policies for managing the park? (planning)
3. How adequate are the currently available resources for managing the park? (input)
4. How appropriate are current management systems and procedures? (processes)
5. What kinds of products and services has management delivered and how much of the management plan has been implemented? (outputs)
6. How have the values and threats in the park changed and which park objectives have been achieved by management? (outcomes)

The evaluation team members circulated and assisted each group. Each group then presented their list and all of the participants helped to prioritise them and rate each of them (1-5 scale) according to how 'useful' and how 'feasible' they thought each of the indicators were.

Initial list of indicators, priorities and ratings for how 'useful' and 'feasible' the board thought each indicator would be (1-5 scale: 1=extremely ..., 2=very ..., 3=...enough, 4=somewhat ..., 5=not...) are in the table below.

Category / indicator	Priority ranking	Useful?	Feasible?
<b>Context</b>			
<b>Locally important values/assets</b>	<b>1</b>		
diversity of marine life		1	3
Tourism potential		1	2
Tourism industry		1	2
Fisheries potential (social and economic potential for local communities)		1	4
<b>Level of damage, threats, and pressures</b>	<b>2</b>		
illegal mangrove harvesting		2	2
illegal fishing methods		1	3
coral damage		2	3
Number of visitors (carrying capacity)		3	2
Number of tourist boats (carrying capacity)		4	2
Number of cottages / rooms		4	2
ornamental fish catch		3	4
waste management		1	2
<b>Government support</b>	<b>3</b>		
Technical		1	3
formal (legal)		1	2
financial (APBD, etc.)		1	4
Programs		2	4
Facilities		2	3
<b>Susceptibility toward change</b>	<b>4</b>		
coastal development in Manado and Minahasa (eg - reclamation)		2	2
<b>Stakeholders</b>	<b>5</b>		
Attendance		3	3
being active (level of participation, actual activities)		3	3
Support for results from joint decisions		2	2
involvement in programs		2	2
<b>PLANNING</b>			
<b>Management Plan</b>	<b>1</b>		
short-term :			
there is an increase in conservation of biological diversity in BNP			
long-term :			
local communities take part in the park management			
<b>INPUT</b>			
<b>Human resources</b>	<b>1</b>		
total staff		2	1
capacity of staff		2	3
skills and training		2	2
volunteers		2	1
Staff position ( <i>right person in the right place</i> )		1	1
Technical associates and colleagues (consultants, scientists)		2	2
<b>Funding</b>	<b>2</b>		
Self-financial resources still available		1	2
funds from donors		1	2
total funds		1	2
contributions from other stakeholders		1	3
management system		1	3

Category / indicator	Priority ranking	Useful?	Feasible?
<b>Facilities</b>	<b>3</b>		
offices (incl. dewan sec)		1	1
tools related to the secretariat		1	1
communication systems		1	1
transportation systems		1	1
<b>Monitoring and evaluation system</b>	<b>4</b>		
system to assess management performance		1	3
inventories and logbooks		1	3
reporting standards, rules for transparency, audits		1	3
<b>PROCESSES</b>			
<b>Program implementation</b>	<b>2</b>		
local community involvement		4	2
involvement of agencies/organisations		4	2
Activities report		1	1
Punctuality		2	2
Punctuality and appropriateness of the use of funds		1	1
<b>Natural resource management</b>	<b>1</b>		
People/ constituents who are involved		1	2
Tools/means/facilities and working paper		1	2
Scientists who are involved		2	2
Resources that are managed		2	2
Compatibility of activities with the zonation system		2	1
benefits shared with local communities		3	1
<b>Management of funds</b>	<b>3</b>		
financial resources		1	1
management of financial resources		1	1
financial reports and audits		1	1
transparency		1	1
<b>Information management</b>	<b>4</b>		
Materials appropriate to that which was planned		3	2
Frequent development of renewed/updated information materials		2	1
Total number of locals who make use of (information materials?)		4	1
Adequacy of the information media that is used		4	1
<b>OUTPUTS</b>			
<b>Joint patrol system</b>	<b>3</b>		
Patrol activity reports		1	1
Total number of patrol members		1	1
Attendance reports		1	1
areas/ routes of operation		1	1
total number of patrol boats		1	1
<b>Zonation system</b>	<b>2</b>		
Zonation map		1	1
Letter of agreement about zonation between dewan and local governments		1	1
boundary demarcation		1	1
<b>Entrance fee system</b>	<b>1</b>		
Basic law for entrance-fee system		1	1
PINs and tickets		1	1
list of buyers and amount collected		1	1
total income from the entrance fee system		1	1
Total number of ticket sellers		1	1
<b>Waste management</b>	<b>6</b>		
Number of people employed to manage waste		1	2

Category / indicator	Priority ranking	Useful?	Feasible?
There is a schedule for cleanups		1	2
Number of places for destroying waste		1	2
Locations that have been cleaned		1	2
<b>Coral rehabilitation</b>	<b>5a</b>		
Total number of rehabilitation sites		1	3
There is substrate for coral attachment		1	3
Report of activities from rehabilitation projects that have been implementation		1	3
Live coral cover increase		1	3
<b>Mangrove rehabilitation</b>	<b>5b</b>		
Total number of rehabilitation sites		1	3
Report of activities from implementation of rehabilitation projects		1	3
Total area of successful replanted mangroves		1	3
<b>Awareness raising program</b>	<b>4</b>		
community information boards		1	3
field billboards		1	3
park calendar in every house		1	3
promotional park T-shirts		1	3
Seminars about the park		1	3
park brochures distributed		1	3
<b>Education and training</b>	<b>7</b>		
Training for monitoring reef-top corals		1	2
other training		1	2
<b>Aid projects for developing local communities</b>	<b>8</b>		
radio communication system		1	2
funding to assist local development		1	2
Addition of infrastructure in villages		1	2
<b>OUTCOMES</b>			
<b>Condition of protected species, ecosystems and biological diversity in the park</b>	<b>1</b>		
There is no artificial landscaping or obstructions (reclamation, damming, fish pond etc) built in the park		1	2
percentage area of live coral cover is stable or increasing		1	3
The area of mangrove forest and seagrass meadows that are healthy, stabile or recuperating		1	3
Abundance, diversity and spawning/aggregation sites for seranidae fish and other important fish are stable or increasing		1	3
abundance of protected, or charismatic species in the park (eg, napoleon wrasse, seaturtles, dugong, shark, lobster, giant clams) are stable or increasing		1	3
total area of "no take zone" ≥ 20% total area of the park		1	2
there are no violations of the rules of the zonation system		1	2
there are no destructive activities (cutting mangroves, fish poison, bombing, taking protected species) in the park		1	2
Water quality is stable or improving		1	2
<b>Optimal eco-tourism appropriate to the park's carrying capacity.</b>	<b>1</b>		
there are no violations of the park management rules by tourists or tourism operators.		1	2
Provincial income from tourism tax (PB 1) stable or increasing		1	2
Number of return visitors is increasing		1	3
Efforts of the nature tourism industry are in line with the carrying capacity of the park		1	3
Increasing quality of the tourism industry that operate or conduct activities in the park		1	3

Category / indicator	Priority ranking	Useful?	Feasible?
<b>Improving local livelihoods and community welfare</b>	<b>2</b>		
Number of local people (who come from within the park and near the park) employed and/or carrying out business in tourism is stable or increasing – including data on management and workforce		1	3
Total fisheries yield increases		1	3
Level of community awareness improves		1	3
(PDB) Family income of the community in the park improves/strengthens		1	2
Level of women and children's health improves		1	2
Amount of conservation funds that enter the communities is stable or increasing		1	2
Percentage of local families who use healthy toilet increases		1	3
Quality and quantity of public facilities in small villages improves/increases		1	3

Irman finished up with a review of progress and results from the workshop. The Evaluation team and NRM team gave closing remarks and thanked the participants.

### Final Outcomes

By the end of the workshop we had achieved all of our main objectives. The Dewan had a better understanding of evaluation methods and issues (or at least they each had the opportunity to learn and participate in the process of designing an evaluation of BNP), they had agreed on a target audience for the evaluation results, they had developed a draft set of objectives for the evaluation (these have been condensed by the evaluation team) and they had helped to develop a draft list of indicators that they also prioritised and rated according to how useful and feasible they thought each indicator would be (the list has been used to develop a data collection strategy and draft outline of the evaluation report). Additionally, each of the evaluation team members had an opportunity to lead a part of the workshop and be directly involved with each of the activities.

The products of the workshop and the results from interviews on information requirements have been used to develop a data collection strategy for the evaluation of BNP and draft outline for the evaluation report. This draft outline will also be circulated for your comments and suggestions.

If you have comments or questions about this summary or about the workshop in July, please contact Nancy Dahl-Tacconi (0812 110 3521) or Reinhart Paat (0813 40 1111 49).