



CRBOM Small Publications Series No. 15

RBO benchmarking

by

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Contributions are most welcome - in English or in Bahasa Indonesia.

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Acknowledgement

RBO benchmarking was developed and piloted in 2004-07 by Network of Asian River Basin Organizations (NARBO) with support from ADB (under RETA 6351). Subsequently, the concept has been streamlined and mainstreamed for Indonesian RBOs by Ministry of Public Works and PJT1 with support from NARBO Indonesia, NARBO and ADB.

The paper is partly based on a presentation made with indispensable support from colleagues at an IWRM training programme conducted by NARBO in Da Nang, December 2009.

About PJT1

Jasa Tirta 1 Public Corporation, one of two such corporations in Indonesia, was established in 1990 for operation and maintenance of water-related infrastructure, as well as management of water resources, river environment, water quality and floods in the Brantas River Basin (East Java). In 2000, its operation was extended to include the Bengawan Solo Basin (Central and East Java), hereby covering an area of nearly 28,000 km² with a population of more than 30 mio. people. The organisation was ISO 9001 certified in 1997. For details, please refer to www.jasatirta1.co.id

Summary

An RBO benchmarking is a structured assessment of its performance relative to '*best practices*', considering its stated responsibilities and operation, and made for the sake of improving its performance.

Benchmarking can describe an RBO's ability to do what it is expected to do (or wants to do), and hereby provide a starting point as well as directions for performance upgrading. Also, a benchmarking can facilitate a structured sharing of experience and inspiration between participating RBOs. Typically, the associated costs are moderate.

At the initiative of NARBO, a benchmarking exercise was conducted in 2006-08 for 10 Asian RBOs - one in Sri Lanka, one in The Philippines, one in Viet Nam, and seven in Indonesia. The benchmarking used a set of 14 performance indicators and was conducted with participation by external peers, for the sake of consistency and knowledge-sharing.

Benchmarking is now applied as a standard practice for Indonesian RBOs. The present paper describes recent national experience, which is clearly positive.

Acronyms and abbreviations

CPA:	Critical performance area
IWRM:	Integrated water resources management
NARBO:	Network of Asian River Basin Organizations
RBO:	River basin organisation

Glossary

Benchmarking: A systematic process for securing continual improvement through comparison with relevant and achievable internal or external norms and standards (Malano and Burton 2002); a way to evaluate an RBO's ability to do what it is expected to do (or wants to do). (Literally, a '*benchmark*' is a mark cut in a wall, used by surveyors as a fixed, absolute and well-defined reference point for elevations)

Best practice¹: Best practice data are used to demonstrate what works and what does not and to accumulate and apply knowledge about how and why they work in different situations and contexts

Performance (of an RBO)²: The degree to which an RBO operates according to expectations, or achieves results in accordance with stated goal or plans. **Performance gap:** The shortfall in performance when comparing with '*best practice*'. **Performance indicator:** A variable that allows for verification of changes in the performance of the RBO, or shows results relative to what was planned

Consistency (of data): Compliance between the quality of different data sets, produced by different methods, or at different places, or at different times

Transparency (of a procedure): The insight available to the data user about how the data were produced. A good transparency is obtained by documentation and can be supported by using standard procedures

¹ Source: www.ib-net.org

² Source: www.ib-net.org, modified

1 Introduction

Benchmarking is a well established management tool for water utilities. Recently, the concept has been adapted by NARBO for use by river basin organisations (RBOs).

The present paper describes recent Indonesian experience with RBO benchmarking.

The paper has been prepared for the sake of knowledge-sharing with colleagues and has been edited with a particular view to readers outside Indonesia.

2 Benchmarking - what, why and how?

What?

An RBO benchmarking is a structured assessment of its performance relative to '*best practices*', considering its stated responsibilities and operation, made for the sake of improving its performance.

RBO benchmarking

At the initiative of NARBO, a benchmarking exercise was conducted in 2006-08 for 10 Asian RBOs - one in Sri Lanka, one in The Philippines, one in Viet Nam, and seven in Indonesia. The benchmarking used a set of 14 performance indicators and was conducted with participation by external peers, for the sake of consistency and knowledge-sharing. The results illustrate the differences between the RBOs and provide guidance for performance upgrading in the course of time.

Benchmarking is now applied as a standard practice for Indonesian RBOs. The approach is presently being consolidated and streamlined for applications elsewhere in Asia.

Why?

A benchmarking can guide development and consolidation of IWRM-based river basin management in general and RBO performance in particular, in pursuit of social, economic and environmental benefits.

Also, a benchmarking can facilitate a structured sharing of experience and inspiration between participating RBOs.

How?

A benchmarking can be conducted for a single RBO or for a group of similar RBOs. It can involve the following steps:

- 1 Clarification of the RBO's performance goals (preferably in support of a clear mandate, vision and mission) (if this has not been done beforehand)
- 2 Selection of a set of indicators that, between them, describe the RBO's performance relative to its stated goals
- 3 Preparation of a routine for how to rate each indicator, for example by a scorecard, for the purpose of transparency and consistency
- 4 A self-assessment of present and desired future performance, conducted by in-house capacity, while at the same time testing (and possibly adjusting) the indicators and the rating routine
- 5 A second assessment, with participation by external peer reviewers

- 6 If conducted for a group of RBOs, results can be compared, in order to learn from each other, provided that the routines are identical and equally valid for the participants
- 7 Preparation (and implementation) of an action plan for organisational adjustments, reflecting the outcome of the analysis relative to the desired future performance
- 8 The exercise can be repeated after some years, using the same indicators and rating routine, in order to describe developments over time

For Indonesia, indicators and rating routines are available from NARBO Indonesia.

3 Indicators and rating

The choice of indicators is highly important for a useful outcome. Indonesia applies indicators that origin from the NARBO pilot implementation, but which has been modified, during a series of workshops, to suit the national context.

A set of 14 indicators is applied, covering 5 Critical Performance Areas (CPAs) and 12 objectives. Each indicator can be given a rating of between 0 and 4, according to clear criteria specified in a detailed scorecard. Please refer to Appendix A for details.

Table 1: Benchmark indicators applied in Indonesia

Critical Performance Area (CPA)	Objectives	Indicators
A Mission	1. IWRM	Formal RBO status
		RBO governance
B Stakeholders	1. Customer satisfaction	Customer involvement
		Customer feedback
	2. Environmental conditions	Environmental audits
	3. Livelihoods	Basin livelihoods
C Learning & growth	1. Human resources	Human resources development
	2. Infrastructure	Technical development
	3. System development	Organizational development
D Internal business processes	1. Planning	Planning maturity
	2. Resource management	Water allocation
	3. Information management	Data sharing
E Finance	1. Financial independence	Cost recovery
	2. Financial performance	Financial efficiency

4 The Indonesian experience

One Indonesian RBO (PJT2 Public Corporation) was among the first four Asian RBOs covered by NARBO's pilot implementation in 2006/2007.^{3 4} The approach was considered useful. In 2008, 6 additional Indonesian RBOs (including PJT1) conducted a benchmarking, followed by 9 other ones in 2009, with more expected to join in the time to come.⁵

Short-term objectives are

- a measurable improvement in RBO performance;
- improved understanding of RBO performance based on IWRM principles; and
- consolidation of benchmarking as a routine tool.

Medium-term objectives are

- a measurable country-wide improvement in RBO performance;
- a better understanding of RBO management implications, including results-based management and peer reviews; and
- benchmarking and monitoring systems routinely applied throughout Indonesia

Long-term objectives are

- improvement in river health and water utilization; and
- reduced in damages from water-related calamities.

Peer reviewers (normally 4 in each case) were applied in order to

- ensure consistency of the benchmarking, including application of the tools;
- assist with identification of strategies to improve performance; and
- develop a network of experienced resource persons in support of RBO activities.

The reviewers were experienced senior managers from the participating organisations. They were certified by NARBO, following appropriate training, and were able to contribute to an amiable dialogue, transparency, capacity building and legitimization of new knowledge.

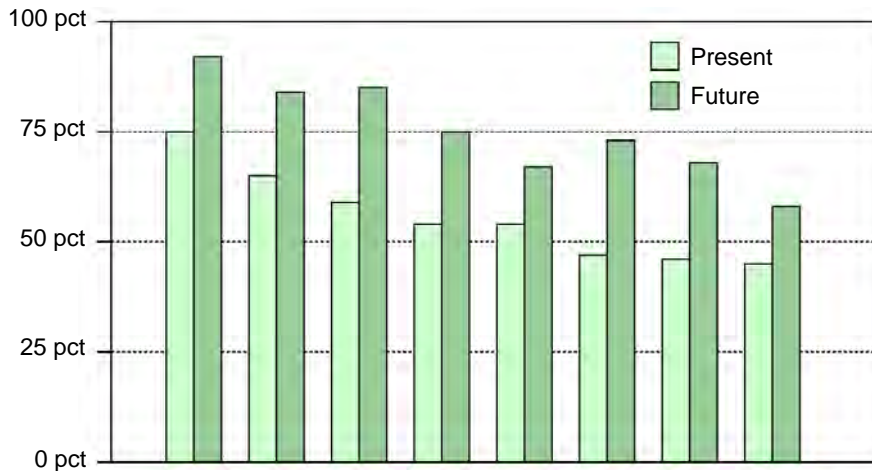
The over-all rating of performance is shown in the figure below for the 8 RBOs where the analysis has been completed. The rating covers present as well as future performance, considering applicable individual targets.

³ With support from ADB under RETA 6351

⁴ The other pilot basins were the Red River Basin Organisation in Viet Nam, Laguna Lake Development Authority in the Philippines, and Mahaweli Basin Authority in Sri Lanka

⁵ Indonesia, with its 133 river basin districts, has 92 RBOs, of which 2 are public corporations (PJT1 and PJT2), 31 are governmental and 59 are provincial

Figure 1: Performance ratings (present and future)



5 Benchmarking and institutional development

A benchmarking exercise can develop internal and external relations at the same time. Internal relations, in terms of commitment and collaboration, can be strengthened by the formulation of goals and indicators, and an open and inclusive self-assessment process, hereby contributing to an improved institutional efficiency. This will, at the same time, develop the external relations, as reflected by performance and responsiveness.

Changes induced by a benchmarking can, from case to case, be a matter of fine-tuning, or a comprehensive overhaul, involving policy formulation and legislation.

Drawing on experience from PJT1, adjustments and adaptation options include, as relevant from case to case:

- Strategic planning in support of present or desired future core competencies;
- stakeholder feedback for guidance of governance and institutional development;
- knowledge base development, including (but not limited to) data collection, data management and information systems, and related dissemination;
- streamlined collaboration with government agencies NGOs and communities;
- public relations and awareness-building;
- human resources management;
- responsiveness in service delivery;
- technological adaptation and innovation;
- various kinds of performance monitoring;
- management of occupational health and safety;
- full or partial cost recovery;
- implementation of various enforcement measures; and
- general quality management with audits.

6 Discussion

The over-all experience is clearly positive.

Benchmarking can describe an RBO's ability to do what it is expected to do (or wants to do), and hereby provide a starting point as well as directions for performance upgrading. Typically, the associated costs are moderate.⁶

Benchmarking is a comparative analysis. First, the characteristics of the organisation are compared with the set of indicators; next, the organisation may be compared with similar organisations; and third, changes over time can be described by comparing two successive benchmarkings with an interval of a couple of years.

Comparisons of RBOs (during a joint benchmarking exercise with the same indicators) can make sense provided that the organisations are widely similar, so that the indicators have the same validity for each participating organisation. Such a comparison can make it easier to learn from each other. If so desired, it can be made and published without identifying the participating organisations.

Using Critical Performance Areas to identify the indicators is related to the orientation of the benchmarking towards internal institutional performance. The CPAs are linked to the *mission* of the RBO. Key Result Areas (KRAs), linked to the *vision* of the RBO, could have been used instead - for example percentage of households with access to safe water, and irrigated area in percent of cultivated area. This would improve the validity but reduce the accuracy, because the achievement of KRAs is determined by a combination of institutional performance and external circumstances beyond the control of the RBO. The choice is based on a consideration of accuracy and validity that is normal when selecting indicators - a high validity can mean a low accuracy and the other way around.

Comparisons of RBOs in different countries must be made with caution, because of differences between their mandate, operation and operating context.

⁶ ADB (Apr 09) estimates the national costs for benchmarking of 20 RBOs at 350,000 USD, plus 380,000 USD for international support and participation. The costs should decrease once routines have been consolidated

If you want to know more ...

Please refer to

The Water Utility Benchmarking Association (www.waterbenchmarking.com),
The Benchmarking Network Inc. (www.benchmarkingnetwork.com), and
The International Benchmarking Network for Water and Sanitation Utilities (IBNET)
(www.ib-net.org) (with a glossary).

Also note the ADB website, www.adb.org, and the benchmarking section of the NARBO website:
<http://www.narbo.jp/narbo/bench/index.htm>

References

ADB (Apr 09): Process development for preparing and implementing IWRM Plans, RBO benchmarking program. Completion report prepared under RETA 6351 by DHV (The Netherlands) in association with WL Delft Hydraulics (The Netherlands) and PT Mitra Lingkungan Dutaconsult (Indonesia)

ADB (Nov 06): ADB Water Financing Program 2006-2010 - Helping to introduce IWRM in 25 river basins in the Asia-Pacific Region (*'the 25 IWRM elements'*)

Kei Saiki (Jan 08): A design of IWRM basin performance benchmarking program. ADB and University of Tokyo. (This publication addresses river basin performance as much as RBO performance)

NARBO (Jan 06): Guidelines for use of NARBO benchmarking service performance indicators

Appendix A: Indicators for RBO benchmarking

(Example from Indonesia, developed with support from NARBO and ADB)

CPA	Objective	Indicator	Indicator value (1-4)
Mission	Integrated water resources management: Our mission is to deliver safe and reliable water supplies and services within an IWRM approach	RBO status: A measure of the RBO development and extent of stakeholder involvement in, and quality of, the organization's decision making process	<ol style="list-style-type: none"> 1 Status of RBO development 2 Evidence of feedback of organizational decisions into operations of stakeholder agencies 3 Acceptable representation of all stakeholders engaged in the Organization 4 Evidence of dialogue and consensus-based agreements in basin-wide planning and management to balance all user needs for water resources and to provide protection from water-related hazards
		RBO Governance: A measure of the national, regional, and organizational framework that support good governance	<ol style="list-style-type: none"> 1 Local and national governance 2 Natural resources legislation 3 Organizational responsibilities 4 Authority of RBO to operate
Stakeholders	Customer satisfaction: Customers will be fully satisfied by the services provided by the RBO	Customer involvement: A measure of the level of customer involvement in the decision making of RBO and, therefore, their acceptance of the organizational goals and operation	<ol style="list-style-type: none"> 1 No planned customer communication 2 Customer information 3 Open meetings 4 Customer contributions to decisions
		Customer feedback: A measure of the level of customer involvement in the decision making of RBO and, therefore, their acceptance of the organizational goals and operation.	<ol style="list-style-type: none"> 1 No planned customer communication 2 Ad hoc customer surveys 3 Routine surveys 4 Customer contributions to decisions
		Environmental conditions: Aiming for an improvement in environmental indicators	Environmental audits: A measure of the level of environmental awareness and intention to protect against environmental degradation

CPA	Objective	Indicator	Indicator value (1-4)
	Livelihoods: Measures improving quality of life for basin communities	Basin livelihood: A measure of the overall change in livelihoods in the basin	<ol style="list-style-type: none"> 1 Livelihoods of basin population cause for increasing concern 2 Water-related livelihood issues remain a concern for sections of basin population 3 Basin on track to meet MDGs for water supply and sanitation; however, economic activities remain constrained by water supply and treatment problems 4 Basin livelihoods improving strongly, socioeconomic conditions such that environmental protection recognized as critical objective in basin
Learning and growth	Human resources: RBO with effective and well-trained staff to deliver mission	Human resources development: A measure of the maturity and effectiveness of HRD system within RBO reflecting its likely contribution to achievement of organizational objectives	<ol style="list-style-type: none"> 1 No formal commitment to staff development 2 Evidence of ad hoc and/or opportunistic use of capacity development initiatives 3 Targeted capacity building not fully integrated with strategic management objectives 4 Fully operational human resources development program
	Infrastructure RBO with technical infrastructure to achieve mission	Technical development: Measure of the level of commitment to adopt appropriate technology solutions that will aid in the delivery of the mission	<ol style="list-style-type: none"> 1 No formal mechanism to identify appropriate technology advances 2 Ad hoc or opportunistic use of technical advances to address deficiencies 3 Formalized asset development plan aimed at technical infrastructure to fully support IWRM 4 Active commitment to R&D to generate appropriate new tools, techniques, and technologies to address emerging and forecast issues
	Systems development: Continuous improvement of RBO operations to deliver mission	Organizational development: Measure of the commitment to quality management through application of QMS or similar management improvement tools	<ol style="list-style-type: none"> 1 Systems for defining management procedures exist 2 Management systems procedures remain ineffective 3 Management procedures are well known and operational but allow little room for staff collaboration 4 An effective QMS operates, including adoption of best practices, evidence of adaptive and responsive decision making, and a commitment to continuous improvement

CPA	Objective	Indicator	Indicator value (1-4)
Internal business processes	Planning: Maximizing effective utilization of resources	Planning maturity: To identify the level of planning operating within the RBO and its likely impact on delivery of mission	<ol style="list-style-type: none"> 1 Operational plans exist 2 Strategic planning is carried out but has limited influence on routine operations and decisions 2 Strategic planning focuses on the mission and guides routine operations but is not necessarily supported by stakeholders 4 Strategic planning is a mature process with stakeholder involvement, broad stakeholder support, incorporating realistic goals within a realistic financial framework and aligned to best deliver IWRM
	Resource management: Effective management of available basin water resources	Water allocation: Measure water resource allocations in the basin that determine delivery and performance of water services	<ol style="list-style-type: none"> 1 No formal water allocation system in use 2 Agencies share responsibility for water resource allocations 3 Spatial and temporal water allocation plans are in use 4 Fully integrated water resource management plans guide water allocation in both space and time
	Information management: Provision of reliable and relevant information for management and stakeholders	Data sharing: A measure of the commitment to and implementation of effective data management and information dissemination	<ol style="list-style-type: none"> 1 Poorly organized data collection and no quality control procedures in use 2 Some basic data quality controls are in use 3 Data is quality-controlled and routinely available for operations and to stakeholders on request 4 RBO's fully transparent data management system provides high quality information on all aspects of the basin to all interested parties
Finance	Financial independence: Operational independence and accountability	Cost recovery: A measure of customer service and strength of budget management	<ol style="list-style-type: none"> 1 Operational costs recovered 2 Operational costs recovered from customers 3 Full operational costs and a proportion of development costs recovered from customers 4 Basin operation and development costs fully covered by the operational revenue stream
	Financial performance: Maximize the effective use of financial resources	Financial efficiency: A measure of the commitment to most efficient use of financial resources in pursuit of delivery of the mission	<ol style="list-style-type: none"> 1 Annual budget is utilized 2 The organization aims at cost reductions that are not tied into performance improvement 3 The organization targets financial efficiency to enhance organizational performance 4 The organization is committed to maximizing and continuous improvement of IWRM benefits through efficient use of organizational resources

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