2nd Regional Meeting of National Water Sector Apex Bodies
Bangkok, 27-29 April 2005

LEADERSHIP IN WATER GOVERNANCE

Performance Indicators for Benchmarking of National Water Sector Apex Bodies[1]

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Introduction

1. The 1st Regional Meeting of National Water Sector Apex Bodies (NWSABs) was held on May 18-24, 2004 in Hanoi, Viet Nam. A number of such bodies have been established in several countries in the Asia-Pacific region primarily to guide national water sector reforms. Supported by the Asian Development Bank (ADB) and attended by representatives from Bangladesh, Cambodia, Indonesia, Lao PDR, Malaysia, Nepal, Pakistan, Philippines, Sri Lanka, Thailand and Viet Nam, the objectives of the 1st regional meeting were to: (i) exchange information and experience on the work of NWSABs in the region; and (ii) identify priority needs and opportunities for networking, capacity building and research among the NWSABs.

2. The participants of the 1st regional meeting decided to start regional cooperation among NWSABs, with initial focus on the following areas:

- Benchmarking and peer review of NWSAB performance
- Training and workshops for capacity development
- Regional exchanges for awareness raising and information sharing
- Support to developing guidelines and sourcebooks
- Regional coordinated media campaign

3. In the concluding session of the 1st regional meeting, the participating NWSABs recognized that benchmarking their performance would be a good exercise to assess achievements vis-à-vis their objectives, learn from experiences of the others, and to identify areas for improvement. They requested ADB to initiate and pilot test a benchmarking process to develop performance indicators against which the NWSABs can be benchmarked.

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[1] The views, interpretations and conclusions expressed in this document do not necessarily represent the views of the Asian Development Bank (ADB) or its member governments.

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4. ADB supported the meeting's decision to conduct a benchmarking exercise which would help improve water sector governance, identify best practices and possible replication, as well as to identify areas for further ADB assistance.

5. The meeting also recommended that a review of NWSAB performance may be more appropriately carried out by invited peers rather than by external consultants, and requested ADB to assess suitable peer review experiences that could be considered among NWSABs. The proposed process for peer-review is presented in a separate discussion paper.[3]

6. This paper is focused on presenting a candidate set of performance indicators for consideration by NWSABs in the 2nd Regional Meeting in Bangkok on 27-29 April 2005, and to gain consensus on pilot-testing these indicators by two NWSABs who have volunteered for this purpose: Thailand's National Water Resources Committee; and the Philippines' National Water Resources Board.

Understanding Benchmarking and Performance Indicators

7. First used by the private sector to improve organizational performance, benchmarking has more recently become a popular management tool for the measurement and improvement of performance in the public sector. Benchmarking is used to:

- Assess performance objectively;
- Expose areas where improvement is needed;
- Identify other organizations with processes resulting in superior performance, with a view to their adoption; and
- Test whether improvement programs have been successful (Cowper and Samuels)

8. Governments and ministries in many countries are now utilizing benchmarking in order to improve performance. Benchmarking efforts in education, information technology, health and local government sectors have already been documented. The governments of Australia, Japan, United Kingdom and the United States have a longer history of benchmarking in the public sector.

9. In the water sector, water utilities, irrigation services and most recently, river basin organizations are in various stages of performance benchmarking processes. Several examples of benchmarking in the water utilities sector exist, among which ADB's Water Utilities Data Books, the Water and Sanitation International Benchmarking Network (IBNET) sponsored by the World Bank (WB) and DFID, and the Water Utility Partnership (WUP), a joint program initiated by the Union of African Water Suppliers (UAWS) and also supported by the WB. Performance indicators in the water utilities sector commonly include coverage ratios, non-revenue water, tariffs, collection efficiency, staffing vis-à-vis number of connections, financial performance, among others.

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[3] *A Peer Review Process to Support Performance Benchmarking among National Water Sector Apex Bodies*, discussion paper prepared by Atty. Mai Flor, Water Policy and Institutional Development Specialist (Consultant); and Wouter Lincklaen Arriens, Lead Water Resources Specialist, Regional and Sustainable Development Department, Asian Development Bank, 2005.

10. In the irrigation services subsector, the Australian National Committee of the Internaitonal Commission on Irrigation and Drainage (ICID) initiated a program in 1998 which reported on 46 systems and 47 performance indicators grouped into four key areas namely System Operation, Financial Indicators, Productive Efficiency and Environmental Performance. The International Water Management Institute (IWMI) and the Food and Agriculture Organization of the United Nations (FAO) also have gained experience in developing performance benchmarking systems for irrigation projects.

11. Following the 3rd World Water Forum in 2003 in Kyoto, Japan, the Network of Asian River Basin Organizations (NARBO) was established in 2004, and member RBOs identified performance benchmarking as a priority program in NARBO's plan of action. With support from ADB, NARBO has recently concluded two regional workshops on performance benchmarking and is expected to agree on a set of performance benchmarking indicators for pilot testing in several RBOs in 2005.

12. Ultimately, benchmarking is about comparison against either a specific standard or a similar organization. There are many types of benchmarking but Trosa and Williams (1995) have identified three main approaches:

- Standards benchmarking – setting a standard of performance which an effective organization could be expected to achieve;
- Results benchmarking – comparing the performance of a number of organizations providing a similar service; and
- Process benchmarking – undertaking a detailed examination within a group of organizations of the processes which produce a particular output, with a view to understanding the reasons for variations in performance and incorporating best practice.

13. Cognizant of the purpose and nature of NWSABs and the wide range of functions they perform in countries across the region, it is recommended that the process of performance benchmarking for NWSABs be started using a Results Benchmarking approach. This has the advantage of not having a specific performance target, standard or metric against which an apex body will be compared to, and it therefore avoids intruding into a government's authority and specific manner of governance.

National Water Apex Bodies and Benchmarking

14. The principal role of NWSABs is to provide leadership in improving water governance. Many governments have recognized the finite nature of water resources and agreed that "business as usual" is no longer adequate. Efforts at improving the effectiveness of water management are underway in many countries across the region. NWSABs are being created or strengthened to serve as a cross-sectoral coordinator to balance conflicting interests within the water sector and harmonize water reform and investment programs.

15. In the 1st regional meeting of NWSABs in Hanoi 2004, the main objectives of NWSABs were set in the context of the seven elements of ADB's Water for All Policy. These are:

1. Guide water sector reforms to support national development goals, reduce poverty and protect the environment

2. Introduce integrated water resources management
3. Improve and expand the delivery of water services
4. Enhance sustainable water use in society
5. Promote the equitable use of shared water resources
6. Fostering consultative and participatory approaches
7. Building capacity to respond to changing needs

16. Clearly, NWSABs have the considerable task of being the prime mover of reform in the water sector. A lot of their work will entail close coordination among, and balancing the interests of the important actors in the sector: irrigation (commonly the largest water user representing 70% or more of demand and withdrawals), environment, energy, and of course domestic and industrial water supplies.

17. The objectives of NWSABs necessarily cut across sub-sectors. As such, NWSABs must have substantial and sustained support from the highest level of government and have the institutional standing to be clearly recognized as the supreme (advisory or decision-making) authority in all aspects of water management, covering both the management of water resources and the delivery of water services. Without a doubt, political will, strong sectoral leadership and a clear mandate are indispensable ingredients to effective water management. But, these factors critical to the success of the NWSAB can be difficult or impossible to benchmark. How does one measure "political will" or "leadership"? Certainly, these factors may not be measured by themselves but perhaps, through a suite of indicators, we may be able to get a sense of the presence or absence of some of these factors.

18. Moreover, since the objectives of an NWSAB are broad and its delivered service are at times intangible, it may be difficult to benchmark its performance. Unlike water supply services or irrigation services that may be measured in metrics i.e. coverage ratio, frequency or availability of supply, the service being delivered by NWSABs are in the form of effective water laws and policies which require subjective assessment.

19. The subjective nature of some of the deliverables of NWSABs make peer review a valuable tool in the benchmarking exercise. It is proposed that once a set of indicators have been agreed upon in the 2nd regional meeting, a self-assessment by the interested NWSABs will be conducted. These will then be subjected to a panel of peer-reviewers not only for validation but also for identifying areas for improvement and possible assistance.

Developing Relevant Performance Indicators

20. Having selected the approach to be adopted in the benchmarking process, the next important aspect to consider is identifying the critical areas of NWSAB operations that will be the subject of measurement. This brings us to the concept of performance indicators.

21. Indicators are standards used to measure achievement of an organization. They are measures of change or results brought about by an activity or series of actions. A performance indicator is a guide to show how well organizations are doing in meeting their goals and objectives. Indicators are pointers, numbers, facts, opinions or perceptions that measure organizational performance.

22. The generally accepted criteria for good indicators are: specific, measurable, achievable, realistic, and time-bound.

23. Moreover, good performance indicators must be objective thus, the measures taken on the indicator must be the same no matter who makes the measurements. It must be verifiable and quantifiable meaning it is provable or demonstrable and capable of being measured by metrics or some means of measurement i.e. number of stakeholders in NWSAB membership. However, given the nature of the mandate of NWSABs as discussed above, the use of qualitative indicators are also appropriate i.e. the existence of a functioning system for water allocation and utilization.

24. In choosing an indicator, the most important elements to consider are its reliability and validity. Validity means that the information that indicators provide must be close to the reality they are measuring while reliability means that indicators used must be accurate and consistent. An indicator is reliable if multiple uses of the same instrument (such as interview, survey, etc) yield the same or similar results.

25. There are several types of performance indicators. The most common are measures of effectiveness and efficiency.

26. Effectiveness is defined as the power or capacity to produce the desired result or outcome (i.e. vision, objectives). Effectiveness measurement, according to Paul D. Epstein, is “a method of how well a government is meeting the public purpose it is intended to fulfill. Effectiveness refers to the degree to which services are responsive to the needs and desires of a community. It encompasses “both quantity and quality aspects of a service”. Effectiveness indicators therefore provide information on the extent to which outcomes (i.e. objectives, goals) have been achieved through the organization’s inputs (i.e. resources, staff, money, materials) and outputs (i.e. products, services, information). An example of an effectiveness indicator is the existence of a functioning central network for water-related data and information.

27. Another performance indicator is the measurement of efficiencies. Efficiency measurement, as per Epstein, is a method of examining how well a government is performing the things it is doing without regard to whether those are the right things for the government to do. Efficiency is the ratio of the quantity of the service provided to the cost in money (value in dollars) or labor (number of employee hours), required to produce the service. An efficiency indicator therefore relates resources used by an organization to the output it produced from those resources. An example of an efficiency indicator is the percent of water permit applications processed per year

28. Performance indicators may be qualitative or quantitative. Quantitative indicators are defined as measures of quantity, such as number of river basin organizations established or the number of water resources development plans formulated. Quantitative indicators deal with outputs and are easier understood and defined. It is commonly accepted that quantitative indicators are measurements that stick to cold and hard facts and rigid numbers, thus, there is no question as to their validity, truth and objectivity. Quantitative indicators are, therefore regarded as “objective and verifiable” as they point out numbers or percentages, i.e. number of RBOs in a country, the number of water resources development plans formulated by a NWSAB, or the percent of budget allocated for human resources development.

29. On the other hand, qualitative indicators can be defined as people's judgment and perception about a certain subject matter such as usefulness of water resources data being collected or affordability of water rates being levied. Qualitative indicators are seen as subjective, unreliable and difficult to verify. They are more difficult to ascertain because these type of indicators probe into the whys of situations and contexts of action as well as perception of people. Nevertheless, they are valuable in the evaluation process because they seek to measure the impact of an action or initiative and are therefore used to evaluate long term effects and benefits. When properly developed and interpreted, qualitative indicators can play a vital and significant role in identifying constraints to implementation of actions or initiatives and obstacles to success, which normally is not readily apparent.

30. The two types of indicators are complementary and both are important for effective monitoring and evaluation because they can cross-validate and point out problems with each other.

31. Finally, performance indicators must be reflective of the factors critical to the success of an organization. The results and information derived from the exercise must be usable for the organization.

Proposed Performance Indicators for NWSABs

32. It is clear by now that there is no one set of universally accepted indicators to measure the performance of NWSABs. Users must design and adapt indicators for their own purpose.

33. We are guided by the following principles:

- Use of both quantitative and qualitative indicators;
- Clearly defined indicators;
- Easy to use and understand;
- Technically sound;
- Measure trends over time;
- Developed in a participatory manner including all stakeholders, whenever possible;
- Relevant to the users and at a level that users can understand; and
- Objectives must be clearly set and indicators must be closely related to them.

34. Below are a list of critical success factors and possible indicators of effectiveness and efficiency that measure the performance of NWSABs vis-à-vis its objectives as guided by ADB's Water for All Policy. The list is not meant to be exhaustive but merely representative of indicators for consideration of the NWSABs. Neither is it intended to be taken in its entirety. We may begin with a small number of indicators and build from there once NWSABs are more comfortable with the process.

- WATER SECTOR COORDINATION

Output	**Indicator**
An independent NWSAB with clear mandate and specific powers and	• Title of law or regulation creating NWSAB

functions is in place	• Plan to create NWSAB being considered and discussed by Parliament/Congress
NWSAB meets yearly	• Actual number of meetings per year
Actual members of NWSAB attend meetings	• All members attended • Some representatives attended • More representatives than members attended
Large water projects referred to the NWSAB for approval per year	• Number of irrigation, water supply, hydropower, dam projects referred vis-à-vis number of projects actually implemented
National water resources management plan with an accompanying water action agenda including investment concerns in place and implemented	• NWSAB has approved the Plan and Action Agenda • NWSAB deliberating on the Plan and Action Agenda

- INTEGRATED WATER RESOURCES MANAGEMENT

National water policies specifying institutional responsibilities in all levels of governance formulated and implemented (i.e. IWRM policies, modern Water Law)	• Policies and laws exist and implemented • NWSAB considering and discussing policies, laws • Draft policies, laws submitted to Parliament/Congress for consideration
IWRM policies in place and implemented	• Number of RBOs created vis-à-vis number of major river basins
RBOs created functioning and effective	• A system for water allocation and utilization in river basins exist and implemented • NWSAB considering and discussing system for water allocation • Number of river basin plans and profiles completed and submitted to NWSAB for approval • Amount and source of budget of RBOs
Functional network among government agencies for water-related data collection, management and dissemination in place	• Network exists and agencies share data • Network exists but agencies do not share data
National water resources assessments conducted	• Number of assessments conducted (assessments include information on water availability for both surface and groundwater)
Water quality management in place	• Water quality standards exist and implemented • Water quality standards exist but implementation needs improvement

System for water allocation and utilization (i.e. permitting and monitoring) in place	• Water rights system exists and implemented • System exists but implementation needs improvement • NWSAB considering and discussing imposition of such a system • System does not exist
Water allocation system is efficient	• number of water permits processed per year vis-à-vis number of water permit applications received • average period of time for processing applications
System for conflict resolution and negotiation protocols among users in place	• System for conflict resolution among users exists and implemented; number of conflicts resolved by NWSAB per year • System exists but implementation needs improvement • NWSAB considering and discussing imposition of such a system
System for conflict resolution is efficient	• average period of time taken by NWSAB to resolve conflict from receipt of complaint

- WATER SERVICES DELIVERY

Regulatory framework in place	• Framework for regulation of utilities exists and implemented • Framework exists but implementation needs improvement • NWSAB considering and discussing establishment of such a framework • Framework does not exist
Responsibility for service delivery delegated to autonomous and accountable service providers	• Number of service providers other than government/public-run utilities
Recovery-based tariff and rationale subsidy policy adopted	• Policy for cost recovery in tariff setting exists and implemented • Policy exists but implementation needs improvement • NWSAB considering and discussing establishment of such a policy • Policy does not exist

- ORGANIZATIONAL SYSTEMS AND PROCESSES

Skills and training of staff appropriate for their functions	• Number of staff and type: administrative, technical, others • Number of technical staff trained per

	year • Total number of days trained per year • Percent of budget for HRD • Percent of budget for R & D

- FINANCIAL ASPECTS

NWSAB has sufficient budget	• Actual amount per year • Source of budget: allocated from national budget, from fees collected, others
Cost recovery policies formulated and implemented	• In irrigation services, Y/N • In water utilities, Y/N
Tariff regulation or at least a fee system in place and implemented	• In irrigation services • In water utilities
Independent tariff regulator for water utilities in place	• Y/N
Water fund independent of national budget from raw water fees or polluter's fees in place	• Water fund existing • NWSAB considering and discussing establishment of fund

- ADVOCACY

Public awareness in place and effective	• Public awareness programs existing • The public is aware of the programs • The public understand the programs • The public is putting into practice the programs
Leadership/Political will is present	• Water is in the President's/Prime Minister's action agenda • Water Law is a priority legislation

- STAKEHOLDER PARTICIPATION

Stakeholders are involved in the development of water policies, laws, etc.	• Number of stakeholders in NWSAB membership • Number of stakeholders in RBO membership • Number of public consultation conducted for new or review of existing policies, laws, etc.
Gender balance and equity is practiced	• Number of women in NWSAB membership • Number of women in RBO membership • Number of women invited to consultations

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