



CRBOM Small Publications Series No. 28

**The garuda, the owl,
the raven and the peacock**

by

Gemala Suzanti

**Center for River Basin Organizations and Management,
Solo, Central Java, Indonesia**

September 2010

The '*Small Publications*' are intended for knowledge-sharing and dialogue. In some cases they may present facts, information and lessons learnt. In other cases, they provide news, opinions, ideas or open questions for discussion.

They express the opinions of the author(s) and not those of CRBOM.

They can be freely copied and disseminated.

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

The author:

Mrs Gemala Suzanti, Head, Data and Information Section, BBWS-BS
(Balai Besar Wilayah Sungai Bengawan Solo) (Solo River Basin Organization)
suzanti@yahoo.com

CRBOM
Center for River Basin Organizations and Management,
Solo, Central Java, Indonesia
www.crbom.org
info@crbom.org

Contents

Acknowledgement.....	i
Acronyms and abbreviations.....	ii
Summary.....	ii
1 Introduction.....	1
2 Scenarios for basin-level development planning.....	1
3 Development planning for the Solo River Basin.....	1
4 The planning conditions.....	2
4.1 Background and rationale.....	2
4.2 The garuda.....	3
4.3 The owl.....	4
4.4 The raven.....	4
4.5 The peacock.....	4
5 Discussion.....	5
6 Conclusion.....	5
References.....	5

Acknowledgement

This paper describes work by the Bengawan Solo Water Council, piloted and guided by professor, dr. S. Budi Prayitno, Bappeda, Central Java, the former chairman (Prasetyo Budi Yuwono, East Java, being the new one), mr. Grait Sutadi, General Manager, BBWS-BS (Balai Besar Wilayah Sungai Bengawan Solo) (Bengawan Solo River Basin Agency), and mr Sudarsono, BBWS-BS, Head of the Secretariat of the Bengawan Solo Water Council.

Acronyms and abbreviations

BBWS-BS:	Balai Besar Wilayah Sungai Bengawan Solo (Bengawan Solo River Basin Agency)
IWRM:	Integrated water resources management
RBO:	River basin organization

Summary

Scenarios can be used to illustrate uncertain boundary conditions for IWRM implementation, basin-level management, RBO operation and water-related development planning. They can for example reflect population growth, (high and low) technological development, climate change, inflation, interest rates, trade barriers, or global prices for food and energy.

Recent strategic planning for the Bengawan Solo Basin, Indonesia, was based on uncertain assumptions about the state of the economy and the political support to implementation of the plan. Four conceptual scenarios were applied to illustrate the dependencies:

- The garuda: Strong economy, strong political will
- The owl: Strong economy, weak political will
- The raven: Weak economy, weak political will
- The peacock: Weak economy, strong political will

In general, the economy will indicate the need of making priorities and the potential for major investment as compared with small-scale maintenance. The political axis will indicate the prospects for reform and innovation, as compared to consolidation and impact mitigation.

Such scenarios can indicate how to make the best out of a given operating environment as long it prevails - both the political context and the economy will eventually change, for the better or the worse. The appropriate response must be seen as a continuous adaptation process.

1 Introduction

Integrated water resources management (IWRM) is subject to a number of boundary conditions that determine or influence the scope and impact of the management. In connection with basin-level IWRM, two important examples are (1) the political will to support and implement various changes; and (2) a reasonably healthy state of the economy. Political conditions and economic growth are critical driving forces to the river basin management. If both are favourable, big steps can be taken. Without either, only small steps are possible.

This paper describes a way to address these boundary conditions.

2 Scenarios for basin-level development planning

A *scenario* is a set of future circumstances, related to events and processes that may and may not happen. Scenarios can for example reflect (high and low) technological development, inflation, interest rates, trade barriers, or global prices for food and energy.

A distinction can be made between *planning scenarios* of circumstances beyond the control of the planners (population growth, climate change, natural disasters), and *development scenarios* of circumstances that comprise not only external events and developments, but also initiatives that are included in the planning (water storage capacity, irrigation development).

Scenarios are used in basin development planning because the future is uncertain. By illustrating opportunities and challenges, they can delineate the space for what can be achieved, in support of a consistent and responsive planning.

3 Development planning for the Solo River Basin

The basin covers parts of Central Java and East Java provinces, with an area of 16,100 km² and a population of some 15 million people.

Figure 1: Location of the Solo River Basin



A master plan was prepared in 1974. The Comprehensive Development and Management Plan was prepared in 2001 and revised in 2005. A strategic development plan (or '*poja*') was prepared in 2009-10. It covers

- (1) water uses;
- (2) water conservation;
- (3) water-related calamities (such as floods, drought, land slides);
- (4) information management; and
- (5) public participation.

The strategic development plan was produced by a highly participatory process by the Bengawan Solo Water Council,¹ a body established according to the Law on Water Resources (2004) and subsequent ministerial decrees. The Water Council has 32 government and 32 non-government representatives. It reports to the Minister of Public Works.²

4 The planning conditions

4.1 Background and rationale

The strategic plan for the Bengawan Solo Basin was prepared under the impression of the Asian economic crisis in 1997-98 (that had severe consequences for Indonesia), as well as the financial crisis since 2007 (that appeared to have much less impact, but which still imposed a particular uncertainty). Therefore, the state of the national economy was very much in the top of the mind of the planners.

Another aspect - well known to development planners - was the political support that could be relied upon during implementation. Political decision-makers apply - by necessity - a perspective that reaches beyond the river basin and beyond water-related and resource-dependent development. Politicians will seldom oppose beneficial socio-economic development, but may have priorities and a time horizon that are not fully consistent with the scheduled implementation of an IWRM-based basin development plan.

To illustrate these uncertainties, scenarios were applied to conceptualize and highlight the assumptions made in the planning. They considered

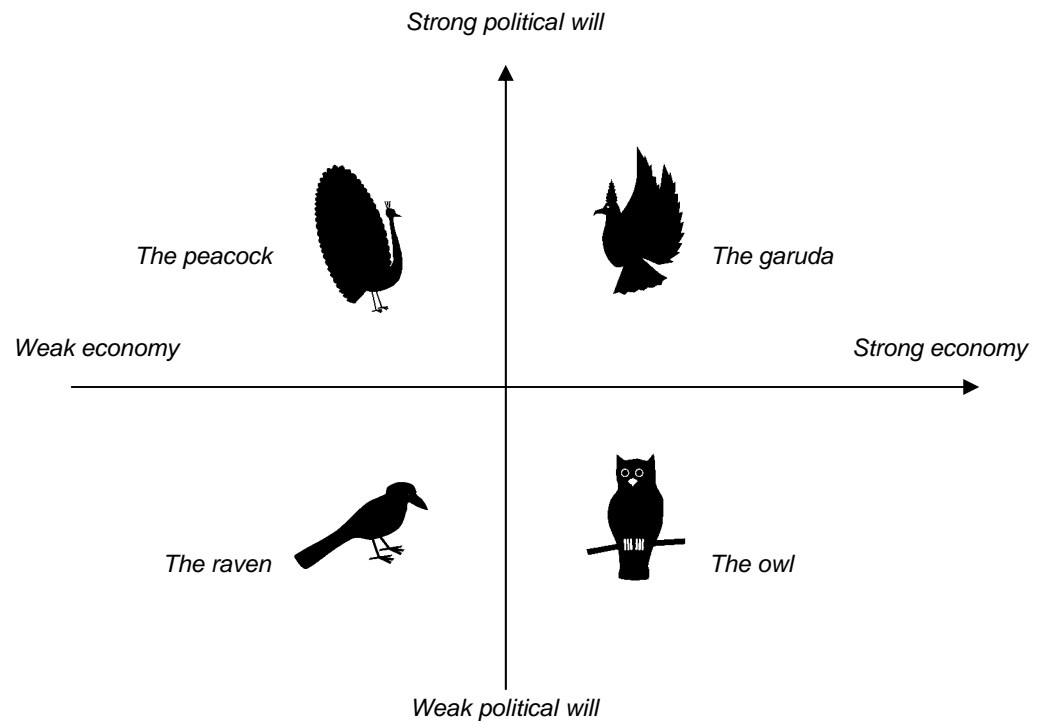
- the state of the economy; and
- the political will to support the implementation of the plan.

The two aspects were classified as '*high*' and '*low*', generating four scenarios, as shown in the figure below.

¹ The '*Water Council*' is a short translation of '*Tim Koordinasi Pengelolaan Sumber Daya Air*' (TKPSDA), or the '*Water Resources Management Coordination Team*'.

² Please refer to Sudarsono (Sep 2009) for additional information

Figure 2: The planning scenarios



In general, the economy axis will indicate the need of making priorities and the potential for major investment as compared with small-scale maintenance - whether the focus must be on doing the right things, or doing the things right as well. The political axis will indicate the prospects for reform and innovation, as compared to consolidation and impact mitigation.

The four scenarios are briefly outlined below.

4.2 The garuda

Strong economy, strong political will



This strong bird is capable of spectacular achievements, including developments that are beyond prevailing trends and constraints - and perhaps beyond mainstream imagination. It can push stepwise rather than gradual shifts to new technological or socio-economic regimes. It is not risk-averse, and occasionally, its endeavours will fail.

Opportunities for basin-level development include (but are not limited to)

- reform and innovation;
- capital-intensive developments with high social and economic returns;
- developments with a high visibility (such as infrastructural landmarks);
- attractive but somewhat risky initiatives (such as economic structural reform); and
- long-term strategic developments (such as education and research).

In this scenario, by 2030, all specified water resources management infrastructure has been built, and the problems of floods, droughts, erosion/ sedimentation, and other problems, can be controlled.

4.3 The owl

Strong economy, weak political will



The wise owl is not very visible. It achieves its aims with discreet diligence and a strong ability to reach its targets. When the sun rises, the owl will have spent the hours of darkness with industrious efforts to sustain itself and its dependants.

Implications for basin-level development include (but are not limited to)

- development of water resources infrastructure gets less attention, with a relatively inadequate funding allocation;
- because of lack of coordination, development of water resources does not go well.

By 2030, problems will remain regarding floods, droughts, erosion/ sedimentation, and other problems.

4.4 The raven

Weak economy, weak political will



The raven is a talkative bird, but does nothing.

Implications for basin-level development include (but are not limited to)

- lack of support from the state;
- instable governance and lack of coordination;
- lack of institutional networking and collaboration; and
- less qualified and less consistent public water resources management policy.

By 2030, only limited development will have been achieved, and drought and flood will still occur every year.

4.5 The peacock

Weak economy, strong political will



The peacock is a spectacular and symbolic bird. With little effort it attracts attention and impresses its surroundings, generating well-being by its mere presence. Relying on positive attitudes it can add visibility to successful initiatives by others and support cost-effective development that requires patience and perseverance.

Opportunities for basin-level development include (but are not limited to)

- institutional reform;
- stable government - but less prosperous; and
- good public water resources policy.

Implementation will be influenced by lack of budget. By 2030, the problems of floods, drought, erosion/ sedimentation, and other problems, will remain.

5 Discussion

The line of thinking outlined above is applicable not only to basin-level development planning, but also to RBO operation and IWRM implementation in general.

The scenarios are merely a conceptual illustration and should not be taken as an indication of '*what is not possible*'. If need be, the political support can be enhanced by dialogue. Development initiatives that may not be immediately feasible can become so in the time to come.

The significance of political support to IWRM implementation is broadly recognized in literature - see for example Asia Society (Apr 09); GWP and INBO (Mar 09); and NARBO and UNESCO (Mar 09), which observe that ³

'Political will at all levels can help to unite all stakeholders and move the process forward. It is needed especially if the resulting plan or arrangement would create or require changes in legal and institutional structures, or if controversies and conflicts among stakeholders exist. ... Political will is a potential engine of public awareness. However, there is a feedback process, as strong political will is also often motivated by public pressure to address high-profile issues. Water managers should focus on promoting correct understanding of the importance of water and the necessity for IWRM when dealing with the public, press, governments and politicians.'

6 Conclusion

Scenarios can illustrate uncertain boundary conditions for IWRM implementation, basin-level management, RBO operation and water-related development planning.

They can indicate how to make the best out of a given operating environment as long as it prevails - both the political context and the economy will eventually change, for the better or the worse.

The appropriate response must be seen as a continuous adaptation process.

References

Asia Society (Apr 09): Asia's next challenge: Securing the Region's water future

GWP and INBO (Mar 09): A handbook for IWRM in basins

NARBO and UNESCO (Mar 09): IWRM guidelines at river basin level

Sudarsono (Sep 09): The Bengawan Solo Water Council - providing insight and directions. CRBOM Small Publications Series no. 5, Center for River Basin Organizations and Management, Solo, Central Java

³ NARBO and UNESCO (Mar 09), Part 1, page 14

**Center for River Basin Organizations and Management,
Solo, Central Java, Indonesia
www.crbom.org, info@crbom.org**