

Cercetari marine	I.N.C.D.M.	Nr. 34	321 - 329	2002
------------------	------------	--------	-----------	------

THE QUEST FOR INTEGRATION: PROSPECTS FOR INSTITUTIONAL CHANGES IN THE BLACK SEA BASIN

B. MEINIER

Simon Fraser University, Burnaby, British Columbia, Canada

ABSTRACT

Currently, the Black Sea constitutes one of the world most polluted bodies of water. Although the Danube polluting inflows account for nearly half of the Black Sea degradation, the Black Sea coastal countries bare alone the responsibility of rehabilitating and protecting this international resource. Ultimately, in order to consider all the polluting nations, future institutional arrangements will need to encompass all the basin's states, especially the Danube riparian nations. In this sense, this research focuses on assessing the prospects for institutional changes, through an application of the Institutional Analysis and Development framework.

BACKGROUND INFORMATION AND PROBLEM

Black Sea crisis

Considered by many as being one of the world's most serious cases of transboundary water pollution, the degradation of the Black Sea is in large part attributed to the rapid eutrophication of its waters (HEY and MEE, 1993). Arising from intensive agriculture and inadequate industrial and municipal

water treatment, eutrophication generates each year colossal losses in the Black Sea coastal countries. During the last decade, this form of pollution led to the collapse of fish stocks and required that the coastal nations invest billions of dollars in sectors such as public health and coastal rehabilitation (MEE, 1993). Originating from land-based sources of pollution, the nutrients are mainly transported to the sea by rivers (BSEP/GEF, 1996c). It is estimated that the Danube alone contributes nearly two-thirds of the nutrient inputs to the Black Sea (BSEP/GEF, 1996a).

Institutions

Currently, the coordination of the regional collective efforts to protect the Black Sea falls within the responsibility of the *Black Sea Environmental Programme (BSEP)*, which represents the interests of the six coastal countries: Turkey, Georgia, Russia, Ukraine, Romania, and Bulgaria. Formed in 1993 by a provision of the Istanbul Commission, the BSEP reflects the coastal nations' intentions to cooperate expressed in the Bucharest Convention (1992) and the Odessa Declaration (1993) (HEY and MEE, 1993). Since its creation, the BSEP proved rapidly its usefulness by raising public awareness regarding the seriousness of the Black Sea crisis and by guiding the coastal countries' environmental initiatives.

Since 1998, when the *Danube River Protection Convention* came into force, the implementation of the *Danube Strategic Action Plan* has been the responsibility of the International Commission for the Protection of the Danube (ICPDR). Promoting sustainable use and development of the river basin, the ICPDR is involved mainly in sectors such as information management and pollution assessment (LINNEROOTH and MURCOTT, 1996). Even though the Danube riparian countries recognize their contribution to the pollution of the Black Sea, thus far the commission has not formally expanded its scope of intervention (BOTTERWERG and RODDA, 1999).

Problem

Despite the relative effectiveness of the BSEP and ICPDR, the fact remains that the current institutional arrangements cannot ensure the restoration and protection of the Black Sea environment (RODDA, 1996). Ultimately, in order to fully address the water quality issue, all the basin countries, especially the Danube riparian nations, will have to join forces to protect the Black Sea (LINNEROOTH, 1993). However, the configuration of

such an integrated approach requires that both the Danube and the Black Sea efforts be supported with strong and efficient institutions. Currently, due to the *early stage of the regional cooperative process and profound lack of funds*, such conditions are not fulfilled.

RESEARCH OBJECTIVES

Through the proposed research, I intended to analyze and evaluate *the performance of the Black Sea institutions*, in order to assess the regional prospects for institutional changes in the Black Sea watershed. Specifically, I propose to consider the effects of the presence of a middle group on the negotiation process, and study the impacts of the European Union's (EU) enlargement on the regional cooperative dynamics.

RESEARCH HYPOTHESIS

Constrained by the nations' willingness to participate, international cooperation over the management of transboundary resources follows a gradual and incremental process. In their quest for integration, the participants must develop ¹⁾ mutual confidence, ²⁾ acquire a common understanding of the problem, ³⁾ determine an accepted level of compromise, ⁴⁾ contract regional agreements and then ⁵⁾ expand their scope of cooperation (GURTNER-ZIMMERMANN, 1998). As long as the involved nations do not complete all these sequential stages, any attempt to broaden the basin agencies' mandate will prove to be ineffective.

At the moment, both the Danube and the Black Sea countries are undergoing the first stages of the cooperative process. Accordingly, the contraction of basin-wide agreements would be premature, and therefore bound to fail (NAKAYAMA, 1997). It is imperative that all regional entities strengthen their internal institutional arrangements before seeking to expand their scope of cooperation (DE VILLENEUVE and COREL, 1998). However, due to unique physical and political particularities of the Black Sea watershed, the integrated management of this international resource may be foreseen in the future. First, unlike other river basins, the Black Sea catchment area is marked by the presence of a distinct *middle group, comprised of Bulgaria, Romania, and Ukraine*. This group of countries contributes to and suffers from the pollution of the Sea, and all are members of both BSEP and ICPDR. In this sense, these nations could play an important mediation role in the negotiation between the upstream and the downstream nations (Fig.1). Second, the project

of enlarging the EU to include Central and Eastern European countries implies that all applicants must adopt the Union's *acquis communautaire* (KLARER and MOLDAN, 1997). Supporting the development and implementation of more rigorous environmental norms, such a provision has the potential to diminish the power asymmetries, and consequently change the cooperation incentive structure.

	Contribution to pollution	Effects of pollution	EU accession interest	Rehabilitation interest	Costs of abating
DANUBE ^a	++	-	+++	+	++
DELTA ^b	+++	--	++	+++	+++
BLACK SEA ^c	+	---	+	+++	+

a) Germany, Austria, Slovak Republic, Hungary, Croatia, and Yugoslavia, etc.

b) Romania and Ukraine

c) Turkey, Georgia, and Russia

+ and - denote the intensity of the relations

Fig.1 - Regional overview of the basin dynamics

METHODOLOGY

Analytical framework

In order to assess the prospects for institutional changes in the Black Sea watershed, I intend to *use* the *Institutional Analysis and Development* (IAD) framework developed by OSTROM and her colleagues (OSTROM *et al.*, 1994). Generally it has been applied to common-pool resource problems occurring at local and regional levels, but it has been used occasionally to study macro-political systems (KAMINSKI, 1992), and inter-basin water diversions (BLOMQUIST, 1992). Applying the IAD framework requires the presentation of the contextual attributes, dissection of the action arena, consideration of the patterns of interaction, and assessment of the outcomes (IMPERIAL, 1999) (Fig.2).

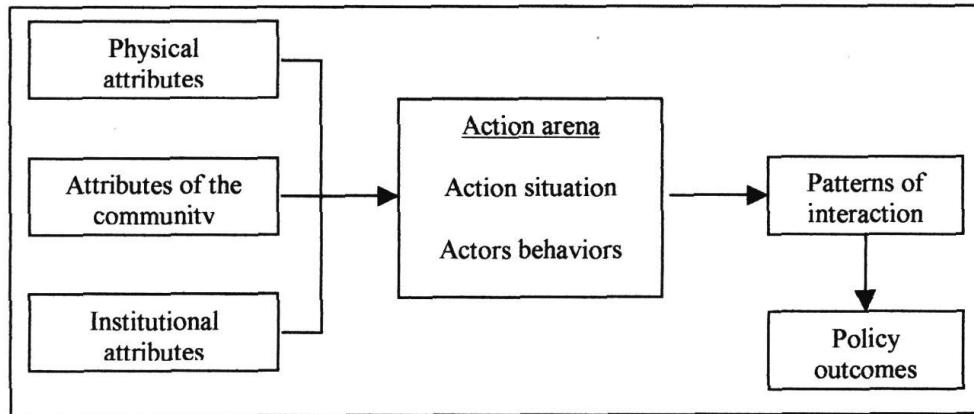


Fig. 2 - A framework for institutional analysis

Data collection

To counterbalance the theoretical nature of this research, the analysis will be supported with direct sources of information. In this sense, a series of interviews will be conducted with *officials* of the *key agencies / ministries / NGO's* involved in the management of the regional water resources. In addition, a series of interviews will be carried out with the EU agencies charged with promoting pan-European cooperation, and the UN organizations supporting the Black Sea institutional development. Depending on the functions and locations of the interviewed officials, *questions* will relate to the *characterization of the basin environmental problem, the structure of the institutional arrangements, the evaluation of the current system's performance* and the prospects for institutional changes (Fig.3).

EXPECTED RESULTS

Inevitably, the integrated management of the Black Sea basin will require that the institutional arrangements encompass all the basin states. Such an expansion is foreseeable only if it can be supported with strong institutions and stimulated by important cooperative incentives. Currently, due to their early stage of development, it is doubtful that the BSEP and the ICPDR can bear further integration. However, in light of the EU enlargement, most of the Eastern European candidates will have to adjust their environmental practices to meet European norms. In numerous sectors, such as the management of

transboundary water pollution, this environmental upgrading can only be achieved through regional collective efforts. In this sense, in order to join the EU, an increasing number of upstream nations may find it necessary and advantageous to augment their contribution to the regional efforts to abate the pollution of the Danube and the Black Sea.

- Characterization of the environmental problem:
 - nature
 - priority sectors of intervention
 - remediation actions anticipated
- Structure of the institutional setting:
 - actors: positions, preferences, resources and objectives
 - outcomes
 - costs / benefits
- Evaluation of the system's performance:
 - efficiency (transaction costs)
 - equity (distributional and fiscal)
 - accountability
 - adaptability
- Prospects for institutional changes:
 - willingness to increase scope of cooperation (interest / feasibility)
 - importance given to the EU accession
 - consideration of a middle group

Fig. 3 - Information required

APPLICATIONS

Throughout its work, the BSEP stated that the *restoration of the Black Sea is conditional* on the *development and implementation of basin strategies* (BSEP/GEF, 1996b). Recently, the GEF also supported such a prescription by stating that only a full investment program combining the efforts of both the Danube and Black Sea countries could adequately address the eutrophication issue (ARIN, 2000). Obviously, the complete rehabilitation of the Black Sea will require the broadening of the existing Black Sea institutional arrangements. In this regard, *identification* of the *strengths and weaknesses* of the *current watershed's institutions* represents one of the first steps towards integrated management of this transboundary resource.

BIBLIOGRAPHY :

- ARIN T., 2000 - *Strategic partnership for nutrient reduction in the Danube river basin and the Black Sea Benefit-Cost Analysis*. World Bank, Washington D.C.: 1-23.
- BLOMQUIST W., 1992 - *Dividing the waters: governing ground-water in Southern California*. ICS Press, San Francisco: 1-365.
- BOTTERWEG T., RODDA D.W., 1999 - Danube River Basin: progress with the environmental program. *Water Science Technologies*, **40**, 10: 1-8.
- BSEP and GEF, 1996a - *Black Sea Transboundary Diagnostic Analysis*. Global Environmental Facility, Istanbul: 1-134.
- BSEP and GEF, 1996b - *Strategic Action Plan for the Rehabilitation and Protection of the Black Sea*. Global Environmental Facility, Istanbul: 1-29.
- BSEP and GEF, 1996c - *Region-wide assessment of land-based sources of pollution of the Black Sea*. Global Environmental Facility, Istanbul: 1-55.
- DE VILLENEUVE G., COREL H.V., 1998 - The contribution of regional river treaties to the protection of the North Sea. *The International Journal of Marine and Coastal Law*, **13**, 3: 373-378.
- GURTNER-ZIMMERMANN A., 1998 - The effectiveness of the Rhine Action Program. Methodology and results of an evaluation of the impacts of international cooperation. *International Environmental Affairs*, **10**, 4: 241-266.
- HEY E., MEE L.D., 1993 - The Ministerial Declaration : an important step. *Environmental Policy and Law*, **23**, 5: 215-220.
- IMPERIAL M., 1999 - Institutional analysis and ecosystem-based management: the institutional analysis and development framework. *Environmental Management*, **24**, 4: 449-465.
- KAMINSKI A., 1992 - *An institutional theory of communist regimes: design, function, and breakdown*. ICS Press, San Francisco: 1-344.
- KLARER J., MOLDAN B., 1997 - *The Environmental Challenge for Central European Economies in Transition*, Edition Wiley, Chisester: 1-292.
- LINNEROOTH J., 1993 - The Danube River Basin: negotiating settlement to transboundary environmental issues. *Natural Resources Journal*, **30**: 629-660.
- LINNEROOTH J., MURCOTT S., 1996 - The Danube River Basin: International Cooperation or Sustainable Development, *Natural Resources Journal*, **36**: 521-547.

- MEE L.D., 1993 - *Saving the Black Sea: Programme for Environmental Management and Protection of the Black Sea*, World Bank, Washington D.C.: 1-28.
- NAKAYAMA M., 1997 - Successes and failures of international organization in dealing with international waters. *Water Resources Development*, **13**, 3: 367-382.
- OSTROM E., GARDNER R., WALKER J., 1994 - *Rules, games and common-pool resources*. University of Michigan Press, Chicago: 1-369.
- RODDA D.W., 1996 - *The Environmental Programme for the Danube River Basin*. Danube Programme Co-ordination Unit, Brussels: 135-146.

Interview Consent Form

Researcher : Bertrand Meinier

Department: School of Resource and Environmental Management,
Simon Fraser University, 8888 University Drive, Burnaby,
British Columbia, Canada, V5A 1S6

Contact Telephone: Tel: (604) 430-5422
Fax: (604) 291-4968

E-mail: bmeinier@sfu.ca

The purpose of this form is to request your consent to participate in an interview related to your involvement in the management of the waters in the Black Sea Basin. This research is being carried out by a researcher at the School of Resource and Environmental Management at Simon Fraser University, and is possible thanks to Scholarships funded by the *Fonds pour la Formation de Chercheurs et l'Aide à la Recherche* (FCAR) and the *C.D. Nelson Memorial Graduate Scholarship*.

Information generated from the interview will be incorporated into a research project part of the requirements for a Master in Resource Management, which will be available at Simon Fraser University Library. The project will focus on the prospects for institutional changes in the Black Sea Basin. You may obtain copies of the result of this study, upon its completion, by contacting Bertrand Meinier at the above address and telephone numbers, or by e-mail.

DO YOU / DO NOT (*circle one*) require that the information provided in this interview be kept confidential. When citing information collected from you in this interview and any subsequent discussions, you wish to be referred to as (*check one*):

- identified by name. The researcher will contact you prior to quoting directly
- a representative of my organization, where the organization is named
- a respondent

The interview will take thirty minutes to an hour. Your participation is voluntary and you may terminate the interview at any time. Your signature below will serve as acknowledgement that you have received a copy of this consent form and have agreed to participate in this research under the terms outlined above. If you have any questions regarding the survey or research, please do not hesitate to contact: Dr. Peter Williams, Director of the School of Resource and Environmental Management at: School of Resource and Environmental Management, Simon Fraser University, Burnaby, British Columbia, Canada, Tel: (604) 291-3074, Fax: (604) 291-4968.

Subject consent: _____ Date: _____