

Introduction

Can a natural resource, like water, that knows no national borders, be managed based on such borders? This book deals with the paradox of managing waters based on artificial and administrative boundaries and the damage done to a notion of coherent water policy by a number of activities and rules that have treated water as an exclusive national and local resource. Watercourses and lakes are often shared among states and regions, and the actions of states that are upstream of a river can have detrimental effects downstream. Conflict often erupts when a state, taking advantage of its position on a watercourse, restricts the water quantity released downstream or intentionally affects the water quality supplied. The fragmentation of water governance is at the root of the mismanagement of water resources. If fragmentation is the problem, integration must be the answer and integrated water resources management (IWRM) has been transformed from a managerial device into a political slogan deemed central for the future of global water management.

The book analyzes the efforts of the European Union (EU) to address water management in an integrated fashion, ensuring that states take into account the environmental externalities of their actions on water resources mandating that land uses (industry and agriculture) incorporate into their management the maintenance of sustainability of water resources. Using the European experience, as an example, the book attempts to answer the question: Is water governance without frontiers possible, and, if so, can practices used in Europe provide some insights for water management for other regions or countries of the world?

The book is an outgrowth of the Marie Curie study sponsored by the European Commission (the Commission) of the EU that involved a

number of EU countries and international water commissions. In addition to secondary research, fieldwork in terms of interviewing officials of the countries involved in the implementation of the EU water policy were executed during the course of the study. A number of interviews were conducted with water directors of member states, members of the Commission, members of industry associations and civil society groups, and secretaries-general of international water commissions. The study is the amalgam of insights gained through research and fieldwork undertaken during the Marie Curie study and further work executed in understanding the European experience within the global context.

Part 1 examines the basic elements of water management policy and the fundamentals of EU organization and establishes why an integrated water management policy became essential for the furtherance of goals of the EU. Before the adoption of integrated water management, the EU water policy was fragmented with a number of institutional devices that addressed water management sector by sector (energy, agriculture, and transportation) or issue by issue (pollution by nutrients, pollution by hazardous substances, and drinkable water). The large number of international river basin districts in Europe, that generate upstream and downstream externalities, induced a gradual understanding that integrated water management is a must if serious efforts are to be undertaken to maintain some of the quality of water resources and to restore some of the damaged ecosystems. Part 1 analyzes the specifics of integrated water management and the difficulties involved in the application of the concept in Europe. The institutional development of the EU is examined with an emphasis on the development and evolution of integrated water management policy that was adopted in 2000 through the water framework directive (WFD). The EU has developed further strategies so that implementation is executed as much as possible uniformly all across Europe. Part 1 looks in depth into the EU implementation strategy, the issues it is facing, while it is evolving, as well as the coordination of various EU policies with the water policy (including regional policy, navigation policy, agricultural policy, and industrial policy).

Part 2 examines the structures that have been put in place in specific EU countries for the implementation of integrated water management policy. Part 2 examines the parameters of effective organization and policy issues states are confronted with when managing waters at the river basin scale. Integrated river basin management, as mandated by the EU

policy, requires the management of waters at the river basin independent of administrative frontiers (regions, districts, and counties) that states have established. This presents problems as new river basin organizations may face institutional competition from other organizations that are functioning at the administrative level, generating, thus, a number of institutional veto players to the implementation of integrated water management policy. Part 2 proposes a framework for understanding policies adopted by states based on the number of institutional veto players that exist in a polity, and the establishment of river basin authorities. The existence of multiple institutional veto players necessitates the coordination of policies both at the horizontal level (ministry to ministry, and agency to agency) and at the vertical level (EU, international, national, and subnational). Part 2 examines in detail the coordination policies as they have been established in various states. Coordination policies are necessary especially in the absence of strong river basin institutions and the existence of multiple institutional players that wish to have a say in the congested administrative space.

A key to effective water governance is the provision of information, consultation with, and participation of stakeholders and the public in water management. Part 3 examines the right to information as the cornerstone of democratic ideal in today's societies. Today, the right of water users to be consulted on water management has been established in many states as a means to induce compliance under the following rationale: If those who use water are able to participate in making decisions on water use, they are likely to comply better with these decisions and to reduce, thus, enforcement costs. Part 3 examines the use of participation mechanisms as a realistic means of effective rulemaking. It further explores the participation of the larger public, the citizen, as a mechanism for the furtherance of democracy in many states.

Part 4 examines the institutional structures put in place at the international level to implement water management policy. Integrated water management mandates the management of water at the river basin, independent of national frontiers, so that water can be managed as the unity nature intended it to be and not through partitions established due to politics. In practice, if states share a water resource (river and lake), they need to cooperate in the management of the resource so that management by one state does not generate adverse externalities for other states. Cooperation, seemingly a rational proposition, is not always followed

thereby leading to conflicts with regard to the management of water resources. In Europe, many water resources are managed cooperatively but there are still issues that need to be resolved in terms of upstream and downstream use and the priority granted to various uses. Cooperative arrangements for the management of resources have been established in the form international commissions created through international treaties. A number of such commissions have been established in Europe such as the commission for the protection of the Danube River and the commission for the protection of the Rhine River. These commissions have functioned more or less independent from each other and their authority has been parallel rather than subordinate to the authority of the EU. With the adoption of integrated water management policy, one begins to detect the transformation of international water commissions into water agencies of the EU. This is a remarkable development that is to foster integrated water management policy. Having said that, the number of international commissions that address various aspects of water management and bilateral arrangements—not always in sync with multilateral development—point out that integrated water management is still an aspiration rather than a reality and further efforts at integration need to be pursued as water policy is maturing.

Part 5 examines the right to participation of civil society in the work of international water commissions. While the right of participation of the public in the affairs of the state is increasingly propagated under ideals of direct democracy—elaborated as associative or functional democracy—the right of civil society to participate in international institutions is not that self-evident. This is because international commissions are examples of delegated models of authority. States, based on the constitutions of their establishment, have the power to delegate some of their authority to international institutions. Therefore, international institutions are primarily accountable to the states that have established them and not to the public of those states. Despite the delegated mode of authority of international institutions, civil society groups are increasingly involved in the work of international organizations and the functioning of international commissions. Part 5 examines the modes of consultation adopted by various international water commissions that seem to converge into a single standard and the reasons why further participation arrangements have yet to be explored. Part 5 analyzes the role of secretariats in the evolution of international water commissions. The role of secretariats in the manipulation

of dynamics in an era of institutional evolution in Europe could be central in achieving the goals of water management.

Part 6 juxtaposes the EU experience and the Australian experience in an attempt to derive insights that will contribute to the success of the European experiment. Part 6 examines the various facets of the European policy as applied by member states—including the emphasis on centralization, multilevel parallel coordination, participation as a mechanism of decentralization—to derive the guiding parameters for the initiation of integrated water management policy in Europe and potentially in other international and local arenas.

