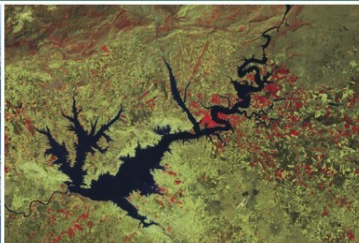


Aysegul Kibaroglu
Waltina Scheumann
Annika Kramer *Editors*



Turkey's Water Policy

National Frameworks
and International Cooperation



Turkey's Water Policy

Aysegul Kibaroglu • Annika Kramer •
Waltina Scheumann
Editors

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National Frameworks and International
Cooperation

 Springer

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Foreword

This book aims to contribute to understanding the broader picture of Turkish water policy. It is unique in the sense that it comprises a wide range of issues of water policy at national level (Part I) as well as an analysis of Turkey's international water policy beyond the prominent case of the Euphrates and Tigris river basins (Part II).

In the past, Turkey was frequently perceived as a strong upstream riparian that pursues huge water development projects without adequately taking the interests of water-scarce downstream riparians into account. Furthermore, Turkey's attitude towards the development and strengthening of international water law was assessed as being reserved at best, because of the country's reluctance to sign up to international water law. In order to get a full picture of Turkey's position in this regards, one has, however, to consider the national policies and framework conditions that impact water resources management.

Part I of this book, The National Framework, provides detailed analyses of water governance in Turkey, such as national policies and institutional frameworks in the water sector but also in other relevant sectors such as energy, agriculture, and the environment. It further discusses the transformation of Turkish water policy due to pressures and impacts generated at the domestic, regional and international levels. This includes developments ensuing from the European Union Water Framework Directive (EU WFD), from liberalization of national markets, and increasing importance of environmental issues for the Turkish public.

Part II of this book scrutinizes Turkey's international water policy and provides analyses of water management and cooperation in all transboundary river basins that Turkey is riparian to, i.e. the Meric, Coruh, Kura-Aras, Orontes, Euphrates and Tigris basins.

Several chapters of Part II are based on a study by adelphi commissioned by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) in 2004. Germany has supported various international initiatives and programmes to facilitate and improve transboundary water management at international rivers and lakes, e.g. through the so-called Petersberg Process. Furthermore, Germany is closely cooperating with Turkey within the framework of EU-funded

twinning projects. adelphi is continuously assisting German government agencies and international organizations with the analysis of water policies and facilitation of policy dialogues. Against this background, the BMU had commissioned the study in order to improve the body of information on the current state of water cooperation on Turkish transboundary rivers.

The study provided a comprehensive assessment of current management of Turkish transboundary waters and identified existing potentials for cooperation. For this book, the assessment of Turkish transboundary waters has been updated and amended with further analysis of Turkish international water relations. Moreover this perspective has now been enriched with the analysis of national aspects determining water policy by distinguished authors.

This book provides a compendium on Turkish national and international water policy that has up to now been missing on the international book market.

Alexander Carius
Director, adelphi

Acknowledgments

Every book is a curious journey and an adventure. This one was definitely no exception. During the weeks-long editing process in Bonn and Ankara, there were times when we, the editors, were contented with the outcome of our efforts by seeing how they contributed to the individual chapters to reflect what we really had in mind. There were also times when we spent laborious hours and days with a view to clarifying some of the complex issues in the manuscripts for the ease of understanding by our readers. All in all, our lengthy discussions over wide-ranging issues concerning water policy in Turkey were among the most instructive as well as productive times of our academic life. Trying to understand the complexities and peculiarities in the water policy discourse and the practice in Turkey, was a profound and lively learning process for all of us where we could draw from the many years of experience and knowledge we had gained through field studies, consultations and scholarships in Turkey and elsewhere. We realized that these were the moments when we dedicated ourselves truly to the editing process both as insiders and also as outsiders benefiting from our friendship, yet reflecting our objectivity to the work at hand as well.

In realizing this edited volume, we were supported both financially and logistically by our own respective institutions, namely the Middle East Technical University (METU), Ankara, the German Development Institute (DIE, Deutsches Institut fuer Entwicklungspolitik), Bonn, and adelphi, Berlin. Hence, we would like to acknowledge their support as well as the research funding provided by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, which enabled us to draft Part II of this book concerning the analyses particularly of cooperation on transboundary rivers. We would also like to thank those experts and scholars in Turkish water policy circles for sharing their invaluable insights with us throughout the entire working process. Many thanks to Janet Sterritt-Brunner for the language editing as well as to Alina Schellig for preparing maps and up-dating others for Part II of this book. And, last but not least we would like to thank our families for their continuous support and patience all through the research and writing process.

Aysegul Kibaroglu, Waltina Scheumann and Annika Kramer

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Abbreviations

| | |
|-------|---|
| ASAT | Antalya Water and Sewage Administration, Turkey |
| ASO | Antalya Water and Public Transport Services, Turkey |
| ALDAS | Antalya Infrastructure Management and Consulting Services Company, Turkey |
| ANTSU | Antalya Water Management Company, Turkey |
| APSA | Authority for the Protection of Special Areas, Turkey |
| BCM | Billion cubic meters |
| BOD | Biochemical Oxygen Demand |
| BOO | Build-Own-Operate |
| BOT | Build-Operate-Transfer |
| BSEP | Black Sea Environmental Programme |
| CAMP | Coastal Area Management Programme |
| CBD | Convention on Biological Diversity |
| CEE | Chamber of Electrical Engineers, Turkey |
| COD | Chemical Oxygen Demand |
| DEFRA | Department of Environment, Food and Rural Affairs, UK |
| DSD | Dangerous Substances Directive, EU |
| DSI | Devlet Su Isleri (General Directorate of State Hydraulic Works), Turkey |
| E_a | Application efficiency |
| E_c | Conveyance efficiency |
| EC | European Commission |
| ECA | Export Credit Agency |
| EECCA | Eastern Europe and the Caucasus and Central Asia |
| EFT | Environment Foundation of Turkey |
| EIA | Environmental Impact Assessment |
| EIE | Elektrik Isleri Etud Idaresi (Electrical Power Resources Survey and Development Administration), Turkey |
| EMRA | Energy Market Regulatory Authority, Turkey |
| ETIC | Euphrates Tigris Initiative for Cooperation |
| EU | European Union |

| | |
|-------------|---|
| EUAS | Electricity Production Corporation, Turkey |
| FAO | Food and Agriculture Organization, UN |
| GAP | Guneydogu Anadolu Projesi (Southeastern Anatolia Project), Turkey |
| GAP RDA | GAP Regional Development Administration, Turkey |
| GATT | General Agreement on Tariffs and Trade |
| GDAR | General Directorate of Agrarian Reform, Turkey |
| GDP | Gross Domestic Product |
| GDRS | General Directorate of Rural Services, Turkey |
| GEF | Global Environmental Facility |
| GIS | Geographical Information System |
| GNP | Gross National Product |
| GOLD | General Organisation for Land Development, Ministry of Irrigation, Syria |
| GRID-Europe | One of UNEP's major centres for data and information management |
| GWh | Gigawatt per hour |
| HEPP | Hydroelectric power plant |
| IBA | Important Bird Areas |
| I&D | Irrigation and drainage |
| ILA | International Law Association |
| ILC | International Law Commission |
| INTERREG | EU-funded programme that helps Europe's regions form partnerships to work together on common projects |
| INWEB | International Network of Water Environment Centres for the Balkans |
| IRBM | Integrated River Basin Management |
| ISKI | Istanbul Water and Sewage Authority, Turkey |
| IUCN | International Union for Conservation of Nature and Natural Resources/World Conservation Union |
| JTC | Joint Technical Committee |
| KfW | Kreditanstalt fuer Wiederaufbau, Germany |
| kW | Kilowatt |
| kWh | Kilowatt hour |
| KOP | Konya Basin Irrigation Project |
| KOYDES | Village Infrastructure Support Project |
| LWC | Local Wetland Commission |
| MAP | Mediterranean Action Plan |
| MARA | Ministry of Agriculture and Rural Affairs, Turkey |
| MATRA | Matra Programme for European Co-operation, Netherlands |
| MCM | Million cubic meters |
| MEDASSET | Mediterranean Association to Save the Sea Turtles |
| MED-HYCOS | Mediterranean Hydrological Cycle Observing System |
| MEDA | Mediterranean Economic Development Area |

| | |
|-----------|--|
| MedWet | Mediterranean Wetlands Initiative |
| MoEF | Ministry of Environment and Forestry, Turkey |
| MoH | Ministry of Health, Turkey |
| MoU | Memorandum of Understanding |
| MW | Megawatt |
| NATO | North Atlantic Treaty Organization |
| NEAP | National Environment Action Plan of Turkey |
| NGO | Non-governmental organization |
| NIMH | National Institute of Meteorology and Hydrology, Bulgaria |
| O&M | Operation and maintenance |
| O&M&R | Operation and maintenance and repair |
| OECD | Organization for Economic Cooperation and Development |
| OFWAT | The Water Services Regulation Authority, UK |
| OSCE | Organization for Security and Co-operation in Europe |
| PHARE | Programme of the EU to assist the applicant countries of Central and Eastern Europe |
| PHARE-CBC | PHARE Cross-border Cooperation |
| PIU | Project Implementation Unit |
| PKK | Partiya Karkeren Kurdistan (Kurdistan Worker's Party) |
| PPP | Purchasing power parity |
| RAP | Resettlement Action Plan |
| REC | Regional Environmental Center |
| SEA | Strategic Environmental Assessment |
| SIT | A protection category according to Turkish law |
| SPO | State Planning Organization (DPT Devlet Planlama Teskilati), Turkey |
| SPA | Special Provincial Administrations, Turkey |
| SSD | Suspended Solids |
| TACIS | The European Union's Technical Assistance to the Commonwealth of Independent States to enhance the transition process in Eastern Europe and Central Asia |
| TEAS | Turkish Electricity Generation-Transmission Cooperation |
| TEDAS | Turkish Electricity Distribution Company |
| TEIAS | Turkish Electricity Transmission Corporation |
| TEK | Turkish Electricity Authority |
| TEMA | Turkish Foundation for Combating Soil Erosion, for Reforestation and Protection of Natural Habitats |
| TETAS | Turkish Electricity Trade and Contract Company |
| TL | Turkish Lira |
| TOE | Tons of oil equivalent |
| TOOR | Transfer of Operating Rights |
| TOPRAKSU | General Directorate for Soil and Water, Turkey |
| TMMOB | Union of Chambers of Turkish Engineers and Architects |
| TSKB | Industrial Development Bank of Turkey |

| | |
|--------|--|
| TUIK | Turkish Statistics Institute |
| TURCEK | Environmental and Woodlands Protection Society, Turkey |
| UN | United Nations |
| UNDP | United Nations Development Programme |
| UNECE | United Nations Economic Commission for Europe |
| UNEP | United Nations Environment Programme |
| UNESCO | United Nations Educational, Scientific and Cultural Organisation |
| USAID | United States Agency for International Development |
| USSR | Union of Soviet Socialist Republics |
| UWWTD | Urban Wastewater Treatment Directive, EU |
| WFD | Water Framework Directive, EU |
| WWF | World Wide Fund for Nature |
| WHYCOS | World Hydrological Cycle Observing System |
| YTL | New Turkish Lira (Yeni Turk Lirasi) |

About the Editors

Aysegul Kibaroglu is professor and faculty member in the International Relations Department at Okan University in Istanbul Turkey. Previously she was a faculty member and the Vice Chair in the Department of International Relations at the Middle East Technical University in Ankara. Dr. Kibaroglu spent a post-doctoral fellowship in the International Water Law Research Institute at the University of Dundee, Scotland. Her areas of research include: transboundary water politics; international law; political geography; environmental security and Turkish water policy. Prof. Dr. Kibaroglu has published extensively on the politics of water resources with an emphasis on the Euphrates Tigris river basin including a book volume entitled *Building a Regime for the Waters of the Euphrates-Tigris River Basin* by the Kluwer Law International (2002). She has also worked as Advisor to the President of the Southeastern Anatolia Project Regional Development Administration from 2001 to 2003.

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Trajectories of Turkey's Water Policy

From state-led water resources development and management to neo-liberal and decentralized approaches

Waltina Scheumann, Aysegul Kibaroglu, and Annika Kramer¹

Turkey's water policy has undergone continuous reforms since the middle of the past century with significant changes occurring especially throughout the past three decades. The chapters gathered in Part I of this volume cover policy developments in the various fields relevant to Turkey's national water policy. They indicate that significant changes in the water sector have followed the country's overall development paths.

1 State-led water resources development and management

The State was considered the active and dominant agent of Turkey's (economic) development until the early 1980s. Turkey had long followed a Keynesian development model which assigns the State an active interventionist role in the nation's economic life including the provision of public services (Kibaroglu et al. 2009). After World War II, state-led water resources development was fostered by the establishment of a central water bureaucracy, i.e. State Hydraulic Works (DSI), assuming a role similar to that of the US Bureau of Reclamation. One of the main

¹We appreciate Dr. Asiye Ozturk's comments on a preliminary version of the introductory chapter.

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objectives of DSI was to stimulate economic development through water infrastructure financing. It was believed that only the State was able to overcome underinvestment and realize economies of scale. Since its foundation in 1954, DSI has been the major state agency entrusted with water resources development (Kibaroglu and Baskan in this volume). While DSI was not the only agency with this mandate, it has long enjoyed discretion over a significant share of the public budget.

After the military coup in 1960 and the establishment of a civil government, import substituting industrialization became the official development strategy. Accordingly, a central planning body, i.e. the State Planning Organisation (SPO), was established in 1961 to steer economic development by creating a strong industrial base. This also meant that public investments in the water sector were arranged through the national five-year development plans: major water infrastructure such as irrigation systems, storage facilities and multi- and single purpose dams (for e.g. hydroelectricity generation) was state-financed and state-managed. In recognition of the economic and political relevance of the agricultural sector for the country, particular attention was also paid to rural development: along with DSI the early General Directorate of Rural Services (i.e. TOPRAKSU) was mandated to foster development of water and land resources in rural Turkey.

The protectionist development model of import substitution was followed until the end of the 1970s when the Turkish economy ran into a serious crisis with high inflation, growing trade deficit and high unemployment rates (Keyman 2005; Kibaroglu et al. 2009).

2 Early signals of neo-liberal and decentralized approaches

Following the military coup in 1980, the government embarked on a major stabilization and economic liberalization programme, i.e. the beginning of export-oriented industrialization. The architect of this economic transformation was Turgut Ozal, the then Deputy Prime Minister. Ozal was reappointed as Deputy Prime Minister with responsibility for the economy and the implementation of the International Monetary Fund's structural adjustment programme, and became Prime Minister in 1983 and 1989. From 1981 to 1988, the government under Ozal's leadership facilitated the shift to a free market economy, albeit with various negative impacts on social welfare such as the deepening of the sharp disparities between the lowest income groups and the rich segments of the society.

The Constitution of 1982 established the basic principle that water is a public good under the State's trusteeship. The authority to explore and manage water resources is vested in the State, and water resources in the domain of private law and private proprietorship are subject to title deed registration. In this way, the State has maintained control over water resources development while at the same time

initiating liberalization in the early 1980s as part of its economic transformation programme:

- With a gradual liberalisation and deregulation of the national energy and electricity sector, the classic investment model where planning, financing, construction and operation is carried out by the public sector only, became obsolete and partly replaced by private investment models. In 1984, models were introduced that promoted private sector investment in the energy and electricity sector. This development was later on followed by the reorganization of the electricity sector with the Electricity Market Law (2001) and the Law on the Utilization of Renewable Energy Resources for the Purpose of Generating Electrical Energy (2005). Recent regulation favours licensing as a means to encourage private companies to develop a river's water resources for generating hydroelectricity based on a water use right agreement (Baskan; Scheumann et al., both in this volume).
- Devolution of large-scale irrigation system management has always been a legal option according to DSI's establishment law (1953), and small-scale irrigation systems using surface- or groundwater were transferred to respective user groups. However, transferring large-scale irrigation system management to a variety of management organizations gained momentum only in the early 1990s (Topcu in this volume). The main motivation behind this shift was to reduce budget allocations to the agricultural sector because management costs of irrigation systems could not be recovered by water charges and was publicly subsidized. This was in line with the cutting off of subsidies for agricultural inputs (e.g. pesticides, fertilizer, credit lines) which had started in the 1980s, the degree of which is still being debated today. However, unlike in the hydropower sector, the public sector is still supposed to invest in irrigation projects and in dams for irrigation and water supply.
- Water supply and sanitation have always been and remain the responsibility of municipalities. Financing of water supply and sanitation was however largely provided by the central government through the Municipalities Fund of the Bank of Provinces. In 1981, a new model was introduced first in the city of Istanbul, i.e. Istanbul Water and Sewage Administration (ISKI). At the beginning, ISKI was independent of the Istanbul Municipality but it was later subordinated to the municipality as a public body with an independent budget. Meanwhile, this model has been extended to 16 water and sewage administrations within metropolitan municipalities. These administrations are encouraged to mobilize their own resources beyond the Bank of Provinces mechanism and to finance large-scale urban infrastructure investments through foreign loans under the Treasury Guarantee Scheme. This has stimulated private sector involvement in the delivery of water and sanitation services (Kibaroglu and Baskan in this volume).

When Suleyman Demirel became president in 1993, after Turgut Ozal's sudden death, the government continued to pay particular attention to dam construction which had already started in the 1950s, when Demirel was the first Director General

of DSI. It was his government that decided on the Southeastern Anatolia Project (GAP) and dedicated a huge amount of financial resources towards infrastructure development in the underdeveloped regions of Turkey, among them 22 large dams, 19 hydropower plants and large-scale irrigation infrastructure for irrigating about 1.7 million hectares.

3 The European Union as a trigger for improving environmental policy

Aligning with the European Union (EU) gained momentum when Turkey was officially recognised as a candidate for full membership on 12 December 1999 at the Helsinki summit of the European Council. In December 2004, the European Council decided that official accession negotiations with Turkey would commence in October 2005 with EU membership for Turkey as the possible outcome.

With the so-called Copenhagen Criteria, the EU has developed a set of key conditions that all candidate countries are required to meet in order to ensure successful membership. These three Copenhagen Criteria are: (i) institutions guaranteeing democracy, the rule of law, human rights, and minority rights, (ii) the candidate state needs to prove that it has a functioning market economy and is capable of coping with the competitive pressures within the EU, and (iii) the ability to fully implement all obligations of EU membership. Core to these obligations of membership is the full legal transposition and the practical implementation on the ground of the so called *acquis communautaire*, which is the whole body of EU law in force.

One important area of EU legislation deals with environmental issues of which water management is certainly one of the fields that is already largely shaped by a complex body of European law. The most relevant directive is the EU Water Framework Directive which demands both detailed requirements for national water management and the obligation for EU members to internationally coordinate their activities along river basins in order to achieve the environmental objectives of the directive. Apparently, while Turkey is obliged to develop a national approach to the adoption of the environmental *acquis*, the country's transboundary approach to water management are major topics in the accession negotiations.

Turkey's wish to join the EU has far-reaching consequences for its water policy and has at the same time stimulated the many efforts in changing its national water regime targeting towards compliance with the European environmental and water *acquis* – while reconciling changes with the country's specific conditions and concerns (Sumer and Muluk in this volume).

Triggered by the EU Water Framework's participatory approach, modest changes also took place with regards to the participation of civil society and non-governmental organizations (NGO) in water resources development. Civil society in its relation to the State has seen dynamic and fundamental shifts with the number

of NGOs significantly increasing throughout the past decades (Adem 2005, 72). More importantly, their role and relation to the political elite has been changing. This can best be demonstrated by the nature of the NGOs. According to Adem (2005, 73), the founders of the Turkish Association for the Conservation of Nature and Natural Resources established back in the 1950s, were high-level bureaucrats. Many of the founding members of the Environment Foundation of Turkey (EFT) which was created as a non-profit organization in 1978, were lawyers and enjoyed good relations with the state apparatus. They were thus able to push for institutionalizing environmental issues, among them the establishment of the Prime Ministry Under Secretariat for the Environment which had been a key concern of EFT along with creating the legal basis for environmental protection by drafting and promoting the Environmental Act of 1983. Both NGOs still acted on the consensus that the State should play a major role by favouring command and control policies.

During the 1990s, a new generation of environmental organizations emerged which demand the protection of civil rights and freedom, along with environmental issues. Today, several groups are active and demanding a voice in decision-making on water resources development and management, among them experts, academics and intellectuals, civil society organisations and non-governmental organisations, and professional organizations such as the Union of Chambers of Turkish Engineers and Architects (a public umbrella organisation with 23 chambers and about 300,000 members).

The massive river development programmes of the AKP - Justice and Development Party - government are challenged by an emerging discourse which is sceptical towards an infrastructure-centred development path ignoring social and environmental concerns. However, the debate over dams has also become instrumental for political groups in their opposition towards the government (Kaygusuz and Arsel 2005). The well-known campaigns against the Ilisu and Yusufeli dams are but a few examples (Kadirbeyoglu 2005; Scheumann et al. in this volume).

Although protecting the environment / nature has been on the international agenda since the 1970s and especially following the Stockholm Conference in 1972, the 'greening' of Turkey's water policy only started later. It had been shaped with the By-Law for Water Pollution Control enacted in 1988, the By-Law on Environmental Impact Assessment of 1993 and by-laws protecting forests, land, surface water and groundwater, biodiversity including wetlands to mention but a few. The concept of 'Water for Nature' is in the process of being recognized, but is still dominated by developmental over ecological concerns as can be seen in the massive dam development programme which fundamentally alters river ecology. Because a command and control policy approach has not been effective, the state apparatus has yet to consider how to create incentives for resource users to comply with its many regulations (Orhan and Scheumann in this volume). Institutional reform directed towards the strengthening of institutions mandated with environment / nature protection and streamlining ecological concerns into sector policies has yet to be undertaken as well as inclusive forms of decision-making (Divrak and Demirayak in this volume).

4 Turkey's international water policy

The chapters collected in Part II discuss Turkey's current positions in international water law and outline the processes and status of cooperation on those rivers which Turkey shares with its (riparian) neighbours. The European Council's strong attention to transboundary water management within the context of Turkish EU accession was illustrated by the EU-Turkey accession partnership dating from May 2003 (European Council 2003). In this document, the European Council rated Turkish transboundary water management as a priority that needed short-term effort and improvement. More specifically, the Council's decision determined the short-term need for Turkey to "pursue the development of transboundary water cooperation, in line with the water framework directive and international conventions to which the Community is a party" (European Council 2003, 10). The European Commission's annual reports on Turkey's progress towards accession always underline the need to step up cross-border water cooperation with its neighbouring countries (European Commission 2004, 2005, 2006, 2007, 2008, 2009).

Motives for these statements stem from international concerns about unresolved water disputes and potential water conflicts at Turkey's borders, in particular over the Euphrates and Tigris rivers. In the past, Turkey was frequently perceived as a strong upstream riparian that pursues huge water development projects without adequately taking the interests of water-scarce downstream riparians into account. Several commentators have emphasised the important interdependencies between water scarcity and security issues on Turkey's borders turning transboundary river management into an important issue in a region that is largely blighted by tensed political relations anyway (e.g. Beschorner 1992, Lorenz and Erickson 1999, Warner 2008). Furthermore, Turkey's attitude towards the development and strengthening of international water law was assessed as being reserved at best, because of the country's reluctance to sign up to international conventions such as the United Nations (UN) Convention on the Law of Non-navigational Uses of International Watercourses, the United Nations Economic Commission for Europe (UNECE) Convention on the Protection and Use of Transboundary Watercourses and International Lakes and the Environmental Impact Assessment in a Transboundary Context (Cascao and Zeitoun 2010, Scheumann 2003).

However, in-depth knowledge on the current state of water cooperation and unresolved disputes on Turkish transboundary rivers has been lacking so far. Part II of this book comprehensively assesses current use and management of the Turkish transboundary waters including, if available, bilateral and multilateral agreements. The first chapters of Part II cover Turkey's position relating to basic principles and the development of international water law (Kibaroglu and Kramer in this volume) and discuss both the water dimension in Turkey's foreign policy and her water diplomacy (Turan; Williams, both in this volume). The subsequent chapters present our findings on cooperation and conflicts on all Turkish transboundary rivers, such as the Meric River with the riparian states Greece, Bulgaria and Turkey (Kramer

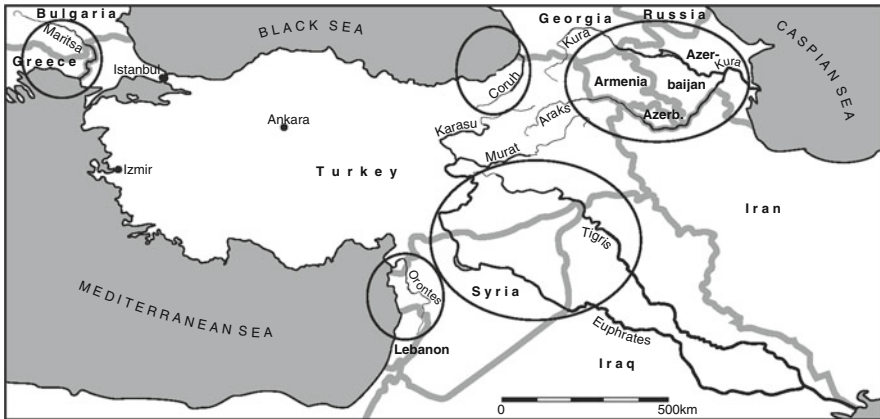


Fig. 1 Turkey's transboundary rivers

and Schellig in this volume); the Kura-Aras river basin with Turkey, Georgia, Iran, Azerbaijan and Armenia (Klaphake and Kramer in this volume); the Coruh River with Turkey and Georgia (Klaphake and Scheumann in this volume); the Euphrates-Tigris rivers system with Turkey, Syria and Iraq as riparian states (Kibaroglu and Scheumann in this volume), and finally the Orontes River with Turkey and Syria (Scheumann, Sagsen and Tereci in this volume) (see Figure 1 and the Annex which includes all bilateral agreements involving transboundary river issues). The last chapter compares the cases with regards to the particular water management challenges and the state and process of cooperation on these transboundary rivers.

Our assessment shows that the situation is often misinterpreted: the somewhat alarming description of Turkish transboundary water disputes as having potential for serious water conflicts appears exaggerated and does not realistically mirror the current situation, even in the most marked water quantity disputes over the Euphrates-Tigris rivers system.

Most disagreements on Turkish transboundary rivers relate to the building of dams which influence water usability downstream. Turkish water policy, with its emphasis on hydropower and irrigation projects by means of infrastructure (e.g. dams), is outlined in Tigrek and Kibaroglu, Sen, Scheumann et al., and Topcu (all in this volume). In principle, we can assess disputes on transboundary waters as the external consequences of the internal economic development strategy putting strong emphasis on the production of agricultural commodities and - even more important - on achieving independency from energy imports. Interestingly, attempts to initiate cooperation on Turkey's transboundary rivers also mainly focus on the development of joint infrastructure. In line with the national discourse, water quality and environmental issues do not play a significant role in transboundary cooperation, with the exception of the recent environmental protection and water quality remediation projects in the Meric and Euphrates and Tigris river basins, respectively.