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Degree of Doctor of Philosophy

The Hegemony of Integrated Water Resources Management: a Study of Policy Translation in England, Turkey, and Kazakhstan

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THE CENTRAL EUROPEAN UNIVERSITY

ABSTRACT OF THESIS submitted by: Farhad MUKHTAROV for the degree of Doctor of Philosophy and entitled: Comparative Analysis of the IWRM Policy Translation in Contrasting National Policy Contexts: with the examples from England, Turkey, Kazakhstan

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Integrated Water Resources Management (IWRM) emerged in the conservation movement in the USA of the 1900s in order to address the challenges of managing complex interactions between water, land, eco- and social systems, and grew to an international level. As IWRM is implemented in dozens of countries world-wide, national water policies become increasingly influenced by the global IWRM discourse via the travel of policy ideas. This dissertation explores the process by which national water policies in countries with contrasting policy circumstances – England, Turkey and Kazakhstan – are influenced by the international IWRM discourse. It introduces the concept of *policy translation* to capture the travel of ideas and their modification at the national level; analyzes the intellectual history of IWRM, the international IWRM discourse, and the drivers in the process of policy influence. Interviews, multiple case study, desk research, participant and non-participant observations, discourse analysis, critical content analysis, conference participation and other methods were used in this research.

Policy ideas may travel via individuals and international organizations – as in less formalized systems of Turkey and Kazakhstan, or via networks and consultancies – as observed in England. The travel of ideas and their modification at the national level is explained through policy translation, which, contrary to policy transfer, emphasises the non-linearity of the travel and (re)interpretation of ideas. Institutional and legitimacy factors are as important in policy translation as formal cost-benefit analysis. National politics is of crucial importance for policy translation in all three cases and largely predetermines the interpretation of IWRM and the extent to which international experience is used. The capacity of states to process and meaningfully use the IWRM ideas coming from an international level is essential in policy translation and is linked to the financial and human resources and the mechanism for policy deliberation at the national level. The global *hegemony* of IWRM is predetermined by the ability of IWRM to be translated to the national level through the three pillars of hegemony - discursive, material and organizational domination. Thus, global IWRM hegemony operates via the successful processes of policy translation in national policy systems.

Keywords: IWRM, Policy Translation, Gramsci, Hegemony, Discourse, England, Turkey, Kazakhstan

Abbreviation

ADB	Asian Development Bank
AIDA	International Association for Water Law
APFM	Associated Programme on Flood Management
AKP	Justice and Development Party (in Turkey)
BWA	Basin Water Authorities (in Kazakhstan)
CGIAR	Consultative Group on International Agricultural Research
CAREC	Central Asian Regional Environmental Centre
CIRIA	Construction Industry Research and Information Association
CIWEM	Chartered Institution for Water and Environment Management
CWR	Committee for Water Resources (in Kazakhstan)
EC	European Commission
CATOM	Multipurpose Social Development Centres (in GAP, in Turkish)
DIE	German Development Institute
DEFRA	Department for the Environment, Food and Rural Affairs
DCLG	Department for Communities and Local Governments
DSI	State Hydraulic Works (in Turkish)
DETR	Department of Employment, Training and Rehabilitation
DTLR	UK Department of Transport, Local Government and Regions
DfID	Department for International Development
DPT	State Planning Organization (in Turkish)
EU WFD	European Union Water Framework Directive
EA	Environment Agency
ESDP	European Spatial Development Perspective
EEC	European Economic Community
EU TACIS	European Union Technical Assistance to the Commonwealth of Independent States
FM	Farhad Mukhtarov (author's comments in the block quotations)
FAO	Food and Agriculture Organization
GWP/TAC	Global Water Partnership/ Technical Advisory Committee
GWP	Global Water Partnership
GIWA	Global International Water Assessment

GAP	Southeastern Anatolia Project/ Guneydogu Anadolu Projesi (in Turkish)
GAP-RDA	Southeastern Anatolia Project Regional Development Administration
GATS	General Agreement on Trade and Services
GWG	Global Water Governance
GWI	Global Water Initatives
GBP	Great Britain Pound
GWM	Global Watch Mission (UK)
GDP	Gross Domestic Product
GIS	Geographic Information System
GDRS	General Directorate for Rural Affairs (in Turkey, abolished)
GIDEM	Centres for Support to Entrepreneurs (in Turkey)
GEF	Global Environmental Fund
HTML	Hyper Text Mark Language
HA2	Holistic Management (part of Making Space for Water in the UK)
HEPP	Hydro-Electricity Power Plant
IWRM	Integrated Water Resources Management
IISD	International Institute for Sustainable Development
IWRA	International Water Resources Association
IHA	International Hydrological Association
IWMI	International Water Management Institute
IRBD	Integrated River Basin Development
IAHS	International Association of Hydrological Sciences
IWHA	International Water History Association
INBO	International Network of River Basin Organizations
IUD	Integrated Urban Drainage
IDB	Internal Drainage Boards (UK)
IFM	Integrated Flood Management
ICWC-SIC	International Commission on Water Co-ordination – Scientific Information Centre (in Central Asia)
IMWG	Inter-Ministerial Working Group (in Kazakhstan)
IMT	Irrigation Management Transfer
Kazgiprovodkhoz	Kazakhstan Research Institute on Water Economy (now a consultancy)
LA	Local Authority

LDF	Local Development Framework
LEAP	Local Environmental Action Plan
MWH	Montgomery Watson Harza (Consulting Firm based in the UK)
MSW	Making Space for Water
MGK	National Security Council (in Turkish)
MOM	Management, Operation and Maintenance
NEPA	National Environmental Protection Agency (in the USA)
NUTS 21	Regional Nomenclature in the EU
ODPM	Office of Deputy Prime Minister (in the UK, abolished)
OECD	Organization for Economic Cooperation and Development
OFWAT	The Water Services Regulation Authority
OHAL	Emergency Situation Region (in Turkish)
OSU	Oklahoma State University
Ph.D.	Doctor of Philosophy
PPS	Planning Policy Statement
PPG	Planning Policy Guidance
PM Office	Prime-Minister's Office (Turkey)
PKK	Kurdish Worker's Party (in Turkish)
PIT	Participatory Irrigation Management
RCEP	Royal Commission on Environment Protection
RSS	Regional Spatial Strategies
RBC	River Basin Council (in Kazakhstan)
RBO	River Basin Organizations (in Kazakhstan)
R&D	Research and Development
RIA	Regulatory Impact Assessment
SIWI	Swedish International Water Institute
SOR	Strategic Orientation Research
SEA	Strategic Environmental Assessment
SWM	Surface Water Management
SUDS	Sustainable Urban Drainage Systems
SWMP	Surface Water Management Plans
SMURF	Sustainable Management of Urban Rivers and Floodplains
SHD	Sustainable Human Development

SWOT	Strengths, Weaknesses, Opportunities, Threats
SIA	Social Impact Assessment
SA	Sustainability Assessment
TF	Theoretical Framework
TMMOB	The Chamber of Turkish Construction Engineers (NGO/Professional Association in Turkey)
TVA	Tennessee Valley Authority
UNEP	United Nations Environmental Programme
UN-Water	United Nations Water Programme
UNESCO	United Nations Education, Science and Culture Organization
UNDP	United Nations Development Programme
USA	United States of America
USIAD	National Chamber of Industrialists and Business People (in Turkey)
UNESCO IHP	United Nations Education, Science and Culture Organization- International Hydrological Programme
UN/ISDR	United Nations International Strategy for Disaster Reduction
USAID	United States Agency for International Development
UNICEF	United National Children's Fund
WWC	World Water Council
WB	World Bank
WSSD	World Summit on Sustainable Development
WMO	World Meteorological Organization

Dedication

This work is dedicated to my beloved parents, my mother Mukhtarova Tamilla Habib qizi, and my father Mukhtarov Gahraman Aliaga oglu. It is my mother's humane care and emotional support, and my father's wisdom and pragmatism that carried me on the wings of inspiration at some moments, and kept my feet on the ground at others.

"Work is love made visible" said Khalil Gibran, "The Prophet."

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"When you work you are a flute through whose heart the whispering of the hours turns to music"
(Khalil Gibran in "The Prophet")

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1. Introduction and Summary of Research Design

"Greater than the tread of mighty armies is an idea whose time has come" (Victor Hugo cited in Kingdon 1995: p1)

Ideas make the world go round, while some ideas go around the world themselves. This dissertation examines the travel of policy ideas linked to the concept of Integrated Water Resources Management (IWRM), which today boasts global popularity and is currently being implemented in over 100 countries (UN-Water 2008). Facilitated by international organizations, transnational actors and the Internet, IWRM ideas travel from the international to the national policy arena and are widespread on a global scale. As they travel, IWRM ideas are interpreted in multiple ways by a great variety of actors and complex processes. The ubiquitous scope of this movement, the hitherto under-researched character of this process and the great policy expectations assigned to IWRM ideas make this a stimulating and vital research subject.

> Water management information has expanded dramatically over the past century, especially in recent years with the expansion of Internet resources, international projects, travel, trade, and education – offering increased opportunities for comparing water systems (Wescoat 2005: p1).

> More than discursive contestation, the different *appropriations* of the concepts are important for understanding how ideas like IWRM travel in the real world, which and whose agendas they serve, and what outcomes and impacts they produce (Mollinga *et al.* 2006: p27).

While Mollinga *et al.* (2006) have used the term "appropriation," this thesis treats the travel of policy ideas through the scope of *policy translation*, which helps to capture the modification of IWRM ideas in the process of travel. In a nutshell, this thesis is about the popularity, or the global *hegemony*, of IWRM and policy translation as the main mechanism by which such hegemony was formed and is currently being operated. Thus, this thesis revolves around 4 major interlinked research themes to which all other concepts and models are subordinate: *Integrated Water Resources Management*, *Hegemony*, *Policy Translation*, and *National Policy Dynamics*. An introduction of these themes and a summary of the study's main problematique, research design, results, and theoretical and empirical contribution are provided below.

1.1 The Research Area: International Travel of IWRM

Given the crucial importance of water in eradicating poverty and achieving Millennium Development Goals, it is widely held that current practices in water resources management on the global scale are inadequate (Global Water Partnership Technical Advisory Committee 2000; UNEP 2005; Watkins 2006). More than 1 billion people have no access to clean drinking water and 2.6 billion lack adequate sanitation (Watkins 2006). Rivers are drying up, groundwater tables are dropping and water-based ecosystems are rapidly degrading. All of this is happening on a global scale. The roots of this inadequacy lie not so much in poor financing or technology, as in "poverty, inequality and unequal power relationships, as well as flawed water management policies that exacerbate scarcity" (Watkins 2006: p1). Many experts see the *fragmentation* of water management by sectors, resources and users (United Nations Environmental Programme 1994) as the main cause of the problem. In response, the need for a holistic vision and management has been advocated.

> The traditional fragmented approach is no longer viable and a more holistic approach to water management is essential. This is the rationale for the Integrated Water Resources Management (IWRM) approach that has now been accepted internationally as the way forward for efficient, equitable and sustainable development and management of the world's limited water resources and for coping with conflicting demands (UN-Water 2008: p4).

Against this background, Integrated Water Resources Management (IWRM) has emerged with a promise to tackle fragmentation and poor governance and has been embraced by most international policy actors[1]. In hydrological terms, IWRM is similar to the concept of watershed management, which is defined as

> the integrated use of land, vegetation and water in a geographically discrete drainage area for the benefit of its residents, with the objective of protecting or conserving the hydrologic service which the watershed provides and of reducing or avoiding negative downstream or groundwater impacts (Lenton and Walkuski 2009: p17).

In addition to the hydrological dimension of IWRM, there are social, political, managerial and other aspects. IWRM has proven to be a multifaceted concept with numerous definitions. The

1 The list of international IWRM actors includes but is not limited to the Global Water Partnership (GWP), the World Bank (WB), the United Nations Development Programme (UNDP) through its project Cap-Net (Capacity Building for Integrated Water Resources Management), the Asian Development Bank (ADB), the African Development Bank (AfDB), the Inter-American Development Bank (IDB), UNEP (UCC-IWRM), the World Water Council (WWC) and many others (Galaz 2007).

Johannesburg Plan of Implementation accepted at the Johannesburg World Summit on Sustainable Development in 2002 (WSSD) required that countries-signatories produce IWRM and Water Efficiency plans by 2005. Thus, IWRM became an institutionalized and binding international obligation,[2] while UN-Water now conducts regular assessments of the planning progress world-wide. The latest UN-Water report, titled the "Status Report on Integrated Water Resources Management and Water Efficiency Plans," was released in May 2008 and surveyed 104 countries in terms of their progress towards IWRM planning. The report stated the following:

> Of the 27 (United Nations)[3] countries responding to the UN-Water Survey only 6 claim to have fully implemented national IWRM plans; a further 10 of those countries claim to have plans in place and partially implemented.…Of the 53 {developing and transition} countries…the percentage of countries having plans completed or under implementation has risen from 21% to 38%. (UN-Water 2008: p1).

This regular UN-Water assessment is an attempt to comparatively measure the progress in national-level water resources planning and management across diverse countries and continents; which, in turn, may act as a basis for developing a universal approach to governing water on a global scale. As reported by UN-Water (2008: p1), among the regions with the greatest IWRM progress are the Americas, Africa and Asia: the continents where water management remains at the heart of development and poverty eradication. Whatever the methodology and results of the UN-Water and other assessments of water resources management on the global scale might be, the very fact that there is a regular and institutionalized effort to keep track of IWRM is suggestive of its power, which has now emerged on the global terrain.

In addition to the United Nations, a growing number of scholarly articles on IWRM have been published in peer-reviewed journals. A simple search for "Integrated Water Resources Management" in academic databases such as the SCOPUS, Web of Knowledge and Google Scholar will produce the following results in the hundreds (and for Google Scholar, thousands). There is also a conspicuous presence of IWRM on the Internet. Viewing these facts, one may conclude that IWRM is the most popular policy concept for water management existent on the global scale.

2 Although formally binding, no enforcement mechanism have been discussed, and the Plan of Implementation remained legally toothless.

3 Square brackets inside of the block quotations indicate author's interpolations.

Despite its sweeping popularity, there is little agreement on what IWRM actually constitutes (Biswas 2004a, 2004b). There is an on-going debate on the basic meaning, scope and nature of IWRM. Over thirty IWRM definitions can be found in the literature (see Annex 1.1). This diversity is not surprising *per se*; what is striking is that despite being vaguely defined and lacking proof of effectiveness on the ground, IWRM became very popular on the international water policy arena (Biswas 2004b, Biswas *et al.* 2005; Mollinga *et al.* 2006).

1.2 The Research Problem: The Hegemony of IWRM

The process of *travel of IWRM ideas* is profoundly under-researched. There are numerous studies on IWRM implementation and effectiveness, as well as the wealth of literature on conceptualization and the essence of IWRM as a policy concept. However, very few academic works look at the issue of the travel of IWRM ideas between international and national domains (Biswas *et al.* 2004; Varady and Iles-Shih 2005a; Conca 2006; Mollinga *et al.* 2006; Huitema and Meijerink 2007). Even fewer works are published in terms of case studies of IWRM travel, how it happens, what the comparative importance of various factors in this process is, who the important actors are, and what explains this process. This gap was neatly indicated by Mollinga:

> What this, by no means exhaustive, list of examples of 'buy-ins' to the IWRM agenda suggests is that different categories of people appropriate the different meanings of 'integration' in different ways and for different purposes. This is only to be expected: the same is true for the participation and privatization notions, or any other policy concept. What is important is to understand the who, the why and the how of this process, that is, the politics of IWRM and related concepts, and to position oneself (as an individual, group or organization) in that field as one of the strategic actors (Mollinga *et al.* 2006: p30).

There is an assumption that IWRM is always relevant and beneficial to implement, regardless of the context and problems with which a particular country or region is faced. IWRM is seen as a flexible framework with universal applicability that needs tailoring on the one hand, and capacity building in a hosting environment on the other (Global Water Partnership 2004). In addition, it has been argued that IWRM has acquired a life of its own as a symbolic concept (Molle 2006; Mollinga *et al.* 2006; Molle 2008), and IWRM ideas may travel with very little regard to the problems on the ground which they are supposed to tackle. Thus, the central problem of this research is the international popularity (conceptualized as *hegemony* in this thesis) of IWRM that promotes the taken-for-granted assumption of its universal relevance and policy value. Owing to

the great complexity of this process and its wide-spread occurrence, the hegemony and policy translation of IWRM needs to be investigated in-detail. Nevertheless, this research does not primarily aspire to derive policy recommendations and implications. Rather, it answers the question of *what* ideas are translated and have become hegemonic, *how* and *why*. The primary focus is on exploration of the process, drivers and outcomes of the IWRM policy translation rather than on IWRM's effectiveness and performance. Thus, the main research aim and the research questions can be formulated as shown below.

1.3 The Research Aim, and Questions

The Research Aim:

Understand the Global Hegemony of IWRM through the Analysis of Travel of IWRM Ideas from the International Level to the National Level in England, Turkey and Kazakhstan

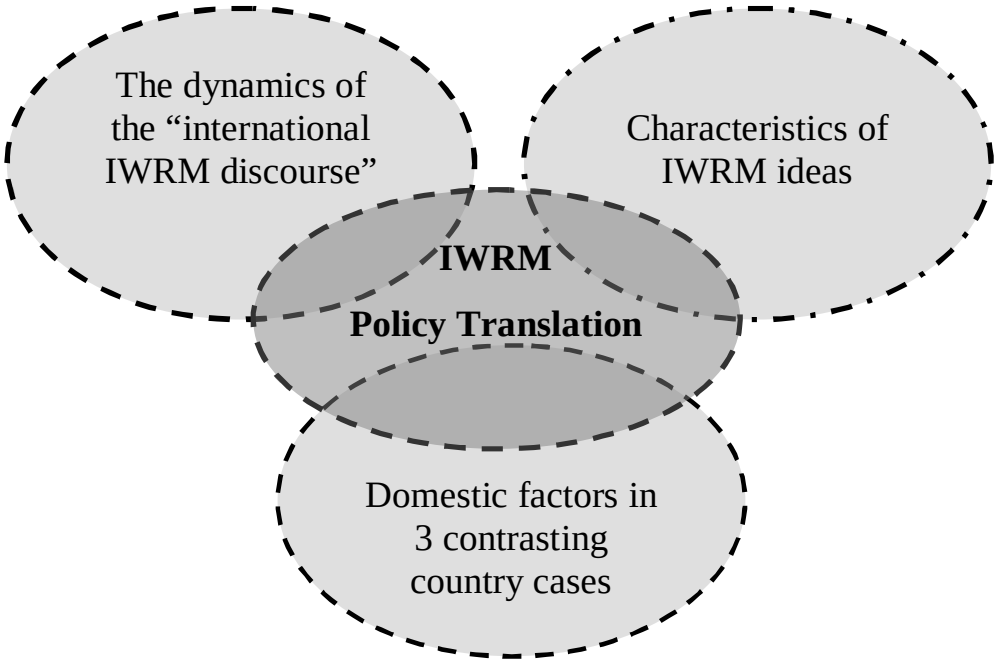
Table 1.1 Research Questions, and Methods

Research Questions	Research Methods
Question 1: How can deeper understanding of the history of IWRM contribute to our knowledge about its travel from the international to the national level?	• Literature analysis • Archival Research
Question 2: Who are the actors, and what are the incentives, processes and drivers that stimulate the travel of IWRM from the international level to the national one?	• Literature analysis • Observations at the Conferences • Discussions with leading academics
Question 3: In what ways IWRM ideas travel from international discourse to national level planning (examples from England, Turkey and Kazakhstan)?	• Case Study Analysis • Interviews • Document analysis
o Question 3a: What are the important drivers in the process of travel of IWRM ideas in England, Turkey, and Kazakhstan?	
o Question 3b: What is the comparative importance of the national policy circumstances in England, Turkey, and Kazakhstan in terms of *IWRM policy translation*?	

Although this research is conceptualized within the framework of *policy translation,* a useful methodological model from the literature on the diffusion of environmental policy innovations was used (Rogers 2003; Busch *et al.* 2005; Tews 2005). *Diffusion of policy innovations* is defined as "an international spread of policy innovations driven by information flows rather than

hierarchical or collective decision making within international institutions" (Busch *et al.* 2005: p3). According to Tews (2002) and Busch *et al.* (2005), three groups of factors provide a framework to study diffusion: *the dynamics of the international system* (channels, mechanisms and agents of diffusion); *domestic factors* (institutions and national level policy and politics); and *policy innovation's characteristics* (some ideas are more easily diffused than others). This research is informed by the discussion in the literature on the diffusion of innovation, but applies the *policy translation* concept to the analysis and interpretation of its material. Research Questions 1 and 2 address the issues of the IWRM policy characteristics and the IWRM international system dynamics respectively. The research Question 3 (3a and 3b), being the focus of the study, addresses the process of IWRM policy translation in three contrasting countries: England, Turkey and Kazakhstan. Figure 1.1 shows the three intersecting areas linked by the concept of IWRM to be interrogated in this thesis.

Figure 1.1 Intersecting spheres of the research



1.4 Theoretical Framework and Methodology

Three parent theories were selected to provide a theoretical framework for this research: *New Institutionalism, Policy Translation, and Discursive Hegemony*. These theories are used to complement each other in discussing and interpreting the relationship between international,

national, and local levels at which IWRM exists. More on the process of conceptualization and reasoning behind the choice of these particular theories is provided in Chapter 3. The research followed the lines of exploration and interpretation of various ideas and meanings associated with IWRM. Therefore, it is considered to be an amalgamation of various ideas and meanings which constitute the backbone of IWRM. I use the notion of *IWRM discourse* to capture this amalgamation, as well as to underline the dynamic character of the meanings and interpretations of IWRM that change according to actors, time, space and policy context. However, in order to provide a baseline assessment of IWRM status in country case studies, Bellamy *et al.*'s (1999: p 342) perspective on Integrated Resource Management as based on three principles was selected:

- Management of interrelated resources with regard to ecological processes and the maintenance of environmental quality.
- Involving community participation in natural resource management.
- Co-ordinating government, non-governmental, and community natural resource management policies and activities...

A multiplicity of methods was used within the qualitative research methodology: such as archival research, textual analysis, and a multiple case study of policy process in England, Kazakhstan and Turkey. More on methodology and methods can be found in Chapter 3.

1.5 Justification and Contribution of the Research

This research is innovative on a number of fronts and can be justified on theoretical, methodological and practical grounds. First of all, it establishes a link between international, national and local levels of IWRM through the concept of *policy translation*. By this means it explains the hegemony of IWRM that operates through the mechanism of policy translation and the three pillars of *discursive*, *organizational* and *material* domination. Secondly, by introducing an innovative notion of the cycle of *discursive, normative and practical* stages of policy translation, this study contributes to the theory of translation. Thirdly, by drawing inspiration from the three parent theories of the new institutionalism, policy translation and discursive hegemony, this research explores the process of IWRM policy translation in three country cases of England, Turkey and Kazakhstan, setting a basis for drawing policy recommendations. Finally, it explains the global hegemony of IWRM, its mechanisms and links it with the national level policy dynamics.

Selection of the three cases was based on several criteria. First of all, there is evidence in the literature that nation-states still play a central role in water policies and the national policy level is key in legitimizing and implementing IWRM (Dolowitz and Marsh 2000; Conca 2006; Unver 2008). Thus, it was decided to analyze the importance of national level policy conditions in contrasting contexts for the policy translation process and the hegemony of IWRM. There were two options with regard to the number of cases: either to include a few in-depth cases or have a dozen cases with lesser detail. The decision to focus on three countries was finally made: one developed, one developing and one in transition in order to provide an in-depth analysis of IWRM national level policy change for each of the cases and find out important differences and similarities across them.

1.6 Limitations and Key Assumptions

This study has several limitations which are rooted in its epistemological approach and methodology. Many interesting research avenues opened in front of the author as the research progressed and conscious decisions to limit the scope to manageable and practical elements had to be made. First of all, it was established that the link between international, national and local levels is not unidirectional. Rather, there is a cycle where policy ideas from the international level pass on to the national and further to the local level, after which are fed back to the national and international levels. The decision to limit the study to the flow and dynamics of international–national-local has been made without regard to the feedback mechanism. This decision is justified by the limited time and resources for this research as well as the peripheral nature of such an analysis for resolving the research problem of the thesis.

Secondly, in two cases out of three: Kazakhstan (the Syrdarya) and Turkey (the Tigris and Euphrates), IWRM exists in the context of transboundary river management. It is acknowledged that the transboundary dimension is crucial for IWRM implementation from a holistic point of view as demanded by its twin concept of river basin management. However, transboundary water management forms a related but somewhat separate field of water management research and falls beyond the scope of this study. IWRM planning, therefore, will be analyzed at national and, where practical, local levels with discussion of transboundary issues only as a background.

Thirdly, it was reiterated at a number of conferences (5 international conferences) where the work-in-progress was presented, that it is not only expert networks that influence the travel of IWRM, but also transnational business, with serious commercial interests involved. The importance of business is acknowledged, especially when considering the common interpretation of IWRM as a neo-liberal concept promoting the use of economic instruments, full-pricing and privatization. Nevertheless, the private sector and its influence, although acknowledged, will not be discussed in this research, as the main focus is placed on the expert and policy networks and the flow of ideas, knowledge and public rather than private funding.

Fourthly, in the course of the research it was found that formal and informal policy networks are crucial for the popularity of IWRM (e.g. the Global Water Partnership (GWP), the World Water Council, the UNESCO-International Hydrological Programme); network analysis would be useful for this research. However, an explicit focus at the national level as opposed to the international level made network analysis at the transnational scale peripheral, and suggested this as a possibility for the future research. Finally, there are limitations in extrapolating the results of the study to a broader range of countries and regions. In spite of this, it is hoped that as far as the global hegemony of IWRM and its policy translation are concerned, broad inferences may be usefully made from this work.

Among the important assumptions is a constructivist standpoint on the issues of reality and truth as socially constructed, and existing in multiple competing meanings. Thus, IWRM is conceived and interpreted as a living discourse rather than a concept whose meaning is set-in-stone. An important implication of this assumption is that in spite of the differences in the appearance of policy concepts seemingly as diverse as a regional development administration and a water user association (studied at the national and regional level in Turkey), a national level water management plan (studied in Kazakhstan) and a surface water management plan (studied in England), them all can be viewed within the same framework of IWRM due to their referral to the same principles of *integration, co-ordination* and *public participation*. Another important assumption is a deliberate emphasis at the national level policy as the domain where IWRM is shaped and the interplay of the international, national and local takes place. This assumption, however, does not presume that state actors are more important than non-state actors, be them

national, local or translational actors. I believe that in order to study the interaction of these various actors with each other the focus at the national level policy provides the most useful service.

1.7 Research Design and Presentation

The thesis can be divided into three clusters of chapters. The first cluster includes Chapters 1 to 3 focusing on the research design and the theory of IWRM, its hegemony and policy translation. Chapter 2 provides the literature review and historical analysis and partly answers research Questions 1 and 2. Chapter 3 presents the theoretical and methodological framework. The second cluster includes Chapters 4 to 6 which discuss empirical case studies of the IWRM policy translation in England, Kazakhstan and Turkey respectively. The third cluster then synthesizes the theory and the case studies: Chapter 7 comprehensively discusses all research questions combining theoretical ideas with empirical insights and presenting the main discussion and contribution along the lines of the four meta-research themes. Finally, Chapter 8 concludes the study and provides recommendations for future researchers and policy-makers.

Summary

This chapter introduced the background of research, the research problem and research questions along the lines of the four main research themes: the IWRM concept, the hegemony of IWRM, policy translation and the national level policy context. The research was justified on methodological, practical and theoretical grounds and the contribution of the research was proposed. The limitations and assumptions were discussed and the outline of the thesis given. This laid the foundations for the discussion of the area and the research problem in detail starting with the literature review in Chapter 2.

2. Literature Review: Integrated Water Resources Management and its Travel

So oft in theologic wars,
The disputants, I ween,
Rail on in utter ignorance
Of what each other mean,
And prate about an Elephant
Not one of them has seen

(Saxe 1873: pp77-78)

Introduction

As John Godfrey Saxe famously put it in "The Blindmen and the Elephant," humans often dispute complex issues of whose essence they have grasped only partly. Being a versatile concept that exists at multiple levels and in multiple forms, IWRM has provoked a lively debate about its basic meaning, function, ways of implementation and the overall practical value. Few agree on a specific definition; the critics point to the poor record of implementation and the idealistic nature of the concept, whereas the proponents see it as a "boundary" concept that provides a common ground for various disciplines to come together. Still, one could see IWRM as a proverbial elephant to which Saxe alluded in the epigraph, but with an important difference: owing to the international popularity of IWRM and its proliferation at the global scale, it is rather a "flying elephant". This chapter reviews the literature on the debate around IWRM with a focus on its international travel.

I aspire to presenting, reviewing and summarizing published academic literature dealing with the travel of IWRM ideas. I will identify important gaps in the current knowledge on the subject and position this thesis in the context of the existing literature. An important goal of this chapter is to present the rationale and justification of specific research questions, designed to resolve the main research problem. Different types of literature have been reviewed, including works on the theory and practice of IWRM, conceptualization of global IWRM discourse, discourse analysis, the links between international and national policy-making, and historical reviews of IWRM. The reviewed material derives from a number of different academic disciplines, including international relations, water resources development and management, discourse analysis and international politics, policy studies, organizational studies and history. Thus, this research is

truly inter-disciplinary. Section 2.1 discusses some literature on the contemporary debate about IWRM as a normative or prescriptive policy concept. Section 2.2 looks at the historical attempts at integration and co-ordination of water management throughout the 20th century and brings a new dimension to IWRM analysis: looking at IWRM as a discursive concept. Section 2.2 also addresses the contribution of history to understanding the popularity of IWRM. Section 2.3 subsequently discusses the international IWRM discourse, its hegemony and actors, and analyzes the role of discourse in the national-level adoption and implementation of IWRM.

2.1 Integrated Water Resources Management: a Normative Concept

As mentioned earlier, IWRM has received much attention during the last 15 years, since the Dublin International Conference on Water and the Environment in January 1992 and the Rio de Janeiro United Nations Conference on the Environment and Development in June 1992 (Global Water Partnership 2005; Watkins 2006). A number of high-profile organizations have embraced IWRM throughout this period. Examples include the United Nations Development Programme (Watkins 2006), the United Nations Environmental Programme (UCC-IWRM), World Bank, the Asian Development Bank (2006), the World Water Council and the EU (EU Water Framework Directive). The concept was mentioned in the UNEP's Agenda 21 (Article18) (United Nations Environmental Programme 1994), as well as the UN World Summit on Sustainable Development (WSSD) in 2002.

IWRM is defined and conceptualized in many different ways without a single "unambiguous definition" (Jonch-Clausen and Fugl 2001). Biswas (2004b) has argued that there may be as many as 35 sets of issues that need to be considered before full, integrated water management[4] can be possible. According to the Global Water Partnership (GWP), an organization established in 1996 by World Bank, UNDP and the Swedish International Water Institute (SIWI) for the purpose of developing and disseminating IWRM world-wide, the questions *"how to integrate," "who would be responsible for this integration,"* and *"why is there a need to integrate in all cases"* remain unaddressed by most existing definitions, in spite of the increasing efforts to define and conceptualize the study of IWRM (Global Water Partnership Technical Advisory Committee

4 For example water supply and demand; surface water and groundwater; upstream and downstream issues and interests; interests of different stakeholders; national, regional, and international issues; water projects, programs, policies etc.

2000). In place of such intensively contested diversity, most researchers apply the GWP/TAC definition of IWRM:

> a process which promotes the co-ordinated development of water, land, and related resources in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital eco-systems (Global Water Partnership Technical Advisory Committee 2000: p22).

This definition is similar to the one of sustainable development, as it promotes "not an end state to be achieved," but a "continuous process of balancing and making trade-offs between different goals and views in an informed way" (Medema *et al.* 2008: p3). According to Jonker (2002), however, the GWP definition suggests the management things that cannot be managed. It is near-impossible to manage rainfall, wind and other natural processes, but it is possible to manage people's activities. Therefore a more suitable IWRM definition, in Jonker's view (2002), would be: "a framework within which to manage people's activities in such a manner that it improves their livelihoods without disrupting the water cycle." Merrey *et al.* (2005: p.203) offer a similar, more elaborate definition of IWRM as the

> promotion of human welfare, especially the reduction of poverty and encouragement of better livelihoods and balanced economic growth, through effective, democratic development, and management of water and other natural resources at community and national levels, in a framework that is equitable, sustainable, transparent, and as far as possible conserves vital ecosystems (Merrey 2005: p.203).

Lenton and Muller (2009: p210), in turn, have most recently argued that the GWP relapsed into an earlier definition of IWRM, proposed at the Earth Summit in Rio de Janeiro in 1992, which recommended that:

> 18.16.Water resources development and management should be planned in an integrated manner, taking into account long-term planning needs as well as those with narrower horizons, that is to say, they should incorporate environmental, economic, and social considerations based on the principles of sustainability; include the requirements of all users as well as those relating to the prevention and mitigation of water-related hazards; and constitute an integral part of the socio-economic development-planning process.

There are dozens of other definitions compiled in Annex 1.1. According to GWP/TAC (2000), IWRM is based on the principles formulated at the 1992 Dublin Conference on Water and

Sustainable Development, International Conference on Water and Environment, which are listed in Box 2.1. Thus, IWRM is not just about integration, but it is also about public participation, women's empowerment and human rights. Lenton and Muller (2009) have even argued that IWRM is about democracy.

Box 2.1 The Dublin Principles

- Fresh water is a finite and vulnerable resource, essential to sustaining life, development and the environment;
- Water development and management should be based on a participatory approach, involving users, planners and policy-makers at all levels;
- Women play a central part in the provision, management, and safeguarding of water;
- Water has an economic value in all its competing uses and should be recognized as an economic good;

Various models of IWRM exist in terms of what it represents and how it can possibly be implemented. For example, IWRM can be performed in both a centralized and a de-centralized model. This raises the issue of co-ordination, which can be done either by one autonomous, empowered agency that concentrates all responsibilities and power on itself (as in the Soviet Union, or in the Tennessee Valley Authority), or it can be managed through a specialized agency with a co-ordinating role.

Table 2.1 Modes of IWRM Governance

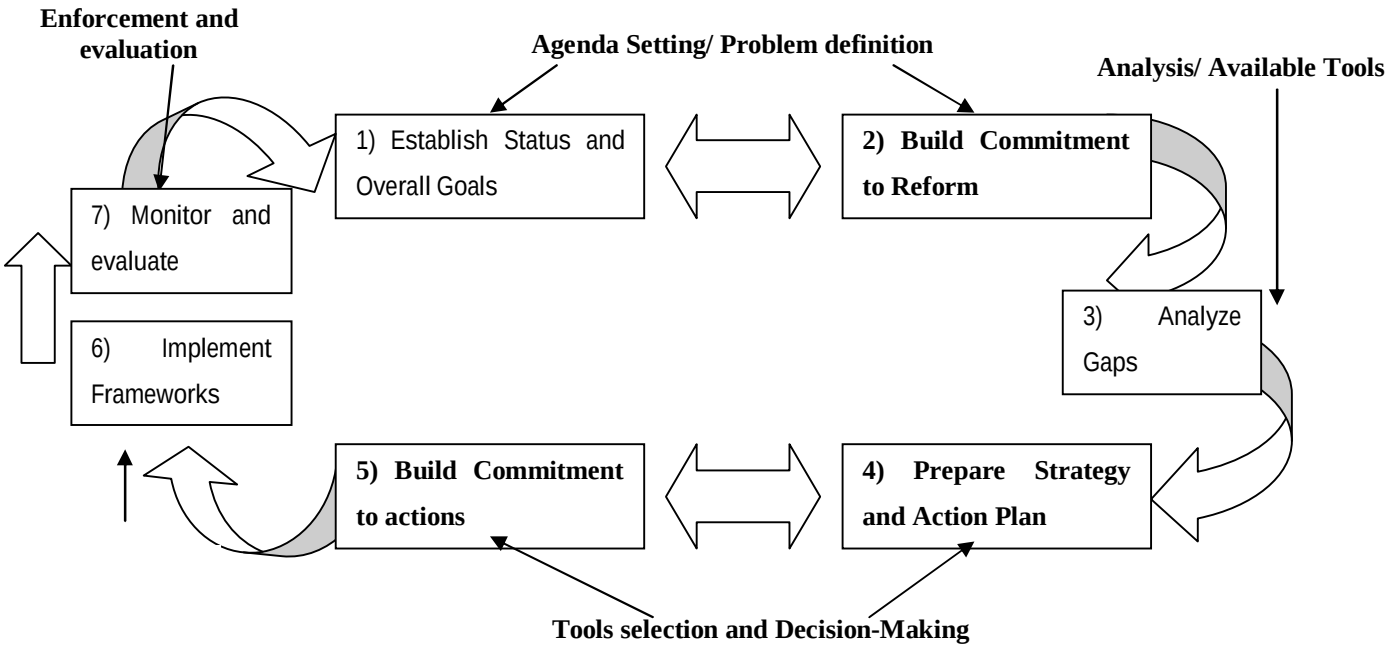
Model	Centralised	Decentralised
Characteristics	Unified public organisation for the management of river basins	Co-ordination of the action of existing organisations with relation to river basins
Advantages	Internalizes upstream/downstream conflicts; Concentrates decision-making authority	Easier to build upon existent structures than creating new ones; Encourages cross-sectoral responsibility for water
Disadvantages	Water management is separated from other relevant policy issues; difficulty in attracting sufficient political support for implementation; possible problems with public participation and accountability	Cumbersome decision-making process; High costs of co-ordination; Disagreement and conflict always present

Source: adapted from Kidd and Shaw (2007: p313)

IWRM is presented in the GWP/TAC (2000) conceptualization as a cyclic *process*, not a goal in itself. It "aims at laying down a framework for a continuing learning and development process," and represents "ongoing learning and development" (Galaz 2007: p5). It is viewed as a

continuous balancing and making trade-offs between different goals and views in an informed way (Global Water Partnership 2005).

Figure 2.1 The IWRM policy cycle



Source: adapted from GWP/TAC (2000)

In order to activate this cycle in practice, three pillars of IWRM must first be established:

- Move towards an enabling environment of appropriate policies, strategies and legislation for sustainable water resources development and management;
- Establish an institutional framework through which policies, strategies and legislation can be implemented;
- Set up the management instruments required by these institutions to fulfil their functions.

In spite of the theoretical appeal of these pillars, the practical meaning of an "enabling environment," an "institutional framework" and "management instruments" has not yet been fully defined in operational terms. The GWP (Global Water Partnership 2003) has prepared a compilation of case studies in "the IWRM toolbox." However, the study has been difficult to apply, owing to the highly specific context of each case (UNESCO International Hydrological Programme 2007).

Overall, there is no real consensus on the exact nature of IWRM: whether it is a goal to be achieved (Born and Sonzogni 1995), an instrument to achieve adaptive management (Pahl-Wostl 2004), or a process to achieve sustainable development (Jonker 2002, 2007, GWP 2004). Many ideas are currently framed within the notion of IWRM. This is well-illustrated by Conca (2006), who draws attention to one characteristic IWRM discussion held by international government officials in 2001:

> IWRM was extensively discussed. FRANCE emphasized state water management, universal provision of drinking water and commercialization rather than privatization. IRAQ distinguished between water pricing and sale, stating that water sale was unacceptable. GWP said discussion should focus on farming, which accounts for 70 percent of water use. ADB identified key issues on farming as access, conservation and fair and equitable returns. FARMERS, the US and MOROCCO shared their experiences, respectively on water pricing, managing water contamination, and managing riverine catchments. UZBEKISTAN called for donor co-ordination, and for donors to respect local knowledge and experience. NGOs stressed participatory decision making and BRAZIL drew attention to water quality and pricing IISD report (2001, cited in Conca 2006: 163)

Thus, no consensus exists on the definition of IWRM or its fundamental aspects, such as what needs to be integrated, in what order, how and by whom (Medema 2006). This is, of course, to be expected from a concept designed to accommodate numerous different contexts of water resources management across the globe. Its clarity and specificity has been sacrificed in the quest for global appeal and popularity. Jochn-Clausen and Fogl (2001) state that IWRM has degenerated into a *buzz-word* that is used by many different people with different understandings of its meaning. There are problems and ambiguities in the concept's definition as well as its practical implementation (Medema 2006, Biswas 2004b). The most recent critical account about IWRM reads as follows:

> In a real world to improve water policy, programme and projects at macro- and meso-scales have left much to be desired. At a scale of 1 to 100 (1 being no integrated water resources management and 100 being full integration), any objective analyst will be hard-pressed to give a score of 30 to any one activity anywhere in the world in terms of its application (Biswas 2008: p21)

The proponents of IWRM argue that its *inclusiveness* and ability to bring together various disciplines and stakeholders is remarkable. "One of the main benefits of using IWRM as a paradigm is its focus on the blending of viewpoints" (Grigg 1999: cited in Medema *et al.* 2008). Thus, Mitchell (1990) and Mollinga *et al.* (2006) refer to IWRM as a "*boundary concept*" that

connects sectors, disciplines, and professions (Jeffrey and Gearey 2006). IWRM is also seen as a "framework" based on the principles of integration, participation and co-ordination, rather than a tool, a method, or a prescription. Nevertheless, IWRM has proven to be an immature management tool (Jeffrey 2007). Recent developments in IWRM have been drawing on some strategies of adaptive management, which means that IWRM is continuously evolving towards more practical management forms (Galaz 2007; Medema *et al.* 2008; Lenton and Muller 2009).

To summarize, IWRM is currently being debated on several fronts, namely its implementation record and practical value, the importance of its scope of management, its definition and main principles, and its function in terms of bridging divides. In spite of its contested nature, poor application record and the absence of clear guidance on how best to implement it, IWRM has too often been taken for a "magic bullet" that is relevant and desirable regardless of any practical context. Such attitudes, currently existing on a global scale, suggest that IWRM has evolved into an internationally institutionalized discourse and has become a symbol as well as a managerial concept. This symbolic dimension of IWRM transforms a formerly mere managerial concept, used to solve recurring water problems on the ground, into a symbol for democracy, rational and strategic planning, and legitimate decision-making affected by public participation. Recognition of IWRM as a symbolic concept is important, as it brings to the fore the importance of understanding the historical process of transformation from the normative to the symbolic. The symbolic dimension of IWRM is best illustrated by contextualization through case studies.

> Symbolic issues can only be dealt with within their contexts…The point is that it is necessary to understand the entire context of this reform to understand the inter-governmental management and politics. Without the context, which brings out the symbolic issue, there is no explanation (Agranoff and Radin 1991: p216).

A historical review of the evolution of IWRM, which led to its hegemonic domination as conceptualized in this thesis, is necessary in order to enrich understanding of IWRM as simultaneously a normative and a symbolic discursive concept. This may also assist in gaining understanding of how IWRM policy travels on a global scale. A critical observer will notice that there are many similarities between IWRM's holistic spirit and other concepts which have been prominent on various countries' political and planning agendas in the past. In many ways IWRM is similar to sustainable development, river basin management (watershed management), rational

comprehensive planning, strategic planning, integrated environmental management, ecosystem management, contingency planning and, to some extent, adaptive management. A historical review will thus help in drawing boundaries between IWRM and related concepts, as well as enhance our understanding of them.

Question 1: How can deeper understanding of the history of IWRM contribute to our knowledge about its travel from the international to the national level?

2.2 Historical Evolution of Integrated Water Resources Management

The close conceptual link between IWRM and Sustainable Development has arguably contributed to the perception of IWRM as a new concept in water resources management that emerged only in the 1990s (Mitchell 1990; White 1998; Tortajada 2002; Rahaman and Varis 2005; Conca 2006; Wolsink 2006; Mukhtarov 2007a, 2007c). Gradually, the historical evolution of water management paradigms associated with IWRM has been brought to light by environmental historians and managers, whose most prominent works on the subject are discussed below.

The origins of IWRM can be traced to the beginning of the 20th century, when U.S. President Theodore Roosevelt initiated the *conservation movement* (Hays 1959). The name "conservation" comes from an original idea to construct reservoirs and store flood waters for use in the dry season. The idea gradually evolved into a multi-purpose river development strategy by 1908[5] (Hays 1959).

> The enormous possibilities of basin-wide river development suddenly captured the imagination of Newell, Pinchott, Garfield, and other conservation leaders. Flood water, now wasted, could, if harnessed, aid navigation, produce electric energy, and provide water for irrigation and industrial use. It also became clear to those men that maximum development required multiple-purpose development (Hays 1959: p.100).

The conservation movement was based on a strong belief in applied science as an omni-potential tool for effective decision-making in natural resources management, and it paid relatively little attention to democratic processes and grass-roots. As conservation had a strongly technocratic

5 This is when several functions of river development, such as navigation, power generation, irrigation, drinking water supply and recreation are combined by a single hydraulic system

approach at the time, engineers played a central role in the process. There were four major U.S. professional societies involved: the American Society of Civil Engineers, the American Society of Mechanical Engineers, the American Institute of Electrical Engineers, and the American Institute of Mining Engineers which maintained close contact with the government (Hays 1959). It was within this movement that a river basin was recognized as the most appropriate spatial unit for water management: "each river system, from its headwaters in the forest to its mouth on the coast is a single unit and should be treated as such" (Theodore Roosevelt cited in White 1957: p.168). It also introduced the idea of multi-purpose river development, which is based on using hydraulic structures in order to serve several different purposes. Theodore Roosevelt created the Inland Waterways Commission in 1907 to study the nation's rivers, and he pushed for multi-purpose river use in the preliminary report of 1908:

> (O)ur river systems are better adapted to the needs of the people than those of any other country ...Yet the rivers of no other civilized country are so poorly developed, so little used, or play so small a part in the industrial life of the nation as those of the United States. It is poor business to develop a river for navigation in such a way as to prevent its use for power, when by a little foresight it could be made to serve both purposes. We can not afford needlessly to sacrifice power to irrigation, or irrigation to domestic water supply, when by taking thought we may have all three. Every stream should be used to the utmost (Inland Water Commission 1908: online).

The conservation movement's enthusiasm for controlling nature is rooted in the *comprehensive rational planning* approach that spread across many countries in the 20th century, including USA, USSR, Germany, China, Tanzania and many others (Scott 1998; Josephson 2002; Allan 2003). Scott (1998) dubbed the approach "high modernism ideology," based on state confidence in the ability of science and technology to manage natural resources and social welfare. Although the conservation movement claimed to have a totally scientific basis and has viewed "political interests" as an impediment, the development of the movement was ironically marred with the political struggle between the Bureau of Reclamation (Reclamation Service) and the U.S. Army Corps of Engineers, two large-scale federal agencies competing for political power. Their struggle is well-documented in Hays (1959), Reisner (1986), Josephson (2002) and others. The conservation movement is best exemplified by the U.S. government's project on Reclamation that can be found in the Annex 2.1. It was within the framework of the conservation movement that *integrated river basin development (IRBD)* emerged as a precursor to IWRM. Three main ideas constitute the foundation of IRBD: the "multiple-purpose storage project, the basin-wide

program, and comprehensive regional development". The appeal and idealistic nature of IRBD, and indeed of IWRM as a relevance concept, was noted more than 50 years ago:

> Their combination {of the three principles as above} is more an ideal than a reality, but it is an ideal which recurs in differing form so frequently and widely and which commands such warm enthusiasm as a symbol in public thinking that it should be reckoned with as a unit (White 1957: pp.160-161).

Two important parallels exist between IRBD and IWRM. Firstly, they represent not a single idea but a constellation of multiple ideas; and secondly, they are both driven by "warm enthusiasm," which is suggestive of their normative value and emblematic attraction. As the movement gained popular support, the term "conservation" had been broadened to an extent that included "almost every movement of the day, and a wide variety of reformers flocked into conservation organizations" (Hays 1959: p.176). The term "conservation" became applicable in various contexts:

> conservation of peace and friendship among nations, the conservation of the morals of youth, the conservation of children's lives through the elimination of child labour, the conservation of civic beauty, the conservation of manhood, and the conservation of the Anglo-Saxon race! (Hays 1959: p.176).

Such expansion in the "conservation" concept has resulted in both popular support and hostility from those oriented towards practical change. A similar divide exists in the context of IWRM. Biswas (2004b) has made an important observation on the question:

> The current popularity of the (IWRM) concept reminds one of another similar concept which received wide popular support in the United States during the early twentieth century: conservation. Even President Roosevelt of the United States said at that time that: "Everyone is for conservation: no matter what it means!" (Biswas, 2001). The situation is very similar in the early part of the twenty-first century with integrated water resources management…The only difference between the Conservation Movement of President Roosevelt's time and the movement on integrated water resources management of the present is that information and communication revolution and globalization processes have ensured that the gospel of integrated water resources management has been spread all over the world, and not mostly confined to the United States, as was mostly the case for the Conservation Movement earlier (Biswas 2004b: p.251).

Concepts such as conservation and IWRM typically evolve into sources of legitimacy and power. They attract a lot of attention attention. However, with their uses expanding, they gradually lose their normative appeal. Molle (2008) refers to such concepts as "nirvana concepts" owing to their attractiveness that becomes challenged by their limited practical achievability. The conservation

movement ended in the 1930s, paving the road for *Integrated River Basin Development*. A charismatic symbol of this phenomenon is the Tennessee Valley Authority (TVA), founded in 1933 by President Franklin Roosevelt, which became very popular around the world and influenced the developments of the rivers Mekong, Danube, Senegal, Zambezi, Volta, and such countries as France, Germany, Japan, Finland, India, Iraq, Egypt, Brazil, Mozambique, El Salvador, Sri-Lanka, Tanzania, Turkey and others (Ekbladh 2002, Molle 2008). In the 1950s, the TVA entered the international arena as a symbol that associated integrated river basin planning with social ideals, such as democracy, progress, poverty eradication, modernization, social engineering etc. Often the example of the TVA was deployed in international diplomacy, to the extent that President John F. Kennedy went on to refer to it as "the best ambassador that the United States has ever had in the Middle East and Africa and Asia" (Tennessee Valley Authority 2009). More information about the TVA and its international influence can be found in Annex 2.2.

Integrated River Basin Development was promoted to the international arena by the United Nations Conference on Natural Resources held in 1949 (the author accessed the 1957 edition of the proceedings). The change in approach to water resources development did not come about until the 1970s, when the notions of environmental sustainability, public participation, and social welfare started to crystallize in water management discourse. In addition, inherent limitations to comprehensive rational planning and social engineering came to light in the developed world because projects based on TVA-like ambitions regularly did not deliver on their grand promises and had unintended and drastic social, environmental, and economic impacts (Scott 1998). As Rahaman and Varis (2005) and Josephson (2002) have put it, too often such projects focused on the macro scale and neglected people's needs, values, experience, and knowledge, which triggered centralization. Nevertheless, comprehensive rational planning in the name of modernity and development is still persistent in many developing countries.

A new era of water management in developed countries started to emerge after the 1977 United Nations Conference on Water in Mar del Plata (Argentina), which underlined the social and environmental issues in water management. According to the text of the Conference Declaration,

> (p)articular consideration should be given not only to the cost-effectiveness of planned water schemes, but also to ensuring optimal social benefits of water resources use, as well as to the protection of human health and the environment as a whole (United Nations 1977: p.30).

Article 44 of the recommendations to the states stated the need to "ensure that national water policy is conceived and carried out within the framework of an interdisciplinary national economic, social and environmental development policy". Public participation was another important issue considered at the Mar del Plata conference: "every effort should be made to convince the public that participation is an integral component in the decision-making process, and there should be a continuous two-way flow of information" (United Nations 1977). This greater concern for environmental issues, public participation and multiple-purpose river development were envisaged within a river basin unit.

With sustainable development discourse on the rise between the late 1980s and early 1990s, IWRM acquired intensive international attention. Prominent examples are the Rio de Janeiro United Nations Conference of 1992 and the Dublin Conference of the same year. This is when the acronym "IWRM" emerged, and the term became institutionalized in the 1990s. Conca (2006: p140) regarded the emergence of IWRM on the global scale as linked to "the growing density of global-conferencing opportunities" and "the rise of sustainability as a discursive movement." Although these two trends gained publicity in the 1990s, both of them had taken roots much earlier, in the 1950s, as discussed above.

In the 1990s, IWRM entered another era, characterized by Allan (2003) as "economic reflexivity." Economic instruments, especially privatization of water supply and sanitation services, became widespread. IWRM discourse reflected this shift by increasingly incorporating the neo-liberal agenda (Conca 2006). According to Priscoli (1996: p.30), IWRM contains a "dialectic between two philosophical norms: the first, the rational analytical model, often called the planning norm, and the second, the utilitarian or free market model, often couched in terms of privatization." World Bank has also seen IWRM as a means to adjusting prices at the national level (World Bank 2004). Conca (2006: p.216) called this trend "water marketization," which encompassed not only water privatization, but also issues such as "prices, property rights, and the boundary between the public and private spheres."

In the 2000s, water management issues were increasingly viewed as inherently "uncertain," "wicked" and "messy". Politics has finally been accepted as an inherent component of water resources management (Mitchell 2005). Allan (2003) referred to this shift as *political and institutional reflexivity*. Moreover, IWRM was being envisioned at the national level rather than at a river basin or watershed level. IWRM and river basin management became two separate, yet closely related, concepts. Conca (2006) called this process the "de-territorialization" of IWRM, which means that IWRM became an abstract policy concept that more applicable in the context of national planning rather than river basin development. It was argued, for example, that inter-basin water transfers could be practiced within IWRM, which clearly goes beyond the river basin management approach. Conca (2006: p.59) proposed a social theory of institution building based on the three fundamentals of water resources management: spatial unit of management, authority for management and knowledge. According to him, all three fundamentals are currently undergoing a significant change, expressed in destabilization of knowledge, hybridisation of authority, and de-territorialization of nature. Finally, IWRM has become differentiated from watershed management and rather portrayed as a national framework for water policies, as well as a discursive framework for global water governance:

> As with the interstate international rivers frame, the link between IWRM and rivers is once-removed; the central focus is on water resources, not watersheds per se. Nevertheless, the ramifications of IWRM for watershed governance are enormous (Conca 2006: p.126).

The latest development in IWRM is the concept of Adaptive Water Resources Management (Pahl-Wostl 2004; Medema 2006; Galaz 2007; Pahl-Wostl *et al.* 2007). "Adaptive management is defined as a systematic process for improving management policies and practices by learning from the outcome of implemented management strategies" (Pahl-Wostl *et al.* 2007: p.1). The proponents of adaptive management claim that IWRM can only result in sustainable water management if a transition towards Adaptive Water Resources Management is achieved (Pahl-Wostl *et al.* 2007: p.3). However, the conceptual challenges in defining the concepts of "IWRM," "sustainable water management" and "adaptive water resources management" remain prominent and unaddressed.

To sum up the brief historical overview of IWRM, ***comprehensive river basin development*** was practiced from the beginning of the 20th century (conservation movement) until the 1970s. ***Integrated river basin development*** has been carrying out the discourse on the international arena since the 1950s, and it grew more socially and environmentally relevant throughout the 1970s and 1980s. The acronym "***IWRM***" emerged in the 1990s in the discourse of sustainable development and increased translational expert networking. The idea of integrated river basin development has gradually lost its obligatory basin level focus as IWRM practices have transitioned from the watershed to the national level. With the wave of neo-liberalism in the 1990s, IWRM became associated with privatization, pricing, elimination of subsidies and commodification of water (e.g. the Dublin 1992 principles), and since the beginning of the 2000s the notions of politics, inherent uncertainty, "wickedness" and "messiness" have become part of the discourse. Finally, the concept of ***adaptive water resources management*** was born and is currently in conceptual formation in order to augment the flexibility of IWRM (Lindblom 1959; Pahl-Wostl 2004, 2006; Pahl-Wostl *et al.* 2007). Table 2.2 below outlines the historical evolution of IWRM.

Table 2.2 The Historical Evolution of IWRM

Approach	The essence	Time period	Other conceptualizations	Examples in practice
Conservation Movement	1) Science is omni-potent; 2) River Basin Planning is necessary; 3) State sponsors development;	1890- 1920s	Comprehensive rational planning; Hydraulic Mission	Reclamation of the West
Integrated River Basin Development	1) Multi-purpose river development; 2) River Basin Management; 3) Science is omni-potent; 4) Explicit intent of social engineering	1920s – 1970s	Hydraulic Mission (Allan 2003)	TVA
Integrated Water Management	1) social benefits, 2) environmental quality, 3) human health, 4) interdisciplinary planning; and 5) participation	Mar del Plata 1977 – 1990s	The Environmental Awareness/ Green Reflexivity (Allan 2003)	TVA-inspired projects: Damodar Valley Authority, Lower Tigris-Eurprates Development, Jordan Valley Authority
IWRM - neoliberal	1) privatization; 2) pricing; 3) Dublin Principles;	1990s – 2000s	Economic Reflexivity (Allan 2003)	Privatization Programmes, Structural Adjustment Programmes
IWRM as a political process	1) "wicked" and "messy" character of water management; 2) politics is legitimate; 3) negotiation and	2000s – present	Political and Institutional Reflexivity (Allan 2003)	Murray-Darling experiences

	consensus are crucial.			
IWRM as a multi-dimensional dynamic concept	1) de-territorialization; 2) hybridization of authority; 3) recognition of multiple knowledge; 4) IWRM as both a normative blueprint and a global discursive framework.	2000s - present	Conca (2006)	Global Water Governance and IWRM
Adaptive Water Resources Management	1) Focus on IWRM as a normative blueprint; 2) "muddling-through"; and 3) "learning by doing" approaches.	2004- present	Pahl-Wostl (2007) (NeWater Project)	The Rhine, the Murray-Darling

Some other models that conceptualize the development of paradigms in water resources management in the 20th century are presented in Annex 2.3. Thus, the historical review of IWRM allows us to look back and distinguish between IWRM and various related concepts. Below is a brief illustration of how historical review, a necessity for any discourse analysis study, also contributes to refining our understanding of the "hybrid" nature of IWRM as a normative, discursive and practical concept.

2.3 Distinguishing Contemporary IWRM from Related Policy Concepts

IWRM and Comprehensive Rational Planning

The main difference between the two is that, if the comprehensive planning approach often tries to consider all the possible resources and implications in a river basin or a given region, producing lots of studies and taking a long time to reach completion, the goals of IWRM are more selective, taking an operational approach instead of producing a fully comprehensive scheme (Mitchell 1990; White 1998; Mitchell 2005). It is important to note that comprehensive planning fell short to meet public expectations both in the Reclamation Project and in replicating the TVA experiences beyond the U.S. Later, as criticism of IWRM increased in the late 1990s and early 2000s, Biswas (2004b) accentuated that IWRM included everything conceivable in water management. As a response to this, Mitchell, drawing on his earlier publications (Mitchell 1983, 1990, 1997, 2005), argued the following:

> (a) [The] holistic approach has been endorsed by many analysts and managers. However, too often this approach is interpreted in a comprehensive manner, without critical appreciation for what that implies. By trying to include everything, analysts and managers risk discrediting the holistic or systems approach, by creating expectations that it is possible to understand and control all

> elements of a system, and by using an approach that usually takes significant time to complete data collection, analysis, and interpretation. … An integrated perspective implies more selectivity than a comprehensive interpretation, while still maintaining the core characteristics of a holistic approach (defining a system, and examining variables and their connections) (Mitchell 2005: p.14).

Thus, IWRM is seen as a framework within which a prioritized selection of the main problems and feasible solutions can be made, rather than as a technocratic attempt to provide the best possible analysis of the baseline and then target its implementation.

Table 2.3 Strengths and weaknesses of comprehensive and integrated interpretations of a holistic approach

	Comprehensive	Integrated
Strengths	Considers entire system, parts, and interrelationships; emphasizes scientific understanding of ecosystems	Selective and focused, greater likelihood of completion in time, encourages use of both science and local knowledge
Weaknesses	Based on predict-and-prepare paradigm and intervention. Takes long to complete, inflexible.	May overlook some elements

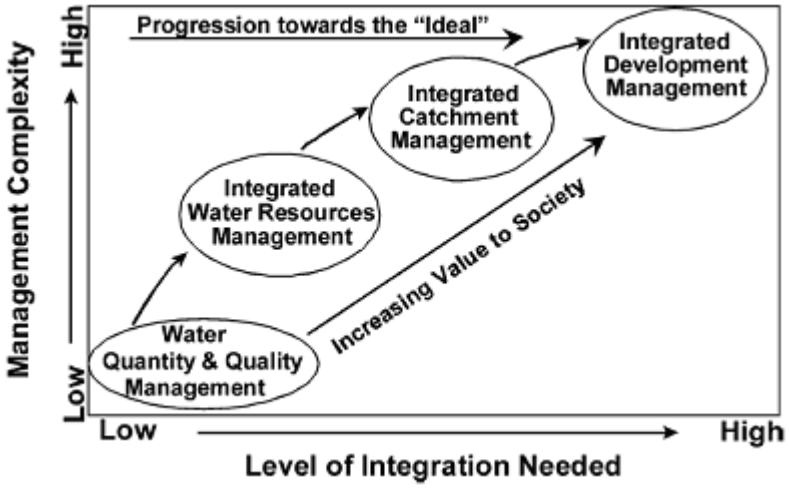
Source: Adapted from (Mitchell 2005: p.16)

IWRM and River Basin Management

These two concepts are often seen as complementary or even synonymous. There are many forms and models of river basin management and organizations {for detailed information see Hooper (2005)}. Today, IWRM often takes place in river basins. A good example is the European Union Water Framework Directive, which demands River Basin Management Plans to be published by the end of 2009. However, as argued above, IWRM should not necessarily be associated with river basins. This is especially relevant when concerned rivers are transboundary and so it becomes very difficult to come agree on a single approach. Indeed, "geographic situations are diverse and natural units seldom coincide with the administrative units" (UN-Water 2008: p.7) and, thus, IWRM often gets pursued beyond the river basin level. The relationship between IWRM and river basin management is surprisingly little researched. Ashton (2000), for example, argues that Integrated Catchment Management (ICM) is of higher complexity than IWRM (see Figure 2.2), whereas other researchers tend to agree that IWRM is broader and more challenging

because it embraces both national and international discourse (Conca 2006; Collins 2007). IWRM in this case includes inter-basin water transfers and multiple river basin management, unlike river basin management.

Figure 2.2 The relationship between IWRM and RBM



Source: (Ashton 2000; cited in Schulze 2007: p.271)

IWRM and Strategic Planning

Although historically it is not a form of water resources management, strategic planning and management are very relevant to IWRM. The discourse of *Strategic Planning and Management* has been around for some 40 years (Bryson and Einsweiler 1988; Mintzberg 1994). Strategic Planning, similarly to IWRM, favors long-term planning over short-term, or ad-hoc, problem solving; innovative solutions over solutions based on existing ideas; synthesis over analysis; and greater attention to future possibilities, strengths and opportunities over preoccupation with present trends, weaknesses and dangers (Global Water Partnership 2005). Mintzberg identified both the advantages and the dangers of Strategic Planning. Table 2.4 below gives two examples of how IWRM discourse can be informed by Strategic Planning.

Table 2.4 IWRM and Strategic Planning

IWRM plan (GWP 2005)	Strategic Planning (Mintzberg 1994; Mintzberg *et al.* 1998)
1) The IWRM sets the direction for long-term planning of water resources	Advantage "The main role of strategy is to chart the course of an organization in order for it to sail cohesively through its environment". Danger There is a danger of setting a course in the unknown and dynamically changing waters called "fallacy of pre-determination". "While direction is important, sometimes it is better to move slowly, a little bit at a time…"
2) IWRM is seen as a policy cycle that starts with a vision, proceeds with an analysis of the situation and strategic choices for drafting an initial IWRM plan, which is then put into practice and monitored. The feedback is then linked back to the original vision. Stakeholder participation is recognized as crucial in this process.	Advantage "Strategy is needed to reduce ambiguity and provide order. In this sense it is like a theory: a cognitive structure to simplify and explain the world, and thereby facilitate action." Danger There is danger in approaching the preparation of plans and their subsequent implementation by segregation, or what is called *"the fallacy of detachment"* (Mintzberg 2003). It says that "effective strategy making connects acting to thinking which in turn connects implementation to formulation…either the formulators (of plans) have to implement or else the implementers must formulate".

Source: (Global Water Partnership 2005)

Successful planning means more than generating a product (e.g. the final planning document). It also involves learning, relationship building, ownership, and improved social and political acceptability (McCool and Guthrie 2001; Lachapelle *et al.* 2003). This is where the role of science should lie in the "messy" world. Knowledge and "expertise" is not pertinent to experts only: it can be available at the local level as well. According to this conceptualization, IWRM provides each strategy with a complementing plan.

Table 2.5 Fundamental differences between a strategy and a plan

Strategy	Plan
Defines direction	Direction is given
Encourages innovation	Relies on existing ideas
Governed by vision, goals	Governed by objectives
Long-term	Short-term
Synthesis	Analysis
Attention to strength and opportunities	Attention to problem-solving (weaknesses and dangers)
Based on future possibilities	Based on current trends

Adapted from Strategic Orientation (SOR), MDF Training and Consultancy, Ede, The Netherlands. Source: GWP (2005).

IWRM emerging as a new concept

As we have seen, IWRM includes many ideas and its content changes over time. New values and principles get introduced, while previously established ones gradually expire. Contemporary IWRM has the characteristics of a new concept. First of all, the globalization of water policy, with the emergence of organizations such as the Global Water Partnership, World Water Council and the increasing number of global mega-conferences and discussions, has put IWRM in the centre of the developing global water governance efforts (Conca 2006; Pahl-Wostl *et al.* 2008; Wouters 2008). Global governance of water has emerged as a result of the recognition that water problems occur on a global scale, and the challenges of water resources are often similar.

Another feature that distinguishes the current state of IWRM from the past is the scope and content of ideas that underwrite the IWRM banner. According to Mollinga *et al.* (2006), IWRM now represents a threefold concept which encompasses integrated development and river basin management, public participation and privatization/marketization. The mere fact that IWRM stands for several different ideas is not new, but it is their combination that makes it authentic. Interestingly, all three concepts are contested individually, and their agglomeration does not help to resolve any controversies. Some authors see IWRM in its current state as torn by deep-seated inconsistencies:

> Despite its popularity (and one might say its reputation) IWRM remains: (i) a theory about, (ii) an argument for, and (iii) at best a set of principles… However, whilst IWRM reflects this post-modernist inspired agenda through its emphasis on contextual relevance, wider participation in planning and decision making, and responsive and reflexive practice, it remains rooted, by and large, in a "predict and prepare" paradigm. It is, therefore, more akin in practice to the contingency planning approaches[6] of the 1960s and 1970s than to the adaptive management frameworks promoted during the 1990s (Jeffrey and Gearey 2006: p.4).

It is clear that, on the one hand, IWRM represents the traditional developmentalist concept in terms of its ambition to control water resources. On the other hand, IWRM is inspired by stakeholder participation, adaptive management, and contextual relevance. Conca (2006) has

6 I have referred to contingency planning as to "comprehensive rational planning" in my historical review

further argued that IWRM has several inner conflicts, such as the tension between the concept's interventionist aspects, rooted in planning on the one hand, and the importance of liberalism and markets on the other. Jonker has therefore argued that "(t)here is still a long way to go to achieve a common understanding of IWRM and to develop and refine approaches for its successful implementation" (Jonker 2002: p719). Overall, because of the dialectic pressures involved in the evolution of IWRM, certain contradictions are inevitable, and despite some authors' view of IWRM as "schizophrenic" (Jeffrey and Gearey 2006), it is more useful to conceive IWRM as a "hybrid" concept that has multiple dimensions as argued above: the normative managerial, the symbolic discursive, and the practical implementation aspects.

IWRM and Adaptive Management

The early work of Lindblom (1959) highlighted that public policy is often an incremental process of trial and error. His ideas were adopted by others, including those who argued for an "adaptive" approach to planning, based on concepts of strategic planning, incremental analysis, experimental design and successive approximation in decision making. Where possible, large, complex problems should be converted into smaller, disaggregated ones that can be dealt with incrementally, thus creating opportunities for learning and adaptation (Pahl-Wostl 2006). Adaptive Water Resources Management goes beyond the "predict and prepare" regime to recognize the complexity of natural and political processes for water management and take the approach of "learning to manage by managing to learn" (Gleick 2003). IWRM has increasingly been incorporating ideas of adaptive management in order to provide a basis for learning and "muddling through." Perhaps this will shape the next conceptual form of IWRM. Thus, IWRM is gradually entering an adaptive management framework. In addition, IWRM has also acquired a symbolic dimension and has driven international discourse. This dimension is discussed in the section below, with proper consideration of the linkages between the discursive and normative forms of IWRM.

2.4 The International IWRM discourse

Since the 1950s, IWRM has become increasingly internationalized. The mega-conferences in Mar del Plata in 1977, Rio de Janeiro and Dublin in 1992, Bonn in 1997 and the Earth Summit in 2002, as well as the recent World Water Forum in Istanbul (2009), have all paved the way for

IWRM to gain international popularity. Water is increasingly recognized as not only a local or regional problem, but also a global one. Thus IWRM has emerged as a global concept of water governance. In the words of Conca (2006: p.5),

> Water-related struggles are being bounded, channelled, regularized, and normalized, with tangible consequences for the behaviour of national governments and other actors. If global governance consists of governing acts that have a broadly international realm, and if those acts include such things as the framing of policy, the setting of standards, and the mobilization and allocation of resources, then water is indeed subject to governance that is increasingly, though certainly not exclusively, global.

There is also an organizational dimension to internationalization of IWRM: the creation of the World Water Council and the Global Water Partnership. These are two organizations whose main mandate is to advance the theory and implementation of IWRM world-wide.

> The globalization of freshwater management is marked by the emergence of a range of new global water institutions in the 1990s, including the above-mentioned Global Water Partnership and the World Water Council (both established in 1996) and several other organizations. On the activist civil society side, an example of the establishment of global freshwater politics is the proliferation of global NGO activity around the inclusion of water in the GATS (General Agreement on Trade and Services), which is part of the WTO (World Trade Organization) process of rule-making for global trade (Mollinga *et al.* 2006: p. 25).

In order to discuss the literature on *IWRM discourse*, one first needs to introduce the concept of *discourse* as it is treated in the social sciences. A more thorough discussion of concepts involved in discourse analysis is presented in Chapter 3, while this section discusses the notion and basic features of the approach. Problems, solutions and policies acquire their meaning within a dominant discourse that shapes our understanding: *"(d)iscourses effectively shape a particular world and are as much constitutive of reality as they are reflective of it"* (Molle 2008: p.149). There are many methods and theories of "discourse," and it is challenging to select the most helpful one. The definition preferred in this thesis reads: *"an ensemble of ideas, concepts and categories through which meaning is given to social and physical phenomena, and which is reproduced through an identifiable set of practices."* A discourse analyst is interested in how discourses compete over structuring meanings and domination. S/he explores the material and organizational features of discourse, and the importance of history and society in making and sustaining a certain discourse as hegemonic. Dryzek (1997) describes discourse as a "shared way

of apprehending the world, enabling those who subscribe to it to put bits of information together in coherent accounts. The assumptions, the judgments and contentions on which each discourse rests, provide the basic terms for analyses and debates" (Dryzek 1997: p8).

The analysis of discourse can be placed in the interpretative tradition of the social sciences (Hajer 2005). Because in those terms reality is seen as a social construct, the analysis of meaning becomes central to understanding discourse. For Foucault (1974: p49), discourses "do not identify objects, they constitute them and in the practice of doing so conceal their own invention." Therefore, for an interpretative *IWRM policy* research, it is not IWRM in its normative sense that is important, but the way in which different policy actors make sense of it. Discourses (the interpretation of objects and concepts) exist in plurality and compete with each other over constructing meaning (Newell and Levy 2005). Some discourses become hegemonic, that is wide-spread and able to self-sustain, while others get marginalized and fade away. Conca (2006), for example, reveals the *discursive* nature of IWRM and its hegemonic status, signified by the fact that policy actors routinely reference IWRM in an effort to legitimize their argumentation:

> IWRM has become *the* discursive framework of international water policy – the reference point to which all other arguments end up appealing. Much like a thoroughly picked-over concept of sustainability, IWRM combines intuitive reasonableness, an appeal to technical authority, and an all-encompassing character of such great flexibility that it approaches vagueness…Vague or not, actors in each of the other institution-building venues analyzed in this book routinely appeal to IWRM arguments, concepts, and rhetoric to bolster their respective positions (Conca 2006: p127).

Varady and Iles-Shih (2005a; 2005b) have compiled a list of designated periods, organized events, and intergovernmental and nongovernmental water initiatives. They have also enlisted influential international professional societies, as well as events organized by them, promoting the creation of robust knowledge networks around IWRM. Figure 2.3 illustrates these points. In organizational terms, the biggest push for IWRM came about with the creation of the World Water Council and the Global Water Partnership in 1996, which advanced IWRM as their main philosophy. Varady (2005a, 2005b) has even documented a certain rivalry between the two organizations. This is perhaps inevitable in the broad institutional field of multifarious initiatives and organizations.

The World Summit on Sustainable Development (WSSD) in 2002 called for all countries to craft IWRM and water efficiency strategies by the end of 2005. At the end of 2005, only 20 out of 95 countries surveyed by the Global Water Partnership had produced such plans or had planning in progress (see Figure 2.4). Nominally integrated water resources management plans that have been developed say little about whose interests get served or whose voice gets heard. In many cases, integrated water resources management plans have a technical, rather than social, focus. Far more attention has been dedicated to increasing the efficiency of water use via transfers into higher value-added areas or via new technologies than to the equity or social justice central to human development (Watkins 2006).

Figure 2.3 Examples of influential nongovernmental and intergovernmental global water initiatives

Institution	Date Established
International Commission on Irrigation and Drainage (ICID)	1950
Working Group on Representative and Experimental Basins	1965
RAMSAR (Ramsar Convention on Wetlands)	1971
International Hydrological Programme (IHP; based at UNESCO)	1975
World Climate Research Programme (WCRP)	1980
GEWEX (Global Energy and Water Cycle Experiment)	1988
Water Supply and Sanitation Collaborative Council (WSSCC)	1990
International Human Dimensions Program on Global Environmental Change (IHDP)	1990
Biospheric Aspects of the Hydrological Cycle (BAHC)	1992
International Network on Participatory Irrigation Management (INPIM)	1994
Global Water Partnership (GWP)	1996
World Water Council (WWC)	1996
World Commission on Water for the 21st Century	1998
Global International Waters Assessment (GIWA)	1999
Hydrology for Environment, Life and Policy (HELP)	1999
World Water Assessment Programme (WWAP)	2000
Dialogue on Water & Climate/Cooperative Program on Water & Climate (DWC/CPWP)	2001
Global Water System Project (GWSP)	2002

Source: (Varady and Iles-Shih 2005a)

Figure 2.4 Results of the GWP Survey on the progress of IWRM national planning

				Total
Number of countries	20	50	25	95
Percentage	21%	53%	26%	100%

	Countries that have plans/strategies in place, or a process well underway, and that incorporate the main elements of an IWRM approach.
	Countries that are in the process of preparing national strategies or plans but require further work to live up to the requirements of an IWRM approach.
	Countries that have taken only initial steps in the process towards preparing national strategies or plans and have not yet fully embraced the requirements of an IWRM approach.

Source: (Global Water Partnership 2006)

In 2000, the UN created the World Water Assessment Programme under the auspices of UNESCO and charged it with the duty to produce a Water Development Report (2003, 2006, 2009) to outline the state of water resources management every three years. This report is routinely presented at World Water Forums (the latest took place in Istanbul in March 2009). In addition, UN-Water, which involves 26 UN agencies, overlooks issues of water management and reports on IWRM progress. There are few publications directly discussing the "IWRM discourse" (Allan 2003; Conca 2006; Jeffrey and Gearey 2006; Mollinga *et al.* 2006; Mollinga 2007; Molle 2008), and yet fewer address the ways in which the global IWRM discourse influences water policy on the national and local levels, or the incentives and drivers for policy actors to adapt the IWRM concept. Although the importance of this issue has been voiced before, no research has been done to adequately fill the gaps. While it is acknowledged that IWRM has become emblematic and may be divorced from the problems on the ground (Conca 2006; Mollinga *et al.* 2006; Molle 2008), the mechanism of IWRM proliferation and the travel of IWRM ideas remain under-researched, while case studies scrutinizing this process in individual countries are altogether absent. Thus, it is important to understand who the global-level actors are and how they operate in order to maintain the IWRM discourse and facilitate its international travel. This justifies Question 2 below, discussed in further detail based on empirical evidence in Chapter 7.

Question 2: Who are the actors and what are the incentives, processes and drivers that stimulate the travel of IWRM from the international level to the national one?

When discussing the gap in knowledge with regard to the policy translation process and the travel of IWRM ideas, especially noticeable is the lack of studies at the national level that would directly link policies and developments to the international discourse and principles. Conca (2006) provides an analysis of the policy change in Brazil and South Africa, but he does not allude to the process by which that influence was rendered. The work in progress of Huitema and Meijerink (2007), in turn, has looked at major changes in water policy and the role of various drivers and actors at the national level, but it has failed to link that change to international discourse. According to Unver,

> IWRM has so far been conceived as a framework for national water governance, and much remains to be done on that basis. Viewing IWRM as a global solution takes the concept a step further. It is necessary to get national water governance in order as a precondition for successful global cooperation (Unver 2008: p.412).

Thus, while global water governance is important, the national level is crucial. The situation varies from country to country. It is hypothesized here (in view of further empirical examination) that the national level is the most crucial juncture where decisions are made on how (if at all) to incorporate the global experience with IWRM and how to implement it. While views on the comparative importance of international and national policy factors in the travel of ideas vary from one school of thought to another, all agree that the domestic factors matter and require close inspection. According to Busch et al. (2005: p150), "domestic actors, interests, institutions, capacities, and policy styles all influence the actual decision of any one country to adopt a policy or instrument that is being communicated internationally." Kern et al. (2001: p8) further assert that "(o)f decisive importance for the generation and diffusion of new policy approaches in the international system, are national capacities for action and administrative convention." A prominent advocate of the "lesson-drawing" approach to the travel of ideas, Rose (2004: p125) upholds a similar view: "a necessary first step in lesson-drawing is to see whether a government wanting to adopt a program has the institutional capacity to do so." Thus, the third research question emerges with the importance of exploring the policy-travel process at the national level and the linkages to the international discourse of IWRM.

Question 3: In what ways does the travel of IWRM ideas happen from international discourse to national-level planning in the cases of England, Turkey and Kazakhstan?

Question 3a: What are the important drivers in the process of travel of IWRM ideas in England, Turkey, and Kazakhstan?

Question 3b: What is the comparative importance of the national policy circumstances in England, Turkey, and Kazakhstan in terms of the *IWRM policy translation*?

There are two major challenges in studying the travel of IWRM ideas from the international to the national level. First of all, it is necessary to find a proper theoretical and analytical framework within which to conceptualize such travel and explain the popularity of IWRM and its implementation and interpretation at the national level. Secondly, it is necessary to think about the cases and variables at the national level that would bring to light the important issues of the process of policy travel. Both of these challenges are discussed in Chapter 3, where the conceptual, theoretical and methodological framework is presented and justified on the basis of the selected country case studies.

Conclusion

This chapter reviewed some literature on IWRM and discussed the complexity and ambiguity of the concept. It has been established that IWRM exists in three dimensions: as a normative concept that contains tools and prescriptions for implementation; as an international discourse that carries symbolic weight and serves as a nucleus for the emerging global water governance policies; and as a practical concept that is being implemented on the ground at the national and local levels. The research questions opened up the discussion of IWRM's hegemony (being the only dominant discourse that compels actors to take IWRM's virtues for granted), the global-national travel of policy IWRM ideas, and the importance of national-level policy contexts for the analysis of such travel. The subject has, therefore, set a basis for the discussion of the three other research themes, to be explored in the upcoming chapters. The history of IWRM has been reviewed and 3 research questions have been formulated to guide the research process. The following chapter discusses the theoretical and methodological frame of reference and offers solutions to the problem of conceptualizing and studying the hegemony and policy translation of IWRM.

3. The Theoretical and Methodological Frame of Reference

If you would be a real seeker of the truth, it is necessary that at least once in your life you doubt, as far as possible, all things. (Rene Descartes)

Introduction

Arguably, social theory is preoccupied with three main issues of social power: economic relations, ideologies, and the patterns of political domination (Callinicos 1999: p.1). This thesis draws on ideologies, economic and political studies in order to explain the process of IWRM global domination and policy translation. Empirical findings are interpreted and inquiries focused within a theoretical framework. This method also explicates on the relations between the various concepts and research themes compounding the thesis.

This research is *exploratory*, whereby, according to Perry (1994), a set of questions identified in the literature review becomes the focus of data collection and analysis. A Theoretical Framework is especially essential to guiding research that contains multiple case studies and provides the necessary focus for data collection by formulating certain propositions in advance (Taylor and Bogdan 1984; Yin 2003). It provides a blueprint for the study in order to suggest "a story about why acts, events, structure, and thoughts occur" (Sutton and Staw 1995 cited in Miner 2007: p4; Miner 2007). The "parent theories" (Perry 2002) serve as a starting point for the journey to build a theoretical framework specially tailored to this study (Page 2000). After the parent theories are presented, the study propositions are developed. In addition to the theoretical framework, this chapter introduces the research design of the study and presents the rationale and justification behind it. The ontology of this research and the appropriate methods are hosted within the qualitative research tradition, according to which the specific data collection, analysis and interpretation techniques are discussed below. Thus, section 3.1 discusses the parent theories; section 3.2 – the theoretical framework for this study and the propositions guiding the research; and section 3.3 – the methodology, presenting the methods and research design. A summary finalizes the chapter and links it to Part II of the thesis, which elaborates on the presented empirical material.

3.1 Parent Theories

Three main "parent theories" (Perry 2002) have been selected to conceptualize and study the travel of IWRM ideas from an international level to the national one: *Policy Translation, New Institutionalism, and Discursive Hegemony (the neo-Gramscian approach).* These theories complement each other to provide a framework for the study and do not synthesize into one single theory. Below, I discuss each of them separately.

3.1.1 Policy Translation

There are several theories and policy models which attempt to conceptualize the process of travel of ideas. Such are, among others, *policy transfer, policy diffusion, lesson-drawing, institutional isomorphism,* and *policy translation*. For the purposes of this study, the *policy translation* model has been chosen. However, before discussing this particular school of thought, schools beyond the above list are briefly visited in addition.

The literature gives various labels to the process of travel of ideas: "imitation, emulation and innovation" (Westney 1987); "institutional transplantation" (DeJong *et al.* 2002); "lesson drawing" (Robertson 1991; Rose 1993a, 1993b); "policy learning" (Bennett and Howlett 1992); "institutional transfer" (Jacoby 2001) or "policy transfer" (Dolowitz and Marsh 1996; Evans and Davies 1999; Dolowitz and Marsh 2000; Stone 2000b, 2000a, 2001, 2004). Although there are fine nuances in each of the approaches, the issues they address are virtually the same. They

> refer to the process by which knowledge of policies, administrative arrangements, institutions and ideas in one political system (past or present) is used in the development of policies, administrative arrangements, institutions and ideas in another political system (Dolowitz and Marsh 2000: p1).

In addition, Wescoat (2005) distinguishes four approaches to studying the process of "transferring lessons to the West"[7] regarding water management: comparative water law, diffusion of water policy innovations, social learning and social movements, and legal transplants.

7 In that context, the American West

- The Policy Transfer school

The policy transfer school places an emphasis on understanding the *process* by which policies and practices move between jurisdictions, as well as on *transfer agents* and transnational networks (Stone 2000a, 2001, 2004). It also studies the origins of policies and the role of policy-oriented knowledge in agenda-setting and policy formulation (Hulme 2006a). On the weak side of this model lies a difficulty to explain the policy continuity and short-term pragmatism in the cases of non-transfer (James and Lodge 2003). According to James and Lodge (2003), this school also fails to distinguish between policy transfer and any other form of policy change. Overall, the policy transfer school has been helpful in generating ideas for this thesis. However, it has a significant shortcoming in that it presumes that ideas transition somewhat mechanically without getting notably modified in the process. Although some authors of the policy transfer tradition put an emphasis on the issues of "soft transfer" of norms, rather than policy tools, and on non-state and transnational actors, rather than states (Stone 2004), the mainstream literature on policy transfer focuses on the "hard policies." Therefore, the policy translation school has been selected as a framework for this study and not as a critique of policy transfer literature, which has been explored in an effort to incorporate the ideas of learning and institutions (Stone 2001; Stryuk 2002; Stone 2004).

- The Policy Diffusion school

Policy diffusion literature presumes that the travel of ideas is an outcome of structural forces, such as industrialization, globalization and regionalization, rather than the freedom of agents as the policy transfer school would have us believe (Kern *et al.* 2001; Tews 2002; Busch *et al.* 2005; Tews 2005; Brinks and Coppedge 2006). As opposed to the policy transfer school, policy diffusion focuses on chronological and geographical patterns in policy adoption (i.e. variables which distinguish adopters from non-adopters, the source of diffusion, and the role of networks). The literature on policy diffusion is usually based on large quantitative studies. One of the weaknesses of policy diffusion is that it focuses on broad historical, spatial and socio-economic causes, and neglects the political dynamics involved in each of the cases.

- The Lesson-drawing school

Literature of the lesson-drawing school (Rose 1993a, 1993b, 2001, 2004) focuses on understanding the conditions under which policies or practices operate in exporter jurisdictions. It additionally questions whether and how to create proper conditions for hosting jurisdictions. Lesson-drawing includes: 1) duplicating policy programmes; 2) adapting them in the domestic context; 3) making hybrids by merging programmes from two different sources into one; 4) making syntheses by combining the elements of three or more programmes; and 5) being inspired (Rose 1993b). It is clear that lesson-drawing is a deliberate exercise that involves research and learning. The literature places an emphasis on cognition and the redefinition of interests on the basis of new knowledge that affects the fundamental ideas and beliefs behind a policy. Therefore, this school takes a positivistic approach to knowledge and policies.

- The Institutional Isomorphism school

In an attempt to explain the drive of organizations to become homogenous in an organizational field, DiMaggio and Powell (1983) present three sources of institutional isomorphic change: mimetic, coercive and normative. Mimetic isomorphism suggests that organizations, governments or individuals often mimic their experiences elsewhere when faced with an uncertainty in making decisions. There is, in fact, a political advantage in claiming that one is imitating, rather than creating:

> The designer, if seen as such, will unavoidably come under the suspicion of trying to impose his particular interest or normative point of view upon the broader community, and that suspicion alone, unjustified though it may be in some cases, may invalidate the recognition and respect of the new institution (Radaelli 2000: p.28).

Thus, mimicking another's solution can be more politically acceptable than designing a new one. In both cases, the goal is to achieve legitimacy. Normative isomorphism suggests that professionals, their associations and the mechanisms of formal education, socialization and recruitment produce a common cognitive base and a shared legitimization of occupational autonomy, which makes organizational structures similar to one another. Coercive isomorphism uses coercion in order to adapt a certain policy innovation. It can also be a subtle institutional push for compliance with certain practices.

- The Policy Translation school

This is the main theoretical approach of this study. The translation school is different from the transfer or diffusion schools. According to Latour (1986), translation presupposes that

> (t)he spread in time and space of anything – claims, orders, artefacts, goods – is in the hands of people; each of these people may act in many different ways, letting the token drop, or modifying it, or deflecting it, or betraying it, or adding to it, or appropriating it (Latour 1986: p.267)

The policy translation school has been preferred to other schools mainly because it accommodates the issues of power and the modification of ideas and policies as they travel. The Actor-Network Theory of Latour and Callon (1981) drew attention to the translation of ideas in organizational studies. The concept of *translation* is very attractive because of its breadth of possibility to look at several issues simultaneously through the same lens: "it comprises what exists and what is created; the relationship between humans and ideas, ideas and objects, and humans and objects – all needed in order to understand what in shorthand we call 'organizational change'" (Czarniawska and Sevon 1996: p.24). Putting an emphasis on the domain of translation, Fadeeva (2004) has argued that ideas are reinterpreted mostly at the local level:

> The process of translation starts in a local space where ideas are discovered. Ideas might be either discovered locally or come from the global space and be reinterpreted locally. Then in the process of re-interpretation or translation, the ideas receive new meanings through the process of local sense-making. The ideas may later transcend the local space and be disseminated to global arena. Some of the fashionable ideas become institutionalized (Fadeeva 2004: p177).

This discussion suggests that the domain in which *translation*, or "re-discovery," happens is crucial as it is a place where various policy factors come together to produce the final version of the idea-object, i.e. the *arteface* in Latour's conception (Latour 1986). Fadeeva (2004: p178) also argued that policy translation is especially relevant to studying the spread of sustainability, because the process of networking in translating ideas of sustainable development is very complex, iterative and the "ideas falling into the range of SD[8] are frequently not subject to straightforward interpretations." This stands true for IWRM as well.

8 SD stands for "sustainable development."

Having originated from the Science and Technology Studies, the concept of translation presents interesting insights for policy studies. It is well-suited to capture the iterative and non-linear process of interaction between national policy factors and international discourse. Czarniawska and Joerges (1996) were cited in Fadeeva (2004) to define *policy translation* as follows:

> Broad institutional rules and practices are not simply applied but, to some extent, are modified, reformulated, reshaped, redefined, and in general terms, *translated*, every time they are taken up by organizations or individuals…Even the term "translation," that describes the process of movement of ideas, implied not simply the process of diffusion but of active modification of the initial idea by an actor, often to the extent that the actively re-interpreted idea hardly resembles the initial one (Fadeeva 2004: p177).

On the positive side of this school is also its ability to illuminate the interplay between ideas, power and networks. An important element of the *policy translation school* is its stand on the role of *power*, which is viewed primarily in terms of so-called "associations" of human and non-human actors. By transferring and translating knowledge and ideas within and between networks, human actors gain power and legitimacy (Fadeeva 2004). While the idea of power is essential in this research, the *policy translation school* does not fully guide it but rather provides a convenient conceptualization.

The discussion below refines the concept of policy translation for the purposes of operationalizing it in this research. The first refining touch is to introduce the distinction between "deep" and "shallow" translation and the way to distinguish between the two (asking "what"). The second "touch" is to present a model for explaining the drivers and the process of translation (asking "why"). The third "touch" is to formulate a model that predicts, describes and explains the process of translation (answering "how"). These three "touches," along with the empirical application of the models, form the contribution of this research to the field of policy translation and policy change in general.

- "Touch One": Deep and Shallow Policy Translation

It is important to distinguish between "rhetoric," i.e. the use of certain language forms in speech, and "deep" policy translation, which presumes substantial change at the policy level and on the ground, as mentioned in Chapter 2. Investigations of local-level change are conspicuously absent from discussions of international-national linkages in the few available case studies of IWRM

policy translation (Conca 2006). Huitema and Meijerink (2007) did not appeal to the local level either when discussing the so-called "*water transitions.*" Nevertheless, the four indicators they provided to determine whether there is a fundamental policy transition are deemed important and suitable for the investigation of the *depth of policy translation.* These criteria examine changes in 1) policy documentation (plans, policies, programmers); 2) legislation; 3) organizational set-up; and 4) procedures for policy-making (such as Strategic Environmental Assessment, or Regulatory Impact Assessment). According to Huitema and Meijerink (2007), a deep policy transition occurs if all four indicators reflect the change. These four criteria are taken as the basis for examining the depth of *policy translation*. This study adds a fifth criterion: the investigation of local-level *change on the ground*. Where possible in empirical case studies, the fifth criterion has been attended to. In this way, a system is devised that would allow the distinction between deep policy translation and the rhetoric of its adoption (shallow translation).

- "Touch Two": Explaining IWRM Policy Translation

Once the process of policy translation is documented on the basis of a national-level investigation, and possibly a brief local-level examination, it is important to explain *why* translation occurred in a certain way. An explanation of drivers and important conditions must be formulated in accordance with the theory of policy translation and broader theories of policy change. The empirical research inquiry has been structured around six drivers of *policy translation*. The drivers below provide a rough guide to the discussion in each case study and the thesis overall.

Box 3.1*:* Guiding ideas on possible drivers of the IWRM policy translation process

- agency factors (strong leaders and policy entrepreneurs)
- institutional theory (legitimacy and prestige, e.g. better acceptance abroad or within the country);
- ideas, discourses and attached to them symbols and power;
- resource-dependency, material and non-material resources;
- national policy factors;
- international discourse and knowledge;

These drivers are derived from the policy studies and new institutionalism literature, as well as various models that put an emphasis on one or another driver/factor of policy change. Six groups

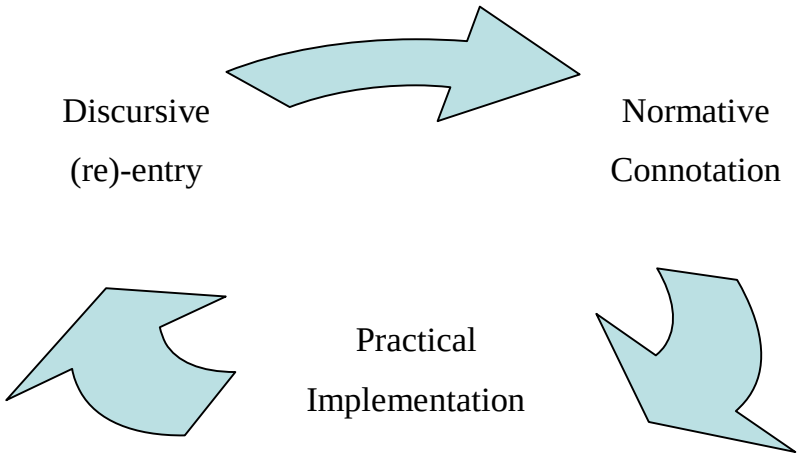
of factors are used to help explain and interpret the policy translation process, then constitute a theoretical proposition that is to be refined and illustrated in the examples of the three case studies of this research. The New Institutionalism literature is the main source of these 6 factor groups, as discussed below.

- "Touch Three": Three stages of Policy Translaton

As argued in Chapter 2, IWRM can exist in three different dimensions. The first dimension is "normative": this type of concepts usually specifies the standards of behaviour, introduce a moral or obligatory dimension and typically lack the ability to require compliance. Molle (2008) uses the term "nirvana concept" to refer to such concepts: they strengthen certain storylines (i.e. simple, causal, and explanatory beliefs) and legitimize specific blueprints or models for both policies and development interventions. Such concepts are "warmly persuasive" (Williams 1976, cited in Molle 2008), nice-sounding, sanitized and endowed with "almost unimpeachable moral authority" (Cornwall and Brock 2005). On the other hand, IWRM has become a discursive framework for international water policy. Discursively speaking, IWRM is hegemonic, and no hard choices are required from the national-level policy actors who decide to adopt IWRM. The discourse produces the "effects of truth," or the normative force, which assigns a system of rewards and punishments for the adoption of the language and action surrounding IWRM. Organizations succumb to institutional and normative pressures and start utilizing the concept in practice, whereby IWRM takes the third form— of a practical concept. These three forms can also be seen as three stages of the single policy translation process, which starts with a discursive entry of IWRM innovations, and the change in the language of the policy debate towards the principles of integration, co-ordination, participation and suchlike. As the debate progresses and discursive change takes place, the concept gains the normative connotation and power and becomes appealing in the policy system. The question "what," which has been discussed at the discursive entry stage, now transforms into the question "how" at the normative connotation stage. Once the means to achieve IWRM policy innovations are decided upon and their implementation starts, the policy enters a stage of practical change. The results from the implementation of innovation are then interpreted at the national level and supplied back to the discourse to support or challenge the normative connotation of the concept. The cycle is thus renewed and self-sustained. "(I)deas are turned into things, then things into ideas, then things into

ideas again, transferred from their time and place of origin and materialized again elsewhere" (Fadeeva 2004: p178). A model of policy translation has been developed to assists in the conceptualization of the cycle of discursive, normative and practical change towards the institutionalization of a policy concept, in our case, IWRM.

Figure 3.1 The cycle of Discursive, Normative and Practical Stages in Policy Translation



Source: own compilation

While this model gives heuristic value to the policy translation process, what is more important to understand is what drives this process of transformation. Unpacking the "black box" of this process will constitute one of the main priorities of the empirical investigation in this thesis.

3.1.2 New Institutionalism

If Policy Translation provides a practical model for the travel of policy ideas that is easy to operationalize and deploy, New Institutionalism presents a framework for explaining this process. The tradition within which policy translation operates falls along the lines of new institutionalism, and there is a good synergy between the two. Following the social constructivist views of Berger and Luckmann (1966), institutional theorists at the time argued that organizations must consider not only their technical, but also their "institutional," environment: the regulative, normative, and cultural-cognitive features that define the "social fitness" of organizations (Scott 2004). These scholars drew attention to organizational attributes, such as schemes, lists, plans and scripts that perform an important, independent role in shaping organizational behaviour and structure (Scott 2004).

The six groups of drivers presented in Box 3.1 are derived from a broad reading of the new institutional literature of various streams. When discussing policy change, institutional literature underlines the importance of such issues as path-dependency, legitimacy, prestige and social acceptance in decision-making. This literature is better-suited to explaining policy continuity, rather than change, but it is nevertheless helpful to understanding the direction and dynamism of the change. It has been noted, however, that "institutional theory overemphasizes the conformance within institutional" fields, and the Scandinavian institutionalists have gone further to allow some agency in their analysis (Fadeeva 2004: p.177). Agency is especially important as one of the driving forces of policy translation. Scott (2003: p888) has referred to them as "intermediaries": "the agents who do not create but transmit and market information." These intermediaries have been termed "strategic brokers," "interlocuters," "border crossers," "transactors," or "cultural brokers," "policy transfer agents." As their role is increasingly recognized in water policy change and IWRM, specific case studies explicating their role are very few (Lendvai and Stubbs 2009). Thus, the standard for the agency-structure divide in the social sciences is present in institutional theory, and therefore this thesis will include both factors as guiding ideas for empirical data collection and interpretation in the case studies.

Another important issue that institutionalists have addressed is the role of ideas, discourses and material interests in policy change.

> (I)nstitutionalist scholars like John Campbell, Peter Hall, and Margaret Weir have systematically studied the role of ideas in policymaking, paving the way towards more rigorous study of ideational processes in institutional analysis (Beland 2005: p.36).

> Ideational factors do not discount the importance of material and structural forces, but they fill an important gap in the literature by giving some additional substance to the concept of resources, at the same time as they make explicit the new preferences and interests of actors seeking institutional change (Harty 2005: p.66).

Ideas in this thesis are studied in the context of discourses. While the concepts of discourse and hegemony are discussed in the next subsection, I would like to assert that there are studies which suggest that organizations and individuals act strategically in order to respond to or predict changes. Oliver (1991) has discussed the "strategic responses" of organization and typified five general strategies: acquiescence, compromise, avoidance, defiance and manipulation. Thus, there

are two more guiding ideas included in Box 3.1: the role and power of ideas and discourses, and the role of material interests and resource-dependency. Finally, owing to the international dimension of this study, it is important to ask to what extent an IWRM policy change at the national level is pre-determined and explained by the national policy factors, as opposed to the international ones. Thus, two more ideas are added to Box 3.1: the national versus the international policy factors and their role in national-level policy change.

3.1.3 Discourse Theory and Hegemony

Ideas of discourse and hegemony are central to this thesis. The work of Gramsci on the dominance of one class over another through the means of discursive hegemony was appropriated to the International Relations discipline in the early 1990s in order to explain inter-state relations (Newell and Levy 2005). Fairclough (1992: p92) defines the hegemonic struggle as "a broad front which includes the institutions of civil society, with possible unevenness between different levels and domains."

A Neo-Gramscian perspective on discourse emphasizes the notion of *hegemony* and focuses on the description and explanation of how some discourses acquire hegemony over other discourses. That is, it embodies domination across economic, ideological, cultural and political domains of society (Fischer and Forester 2003). The hegemony of discourses, as Gramsci originally defined it, is an equilibrium that always remains partial and temporary. In order to construct and maintain a hegemonic equilibrium, it is necessary to build alliances and integrate, rather than dominate, subordinate classes to win their consent. For Gramsci, hegemony brings about

> not only a unison of economic and political aims, but also intellectual and moral unity, posing all the questions around which the struggle rages not on a corporate but on a 'universal' plane, and thus creating the hegemony of a fundamental social group over a series of subordinate groups. It is true that the State is seen as the organ of one particular group, destined to create favourable conditions for the latter's maximum expansion… In other words, the dominant group is co-ordinated concretely with the general interests of the subordinate groups, and the life of the State is conceived of as a continuous process of formation and superseding of unstable equilibria (on the juridical plane) between the interests of the fundamental group and those of the subordinate groups -- equilibria in which the interests of the dominant group prevail, but only up to a certain point, i.e. stopping short of narrowly corporate economic interest (Gramsci 1971: p.182).

The concept of hegemony as Gramsci has formulated it has been taken up in international studies in order to explain the processes of domination of certain states over others. This has some

relevance to the processes of IWRM policy spread, although a later conceptualization of hegemony as applied to discourse is more applicable.

> Hegemony is a structure of values and understandings about the nature of order that permeates a whole system of states and non-state entities. In a hegemonic order these values and understandings are relatively stable and unquestioned. They appear to most actors as the natural order. Such a structure of meanings is underpinned by a structure of power, in which most probably one state is dominant but that state's dominance is not sufficient to create hegemony. Hegemony derives from the dominant social strata of the dominant states in so far as these ways of doing and thinking have acquired the acquiescence of the dominant social strata of other states (Cox 1993: p.42).

Hegemony is the most sophisticated and durable form of power (Zeitoun 2008). It is both stable and unstable as it is based on the positionality of actors that change over time. Civil society is a very important concept in Gramsci's thought, because it represents both an extension of the state through which the elite dominates other groups and the arena of discursive contestation.

> Hegemonic stability is rooted in the institutions of civil society, such as the church, academia, and the media, which play a central role in ideological reproduction, providing legitimacy through the assertion of moral and intellectual leadership and the projection of a particular set of interests as the general interest. Civil society, in Gramsci's views, has a dual existence. As the ideological arena in which hegemony is secured, it represents part of the "extended state," complementing the coercive potential of state agencies…However, the relative autonomy of civil society from economic structures and from state authority turns the ideological realm into a key situation of political contestation. (Newell and Levy 2005: p.50)

Often, hegemony is used as a synonym of power or "empire". As Warner (2008) rightly noticed, hegemony is the domination of one social group (or discourse) over others in the conditions of formal equality, whereas an "empire" means domination through the formalized unequal position of power. Moreover, the key mechanism of hegemony lies in the persuasion of the dominated in the "naturalness" of the order in which they are subverted. Or, as Machiavelli put it "even a ruthless ruler needs to ensure that the ruled believe his rule is justified" (Zeitoun 2008: p.33).

> What is this thing called hegemony? Is it a euphemism for "empire" or does it describe the role of a primus inter pares, a country that leads its allies but does not rule subject peoples? And what are the motives of a hegemon? Does it exert power beyond its borders for its own self-interested purposes? Or is it engaged altruistically in the provision of international public goods? (Zeitoun 2008: p.30)

The neo-Gramscian reading of hegemony unravels the mechanism of hegemony formation and operation. Through a combination of ideological means and material concessions, hegemonic politics emphasize the constant struggle around the points of greatest instability among groups that are trying to build, sustain or block alliances (Fischer and Forester 2003). The work of Gramsci on dominance of one class over another through the means of discursive hegemony was appropriated in the International Relations discipline in the early 1990s to explain inter-state relations (Newell and Levy 2005). Fairclough (1992: p92) explains the hegemonic struggle as "a broad front which includes the institutions of civil society, with possible unevenness between different levels and domains." In neo-Gramscian terms, discursive practices, the production, distribution and consumption (interpretation) of texts, is a facet of the hegemonic struggle which contributes in varying degrees to the reproduction or transformation of discourses and existing social and power relations. Newell and Levy (2005) and Newell (2008) have suggested that, within a neo-Gramscian perspective, actors engage across three pillars of hegemony in their struggle. On the *material level*, there are various rewards and punishments for compliance to the order of hegemony. On a *discursive level*, the frames of seeing reality are provided and sustained. And on an *organizational level*, coalitions between actors are built. These ideas can be relevant to IWRM discourse as well.

According to Laclau (1985), "for a discourse to become hegemonic it needs to dominate the field in which it was formed by blocking the flow of differences in the meanings, and setting itself up as the centre of interpretative process." A policy arena is never mono-discursive (Gramsci 1971; Laclau and Mouffe 1985; Fairclough 1992; Fischer and Forester 2003), and the primary way for hegemonic discourses to sustain power is through the terms and concepts which they introduce and shape (Fischer and Forester 2003). When attempting to unravel the hegemony of the IWRM discursive community, the neo-Gramscian ideas are helpful. These ideas suggest that by creating a unified discourse, IWRM has co-opted existing and sensitive conflicts (e.g. public versus private ownership and management of water, local versus global action, centralized versus decentralized styles of governance, river basin management or other units of administration, the roles and responsibilities of water users). Being an amalgamation of those ideas, some of which are conflicting, there is no consensus in IWRM discourse as the GWP would want us to believe. IWRM, then, is more of a compromised "sanctioned discourse" in the making (Allan 2003).

Sanctioned discourse is defined as a "prevailing dominant opinion and views which have been legitimated by the discursive and political elite" (Jägerskog 2002). In Allan's (2003: p.2) conception of a "sanctioned discourse,"

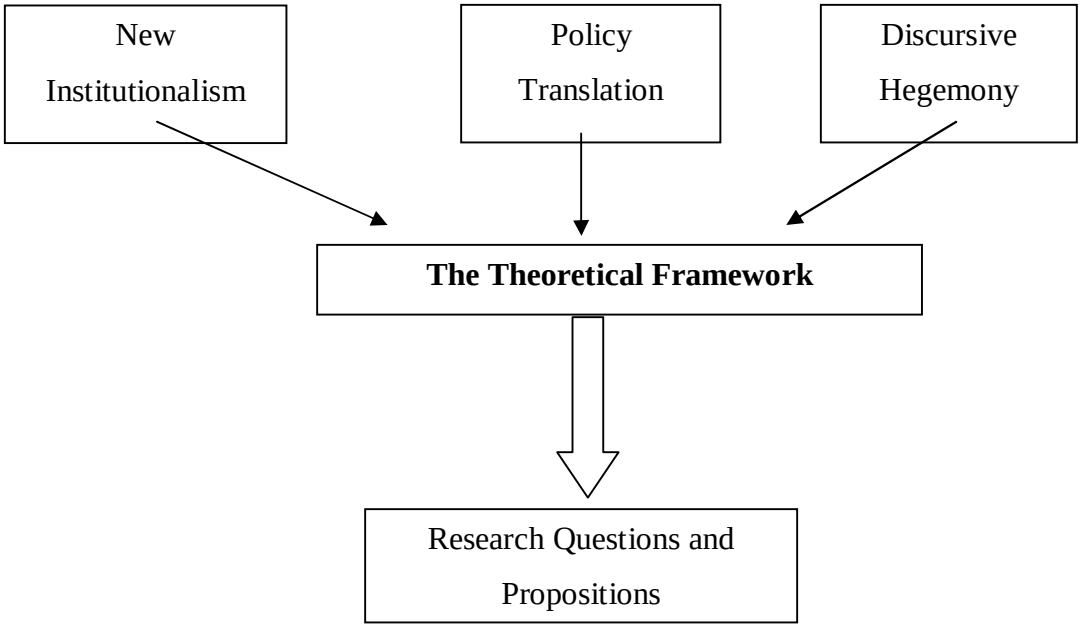
> (p)olicy debates bring about hegemonic convergence, a concept, which is similar to that of a sanctioned discourse…. All policy-making discourses are partial and made by coalitions, and reflect those who can best construct and deliver the most persuasive arguments... Policy is made by agents and policy entrepreneurs, operating in complex local discourses, usually at the national level, rather than in generic discourses informed by principles developed in an international arena.

To sum up, three parent theories were selected and discussed in this section. *Policy translation* is the main concept that captures the focus of this research: an iterative, non-linear and complex process of policy change with regard to IWRM policy innovations that involves interactions between national and international policy domains. A related framework provided by the theory of *diffusion of policy innovations* is used to structure the research inquiry around the three groups of factors: *characteristics of IWRM policy innovations, national contextual factors, and international factors.* Institutional theory contributes to understanding the policy behaviour of actors at the national level. Institutionalist approaches, in general, introduce an important organizing dimension to the study. The third theory of discourse and hegemony assists in unravelling the hegemony of IWRM. Policy translation is viewed as a process through which the three pillars of hegemony are established and maintained: discursive, material and organizational domination. Thus, policy translation operates in unison with hegemony. Notably, this research is informed by these three theories, but it does not seek to produce a methodological synthesis.

3.2 The Combined Theoretical Framework

The three parent theories outlined above help to illuminate the distinct aspects of the complex phenomenon of international-national interplay in IWRM policy innovations. Figure 3.1 presents the three theories compounding the theoretical framework of this study.

Figure 3.2 The Combined Theoretical Framework



The concepts and models introduced in this section will assist in collecting and interpreting the empirical data. There are several storylines emerging from these models which are not, strictly speaking, hypotheses but rather organizing elements for data collection. The first storyline addresses the question of how IWRM discourse translates from the international level to the national one (Question 3) and offers 2 propositions. In attempting to explain the process of policy translation and asking why the process happens in a particular way, propositions 1 to 3 acquire the following formulation:

Proposition 1: Through the three pillars of hegemony in neo-Gramscian terms, as discussed earlier.

Proposition 2: Through the three stages of policy translation.

Proposition 3: The translation of IWRM policy from the international to the national policy level is influenced by the drivers and factors listed in Box 3.1.

To sum up, this section described the theoretical framework of the thesis, presenting in three "parent theories": the hegemony, policy translation and new institutionalism. The hegemony is deemed to operate through the process of policy translation and new institutionalism in order to explain the way this process happens. Analytical concepts introduced in the section provide the

means to operationalizing the framework and studying the process of translation in the empirical cases. Policy propositions were derived from conceptual and analytical frameworks in order to guide this research. An important contribution of this research is its advancement of the theory of policy translation and the empirical testing of the new ideas. The next section looks at the issues of methodology, methods and research design employed in this thesis.

3.3 Methodology

According to Perry (2002), selecting one major methodology is a wise decision for a Ph.D. thesis. *Qualitative research* has been chosen as the governing methodology of this study. Hence a phenomenological perspective provides the general methodological framework. As Taylor and Bogdan (1984) put it, "qualitative research is a craft. Qualitative methods have not been as refined and standardized as other research approaches. As a result, the researcher is a craftsperson. The qualitative social scientist is encouraged to be his/her own methodologist (Mills 1959). There are guidelines to be followed, but never rules." In this thesis, a mixture of methods has been creatively assembled and applied by the author.

This research takes a phenomenological perspective, which is based on the view of human behaviour as dependent on how people define the world around them. Thus, a phenomenologist attempts to see things from other people's point of view (Taylor and Bogdan 1984). In the case of this dissertation, views on IWRM at the national level will be compared with those at the international, regional and local levels. The differences in reading and understanding IWRM at the national and local levels will also be analyzed.

Perry (2002) suggests that a researcher's self-description is helpful to understanding the possible impact of his/her appearance and background on informants. In the period of this research (2005-2009), the researcher described himself as a Caucasian (white), Azerbaijani, mid-twenties, middle class, non-smoking, unmarried, male Ph.D. student. The student status (and associated submissive behaviour), age and nationality (it is believed that being Azeri was advantageous for the research conducted in Turkey and Kazakhstan) all contributed to this research. Affiliation with the Central European University and University of Oxford, both well-known academic and research institutions, is also believed to have been very helpful in accessing information and informants. Below, I elaborate on the research design (section 3.3.1) and research methods used

in this thesis (section 3.3.2). A very important section of this chapter describes how the data is interpreted and how certain derivations and conclusions are obtained.

3.3.1 Research Design

The work is exploratory and interpretative with some theoretical contribution. The case studies have been strategically selected and can be justified on a number of grounds. The following decisions were made with regard to the mork's research design and boundaries:

Scope-related decisions and Limitations

1. It was decided to focus on national-level policy making. Governments still play a key role in the policy translation process (Evans 2001, 2004b; Evans and McComb 2004), and the process of *translation* primarily happens at the national level.
2. It was decided to use the term (and approach) "policy translation," rather than policy transfer. Discourse is never transferred immutably as a piece of technology or "material," but it is rather "*appropriated*" and translated into the realities of the recipient media. According to Molinga *et al.* (2006), "ideas only become 'real' when groups of people 'buy in', and make them part of concrete water resources governance and management practices."
3. The focus of this thesis will not be on the fact of the effectiveness of IWRM per se. Although the presence of IWRM will be examined briefly (in order to distinguish between "translation" and "rhetoric"),[9] this study attempts to understand *how* and *why* policy translation takes place, identify the roles of the different players in the translation process, and understand how deeply this process runs.
4. Grounded theory generation is not attempted in this thesis, and no ambition of building a theory of policy translation is pursued.
5. This work examines *policy translation* from the international to the national and local levels only. Owing to restrictions in resources and time for research, it does not explore the feedback from the local to the national and international levels.

9 This point is also innovative, because previous attempts to analyze the international-national interplay, as in Conca (2006) and Young (2002), have not looked at the local level in order to find out whether national policies have had any impact on the ground. This research, therefore, looks beyond the studies previously listed.

Multiple Comparative Case Study approach

The case-study mode of research is well-suited for the purpose of this study. The arguments developed in theoretical part of the thesis demand to be tested and illustrated on the ground to gain understanding of how well they stand for being accurate. Furthermore, the multiple case study approach helps to illuminate the importance of the studies' varying contexts. The multiple case study approach was chosen for this study after the pilot study in Turkey. According to Yin (2003), the multiple case study approach should be favored over single-case studies for several reasons. First, it is possible to directly replicate the results of the study, and second, the differing contexts of multiple cases plays out in the comparison and thereby significant enrichment of the study (Silverman 1993). In an *exploratory case study*, which is the one selected for this research, statements should be made on a) what is to be explored; b) the purpose of exploration; and c) the criteria according to which the exploration will be deemed successful. Multiple cases should be used as multiple experiments. Under these circumstances, the mode of generalization is "analytical replication," whereby a previously developed theory is used as a template by which to compare the empirical results of the case study. Rival theories should also be attended to in order to enhance understanding of a given phenomenon.

The Pilot Case Study

Before deciding on the multiple case study research design, a pilot study of IWRM translation in Southeastern Anatolia Project (Turkey) was carried out in March 2007 with the support of the Ph.D. travel grant secured by the Central European University. During this pilot study, the author spent three weeks as an intern in the Department of International Relations, the GAP Regional Development Administration in Ankara. Apart from being an intern, a number of relevant stakeholders who are represented in Ankara were contacted and interviewed. After the internship, a short 3 days' trip was taken to the GAP region (Şanlıurfa), where the author conducted a "rapid assessment" of the local perspective. The pilot case study also included participation in the conference on "River Basin Management" in Antalya (21 – 24 March 2007). Contact with future interviewees was established.

During the selection of case studies, first a pilot study was made in the GAP region of Turkey. As a result, the author decided to focus on the national level of this county. Having realized the importance of the national-level context, the author selected two other contrasting settings for the study, namely, England and Kazakhstan. The alternative would have been to explore a larger number of cases in scarcer detail, or a single case study of the GAP region of Turkey. The final three-case design was favored, because it offered the benefits of a multiple case study approach and a comparative study without compromising the level of detail of any of the cases, or their exploratory and illustrative value.

Justification of the selection of the three cases

The three cases were selected with the aim to compare and contrast the different national-level policy conditions: a developed formalized policy setting; a setting of a developing country where democracy and modernization processes take place; and the setting of a country in transition, where the strong systemic institutions from the previous regime are being replaced by the new socio-economic system. In order to broaden the study to IWRM, it was decided to focus on different sectors or projects within the countries, so that in England, the issue in focus was flood management, in Turkey it was a regional development project, and in Kazakhstan – a national water management plan. What unites these projects is their common ambition to achieve *integrated management*. Furthermore, it occupies a prominent position on the political agenda of each country and thus facilitates policy translation from abroad. The GAP project was selected as a case study because of its claim of *sustainable human development* and its strong link with the international community and IWRM discourse, which suggested the presence of policy translation in the case. Also, while little research has been done to analyze the degree of international influences on the GAP project, it has acquired great resonance and publicity in recent years. The fact that the author speaks Turkish and is acquainted with the cultural settings of the region also contributed to the decision to conduct research there. Kazakhstan was chosen because of the setting of an emerging market economy and an active engagement of international actors with IWRM planning (the UNDP and the CAREC). The focus of the study was on IWRM planning at the national level with a focus on the priority uses of water. The author's knowledge of Russian also contributed to the decision. Lastly, England presented a case for contrast, in

which the transfer of IWRM policy was less obvious but still present in somewhat concealed form. The specific project on Integrated Urban Drainage, its planning and implementation at the national level have been studied to examine the extent to which the planning system and its operation in England have been influenced by international factors. Thus, the thesis includes three contrasting case studies in accordance with theoretical and analytical models presented earlier in the chapter.

3.3.2 Methods for Data Collection and Analysis

Desk Study and Archival Research, Conferences

The desk study and archival research were conducted as an examination of the history and intellectual foundations of IWRM with regard to its *policy translation*. Consultations with leading academics in the field were carried out by presenting research design and preliminary findings of the pilot study at international academic conferences on River Basin Management (Antalya, March 2007), Environmental History and Policy (Amsterdam, June 2007), Environmental History of Water (Tampere, June 2007), NeWater Adaptive and Integrated Water Resources Management (CAIWA, Basel, November 2007), and the Human Welfare Conference (Green College, Oxford, May 2008). For theoretical and historical research the work with secondary literature sources and document analysis was carried out. For case study research, the case study protocol and the array of methods explicated in Yin (2003) were used. Interviews of various types, such as face-to-face, in-depth, semi-structured and over telephone, were conducted. Data collection will proceed with the analysis of published texts and archival documents that are available from public libraries and electronic databases, access to which was ensured during this research. The data analysis will proceed with the use of *critical content analysis* of that literature.

- IWRM Policy Translation in England

Data collection was conducted between January and November 2008. Both primary and secondary sources of data were used. Documents, semi-structured interviews with key policy-makers, written opinions of other important actors and materials from two conferences on the topic represent the main items in the database. Further sources of data used were: government documents (e.g. Defra, ODPM, DCLG, EA); independent reports (e.g. Coulthard *et al.* 2007; Pitt

2007; Pitt 2008); journal articles and academic books on spatial planning, flooding, water and related issues (e.g. Zaugg 2004; Kidd and Shaw 2007; Nadin 2007b; Howes 2008); consultancy reports (e.g. CIRIA, FRHC, Halcrow, MWH); parliament papers and reviews (e.g. House of Commons 2008a; House of Commons (EFRA) 2008b); legislation (e.g. Water Industry Act 2001, PPSs and PPGs); reports by International Organizations (e.g. APFM 2006a, 2006b, 2006c, 2007;); CIWEM Conference/Seminar materials (2006, 2008a, 2008b); Email communication with key policy-makers.

Semi-structured interviews

Face-to-face and telephone interviews were conducted with key policy-makers in England. A total of 10 interviews were conducted, including 6 interviews with the Environment Agency staff and 4 interviews with the Defra staff. The number of interviews was satisfactory, seeing as the information provided by the informants was growing repetitious. The interviews lasted from anything up to 2 hours in length, were digitally recorded or noted (3 noted and 7 recorded and transcribed) but will not be made available for public scrutiny. This owes to research ethics, as expressed in Chapter 3, and many of the interviewees were senior public officials who would be easily identifiable from the context. Besides, anonymity was offered to the interviewees because it felt like the appropriate way to encourage deeper insights. The data obtained from the interviews is used to inform the arguments developed in response to this study's research questions. Direct quotes are made in the text only when the respondents' anonymity can be assured.

Conferences and Seminars

The author participated in the CIWEM Rivers and Coastal Groups seminar on "Integrated Urban Drainage" (17-18 April 2008, Wakefield) with financial support from Green College, University of Oxford. Important presentations were recorded and contacts made. The second conference was the CIWEM "Surface Water Management Conference" (23 October, 2008, London), where the author's participation was supported by the Central European University. This conference was attended by most key players in surface water management and produced a rigorous and informative debate. Full digital recordings of the conference were made, transcribed and used to inform the arguments of this thesis. Delegate notes and PowerPoint presentations of the speakers

complemented the database. In addition, materials from the CIWEM 2006 Conference on Integrated Urban Drainage, obtained from the Internet, were used.

The collected data was coded according to 8 codes: 1) IWRM interpretation; 2) leaders in policy change; 3) organizational culture; 4) levels of governance; 5) capacity of actors; 6) relevance of experiences from abroad; 7) ideas, discourses and symbols; 8) policy innovations. The interview proforma is presented in Annex 3.1. Changes to the proforma were made in order to individualize each interview, but the main themes remained the same across all ten sessions. Section 2 of the report will introduce three levels of policy change in Flood Management in England. Section 3 discusses IWRM interpretation, policy innovations, and the drivers for change. Finally Section 4 summarizes the discussion and draws conclusions.

- IWRM Policy Translation in Kazakhstan

Data collection was conducted in August 2008 during the internship at the UNDP IWRM project office in Almaty, Kazakhstan. Both primary and secondary sources of data were used. Documents, semi-structured interviews with key policy-makers, written opinions of other important actors, and materials from the IWRM project office have been collected, classified, coded and analyzed. The extreme weather conditions of 40-43 C in August 2008, along with limited financial resources, contributed to the decision not to travel in Kazakhstan and limit research to the collection and study of project documentation, expert interviews with those available in Almaty and telephone calls to Astana. As the office of the Balkhash-Alakol BWA and the "Kazgirpovodkhoz" are both in Almaty, along with many national experts, the decision was justified, although it is acknowledged here that deeper understanding could have been obtained if Astana and the general locale had been visited. This is perhaps the biggest limitation of this study. Other sources of data used were: government documents (e.g. CWR, Ministry of the Environment, the Prime-Minister's Office); NGO Publications (Regional Environmental Centre, International Commission on Water Co-ordination; MGIMO etc.); International Organizations and consultants' reports (ADB, EU, UNDP, GIWA) ; UNDP IWRM project-related documentation (from expert reports to correspondences with the government regarding the national IWRM plan; minutes of the meetings); legislation (e.g. Water Code and the Government Decrees); journal articles and academic books on spatial planning, flooding, water and related

issues {Genina, 2007; O'Hara, 2008; (Ryabtsev 2007a, 2007b); Zimina, 2003; Allan, 2007}; newspaper articles ("Oko," "Gazeta.kz," "Megapolis"); e-mail communication with key policy-makers.

Semi-structured interviews

Face-to-face and telephone interviews were conducted with key policy-makers in Kazakhstan. A total 10 of interviews included 6 interviews in person and 4 by telephone. Officials and experts at the CWR, CAREC, UNDP-IWRM, Kazgiprovodkhoz, independent experts (including a former minister of water management and a former head of the CWR), NGOs, the BWA (Balkhash-Alakol) were interviewed. I did not contact the media, the Ministry of the Environment, the Ministry of Industry, the Ministry of Agriculture, the WB and the ADB, regional and local players, or water users. However, the project office provided documents with written opinions and comments from representatives of the groups not interviewed, and this information was used to fill in the gap. In order to ensure that informants felt comfortable during the interview, anonymity was offered. The interviews lasted anything up to 2 hours in length, were digitally recorded and noted, but the transcripts will not be made available for public scrutiny. Direct quotes are made in the text only when the respondents' anonymity can be assured.

Data Analysis

The collected data was coded according to 8 codes: 1) IWRM interpretation; 2) leaders in policy change; 3) organizational culture; 4) levels of governance; 5) capacity of actors; 6) relevance of experiences from abroad; 7) ideas, discourses and symbols; 8) policy innovations. This coding system is consistent with other case studies. The interview proforma is presented in Annex 1. Changes to the proforma were made in order to individualize each interview, but the main themes remained the same throughout all the interviews.

- IWRM Policy Translation in GAP, Turkey

The primary data collection was conducted in two stages. At the first pilot stage in March 2007, the author conducted a three-week internship at the GAP-RDA in Ankara, followed by a three-day rapid assessment field-trip to the Sanliurfa Regional Office and participation in the high-

profile "River Basin Management" International Congress organized by the State Hydraulic Works (Turkey) and the World Water Council (WWC) in Antalya on 21-24 March 2007[10]. The data collected during the pilot study was then analyzed and presented at the departmental workshop of three international conferences in Finland, the Netherlands and Switzerland in 2007. Following recommendations and feedback from participants and fellow academics, a more targeted field work was conducted in August and September 2008, when two weeks were devoted to interviews and participant observations at the GAP-RDA Ankara Office, and two weeks to a visit to the region, interviews with governmental and non-governmental stakeholders in Sanliurfa and site-visits to the *Harran Plain*. In spite of a great wealth of collected primary data with 29 interviews, 13 noted informal chats and a journal of field-notes, the study draws extensively from published sources, conference papers, dissertations, articles and reports. The number of published sources used in this case came close to 200 in EndNote X1.

There are several important limitations to this case study. For example, non-governmental and international organizations were not accessed during research trips, and interviews with state officials only were conducted. More time in the field could have provided further insights. However, research was limited in time and resources. In order to compensate, available reports and written opinions of those not interviewed, including NGOs and academics, have been broadly used. The collected documents included: government documents, reports and assessments (e.g. SPO, GAP RDA, DSI); non-governmental publications (e.g. USIAD 2007, USIAD 2008 etc.); international organizations and consultancy reports (e.g. UNDP, Halcrow Ltd); legislation (e.g. water laws, the laws on establishment of organizations); journal articles and academic books on spatial planning, flooding, water and related issues (e.g. Unver 2001b; Harris 2002; Unver 2002b; Unver 2002a; Harris 2005a; Ertugal 2006; Unver 2006; Harris 2008b); newspaper articles (e.g. Financial Times, New York Times); e-mail communication with key policy-makers; Water User Associations' reports; conference proceedings (International Congress on River Basin Management 2007, The TMMOB Water Policy I 2006; The TMMOB Water Policy II 2008); internal memos of the GAP-RDA and the SPO.

10 The conference was the first big event organized by the State Hydraulic Works (DSI) in preparation for the World Water Forum in Istanbul, March 2009. Attended by the Prime-Minister Erdogan, all ministers in charge of water and land resources management, as well as the international business and academic elite, the conference provided an important source of data, information and inspiration for this case study.

Semi-structured interviews

A total of 29 personal interviews were conducted in 2007 and 2008 with key policy-makers. In addition, several informal conversations were noted as important sources of information, amounting to 13 notes (chats), as well as a field-notes journal, which kept the author's participant observations. The interviews lasted from anything up to 2 hours in length, were digitally recorded and noted.

Data Analysis

The collected data was coded by 8 codes: 1) IWRM interpretation; 2) leaders in policy change; 3) organizational culture; 4) levels of governance; 5) capacity of actors; 6) relevance of experiences from abroad; 7) ideas, discourses and symbols; 8) policy innovations. This coding system is consistent with other case studies but was amplified by new emerging codes as deemed relevant. The interview questionnaire is presented in Annexes 3.1 – 3.3. The data was analyzed with the assistance of the Atlas 5.0 software, which coded and systematized the data to then be manually analyzed in the process of conceptual mapping and exposition.

Table 3.1 Research Questions / Methods Matrix

Research Question	Case study	Interviews	Discourse Analysis	Content/Critical Analysis	Participant Observations	Non-participant observations
Intellectual Foundations and history of IWRM with regards to its translation			X	X		
Actors, incentives, processes and drivers of IWRM policy translation			X	X		
Policy translation in England, Turkey and Kazakhstan	X	X	X	x	X	X

Source: own compilation

To sum up, this section has discussed the methodology, research design and methods used in this research. The choice to conduct a multiple case study research was justified, as was the selection of particular countries and projects to study. The qualitative research methods were deployed,

provided not only the methodological, but also the ontological, framework for this study. The process of data collection and analysis in each of the cases was discussed in detail.

Summary

Chapter 3 provided an important milestone in setting a theoretical, analytical and methodological framework for this study. Three "parent theories" have been selected, to be combined in an effort to capture, understand and explain the process of IWRM policy translation from the international policy arena to the national one and the hegemony of IWRM internationally. Thus, the concepts of Neo-Gramscian hegemony and discourse, the notion of policy translation as explicated in the Science and Technology Studies, and the theory of New Institutionalism have been discussed, and their selection justified for the purposes of the study. Sophisticated qualitative research methodology and methods have been deployed, including such methods as interviews, multiple case study, desk research, participant and non-participant observations, discourse analysis, critical content analysis, conference participation and other methods. Chapters 1-3 introduced the research area and the rationale for this particular research, and reviewed published (as well as some non-published) academic literature on IWRM hegemony and policy translation. It has also provided the theoretical and methodological frame of reference for the research, which will proceed to the empirical investigation stage in Chapters 4 through 6. That part will include multiple case studies, in which the theoretical and analytical models discussed in Chapters 1-3 will be analyzed based on the collected data.

4. IWRM Policy Translation in England Flood Management

*"**Sir Humphrey (to Bernard)**: If people in the government start talking about it, do you know what will happen?...In the end they will start thinking about it! They will realize the problems, the flaws in the reasoning, the nation will get worried…and agitation, questioning, criticism…change!"*

("Yes Minister," the British TV Series)

Introduction

This chapter begins with a quote from the Margaret Thatcher's favourite satirical TV series. "Yes Minister" provides an excellent depiction of the fear of change in the British civil service, as would be the case in any other country. The epigraph also tells us that *discursive change* takes place as the language of debate shifts, and only then can *normative change* happen with the realization of the problems, the flaws in policy and the necessity for change. This somewhat rough indication is in agreement with the 3-staged model of the cycle of policy translation presented in Chapter 3 (Figure 3.1) of this thesis, which is empirically illustrated in this chapter and the two case studies that follow.

This chapter studies the process of change in England's urban flood management policy in an attempt to identify and analyze IWRM translation. It addresses the following primary issues: 1) the form in which IWRM exists in England (if at all), and its interpretations; 2) the role that international IWRM ideas play in the policy change process in flood risk management in England; and 3) the importance of various drivers in the policy change process. Research has shown that, in spite of the country's great financial and human capacity, institutional fragmentation and insufficient public participation still persist in the flood risk management policies of England. Policy change is infused with ideas and knowledge from abroad, but their implementation happens through the process of national-level filtering and discussion in national forums for policy deliberation, triggered by the regulatory impact assessment that are the practices of the civil service. Thus, learning is conducted for evidence-based policy change and policies are rather translated to the national context as opposed to being mechanistically transferred. Three stages of policy translation can be observed in the emergence of Making Space for Water, a new government flood risk management strategy, and the incremental nature of the change is underlined. Whereas the role of policy translation agents is crucial in driving the cycle of change, it is path-dependency and the interaction of institutions which form the direction of

change and catalysts, such as unexpected flood events, do not shift the policy direction but rather mobilize support for change in a direction that has already been established in a prior debate. This is what happens in a policy context where a continuous debate takes place. As will become apparent from the other two cases, this is not necessarily the case in all countries. The relevance of policy ideas from abroad is debated owing to the power struggle and political dynamics at the national level, which, however, is to be expected, as theorists of policy transfer/translation, such as Stone (2004) and Wescoat (2005), have indicated. It has been found that transnational policy consultants and government-sponsored studies of think-tanks are among the main sources of ideas introduced from abroad, as well as legislation and regulation by the EU.

4.1 Institutional Fragmentation and the Current State of IWRM in Flood Management in England

The drought of 2004-2006 in the South and South East of the country, the floods of 1998, 2000, 2002, 2005 and, most remarkably, the summer of 2007 all contributed to public anxiety and put the government under increasing pressure to re-consider its water-related policies (Defra 2008c, 2008d). According to the "Future Water" strategy for England, droughts are likely to be more common in the future due to the climate change (Defra 2008). By 2080, rainfall in the summer is expected to be half as much, and there will be 30% more in the winter. On the other hand, according to the "Foresight Report," nearly 4 million people and English properties valued at over GBP 200 billion are currently at the risk of flooding.

The summer 2007 floods in England showed that the country was not prepared for extreme weather conditions and flooding. A striking fact from the 2007 floods was that the water in two thirds of flooded areas came not from rivers or the coast but from surface water that had not been drained properly. Underground drains and sewers were completely overwhelmed (Pitt 2007). This issue brought up the importance of surface water[11] (stormwater) management, which requires a truly cross-sectoral and integrated approach, as well as public engagement (Pitt 2008). The causes of flooding were in urbanization and development in the floodplains, increase in the paved surfaces in urban areas, poor registry and maintenance of underground sewerage and no clear

11 This is a run-off which originates from rainfalls and needs to be drained to a nearest water body in a proper manner. Surface water management (SWM) is a complex water management subject that has seen several shifts in management methods over the last two hundred years.

responsibility for any agency dealing with surface water in England (Pitt 2007; e.g. House of Commons 2008a; e.g. House of Commons (EFRA) 2008b). Because of these inadequacies, the very implementation of the EU Water Framework Directive and the Floods Directive (European Union 2007) are in danger, and the government has decided to take serious action towards improving the situation.

Figure 4.1 The Flood Warning Signs, Oxford, UK in winter 2008

Source: author

The causes of poor flood management lie in the fragmentation of water and land management policies and practices. In other words, the key problem is insufficient progress towards IWRM. The current state of water resources policy in England is characterised as "increasingly complex and fragmented" (Kidd and Shaw 2007: p320), where "an important opportunity to build upon the strength of the spatial planning system …is being overlooked" (p315). Yet, another source claimed that "(t)ypically, UK planning documents and policies have not accounted sufficiently for the importance of water within developments, although this is now changing with the RSSs[12],

12 Regional Spatial Strategies

LDFs[13], the SEA[14] and WFD[15] directives" (DTI-GWM 2006: p94). This criticism is also present in a recent report by the House of Commons Select Committee on the Environment, Food and Rural Affairs:

> Some other European countries have a more "integrated" approach to water management, whereby several water-related issues (water demand and supply, flooding, droughts, pollution caused by runoff, and so on) are considered together. In Germany and France there has been widespread diffusion and adoption of sustainable water practices since the 1980s, including common use of sustainable drainage systems which often have multifunctional benefits related to flood risk, water supply and water quality…the UK is still lagging behind other European countries in some regards (House of Commons 2008a: p.10; House of Commons (EFRA) 2008b: p10).

The complex structure of water resources management in England is shown in Table 4.1, which presents the main organizations and their functions with regard to surface water management.

Figure 4.2 Flood Scene on the Cherwell River, Oxford, UK in winter 2008

Source: author

13 Local Development Frameworks

14 The EC Strategic Environmental Assessment

15 The EU Water Framework Directive

Figure 4.2 The Cherwell River Flooded, Oxford, UK in winter 2008

Source: author

Table 4.1 Actors and their responsibilities in Surface Water Management in England

Name	Function	Authority
Local Authority Drainage Departments	Drainage, flood alleviation and watercourse regulation of water bodies apart from designated main rivers	Land Drainage Act 1991, Public Health Act 1961
Water Companies	Responsibility for providing and maintaining a public sewerage system, which includes sewers carrying surface water away from impermeable areas occupied by buildings.	Water Industry Act 1991 (amended) and 1999. Regulated by Ofwat
The Environment Agency	Responsible for maintaining, operating and improving flood defences. Provides 24-hour Flood Warning service. Provides emergency response. Has a supervisory duty by consent over LAs and Internal Drainage Boards. Report on Government High Level Targets to Defra.	Environment Act 1995
Defra	Makes policy and strategy	Reports directly to Ministers
Internal Drainage Boards	Supervisory duty over flood defence and drainage for low-lying land in England and Wales. Ordinary Watercourses in low-lying land.	Land Drainage Act 1991, 1994
Highways Authority	Keeps the roads (except trunk ones) free from flooding	Highways Act 1980, Land Drainage Act 1991 and 1994.

Source: Adapted from (Balmforth et al. 2006: p11)

- ***The IWRM baseline in England***

This section briefly examines the surface water management policy context in England against the three criteria of IWRM: horizontal and vertical integration, and public participation.

Horizontal integration

The governmental departments and agencies in Table 4.1 need to be closely co-ordinated for the "joined-up government" ideals of the New Labour[16]. However, there are different "ethos" in each of the organizations, which presents a serious barrier to co-operation and might prevent organizations from talking in the "same language."

> Why would they (Defra and DCLG) work together closely? They work in different offices, they have different culture, different identity, different processes, aims, ministers, political interest at the ministerial level. Of course, there should be cooperation and the government is saying we need to do joined-up government, but when you talk to DCLG, they seem to have different way of thinking about things. Why would they work together? It seems to be so naïve to achieve… Work with the DCLG, they seemed to be very keen to defend LA from any new burdens, they were very keen to say that anything you do must be fully funded (Defra I01 2008).

These are the realities of IWRM in action, and the Pitt review has noted this by recommending to set-up a special Cabinet Committee on flooding, precisely to better co-ordinate policies at the horizontal and vertical levels. As Pitt (2008) put it in his review,

> Defra cannot tackle this job (flood risk management) alone. The issues considered in this report are many and varied, and go far beyond Defra's direct interests. In order to support Defra, there should be a new Cabinet Committee to deal with flooding, much as we have already for terrorism and pandemic influenza... A Cabinet Committee will provide clear ministerial leadership across government, and ensure that other important departments such as DCLG, the Cabinet Office and BERR play their part. As a Cabinet Committee, its business will take precedence within government over other matters. It is a step which raises the status of flooding to bring it alongside the other most serious risks we face (Pitt 2008: p.404).

Vertical integration

With regard to multi-level governance and vertical integration in IWRM, the New Labour Government is implementing a new policy. The general direction of travel is to separate the policy-making function from delivery and implementation functions in the government. The

16 "New Labour" is a brand name for the Labour Party since 1994. it was later used in the draft manifesto of 1996, called "New Labour, New Life For Britain".

efficiency of this strategy will become more apparent in time, but according to strategy theorists (Mintzberg 1994), it is better when planners and those in charge of implementation cooperate and co-ordinate their activities.

> Defra has been changing dramatically…Defra's FM has already contracted from 60-70 maybe staff down to about 20-30. The general trend I believe throughout the government of separation of policy-making and implementation. Defra used to be more involved in implementation. Now there is a much bigger separation between the two. It used to be primarily staffed by engineers, you'd have regional engineers who supervised the design of flood infrastructure and projects and had the 'critical overview'. Those functions are gone (Defra I01 2008).

> Defra used to have a number of staff around the country in 4 or 5 offices but they closed in 2006, and so they were not able to do it, and this is the government's kind of direction of travel for policy departments like Defra, core policy departments dealing with policy only and not delivery and the government was looking for someone else to do it (EA I04 2008).

Interestingly, however, whilst Defra is now focusing on policy matters only, with no engineering function remaining, the Environment Agency (a mere environmental regulator in the past) is taking more of a strategic planning role, and some of the functions that have been eliminated in Defra are likely to be taken up by the Environment Agency (Defra I01 2008). Also, there is a widely discussed and approved new role for the EA as a "strategic overview" actor to co-ordinate efforts on Flood Risk Management of all sources at the national level. The EA has the outcome targets that it needs to deliver set by Defra.

Public Participation

There are inadequacies in public participation in the process of urban flood management in the UK, so that according to Balmforth (2008),

> [The] public is often completely disengaged in what we are doing with the drainage. If you compare, and what you find in other countries is that there is a lot more of engagement of the public… I think we are still at our infancy in our public engagement. It is terribly condescending and patronizing. Public is not the body that will respond to the flooding, but is a resource, an asset, they have local knowledge, ideas, they want to be engaged, they have a role to play (Balmforth 2008).

This was further confirmed by the Pitt review, which underlined the importance of action regarding this issue: "key decisions must still sit with government itself, but local responders and the private sector need influence and to be more closely involved. Submissions to the Review

from key external organisations, notably local government and critical infrastructure operators, have made this clear" (Pitt 2008: p.405). To sum up, a decentralised form of IWRM is envisaged in England in spite of the various attempts to suggest the possible adoption of a centralised model. Vertical relations between public agencies is changing with Defra retaining mostly policy-making functions and the EA taking up more of a strategic planning and regulation role with regard to flooding. Public participation is seen as inadequate in SWM at the moment, and an action plan is needed to improve the situation. However, the problem is partly rooted in the very complex administrative system of England that is difficult for the public to understand and penetrate without much time and resources devoted specifically for the purpose.

- ***Policy Change towards IWRM in Flood Management in England***

Understanding of the need for IWRM emerged as early as 1993, when Tunstall *et al.* (1993) pointed out the lack of integration in the water management policies of England and Wales (Chatterton and Green 1999a):

> A key problem for environmental protection in England and Wales is that the National Rivers Authority[17] is expected to manage and regulate water issues (catchment planning, flood defence etc.) without any statutory control of land use planning or land use change. *Yet, many water management problems are in effect land use management problems, be they the prevention of non-point source pollution or the prevention of the growth of flood damage potential in land areas liable to flooding* (cited in Chatterton and Green 1999a: p79; my emphasis).

IWRM and the need to associate water resources with land management has been an issue in the debate at least since 1993, and only since 2004 have visible changes started to occur in the direction of IWRM and the provision for united government and joined policies, making for more successful public engagement. This is a subtle indication that policy changes need to mature, and time is a necessary, though not a sufficient, component of the process.

In response to the growing recognition of problems in flood management, and following a lengthy debate about the need for reform in the spatial planning system of England, the Office of Deputy-Prime Minister (ODPM) – since 2006 the Department of Communities and Local Government (DCLG) – has released the Planning and Compensation Act (Office of the Deputy Prime Minister 2004a). This Act introduced a regional dimension to planning and set the ground

17 The Environment Agency since 1996

for several Planning Policy Guidelines (PPGs) and Planning Policy Statements (PPSs) that followed (Kidd and Shaw 2007). A new spatial planning system has implications for water resources in general, including the field of flood risk management. Integrated management and planning of water resources is a cross-cutting theme of "Future Water," which is laying out the government's vision for the sector until 2030[18] (Defra 2008d). Table 4.2 provides a selection of main policy events with regard to surface water management since the creation of the Environment Agency in 1996.

Table 4.2 The History of Policy Evolution in Flood Management Reform in England

Year	Policy event
1996	Creation of the Environment Agency on the basis of NRA
1998	Easter Flood Events
1998	Bye and Horner Report
2000, 2002, 2005, 2007	Floods increase public attention to this issue
2004	Foresight Report
2004	Planning and Compulsory Purchase Act 2004
2005	First Government Response to Making Space for Water
2006	Scoping Study for Integrated Urban Drainage Pilots
December 2006	Planning Policy Statement 25: Strategic Flood Risk Assessments introduced
January 2007	15 Integrated Urban Drainage Pilots are set up
February 2007	Development and Flood Risk: A practice guide companion to PPS25
October 2007	Informal exchange of opinions about IUD Policy Options by Defra
November 2007	The EC Floods Directive
November 2007	Open Board Paper by the EA on Surface Water Management
December 2007	Pitt Review Interim report
February 2008	Consultation on Surface Water Management
February 2008	"Future Water" Strategy
April 2008	CIWEM IUD Seminar
May 2008	House of Commons "Flooding report"
June 2008	New Floods and Water Bill announced
June 2008	Pitt Review Final report is released
June 2008	IUD Pilot Summary Report
July 2008	Defra/EA Conference in Manchester
July 2008	Government's response to the "Flooding" report
September 2008	Summary responses to "SWM Consultation" published by Defra
October 2008	CIWEM Conference on the Future of Surface Water Management

18 The strategy demands more attention to strategic reporting of the Water Companies18 and the Environment Agency (EA), as well as making sure those plans are open for public scrutiny and consultation.

December 2008	Government's response to Pitt Review Recommendations
December 2008	SWMP Guidelines published by Halcrow/Defra

Source: own compilation

In this wave of change, the government introduced a strategy titled "Making Space for Water" (MSW) (Defra 2004b, 2005), along with some regional-level planning processes, as evidenced in the Environment Agency's (EA) Strategy for flood risk management from 2003/4 to 2007/8 (Environment Agency 2003). The new strategy emphasizes non-engineering protective measures against flooding, more green spaces for inundation and a strengthened resilience to floods. The government has proposed a general approach to living whereby risk is anticipated, rather than fallaciously believing in some imaginary protection from floods.

A shift from the "flood defence" paradigm to the "flood risk management" paradigm has been taking place in England, as shown in Annex 4.1. Flood Risk Management is very much infused by the values of IWRM, as shown in the table above. The paradigm shift manifests itself in the emergence of MSW (Defra 2004b, 2005), the spatial planning reform and new language of discourse. Table 4.3 illustrates the three levels of policy change, all interconnected and providing the background for our utmost interest: surface water management.

Table 4.3 Three Levels of Policy Change in Surface Water Management in England

Level	Direction of change
LEVEL 1 From "Fragmented" to "Joined-up" government and planning	New Labour Priorities in reforming the planning system centered around five principles (since 1997): 1) more timely plan and decision-making processes at the local and national levels; 2) a more inclusive and effective process of participation and consultation with the public; 3) joined-up government and cross-stakeholder co-ordination and integration; 4) evidence-based governance; 5) focus on targets and delivery of outcomes (Nadin 2007a) ;
LEVEL 2 From "Flood Defence" to "Flood Risk Management"	Making Space for Water introduced Flood Risk Management and departed from the Flood Defence paradigm. This is evidenced by a shift from 1) consideration of a single source of flooding to all sources; 2) project-driven to risk-driven activities; 3) more multifunctional benefits from flood defenses – water quality, water supply; 4) wider range of policy options and techniques (non-structural measures); 5) social justice of flood defenses; 6) better incorporation of environment and social consequences of flooding in the decision-making process (Penning-Rowsell *et al.* 2006) ;
LEVEL 3 From "No surface water management" to	"Future Water" strategy and Defra Consultation on Surface Water Management as well as Defra's 15 pilot projects advanced/tested new approaches as follows: 1) introduction of Surface Water Management Plans to be drawn by the Local

"Integrated Urban Drainage"	Authorities (LAs) with key inputs from Water Companies, Highway Authorities, the EA, and other related stakeholders; 2) EA taking a "strategic overview" role of all flooding, including surface flooding, 3) better awareness and engagement of public in preparedness and emergence relief before and during the surface flooding; 4) better application of SUDs[19] to new and old development; 5) legislative change in the pipe with the major "Flooding and Water Bill" in preparation for 2009 (Defra 2008a, 2008b).

Source: own compilation

Level 1 Change: From Fragmented to United Government

New Labour's priorities have been at the centre of change in the administrative life and spatial policy of England since the latter half of the 1990s. New Labour introduced the priorities for united government, i.e. a democratic renewal through engaging communities. It started to shake up departments and policy makers, including the division of the former Ministry of Agriculture, Fisheries and Food (MAFF[20]), which included flood defense (Johnson *et al.* 2005a). Spatial planning came to play a more important role in land use planning and management. In parallel, there were significant changes happening in the planning system with the Planning and Compulsory Purchase Act (2004) and several Planning Policy Guidances and Statements released by the Office of Deputy Prime Minister (ODPM).[21]

Level 2 Change: From "Flood Defence" to "Flood Risk Management" – Making Space for Water

The year 2004 can be rightly called a "watershed" year because, then, some major new legislations were passed, including the Planning and Compulsory Act (Office of the Deputy Prime Minister 2004a), the Planning Policy Statement Nr. 11 (Office of Deputy Prime Minister 2004a), Nr. 23 on Planning and Pollution Control (Office of Deputy Prime Minister 2004b), and a consultation document for the new Making Space for Water (MSW) strategy for flood risk management (Defra 2005). Making Space for Water did not emerge in isolation from the activities of other countries in this field. A number of drivers contributed to the emergence of MSW strategy and these strongly suggest that an examination of international trends and the experiences of other countries can enrich the government's understanding of the policy change process.

19 SUDs stand for sustainable urban drainage – engineering and spatial planning techniques that mimic nature in maximizing infiltration and providing retention bodies to attenuate and store runoff (green roofs, retention ponds etc.)

20 Replaced by Defra in 2001

21 PPS 1, PPS 11, PPS12, PPS 23, PPS 25, (PPG14, PPG20 – these were introduced from before), PPS: Planning and Climate Change, supplement to PPS 1.

Level 3 Change: Surface Water Management

Integrated Urban Drainage is covered by a special project in MSW, for which the government decided to pilot projects starting from 2007. There are two main problems with Surface Water Management: 1) the mechanisms of flooding can be complex, with floodwater originating from a variety of sources and being transmitted via complex flood pathways to impact at a wide range of receptors; and 2) the responsibilities for urban flood risk management fall across a diverse range of stakeholders.[22] In order to determine the direction for the reform of complex and fragmented surface water management, Defra decided to set up 15 pilot projects across the country. These pilot studies aimed to: a) understand the causes of flooding in urban areas; b) test the partnership approach to manage urban drainage; and c) test new modelling techniques. Owing to limited resources and the focus on national-level policy change, the local-level pilot studies have not been attended to in this research. The extent to which they inform national-level policy change remains unknown. However, this has not impacted the main goal of the study, which is to understand the process of policy and knowledge translation from abroad into England in the process of policy change. In other words, the main focus of the study is not policy performance but translation.

4.2 The Pathways and the Process of IWRM Policy Translation

There are numerous sources of outside knowledge that can penetrate the domestic policy context in the UK. During data collection, the author considered the following sources:

Box 4.1 Pathways of Policy Translation in Surface Flood Management in England

1) New approaches to SWM developed and disseminated by International Organizations (e.g. APFM, UNESCO IHP guidelines etc.);
2) Experiences with surface water management in other countries learned by site visits or desk research sponsored by the government;
3) European Union Legislation and Policies (EU Spatial Policy, EU WFD, EU Floods Directive);
4) International (EU) research projects (e.g. SMURF, CRUE, AUDACIOUS);
5) International Conferences and Meetings (e.g. CIWEM, Defra/EA, international conferences);
6) Engineering and Policy Consultants (e.g. CIRIA, Halcrow, MHW, Atkinson etc.), research centres and academics through their work and academic publications (FHRS, Oxford Brookes, University of Leeds).

22 The independent review of the summer 2007 flooding in Hull put it as "in short, no single agency accepts responsibility for any elements outside their terms of reference. This is a recurring theme – one of inadequate consultation, co-operation and unity between the agencies. These practices must end" (Coulthard 2007: p.34).

After the desk research and interviews, the comparative importance of various knowledge and idea sources in policy change became clear. The EC's *Europe 2000* studies of spatial development (CEC 1991) and publication of the *European Spatial Development Perspective* (ESDP) (CEC 1999) have certainly influenced the emergence of Making Space for Water. As Nadin (2007b : p51) has put it, "the European debates do not provide a model for a new approach to planning, but they have infused and penetrated the planning discourse in England and elsewhere." The new spatial planning paradigm in England has clearly sponsored the emergence of Making Space for Water, although the actors and processes of its penetration into the English policy context remain unknown. The emergence of MSW was to some extent indicative of the influence of European legislative requirements, such as the Water Framework Directive (European Union 2000), the Habitats and Birds Directives (European Economic Community 1992), and the Aarhus Convention (United Nations Economic Commission for Europe 1998). Similar shifts in flood management policy have been occurring in the Netherlands, where a policy document named "Room for the river" was published in 1996 by the Ministry of Transport, Public Works and Water Management and the Ministry of Public Housing, Spatial Planning and Environmental Management (Silva *et al.* 2001). In Switzerland, a similar policy called "More Space for Running Water" was worked out in the late 1990s by the Swiss Federal Office for Water and Geology together with the Federal Office for Spatial Development and the Federal Office for Agriculture. Incrementally, a new language of discourse emerged, which, as it appeared elsewhere in Europe, argued that society must "live with floods" (ICE 2001), "prepare for floods" (Office of Deputy Prime Minister 2002), "make space for water" (Defra 2005) and "live with risk" (UN/ISDR 2004)" (Johnson *et al.* 2007b: p377).

International recognition of the principles of Sustainable Development, advanced in 1992 and reconfirmed in 2002, have also played a role in the emergence of MSW. A person who has been in lead of Making Space for Water in Defra said the following about the origins of the strategy:

> I think originally we were looking at the principles of sustainable development and the need to make sure that social and environmental criteria, as well as economic criteria, were properly assessed in our policies. And there was a feeling among some people that the existing flood management policy was very heavily skewed towards the economic criteria …and we decided to review whether or not we were taking sufficient account of social and environmental factors. That was really a drive across Defra to look at sustainable development principles (Defra I08 2008).

Experiences with surface water management in other countries presented a more direct source of external influence on policy formation in England. Two reviews of international experiences in the 1990s laid the background for change in land use planning and flood risk management policies. The first one was commissioned by the National Rivers Authority (Tunstall *et al.* 1993), and the second by the Environment Agency (Chatterton and Green 1999a, 1999b). Both were prepared by the Flood Hazard Research Centre, and looked at the experiences in land use planning and flood management of European countries (France, Germany and others) and the U.S. A set of measures for reform in England were proposed, recommending the following:

Box 4.2 Recommendations from the Flood Hazard Research Centre 1999 reports (Chatterton and Green 1999a, 1999b)

- Develop a national integrated strategy for source control within a framework for surface water management.
- Clarify and resolve legal ambiguities to facilitate comprehensive surface water management and source control.
- Incorporate a surface water management framework within LEAPs, Development Plans and Strategic Plans.
- Integrate high (quantity) and low (quality) flow strategies, within surface water management plans in the context of the Urban Waste Water Planning Directive (EC Directive 91/271/EEC).
- Take into account future development pressures in long-term catchment change projection.
- Consider the effective use of economic incentives particularly "Guided Growth" policies.
- Develop a sustainable environmental strategy for source control.

The report also noted "outstanding legal ambiguities" (Chatterton and Green 1999a: p86) in the surface water management of England and the need for "resources to be provided by the NRA (now the EA) and LAs to give technical advice to developers" to support their SUDs. The report recommended for "water utility companies to be encouraged to participate in the 'partnership' approach with the NRA (now the EA) and other interested bodies" (Chatterton and Green 1999a: p86).

Many recommendations were not acted upon and, in fact, on the basis of that report the perception that the UK is more advanced than other European countries was formed:

> It was clear from this useful exercise that England, and Thames region in particular, were a long way ahead of the other countries participant in most, if not all, areas of land use planning, catchment planning and co-ordination and integration between the two (Howes 2008: p35).

In 2006 the Global Watch Mission Report of the British Water commissioned a study and a trip for a team of UK experts to the U.S. to study "sustainable drainage systems" (DTI-GWM 2006). The team included experts from the EA, a water company, the British Water, consultants and academics. The report advanced interesting propositions based on the comparison with the U.S. system. The report noted that the nature of the UK planning and civil service system is different from that in the U.S. and therefore a number of solutions that worked in the latter may not necessarily work in the former:

> Similar attempts at prosecution of any of the various parties involved in stormwater management in the UK cannot be envisaged, owing to problems of obtaining suitable evidence, the opacity of the services provided and the relative secrecy and complexity of UK governance and institutional systems compared with those in the US (DTI-GWM 2006: p75).

Indeed, in the course of research it was difficult to obtain any account on the process of decision-making and the criteria used by actors to make decisions. The report also underlined the importance of leaders in the policy change process – another central line in the current discussion of SWM reform and the EA assuming the strategic overview role:

> Strong champions are needed in the key stakeholder groups if innovative and more sustainable management of stormwater is to be implemented…In addition to champions, better integration across all stakeholders groups and a stronger commonality of purpose in delivery of innovative stormwater management needs to be in place (DTI-GWM 2006: p77).

Since the summer 2007 floods, the policy reform process has accelerated and a number of independent reviews have been commissioned. These have included the Sir Michael Pitt Review, which reported with interim results in December 2007 and final results in June 2008; the list also includes the House of Commons Select Committee on Environment, Food and Rural Affairs, the EA independent review, the Water UK review and the independent review of floods in Hull. Some of those reports included experiences from abroad in order to inform the policy reform process and situate England in a global context. For example, the Pitt review (2008) has a section on international experiences:

> Since the interim report we have considered how other countries are dealing with the issues addressed by the Review. This has taken a form of a series of visits to the Netherlands, France, Sweden and the US, as well as desk-based research. This international evidence forms an important part of our evidence base (Pitt 2008: p15).

Sir Michael Pitt noted that Climate Change informed many existing flood policies in Sweden, the insurance arrangement of Canada and Germany and land use policies of the Netherlands, which all provided good models for the UK. The House of Commons Select Committee on Environment, Food and Rural Affairs (House of Commons 2008a; House of Commons (EFRA) 2008b) also visited Lyon, France, where there were notable advancements in stormwater management. The recommendations were published and, less than three months later, the government approved most of them, including the strategic overview role of the EA for all kinds of flooding and the leading role of the LAs in planning and managing surface water. When making the argument for LAs to take the lead (House of Commons 2008a; House of Commons (EFRA) 2008b), the committee referenced experiences in France and Germany, as was indicated in the previous section. Another source of external influence is the European Union Legislation and Policies. This would include the EU Water Framework Directive (European Union 2000), the EU Floods Directive , the European Spatial Planning Policy. The EU WFD is commonly seen as an important influence on England's entire system of water planning, including possible linkages between the River Basin Management Plans (required by the WFD) and the Surface Water Management Plans (EA I09 2008, Howes 2008b).

> It (European Union) requires the Environment Agency to prepare 11 River Basin Management Plans for England and Wales by December 2009. By bringing major environmental issues to the forefront of the planning process these River Basin Management Plans will have a significant role in advancing the agenda for sustainable development. Their main role is to engage with the public and primary stakeholders on plans for the management of the water environment within the river basin districts (Howes 2008: p84).

The Directive also mentions the need for Local Authorities, developers and planners to come together in order to reduce flood risk. However, in general the Water Framework Directive regulates water quality and promotes river basin management, rather than managing floods. An interviewee at Defra argued that the needs of the WFD will be incorporated in the Floods and Water Bill. The WFD, according to this source, allows for natural water bodies to be used as drainage ponds, because this is a natural process. Source control measures will have to be

implemented in order to ensure the appropriate quality of runoff. Therefore, there is an issue with the quality of run-off control as far as the WFD is concerned (Defra I03 2008).

A special Floods Directive was released by the European Commission in November 2007. The Environment Agency designated staff to deal with this Directive (plan for its transposition into UK legislation) in December 2007. In the interview with the EA, it became clear that current planning and thinking about the possible impact of the Floods Directive is very premature, but possible implications are formidable. The Flood Directive requires the introduction of flood risk maps (all sources, including surface water) based on the risk approach.

International Research Projects provide another opportunity to learn from other countries. Defra/EA has a joint research programme on flood risk management, and there are several international projects included in this programme. According to Howes (2008b), who worked as a planner for the EA, those projects can be very helpful.

> I was involved in various research projects using European Community funds. It became clear that the leaders in water management were those with high densities of population and consequent pressures on land use i.e. London and South East, the Rundstadt of Belgium and Holland and the Lower Rhine corridor (Howes, 2008b).

However, the common problem here, similarly to the government-sponsored reports on drawing international lessons, causes a divide between researchers, policy-makers and bureaucrats. This divide has persisted for a long time and is difficult to overcome. A senior Defra official was quoted to be discontent with the amount of resources used on research and the consequent marginal feeding of the results into the policy system. Yet another forum for international debate and exchange of opinions and experiences would be international conferences and meetings (e.g. conferences organised by the CIWEM, Defra/EA); the Charted Institution for Water and Environmental Management (CIWEM), for example, frequently organizes events on important issues related to water resources management. These conferences are not academic but are rather intended for practitioners. They tend to attract very limited international participation and mostly provide a forum for national-level actors to debate and discuss their issues. It could be said that international knowledge is more readily accessible when it is more technical and concerns technology and implementation techniques. It is less clear how the international knowledge

obtained from a conference impacts the national-level policy formation and decision-making. Another source drew on personal experience: "I've been to many international conferences, I've learned little of what's been of interest to me…. It seems to me that Britain is a bit ahead of other countries when it comes to the social side of flooding…" (Defra I01 2008). This illustrates a common tendency to perceive England as a leading country in the issue of flood management.

The final sources of international influence are consultants and research centres. Their numbers have increased recently, and consulting groups play the increasingly important role of knowledge brokers in engineering and policy. The 1998 review of the Easter floods, according to Johnson *et al.* (2005), was co-authored by Horner (then a director of an engineering consultancy), a lead author for the Future Flooding Foresight report was then a director of the Halcrow Groups (Edward Evans), and Defra commissioned a scoping study for IUD Pilots, which was led by an expert associated with MWH (Balmforth *et al.* 2006). On the other hand, there is also need for the contributions of research centres, such as the Middlesex University Flood Hazard Research Centre (that conducted the studies of 1993 and 1999 broadly discussed in this chapter) and other universities. What is unique about consultancy groups, however, is that they have gone global since the 1990s and have offices scattered all over the world. Their position of being simultaneously global and national players allows them to make recommendations based on international experiences, which they often do. Balmforth (MWH) referred to experiences with SUDs, source control and public engagement in Japan and the Netherlands (Balmforth 2008). An EA interviewee confirmed that consultants are the main source of knowledge of international experiences, as often they are commissioned to prepare such studies: "we are now having a project on Framework Project for Urban Drainage – the analysis of the experiences with these issues in other countries in order to make a framework for research and development for the next five years. And they have commissioned Montgomery Watson (MWH) for this purpose" (EA I04 2008). During the SWM Conference, Balmforth (2008) drew widely on international experiences:

> We were contrasting the Dutch defence against flooding and the Japanese sort of embrace it. Because there are a number of things with the civil society. A number of threats and flooding is only one of them. They are far more aware of the risks, they sort of embrace them, they have rigorous evacuation procedures…We have three offices in Holland. Because of the historical infrastructure in Holland all of drainage infrastructure is registered and its so much easier (Balmforth 2008).

Balmforth (2008) further drew on experiences in the Netherlands, where much flooding is caused by run-offs and retrofitting of SUDs. There is much to learn from that for England's benefit. In addition to the discussed pathways of policy translation, there is an ongoing dialogue between government officials who speak to each other on an annual basis (EA I07 2008).

Opinions about the relevance of international experiences to policy reform in England are divided. Some interviewees stated that it is important to learn from other countries, while others emphasized the unique context and institutional arrangements in England and that no other country can offer meaningful lessons about policy reform. The informant coded as EA I07 (2008) pointed to the importance of spending resources on learning from the experiences of other countries: "Nobody has the monopoly of knowledge and expertise. If there are areas in Europe that are working well and they have got a solution, it would be foolish not to learn" (EA I07 2008). Examples from abroad were emphasized by Aucott [23] during the CIWEM conference on SWM, where he claimed that there is a need to look abroad for lessons.

On the other hand, some believe that the situation in England is unique and there is specific history and institutional arrangements that make beneficial lesson-drawing challenging. Interviewees Defra I05 (2008), EA I02 (2008), EA I04 (2008), and EA (I06 2008) voiced this concern. To give an example of one of those opinions,

> …the (SWM) issues are mostly specific to this country, and a lot of it goes back to privatization of Water Industry in 1989, and they have been sorted out ideally as they could have been back in 1989. So, you don't clearly see other countries struggling in the same way (EA I02 2008).

There is acceptance among these interviewees that technology and techniques are more easily transferred and it is more reasonable to pay attention to them rather than to institutional lessons. Another recurring theme from the interviews is that the knowledge transfer is flowing in another direction, from England to other countries. This is linked to the perception of England as an advanced country in terms of flood risk management policy. An interview with a senior Defra FM official generated the following statement:

23 Current project manager at Defra responsible for Surface Water Management

> The other thing is that you tend to find that everyone's legal arrangements and organizational set up are specific to the national system and characteristics, could be very, very hard to actually draw much, in a way, lessons from it. You know, hypothetically, we could go to France, let's find out how the organizations produce the river basin management plans, but it might be because of the long tradition of organizational set up in France. By the way, I am only thinking about France just as an example. So, I am a little bit sceptical about the value of going through that sort of analysis, usually because you have to put enormous amount of effort into trying to find the information and still it does not actually tell you anything normally useful, but this is based on my experience, I could be wrong (Defra I05 2008).

The same informant went on to advance the argument about the inappropriateness of lesson-drawing:

> Geographically we are on the island, unlike the mainland Europe, for example, having a preoccupation whether the country's upstream, pollution, or setting too much or too little water. Our preoccupation is managing water geographically in the UK, and therefore, international situations are not important to that…I am not saying we disregard the international factors. We are pre-eminent in applying environmental regulation in Europe, but it is not the main driver, the main driver is that we have population fairly dense, that we get so much rain, we need to manage water we get…But I can't say it had an overriding influence on policy development, there ought to be known that something has a reasonable experience in working, and that the amount which has been used somewhere else is relevant in terms of effectiveness in the UK context (Defra I05 2008).

Against all these opinions, a senior official in the EA argued for the importance of lesson-drawing, which, according to him, mostly depends on political will:

> I think there are issues that would need to be carefully considered. I do not think anything is insurmountable, provided there was a political will to make changes, but urban drainage is a complex area with a number of organizations all involved, and has a very local level within the national context, and clearly the governance organizational issues come to the fore who is responsible for what, who is accountable for, who provides money for, given the difference we have throughout England (EA I07 2008).

Thus, we have different opinions on this subject. Nevertheless, as it will be summarized below, the influence of international knowledge has been formidable in the policy reform debate. It is difficult to draw a direct cause-effect relationship between the statements on international experiences and change that has taken place in England, and it proved difficult to penetrate the decision-making system in England.

To sum up, the opponents of spending resources to learn from other countries backed their position by four arguments: 1) the policy and institutional context in England is unique and determined by history and traditions, and therefore drawing direct lessons from other contexts is difficult, if not impossible; 2) Britain is leading in implementing the European environmental regulation, as well as in terms of research and policy on the institutional and social aspect of flood management, and therefore, lesson-drawing is happening the other way around and other countries are learning from England; 3) the technical issues and techniques are more easily transferred from abroad than are institutional innovations, and therefore the focus should sit on those; and 4) Surface Water Management, being different from river and coastal flooding, is a very localized issue that mostly requires a local response.

Nevertheless, the current policy change in SWM seems to be informed by international experiences, like Pitt's review, the House of Commons Select Committee on Environment Food and Rural Affairs report and the work of consultants and research institutions, who widely based their recommendations on international knowledge. Experiences from countries as diverse as the Netherlands, Japan, Scotland, Wales, USA, Germany, France, Sweden have been discussed as relevant and important, and thus there is reason to believe that the international arena has had a genuine influence on the discourse and policy options in England. A striking finding was that most of the issues discussed today have also been outlined in conceptual form in the EA-sponsored reports of 1993 and 1999 (Chatterton and Green 1999a, 1999b). Thus, international experiences and learning have been a part of the evolving policy change and reform in England, and there are grounds to claim that policy translation has happened. However, the process of policy change has been much more incremental and eclectic, slow and dependent on many domestic factors (discussed in the next subsection), than would be expected in cases of direct policy transfer. Therefore, the term *policy translation* proves to be more appropriate to capture this process.

Based on the collected primary materials, it seems that the most important pathways are the government sponsored site visits and studies of international experiences, the work of international consultants and research centres, and the EU policy and legislation. Consultants and research centres (academics) often remain in the shade, although their international nature puts

them in a special position to draw comparisons across counties and suggest policies that have been successful in other countries. With regard to the EU policy and law, more adjustment will happen as the River Basin Management Plans for the EU Water Framework Directive will be published in 2009 and as the deadline for transposition of the EU Floods Directive will come closer.

As discussed in Chapter 3, policy translation happens incrementally, following the three stages of the cycle (see Figure 3.1). Theorization of the three stages is provided in Chapter 7 based on the comparative results from the three case studies and the theoretical framework of the thesis. Here, I will briefly return to the epigraph of this chapter and discuss the order of change/translation that starts with a discursive shift in language, followed by the normative institutionalization of change until it finally culminates in practical implementation. The discursive change happening through language has obviously taken place in England's flood risk management policies. The emergence of a new language with idiosyncratic terminology and ideas (e.g. "live with floods," "prepare for floods," make space for water," "live with risk" and "more space for running water") signifies a discursive change. Language and the frequency with which words are used in everyday policy discussions determine the way actors think about and construct reality, policy, and how they make decisions. Then the acceptance of certain ideas or discourses, such as the "Making Space for Water" strategy, is indicative of their increasing institutionalization. As Johnson *et al.* (2007: p378) have put it,

> [T]he new FRM ideology has yet to result in any radical "out of the box" thinking even though, as the MSW policy has indicated, the building blocks for such innovation are now in place. This is not because of any lack of desire on the part of the government. It is because policy has only recently moved into the second phase of the FRM change process – one which argues not that society *must* "live with floods" or "make space for water" but debates *how* can society "live with floods" and "make space for water". It is this shift from the policy ideals set out in MSW (Defra 2004 2005a) to a more reality driven implementation and delivery phase of the MSW policy doctrine which is now of concern. Implementing this new flood doctrine brings to the fore questions about how decisions *should* be made and how resources *should* be distributed if the ideology of MSW is to be embraced into day-to-day decisions (Johnson *et al.* 2007b: p.378, emphasis original).

Understanding that MSW must be implemented is indicative of normative change. Then the question "how" signifies the shift from normative to practical change. This shift is perhaps the most challenging thing of all, since decisions have to be made on the allocation of resources and

day-to-day life. Apparently, this shift takes time, and it poses a number of other conditions. The incremental nature of change here gains further confirmation. The practical implementation of the Surface Water Management Plans is yet to happen.

4.3 Drivers of Policy Translation in Surface Flood Management in England

This section examines the various drivers of policy change and policy translation with reference to the criteria assembled in Box 3.1 in Chapter 3.

- *The role of individuals (agents of translation)*

The role of individuals in the surface flood management policy change is crucial at all three levels. Several individuals have acted as agents of policy change. In 1998, following the Easter floods, the Environment Agency invited Peter Bye, a former Local Authority chief executive, and Michael Horner, the director of an engineering consultancy, to conduct an independent review of the Environment Agency performance. The report was pro-people and based on the views of flood victims. "This personal commitment to flood victims and social issues, on the part of Peter Bye, was very different to formal processes, and reliance on expert and scientific evidence, that had gone before" (Johnson *et al.* 2005a: p570). The 2007 floods urged the government to commission Sir Michael Pitt to undertake an independent review of floods and recommend an innovative course of action. Interestingly, Sir Michael Pitt also comes from a local government background, and he specially attended to that level in his reports. The Pitt review (Pitt 2008) enjoyed tremendous authority, and the government endorsed almost all of its recommendations. On the other hand, Ms. Sarah Nason from Defra pushed for more environmental and social awareness in her own organization and has been instrumental in championing the MSW policy. However, John Gardiner, author of the Thames 21 plan, was working in the NRA Thames Region at the time, and he developed a flood risk project appraisal scheme. He also planned the Jubilee River, another exemplary project in the UK.

In their arguments for change, all leaders encountered certain reluctance on their colleagues' parts. The professional mindset seems to be the main barrier to overcome when new, out-of-the-box thinking emerges in an organization. According to Howes (2008: p35), who referred to

Gardiner's experience, "the blockages to progress were identified as institutional fragmentation of responsibilities and personal (ignorance, inadequate mid-career training and inertia arising from disinterest). Technical uncertainty, though present, was not a problem." Thus, the personal dimension of policy change should not be underestimated. Personal jealousies, misunderstanding, lack of desire to look broad-mindedly at professional issues is a common reality when policy change is being hammered out. From an extract from Dr. Gardiner's reflections on his experience:

> When our appraisal work was passed to the Design Department, my fellow engineers there tried to undermine what we had done. Mr. Smith[24] in particular tried to ignore the consultative framework that had been in place for 4 years on the Lower Colne Study, and nearly destroyed our public reputation. He had to be replaced by a consultant, Mr. White[25], who understood our work (he had been the consultant's engineer on the 5-year long MWEFAS appraisal) and proceeded to implement all 60 projects without further difficulty (although one of the 'best practicable environmental options' had to be re-appraised in the light of changed circumstances on the ground). So, again, individuals can choose either to support advances or the retard them, and their decision is sometimes based on professional jealousy. *I report this to you to illustrate that progress is not uniform, even within one organization* (Gardiner 2008; my emphasis).

The process of policy change gets even more complicated when there are a number of stakeholders and organizations involved in an issue. Gardiner poses further examples to illustrate how personal motives can stand in the way of effective integrated policies. In fact, this is one of the reasons why England has not had a truly integrated river basin management plan since the 1990s but has rather implemented the catchment flood management plans and Local Environment Agency Plans (LEAPs).

The role of individuals is important; however, civil service culture and the English administrative system seem to be organized in a way as to minimize that role, or at least to conceal it. The decision-making process is not transparent. Decisions seem to roll out of the debate, which in itself is long and involves formal and informal consultations, while bureaucrats are not directly accountable to the public for their decisions. In fact, only politicians are.

- *Civil Service Culture, the decision-making process*

24 The name has been changed to retain the person's anonymity.

25 The name has been changed to retain the person's anonymity.

Johnson *et al.* (2005: p563) has indicated that "contextual factors" include "information, technology and knowledge; institutions and organizations; socio-economic conditions; and political context." In addition, there is certain *civil service culture* in England that must be considered in a discussion of policy change. It seems that the role played by individuals in policy change is getting more "formalized". This feeling arose when I was trying to understand the decision-making process in Defra: how does it happen and who has the final word? It was not clear from the research what the criteria for the final decisions were, nor how they were being distinguished from formal procedure consultations. To support this, Johnson *et al.* (2005) mention in their discussion of four-flood events that the post-flood policy discourse in 2000 was different from the post-flood policy discourses in 1998, 1953 and 1947.

> Unlike the policy changes that emerged following the flood events of 1953 and 1998, (this) was the outcome of a formal government process of policy review and revision. In this, the key actors were the government department with responsibility for planning (Department for the Environment, Transport and Rural Affairs (DETR), and subsequently, the DTLR), the EA acting as a key adviser and MAFF acting in an advisory capacity. (Johnson *et al.* 2005b : p.572)

This is a case of a more "formalized" manner of decision-making, which in Defra (with regard to FRM) is not as straight-forward as it might seem from the official documentation and procedures. The "bounded rationality" principle resurfaces in the arguments of a Defra staff member, who reflects on the considerations a bureaucrat makes when deciding on a policy.

> I've noticed very much how difficult it is to take on board all different perspectives. So, I am sitting in the middle of Defra and there are economists and social scientists, people from the Environment Agency, from different government agencies all trying to get their point of view across, and I can't understand them all because it is too difficult and my brain is too small. Hm…so, there is a lot of *selection* going on, of course. *I select things I understand easily*, because that's less effort. I select things that *I cannot ignore*, because they are from people who could block the policy, for example the Department for DCLG has a veto on our policy, so we had to change it so that they were happy with the policy, because it is two ministers who both have to approve it. *Hm…I'm also of course influenced by the process*. The process is based on an impact assessment, which is largely based on monetary, quantifiable things (Defra I01 2008; my emphases).

The nature of selection is interesting, as the problem, options and policies are very much likely to be structured around three factors: *how easy it is to grasp and incorporate a policy; what is important to the "gate-keeper" who is going to approve or reject the policy; and the evidence-based process.* Another important issue is the extent to which the decisions taken by FRM or

Defra reflect important social and environmental considerations, which are yet another government priority.[26]

> The government is trying to incorporate the environmental and social impacts and quantify them. You're instructed to include all impacts, even if they are not quantifiable, but the emphasis is on the quantifiable. So, in your policy you'd give value to anxiety of people who got flooded, value to environmental benefits. These methods are not very good, are they? I do not think they give much weight. Usually people would not include social benefits in the list of benefits in the quantitative valuation (Defra I01 2008; my emphasis).

The government has developed a Regulatory Impact Assessment and a series of guidelines on how decisions should be made. This, if enforced, could be a substitute for a fully transparent and participatory process not possible in the reality of the complex institutional system of the UK. But even those guidelines do not seem to provide a binding requirement for bureaucrats to make their decisions:

> The guidelines are not very detailed, you simply are said [sic] you have to quantify both costs and benefits, but it's up to a bureaucrat. In theory this process is supposed to drive the policy development. In practice, people would normally know their policy and then do their impact assessment afterwards in order to fit it to the policy they have already come out with. I think it is quite normal (Defra I01 2008).

Another interesting observation about decision-making in Defra is about the timeframe allotted to the process. It was argued by an interviewee in the Environment Agency that normally decisions are evidence-based and science informs policy-related decisions, unless there is urgency, whereby certain individuals must take the risk to make decisions on the basis of incomplete information:

> In an ideal world, in principle, the research should be done in a thorough way before any policies are decided upon, and many decisions are taken in this way. In practice, however, there are lots of drivers and policy decisions that often need to be taken in a short timeframe, and there is not enough of a chance for science and research to inform this process. When it comes to decision making in DEFRA, it is consultative and the project boards are set up with the representatives from various stakeholders participating. The decisions are made on those boards, most often by an executive who is a senior person. (EA I04 2008)

Insights from Defra show that the organization has many different processes of decision-making. Furthermore, decisions are sometimes rushed regardless of the sufficient timeframe allowed for

26 These views are based on a single interview with a Defra insider and might need further validation. Nonetheless, they offer interesting insights.

them. This happens because there are two stages of decision-making: the first is considerate and evidence-based, and the second is urgent and outcome-oriented.

> What happened in this policy development is that the process was very calm and considerate until near the point of publication, when people's minds suddenly focus. And the other departments suddenly focus. Because it is only when you've got something written down they can really look at it, and it's only when the deadline is near they can bother to look at it. So, to me it was very interesting these two phases, there is a considerate evidence-driven phase, which needs to be long, because it's only the process of writing things which forces you to crystallize your ideas, and this is an inevitably long process. And there is an accelerated process, when suddenly there is a deadline, suddenly people are reading it and making quite significant comments on your policy, so lots of change has occurred in that last few weeks or months. (Defra I01 2008)

To sum up, civil service culture poses constraints on the choice of individuals to decide on policy matters. The UK could be characterized by comparative secrecy and technocracy of decision-making, whereby the complex administrative system makes it very difficult for stakeholders and the public to participate in the process of decision-making. The process of consultation presents some opportunities for opinion exchange, but framing the options and presenting the problems is largely done by bureaucrats, who, as has been argued by an interviewee, are not strictly guided by formal procedures. The decision-making process is indeed central to understanding the discussion of policy change. The "bounded rationality" principle, which argues that comprehensive policy analysis and implementation is impossible due to the limited cognitive resources of humans, holds true in the context of complex policy issues and a number of stakeholders in England. This puts pressure on bureaucrats to make choices, which normally happens on the basis of how easy it is to understand the respective policy, and its importance to the minister or party charged with its approval. The process finally takes the form outlined in the regulatory impact assessment. Often, a bureaucrat would know a policy before the impact assessment or even the regulation takes place, yet those are important things to consider in evaluating a decision.

- *The role of the flood events*

This was not included among the factors influencing policy translation, as discussed in Box 3.1 in Chapter 3, but it constitutes one possible contextual factor: namely that floods and natural disasters can have an impact on political agenda and facilitate learning and lesson-drawing from abroad. The primary data gives an interesting account of the origin of the MSW strategy. An

interviewer from the EA argued that, while many important factors played a role, the flood events of 1998, 2000 and 2002 were among the most important and showed that the EA was not prepared to cope with flooding (EA I04[27] 2008). According to this source, the report following the 2002 floods and the Foresight report (Evans *et al.* 2004) resulted in a new strategy for flood risk management within "Making Space for Water" (EA I04 2008). The source went on to explain that "(t)here are many drivers, of course, but the floods put the issue on the public agenda, and on the politicians' agenda accordingly" (EA I04 2008).

This is in line with the hypothesis that flooding events place the issue on the public and political agenda and demand urgent action in the policy arena. However, it is not sufficient for a new, better policy to follow, as argued by Johnson *et al.* (2005). In fact, there is danger in that "in the wake of some disaster relief, and under the pressure of the media effect, the nation may have subsidized some poor decisions and penalized some sound proposals, forgoing opportunities for change" (Wilkins 2000: p84). Change, therefore, takes place incrementally, being only catalyzed by the flooding events:

> I think it (policy change) needs time. You need an on-going relationship, in terms of building trust and none of us hear things told to us for the first time. Unless we are already receptive to a message, we do not hear it. You can't learn something big in one go. You need to learn a little bit this time, and a little bit other time. With repetition, we gradually begin to understand it, and to believe it and trust it (Defra I01 2008).

Thus, the summer floods of 2007 did not make a big difference as the policies were already there and the floods only catalyzed the process. No existing policy really changed. Thus, it takes a new language, a receptive environment and a policy agent to drive policy change.

- *Material Considerations and the role of Ideas in Policy Translation*

It thus seems that MSW emerged solely as a result of the growing importance of environmental and social factors. However, the next statement makes provision for serious economic considerations behind MSW as well.

27 This coding is introduced to ensure the anonymity of informants. Each interviewee is given a code and a number (from I01 to I10) and references are made to the codes when drawing on the interviewees' views. Affiliation is disclosed freely.

> There was far more pressure and calls about flood defence than were before. That might be partly because of the big floods of 2000, and people subsequently wanting defences, and there was far high pressure on the budget for defences, and it became apparent that we will not be able to provide defence everywhere, so we needed a policy where we built more resilience and where flooding was managed, rather than protected against. So, we adopted this thinking about flood risk management rather than flood defence (Defra I08 2008).

Thus, as the public was more concerned about safety and as the costs of flood defense were mounting up, it made more economic sense to implement the holistic management of floods. A similar economically justified argument appears in the discussion of flood policy in the Netherlands (Silva *et al.* 2001). The informant continued: "The other influence on the policy was the Foresight project. The MSW was one of the ways we were responding to the Foresight propositions" (Defra I08, 2008). The Foresight report was based on projections of flooding risks until 2080 (Evans *et al.* 2004) and attempted to quantify the potential economic losses. This evidence-based argument for action further contributed to the economic drive behind the government taking initiative to reduce future flooding risks.

The role of ideas in policy change was discussed in section 4.3, when the pathways of policy translation came into focus. Ideas and discourses on the spatial planning and flood management policies of European countries have influenced the Making Space for Water policy. Thus, foreign ideas and discourse have provided input for the national-level debate in England but have not influenced the country's policy directly. The great capacity for policy deliberation, the multiplicity of actors engaged in the debate and the presence of a multiplicity of forums have all contributed to the informed processing of foreign ideas and discourses. With regard to the national and international policy factors, they were discussed in the same section with a focus on international policy. Access to the national-level decision-making fora has been limited, and therefore the interplay between national and international knowledge in decision-making has not been covered fully. The role of the floods in the acceleration of policy change, however, has been discussed as a national policy factor.

Summary and Conclusions

The current system of water management in England is complex and fragmented and needs reformation. In spite of the calls for reform since the early 1990s, it was only in 2004 that the New Labour government adopted a new planning law and started to implement comprehensive

reform. This chapter dealt with three issues regarding policy translation: 1) the presence and interpretation of IWRM in the policy setting; 2) the role of international experiences and policy translation in England's flood management policy change; and 3) the drivers of this change/translation. Assessment has revealed that Local Authorities are expected to play a greater role in IWRM, as suggested by the Pitt review and earlier by the Bye and Horner report. Major improvements will need to be made in the area of public participation. In terms of multi-level governance, there is a trend in the government to separate policy-making from implementation. With Defra becoming solely a policy maker, the Environment Agency (EA) is getting more of a strategic planning role. Horizontal co-operation between the departments was found inadequate, as reflected by Pitt's recommendation to set up a Cabinet Committee devoted to flooding in order to facilitate such co-operation.

With regard to the policy translation process, there have been two important findings: the first is about the opinions of policy actors about the relevance of external knowledge, and the second is about the pathways of external influence. The relevance is debated, given that the proponents of learning from international experiences state that there are other countries doing better than England in a number of aspects, and there is still a lot to learn. It was noticed, however, that policy leaders may draw attention to foreign examples selectively in order to justify their policy ideas and proposals. Still on the other hand, Pitt and the House of Commons referred to Germany and France when arguing for the opposite— namely, greater involvement of the Local Authorities. Thus, knowledge of what is happening abroad can be used not only strategically, but also tactically, for policy entrepreneurs to champion their arguments in political negotiations.

The opponents of lesson-drawing argued that the policy context in England is too specific to draw lessons from other countries; that the UK is often a leading country in terms of flood risk management research and drawing upon internal knowledge should be a priority; that technical knowledge is more easily transferred than institutional knowledge; and finally that the issue of surface water management is so too context specific (i.e. on the urban landscape) and global lesson-drawing might not be useful. Nevertheless, there is sufficient evidence that external knowledge does matter in policy change, as referrals to experiences in other countries have been made on a number of occasions. This influence, however, is not straight-forward; rather, it is

eclectic, incremental, diffused and happens through the use of multiple agents at multiple times in a discrete fashion. Thus, the term *policy translation* has indeed proven more appropriate to capture this process than the customarily used *policy transfer*.

Regarding the pathways of translation, it was found that the most active ones involve government-sponsored research and the work of consultants and research centres. The influence of EU policy and legislation, obviously, is another strong influence. However, conferences and EU-wide research programmes present pathways of somewhat lesser importance in conveying the influence on the external knowledge. As for the drivers of policy translation, leadership matters and perhaps it is crucial, as exemplified by Michael Pitt, Peter Bye, Sarah Nason and John Gardiner. On the other hand, it was established that institutional constraints pose limits to the freedom of agents, and the direction of policy change is rather predetermined by prior debate and institutional history in the setting. Interesting insights have been explored regarding decision-making in Defra, as well as civil service culture in general. It seems that the administrative system in England minimizes, or at least conceals, the role played by individuals in policy change. Instead, it provides a picture of a highly formalized process with a claim for objectivity. It was interesting to document a remark by one of the informants, stating that it is normal for decisions to be made in Defra before the regulatory impact assessment, which is drawn post-factum instead in order to justify ready-made decisions. Below is a table that summarizes the findings of this chapter.

Table 4.4 Summary of Findings and Conclusions

Research Question	Findings/Conclusions on SWM and FRM
IWRM in the setting	1) Fragmentation is common, there are unclear roles and responsibilities and outdated legal frameworks in water resources management in general and SWM in particular; 2) IWRM that is pursued in England is in a "decentralised" mode, LAs play a crucial role in linking water and land policies and catchment planning is not as strong as desired but is likely to improve with the EU WFD. 3) Horizontal integration is widely regarded as inadequate, a number of proposals were made by Pitt (2008) to improve that. 4) Vertical integration is under change, the EA is assuming a strategic planning role and Defra's role in flood management is decreasing. 5) Public Participation is seen as inadequate by a number of sources including Pitt (2008). This can partly be explained by the civil service culture in England.

Policy translation of external knowledge	6) International experience matters in policy debate, but it is translated rather than transferred. Translation happens in an incremental, diffused manner that gets affected by many domestic factors. 7) The value of drawing from international experiences is debated in the policy setting; 8) The discussion of pathways of translation has indicated that the most effective approaches are government-sponsored policy research and site-visits abroad. The work done by international consultants and research centres is also important, especially recently, as those consultants have gone global and are able to draw lessons from the various countries in which they operate.
Drivers for policy change	9) Leadership matters and is perhaps crucial; 10) Institutional constraints provide limits and the civil service culture in England is difficult to penetrate. It is difficult to determine who makes the decisions. 11) The summer floods of 2007 did not change the existing policies but rather accelerated them. The hypothesis of Johnson *et al.* (2005) was, therefore, confirmed. 12) Economics played an important role in the introduction of MSW, along with ideas of sustainability, new spatial planning and IFM. 13) Policy change happens incrementally, gradually through the processes of discursive, normative and practical change.

Source: own compilation

5. IWRM Policy Translation in Kazakhstan: The National IWRM and Water Efficiency Plan

The shelves are bursting with plans and with normative studies of optimal solutions. A few inches will suffice to record what is known, in fact, to have happened. The emphasis has been on plans rather than performance (White 1969: p14).

Introduction

This chapter firstly assesses the baseline of IWRM in Kazakhstan and introduces the process of policy change in the water sector. Then, it discusses the process and pathways of IWRM policy translation. Finally, it scrutinizes the drivers for policy translation. Three policy innovations are discussed with a focus on policy translation in Kazakhstan. These are the new Water Code (2003),[28] the National IWRM and Water Efficiency Plan (2007) and the River Basin Councils (2005). Section 5.1 discusses the background and policy change with regard to national-level IWRM planning, section 5.2 examines the status-quo of IWRM in Kazakhstan, section 5.3 addresses the process of policy translation, and section 5.4 – the drivers of this process. Among the most important findings of this case study is the unearthing of poor horizontal and vertical co-ordination in the water management structures, with public participation practices only beginning to be established. There is no consensus on the meaning of IWRM, which is interpreted in at least four distinct ways in this setting. Knowledge and experience from abroad have contributed to the policy change process, but it seems that the agenda for translation has been set from abroad on the basis of the conditionality of the available financial aid, whereas policy innovations themselves have been devised with little reference to international experience. This is explained not so much by the desire of Kazakh experts to have context-specific IWRM innovations as by their lack of capacity to draw on international experience, let alone to learn from and tailor it for the country's needs. Thus, the lack of national-level capacity to filter international experiences has been noted as the main impediment to policy translation in Kazakhstan. One of the major reasons behind the lack of such capacity derives from the absence of a regular forum for policy deliberation, as there are in England and Turkey.

28 Year of introduction

5.1 Background and IWRM Policy Change

It is widely accepted that the water resources of Kazakhstan are poorly managed (United Nations Development Programme 2003; Zimina 2003; United Nations Development Programme 2005; Hannan 2006; Aliakhasov *et al.* 2007; Allan and Steyl 2007b). While much of Kazakhstan is arid or semi-arid, the country does not suffer from water scarcity as per the accepted definition (Hannan 2006)[29](e.g. Annex 5.1). Kazakhstan is a big country, and it is difficult to discuss all 8 river basins together, but there are certain problems that are common to all. The most notable among those are the problems of industrial pollution of rivers and lakes, the shrinking of the Balkhash lake, the competition for water between hydroelectricity production and irrigation, very inefficient water use and transportation, especially in agriculture, and the absence of water demand management (United Nations Economic Commission for Europe 2008). Little attention is paid to water quality, and the emphasis falls rather on water quantity. Poor financial and human capacity is a serious constraint, especially when it comes to the Committee for Water Resources within the Ministry of Agriculture and its regional subsidiaries (United Nations Economic Commission for Europe 2008). Water supply and the irrigation infrastructure is dilapidated, water efficiency in irrigation is as low as 50-60%, and water lost in the pipe system causes water-logging and the salination of land.[30] One of the biggest problems in Kazakhstan is the poor access to drinking water sources for the population (mostly in rural areas). According to UNECE (2008), over 39% of the population did not have permanent access to safe drinking water in 2006. This is currently a priority area for the government as it is implementing the State Programme on "Drinking Waters: 2002-2010" (Genina 2007).

Overall, it is claimed that the main cause of the crisis is in the poor water management system and such problems as centralized administration, poor and over-bureaucratised communication between government agencies, and weak cross-sectoral co-ordination amidst common fragmentation of responsibilities (Zimina 2003). In 2002, the Government Decree No. 71 approved the "Concept of Water Resources Sector Development until 2010" to tackle these

29 Water resources amount to 100.5 km3 of renewable surface water flow, which is equal to 6000 m3/capita - well above the Falkenmark Water Stress Limit of 1700m3/capita (Falkenmark et al. 1989; United Nations Development Programme 2004).

30 The inefficient use of water only in the irrigation sector results in 200 mln USD lost for Kazakhstan in crop value (whereas on the Central Asian scale this figure is 1.7 bln USD or 3% of the GDP of the region30). These figures are well-known to the Governments of Central Asian states and reflect a lack of capacity to enact changes, as Borishpolets and Babadjanov put it (Borishpolets and Babadjanov 2007).

problems. The following quote well illustrates the problems of the current administrative system to manage water resources in Kazakhstan.

> As seen from above, the Kazakh administration used to cover the main aspects of water management at two main levels: oblast (or regional) and national. Nevertheless, the different administrative bodies mainly worked vertically, reporting to the central level in a highly formal manner with too little exchange between them and weak overall co-ordination. The information collected, without processing at the basin level in an integrated way, thus remained fragmented and sectoral (United Nations Economic Commission for Europe 2008: p149).

- *Administration of Water Resources*

Water management in Kazakhstan is administered at four distinct levels. At the intergovernmental level, the Interstate Commission for Water Co-ordination (ICWC), formed in 1992, serves the needs for annual water allocation among the Central Asian countries[31]. At the national level, the Committee for Water Resources (CWR) is the main government agency dealing with water management issues (Parliament of the Republic of Kazakhstan 2003). Republican State Enterprises and Basin Water Authorities (BWAs) are territorial and basin level units within the CWR respectively. They are responsible for controlling water USAge and discharges, and reporting to the CWR.[32] CWR and its territorial and basin bodies do not deal with water management at the local level. That is done by the local executive (akimats)[33] and representative (maslikhats[34]) bodies who allocate water to their direct users. These bodies exist at the oblast (regional) level and rayon (district) level. There are also Water User's Organisations[35] (WUOs). At the moment, the maintenance and operation of infrastructure is the duty of the Republic State Enterprises,[36] which provide their services commercially and are not supported by

31 Transboundary water management in Central Asia is of crucial importance, but this is beyond the scope of this chapter and the reader is referred to following literature for more information on international issues (Severksiy et al. 2005; Aliakhasov et al. 2007; Borishpolets and Babadjanov 2007).

32 There are 26 Republican State Enterprises, which mostly deal with technical matters with regard to water infrastructure maintenance and operation. In addition, there are 8 BWAs which deal with the issues of licensing and management as shows below.

33 These bodies are appointed by the President directly and are accountable to nobody but the President. As will be shown below, akims enjoy considerable power which often is at the heart of water problems.

34 These are representative bodies at the Oblast level: "Maslikhats are elected by population of corresponding administrative – territorial units on the basis of general, equal, direct universal suffrage by secret voting for the term of 4 years" (Electronic Government of Kazakhstan 2009).

35 This is a recent innovation in Kazakhstan supported by the World Bank and other International Organizations. According to Zimina (2003) there are many of WUOs in the Mukhtaaral region in the south of Kazakhstan as this is where most international projects have been concentrated. It is not easy to establish self-governing bodies for water users in a post-Soviet context, and there are numerous problems related to this, nevertheless, the government supports the creation of the WUA through conditional agricultural subsidies as it is easier to regulate organized bodies of farmers, as opposed to a great many individuals.

36 According to Kipshakbaev (2005) the rushed transfer of the RSEs on the cost-recovery operation has been premature and caused losses in qualifies staff members and drastic decreases in budget (Kipshakbaev 2005)

the state budget. Table 5.1 below provides information on the policy actors involved in Kazakhstan's water management. Figure 5.1 shows a map of Kazakhstan and its 8 river basins.

Table 5.1 Institutions involved in water resources management in Kazakhstan

Agency	Responsibilities
Ministry of Environmental Protection	Issues environment permits and monitors surface water quality and quantity through the national hydrometeorological institute, Kazhydromet. The territorial bodies of the Ministry are now re-arranged in accordance with the river basin principle, as of 2008.
Ministry of Agriculture	Hosts the Committee for Water Protection (CWR). Responsibilities of the Ministry, among others, include agricultural research, land reclamation, soil quality monitoring, drainage and salinity.
Ministry of the Energy and Mineral Resources	Hosts the Committee on Geology and Mineral Resources Use, responsible for the monitoring of groundwater, including its quality.
Ministry of Health	Monitoring of drinking water access, the quality of drinking water, through the department of Sanitary and Epidemiological Services at the territorial (oblast) level.
Ministry of Emergencies	Responds to floods, droughts and ensures the protection of water bodies against accidental water pollution. Also deals with issues of the security and safety of hydraulic structures, such as dams.
Ministry of Economy and Budgetary Planning and Ministry of Finance	Both agencies ensure that the agencies responsible for water resources management have the required financial resources to carry out their tasks.
Agency on Regulating Natural Monopolies	Must approve any water tariff changes proposed by the Water Companies that deal with water supply and wastewater collection and treatment
Agency on Land Resources Management	Conducts spatial planning in river basins with regard to drainage, soil erosion and floods
Oblast level akimats	Appointed by the President, akims are heads of the oblast territorial administration (16 in Kazakhstan and 2 cities of special significance – Astana and Almaty). They approve economic development plans for the territory, including those with an impact on water resources.
Municipalities	Contrary to both Turkey and England, municipalities are not elected but appointed, which creates a vacuum in the accountability of municipalities to the people they serve. Municipalities can be involved with water supply and sanitation companies (Vodokanals).
Interstate Commission on Water Co-ordination	This intergovernmental organization conducts water allocation between all 5 Central Asian states every year. CWR represents Kazakhstan in this organization, as well as in all inter-governmental talks.
Water User Groups	Mostly including groups of farmers who get organized over secondary and tertiary irrigation channel management, as well as water allocation. They are most concentrated in Southern Kazakhstan, which is possibly due to the international projects in that area that have introduced the concept and implemented it on the pilot scale.

Adapted from UNECE (2008: p147-150)

Thus, it is obvious that a large number of stakeholders are engaged in water management, and there is no single agency that is well-placed to co-ordinate policies and their delivery. According to the Water Code, articles 37-40, CWR is the main state agency charged with water-use planning and authorization. However, as UNECE (2008: p149), as well as many other agencies, put it,

> (I)n practice, this task goes far beyond their capacity, at least with the current low staff levels and weak organization. This situation creates overlapping responsibilities and tensions between institutions, in effect the opposite of the better co-ordination sought through IWRM.

Placed within the Ministry of Agriculture, the Committee for Water Resources is able to effectively oversee only issues of irrigation and drainage. However, being subordinate to the Ministry, CWR is politically handicapped to push for any policy changes against the interest of its patron organization in this field (Asian Development Bank 2005; United Nations Development Programme Project on Integrated Water Resources Management 2007). CWR lacks the political freedom to enact its formal "strategic overview" role and, most importantly, the capacity and resources to do so (United Nations Development Programme 2004; United Nations Development Programme and Global Water Partnership 2004; United Nations Development Programme and The Arab Water Council 2004; Asian Development Bank 2005; UNDP-IWRM 2005; Aliakhasov *et al.* 2007; Genina 2007; United Nations Development Programme 2008). Thus, broadly speaking, in spite of the sophisticated administrative structure at all four levels of governance, there is no co-ordinating mechanism that would ensure the strategic overview and coherence among the different levels of governance and sectors. The management system, therefore, is fragmented and performing poorly.

- *Policy Change in the Water Sector*

There have been several important changes in national water policy since Kazakhstan gained independence. The latest, and most notable, wave of the reform started in 2002. According to Nee (2009), most of the legislation on natural resources has been revised since 2002 as a result of the influence of the then Minister of Agriculture, who was also Deputy Prime-Minister. The Water Code, the Land Code and the Forestry Code were all re-written at that time. The start of an intensive reform in 2002 is also linked to increases in Kazakhstan's financial resources as per the increased oil revenues (CWR I-06 2008). By 2003, a new Water Code was prepared but, according to Hannan (I-10 2008), most of the proposed innovative ideas were removed from the draft during the Parliamentary review process. A committee's top official also pronounced his dissatisfaction with the Code, which as a result was being corrected for the fourth time in the

course of the research for this thesis[37] (CWR I-06 2008). However, the adoption of the Water Code, which stipulated a need for integrated water resources management, allowed for private-sector participation and made explicit provisions for public participation, which was a remarkable step for Kazakhstan. There are a number of bylaws which regulate the water sector, and the relevant legislation is continuously evolving. The Water Code has provided a legal basis for starting an IWRM process in Kazakhstan, which commenced in 2004 with the UNDP Project "Preparation of the National IWRM and WE Plan for Kazakhstan." Table 5.2 presents a list of main policy change events in the water sector of Kazakhstan since its independence.

Table 5.2: The Milestones of Water Resources Management Reform in Kazakhstan, 1992-2008

Year	Policies, Laws and Regulations	Year	International Projects on Water Resources
1992	Formation of the Interstate Commission on Water Co-ordination	2000	ADB/GoK project on the Institutional Development and reform policy for better water management
1993	First Water Code of Kazakhstan	2002-2003	EC Joint Programme on the Tobol River Management (Kazakhstan – Russia)
1997	CWR moved from the Ministry of the Environment to the Ministry of Agriculture	2003	JAICA Rural Water Supply Project
1998	Oblast Committees for Water Resources have been reorganized into Republican State Enterprises for Water	2003-2004	USAID Suggestions on improving the management of water and energy resources of the Syrdarya
1998	Privatization of land	2002-2004	The UK DfID sponsored "Nura-Ishym IWRM" project implementation
2000	CWR moved back from the Ministry of Agriculture to the Ministry of the Environment	2003-2004	The WB; The main problems of the seven river basins
2001	Ratification of the Helsinki Convention	2004	UNDP Human Development Report (2003)
2002	Johannesburg Declaration and commitment to IWRM	2004	EU/TACIS "Strategic Concept Note on Integrated Water Resources Management in the Talas river"
2002	The State Concept on Water Resources Management	2004	EU/TACIS Support to regional management of water resources and capacity building of the BWAs
2002	The State Programme on Drinking Waters	2004	UNDP Water Resources of Kazakhstan in the new Millennium (assessment report)
2002	CWR moved again from the Ministry of the Environment to the Ministry of Agriculture	2004-2005	EU Environmentally safe development in the Kyzylorda Oblast (anti-desertification measures through sustainable water management)
2003	Adoption of the new Water Code	2004 -	The Norwegian government, the UNDP, the GWP and the DfID (later) have sponsored a project

37 The latest changes to the Water Code took place on February 12, 2009

Year	Policies, Laws and Regulations	Year	International Projects on Water Resources
		2007	"Preparation of the IWRM and WE Plan for the Republic Kazakhstan"
2004	The Government Order #159 on Regulations of the Schemes of Complex Use and Protection of the Water Resources[38]	2005	The ADB project on the "Institutional Strengthening of the Committee for Water Resources" reported its final draft
2005	Establishment of River Basin Councils in Kazakhstan with the Balkhash-Alakol Basin	2007-2009	EU TACIS and CAREC project on "Preparation of an Integrated River Basin Plan in the Ili-Balkhash Rive Basin".
2005	First National Forum of the River Basin Councils		
2007	Final draft of the National IWRM and WE Plan prepared		
2008	Scaling up of the Kazakhstan experience to other countries in Central Asia planned		
Dec 2008	Approval of the IWRM and WE Plan for State Budget Funding		

Source: own compilation

Thus, the government's changing attitude towards water resources, the adoption of the Water Code, the start of the IWRM project and related realization of the River Basin Councils idea represent the various policy innovations that are to be discussed in this chapter. However, before moving on to the discussion of these policy innovations, I would like to provide a brief assessment of the state of IWRM in Kazakhstan in order to underline the importance of the policy innovations discussed above.

5.2 The IWRM Baseline in Kazakhstan

- *Centralized or Decentralized IWRM in Kazakhstan?*

The question of the post-reform mode of IWRM in Kazakhstan comes down to the question of whether the Committee for Water Resources (CWR) is going to become an independent government body, bestowed with the power and resources required to implement its functions and responsibilities, and whether all issues and responsibilities of surface and ground water management would be concentrated in CWR. If so, that could be seen as a centralized mode of IWRM, whereas if better co-ordination among the agencies is envisioned, casting CWR in the role of co-ordinator could be seen as a decentralized mode of IWRM. When the UNDP project on

38 As shown later, this schemes as widely seen as IWRM plans in Kazakhstan

IWRM began in 2004, the project team proposed that CWR's capacity and status be increased (Asian Development Bank 2005; Kenshimov 2005; UNDP-IWRM 2005; Aliakhasov *et al.* 2007; UNDP-IWRM 2007; United Nations Development Programme 2008). The status of CWR is, therefore, seen as a problem. According to the Asian Development Bank (Asian Development Bank 2005), CWR's central office has 34 people on staff and 184 in the Basin Water Authorities (BWAs) (its basin level bodies). Such deficiency in staff is most felt at the level of BWAs, whose job is to monitor and regulate water management, issue licences and co-ordinate water use. The resource base of the BWAs is not up-to-date and has a limited number of computers, telephones and transport. In some cases, a BWA would cover large territories approximating the size of a European country (e.g. Hungary), yet it lacks its own car to use in carrying out inspections (BWA I09 2008). Thus, responsibilities and powers bestowed on the Committee for Water Resources and its basin bodies need to be accompanied by proper resources (Asian Development Bank 2005). Interviewees UNDP I01, UNDP I02, UNDP I03, CWR I05, CWR I06, NGO I08, BWA I09 and Consultant I10 (2008) all confirmed that there is a need to increase the status of CWR. This view is further supported by the reports of ADB (Asian Development Bank 2005, 2006) and UNDP-IWRM (UNDP-IWRM 2005; United Nations Development Programme Project on Integrated Water Resources Management 2007).

> Although it is under the Ministry of Agriculture, a main water user, the Committee on Water Resources does not have sufficient authority, independence and credibility *vis-à-vis* the other bodies and organizations involved in water management to co-ordinate their respective functions…Moreover, the low status of CWR in the administrative hierarchy also weakens its ability to negotiate on crucial issues concerning transboundary water resources (United Nations Economic Commission for Europe 2008: p151).

However, in spite of these calls for change, the government seems reluctant to implementing this change. Administrative inertia and the lack of any agent of change seem to be the main reasons for this intransigence. To sum up, the administration of water resources in Kazakhstan is represented by a centralized system plagued with fragmentation, lack of reliable data and information on the state of water resources and their use, and the lack of mechanisms to manage this process.

- *Horizontal Integration*

As shown in Table 5.1, there is a great number of state agencies and other stakeholders at the various levels of water governance in Kazakhstan. Very little cross-sectoral co-ordination exists and no agency is able to take the lead in that regard. This is manifested in the "lack of co-ordination among relevant government bodies leading to mismanagement and conflicts of interests between the BWAs and Republican State Enterprises, weakening of WUOs, the lack of investment into irrigation sector, and finally, poor co-operation with upstream countries" (Zimina 2003: p92). CWR is best positioned to become a strategic overview player, but this would require changes in the organizational set-up of the government, as well as some endowment of CWR with resources and targeted capacity-building.

- *Vertical Integration*

As shown above, there are four levels of governance in the water sector of Kazakhstan, but multi-level governance is not functioning smoothly. The fact that a local executive power is appointed and not elected raises concerns about democracy and the legitimacy of local governance, as there are limited accountability incentives and opportunities for public participation in the decision-making process. As Allan and Steyl (2007a: p17) put it:

> The functions of the RBO[39] and the Akims are closely related with respect to the administration of waters, but the Akims have the advantage in terms of sheer power, and the latter in fact has more direct powers of watercourse management…Anecdotal evidence presented to the authors suggests that co-ordination is neither extensive nor formalized. In addition, the RBOs are largely crippled by lack of both financial and human resources: this renders enforcement of decisions difficult, and compounds the views of some industrial concerns that the RBO is toothlessly impotent (Allan and Steyl 2007b: p17).

This point is further confirmed by the local case study, provided in Annex 5.2**,** which shows that local territorial bodies can make decisions that contradict the established laws or regulations.

- *Public Participation*

The principle of public participation was introduced by the new Water Code in 2003. An introduction of 8 River Basin Councils created a forum for users and NGOs to participate in and journalists to report on. However, in light of the advisory mandate of the RBCs and the little

39 These are the same as the BWAs – the basin level agencies of the Committee for Water Resources

power to "exert control over the water use of industry" (Allan and Steyl 2007b: p21), stakeholders seem to be less than enthusiastic to participate (Allan and Steyl 2007b). Here is another opinion promulgating stakeholders' insufficient engagement in water policy in Kazakhstan:

> The level of integration and involvement of public in the management of water resources remains weak and insufficient, and the most undeveloped is the level of awareness of the NGOs and the quality of information, which does not allow the active involvement of interested parties in the process of decision-making. At the same time, the public does not have enough resources, including funding for full-fledged participation; the NGOs experience the lack of specific knowledge and the opportunities to be really involved in decision-making (Tirtishniy 2005; translated from Russian)[40].

The government, in turn, attempted to present the case by increasing the rates of public participation in water management. This is exemplified by a quote of the head of the Committee for Water Resources:

> It should be noted with satisfaction that for several years, since the establishment of the Regional Ecological Centre of Central Asia (REC CA), much success has been achieved as regards the creation of conditions for uniting efforts undertaken by NGOs in countries of the region, with the aim of improving the ecological situation in the Aral Sea Basin. For example, in 2002, REC CA (FM: the Regional Environmental Centre of the Central Asia) considered more than 250 proposals submitted by NGOs from all the countries of the region. As a result of competitive selection, project proposals were funded with regard to stimulating public participation in addressing the vital problems of the region (Ryabtsev 2007a: p4).

While there are initiatives to increase the rate of public participation, there is no formal requirement to consult the public about the preparation of water projects and programmes. No regulatory impact assessment is practiced like it is in England, and the sporadic cases of public participation rather resemble "window-dressing" efforts.

- *The Debate around the Interpretations of IWRM in Kazakhstan*

It is clear that discourse on IWRM has penetrated Kazakhstan, as this language now dominates the national discussion of policy. Before the start of the UNDP project (on IWRM planning), about 15 projects involving international organizations had been conducted. They had dealt with

40 Mr. Tirtishniy was an expert for the UNDP IWRM project concerned and is currently involved in the Consulting Company "Atasu".

water governance and IWRM at least to some extent (see Figure 7.1) (Aliakhasov *et al.* 2007). According to Hannan, an international consultant for the UNDP project on IWRM:

> Several projects on capacity building in the water management organisations contributed to an overall understanding of IWRM prior to the start of the preparation of the National Plan. Of particular note was the Nura Ishim River Basin Management Project, funded by the UK Department for International Development (DfID), which took place over a period of eighteen months leading up to the start of the IWRM Plan project. This capacity building project emphasised the establishment and implementation of IWRM within the RBOs[41] as well as at the national level Committee for Water Resources (CWR) and contributed to the drafting of the new Water Code in 2003. RBOs and the CWR and other organisations therefore had a good foundation in IWRM before the process of preparing the National IWRM and WE Plan began (Hannan 2006: p3).

As a result of these projects, various interpretations of IWRM were formed. The Scientific Information Centre of the International Commission on Water Co-ordination (SIC-ICWC), which also represents the regional office of the Global Water Partnership (GWP) in Central Asia and Caucasus, invested much effort into popularizing the concept of Integrated Water Resources Management, translating the GWP Technical Advisory Committee's materials into Russian and presenting them in Kazakhstan (and other Central Asian Republics) through various workshops and conferences.

While there is some broad familiarity with the acronym and the notion of IWRM, opinions vary as to what IWRM represents. For example, Dukhovny and Sokolov, the representatives of the Central Asian branch of the Global Water Partnership, see IWRM as a system for water management. Their view is fully reflected in their comments on the draft IWRM plan consultation document. This is in opposition to the view of IWRM as a process of management, or as a goal to be achieved through certain means. They defined IWRM as:

> A system based on account of all types of water (surface, ground, return) within hydrographic boundaries, which connects interests of various sectors and hierarchic levels, promotes effective water use in interest of sustainable development of society and ecologic security (aiming at maximum productivity) (Dukhovny *et al.* 2004: p3).

The concept of IWRM has penetrated the rhetoric of the Scientific Information Centre of the International Commission for Water Cooperation (SIC-ICWS) so much that one of its latest reports on water management in Central Asia included recommendations, each of which started with the word "integration" (Dukhovny and Sokolov 2003 : p35).

In an attempt to operationalise Integrated Water Resources Management, the United Nations Development Programme (UNDP) team together with the Global Water Partnership have worked out three components of the project that were collected into an IWRM Concept Note: 1) the preparation of the National IWRM and Water Efficiency plan; 2) the establishment of River Basin Councils, and 3) halving the number of people without access to safe drinking water (Gusterman 2008: p.13). It was decided by the project management not to have a pilot project at the local level, but rather to focus on institutional changes at the national level first. (Hannan 2008). The Concept Note, along with a brief indication of the pressing problems, the projects' goals and early-stage propositions, was released in March 2005, and by May 2005 most government bodies had commented on it. The First National Forum was conducted in September 2005 and brought together the various stakeholders and their conflicting views on IWRM. The forum addressed the issue of the contested essence of IWRM and proved that the normative institutionalization of IWRM had not yet taken place:

> However, it became apparent in the first forum that very few people knew what IWRM is. Many had heard of it and even used the term quite freely but did not actually understand its concept. Some dismissed it as a 'western concept' that has no applicability to Kazakhstan. Others were concerned that the introduction of IWRM and the integration that is its main point would weaken their organisations by removing or reducing their functions and budget allocations. The first forum was therefore very difficult as the assumption of a general understanding was incorrect and there was little support for IWRM outside of those organisations directly involved in water resources management. Subsequent forums included presentations to educate participants and to reduce their concerns (Hannan 2006: p6).

Understanding of IWRM among the local experts is different from that of the Global Water Partnership. In the 1970s, the Soviet Union prepared *river basin management plans* which are still being practiced in Kazakhstan and Russia, albeit on a somewhat smaller scale. Called the

"complex schemes of use and protection of water resources,"[42] those basin level plans include the inventory of all water and related land objects and socio-economic trends. In addition, since 1986 there have been 8 BWAs in the country, indicating that river basin management has already been introduced in Kazakhstan. This has led the government of Kazakhstan and some independent experts to claim that they have been complying with IWRM for the last 20 years. The comments to the consultation of the Concept Note Tirtishniy (Committee for Water Resources 2006; translated from Russian) put it as follows: "According to many leading national experts (Kazgiprovodkhoz, the Kazakh office of the ICWC) the basin schemes are almost completely identical to the requirements of IWRM, except for the mechanisms of implementation of those plans…The difference of Kazakhstan from the developing countries is that in many of the latter river basin management plans have never been prepared and IWRM would have a different character."[43]

According to article No. 46, item No. 1 of the new Water Code of Kazakhstan, "schemes for the complex use and protection of water resources shall be developed for the purposes of decision-making regarding the issues of integrated administration of water resources." Article No. 46 also stipulates that the schemes will produce a forecast of available water resources and communicate this to the central executive power, which will then decide upon future development programmes in consultation with the Committee for Water Resources. Government Order No. 159 from 2004 specifically regulates the process of preparation of these schemes. The schemes are subject to environmental expertise (a form of Environmental Impact Assessment practiced in the Former Soviet Union countries) upon completion. However, the order does not specify the requirements of the scheme in detail, and neither does it set out the procedures required in order to apply the studies in practice. The schemes, as was found, were based on the guidelines previously produced in Russia, which undermined their legitimacy (Kazgiprovodkhoz I-07 2008).[44] There are

42 In Russian this corresponds to the "Схема комплексного использования и охраны водных ресурсов". These schemes have been practices since the 1970s, and according to UNDP I-01 (pers. comm.) they were the guiding documents for the Surdardya and Amudarya river development that finally led to the Aral Sea disaster. However, the schemes are said to be technically impeccable and that deviation from their implementation was what caused the disaster, according to the technocrats.

43 The extent of equalization of IWRM with the schemes of complex use and protection of water resources can be illustrated by the following anecdote. The name card of the head of the division of Kazgiprovodkhoz consultancy that is responsible for the schemes is bilingual: in Russian it says ""начальник сектора схем комплексного использования и охраны водных ресурсов" (head of the schemes preparation), whereas the English side firmly states "Manager of the IWRM Schemes Sector".

44 There is an obvious need for Kazakhstan's guidelines in the preparation of the schemes.

indications that the schemes could have been done better if CWR had had a greater human and technical capacity to use the Geographic Information Systems (Kazgiprovodkhoz I07 2008).

Currently, the process and the content of preparation of the schemes is pretty much the same as in the Soviet times, except for the chapter on IWRM (Kazgiprovodkhoz I-07 2008). Perhaps, the biggest problem with the schemes is similar to the plans prepared in the era of comprehensive rational planning discussed in Chapter 2, i.e. "nobody considers the schemes" (Kazgirpovodkhoz I07 2008). The programmes and action plans of the Oblast and district akimats do not take schemes into consideration, and besides, it is hard to take into consideration huge volumes of technical information generally provided in schemes. A quote by Gilbert White with regard to river basin plans in the USA stands very much true in the context of contemporary Kazakhstan:

> The shelves are bursting with plans and with normative studies of optimal solutions. A few inches will suffice to record what is known, in fact, to have happened. The emphasis has been on plans rather than performance (White 1969: p14).

A suggestion that has resurfaced in two other case studies, and which suggests that the authorities in charge of planning and implementation need to cooperate closely, is very much relevant to the case of Kazakhstan as well (Mintzberg 1994).

While the equalization of IWRM and the schemes is a typical trend in Kazakhstan, there are people who distinguish between the two. According to UNDP I01 (2008), IWRM is broader as it includes environmental considerations and public participation. Another view of IWRM that exists in the policy setting is a managerial (an institutional soft) element that is an addition to the technical and "hard" schemes (which provide more detailed scientific information, compiled in maps, figures, formulas and tables). This is an example of the translation of IWRM from international theory to the national policy level, whereby a broad meaning of IWRM as both a technical approach to water management and an institutional strategy has been interpreted as the latter in the face of the existing mechanisms for the production of detailed technical water management means. This view has been reinforced by Hannan, who has argued that: "IWRM is primarily institutional. It goes down to measuring water quality etc., but you need to have institutional structures for that" (Hannan I10 2008).

To sum up, IWRM is viewed by policy actors in Kazakhstan in four different ways: 1) as a *process of management* that is new to Kazakhstan and needs to be established from scratch through a comprehensive legal and institutional reform (Hannan and the IWRM Plan); 2) as a *system of management*, that needs gradual tuning and practical adaptation as an indispensable element, and where hydrological and socio-economic models would be at the heart of the process (Dukhovny and Sokolov 2003); 3) as a *managerial addition* to the old system of "schemes"—this is the most widely held point of view within the government and national-level experts. In this context, IWRM brings public participation, environmental considerations, and sets up a structure of incentives for the local executive power to comply with the schemes during the preparation of their programmes; and finally 4) as completely *identical to the "schemes"* (many experts, for example in Kazgiprovodkhoz, hold this belief). These various ways of interpreting IWRM are linked to the process of translating IWRM policy in Kazakhstan, which will be discussed in the forthcoming sections. The innovations discussed include the Water Code, the National IWRM and Water Efficiency Plan, and River Basin Councils.

5.3 The Pathways and the Process of IWRM Policy Translation in Kazakhstan

- *The Water Code*

The work on the Code started in 2002 and it was submitted and approved in 2003, even though the process of correction was still in progress during the course of this research, with the latest changes introduced on February 12, 2009. The new code, prepared by the experts from Kazgirpovodkhoz[45], includes such concepts as River Basin Councils, water pollution fees and taxes, public participation, water user associations and other. There have been several pathways of international influence in the process of drafting the Code:

1) The final stage of the Water Code was partly funded from the budget of the Nura-Ishym project sponsored by the UK DfID (Hannan 2006), UNDP I02 (2008).
2) The Code incorporated experiences and debates from other countries; the websites of relevant organizations worldwide were researched. Experiences from England, France, Spain, Germany, Russia and Poland were reportedly used (Kudaibergenuli 2006).

45 "Kazgirovodkhoz, the former design institute for the construction of waterworks, which has over 3,000 employees, has prepared basin management plans for the RBOs for the integrated use of water resources by each basin with more aggregated data" (United Nations Economic Commission for Europe 2008: p149).

3) It is claimed that most of the foreign influence on the Water Code came from the debate on the Russian Water Code (Nee 2009, UNDP I02 2008, Expert I04 2008);

The articles on River Basin Councils and the "schemes" for river basin management plans in the Kazakh Water Code and the Russian Water Code indeed bear notable resemblance (Parliament of the Republic of Kazakhstan 2003; Nee 2009; Kazgiprovodkhoz I04 2008; UNDP I02 2008). However, not all proposals in the draft were accepted. For example, the idea to have a National Water Council, a form of inter-ministerial body to administer water-policy-related decisions, has been proposed as a statutory consultee in the Water Code but was adopted only as an option[46] still open for consideration. The economic instruments discussed in the draft, and the proposal to have much stronger provisions for public participation, were treated in a similar fashion (Kazgiprovodkhoz I04 2008). As one of the interviewees commented on the government's reluctance, "this is because of centralization – they are scared to lose the power" (Kazgiprovodkhoz I04 2008). Future research, if successful in accessing the relevant governmental officials and MPs, could produce interesting insights on the process of filtering proposals for the Water Code.

The Water Code has introduced several important innovations and has served as a legal basis for some subsequent policy developments. However, it also carries several drawbacks. First of all, the Code was deliberately left "broad-brush," with many details delegated to subsequent legal documentation. Therefore, the Code requires many bylaws to transpose the general framework.[47] This is arguably justified by the frequent change in laws and regulations in Kazakhstan (Nee 2009). The second weakness is that the Water Code gives a lot of toothless power and responsibility to the Committee for Water Resources within the Ministry of Agriculture without making provisions for its viable realization, thus causing a discrepancy. The third weakness is that it introduces many new terms without performing the preparatory legwork to raise awareness and build a consensus around them. This directly relates to the lack of a regular national-level forum for policy deliberation, in which stakeholders would come together to exchange opinions

46 The article 131 of the Water Code states that "The Government of Kazakhstan may create a National Co-ordination Council for co-ordination of the activities of state bodies, civil organizations and users at the national level".

47 The Code is not detailed enough because the Minister of Justice in 2002 asked for Codes to be only frameworks, whereas now there is a trend to adopt laws of direct application. This shows how much is dependent on top level politicians.

and develop ideas. This is routinely practiced in England and increasingly developing in Turkey. In the absence of such a forum, and the ineffective communication among policy actors, new concepts and definitions, as will be shown below, often get "hijacked" by entrepreneurial policy actors enhancing their legitimacy and technocratic authority as cutting-edge experts with a link to the West. Nevertheless, in spite of all these weaknesses, the adoption of the Water Code has been a very positive development in Kazakhstan, as well as on a broader Central Asian scale. It has secured a new agenda for IWRM to be legally justified to proceed to the implementation stage.

- *The National IWRM and Water Efficiency Plan*

The project was initiated in 2004 jointly by the Norwegian and the Kazakh governments, supported by the UNDP, GWP and DfID, and therefore was a product of international co-operation from the beginning. The plan underwent a thorough national consultation procedure, which brought up many interesting issues. Being ambitious in its propositions (the 2007 version), the plan has been in consultation for 2 years and only in December 2008 did the State Budget Programme of Kazakhstan for 2009-2011 include programme No. 093, titled "Integrated Water Resources Management" (Nikolaenko 2008; and Nee 2009). There are many innovations suggested in the Plan, including a proposal to restructure the government (the CWR's increased role), introduce the River Basin Councils, the national information system, the principle of cost-recovery, improvements in water efficiency, better monitoring, capacity building and education programmes. The following pathways of policy translation from abroad worked in the preparation of the plan:

1) International experts (e.g. Hannan);
2) The GWP, as it was formally part of the project through the Central Asian GWP office.
3) Since the plan developed upon the Water Code, which introduced the idea of River Basin Councils, the indirect influence of the Russian and French Water Codes is clear here (Nee 2009, UNDP I02 2008, Kazgiprovodkhoz I04 2008).

Overall, it was the process of national consultation and bureaucratic consensus which resulted in the final version of the Plan. The final national IWRM plan was not made available to the author

at the time of writing, although the plan has been approved by the government and the Parliament.

- *River Basin Councils*

According to Hannan (2008), there is a greater need for basin level forums for discussion in Kazakhstan than in Europe, because the local councils of Kazakhstan are not elected but appointed (only regional assemblies, maslikhats, are elected). River Basin Councils are regarded as the project's most successful element, desirable for replication in Central Asia (Hannan 2006; Aliakhasov *et al.* 2007; Ryabtsev 2007a). This policy innovation was legally established by Article No. 43 of the Water Code and Order No. 71-П of the CWR, which required the Basin Water Authorities to take the lead in the establishment of RBCs and arranging the preparation of basin agreements (Allan and Steyl 2007). RBCs are advisory bodies and do not have statutory powers. The proposal, voiced by some experts, to grant statutory powers to the RBCs has been rejected on the grounds that a governance function cannot be granted to a civil society organization (which is the legal form of RBCs, according to the Civil Code of Kazakhstan). This is in spite of the fact that such an option is open according to the Water Code (UNDP I02 2008). The membership of an RBC consists of the heads of a BWA (chairperson), akimats (provincial executive power) and maslikhats (provincial legislative assemblies), along with some local users, including representatives of other province-level executive agencies responsible for water management, NGOs and water user associations; journalists[48] are also invited to the meetings (Aliakhasov *et al.* 2007).

As Hannan (2006) put it, there was no direct policy model to follow with the creation of River Basin Councils in Kazakhstan. However, the Russian Water Code (discussions that started in the beginning of the 2000s) sparked the idea of creating River Basin Councils. The Russian Water Code adopted in 2006 bears outstanding similarity to Kazakhstan's, especially to articles No. 34, 40-43 and 56. This is suggestive of the close relationship between the two codes in the process of their drafting (Nee 2009, UNDP I02 2008, Expert I04 2008).

48 All these stakeholders have the same status at the meeting of a river basin council, except for the BWA which organizes and facilitates meetings.

In the National IWRM and Water Efficiency Plan project report for 2005, the team stated that on "6-10 June 2005 the review of international experiences with regard to River Basin Councils has been conducted and distributed among the stakeholders. Among the countries reviewed there were France, England, Germany, Spain and Russia" (United Nations Development Programme 2005: p3). Following his business trip to France in the years prior, one of the project experts, Mr. Kudaybergenuli, informed the project team about France's experience with river basin management. However, information about foreign experiences with IWRM gave no clear indication of how those lessons could benefit Kazakhstan specifically and, based on the information collected, it is difficult to assess the extent to which international experience has impacted the establishment of RBCs in Kazakhstan. There are reports on what has happened in other countries, but there are no *lessons learned* from that experience, which issue is primarily linked to the lack of learning, or "filtering," capacity in the policy system of Kazakhstan. Such capacity is linked not only to the need to improve the technical and human resource base of the agencies responsible for lesson-drawing, but also the need for a regular forum for policy discussion and deliberation, both at the national and river basin governance levels.

- *The effectiveness of River Basin Councils*

There is some concern about the effectiveness of River Basin Councils. First of all, the Councils' meetings have not been well-attended by the major political and industrial actors and, therefore, are not complete in their representation and policy impact. The profile of Councils remains low, and there is a lot of work to be done to improve the ways in which meetings are carried out. This points out the low capacity of Basin Water Authorities (the provincial bodies of the Committee for Water Resources of the Ministry of Agriculture) to organize the work of the Councils. It is normal that akims (heads of executive power in provinces) and deputy akims are not present at the meetings, which undermines the legitimacy of the discussions and the agreements reached during sessions (UNDP I01 2008). Indeed, Allan and Steyl (2007) have documented the reluctance of akims to participate because of the merely "advisory" status of the RBCs: they are seen as "waste of time" and low-priority amidst a considerable workload.

Figure 5.1 River Basin Council meeting in Balkhash-Alakol Oblast, Kazakhstan

Source: UNDP – Kazakhstan

Figure 5.2 First National Forum of Stakeholders, Almaty, Kazakhstan

Source: UNDP – Kazakhstan

Hannan (2008) has pointed to another problem with River Basin Councils: namely, the attempts of certain active civic groups (NGOs) to dominate the discussion forum and push their own agendas. This is, however, to be expected in a democratic forum, which needs firm moderation. In such circumstances, it is often not easy to develop a forum for open discussion. It is deemed necessary for RBCs to be chaired by the heads of the BWAs, who are to kick off the process. However, the heads of BWAs also tend to dominate the discussions (Allan and Steyl 2007, Tverdosvksy 2008). Certain mechanisms to facilitate discussions are necessary, as it is to ensure broad participation by all important parties. When discussing River Basin Councils, it is necessary to mention that there are 8 of them, and their experiences vary. However, in general they all lack the funding to conduct meetings and encourage the participation of the main stakeholders, such as provincial administrations, the industry and water users (Allan and Steyl 2007b).

In the process of preparing to set up RBCs, many obstacles had to be overcome. The concept was totally new for Kazakhstan, and the national government (CWR and the Ministry of Agriculture), the NGOs and the BWAs all opposed it at first (Hannan 2006). The BWAs, who would initially carry the heaviest workload to get the RBCs going, protested most actively, while the NGOs were sceptical about "another project without a real impact on the ground" (UNDP I02 2008). The positive side of RBCs was the creation of a forum for NGOs and ministries to discuss the issues, and that soon came to prominence. River Basin Councils are a co-ordinating mechanism as much as a mechanism for public participation.[49] The role of the journalists proved to be important, because they were able to publicize the issues in discussion and put pressure on the government and certain officials breaching the law. This is believed to be an especially important factor in systems where democratic rule has not yet been fully established. As UNDP I02 (2008) put it:

> We always got journalists involved in our activities. We framed the River Basin Councils as a project on introduction of democratic elements in water resources management. And journalists came. Three years we have been well covered in the media, and did not even pay for this. The role of journalists is important – raising awareness and forming opinions.

49 An anecdote was told by one of the experts on RBCs about the establishment of one of them. At the first meeting of the Council there were two organizations that resided in the same building but did not know about the address of each other. They could not communicate with each other, until they met at the Council meeting and started to exchange the contact details. Then they found out that they actually sit in the same building but different floors! (UNDP I02).

The example of the first, pilot RBC in the Balkhash-Alakol River Basin shows that there are formidable problems in the sustainable functioning of councils, and thus leadership and support from the government is essential in the early stages. The pilot council organized five meetings, starting in the summer of 2008. Most of them were well-attended, and the council established itself as one of the most progressed ones. However, the lack of finances has made its work difficult.

> The members of the RBC are interested to participate, we put some questions for discussion, and we try to get them to participate and make input. The members of our Council are the state bodies, the executive bodies, and the representative bodies, and the large water users, as well as the NGOs who participate passively, whereas the others are active. Last two RBC meetings we have organized without support from the UNDP, and in principle people did come! We have a large territory, and the whole basin is about 1000 km to drive. And the NGOs are not interested to pay for themselves… *We see the RBC as a chance to solve the problem on the spot and avoid writing complaint letters to each other* (Representative of a Balkhash-Alakol RBC 2008; my emphasis).

The latest meeting of the council addressed the subject of the Sanitary Epidemiological Stations of the Ministry of Health and the quality of drinking water in the basin. Representatives of the Ministry of Health were in attendance, which provided useful information and was of great help to the members of the River Basin Council. However, the capacity of the RBO to organize such meetings is limited:

> We have no funding and we need more staff in order to implement the provisions of the law. We need to collect, send out, and analyze information so that we can discuss things at the RBC. We do not have time to deal with the RBC. In an emergency fashion we get together just before the RBC meeting to discuss the agenda. We have so many obligations as part of the CWR, in 1995 there were 76 persons of us, now - only 32. And in 1995 there was not the same amount of workload. The USSR has collapsed, now the government does have the money, but they are not improving our situation for some reason (Representative of a Balkhash-Alakol RBC 2008).

Again, the matter boils down to the capacity of BWAs, the interest (incentives) of the members to take part in the work of the Council, and to the possible policy implications of that work. According to Hannan (2005), River Basin Councils in Kazakhstan would ideally consist of: one third water users and their representatives; one third industry and big water users; and one third government officials. He also mentioned that it will require at least 5 years for River Basin Councils (RBCc) to start functioning on a sustainable basis, and 10 years for the first results on

the ground to be visible (Hannan 2005). However, it must be noted that the concept of RBCs was not equally successful in all river basins.[50]

In order to exemplify the local-level peculiarities in the water management approach of Kazakhstan and illustrate the peculiar interaction between water and land resources management, I will briefly discuss the case of the Big Almaty Lake (see Annex 5.2). The local case study suggests that the local executive power often does not take the statutory recommendations of the CWR and its basin organizations. It also betrays the weak communication between agencies and shows that the role of leadership and journalists in putting pressure on bureaucrats is crucial. These ideas bring us to the discussion of important drivers of policy change and translation, upcoming in the following section.

5.4 Drivers of Policy Change and Policy Translation

- *The role of individuals*

There were 2 main characters in the project: Tim Hannan, an international consultant for the project, and Aleksandr Nikolaenko, a project manager. Up to 40 local experts have been involved in the work, but the direction of the project was determined by the Hannan-Nikolaenko tandem. The project was launched in three directions: 1) with government officials, through workshops on IWRM; 2) with local experts, in order to create working groups and proceed with the preparation of the plan (Nikolaenko 2008) (all working groups reported according to the same structure in order to maintain consistency); and 3) with NGOs and members of the public. Awareness-raising about the project was achieved via public workshops and the media. A broad consultation, both with the governmental and other stakeholders, was necessary in order to get support for the plan from its very inception. This was a different approach from the majority of projects facilitated by international organizations in Kazakhstan to date. The leadership of Nikolaenko was instrumental

50 During the project correspondence, a letter dated 15 June 2007 was found. It was from experts of the project Mr. Petrakov, I and Mr. Aliakhasov, Zh and addressed to the head of CWR, Mr. Riabtsev. The letter stated that in September 2007 the Norwegian Government would undertake a mission to Kazakhstan in order to examine the progress of the project that was realized based on a grant from the former. The Ishym and Irtysh river basin councils had their meetings planned for September, so there was a chance that the Norwegians would want to participate in them. However, neither of those two councils had a single basin agreement signed and the experts were concerned that the Norwegians might notice this. The request put in the letter was reminiscent of the administrative-command methods of government practiced in Soviet times, and obviously, still strongly embedded in Kazakhstan's approach to water management: "We request that you assist the progress in Ishym and Irtysh BWAs via administrative leverage in order to facilitate the development of basin agreements and the preparation for the meetings between RBCs and participating donors."

in promoting the plan through national networks in accordance with the rules posed by formal government procedures. Nikolaenko was managing and communicating through government channels, which only a local expert with managerial experience would have been capable of.

It was also a daring undertaking to invoke government consultation for the plan, which proved slow and pain-staking, though eventually successful as the government developed a feeling of ownership over the document. This will hopefully be crucial in the implementation stage. A relationship with NGOs and the press was established, in spite of their suspicions that the project might be another undertaking of international organizations with marginal impact on the ground. Clarifications on the fundamental changes in the pipeline and the new mechanism for empowerment had to be made, and the trust and support of NGOs and journalists had to be secured (Nikolaenko 2008, Petrakov 2008). The tandem of Hannan-Nikolaenko was successful as the ideas proposed by Hannan required to be translated into the official language and format acceptable by the government. Thus, an IWRM Plan had to be re-worked into a National Programme, because "plan" as a notion does not exist in the Government of Kazakhstan. An important idea was to prepare a critical Concept Note in the early stages in order to collect early feedback on the project. As Hannan put it:

> The Concept Note proved to be a valuable document and it recommended for any National Plan prepared in the future. It was widely read and many comments and suggestions were returned. It can be seen as a "draft of the draft" of the IWRM Plan. Where knowledge of IWRM is limited, which would be the case in most countries preparing a National Plan, it is difficult for stakeholders to contribute effectively without a tangible idea on which to build their own ideas. The Concept Note assists this process (Hannan 2006: p7).

Further, an Inter-Ministerial Working Group was established in order to facilitate a consultative approach and consensus in the government. The idea to establish such a group was not welcome in the beginning on the grounds that there were no solid ideas on which the IMWG could comment.

> There was no understanding of the participatory process in which the project and the IMWG could form ideas jointly. However, following the preparation of the Concept Note, the members of the IMWG had something concrete to work with and were then willing to participate. With the Concept Note as a base the IMWG started to be an integral part of the process. The first full IMWG meeting was held in June 2005, following the Concept Note in March 2005 (Hannan 2006: p7).

A draft plan became ready in December 2005/January 2006 and was submitted for consultation to the government and stakeholders. Resulting from the efforts of the national project manager, a suggestion to release a Government Decree in support of the plan preparation was made. The Decree was released in October 2006 by the Prime-Minister's Office of Kazakhstan. Moreover, also in October 2006, the National Security Council released a secret communication to the Ministers with the requirement to produce a plan without delay (UNDP I-01 2008).

An important forum to generate ideas was a little workshop initiated by Hannan. It consisted of regular meetings, taking place every 2 months in Almaty, where the staff of international organizations and other expatriate experts operating in Central Asia conducted informal discussions on water management issues. National experts would occasionally participate in these meetings. This proved to be extremely helpful, but it was not sustainable as it ceased to exist once Hannan left the country. The absence of a policy forum, where policy ideas can be discussed and the normative maturation can take place, is a prominent recurring theme in this chapter.

- *Civil Service Culture*

In the civil service and organizational culture of Kazakhstan, a lot is left over from the administrative-command system of the Soviet Union.[51] The governmental hierarchy needs to be respected and the format of the government complied with.[52] The policy proposal to change the status of CWR is very interesting as it has triggered a reaction that reveals how the civil service and the government work in Kazakhstan. Therefore, we will use this example in the forthcoming discussion.

According to one of the interviewees (UNDP I-08 2008), CWR staff does not want the new responsibilities and new powers that ADB and UNDP experts advocate for them. Other agencies

51 One example was with the UNDP project experts' letter to the Head of CWR, asking for the application of an "administrative leverage".

52 For example, Hannan's Concept Note and the Plan had to be re-written into a protocol language required by the Government for state programmes. Also, the consultation process had to be done by means of permanent recapitulation about the legislative basis for the project, commitments and laws of Kazakhstan in order to push through the inertia. Knowledge of the local bureaucratic context was crucial.

have also been cautious about the new workload bestowed on them in connection with the preparation of an IWRM plan.[53]

In spite of the unequivocal support for the call for administrative changes, there are two practical problems with their implementation. First of all, it seems that nobody in the government is interested in increasing the status of the Committee for Water Resources (CWR). CWR is understaffed and has a significant workload, so it is also not looking forward to a new strategic overview role or further responsibilities. The Ministry of Agriculture is interested in keeping CWR within its remit, whereas other government bodies are cautious of any changes which may a) result in some responsibilities over the water taken away from them and given to CWR (or whatever agency it is to become); and b) be likely to increase their workload, without sufficient reward for the extra effort, as the management gets better-organized and co-ordinated (UNDP I01 2008).

The second reason for the retardation of change so far has, perhaps, been the absence of an *agent of change* to pressure the government, which exists under conditions of inertia without leverage or advocacy. When the proposal to change the status and role of CWR was first opened up for consultation after the publication of the Concept Note in March 2005, the 1st Inter-Ministerial Group suggested that these proposals should not sound as direct and that they should be more flexible. A more expressive comment against the status change came from Mr. Miroshnichenko,[54] voicing that:

> The issue of increase in the status of natural resource agencies, including the CWR, is not well justified... What will be changed if the CWR is re-organised into the Ministry of Water Resources and Land Reclamation? Will the budget funding increase? Will the technical and personal capacity improve? Will corruption reduce? Will the political weight of the water experts increase in the Government? Will the quality of governance improve? The answer to these questions is "no" or "almost no". The problem of status is being raised by all the government agencies, including the Ministry of the Environment. This is being driven by mundane *bureaucratic dreams* (Miroshnickehko 2005; my emphasis; translated from Russian).

53 For example, according to the same interviewee (UNDP I-08 pers. comm.), who conducted the consultation of the first draft of the plan with the government officials, there is one agency that has to take the lead for the budget money on certain activity and other agencies to be mentioned under the activity as the ones who co-operate. When the ministries would come across their name as a lead (i.e. responsible for the budget money), they would ask their names to be crossed over and the CWR being put as a lead. This shows the government inertia and reluctance to take a lead in the change.

54 Mr. Miroshnichenko is an expert of the Ministry of the Environment and CAR

This scepticism is related not only to the policy suggestion to increase the status of natural resource agencies, but also to the prospects of the IWRM plan to be implemented. The reluctance of the government to change the status of CWR again, after it had been moved from one agency to another four times, was understandable. It is clear that there is no strong and committed enough policy agent who would catalyze change. In a recent communication with Nee (2009), it was suggested that the Plan has been approved by the Ministry of Economy and State Budget Planning as of February 2009. It seems to me that a leader like Tim Hannan, who enjoys authority in countries like Kazakhstan almost as much as Sir Michael Pitt did in England, should be encouraged by all means to ensure the implementation even after their direct responsibilities with regard to a project are over.

To sum up, the proposal to increase the status of CWR has found sympathy in most of the interviewees and is supported by the Asian Development Bank and the United Nations Development Programme. However, the government is reluctant to enacting this change due to bureaucratic inertia, in fear of having too frequent changes in the government structure.[55] The widely spread calls for increase in the status of CWR are therefore labelled by the opponents as "mere bureaucratic dreams." The lack of continuous leadership and an agent of change is clear. However, it is also clear that the administrative system opposes changes in the status of CWR, as well as any potential consequent changes in the concerned parties' roles and responsibilities. A regular forum for water policy discussion and deliberation is necessary at the national and river basin levels.

- *Ideas and discourses related to IWRM*

As mentioned earlier, prior to the commencement of the Project, there were some 15 international IWRM-related projects in Kazakhstan, involving organizations like World Bank, the Asian Development Bank, the European Commission, the United States Agency for International Development, the UK Department for International Development, the United Nations Development Programme, the European Union. Those projects have introduced a new language

55 This is surely subjective as it depends on the political culture. In England, as we have seen from Chapter 4, structural change is a matter of continuous development of the country, whereas in Kazakhstan, which seems to have inherited the Soviet political system, administrative change is not as intensive and it is more difficult to conduct.

to the Kazakh policy community and, although this has not translated into a uniform understanding of the concept, familiarity with the term "IWRM" has increased since then. New words in Kazakhstan's policy discourse include "integration," "decentralisation," "condominium," "water user association" and others. They are indicative of the discursive (first stage of change) shift in Kazakhstan towards the greater inclusion of policy concepts from the international IWRM discourse. However, there is no single dominant interpretation of the IWRM concept and, therefore, no normative notion of what is good and what should be implemented. As Tirtishniy (2005), an independent expert, put it in the comments to the Concept Note, the Global Water Partnership promoted IWRM in Kazakhstan, but it did not suggest *how* to make it work (Tirtishniy 2005). There is tension between the modern notion of IWRM as equal to the schemes of river basin management in the 1980s and the *post-modern* notion of IWRM that embodies public participation, equable consideration of environment and economic interest, and the focus on IWRM implementation. Therefore, the normative and practical turns of the reform will still need to be implemented in Kazakhstan. As far as policy documentation, legislation and the organizational set-up and procedures for policy-making are concerned, the shift towards IWRM is clearly felt. Changes are partly instituted in the administrative sense with the establishment of RBCs. However, there is much more to be done in terms of strengthening CWR, creating the National Water Council and establishing better horizontal and vertical co-ordination, which includes having forums for policy deliberation.

It is an interesting observation that in Kazakhstan the language is being used symbolically as a way to establish power and institute an image of Western expertise. However, new terms introduced without care form a divide within the policy community and cannot serve the common purpose if they are not addressed in detail and explained in special forums. Not only new terms are introduced as part of the discursive change, but new terms are created by merging Western and Russian scientific terms: for example, the Water Code (article No. 96) introduces a concept of "Гидромелиоративный кондоминиум" (translating from Russian as "Irrigation and Drainage Condominium"). This is a compound of the Russian technical term "Гидромелиоративный" and the Western term "кондоминиум". Supposedly, this creates a feeling of inferiority among experienced experts, because they are not able to understand the new Water Code, as reported by

two interviewees (I09 2008, I02 2008). Such feeling of insecurity is a sure way to stalled dialogue.

To sum up, there is no single normative definition and agreement on how to implement IWRM in the whole policy setting of Kazakhstan, which suggests that in spite of the discursive change (new language on IWRM), the normative and practical changes are still to be expected. A new policy language is symbolically used by policy actors to establish and maintain power positions. Material interests play an important role as the whole project on the IWRM and the Water Efficiency Plan was financed via external sources. There was a feeling that the government of Kazakhstan was not regarding the issues of public participation and national planning as a top priority and embarked on the project because there was international funding available. This might be a reason why the government was not very committed to the project and recommended some changes. The interaction between national and international policy factors has not been as prominent in the study of Kazakhstan, as it has been in Turkey or England, and therefore no special section is devoted to that theme.

Conclusions and Recommendations

The study has found that horizontal co-ordination in Kazakhstan is handicapped and the Committee for Water Resources does not have the status, resources or ambitions to co-ordinate strategically and effectively. Multi-level governance does not operate smoothly either due the power imbalance between provincial water administrations (BWAs) and territorial executive powers (akimats), with the latter being much more powerful. In addition, there is a mismatch in institutions as the Committee for Water Resources functions at the basin level, whereas the executive power and other ministries (apart from the Ministry of the Environmental Protection) all function at the territorial level. With regard to public participation, the situation is not much better. However, with the establishment of River Basin Councils (RBCs), there is now a forum for participation and discussion at the basin level, and this mechanism needs support and strengthening. RBCs have also proven helpful to co-ordination at the basin level. With regard to IWRM, there are four different interpretations, which show that IWRM has not yet been fully institutionalized in the normative sense. Implementation of IWRM without maturation of the normative meaning in the policy setting through a rigorous and informed debate might result in

resignation to the old-type practices of IWRM "window-dressing" – an effect to be avoided by all means by systems with strong institutional path-dependency, as it is in Kazakhstan.

The process of policy translation regarding the three innovations was studied: the Water Code, the National IWRM and Water Efficiency Plan and River Basin Councils. With the Water Code, local experts drew lessons from the Russian Water Code debate (it was adopted later, in 2006, but it had been discussed since the early 2000s) as well as from other countries' experiences. While the code provides a legal base for future reform towards more integrated water resources management, it falls short on a number of other issues. It conveys only a general notion of water management, includes a number of foreign terms incomprehensible to many and, above all, it gives toothless power to CWR. The National IWRM and Water Efficiency Plan has been initiated jointly by the Government of Norway and the Government of Kazakhstan, who put forward the idea for the project, whereas UNDP and GWP prepared the project proposal. Additional funding from the UK DfID was later secured. There were several pathways of external influence in the preparation of the Plan: 1) Hannan's (UNDP Water Advisor on Central Asia) knowledge and experience; 2) The Global Water Partnership's materials that were translated into Russian and widely distributed during the project; and 3) The influences of the Russian Water Code and the French model of RBCs, which seem to have played an important role. It took longer than expected to go through an extensive but necessary consultation process of the Plan and a lot of propositions have been removed in this process.

Finally, River Basin Councils (RBCs) were created in Kazakhstan with no particular model in mind, but French experiences and ideas from the Russian Water Code were reportedly utilized. It was not easy to argue for councils as this was a totally new concept for Kazakhstan. However, they have been established and proven helpful. The most serious problem that RBCs currently face is linked to the lack of funding and human resources to organize regular meetings. The capacity of Basin Water Authorities should be improved as more resources will enable their more effective participation in the meetings of the River Basin Councils. The particular case of the Balkhash-Alakol River Basin Council has also been discussed in this chapter.

With regard to the drivers of policy translation, individuals, their skills and connections were essential in securing change. The tandem of Hannan and Nikolaenko played a crucial role in securing the success of the consultation exercise of the Plan, although after the project was over, no agency ensured the approval of the plan. There is strong heritage of the centralized and hierarchical style of government business inherited from the USSR. This is especially reflected in the middle-range bureaucracy, which opposes any change out of fear of increased workload, and the top management, which fears losing power and responsibility.[56] Capacity for management needs to be improved, however mundane it may sound, and it is the highest priority for the Committee for Water Resources to improve its human and technical capital. Monitoring and better management of information related to water management is a priority for Kazakhstan, as well as water efficiency improvements. Interestingly, it was found that the role of journalists is important in making sure that the law is enforced (e.g. the case of the Big Almaty Lake).

Overall, it is possible to talk about the ongoing institutionalization of IWRM, as discursive change has obviously taken place in Kazakhstan. However, the fact that there are competing interpretations of the concept and no clear consensus on or understanding of how best to implement it suggests that normative change has not yet taken place. Without making sure that IWRM is fully institutionalized in the respective setting, a jump into practical implementation might result in a return to the practice of the schemes (plans) adorned with only cosmetic measures to make them look like IWRM. This is especially important at the moment, when the United Nations Development Programme has started a new project on national IWRM planning in Kyrgyzstan and Tajikistan, which is based on the lessons learned from Kazakhstan (Hannan 2008).

56 This, however, can be observed elsewhere, and perhaps is not linked to any particular culture of civil service.

6. IWRM Policy Translation in Turkey (Southeastern Anatolia Project)

> *We work and will be working towards the benefits of the man. If we do not want this country to be in the dark, if we are to produce cheap hydroelectricity in this country, these sources will be assessed. If we love this country {in a loud voice}, if we love this nation, no one could stand in its way… (Prime-Minister Erdogan in the TV address to the Turkish environmental groups in August 2008)*

Introduction

This chapter is concerned with three issues: 1) the extent to which the water sector in Turkey at large, and in GAP in particular, corresponds to the principles of IWRM; 2) the process of translation of the two policy innovations: the GAP Regional Development Administration and Water User Associations; and 3) the drivers of policy translation. The Southeastern Anatolia Project (Guneydogu Anadolu Projesi in Turkish, or the *GAP*) is a massive water and land development project with a funding of USD 32 billion and an ambition to construct 22 dams and 19 hydroelectricity power plants with the capacity of 7200 MW, and to open 1.7 ml ha of land for irrigation (Nippon and Yuksel 1989; Unver 1997a; Unver 2001a). The GAP developments are claimed to have been inspired by the Tennessee Valley Authority (TVA) and the Lower Colorado River Developments (Time 1998-1999; Southeastern Anatolia Project Regional Development Administration 2000), which is suggestive of the sort of knowledge and policy translation that are exercised in the project. At the same time, the GAP has been well-covered in the international media and academic literature, with a claim for a *sustainable human development* approach (GAP-RDA and UNDP 1997; Unver 1997a; Erhan 1998; Unver 2001; World Water Council *et al.* 2003; Unver 2006). This chapter first discusses the background of water policy in Turkey, countrywide as well as the GAP region in particular in section 6.1, and then it moves on to an assessment of the state of water resources management against the criteria of IWRM in section 6.2. Section 6.3 discusses policy translation and the ensued policy and organizational dynamics in GAP, and section 6.4 attempts to explain the success or failure of the translation process. It was found in the course of research that institutional fragmentation and the lack of public participation in water policy are common in the region. The translation of the two policy innovations discussed has failed, and the national policy factors and discourses have taken prevalence over the ones introduced. Owing to the less formalized policy context, the main pathways of policy translation

were individuals and international organizations. Overall, policy translation was found more suitable to conceptualizing the process of travel of IWRM ideas to the GAP than policy transfer.

6.1 The Background of the Southeastern Anatolia Project (GAP)

Turkey's annual water resources available are equal to 110 billion m3. With a population of 70 million people, the yearly water availability per capita amounts to about 1700 m3/c/a (World Water Council *et al.* 2003). This is borderline between being a water-rich and a water-stressed country (Falkenmark 1981). Presently, Turkey utilizes only about 42 billion m3 of its resources and has untamed potential in terms of hydropower and irrigation expansion (4 million ha) (World Water Council *et al.* 2003)[57]. According to 2000 figures, the biggest user of water is irrigation, which consumes 31.5 km3 (75%). This is followed by domestic consumption of 6.4 km3 (15%) and industrial consumption of 4.1 km3 (10%) (World Water Council *et al.* 2003; Cakmak *et al.* 2007).

Institutional fragmentation is portrayed as the main problem of water resources management in Turkey. This is the rationale for introducing IWRM and moving towards the EU Water Framework Directive, which Turkey needs to do in any case if ambitions of EU accession are to be pursued. Table 6.1 presents an overview of agencies involved in water management in Turkey.

Table 6.1 Overview of Turkish Governmental Organizations and Their Tasks in Water Management

Organization	Main tasks and responsibilities (summarized)
Ministry of the Environment and Forestry	Water Quality and Pollution, EIA
State Hydraulic Works (DSI)	Water resources development, water supply to municipalities of over 100 000 population
Ministry of Health	Drinking and Bathing Water Quality
Bank of Provinces	Water supply and sanitation for towns with population between 3000 and 100 000
State Planning Organization	Overall planning for investment
Directorates of Water and Sewage of Greater Municipalities	Water and Wastewater treatment plants inspection and control over industrial effluents

57 Turkey has currently developed only 34% of its hydroenergy potential, and is expected to increase the number of HEPPs (Hydro-Electricity Power Plants) and irrigated land (to reach 71.5 billion m3 by 2030).

Organization	Main tasks and responsibilities (summarized)
Autonomous Offices of the Provinces (Il Ozel Idareleri)[58]	On-farm development works
Ministry of Agriculture	Farmer education, subsidies, policy and legislation matters with regard to irrigation and aquaculture. Monitoring
The General Directorate of Electricity	Hydroelectricity Production
Ministry of Tourism	Water and wastewater treatment in the areas of tourism
Ministry of Interior	Local authorities' water responsibilities
Agency for Agriculture Reform	Land consolidation and levelling, cadastre
GAP Regional Development Administration[59]	Investigation, monitoring, co-ordination, evaluation and promotion of the GAP project.
Municipalities and Water User	Water and sanitation services
Water User Associations	Maintenance and Operation of secondary and tertiary irrigation channels, other irrigation infrastructure and water allocation

Source: Adapted from Grontmij (2004)

The GAP region, which is 75 358 thoUSAnd square kilometres[60] in size, is home to 6,1 million people (Southeastern Anatolia Project Regional Development Administration 2002a, 2002b, 2002c). This constitutes slightly less than 10% of both the population and territory of Turkey. The GAP region is rich in water and land resources, with 31 billion m3 of water and about 1,700 000 ha of land feasible for irrigation (Venture 2000; Unver 2006). The GAP province is of strategic importance to Turkey as this is the gateway to the Middle East and a main supplier of certain agricultural products such as lentils, pistachios, barley, sesame, pomegranates and grapes. In spite of the great importance of this region, it is under-industrialized with rampant poverty and high fertility rates, low human development indicators, uneven land ownership, considerable seasonal migration of agricultural workers and out-migration (Okhlahoma State University *et al.* 1999b; Unver 2006; USIAD 2008). Figure 6.1 in Annex 6.1 presents the GAP region.

The history of the GAP project has been well presented in Oktem (2005) and, in support of his arguments, I present below a recast of his narrative.

58 These agencies took over on-farm development works, such as roads, sub-surface drainage systems, water supply and infrastructure – functions that used to be provided by the General Directorate for Rural Services.

59 Linked to the Prime-Minister's Office and will be discussed in detail below.

60 The GAP region consists of 9 provinces of Adiyaman, Batman, Diyarbakir, Gaziantep, Kilis, Mardin, Siirt, Şanlıurfa, Sirnak

The GAP Regional Development Administration (GAP-RDA) was born in 1989, following the Master Plan prepared by the Japanese/Turkish consortium *Nippon Koei Co. Ltd.-Yuksel Proje A.S.*, who were both leading engineering consultants in their respective countries (GAP-RDA 2002). The main ambition of the project, according to a former GAP regional director, Erkan Alemdaroglu, was "*to make the region an agro-industrial export base" and create industrial jobs in order to transform "small farmers" into industrial workers*" (Barham 1996). The first vision of the development of the Tigris and Euphrates, a predecessor of GAP, emerged among the late-Ottoman technocrats in the Directorate of Public Works (Turkiye-Cumhuriyeti 1971). However, World War I postponed this vision until the early 1930s, when the founder of the Republic, Mustafa Kemal Atatürk, brought this idea back. In a speech from 1934, he outlined a "great water ideal" that should be implemented in order "to take every measure to use the springs of wealth of our homeland" (Turgut 2000: p.47). Unver (1997b) also referred to Atatürk as the project's first visionary, who talked about the "lake of humanity." In spite of recurring claims that the TVA was what had inspired the GAP, an anecdote has it that the idea had actually come from the Dnepr river developments in the USSR in the late 1920s (Mortan 1977: p.135; cited in Oktem 2005).

> Anecdote has it that the Ambassador of the Soviet Union, at one of his audiences with Atatürk, went into a great length to praise the development of the Dnepr-river and manmade lake. Atatürk, who was listening silently, immediately gave orders to Celal Baylar, requesting a plan for a large-scale electrification programme. Following these orders, observations and measurements began; gauging stations were established on more than twenty rivers.

Developments in the Southeast were further shaped in the 1950s when the State Hydraulic Works (thereafter *Devlet Su Isleri* or *DSI* in Turkish) drew independent plans for the development of the Tigris and Euphrates, mainly for hydro-power production. The Keban Dam (1974) was foremost on the list of future developments in the region (Mortan 1977). In the early 1980s, the project was framed in the form of the GAP and development plans on the Tigris and Euphrates were unified into one programme. Table 6.2 presents a comparison between the GAP and Turkey and shows that the GAP falls below Turkey's average on all indicators.

Table 6.2 Comparison of Turkey Average and GAP

	Turkey average	GAP region
Life expectancy at birth (years)	65.87	65.08
Real GDP per capita (PPP$; 2004)	5.194	3,307

Adult literacy rate 14+ (%)	83.50	70.27
Human Development Index (HDI) value	0.72	0.66
	Turkey average	GAP region
Agriculture contribution to GDP	17%	40%
Industry contribution to GDP	25.7%	17.7%

Source: Adapted from the UNDP Human Development Report of Turkey (2004)

Apart from being a water development project, GAP has a multiplicity of other dimensions that need to be considered, such as domestic electoral politics, the discourses of sustainable human development, transboundary issues with Syria and Iraq, the EU accession negotiations, the Kurdish identity and separatism issue, and the Development versus Environment debate. Therefore, I will proceed to briefly discuss other, non-water-related aspects of the GAP project, as presented in Figure 6.2.

- ***The Great Complexity of GAP***

Domestic electoral politics

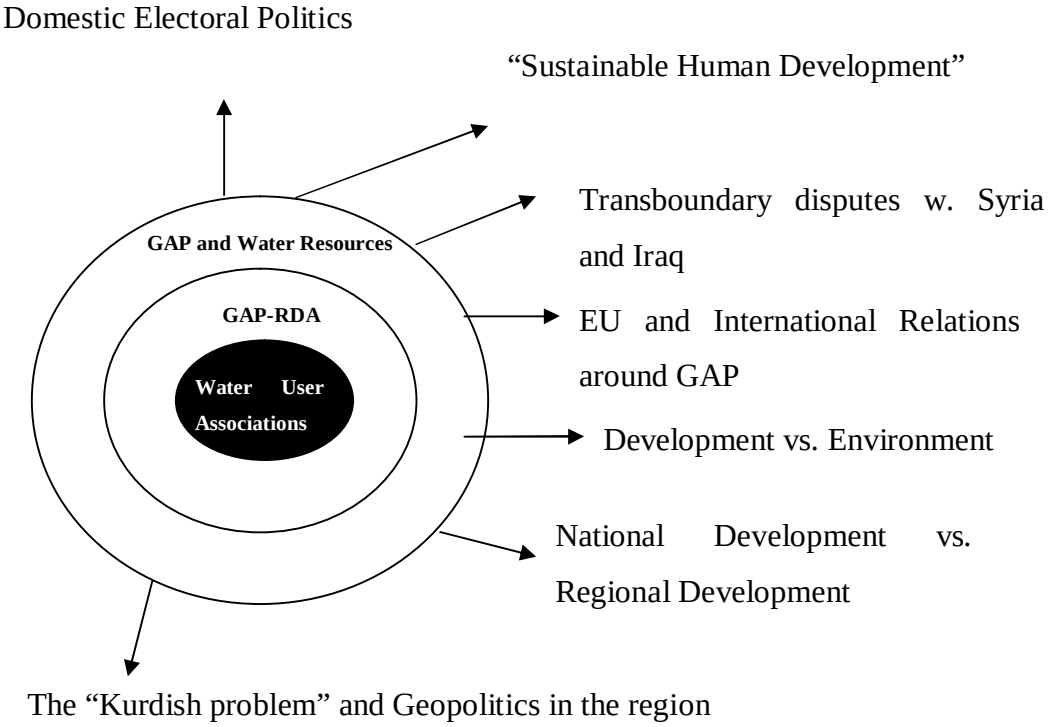
There is an important domestic electoral interest in the region, and it is argued by Carkoglu and Eder (2005) that the current government is interested in maintaining a patronizing approach and not developing the local knowledge in order to sustain GAP as its electoral base. The GAP Action Plan (2008-2012), the related government rhetorics about the final efforts to complete the project, as well as the decision to transfer GAP-RDA activities to the province, are perhaps all linked to these electoral politics. Most of the interviewed experts remain sceptical about the new GAP Action Plan and the transfer of the GAP-RDA projects, and they look forward to real changes in the region (Anonymous 2008, Kalaycioglu 2008).

The Kurdish problem: nation-state discourse versus multi-culturalism

As argued elsewhere, the GAP is inherently linked to the "Kurdish problem" and, in fact, first emerged as a project intended to facilitate the containment of the insurgency by means of economic development, forced urbanization and the "modernizing mission" (Scott 1998; Carkoglu and Eder 2005; Oktem 2005). This strategy consisted of two parts: the first dealt with the infrastructural development of dams, irrigation channels and industry development; the second one dealt with with the discourse formation of sustainable human development and

integration. The circumstances of an ethnic conflict bring a different dimension to the project, as public participation and the bottom-up approaches lose their traditional normative meaning. The Kurdish context of GAP is somewhat less political due to the lower intensity of Kurdish insurgency since the late 1990s. However, there still exists a strong sentiment in the region that the Kurds are being discriminated against. A good example is the Kurdish-populated town Suruc, which is closer to the Atatürk Dam than to the Harran Plain. However, the latter was originally selected as a pilot irrigation district. The ethno-nationalists' reasoning behind this choice was that the Arabs in the Harran Plain were favoured over the Kurds in Suruc (Ertugal 2003, 2006), (Kalaycioglu 2008).

Figure 6.1 GAP Complexity



Developmental versus Environmental discourse

Turkey opted for the "hydraulic mission" paradigm (Allan 2003) and prioritizatized development and growth over environmental and, to some extent, social matters. The argument is the same as it was in the 1992 Rio summit, when developing countries argued that, at this stage, environmental issues came second to development.

> Countries such as Germany, France, Holland, Belgium and other EU members have completed their water development projects and passed on to the next stage of water management – more efficient use of water resources, demand management, minimization of environmental impacts. The water quality oriented EU Water Framework Directive emerged. Turkey, in turn, is still improving on its socio-economic macro indicators, and has not completed its activities towards the fast growing demand for water in domestic, energy and agricultural sectors. In other words, Turkey is still at a previous stage that could be called "completion of water resources development". It is also important to remember that in the recent year Turkey gained important experience in water resources development" (USIAD 2007: p141).

The GAP, and especially irrigation development, will change the land and water regimes in the region substantially (State Planning Organization 1990: p512). Ironically, according to Turkish legislation, many of the major GAP-related projects would not fall into the category of projects requiring the Environmental Impact Assessment (EIA) because they were designed, or put into operation, before 1993.[61] At the moment, there are 6 dams planned within the Guneydogu Anadolu Project (GAP) which need to be studied in terms of EIA.

The Transboundary dimension

Syria and Iraq have voiced their concern over the GAP project and negotiations have been going on since the 1980s, as of yet with no long-term agreement reached by the parties. World Bank has refused to lend resources to the project before any three-lateral agreement of the Tigris and Euphrates is reached. Thus, naturally, Turkey was not a signatory to the Helsinki 1992 or New-York 1997 Water Conventions. Moreover, as stated by the Ministry of Foreign Affairs of Turkey, the doctrine of "water sharing" is not accepted by the Turkish government, which based its position on the "sovereign right of a nation to exploit its resources" (Cubukcu 2007). The transboundary impacts of GAP have created a poor image of Turkey and the GAP project in international water policy circles. Perhaps, this has contributed to the current drive behind the GAP-RDA projects to generate counter-discourses of sustainable human development in order to improve their position on the international, public front. Relations between Turkey and Syria have been improving in recent years, and a researcher interested in GAP's transboundary issues needs to refer to the latest developments in that area.

61 "EIA is required for a dam project if the reservoir volume is higher than 100 milliom m3, or if the surface area of the reservoir is more than 15lm2. However, EIA is not required if the dam was constructed before 1993, or if the final design was prepared before 1993 (Cakmak 1999)" (Brismar 2003: p30)

EU Accession and Regionalization Policy

The EU WFD is an important point of legislation for Turkey. However, it is feared that transboundary issues are currently blocking Turkey's acceptance of the scheme (Coban 2007). Serious governance reform is necessary in water and GAP management in order to further Turkey's accession into the EU. GAP remains on the agenda of EU-Turkey negotiations, and regional development policies of the EU (NUTS 21 regions) have already been applied to both the country and GAP to bring about some organizational change. This organizational change is manifested in the increased regionalization and introduction of the three Regional Development Administrations in the province, increased decentralization trends and empowerment of municipalities, and increased targeting of privatization. Related to this is also the shifting emphasis from national development (growth) to regional development (growth and trickling-down effect).

The Grand-Narrative of Sustainable Human Development

An all-encompassing hegemonic, amoeba-like discourse of sustainable human development is the grand-narrative of the GAP-RDA. It has contained all discourses mentioned above and suggested a legitimate channel to materialize the desired manifestations of the above-mentioned discourses. These include: a greater emphasis on development, a lesser opposition from environmentalist pressure groups, containment of the Kurdish attempts to break-away, exercising hegemony over Syria and Iraq in transboundary water negotiations and affairs, as well as strengthening Turkey's negotiation position in the EU talks, where the human rights and minority issues of the southeast are routinely criticized.[62]

6.2 The IWRM Baseline in GAP

- *Horizontal Integration*

The institutional complexity of the GAP management is overwhelming. The number of agencies formally involved amounts to about forty (USIAD 2008), and there are 270 independent projects going on in Turkey at the moment (Cakir 2007). The GAP-RDA was created in 1989 by law No. 388 with a mandate to co-ordinate, monitor, evaluate and promote the GAP project and, until

62 For EU criticism see (USIAD 2008)

recently, it was the only regional development agency in Turkey. Another co-ordinating and planning agency on the national scale is the State Planning Organization (SPO), which approves all public spending in Turkey. Although ultimately the SPO is responsible for GAP, the project-related documentation first must go to the GAP-RDA for assessment and corrections before being passed on to the SPO.[63] The third important agency is the State Hydraulic Works of Turkey (*Devlet Su Işleri* in Turkish, *DSI*), which deals with all water-related infrastructure and management issues, apart from those within the remit of municipalities (population less than 10,000). The GAP High Council is a cross-ministerial national-level platform for policy making. Presided by the PM and including the State Minister responsible for GAP, the State Minister responsible for the SPO, and the Minister of Public Works and the Minister of Agriculture, the GAP High Council meets at least twice a year to ensure the steady progress of the project (Southeastern Anatolia Project Regional Development Administration 2001b). Other ministries, such as the Ministry of Agriculture, the Ministry of the Environment and Forestry, the Agency for Agricultural Reform and agencies at the provincial and local levels, also play an important role in policy implementation. However, policy formulation is limited mostly to the DSI, the SPO and the GAP High Council (GAP-RDA 2004; Unver 2006; Unver 2006).

Horizontal co-ordination happens on two levels: at the national level in Ankara and at the provincial level in Şanlıurfa, where all ministries and public agencies have offices. According to Grontmij (2004), organizations involved in water management in Turkey do not regularly consult, co-ordinate or co-operate with each other. The GAP-RDA has the difficult task to learn to co-ordinate. However, in Ankara, the GAP-RDA faced a lack of trust and co-operation from other public agencies, especially the SPO and the DSI, whereas in the region, the GAP-RDA was confronted with distrust from the local people, who failed to affiliate with the GAP and rather perceived it as an alien institution[64] (Aydoğdu 2007, Kalaycioglu 2007, 2008).

63 While this is a rule demanded by Law #388, it is not complied with, because the SPO controls the GAP project completely. This will be discussed later.

64 Two points must be made clear here. First, the GAP-RDA was created not as an implementing agency, therefore "winning trust" by the projects of GAP-RDA was impossible (before they embarked on the idea of developing the GAP-RDA programme of projects). USIAD (2008) argued that GAP-RDA could have directed its budget for project promotion towards winning the trust of the local people, rather than promoting the project on the international arena. However, prestige and ensuing financial and institutional rewards linked to GAP's international presentation outweighed the local efforts on project presentation and promotion. Second, there was very little reason in co-ordinating at the regional level as all public agencies in the province have their own offices in Ankara to which they report and from where those reports go to the SPO. The functions of the GAP-RDA regional office, therefore, was limited to simply receiving and collating information, with occasional study and project funding for which the GAP-RDA secured in mid 1990s (largely due to its international promotion strategy).

> There are many organizations involved in water management with overlapping, conflicting and unclear tasks. Because different laws and regulations authorize a number of different institutions to manage the same water resources, these overlapping competencies have given rise to conflicts over tasks and responsibilities in the water sector. (Grontmij Engineering 2004: p7)

> Acceptability and support of reform from the local people is the most important factor. If no participation, the management is cut off from the people and the project gradually collapses…People are suspicious in the region. Why do they (the GAP RDA) come here? What do they ask for? Why do they distribute seeds for free? (Aydoğdu 2007)

There is a dire lack of co-ordination between agencies. Drainage is done by both the DSI and the Il Ozel Idareleri[65]; farmer education on irrigation techniques and agricultural extension services are provided (on a limited, case-by-case basis) by the Ministry of Agriculture, whereas the public body most interested in irrigation efficiency and the good state of infrastructure in the region is the DSI. A land consolidation exercise is currently being conducted by the Agency for Agricultural Reform, but the process is slow and costly. Overall, it is not clear who is responsible for the linkages between water use and land use, land salinity and erosion. Similarly, it is not clear who is responsible for the joined-up management of surface and groundwater, as well as the quality and quantity management of water. Under these conditions and the limited powers that the law bestows on the GAP-RDA, the project cannot be co-ordinated adequately. In the words of a long-time regional director of the GAP-RDA, Mustafa Aydoğdu, "the DSI is the main actor, but the General Directorate for Rural Services[66] (GDRS), farmers, governors, municipalities – all these actors are important and have to be brought under the same umbrella, which is almost impossible" (Aydoğdu 2007).

- *Vertical Integration and multi-level governance*

In a centralized political system like Turkey's, the division of responsibilities between the centre and the provinces is clear: policy, planning and investment issues are dealt with in Ankara, whereas implementation, monitoring and reporting is done in the province and communicated to the State Planning Organisation in Ankara. In this setting, the provincial offices of ministries and state agencies have little freedom and motivation to improve things, as policy is not within their remit. In an analysis of the GAP-RDA, Oktem (2005) noted that the GAP region is often being

65 These are Provincial State Bodies which are responsible for the infrastructural development of municipalities and villages, e.g. road, social infrastructure, erosion control etc.

66 Abolished in 2005, its functions officially transferred to İl Ozel İdareleri

"imagined" in Ankara, rather than being clearly perceived. "Imagining" the region reinforces established patterns of patronizing the local population and providing coercive "development from above" in the name of poverty alleviation, a "civilizing mission," which does not only violate the identity and traditional rights of local populations but also contradicts the principles of multi-level governance and subsidiarity. It is tempting to suggest that the GAP-RDA should have adopted bottom-up approaches, or the "grass-roots" philosophy as in the TVA, with decentralization and the subsidiarity principles in order to create a feeling of "ownership" for the local people. Unfortunately, such a simplistic approach would do only harm as GAP's socio-cultural setting is very specific and complex. There is no clear-cut solution to the paradox between the available choices: "developmentalism from above" would almost certainly fail like all other similar ambitious attempts in the past (Scott 1998; Josephson 1998), whereas the local population arguably lacks the capacity, and sometimes the desire, to claim "ownership of the project." The latter is perhaps linked to the depleted-by-war resources at the local level and the history of state domination that has discouraged the culture of participation and initiative. This paradox is further aggravated by path-dependency of the centralized administrative system in Turkey, which makes devolution, regionalization and decentralization a challenge:

> (The) Regional Development Administration's head office is not in the region. This has led to the prevalence of a centrally guided economic development instead of a local participatory one. (Building a factory in the region requires getting permits from Ankara and the process can sometimes take months.) The lack of development agencies that could bring people together in the act of planning and thinking the future has harmed the developmental look (Mortan 1998: p43).

> While the bottom-up approach is more desirable in theory, in practice Turkey is a very centralized state and decisions are made in Ankara. The decision to place the Headquarters of GAP-RDA in Ankara was also because of it - the money is most important, and when it is discussed, it is not acceptable for an expert to go and ask for the money from an undersecretary, so there should be top management placed in Ankara. This was a constraint of the project. All other organizations work in a very centralized way, and this is understandable because the SPO and the DSI have 28 regions and if to have a telephone conversation with each – work will become impossible. But if there is only one GAP-RDA in Ankara and there is only one Regional Office - very easy communication and management (Aydoğdu 2008).

Repeated studies show that the local people regard GAP as an "alien," the project as a "fiasco," if not another nationalistic attempt to assimilate Kurds by triggering their migration to the west of Turkey (Kalaycioglu *et al.* 2002b; Carkoglu and Eder 2005; Oktem 2005; Ertugal 2006). The modern "developmentalism from above" approach could be traced in the GAP-RDA in Ankara

with patronizing views on the people in the region. Oktem (2005) introduced the term "civilising mission" of the state, and the policies of its secular vision re-sound with many members of the Administration.[67] Thus, in the context of the GAP, the main conflict appeared to be between the centralized nature of the government in Turkey and the desire to go beyond traditional modernity "missions" by the GAP-RDA. Multi-level governance and vertical integration has, therefore, been limited in GAP.

As experiences from other regional development attempts in Turkey suggest (Eastern Marmara Region, Antalya Region, Cukurova Region, Zonguldak-Bartin-Kakabuk Regional Development Project, Eastern Anatolia Project and Eastern Black Sea Regional Development Plan), the failures of these projects may be rooted in the absence of the middle governance level between local and central authorities. The same refers to rural development projects (USIAD 2008: p95). All of these indicate unfavourable conditions for the vertical integration of GAP. There is hope that this will change with the introduction of Regional Development Agencies as a part of the EU policy NUTS 21.

- *Public Participation*

According to Unver (2007), the GAP-RDA has embraced public participation: "(F)acilitating stakeholders' participation: (the) GAP-RDA could be the ONLY organization on your list that is doing this; and doing it rather well." Nevertheless, there is a considerable amount of literature to suggest that public participation efforts of the GAP-RDA were limited to small-scale projects, apart from the re-settlement of the *Halfeti*. The very beginning of GAP, the Master Plan, was prepared in a top-down fashion that received some strong criticism later:

> The 1989 Master Plan for Regional Development emphasized issues ranging from regional physical infrastructure development, to the neglect of social and sustainability issues. It was partially a conventional regional investment plan with a multi-sectoral approach. Concepts such as environmental, economic and social sustainability, gender issues, participatory planning and implementation, and the inclusion of the private sector as an active participant were either missing or not given much importance. The changing needs and conditions in the Harran plains in the

67 Oktem (2005) described a GAP-RDA sociologist who believed that all the members of the Administration have a responsibility to promote a modern lifestyle in the region. With little regard to the social and religious values of the people in the region, this lady's half-naked daily baths in the irrigation channels did not trigger any social change as she desired, but only undermined the respectability of GAP-RDA in the region.

> GAP region and paradigm discussed here are the reasons for preparing a new participative water-based regional development plan (Unver and Rajiv 2004: p181).

> The Master Plan is a good plan, but the trends within the region have been ignored. No one has asked what the residents of the region want. Someone has tailored a shirt and told them to wear it. Yet, the people here, they just don't wear that shirt ([Ergun I-13] cited in Oktem 2005: p266).

Thus, it is hardly surprising that the ambitions of the Master Plan remained only on paper. The rhetoric of the Master Plan that was based on regional development was changed to the language of s*ustainable human development* introduced in 1995 and embodied in the new Regional Development Plan of 2002. Unver and Rajiv (2004: p176; my emphasis) describe GAP's new philosophy as follows:

> (T)he ultimate aim of GAP is to ensure *sustainable human development* in the region. It seeks to expand choices for all people – women, men, and children, current and future generations – while protecting the natural system, which sustains life in all forms.

In spite of the rhetoric, the GAP Regional Development Plan (2002) was never enacted after former Prime Minister Bulent Ecevit signed it off in 2002 before leaving office to join Erdogan's government, which did not take the plan into action (Guven 2007). At the local level, there is a documented strong discontent of the local people about the so-called "participative" ways of producing the GAP Regional Development Plan of 2002 (Kalaycioglu *et al.* 2002a; Ertugal 2005, 2006). The main reason for divergence in the GAP-RDA rhetoric and the project on the ground is that, even though the GAP-RDA has accepted the narrative of *sustainable human development* and embraced the principles of public participation (Kibaroglu 2007), the GAP-RDA is not an executive agency and has no powers of implementation. The DSI and the SPO have never shared the sentiments of *sustainable human development* and public participation as it would mean much more work and re-positioning for them than for the GAP-RDA. Therefore, *sustainable human development* and public participation, not being institutionalized beyond the GAP-RDA, were restricted to rhetoric and several small-scale demonstration projects[68] only.

68 Those demonstration projects were conducted with funding from the EU and UNDP. Those projects included CATOMs (The Multi-Purpose Women Support Centres), GIDEMs (project on entrepreneur support) in GAP, Rehabilitation of Children Working on the Streets and some other projects. The project of resettlement of Halfeti for the Birecik Dam construction (completed in 2000) was an example of participative re-settlement, which must be welcomed and encouraged. However, on a broader scale, public participation has been rhetorical and limited.

To sum up this section, there are formidable problems with the horizontal integration of the water sector all over the country and, in the GAP, the problems are exacerbated by the de-facto very weak GAP-RDA unit, which has an official mandate to co-ordinate and provide a strategic overview. With vertical integration, the centralized governance system has drawn a clear-cut separation between policy and implementation, and therefore it has created barriers to effective organizational learning and communication. There are different "images" of the GAP in Ankara and the region. With regard to public participation, it was found that only demonstration projects and the re-settlement of *Halfeti* accorded with this principle. However, it was also found that uncritical calls for public participation could harm the project, and its historical, cultural and socio-economic conditions must be taken into consideration in order not to avoid further patronizing.

6.3 The pathways and process of IWRM Policy Translation

The GAP Regional Development Administration and Water User Associations introduced in the Harran Plain are discussed in this section in the context of the policy translation process.

The GAP Regional Development Administration as a Policy Innovation

The Master Plan of 1989 suggested three options for the organizational form of the GAP-RDA: a TVA-type administration; a public-private partnership; and an administration with headquarters in the region in Şanlıurfa (Ozbilen 2007). The government chose the "hybrid" option: a Regional Development Administration with offices in Ankara and Şanlıurfa charged with the co-ordination, investigation, monitoring, assessment and promotion of the project (TR No. 388). Thus, the GAP-RDA became a planning and a co-ordinating agency with a limited implementation agenda and financial resources. The GAP-RDA is not even the most important player in the project: the DSI is the main agency responsible for policy and implementation in the GAP, while the SPO takes an active planning role.

Since its establishment, the GAP-RDA had worked in three main directions. At the international level, it had targeted commercial banks, financial institutions, as well as international media, NGOs, professional associations and experts in order to promote its "grand narrative" and secure funding. At the national level, the GAP-RDA had planned studies and co-ordinated public

agencies with regard to construction and other on-the-ground activities. And at the local level, it had engaged in selected non-political local NGOs and people in order to facilitate mutual trust. It seems that the GAP-RDA was most successful on the international arena, giving GAP broad publicity and international recognition and promoting its long-time president Unver to an international water policy position. Unfortunately, the Administration failed to ensure efficient co-operation and co-ordination among agencies at the national level, and ensured only a negligible engagement with the local people—most of them, in fact, feeling deep distrust for the GAP and its Administration (Kalaycioglu 2008, 2007), as stated earlier. Chronologically, three stages of the GAP-RDA development can be distinguished. From 1989 to 1995, the Administration matured and formulated its "grand narrative". From 1995 to 2003, the Administration and the project started to decline at the national level as financial and economic crises hit the country, along with the weakened political attention to the project (USIAD 2008).

Interestingly, the discourse-generation activities on the international level have increased as the national decline of the GAP-DRA deepened. A more serious blow came in 2003, when the new AKP[69] government came to power and embarked on a more critical perspective towards the GAP project. This stage of decline characterised the constant distress of the GAP-RDA as the threat of being shut down persisted until 2008, when with a political decision the GAP-RDA's Headquarters in Ankara were closed and the staff transferred to the regional office in Şanlıurfa[70] (Saniurfa-Gazette 2008). This virtually meant the loss of all organizational and administrative importance, especially in the context of the three newly created Regional Development Agencies taking over most of GAP's role (Yaman 2008). The interaction between the national and the international dimensions in the fate of the GAP-RDA is very interesting. The international activity of the GAP-RDA started in the 1990s when various international contacts were established:

> By launching a comprehensive publication and promotion policy (Altinbilek 2004, Erhan 1997; Unver 1997b; Unver 1997c), with regular reports published in Turkish and English, and providing research opportunities for visiting researchers and UNDP evaluators, it set the terms by which this project could be conceptualized, analyzed and criticized" (Oktem 2005: p247).

69 Justice and Development Party headed by President Ergodan

70 This appeared in an article in the local newspaper called "Sanliurfa Gazette" in 2008

In 1995 a seminar on Sustainable Development was conducted with the participation of international experts. Sustainable development, participation, integration and human dimension were all mentioned in the rhetoric of the GAP-RDA, although the project was managed by the SPO and the DSI, the Ministry of Agriculture and provincial bodies – agencies that hardly deal with considerations of sustainability. GAP-RDA had a budget of 7 million USD, as compared to the 30 billion USD of the Devlet Su Isleri (State Hydraulic Works). So, the GAP-RDA decided to focus on social and small-scale demonstration projects, such as youth projects and projects for girls in the villages, as well as centres for entrepreneurial support (Zahir Erkan 2007). The 1997 Sustainable Development Umbrella Progamme set up 27 projects on various dimensions of sustainability, but implementation has not been well-monitored as no accounts of their progress could be found at the GAP-RDA. In 1999-2000, two seminars were conducted: one on the exchange of experiences between GAP and other water and land development projects, and another on the American experiences in regional development projects. Especially fruitful was ensuing cooperation with the UNDP, EU, IWRA, Kent State University, Oklahoma State University and others. This aggressive international promotion policy of the GAP-RDA was also directed at the creation of opportunities for researchers, some of whom, unfortunately, engaged in biased research (Oktem 2005):

> Contrary to the principles of independent evaluation, however, the social, economic and environmental impacts of the Dam were assessed together with the GAP RDA, resulting in an overwhelmingly positive account, which reproduces the grand narrative of the Administration (Oktem 2005: p258).

In 2002, the GAP-RDA completed its Regional Development Plan, which extended the project until 2010 and anchored it to the concept of SHD. The fact that the Regional Development Plan came to existence exactly in 2002, when the change in government was expected, might be suggestive of specific timing: the plan was to signify the importance of the GAP-RDA in the face of possible closure in 2004. In 2002, just before the change in government and decisions with regard to GAP, the GAP-RDA produced a SWOT[71] analysis of its organization upon the request

71 SWOT analysis is a strategic planning technique formulated by the Harvard School and consisting of the analysis of the strengths and weaknesses of an organization as juxtaposed with the conditions in its environment:, the opportunities and the threats (Mintzberg 1994).

of the SPO. The results of the full-day discussion of the staff of the GAP-RDA have been summarized in Table 6.3 and throw some light on the organizational dynamics.

Table 6.3. SWOT Analysis of the GAP-RDA

Strengths	Weaknesses
1. GAP-RDA is very dynamic, flexible, entrepreneurial, open to innovations (23)[72], the only regional development agency in the country (13); 2. Young and active personnel, established organizational structure (13); comfortable working environment; extremely successful in international relations and making and maintaining important contacts (4); its image on the international arena presents it as a strong and reliable organization. 3. Umbrella character of the organization provided by the law #388 on its establishment.	1. Weakness of our law that the GAP-RDA is not an investment and executive body, completion of the term in 2004 (41); Organizational development still taking place. 2. Many projects depend on temporary workers. Flexibility, dynamism and openness of the GAP-RDA are linked to current organizational management. There is a risk that with the change of management these will disappear. 3. Uncertainty with the term of the organization (16). 4. Small budget (13). There is a problem in co-ordinating other agencies. There is insufficient desire to share information and build partnerships (10). 5. The personnel of the organization receives insufficient compensation (6). 6. Lack of skilled people, especially in the domain of international relations.
Threats	**Opportunities**
1. Views of other organizations on the organization, lack of cooperation, organizational competition and related problems (24); 2. Its term is soon coming to an end (11). 3. Economic crisis (11) and decrease in public spending (9); Poor image of the GAP project due to incompletion (5); 4. International campaigns that are on the rise against the GAP as the result of globalization is a threat[73] (7); 5. Poor image of the GAP in the region due to incompletion and mistakes (5); the local people's high expectations for the organization (1); 6. Decrease in budget and insufficient financing that the organization gets from the budget.	1. International interest to the region; the positive image and discourse around the model of development can be used as an opportunity (12); 2. Increasing importance of regional development in the world can be an opportunity for GAP (9); 3. Reconstruction works that started in the public sector, stronger partnerships between Public Agencies and NGOs (7); the unique position of the GAP-RDA as one-of-a-kind and absence of competitors in this field (7); the deadline of 2010 is an opportunity to mobilize efforts to complete the project by then. Support from the National Security Council. 4. Creation of the new strategy of an organization for proposal to change its law and responsibilities is an opportunity for the project.

Source: (Southeastern Anatolia Project Regional Development Administration 2004: translation from Turkish)

As seen from the matrix, the biggest threat perceived by the GAP-RDA in 2004 were the "views of other organizations on the organization, lack of cooperation, organizational competition and related problems" (Southeastern Anatolia Project Regional Development Administration 2004). This theme has been central during the fieldwork as statements on institutional competition,

72 A number in brackets specifies the number of people who have agreed with a particular bullet point

73 This reference is probably related to the Ilisu Campaign

hostility and the lack of cooperation were common. The following statement by the former regional director of the GAP-RDA, Mr. Erkan Alemdarolgu, summarizes the main points of the issue of institutional competition:

> Although it looks as if the GAP-RDA has been granted the powers to manage the project by the provisions of the law, it lacks the resources to do so. The administration has carried out studies such as the 1989 Master Plan, the 2002 GAP Regional Development Plan, the Crop Pattern Plan, the Social Action Plan, but is not successful in their implementation. This must be improved. This means that according to the law, the public agencies that have budget with regard to the GAP region, must direct their projects to the GAP-RDA for the necessary amendments, and only then are the documents sent for approval to the SPO. However, all of this is different in practice. Those agencies that did not object the Master Plan started to demand more resources for their annual plans, involving politicians in the process. This makes planning futile and hinders the integration and synchronization of investment. Thus, sectors that do not require much money receive great investment, whereas those that do require investment are left with relatively less money (for example the drainage investment that did not go hand-in-hand with irrigation investment in time, which caused salinity, and on-farm erosion[74]) (USIAD 2008: p167; translated from Turkish).

During the years 1991- 2002, investment in the project was low (USIAD 2008). It was especially lagging behind in irrigation (26% in 2008), while the greatest part of investments went into hydroelectricity production (83.6% in 2008). This indicates that GAP's priority focus was economic growth; hydropower generated in GAP had to be transferred to more developed Western Turkey, which only deepened the distrust of local inhabitants, who viewed this as an exploitation of their natural resources that were to be used in the West of the country.

A continuous threat of closure has degenerated the working atmosphere in the organization, which has already been weakened by the departure of important, skilled people and the loss of vital responsibilities.[75] During participant observation in the fieldwork, it was observed that many employees had lost motivation, had no tasks to complete during working hours and commonly engaged in futile activities. Finally, the SPO's suggestions to shut down the GAP-RDA led the AKP government to transfer the GAP-RDA to the region. When asked about the rationale behind this decision, a commonly received answer was "*it was a political decision,*" subtly hinting at the

74 On the other hand, it was noted during the fieldwork that the Agency for Agricultural Reform has received a great allocation of money within the GAP Action Plan. This could be explained by the need to accelerate the land consolidation and levelling practices that would almost certainly increase the popularity of the government (AKP) in the region.

75 It was not uncommon for the author to come across employees of the organization not being involved with work during office hours and playing cards or similar games instead.

upcoming municipality elections in March 2009, where the GAP region carries some major electoral importance for the ruling AKP Party (Yaman 2008, Kalaycioglu 2008, Zahir Erkan 2008). The decision to transfer the project (January 2009) to the region has resulted in the further deterioration of the organization. Many employees have left as they view the organization's functions and *raison d'etre* as diminished.

> When we have been writing the law (FM: on regional development agencies), we sent the draft law to the GAP-RDA. We suggested that RDAs will become strong and as the DPT will be controlling them, there is no need for the GAP-RDA left. However, with a *political decision*, it was decided *not* to close the GAP-RDA but to extend its period. And now we are trying to adapt to this… In fact, however, the functions of the GAP-RDA have been completed after creation of the RDAs in the region. We suggested that the people working for the GAP-RDA could take up positions in the RDAs in the region. They know the people, the socio-economic details etc. But most of the people did not want to move out of Ankara (Yaman 2008).

Since November 2007, the government has embarked on a new programme to revitalize the GAP project and make a final effort to complete it in its most crucial aspects by 2012. The GAP Action Plan was prepared in 2008 and targeted new economic models for investment in the region, focusing on private sector involvement.[76] However, even the emergence of the GAP Action Plan, as well as the decision to transfer the GAP-RDA's Headquarters to the region, is most likely indicative of the electoral politics interfering with the project. Thus, organizational competition, the "hybrid" form of its organizational model, the lack of political patronage and the somewhat unsupportive attitude of the current government towards it have all contributed to the fall of the GAP-RDA. Nevertheless, on the international arena, the GAP-RDA will remain prominent owing to the history of promotion of its "grand narrative" of sustainable human development. Why the GAP-RDA adopted this narrative and how it promoted it is discussed below.

- ***The "Grand Narrative" of the GAP-RDA: Sustainable Human Development***

76 As the result of the GAP Action Plan, the following priorities were identified in the region: completion of the irrigation investments, decrease in the price of electricity for pumping water for irrigation, devising a system of regional and sectoral incentives, establishment of regional minimal fee; promotion of professional training; completion of the two-ways highways and roads; support education and newly established universities; completion of the cadastre works. Creation of the organized industrial zones for agriculture and animal husbandry, increase in their numbers, improvement of border control; improve access to bank credits; improvements in Infrastructure; introduction of programmes to provide employment; assessment of tourism potential, strengthening of the disadvantaged groups; human resources development; farmer education – extension services improvements; safety and security improvements in the region (Southeastern Anatolia Project Regional Development Administration 2008a).

As has been stated on multiple occasions, *Sustainable Human Development (SHD)* is the main philosophical claim of the GAP project, according to the GAP-RDA. One of the typical statements linking GAP to sustainability is presented below:

> (The) GAP Administration transformed the project in 1995, as a result of a participatory multi-stakeholder process jointly managed by the *United Nations Development Programme* (UNDP), into a *sustainable human development* program (United Nations Development Programme and GAP Administration, 1997), incorporating the principles set forth by the Earth Summit, Rio de Janeiro, 1992; International Conference on Population and Development, Cairo, 1994; World Summit for Social Development, Copenhagen, 1995; and World Conference on Women, Beijing, 1995 (Unver 2006: p22; my emphasis).

How a 32 billion USD project could possibly be transformed into a *SHD* project through the GAP-RDA and the UNDP with a budget of 5.2 million scattered across 29 projects is less clear. However, the GAP-RDA went on to continue its rhetoric. Unver positioned GAP as a "participative water-based regional development in the South-Eastern Anatolia Project" (Unver 2006) and as an "Integrated Socioeconomic Development Project" (Unver 1997b). These concepts do not provide a mere label for the developmental approach, but they have an important function in structuring thought and policy options.

It is necessary to have some insight into the reasons why GAP emerged in the first place, and only then ask the question why it opted for the *SHD* narrative. Indeed, Oktem (2005) and Carkoglu and Eder (2005) noted that the emerging scholarship on GAP does not address why this regional policy originated particularly at the end of the 1980s, nor how it took over the traditionally stronger emphasis on national development in Turkey. According to Unver (2006), regional development is never a priority for a state (e.g. Turkey) unless there is a strong external incentive, such as EU accession or some other driver:

> This "wait" is typical of the national processes in both developing and developed countries in regard to the emergence of regional policies. Unless influenced by externalities, of which a good example could be the regional policies of the European Union, development on a national scale is usually the priority until some social, economic, political, or other threshold is reached that shifts the emphasis from national issues to interregional development disparities (Unver 2006: p19).

The same view is voiced by Ertugal (2007), who argues that for Turkey, national development and industrialization was a priority by comparison with regional development. These views

suggest that the regional development approach taken by GAP emerged due to the special historical and political conditions that made the GAP region more important than national development goals, and they support the argument of Oktem (2005) and Carkoglu and Eder (2005) that GAP emerged in connection to the "Kurdish problem".

> As the focus of GAP shifted from hydroelectric to regional integration, GAP came to be seen not only as a way to improve living standards and economic conditions in the region, but also to help ease political tensions and polarization. GAP became a policy tool to address the economic roots of Kurdish separatism (Carkoglu and Eder 2005: p170).

The regional approach to development also helped to "re-name" the region that had acquired, by then, the name *OHAL* (region in the State of Exception) as *the GAP region*, and the mention of Kurds is conspicuously absent from any official sources on GAP. Oktem (2005: p243), therefore, sees the "grand-narrative" of *sustainable human development*, justice and multiculturalism as a part of the broader nation-space discourse.

> It is in the 1980s, with the dual culmination of the Kurdish Insurgency and the implementation of the Southeast Anatolia Project (GAP), designed as a panacea to ethno-nationalist Kurdish challenges that all these statements crystallize into a larger nation-space discourse.

Regarding the question of why did the GAP-RDA take up the concept of *sustainable human development*, various opinions can be found. Carkoglu and Eder (2005) see SHD as a "password" for better funding and acceptance for the project in international professional and academic circles:

> Although this shift in GAP's focus towards sustainable human development is certainly welcome, the question as to why GAP genuinely has been transformed into a sustainable development project remains to be answered. The GAP Regional Administration itself addresses this question and suggests: "the international community has added new dimensions and concept to the definition of development. Coming to the fore in this period were concepts such as environment, sustainability and participation, which were either overlooked or totally absent in the original master plan" (www.gap.gov.tr 2005). In effect, the Turkish government was responding to some of the new trends emerging in the development agencies and saw this shift as a convenient strategy to ensure international funding. In sharp contrast to the initial years of GAP, when there was no international financing available for dam building, this strategy has been quite successful in receiving funds from a wide range of international institutions such as the World Bank, FAW, UNDP, UNICEF, as well as the EU (Carkoglu and Eder 2005: p179).

It can even be argued that it was a necessity that the GAP-RDA entered the international arena because, at the national level, its functions were limited by the hostile attitude of the DSI and the

SPO. Secured funding from the EU and UNDP allowed for the justification of the importance of the GAP-RDA amidst the growing scepticism over its value at the national level in the aftermath of easing tensions in the Southeast and declined violence since 1997. Therefore, the Sustainable Development Programme of the GAP-RDA and UNDP, as well as the 46 million grant from the EU, were all ways for the Gudeydogu Anadolu Projesi Regional Development Administration (GAP-RDA) to secure a niche at the international level. The social projects that the GAP-RDA managed have overall been successful, but due to limited funding and scope, they have implemented little change in the region (Fieldnotes 2008). Nevertheless, they have served the purpose of perpetuating the "grand narrative" of *Sustainable Human Development.*

Another interpretation is provided by Oktem (2005), who argues that the SHD is to contain the "Kurdish problem" and UNDP funding was a convenient way to frame the "grand narrative" in this trendy language.

> The Administration (FM: the GAP-RDA), established to contribute to the solution to the "Kurdish Problem"…had a number of narratives at its disposal to approach the social unrest of its predominantly Kurdish "beneficiaries". Within the repertoire of the neo-liberal post-coup of the 1980s, "multiculturalism" would have been one option, yet the Administration, thanks to funding by the United Nations Development Program (UNDP) opted for another narrative, that of "Sustainable Development"…[S]ustainable development became an additional layer to earlier statements of the nation-space discourse. Its operations can be characterised by a set of strategies ranging from "banalising," "excising" – from the narrative that is – to "taming, containing and cultivating" the ethnic "Other" (Oktem 2005: p244).

Yet, another possible interpretation of the decision of the GAP-RDA to opt for the SHD grand narrative is linked to electoral politics. Carkoglu and Eder (2005) argue that the governing parties saw the GAP region as an important contributor to vote polls, and therefore the "grand narrative" of the GAP project was constructed along the lines of an apolitical, welfare-maximizing project.

> The shift of emphasis from hydro-energy production to integrated regional development within GAP is also linked to an often-neglected rationale based in electoral politics.[77] This neglect is based on the long-standing presumption that giant development projects are planned and administrated by an apolitical, welfare-maximizing state apparatus. Thanks to this convenient

77 Indeed, an extremely important factor, especially recently. The AKP (Justice and Development Party) and Erdogan's decision to move the headquarters of the GAP-RDA to Şanlıurfa and close the premises in Ankara has been linked to the municipal elections of March 2009, which AKP confidently won. The GAP region is an important vote-base for AKP and the move to accelerate the GAP project with the Action Plan, as well as to move the GAP-RDA "closer to the region" have been populist moves for winning votes (Kalaycioglu 2008). Many interviewees answered the question why with "it was a political decision" (which either meant that the agency's workers mattered (140 people) or that it was undertaken in order to gain political capital.

> characterization, the project came to be seen outside of any strategic or political concerns, disregarding the nationalistic tones of argumentation for the necessity and urgency of the project in government as well as media and intellectual circles (Carkoglu and Eder 2005: p173).

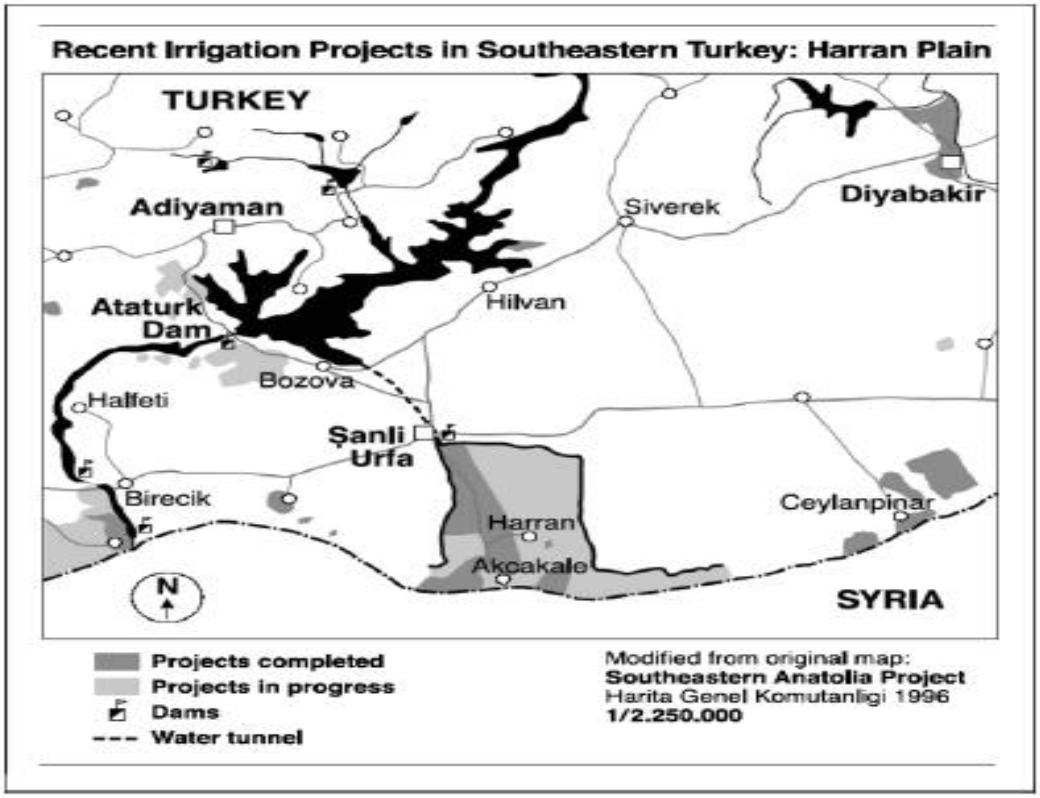
Most probably, it was a combination of the above-mentioned reasons for Sustainable Human Development to emerge and become the GAP-RDA's central idea. What happened in reality was "developmentalism from above" with a widely-spread "patronage mentality" that degraded the implementation phase of the project. Aside from keeping the local know-how at arm's length, the patronage logic pushed budgetary allocations towards becoming unaccountable (Carkoglu and Eder 2005: p174), which GAP indeed became by 2009, having spent more than USD 20 billion and resulting in questionable outcomes of poverty alleviation in the region (USIAD 2008).

Thus, all critical authors view this "grand narrative" as a discursive move, rather than a true commitment to the principle of sustainability (Carkoglu and Eder 2005; Oktem 2005; Kalayciolgu 2008; Ertugal 2006). Opinions, however, divide over the reasons why GAP took *SHD* on board. Some argue that this is to disguise the nationalistic focus of the project, others implicitly acknowledge it as a "password" for better funding and international acceptance (Unver 2001b), and yet other authors argue that there was an electoral motivation, as well as the personal interest of the GAP-RDA elite to promote their international careers, behind taking on *SHD* (Carkoglu and Eder 2005). It is highly likely that international recognition and the access to additional funding allowed the GAP-RDA to survive in a hostile environment at the national level and was a niche to prove its vitality. Having faced threats of closure and dysfunction, the GAP-RDA thrived by promoting itself and the project internationally, and the SHD was the most convenient narrative to achieve this goals.

- ***Irrigation and Water User Associations as a Policy Innovation in Harran***

Irrigation management is the most important for poverty alleviation, and yet it is the most problematic in GAP. Only 15% of land planned for irrigation has been actually irrigated (Southeastern Anatolia Project Regional Development Administration 2008c). Most of the land that has been opened up for irrigation is located in the Harran Plain – an area on the border with Syria (Annex 6.1).

Figure 6.1 The Harran plain



Source: (Harris 2008)

Currently, several issues are limiting effective and equitable irrigation management in the Harran Plain. First of all, there is insufficient human capacity. Farmers who have never irrigated before are now obliged to do so and organize themselves in water user groups in order to provide communal services. Insufficient and inadequate training and agricultural extension services put a limitation on improving the "human factors" (Kanadikirik 2008, Yilmaz 2008, Gokhan 2008). It was commonly perceived by Ankara that "time is needed" for farmers to learn. In the regional office, however, the importance of a more intensive intervention is underlined, even though there is scepticism based on previously failed attempts to provide knowledge and services "from above" (Demir 2008). Indeed, a quote by one of the farmers states that: "Technical advice is no good. We do not need it. Since 1995 there is 50% increase in the salinity of lands" (USIAD 2008).

The main channels are open concrete-lined channels in the trapeze form (see Figure 6.3). They are not suitable for the region as they have high evaporation rates. Secondary channels are also

open concrete channels, and the tertiary channels are in the form of canalettes (Figure 6.2 and 6.4). Techniques used by farmers for irrigation are also poor, with most of farmers engaged in flood irrigation, in certain cases in the territory that was provided with drip irrigation technology as part of the pilot project. Flood irrigation results in water wastage and water-logging of the land. Another important issue is the lack of organized drainage in the Harran Plain and fragmented responsibilities over it among various state agencies. DSI did not construct drainage systems, and the underground ones are no agency's responsibility at the moment. Most of the drainage network consists of earthen, poor-quality canals (Figure 6.5). Water logging is a common problem that ensues from that: at 1-2 meters' depth in the soil, one often finds that water has been logged (Il Ozel Idareleri 2008).

Figure 6.2 Secondary irrigation channels and siphon type irrigation of the maize fields, GAP

Source: author

Figure 6.3 Main irrigation channel with water gates for irrigation of fields, Harran, GAP

Source: author

Figure 6.4 Secondary irrigation channels and siphon type irrigation of the maize fields, Harran, GAP

Source: author

Figure 6.5 Open non-aligned drainage channels that follow the secondary irrigation channels, GAP

Source: author

Water User Associations in the Harran Plain as a Policy Innovation

Water User Associations are community-based resource management organizations that operate and manage secondary and tertiary irrigation channels, as well as on-farm infrastructure. There is a democratic procedure for the elections of WUAs, and the *raison d'etre* of WUAs is to secure equal, fair and effective irrigation water management while representing the interests of farmers in a community. As a policy innovation, irrigation management transfer happened across all of Turkey, but the most problematic region proved to be the GAP province (Kanadikirik 2008). This was caused by the socio-economic and cultural background of the region, among other factors. Obviously, the main motivation behind the transfer were cuts in public spending on the maintenance and operation of the systems (Gokhan 2008, Kibaroglu 2002b).

There have been 18 Water User Associations established in the Harran Plain since 1995, when irrigation started. Although not a policy innovation specific only to the GAP region, irrigation management transfer to Water User Associations on a large scale started in Turkey in 1993 as part of the DSI-World Bank-initiated accelerated transfer programme (Kibaroglu 2002a; Yildiz 2004; Erdogan 2007). Water User Associations were created in the GAP region because irrigation had not been practiced on a large scale before 1994. At the moment, 42% of the irrigation infrastructure and 91% of irrigated land have been transferred to WUAs in Turkey (USIAD 2007). However, according to the WB paper on "Irrigation and Water Resources with a Focus on Irrigation Privatization and Management" (2006), many praised countries with PIT have perhaps done the transfer too hastily. This certainly stands true in the Harran Plain (Kanadikirik 2008).

It is important to distinguish between different WUAs in the Harran Plain. Some of them are functioning more successfully than others, but there was a general feeling among the interviewees, as well as written opinions on irrigation in GAP, that WUAs have fallen short on the matters of democratic representation and fairness. On the other hand, it is questionable to what extent one can expect a smooth translation of a modern concept of "participatory irrigation management" into a setting where a) farmers have not irrigated land before, b) most farmers are landless and thus do not care about land and long-term improvements, and c) with the important traditional organization of a society based on tribes and clans that operate according to principles different from democratic participation.

Main problems with regard to WUAs in the Harran Plain

Several problems have been reported with regard to the functioning of WUAs in the region. According to Harris (2005b), the embezzlement of funds, nepotism, "corruption," "elite capture" and "participatory exclusion" are all present in some of the 18 WUAs in Harran. Heads of WUAs are elected by the council delegates – a procedure that was found undemocratic as individual farmers did not have the chance to vote for or against the candidates (Harris 2005b). Harris (2005) conducted a survey on the level of satisfaction among farmers with the elections for WUAs, and 60% of the surveyed were found not content, which suggests some serious drawbacks. Another question was asked about training, and two thirds of farmers reported that they never had any sort of training by state officials. This confirms the fact the government

invested insufficient efforts into the training and education of farmers. Those efforts that were planned in a consistent way have never been scaled up or implemented.[78]

Figure 6.6 Sharecropper family of Arabic origin, Harran, GAP

Source: author

78 This is related to the project initiated by the GAP-RDA on Maintenance, Operation and Management of irrigation schemes (MOM) that has never materialized in reality. It will be briefly discussed later in the text.

Figure 6.7 Sharecropper's house for working season

Source: author

Accelerated transfer was first motivated by the prospects of public funding cuts and devolution of the system. When asked why there was a rush with IMT, a DSI official responsible for the maintenance and operation of the systems drew the attention to the costs of the DSI, which have decreased dramatically as a result of the IMT. This is indicative of the main motivation behind the programme.

> The government used to spend 90 million USD annually on operation and maintenance of the water systems. After the transfer they spent only 5 million. There is 85 million USD saved, but the channels and other infrastructure suffer great damage. 1% of the investment costs need to be paid on maintenance and operation. The farmers need to do this, so there are places where they manage, in other places the government is still helping them (Gokhan 2008).

Later, World Bank (2006) acknowledged that its push for Irrigation Management Transfer has happened too fast and resulted in adverse effects around the world. Therefore, a paradoxical situation emerged when a large investment had been secured to complete the irrigation networks and bring water to the plain, but cuts were implemented in taking care of that infrastructure and

the fair allocation of water, which, of course, resulted in the reduction of positive impact from irrigation.

> The government was supposed to create a sense of ownership, increase transparency of operational processes, accessibility to system personnel, provide efficient maintenance, improved irrigation service, reduce conflicts among water users and increase agricultural productivity. However, the lack of local farmer participation during irrigation systems transfers' process, and weaknesses in relations between the institutes mostly obstructed government to achieve its goal (Erdogan 2007: p21).

> Farmers were complaining about poor field drainage saying that the tail water accumulated at the end of the field and the crop died in that part of the field as a result of poor drainage. Although field drainage is a problem, water logging at the end of (the) field is only due to poor drainage. What was observed was that farmers used much water, and land levelling was poor (Yildiz 2004: p33).

Thus, the poor drainage network and levelling, insufficient training and extension services, as well as the non-supportive behaviour of the Provincial Governor, all indicate drawbacks in the government's support for irrigation and the WUAs. On the other hand, the low level of trust in WUAs, non-satisfaction with the process of electing the heads of WUA, as well as low transparency of WUA's activities, all suggest that there are formidable problems. Whereas fee collection is a problem in some WUAs (e.g. Firat, Imambakir WUAs), in others (e.g. Kisas and Tek-Tek WUAs) fee collection would reach up to 90%.[79] According to Demir (2008), this indicator could be used to determine whether a WUA is working well because, in cases where the water fee is kept low and fees are uncollected, there is a high chance that the Chairman will make concessions in order to win votes in future elections. Overall, WUAs constitute a positive policy innovation in Harran, but there should be a new law with much stricter control and monitoring, as well as improvement within the WUAs with regard to their structure and functioning. Policy translation has been confronted with the socio-cultural realities of the GAP population, where the notions of "democracy" and "representation" are not as well institutionalized. Thus, according to Harris (2005b), the poor, the landless, women and those engaged in animal husbandry have been adversely affected by irrigation and WUAs did not embody those principles of "ownership" and participation as had been hoped.

79 It is noteworthy that often documents were refused to be given out and information was supplied only in the narrative form.

Figure 6.8 The Kurdish Villager in Suruc, Harran Plain

Source: author

To sum up the discussion of the pathways and the process of policy translation regarding the GAP-RDA and the Water User Associations (WUA): in the pathways of translation, the boldest actors were individuals and international organizations, and not consultants or government-sponsored studies by the think-tanks, as it was in the case of England. Policy change came about with the emergence of a new political government, and while the change followed the lines of path-dependency in the desire to complete GAP, the approach was different. There is less capacity for learning from international experience. The forum for policy deliberation is being formed with professional and non-governmental organizations getting increasingly interested in water policy issues, which is a very positive development. Currently, water policy discussions are being activated in Turkey towards a greater incorporation of IWRM. However, the water policy debate is not yet as informed by international experiences as it is in England and, therefore, the factor of individuals is stronger in the policy change. This is also caused by the lack of regulatory impact assessment in Turkey; even the Environmental Impact Assessment is not applied to most structures within GAP.

The "hydraulic mission" and "developmentalism from above" are still the dominant discourses, although they are challenged by discourses of decentralization and privatization. Therefore, it is difficult to judge at what stage of the policy translation cycle GAP is. The discursive entry of the principles of IWRM has been made by the GAP-RDA through its grand narrative of the SHD. However, they have not been institutionalized beyond the GAP-RDA. At the same time, the dominant discourses of the State Hydraulic Works and the State Planning Organization are also being changed. While it is difficult to pinpoint the normative change stage, there are attempts to materialize the GAP Action Plan's ambition to complete the project by 2012.

6.4 Drivers for Policy Translation

- *National vs. International Factors in IWRM Policy Translation*

GAP policy has been influenced by both national and international factors, which have interacted in an interesting fashion. The very conceptualization of GAP was assisted by the Japanese-Turkish consortium, signifying international cooperation. The GAP-RDA, as mentioned earlier, has been very active in the international domain, whereas international organizations, commercial banks and governments have contributed to GAP financially. Unver and others have repeatedly stated that GAP has drawn its inspiration from the Tennessee Valley Authority and the American vision of the grass-roots, whereas the project was initially designed to create an export-base in the GAP region – another aspect of global economics. On the other hand, GAP has been an issue of national-level electoral politics, the struggle for power between organizations, and has been directly influenced by national development priorities and the economic situation. An interaction between *national* and *international* in shaping policy change in GAP, as well as related discourses, represent an important and, I would argue, a typical policy phenomenon.

The GAP-RDA has engaged actively with international actors for several reasons, which have come to influence the project significantly. First, as the nationally determined condition of lack of funding and the economic and financial crises that Turkey experienced in the 1990s strained public finances, the GAP-RDA started to look abroad in order to gather financing from international banks, businesses and organizations. Second, the GAP project was started unilaterally by Turkey without regard for its downstream neighbours Syria and Iraq, who protested vigorously against the project on the international scene. Violence in the region and the reported violation of the civil rights of the Kurdish population also attracted international

criticism, as the attempted construction of the Ilisu dam did. On the other hand, little regard was given to environmental issues. This all presented GAP as a project guided by traditional approaches governed by "developmentalism from above" and there was a need to launch counter-discourses and create a better image for GAP at the international level. Third, important self-interest of the top management of the GAP-RDA was involved in engaging with international water policy elites as this could help in the future. As shown below, the former president of the Administration has served on a number of boards of international professional organizations and suchlike, which has been an excellent position for the organization to connect to international and national networks. Fourthly, and most importantly, the engagement of the GAP-RDA with international actors was triggered by its precarious situation in the national context and its risk of being closed. The SPO and the DSI have not been cooperating with the GAP-RDA (GAP-RDA 2002) and the threat at the national level could be best addressed by making the GAP-RDA an indispensable international nexus of the Turkish government.

In the early 1990s, when non-cooperation had resurfaced, the GAP-RDA needed to find a niche of operation: international discourse-generation, promotion and co-operation. This was hoped not only to improve the project's image and attract financial resources but also to strengthen the organizational position of the GAP-RDA, which faced threats at the national level. Indeed, when before 2002 the management of the GAP-RDA felt that there was a chance for the new government, due to take office in 2003, to turn against the organization, and due to the expiring term of the organization (2004), top management scheduled the release of the new Regional Development Plan for 2002 to justify the need to preserve continuity in the management and implementation of this plan. Moreover, in the SWOT analysis, the international successes and contacts of the GAP-RDA are linked to the managerial staff, suggesting by this that any changes in top management could endanger these achievements. However, the new government did not consider these arguments, and the state policy towards GAP changed.

As mentioned earlier, the policy translation of the Water User Associations was introduced by the DSI with financial and technical assistance from World Bank. The State Planning Organization claims that the motivation behind an accelerated transfer came from the farmers who had visited Spain and Mexico to observe the effectiveness of the agricultural reforms there. However, insight

from the State Hydraulic Works (DSI) suggests that the annual costs for Maintenance and Operation in Turkey was reduced to 85 million USD after the transfer. This, in turn, suggests that this was the primary motivation of the transfer and the creation of Water User Associations (Gokhan 2008). It is acknowledged by both the SPO and the DSI that the transfer was too rushed, most farmers in the GAP region were unprepared and the structure and regulatory framework of the WUAs should now be much improved, starting with the introduction of the specific Water User Association Law (that has not been adopted yet in spite of having been drafted in the 1990s). Table 6.4 presents some of the national and international factors that influenced the course of implementation for the GAP project.

Table 6.4: A comparison of national and international factors in GAP

National	International
Lack of funding, economic crises	The discourse on Sustainable Development and Environment
The Kurdish problem	The transboundary issues with Syria and Iraq
Domestic Electoral Politics	EU Accession and Regionalization
The "hydraulic mission" paradigm of the Turkish government	Tapping into the external markets; High food prices
The drive for privatization and liberalization	The World Bank influence on the WUAs and liberalization
Institutional competition and the need for an organizational niche for the GAP-RDA	The UNDP, EU and other external funding

Source: own compilation

- *Ideas and discourses versus material resources*

The organizational field represented by the SPO, the DSI and the GAP-RDA is home to a multiplicity of competing discourses. The DSI technocracy is strongly institutionalized and has built a hegemonic alliance with the government over the discourse of "hydraulic mission," which marginalizes the environmental considerations, as well as any opposition to proposed development of land and water resources. Statements by the Prime-Minister, as well as the Minister of the Environment and Forestry (a former DSI President[80]) signify this point. The DSI also promotes "developmentalism from above" as it is a very centralized and technocratic

80 The very fact that a chief dam engineer is now a Minister of Environment and Forestry, while the long-time Prime-Minister and President of Turkey, Suleyman Demirel, comes from a DSI background all confirm the strong infusion of the government regime in Turkey with the "hydraulic mission" paradigm.

organization. However, "developmentalist from above" and "high modernism ideology" are much more strongly represented by the SPO (nowadays this is gradually changing by the trends of regionalization and privatization). The GAP-RDA, in turn, is influenced by the "civilizing mission" to bring modernity to the GAP region in the form of desired top-down, socio-economic change, foster "public participation" in the region, which has been traditionally dominated by the state, and promote "sustainable human development" on its own with a budget of 7 million USD, while being opposed by the DSI and SPO. According to Oktem (2005), there are three levels of discourse in GAP: the "nation-space" discourse, which was designed to resolve the "Kurdish problem," the grand-narrative of *sustainable human development* and multi-culturalism and a number of micro-discourses on the views of officials on the region and its people. However, in my opinion, s*ustainable human development* is the grand-narrative hegemonic discourse that is strongly linked to finance and the need of the GAP-RDA to survive as an organization under stress. Ideas such as *participation*, *privatization*, *regional development*, and *integrated development* have been instrumental in shaping the discourses of the GAP Administration. Thus, the GAP-RDA can be seen first and foremost as a "discourse generator" (Oktem 2005), and only then as a co-ordinating and fund-raising public agency.

The "paradigm paradox," however, has given the project a somewhat schizophrenic character: on the one hand, the top-down governance has been indispensable under the conditions of unrest in GAP and, on the other hand, participation and the involvement of local knowledge and empowerment of the local population has been necessary for the successful realization of the project. On the material side, the adoption of SHD, as well as international activities of the GAP-RDA, have resulted in the inflow of financial resources. Table 6.5 shows the credits secured from external sources, while Table 6.6 presents the grants from international sources.

Table 6.5 Credits secured for GAP from International Sources

Credit-giving Organization/ Government	Project Name	Credit Amount
USA EximBank	Ataturk Dam and HEPP	111 million USD
Switzerland Bank	Karakaya Dam and HEPP	468 million USD
The World Bank	Karakaya Dam and HEPP	120 million USD
EU Investment Bank	Karakaya Dam and HEPP	104 million USD

Credit-giving Organization/ Government	Project Name	Credit Amount
Italian Government	Karakaya Dam and HEPP	85 million USD
European Social Development Fund	Kralkizi-Dicle Project	69 million USD
	Batman and Cinar Goksu Project	79 million USD 17.75 million USD
	CamGazi Dam Birecik Dam	22 million USD
	Water Supply to Şanlıurfa Havi Rural Area	31 million USD
	Reconstruction of the Gaziantep University Hospital	6 million USD
	Gaziantep Organizational Industrial Zone	6,7 million USD
	Total	184 million USD
Turkish-French Financial Protocol	Gaziantep Wastewater Treatment Works	120 million French Francs
	Diyarbakir Treatment Works	60 million French Francs
Austrian Government	Karkamish Dam and HEPP	200 million USD
Switzerland-Turkey Trade Cooperation	Ataturk Dam and HEPP	782 million USD
Turkish –German Financial Protocol	Gaziantep Drinking Water Project	25 million German Marks
	Ataturk Dam	705 million German Marks

Source: (USIAD 2008)

Table 6.6: Grants given to GAP from International Sources

USA Trade and Development Agency	GAP IInternational Airport, GAP GIS	720 000 USD 377 000 USD
Canadian International Development Agency	Ataturk Dam	284000 USD 249 000 USD
USA National Healthcare Institute	Parasite illnesses in GAP	150 000 USD
The French Government	Irrigation technologies	1 million French Francs
The WHO	Malaria Prevention	200 000 USD
USA Joint Development Committee	Children working on streets in Diyarbakir	45 000 USD
The WB- Australian Government	Şanlıurfa-Harran ON-Fram Irrigation Project	964 000 USD
FAO	Capacity Development for Regional Development	158 million USD
European Union	GAP Regional Development Programme	47 million USD

UNDP	GAP Sustainable Development Project – 29 Projects	5.2 million USD total budget. Grant amounted to 1.3 million USD.
Israel	Irrigation technologies	70 000 USD
Israel	Re-use of wastewater	50 000 USD
Switzerland Government and UNDP	Youth, disadvantaged groups and poverty	2.2 million USD
French Government	Small-scale reuse of wastewater	540 000 USD

Source: (USIAD 2008)

- *Individuals versus Institutions and Organizational Culture*

There are several policy entrepreneurs who have significantly influenced the project and shaped discourses that currently dominate the scene. The "father of dams," Suleyman Demirel, is the first person who comes to mind in a discussion of GAP. Suleyman Demirel's personal history suggests a strong position for the DSI in the government hierarchy as he was the founding head of DSI in 1954. Another great supporter of GAP is PM Turgut Özal, who was the president of SPO in the 1970s. Özal was the policy entrepreneur who saw GAP as an opportunity to contain the Kurdish Insurgency by supplementary, non-military means (Oktem 2005). Both policy entrepreneurs shared a technocratic belief in the omnipotency of planning and science, and both were engineers educated in the USA

One man who has been instrumental in the development of the GAP-RDA is Dr. Olcay Unver. A charismatic leader, educated in the USA, he has worked at the local level, first as regional director of the GAP-RDA and later moving on to the position of President in 1991. Unver provided important links between international networks, the flow of knowledge and funding in them and national networks in Turkey. He was able to translate entrepreneurially between these two types of networks and incentivize their actors. Also an engineer educated in the USA, Unver shared the belief of Özal and Demirel in the necessity of water and land development, and the "civilizing" mission of the state (State Hydraulic Works 2007). During his presidency years and after, Unver served on the boards of many international professional water associations and NGOs, thus gaining empowering knowledge of matters of the evolving international water policy. His membership included the WWC, GWP, IHA, the International Journal of Water Resources Development, Tokyo Club and the International Water Resources Association. Unver was also a

founding director of the Tigris-Euphrates Initiative. He has organized high-profile international events in GAP, such as the "Development Projects Based on Water Resources: The World Experience" workshop (1999), and the workshop on the "American Experience in Water Based Development Projects" (Southeastern Anatolia Project Regional Development Administration 2000, 2001b). While all these contacts were good public relations activities for Unver and the GAP-RDA, it did little to move the main actors from their discursive position, the SPO and the DSI, and therefore were viewed by them as another attempt by the GAP-RDA to disregard the power of the other two big organizations.

While individuals certainly play an important, if not the crucial, role in policy change, history, path-dependency and civil service culture matter as well. Developmentalism and the hydraulic mission have been shaped during years of secular nationalism, the discourses of mono-ethnicity and nation-state. Professional technocracies have been especially strong with the DSI and the SPO becoming major players. These organizations are older and well-established, with institutionalized sets of procedures and activities. The GAP-RDA could not compete with them. In fact, it was born out of the SPO. It could be potentially revealing to observe and analyze the decision-making system in bureaucracies such as the SPO and the DSI. Unfortunately, unlike the UK, public consultation is not practiced in Turkey, and there is little interaction with the public and the researchers of civil service. In order to underline the role of individuals, I would like to cite Mortan, who said:

> (O)n the way back from Adiyaman, at dawn, I stopped in Gaziantep and saw the street named after its legendary industrialist Sani Konukoglu. This was reminding me of the importance of policy entrepreneurs in social transformation, and that development could only be brought to life through the labour and sweat of people[81] (Mortan 1998: p44).

Overall, the international factors are closely inter-linked with the national ones, whereas ideas are linked to material resources. The role of individuals was important. However, history and discourses that have been shaping for decades take prevalence on the operational level. Unver

81 The crucial importance of individuals is once again confirmed as the President of the SHW Veysel Eroglu, a close ally of the PM Erdogan, was appointed as the Minister of the Environment and Forestry in 2007. An interesting "castling" has followed this appointment, the State Hydraulic Works that used to be under the Ministry of Energy and Natural Resources has been transferred under the Ministry of Environment and Forestry, obviously in order to fit the newly appointed Minister. This is yet another indicator of the importance of individuals in water policies.

was instrumental in devising the SHD "grand narrative"; however, with little success beyond the GAP-RDA, and after his removal from the organization in 2003, discourse has declined, although it is still referred to as an underlying philosophy of the project. Unfortunately, neglect of the local people, the unimplemented projects in irrigation and social infrastructure and rampant, widely spread poverty all suggest that, whatever drivers played a role in shaping discourses, the "developmentalism from above," and the hydraulic mission, embodied in the high modernism ideology, have been manifested in practice, and unsuccessfully so. The new GAP Action Plan offers little that can change this perspective. The simple addition of a new financial model with the inclusion of the private sector would not resolve the complex socio-economic problems of the region, and it is indeed questionable whether the private sector would want to take a risk with a project with such a poor reputation.

Conclusions

The horizontal co-ordination in the GAP water policy is very poor, as is the vertical integration, which discourages innovation. Public participation exists in the rhetoric of the GAP-RDA with limited implementation in a number of pilot and demonstration projects. Even the claim for *sustainable human development*, the grand-narrative of the GAP-RDA, does not correspond to the reality and rather represents a hegemonic discourse shaped for the multiplicity of reasons discussed above. Discourse and rhetoric are disconnected from the reality, but at the international level this is not felt and articulated in the literature. There are no mechanisms for verifying or disproving the sustainability rhetoric of the GAP-RDA at the international level and, thus, an image of the "best-practice" was instituted in the late 1990s.

Policy translation of the GAP-RDA, and the Water User Associations have been discussed. The GAP-RDA was found to be a "hybrid" organization that could not enforce its functions. As a policy transfer innovation, the GAP-RDA failed and transformed into a "discourse-generator" in order to survive as an organization, completely shifting away from its *raison d'etre* of a co-ordinating agency with a strategic overview role for GAP. The projects initiated by the GAP-RDA had a limited budget and did not span beyond the pilot schemes. Recommendations of an important study of the GAP-RDA, for example, the MOM study, were not taken into consideration by the DSI and the SPO.

With regard to WUAs, their transfer to the GAP region was not case-sensitive and resulted in the creation of non-democratic and inefficient WUAs there. Most of the farmers in the Harran plain are discontent with them. The main driver of translation was the financial element of reducing the costs of maintenance and operation of the irrigation infrastructure. Local-level participation, which was crucial for the "ownership," was not granted sufficient attention and, consequently, failed (USIAD 2008). When discussing the process of policy translation and why they were not successful, the chapter drew attention to the fact that GAP is a multi-dimensional project in which various seemingly unrelated sides come together in discourses to shape policy processes. Relations between GAP and domestic electoral politics, "sustainable human development," transboundary disputes with Syria and Iraq, EU and International Relations around GAP, Development versus Environment, National Development versus Regional Development and the "Kurdish problem" have been discussed.

As for the drivers for policy translation, the intimate linkages between the national and international levels were established as it was found how certain national-level policy events triggered the internationalization of GAP-RDA policies. Ideas and discourses proved to be multiple in GAP, with one unifying discourse of "*sustainable human development*" that acquired hegemony and accommodated other discourses in itself. Material manifestations of this discourse included international seminars, networks and the inflow of international financial resources to GAP (see Tables 6.5 and 6.6). Demirel and Özal founded the project and provided the necessary patronage, while Unver was instrumental in navigating the GAP-RDA in the hostile waters of its waning relevance to and competition with the DSI and the SPO. He finally found his ship in international waters under the flag of "*sustainable human development*" – the grand narrative of the organization. Liaising between national and international networks, Unver managed to keep the GAP-RDA afloat until 2003. However, after his departure, the organization gradually declined to its full transfer to the region in 2009. Overall, the process of policy change was found more reminiscent of *policy translation* than policy transfer, with a very complex and iterative process of adaptation for policy innovations to the national context. Thus, the hypothesis that *policy translation* better captures the process and the outcomes of policy change has been hereby once again confirmed.

7. Synthesizing Theory and Practice: IWRM Policy Translation and Hegemony

"Throwing pebbles into the water, look at the ripples they form on the surface, otherwise, such occupation becomes an idle pastime" (Kozma Prutkov).

Introduction

In the introductory chapter, I mentioned that all concepts in this research can be divided into four interlinked research themes: the *IWRM* concept (in its complexity); the global *hegemony* of IWRM; the *policy translation* process that links international and national policy domains; and the *national level policy* circumstances reviewed for the three case countries. The main purpose of this chapter is to reprise each of the four research themes and integrate by this the theory and practice of IWRM policy translation and hegemony.

Section 7.1 links the theme of *IWRM* with *hegemony*. Section 7.2 links the theme of *IWRM* with the *national level policy* system when discussing the relevance of IWRM policy innovations to solve problems that exist in water management in the case studies. Section 7.3 discusses the theme of *national-level policy* conditions as linked to the discussion of the various interpretations of IWRM. Section 7.4 discusses the process of *policy translation*, distinguishes it from policy transfer and policy change, and elaborates on the three stages of translation and the depth of it as linked to the national-level policy conditions in each of the studied countries. The same section discusses the drivers of policy translation as determined by the national-level policy context. Finally, all four research themes are reprised and brought together in section 7.5 in order to explain how IWRM policy translation operates at the national level in order to produce the global hegemony of IWRM. The summary of key messages from this thesis and the avenues for future research conclude the chapter. The main message of the chapter, and the thesis, is that the global hegemony of IWRM is embedded at the national level and is contingent upon the success of policy translation at that level. The complete success of policy translation at the national level is more ideal than real, and therefore the hegemony of IWRM is always incomplete and fluid. The success of policy translation is judged by: a) the completion of the translation cycle; and b) the depth of translation as explicated by the 5 criteria articulated in Chapter 3. Details related to the themes of IWRM, hegemony, policy translation and national-level water policy and politics in the three cases are reprised below.

7.1 The Hegemony of IWRM

The global hegemony of IWRM is explained by the Neo-Gramscian theory. A policy arena is never mono-discursive (Gramsci 1971; Laclau and Mouffe 1985; Fairclough 1992; Fischer and Forester 2003), and the primary way for hegemonic discourses, in our case IWRM, to sustain power is according to the terms and concepts which they introduce and shape (Fischer and Forester 2003). IWRM unifies existing and sensitive conflicts (e.g. public versus private ownership and management of water, local versus global action, centralized versus decentralized styles of governance, river basin management or other units of administration, the roles and responsibilities of water users). Being an amalgamation of those ideas, some of which are conflicting, there is no consensus within the IWRM community as the GWP would have us believe. Thus, IWRM has not produced any consensus on the sensitive issues of water resources management and has rather incorporated those conflicts.

> The so-called global water consensus is such an amalgamation of ideas, with its own internal contradictions, and therefore not a true consensus but more of a compromise "sanctioned discourse" in the making (Mollinga *et al.* 2006: p28).

The emergence of global-level policy actors, as discussed by some authors (Varady and Iles-Shih 2005a; Varady and Illes-Shih 2005b), has also triggered the popularity of IWRM. The hegemony of IWRM thus comes partly from the proliferation of professional membership organizations, specialized publications, professional journals, international congresses, technical meetings and issue-oriented global summits, bringing to both ideational domination and the organizational manifestation of the hegemony (Conca 2006: p.132; Zeitoun 2008). In Mukhtarov (2007a; 2007b; 2007c), I suggested that the discourse of IWRM obtained its international hegemony through a three-staged process. In the first stage, IWRM ideas were picked up by international organizations and professional networks (consultants and expert networks) in the 1940s and 1950s to signify the global universalistic approach to manage water resources. The second stage involved the formalization of IWRM and its simplification in order to provide a widely applicable "policy tool" in the 1990s. The third stage involved broad marketing and promotion of IWRM to encourage countries to take up this approach – an ongoing effort. While this hypothesis needs further empirical verification, the fact that IWRM's hegemony involved the discursive, organizational and material dimensions is empirically supported.

On the material side, IWRM provides to national-level policy actors better access to international funding (as in Turkey and Kazakhstan), and often projects for the preparation of IWRM national plans are funded by international organizations, as in Kazakhstan and a number of smaller-scale projects in GAP, Turkey. The organizational pillar of IWRM hegemony is represented by international organizations and formal and informal networks which facilitate and develop the discourse. This pillar seems to be the most vulnerable and in need of further strengthening. The UNESCO's International Hydrological Programme, on which the author acted as an expert panel member, prepared a draft report of IWRM in river basins, sub-basins and aquifers. It stated the following:

> The new organizations still do not have real influence globally to assist co-ordination or actions on a global scale…As a result, there is no entity in the world that stands out as the leader in co-ordinating knowledge of IWRM actions. As a result, there are many dispersed efforts that are not strong or effective. Even those of INBO {International Network of Basin Organizations} fall mostly in the category of "event publicity" and have no real basis for co-ordination (UNESCO International Hydrological Programme 2007: p29).

On the ideational side, linking IWRM to sustainability and other values as discussed above, it has acquired a strong normative power and the "taken-for-grantedness" that presumes that IWRM is always good in all conditions. Thus, the hegemony of IWRM is exercised through all three pillars suggested by neo-Gramscian thought even if hegemony is not complete, and each of the pillars is constantly being shaped.

The hegemony of IWRM has also been triggered by historical moment, as necessitated by Gramsci's concept of *historic bloc*. The reasons why IWRM picked up speed and became internationally popular in the 1990s and 2000s are many-fold. First of all, there was a clear *institutional vacuum* at the global level in terms of policies, legal regimes or frameworks involving in-land water amidst the greater recognition of water as a global issue of extreme importance. By the 1990s, the UN-designated periods, events and other initiatives had not resulted in any consistent strategy to deal with diverse water problems (Varady and Iles-Shih 2005a; Varady and Illes-Shih 2005b). Thus, there was an acute need to accommodate deep conflicts over fundamental issues regarding water. In other words, there was a need for a *"consensus"* on global water governance. Secondly, expert networking and "conferencing" had built-up by the 1990s and resulted in the increasing professionalization of the water policy field.

This resulted in the positioning of IWRM on the political agenda. Thirdly, and most importantly, the sustainability discourse created a window of opportunity for IWRM to become popular, as it is still often (and erroneously) conceived as a mete extension of sustainability thinking in the water sector.

When it comes to the discussion of specific actors in the promotion of IWRM discourse, the knowledge actors need to be singled out as they are the ones who have mostly formed the discourse.

> Nevertheless, the central forum of IWRM in global water politics is the global expert conference, not the diplomatic arena; its currency is the task force report, not the treaty. IWRM networking and river diplomacy are best understood as parallel, occasionally interacting institution-building processes rather than tightly coupled phenomena (Conca 2006: p.127).

This is an important statement that links IWRM to the professionalization of the field and expert networking. This elitist character of the discourse suggests that local knowledge is often overlooked in national discourses. As Conca put it (2006: p158), "not surprisingly, an approach grounded in expert knowledge, scientific rationality, and increasingly bureaucratic organization has often reinforced a limited, hub-and-spoke notion of participation." Thus, IWRM's hegemony is linked to its intellectual foundations, as discussed above, but it is also explained by the various types of knowledge actors who have participated in the dissemination of IWRM. An important element of IWRM hegemony is policy translation, which is discussed below.

7.2 The Relevance of IWRM Policy Innovations and the Rationale behind Learning Lessons from Abroad

In spite of the seeming differences between the policy projects studies in the country cases, the common appeal of those policy innovations to the principles of IWRM allows us to draw a cross-case comparison. Table 7.1 below provides a summary of the studies of policy innovation in a comparative mode.

Table 7.1 Policy Innovations Discussed in the Case Studies

	Policy Innovation	Intention and principle	Realization	The type of change
Kazakhs	Water Code	Public participation, legal basis for IWRM, decentralization, RBCs	Principles are incorporated, implementation lags behind as the normative meaning has yet to be established	Legislative Change

	Policy Innovation	Intention and principle	Realization	The type of change
	National IWRM and WE Plan	IWRM principles as developed by the GWP and UNDP	Plan prepared and approved; Implementation to be seen	Plan and Strategy
	River Basin Councils	River Basin Management, Public Participation, Horizontal integration at the basin level	Commitment and Resources are lacking for sustainable operation; nevertheless it is important in the long-term	Organizational change, decentralization, and public participation
Turkey	GAP-RDA	Co-ordination of agencies and development at national and regional (not basin) level	Transformed into a "discourse-generator" and abolished on the national stage in 2009	Organizational Change
Turkey	Water User Associations	Decentralization, public participation, monetary relief	Maintenance cost-cutting without democratic realizations	Organizational Change
Turkey	MOM project	Agricultural Extension Programme	Pilot schemes only	Project/Programme
England	Making Space for Water	Flood Risk Management Strategy of the government	Many projects and one of them on Integrated Urban Drainage. Still in progress	Strategy/Policy
England	Surface Water Management Plan	Local solution, EU Flood Directive, Cooperation and Integration	In progress (pilots and guidance preparation)	Plan and Integration

Source: own compilation

In Kazakhstan, CWR officials underlined two problems as priorities: the lack of information on water management, and the lack of a feeling of responsibility for the various actors to perform their duties. An inter-sectoral water policy approach is absent, with very little co-ordination and no powerful player providing a "strategic overview," which in England's flood risk management is played by the EA. While in England policy innovations attempt to solve relatively well-defined problems, in Kazakhstan the reform is more comprehensive in scope and less targeted in purpose. There are three policy innovations which are called in to solve the issues of institutional fragmentation: the national IWRM and Water Efficiency Plan, River Basin Councils and the Water Code. While the plan has a broad scope that covers many non-prioritized issues, there is a lack of articulated mechanisms and ways to achieve these in a practical and time-bound manner. Thus, policy innovations in Kazakhstan are less linked to the pressing problems (although they address them indirectly) and seem to be driven more by the agendas set by donors and international consultants (The Norwegian Government, the Global Water Partnership, the UNDP). This might be the prime reason behind the reluctance of the Kazakh government to adopt a plan and implement institutional reform. In GAP (Turkey), the main problems include the lack of funding to complete expensive irrigation works, the failure to harvest and increase productivity

and the income levels of farmers. Distribution of income is another problem, as there is serious inequality in the GAP region. Similarly to the Kazakh case, the political commitment to IWRM and poverty reduction is absent in GAP, and the hydroelectricity generation and industrialization of the region give little regard to agricultural development, poverty eradication, social development and the traditional identity and rights of the indigenous population – the Kurds and Arabs are present in the project. The link between problems and policies is absent, in spite of the plentiful international literature portraying GAP as an IWRM-like project. Overall, the strongest link between problems and policy innovations is in England, which is enabled by public and political pressure for change, as well as the country's great financial and technical capacity.

- ***Perceived Relevance and Importance of International Experiences***

Wescoat (2005) suggested six common arguments against searching for international water management lessons: *irrelevance, incompatibility, incomprehensibility, proximity, coercion, and the politics of difference*. It is understandable why international knowledge would be rendered irrelevant, or not worth considering, to signifying the importance of local and national-level knowledge. On the other hand, the very international knowledge and experience can become a source of legitimacy and power for policy actors who have attempted to institute an image of informed and up-to-date expertise with access to international networks and the capacity to translate that knowledge to the national policy setting. What is crucial to understand is that the content, and even the record of failure or success, of a policy is not primary for policy translation and ensuing global hegemony: the *national-level politics* and power are. The construction of problems as unique or not, and the construction of solutions as important in line with international experiences or not, is a function of the political battle at the national level.

In England, the issue of the relevance of international experiences is debated. The proponents of policy translation (officials from the Environment Agency, policy consultants, the House of Commons and the Pitt review) claim that "nobody has the monopoly of knowledge." The opponents of spending resources on international experiences, in turn, argue that 1) the national policy and context are unique; 2) Britain is pre-eminent in the environmental and water regulation; 3) lesson-drawing happens the other way around, from England to other countries; 4) the technology transfer is more important than knowledge transfer as the former is easier to

achieve. The policy-makers in Defra tended to underplay the importance of international experiences, which is likely linked to their own legitimacy as a knowledge- and expertise-generating entity, rather than one that draws knowledge from somewhere else. Technocratic views from the Environment Agency have also voiced their appreciation for the technical nature of the problem and therefore have found little value in lesson-drawing from other countries experiences in regulation. Thus, the acceptance or negation of 'the relevance of international experience' is influenced by the power struggle and the positions and roles of the actors at the national level who appeal to international experience.

In Kazakhstan, the relevance of international experience is more easily accepted, although it was stated by government officials that the EU Water Framework Directive, for example, is not directly applicable as it focuses on the issues of water quality, while the main problems in Kazakhstan are with water quantity. Experiences from the West proved to be more legitimate in Kazakhstan than those from Asia and Africa did. Some local experts have used the Internet and their links to Russia (to some extent from networks and connections that existed during Soviet times) to search for information on water policies in other countries (mostly available in the Russian language). This knowledge, then, has been presented as "international experience" in the drawing of the Water Code and policies. International organizations that operate in Kazakhstan provide expertise and policy models, often coercively, which has generated resistance. There is much that is being emulated from Russia, and relevance and proximity are what is most perceived by the Kazakh government. In Turkey, the GAP region is very specific in its socio-economic and cultural characteristics, which makes most international experiences irrelevant. Greater embrace of privatization and regionalization happens under the influence of the EU accession process and the global neo-liberal trends. Drawing on the international lessons, however, has been supported by most of the actors as a source of additional funding and greater international recognition for the project, but it has not provided a means to the solution of the pressing issues of poverty and low agricultural productivity in the region.

Overall, it has been established that the presentation of problems and solutions as unique or not is a matter of political struggle at the national level. In all three cases, the relevance of international experiences is debated and is a battlefield for legitimacy of the national-level policy actors.

Government officials and bureaucracy, in general, tend to emphasize the uniqueness of institutional design and their own research capacity. Consultants and international research centres (think-tanks), as well as the government and the parliamentary committees, try to draw extensively on international experience. They argue that experiences are not unique. International Organizations, naturally, provide international models and promote lesson-drawing.

Table 7.2 Observations on the Perception of the Relevance of International Experiences in Policy Reform

Turkey	England	Kazakhstan
Technology transfer is conceived as more important than "soft" institutions. The TVA and American experiences are mentioned in the discourse. The relevance of international experiences is accepted, but specific conditions of GAP are underlined in the debate. GAP-RDA has been the main platform for policy translation.	The proponents of lesson-drawing argue that much can be learned from other countries. These are mostly consultants and research centres. The opponents in Defra and the EA argue that the context in England is specific and the UK is anyway a leading country when it comes to water policies and flood management (this view is shared by the government).	The relevance of European and American experiences is accepted. However, the EU WFD is claimed to focus on water quality, while the main problem in Kazakhstan is said to be quantity. The necessity to manage both quantity and quality together is yet to mature. The experiences from developing countries are discarded on the grounds that Kazakhstan is more developed.

Source: own compilation

7.3 Interpretation of IWRM ideas

IWRM is interpreted in multiple ways based on various national-level policy conditions and politics. In England, its interpretation falls within spatial planning and the development framework, capturing the links between land, water, and development. In Kazakhstan, IWRM is widely used as an acronym and a symbol for a "best practice" policy. IWRM is interpreted in 4 different ways: as a process of management, a system of management, a managerial addition to the river basin plans (schemes) that have been practiced since Soviet times, and as something identical to river basin plans (schemes). The major problem with the plans is that they are rarely implemented as designed. For this reason, river basin councils were set up as a policy innovation to facilitate dialogue and form partnerships at the basin level. In GAP, the "IWRM" acronym is sometimes used in the policy debate. However, the main hegemonic discourse is that of *Sustainable Human Development*. Coupled with regional development, it represents sustainability thinking with regional overtones (Unver 2007).

According to Hajer and Versteeg (2005), such various interpretations of a concept can be helpful for partnership building, and partnerships provide an organizational pillar for hegemony. This might be one of the explanations why vaguely defined discourses such as IWRM become hegemonic.

> The assumption of mutual understanding, however widespread, is often false, concealing discursive complexity. Even when actors share a specific set of storylines, they might interpret the meaning of these storylines rather differently. Interestingly enough, actors that can be proven not to fully understand each other can still produce meaningful political interventions. Precisely the effect of misunderstanding can be very functional for creating a political coalition (Hajer and Versteeg 2005: p157).

Discourse analysis has shown that there is an ongoing struggle to institutionalize the meaning of IWRM in Kazakhstan. The alarmist discourse around the Aral Sea disaster and the danger over the Balkhash lake seem prevalent, although there is little discussion of water policy in Kazakhstan within civil society, as compared to Turkey or England.

Table 7.3 Interpretation of IWRM Ideas

Turkey	England	Kazakhstan
Sustainable Human Development that is similar to IWRM in its ambition to carry out integrated regional development. Participation is interpreted as a contribution to irrigation costs, ad-hoc consultations and limited choice in resettlement.	Decentralized mode of water management. IWRM is not used in the discourse, but water is integrated in spatial planning. Partnerships, leadership and the question "who pays" are the most important issues.	IWRM is present in the discourse and has a prominent significance for all Central Asian countries. In Kazakhstan, it is being interpreted as 4 various phenomena: a process of management, a system of management, a managerial addition to river basin plans, and as equal to river basin plans.

Source: own compilation

7.4 The Process of IWRM Policy Translation

When discussing the policy translation process in the three case studies, attention must be paid to pathways, actors and processes of translation. In England, a number of pathways were involved, but the role of informal professional networks was less prominent than in Turkey or Kazakhstan. The role of individuals in England is also disguised, whereas it seems to be more prominent in policy discourses in Turkey and Kazakhstan (perhaps owing to the absence of regulatory impact assessment and a less formalized policy system). In England, consulting companies are crucial in

both drawing upon knowledge from abroad and in the leading partnerships for integrated urban drainage at the local level. The technical capacity of consultants is great, as is the capacity of the government to pursue innovation and evidence-based policy. Other important pathways of transfer include EU legislation and policy (The EU WFD, the Floods Directive, the Spatial Planning Directive), and government-sponsored studies (e.g. the Pitt review, the studies prepared by the Flood Hazard Research Centre) that draw on lessons from abroad.

In Kazakhstan, international organizations and individuals (consultants and in the government) play a crucial role in translating IWRM innovations. Unfortunately their presence is project-based with little continuity. Hannan, an international consultant for the UNDP-IWRM project, has been crucial in mobilizing international knowledge and national support for the project. However, there is a feeling that the idea of the IWRM plan has been imposed on the Government of Kazakhstan and that, if it would be the will of the latter, drinking water supply, water quality and quantity monitoring and information management and infrastructure would be given more attention in the first place. These are the priorities that resurfaced during the interviews with CWR officials. The international consultants, however, put an emphasis on institutional fragmentation, the need to raise the status of CWR and public participation through River Basin Councils. Interestingly, in England, technical issues are easier to transfer from abroad than are institutional ones, yet the need for institutional reform is more acute as compared to the need for technical advancement. In Kazakhstan, technology transfer, such as irrigation infrastructure, drinking water supply infrastructure, water meters and monitoring equipment, could solve many problems if there were money in place (these are capital-intensive investments). However, the focus of the UNDP-IWRM project (and indeed many previous projects) was on the "soft" measures, as this is what the designers of the project saw as crucial. The project had a component of drinking water supply for the Millennium Development Goals as well, but funding for this component also proved insufficient. Thus, funding seems to be the key limiting factor, as is the poor regulatory framework and capacity of personnel to operate the infrastructure.

In Turkey, the most important pathway of translation was the South-eastern Anatolia Project Regional Development Administration (GAP-RDA), which was a policy innovation in itself and became a platform for other policy innovations through the knowledge networks that it has

fostered. The GAP-RDA's former president has been instrumental in creating and managing these networks and mobilizing support from such organizations as the United Nations Development Programme, World Bank, the Global Environmental Fund and others. Funding from World Bank was important for the creation of Water User Associations in Turkey. Since the departure of this policy entrepreneur, the political influence of the GAP-RDA has declined and the inflow of international policy innovations has decreased significantly, as has the international visibility of GAP as a project. IWRM policy translation has largely failed in Turkey, owing to the hegemony of the hydraulic mission, the nation-space discourses and the reluctance of the State Planning Organization and the State Hydraulic Works (DSI) to embrace IWRM and co-operate with the GAP-RDA. The same fate expected the model of Water Use Associations in the Harran Plain in Turkey:

> Likewise, the Turkish model of IMT[82] was inspired by the Mexican model but fell short of establishing autonomous water user groups. This is little wonder because models are by nature decontextualized and their application in specific settings can but lead to utter diversity; but this is also testimony of the pre-eminence of political and other motives in the adoption of a given model, especially when the context and modalities of its implementation are quite distinct from the circumstances in which the original model was developed (Molle 2008: p142).

Table 7.4. The Process of Policy Translation

Turkey	Kazakhstan	England
Pathways through professional knowledge networks and individuals and International Organizations.	The ideas of IWRM Plan and River Basin Council came from outside – the GWP, UNDP and Hannan. There was little political will on the part of the government. Implementation is yet to be seen.	Consultants and Research Centres. Consultants act both as facilitators for partnerships and knowledge authorities (drawing lessons from abroad). They acted as "institutional glue."
UNDP, WB and their funding have been important for the operation of the GAP-RDA and the WUAs	Focus was on institutions instead of infrastructure. UNDP, GWP and international consultants played a role in agenda-setting.	There is a great capacity of knowledge actors and the government to hire consultants. There is a forum for policy discussions – often sponsored by the consultants.
EU plays some role in bringing about regionalization and privatization trends that challenge the hydraulic mission.	Russian influence is significant in policy-making and mimicry processes take place as language is the same and policy systems are similar.	EU plays a substantial role in its policies and legislation. There are RIA, EU WFD, EU Floods Directive and other regulations.
GAP-RDA as a policy	CWR's capacity is advocated to be	The EA is being suited with the powers

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Turkey	Kazakhstan	England
innovation lacked the power to implement its role and turned in discourse-generator and then was abolished.	raised. It lacks the de-facto power to implement changes, like the GAP-RDA.	and money supply required for its role. This is in contrast to the CWR and the GAP-RDA.
WUA were not designed for the GAP region but implemented for cost-cutting rationale.		Institutional changes are more important but also more difficult to draw from other countries.

Source: own compilation

The next subsection looks at the three stages of policy translation as it proceeded from the discursive entry through normative institutionalization to practical implementation. This will prepare a ground for the discussion of the drivers of policy translation.

- ***Stages of Policy Translation: from Discursive through Normative to Practical Change***

As discussed in Chapter 3, policy change does not occur instantaneously but it is rather incremental. As Johnson *et al.* (2005a: p.573) put it, "the policy changes that were 'catalyzed' by the flood did not reflect any 'new' policy ideas, or fundamental changes in policy direction. Rather, the floods served as a catalyst for increasing the rate at which a policy idea, already under consideration, was given prominence and acted upon." As I argued in Chapter 3, there are three stages of change: discursive, normative and practical. A discursive change occurs with the change in the language of the debate, new concepts are introduced and the normative value of previously dominant concepts is questioned. This stage is characteristic of the lively debate on what should be done and in what direction. This might also be accompanied by manifestations in policy documentation and even legislation (does not necessarily come with the normative stage of change, as there is a lot of legislation that is not followed by normative change and therefore remains illegitimate). Normative change is characterized by the crystallization of values and commitment. Such questions as "how," "who" and "who pays" are answered at this stage. The normative state (change) can also be understood, in the terms presented by Johnson *et al.* (2005a: p.574), as

> the relationship between beliefs, values, and policy positions. This provides a basic understanding of the dominant belief systems, policy positions and mechanisms at the time of each of the floods. In none of the case studies did the floods alter these core beliefs. Quite the contrary: it was the

> beliefs, values and norms at the time of the floods which impacted on the nature of the policy response which arose.

Practical change, in turn, is manifested in the changes of investment patterns and implementation of policies, as well as changes in the progress indicators. It is a sensible argument that "by monitoring these incremental changes we should be able to anticipate, rather than react to, catalytic changes that may occur in the future" (Johnson *et al.* 2005a: p.574). In this, a crucial value of discourse analysis is embedded: a value to determine trends and possibly predict certain changes (not the time and extent of them but rather the direction of change). The three stages of policy translation are discussed below based on examples from the case studies.

Discursive change through language has obviously taken place in the flood risk management field in England. When the new language emerges with its own terms and notions (e.g. "live with floods" (ICE 2001), "prepare for floods" (Office of Deputy Prime Minister 2002), "make space for water" (Defra 2005, 2005b), "live with risk" (UN/ISDR 2004) and "more space for running water" (Zaugg 2004), it signifies a *discursive change*. Language and the frequency with which words and their combination are used in everyday activities determine the way actors think and construct reality and policy, and the way they make decisions. The practices that follow also shape the language. Normative change happens with the institutionalization of certain views on reality, the emergence of a new language, new ideas, values, beliefs and attitudes of policy actors. The acceptance of certain values behind a new discourse is indicative of its institutionalization, "taken-for-grantedness" (Powell and Colyvas 2006), "normalization" (Molle 2008) and the generation of the "effects of truth" (Stone and Maxwell 2005). As Johnson *et al.* (2007b: p378) put it in the context of England's policy change in flood risk management,

> (w)hat has been accepted (in relation to MSW) is the validity in principle of this "new" discourse by the operating authorities, although questions remain as to the acceptance of this approach in society more generally – not least because of the great responsibility and accountability it places on an individual. It is important to note, however, that whilst the language is changing, the debate about what should be done remain dominated by the "usual suspects" (e.g. climate change, development control, institutional "fit," the role of state versus the individual, cross-policy integration, and the importance of non-structural measures).

Thus, discursive change brings new ideas which are not well-embedded in the norms and values of the actors who participate in the discourse. They are discussed and are open for social

construction; interests, ideas and symbols are hanging in the "air" and it is up to policy entrepreneurs, the receptivity of the context and other factors to transform the discursive shift into a normative one. This certainly requires policy entrepreneur(s) or champions, as normative change does not emerge out of discursive change "by default." The phrase "policy champions" is used by the authors below as they put emphasis on the resources that these actors invest in when promoting a certain policy.

> In other words, the new FRM {Flood Risk Management} ideology has yet to result in any radical "out of the box" thinking even though, as the MSW {Making Space for Water} policy has indicated, the building blocks for such innovation are now in place"…This is not because of any lack of desire on the part of the government. It is because policy has only recently moved into the second phase of the FRM change process – one which argues not that society *must* "live with floods" or "make space for water" but debate *how* can society "live with floods" and "make space for water." It is a shift from the policy ideals set out in MSW (Defra 2005) to a more reality driven implementation and delivery phase of the MSW policy doctrine which is now of concern. Implementing this new flood doctrine brings to the fore questions about how decisions *should* be made and how resources *should* be distributed if the ideology of MSW is to be embraced into day-to-day decisions (Johnson *et al.* 2007b: p.378, emphasis original).

Understanding that MSW must be implemented is indicative of the normative change. It has resulted from the "new" language, policy entrepreneurs and other contextual factors. Then the question "how" signifies the shift from normative to practical change. It is the most challenging of all as here decisions on the allocation of resources and day-to-day life have to be made. Apparently, this shift takes time, but it also poses a number of other conditions. The incremental nature of change is further confirmed.

> I think it {policy change} needs time. You need an on-going relationship, in terms of building trust and none of us hear things told to us for the first time. Unless we are already receptive to a message, we do not hear it. You can't learn something big in one go. You need to learn a little bit this time, and a little bit other time. With repetition, we gradually begin to understand it, and to believe it and trust it (Defra I01).

According to this informant, the summer floods of 2007 did not make a big difference, the policies were already in place and the floods only put more energy into the process. No existing policy really changed. Thus, it takes a new language, a receptive environment, and a policy agent to drive the shift from discursive to normative stage. Legislative change is currently being expected in England. The Floods and Water Bill is scheduled to be presented by the end of the

year, and the practical implementation of the Surface Water Management Plans will begin. This will also be a pre-condition for the implementation of the EU Floods Directive.

In Kazakhstan, discursive change has taken place as 15 projects on IWRM have been implemented since the 1990s, introducing the new language to the Kazakh policy community. Furthermore, familiarity with the term "IWRM" has increased dramatically since then, even though this does not necessarily translate into uniform understanding of the concept. New words in Kazakhstan's policy discourse include "integration," "de-centralisation," "condominium," "water user association" etc., which is rather indicative of a discursive (first stage) shift towards the greater inclusion of policy concepts from the international IWRM discourse. It is evident that the language of policy discussions has moved towards IWRM. However, there is no single dominant interpretation of IWRM and, therefore, there is no normative notion of what is good or what should be implemented. The normative and practical turns of the reforms will still need to be implemented in Kazakhstan. Changes are partly being instituted in the administrative sense via the establishment of River Basin Councils. However, there is much more to be done for the CWR to be strengthened, the National Water Council created and better horizontal and vertical co-ordination established. Real-life policies with infrastructure, water resources monitoring, water efficiency, metering, pricing and industrial development need to follow. The language is being symbolically used in the policy setting in order to establish or enhance power by instituting an image of Western expertise. New terms, however, introduced without care create a divide within the policy community and cannot serve the communication purpose if not explained in detail and made available to everyone. The Water Code (2003) has been incomprehensible even to experts in water management as it contains many new and foreign concepts. In contrast, one of the major goals of the UK's Floods and Water Management Bill, currently being consulted publicly, is to appear in an easy-to-understand language and style (Defra 2009).

In Turkey, discursive change was introduced by the GAP Regional Development Administration (GAP-RDA). The terms "integrated development," "sustainable development," "public participation" and "human development" have bocame part of the policy debate. However, they have never been institutionalized beyond the GAP-RDA, the government, and the State Hydraulic Works (DSI), and the State Planning Organization (SPO) did not take the "sustainable

development" rhetoric seriously until very recently. Thus, normative change has not taken place, and discursive change has been limited to the rhetoric discussed in Chapter 8. Policy change and policy translation in Turkey, therefore, remain limited. The hydraulic mission still reigns, but privatization and regionalization have taken roots in the policy discourse. Great changes are on the way in the public administration system of Turkey, including in the water sector and the GAP region. While it is important to describe and deconstruct the process of policy change into the cycle of discursive, normative and practical, it is even more important to understand what drives this cycle while keeping the focus on the interplay between national and international policy factors. The depth of policy translation is also crucial to understanding a the commitment to policy change.

- ***The Depth of Policy Translation***

Indicators of the depth of translation were discussed in Chapter 3. According to the table below, the depth of policy change towards IWRM is greatest in England, followed by Kazakhstan and then Turkey. Huitema and Meijerink (2007) have discussed policy transitions in the water sector as gauged by the four indicators:

> How to distinguish transitions from shallow levels of change can be a topic of debate, but there are obvious examples, for instance the introduction of integrated water resources management and adaptive management. We have argued that such transitions should become visible either in the substance of policy (e.g. in policy documents), in the applied procedures (for instance in allowing greater levels of public participation), and in the organizational set up of water management (new organizations such as collaborative management organizations). The more fundamental the changes in these respects, the more they resemble what we would call a transition. In a similar vein, the greater the level of policy stability, the lesser the likelihood that we speak of a transition (Huitema and Meijerink 2007: p22)

My model to gauge the depth of translation has been elaborated to include legislation and changes on the ground. Policy transition has been replaced with policy translation and applied to the three cases of the study. Table 7.5 below summarizes the findings.

Table 7.5. Depth of IWRM policy change in the three cases

	Turkey	England	Kazakhstan
1. Policy documentation	"IWRM" is not mentioned but "sustainable human	MSW is mentioned in the "Future Water" strategy;	A number of reports by international organizations, and the national

	Turkey	England	Kazakhstan
	development," "public participation" and integrated development are GAP-RDA (2002), Master Plan (1990), GAP Action Plan (2008)	spatial planning documents and principles of integration and participation are outlined in the PPSs and PPGs. There are detailed guidelines to follow in terms of the policies.	IWRM plan that was accepted by the Parliament in 2009. Unified State System for Environmental and Natural Resources Monitoring (USSENRM). De-facto there is IWRM as an acronym and a system of principles in place.
2. Legislation	No water law adopted, in consideration for years. With regard to the GAP-RDA, there is legislation but no real powers given to the latter to implement it. Regarding public participation, it is not reflected in any legislation.	Fragmented and numerous legislation, to some extent obsolete. A new Water and Floods Bill has been released for public consultation. The first stage of policy change focused on "no new legislation," but the unification bill was proposed by the Pitt review and acted upon. The principles of IWRM are included in it.	The Water Code (2003) has been adopted and the amendments to it continue. The Environmental Code, the Forestry Code, Legislation with regard to land resources and farming exists. The principles of IWRM as articulated by the GWP are explicitly articulated. Translation took place through plans and the focus on quantity (and quality to a lesser degree). There is a need to adjust the Water Code and the National IWRM Plan.
3. Organizational change	The National Commission was only temporary. The GAP-RDA is a sign of organizational change, but the political reality has overridden it. The EU regionalization policy has brought up organizational change with RDAs created. Privatization is on the agenda as well.	Defra is shrinking and devolving, the EA is taking up a policy role and responsibility for all flooding, LAs are responsible for SWMP preparation and building up partnerships for SWMPs implementation. Somewhat disguised is the process of decision-making. A new cabinet committee is proposed for flooding issues.	The National Commission was temporary. International Organizations and the IWRM Plan propose that CWR take up a strategic overview role. The National Commission on SD needs to incorporate water issues better. New financial and managerial models are needed to build and sustain a new infrastructure. There is clear division between drinking water and agriculture. Fragmentation in the horizontal and vertical organizational set-up is evident.
4. Procedures for policies	Public participation is not recognized in the legislation. No regulatory impact assessment required for policies. There is no Strategic Environmental Assessment, and the Environmental Impact Assessment requirements are easily overlooked. The environmental considerations are not of any restrain to industrial development.	There is a Regulatory Impact Assessment practiced for decision-making. Formal procedures are not always obeyed, and informal processes take place (at least in Defra). Public consultation of all strategies, policies and legislation is compulsory, however, not clear how the feedback is being considered. Anecdotal evidence suggests that this happens through closed-door lobbying with the representation of the economic, social and environmental parties.	There is no requirement for public participation in preparing river basin plans; there are no SEA, EIA, social impact assessment requirements either. Poor access to decision-makers, poor accountability as well. Kazakhstan is a member of the Aarhus convention but has reportedly been lagging behind with implementation.
5. Changes on the	It was found that changes on	There were 15 pilot IUD	No assessment was carried out.

	Turkey	England	Kazakhstan
ground	the ground are very insignificant in the direction of the claims made. Almost no progress in terms of poverty alleviation and change in basic social indicators.	projects set up across the country. I have not carried out any local-level investigation due to a lack of resources and the prominence of information at the national level.	River Basin Councils so far are not sustainable and need support. Brief examination of land and water resources interaction in the area of the Big Almaty Lake showed that there were inherent problems with management: such as lack of power of CWR, presumed corruption, poor legal base.

Source: own compilation

The model, which assesses the depth of policy translation and allows for a distinction between superficial policy change (or rhetoric) and fundamental policy transitions, is very valuable. It can be applied to various contexts and serve the various needs of assessing the effectiveness of policy learning. Data requirements for this model, however, are high, which is its main limitation.

- ***The Drivers of Policy Translation***

Civil service culture and decision-making

Much depends on the political system, path-dependency and trends established in a policy system. In Turkey, the system is centralized and authoritarian, with a strong vertical hierarchy of governance. There are trends such as nationalism, developmentalism (industrialization), regionalization, privatization and modernization. There used to be a governance vacuum at the regional level that still needs to be filled. Professional societies have the important capacity to produce independent studies and conduct academic and policy debates (TUSIAD, USIAD, TMMOB, MUSIAD). However, to what extent they influence real policy is less clear. There is destabilization of the centralized and state-oriented government structures in Turkey towards the greater embracement of regionalization and privatization. According to some authors, this could indicate the direction of future policy change (Johnson *et al.* 2005a). The rapid modernization and industrialization of Turkey has been marked by multiple, continuous processes of adoption of policy innovations and models from the West. Thus, the main actors in the GAP policy field have originated through some sort of policy translation, including such agencies as the DSI, the SPO and the GAP-RDA. The local civil society is not strong enough in the GAP region, and authoritarianism and patronizing are present in the setting.

In Kazakhstan, the policy system has been predetermined by USSR heritage. Centralized, with little democratic governance and poor capacity for civil actors to engage with each other, no forum for policy discussions and deliberation, the Kazakh policy system is falling short on the capacity to learn from international experience. Eight River Basin Councils have been formed for this purpose (forum), but their sustainable functioning still needs to be stabilized, mainly financially and then administratively. Bureaucracies are inert, because they are disinterested in changes that could destabilize their position and/or add on their workload (Nikolaenko 2008). No interview access to top policy-makers was granted for this research, but it seems that they enjoy a lot of freedom and little accountability in their decision-making. There are no quality control procedures in place, such as regulatory impact assessment, which would assist the government in moving towards a policy-making process that is more transparent, accountable and participatory, as well as predictable. There is no "political will" for change towards IWRM in the government. My argument is that political will is not a stable factor but a process of change that is actor-centred. It depends on policy champions putting issues on the agenda and continuously using their power and influence. This sort of leadership is prominently absent both in the Turkish and Kazakh governments, with regard to the GAP project and the IWRM project respectively. In England, the complex administrative system has posed a growing burden on local authorities. It has caused the devolution of most flood risk management policy responsibilities from the national to the regional level (from Defra to the Environment Agency) and their implementation to exclusively local (through the local authorities) domains. There is a lack of cooperation between agencies at the national level and those at the city council level.

An important point is that the IWRM discourse has invariably emphasized the need to co-ordinate and integrate institutions at the horizontal and vertical levels. But very rarely do parties ask why such discordance exists. As mentioned above, different public agencies have acted with different agendas, competing with each other over resources and power. They would not be readily available for cooperation unless some incentives are provided. A hegemonic discourse, in theory, might bring about this incentive by structuring ideas and interests along with certain patterns of coalition-building (Cox 1993; Deyle 1996; Newell 2008).

- ***Agents of Change and Policy Entrepreneurs***

The role of individuals in policy change has been the subject of a long debate that is, as of yet, unresolved. According to Gramscian thought, and indeed, the findings of the three case studies converge on that, the role of individuals, although not entirely unconstrained, is crucial:

> The active politician is a creator, an initiator; but he neither creates from nothing nor does he move in the turbid void of his own desires and dreams. He bases himself on effective reality…but does so in order to dominate and transcend it (Gramsci 1971: p.172).

In Turkey, Demirel and Ozal are examples of American-educated technocrats who became politicians and realized the idea of GAP. On the other hand, Unver, also from a civil engineering background and educated in the USA, has been instrumental in policy translation through the GAP-RDA by linking it to international professional associations, universities and other global-knowledge and professional networks. President Erdogan disfavoured GAP upon his ascent to office and fired the top management of the GAP-RDA, driving away many members of staff. In 2003, the GAP-RDA became very different from the GAP-RDA there had been in the 1990s. Mr. Veysel Eroglu became president of the DSI, to be later succeeded by the Minister of the Environment and Forestry. There is no regulatory impact assessment or other procedure that would limit the freedom of individuals in decision-making, which remains largely informal. Unver's role of liaison between national and international networks was prominent. In England, although the role of individuals is more disguised, there is anecdotal evidence that the regulatory impact assessment does not always provide the basis for decision-making. Public individuals, such as Pitt, Bye and others, clearly have substantial influence on policy. In Kazakhstan, the tandem of Hannan-Nikolaenko was successful in translating IWRM ideas into the Kazakh context, but the lack of leadership in the government resulted in the long-term intransigence of the plan. The chairman of the Committee for Water Resources, Mr. Ryabtsev, was supportive of the project, as was his deputy, Mr. Kenshimov. However, with IWRM, a full-fledged investment to push the policy through is needed because a number of agencies are typically involved. Because of that, no substantial commitment has been shown to the IWRM plan, and its realization remains to be seen. Individuals were found to play a crucial role in driving policy translation in all three case countries. Being constrained by the civil service culture and discourses, individuals acted to use the milieu for power generation in order to transcend the limitations (Gramsci 1971).

- ***Ideas and Discourses***

In Turkey, *hydraulic mission* is a hegemonic discourse that is manifested in material resources (industrialization and development), in organizational set-up of coalitions (the State Hydraulic Works and their alliances) and the discursive dimension of linking modernity, civilization and development. State-led domination across these three channels of hegemony is clear. The emergence of the Sustainable Human Development (SHD) discourse could have challenged hydraulic mission but failed to get institutionalized beyond the GAP-RDA. Indeed, SHD ideas have been better grounded at the international level (through publications and professional lobbying) than at the national level. With EU accession and further liberalization, as well as the pacification of the GAP region, there are big changes expected in the GAP region and Turkey as a whole, including changes in water and environmental resources.

In England, "Making Space for Water" (MSW) is a *hegemonic discourse* in the field of flood risk management. It includes such ideas as decentralization (devolution of responsibilities to the Local Authorities); policy-making and implementation across the government; a drive for a more evidence-based policy. The *hegemony* of MSW is maintained through the three pillars as described by neo-Gramscian theory (Newell and Levy 2005). On the material side, "Making Space for Water" has proven to be less costly and scored highly in the cost/benefit ratio in the regulatory impact assessment. In the discursive dimension, appeal to issues of sustainability, fairness, environmental preservation, wetland conservation, and a move away from exclusive civil engineering solutions has ensured that the MSW gain discursive hegemony. Finally, in terms of the organizational pillar, two levels can be distinguished. At the macro level, Defra and the Environment Agency have been going through restructuring, and the Local Authorities have assumed new responsibilities. The issue of organizational change is not complete as it is still emerging, but the Environment Agency has been given the role of a "strategic overview" player in order to direct MSW policy. At the micro level, various networks and alliances have been established to reflect the interests of the actors engaging in the policy. An important element of alliance building for MSW is the embracement of this policy by the Chartered Institution for Water and Environment Management (CIWEM), an authoritative professional organization in Britain. CIWEM has been extremely active in terms of organizing seminars and conferences on the subject of on-going flood risk management reform in England, and these events provided

numerous opportunities for networking and alliance-building. Thus, through the material, discursive and organizational pillars of hegemony, MSW discourse obtained its hegemony. It is important to note that no discourse can attain hegemony without any of the three pillars discussed above.

In Kazakhstan, there is a dire need for a new infrastructure and new models of governance. Drinking water, irrigation, industrial development, flood control, river basin management and recreation need proper infrastructure and much planning. Regulation is also important, but it seems that the focus of international projects has fallen on institutional cooperation and concepts (Water User Associations, Integrated Water Resources Management, Condominiums, Water Code etc.), rather than on hard solutions. IWRM language is used to draw power from it. IWRM enjoys incomplete hegemony, which owes to the fact that it has not yet proceeded to the normative stage. Moreover, it has no organizational representation, no agency or informal alliance that would push this policy up on the agenda. There is no carrier of IWRM, no individual or organization that would push for change. The UNDP project team is not in a capacity to become one. The discursive field in water resources in Kazakhstan still echoes the alarmist accounts on the Aral Sea and the neo-alarmism that emerges with regard to the Balkhash Lake as its levels drop.

- ***Material Resources***

The international finance secured in the GAP region amounted to 2.8 billion USD in credit and 1 billion in grants. This is about 10% of all planned investment in the region. The role of SHD discourse in this has been explored in Chapter 8. The emergence of SHD can be linked to this dimension. The main driver behind the creation of Water User Associations has also been the material relief for the state budget. In Kazakhstan, IWRM planning has become possible with the money from the Norwegian government, UNDP and DFID, thus signifying the importance of the question “who pays” when determining language and policies. Also, local experts associate a lot of prestige with IWRM discourse. In England, MSW was cheaper and more politically conducive than the flood defense policy. Thus, material considerations play a crucial role and, according to Gramsci, are effective in creating and sustaining hegemony only in tandem with organizational and moral domination. Thus, material concessions alone will not ensure the domination of one

policy over another. According to the neo-Gramscian perspective, material interests are intertwined with ideas and symbols and therefore cannot be discussed on their own.

- ***The Interplay between National and International Factors***

The neo-Gramscian perspective allows us to look at national and international factors and their interplay as they shape policies and obtain discursive domination:

> (I)nternational relations intertwine with these internal relations of nation-states, creating new, unique and historically concrete combinations. A particular ideology, for instance, born in a highly developed country, is disseminated in less developed countries, impinging on the local interplay of combinations. This relation between international forces and national forces is further complicated by the existence within every state of several structurally diverse territorial sectors, with diverse relations of forces at all levels (Gramsci 1971, 182; cited in Newell and Levy 2005: p.55).

This relationship is at the heart of this thesis, and the above-mentioned factors have been discussed in each of the cases as they came together to influence the process of IWRM policy translation. In Turkey, the inter-agency "turf wars" at the national level, among other factors, have forced the GAP-RDA to engage in international policy promotion and the search for external funding opportunities. The national-level discourse of nation-space has been at the heart of initiating the GAP project and has posed an important limitation to other policies that nevertheless flourished in the rhetoric, mostly at the international level. Capacity is yet another issue worth mentioning, as the independent reviews practiced in the UK are rare in Turkey (although their number is increasing with professional associations publishing reports). In Kazakhstan, these are absent altogether.

Electoral politics play an important role for the AKP (Justice and Development Party) in Turkey. What has influenced the project is lack of funding, the Kurdish question, domestic electoral politics, the hydraulic mission and "turf wars." At the international level, the TVA is an obvious symbol that has been linked to GAP, where the Bureau of Reclamation and the Lower Colorado Authority are less visible as such symbols. Sustainable development and the environmental discourse are taking roots in Turkey, but the hydraulic mission is still hegemonic, as manifested in the material, ideational and organizational domination. In England, many national factors are

important. The process of translation is therefore eclectic, incremental, diffused and involves a number of agents at multiple times in a discrete fashion. The agenda was determined by the national problems and then international ideas were looked to for translation. Consultants and experts constitute a nexus between the national and international arenas. Policies strive to be evidence-driven in their essence. Policy language is authentic, because it emerges as a result of internal politics and not an imposition from the international discourse. The power of individuals, and the legitimacy linked to international ideas and sources, is not as strong in England as it is in Turkey and Kazakhstan.

In Kazakhstan, the project design and agenda are suggested by international actors, whereas implementation has been fully national. The local experts stress the importance of data and information, the dilapidated infrastructure system, whereas international experts place an emphasis on institutions. There is no forum for policy discussion among national-level policy actors in Kazakhstan. Professional associations have not yet been formed as old research institutions have disintegrated (e.g. Kazgiprovodkhoz). There is no capacity for pilot projects—the consultation process has been important, but the feeling of ownership is most crucial, and the idea will not be successful if imposed on Kazakhstan, as with the IWRM plan. There is no hegemonic discourse at the moment on the background of the echoing alarmist discourses linked to the Aral Sea disaster. The international sources of influence included the UK DFID, UNDP and Russia, but overall they are weaker than the national policy circumstances. The project and IWRM issues have not got the necessary political weight and commitment.

7.5 Reprising the Four Themes of this Research: Global IWRM Hegemony through National Policy Translation

This section brings together the four research themes underlined in this thesis, namely, IWRM, hegemony, policy translation and national-level policy conditions. Their reprisal will assist us in the resolution of the main research question of this thesis: understanding the mechanism of the global hegemony of IWRM.

1. Integrated Water Resources Management

The first theme of the research is the multifaceted concept of IWRM, which emerged in the USA in the conservation movement of the 20th century and has evolved through many historical forms, which has finally become an international concept since the 1950s and a global hegemonic concept since the 1990s, framed within the discourse of sustainability. First, IWRM emerged as a normative concept linked multiple-purpose river development, but with the internationalization of water policy and the creation of transnational professional networks and international organizations, the concept obtained an international flavour and was gradually shaped into discourse. Symbols such as the Tennessee Valley Authority (TVA) have contributed to this process. Now, IWRM is the "discursive framework of international water policy – the reference point to which all other arguments end up appealing" (Conca 2006: p127). The notion of emerging Global Water Governance is centred on IWRM.

Thus, IWRM can exist in three dimensions—the normative, discursive and practical—and various policy tools may be envisioned within the notion of IWRM. The main weakness of IWRM is the absence of a universally accepted definition and, therefore, many interpretations are possible. The poor implementation record of IWRM is another weakness mentioned by critics. On the other hand, this weakness is also the strength of IWRM, as it stands for a "boundary concept" that unites grounds. Broadly speaking, there are three principles which underline IWRM, and any IWRM policy innovations (tools) should be linked to at least one of them: 1) horizontal cross-sectoral integration; 2) vertical integration of multilevel governance; and 3) public participation and consultation. IWRM has been regarded as a "nirvana concept" (Molle 2008), which is very difficult to achieve and progress towards which is desirable.

> Although, just as with nirvana, the likelihood that we may reach them is admittedly low, the mere possibility of achieving them and the sense of 'progress' attached to any shift in their direction suffice to make them an attractive and useful focal point (Molle 2008: p.132).

This was confirmed in all three countries as the assessment of the status-quo against the three principles showed that IWRM was incomplete in all cases.

2. IWRM Hegemony

The second theme of this research is the concept of hegemony as applied to IWRM. This is also the main research problem of the thesis, as hegemony is manifested in the "taken-for-granted" positive nature of IWRM in all contexts without exception. IWRM is often promoted as a concept that is always good to be taken on board and implemented. Hegemony, however, is a sophisticated form of power. The hegemony of IWRM discourse, as Gramsci developed conceptually, is an equilibrium that always remains partial and temporary. In order to construct and maintain a hegemonic equilibrium, it is necessary to build alliances and integrate, rather than dominate, the subordinate classes in order to win their consent. Thus, IWRM has co-opted other discourses and has "written them" into a "consensus."

> Gramsci took over from Machiavelli the image of power as a centaur: half man, half beast, a necessary combination of consent and coercion. To the extent that the consensual aspect of power is in the forefront, hegemony prevails. Coercion is always latent but is only applied in marginal, deviant cases (Cox 1993: p52).

Newell (2005) has suggested that, within a neo-Gramscian perspective, actors engage across three pillars of hegemony in their struggle, and so IWRM hegemony is exercised on three levels. On the *material level*, there are various rewards and punishments for the national-level policy actors' compliance to the order of global IWRM hegemony. This most often refers to the access to aid funds and commercial bank loans. This has been demonstrated by the cases of GAP, Turkey and Kazakhstan very clearly. In England, the material-level domination of Making Space for Water is manifested at the national level as it is cheaper than conventional engineering flood defense procedures. The three pillars of hegemony are exercised both at the international level, promoting the popularity and a ubiquitous scope of IWRM, and at the national level, when IWRM is taken on board and implemented.

3. Policy Translation

The third research theme is policy translation. It links the national and international levels and conceptualizes the process of the travel of IWRM ideas, in which they exist through modification. The concept of *translation* is very attractive because of its breadth and the possibility to look at

several issues simultaneously and through the same lenses: "it comprises what exists and what is created; the relationship between humans and ideas, ideas and objects, and humans and objects – all needed in order to understand what in shorthand we call 'organizational change'" (Czarniawska and Joerges 1996: p24). Policy translation is especially relevant to the study of the spread of sustainability, as the process of networking in translating ideas of sustainable development is very complex and iterative. This also stands true for IWRM.

I have developed the theory of translation a bit further by suggesting several refining touches required to operationalize it. The first "touch" is the introduction of a distinction between "deep" and "shallow" translation, and the way to distinguish between the two (the question "what"). The second "touch" refers to the model for explaining the drivers and process of translation (the question "why"). The third "touch": the model that predicts, or describes, and explains the process of translation and answers the question "how," which includes the three stages of policy translation as discursive entry, normative institutionalization and practical implementation. These three "touches," along with the empirical application of the models, represent the contribution of this research to the field of policy translation and policy change in general.

An important finding is that IWRM hegemony is achieved through its policy translation. Once ideas are being successfully applied to the national and local levels through the three stages of policy translation, the global appeal of IWRM grows and other countries and regions become involved in IWRM planning and implementation. Thus, the success of the national-level policy translation of IWRM (as in Kazakhstan, for example, or as it was promoted in GAP in the 1990s) is crucial to the global hegemony. "In short, the task of changing world order begins with the long, laborious effort to build new historical blocs within national boundaries" (Cox 1993: p65). This link between national and international is important to note and represents the key finding of the thesis.

4. National-Level Policy Context

The fourth theme of this research, and indeed, the main emphasis of the case studies, was the comparative importance of the national-level policy context. It was hypothesized in Chapter 2 (with a view on further empirical examination), that the national level is the most crucial juncture

point where decisions are made on how to incorporate (if at all) international IWRM experiences and how to implement them. This view has been confirmed by all three case studies: national-level politics are crucial for the interpretation of IWRM, for the perception of its relevance to the national context, as well as the importance of drawing international lessons. Such conditions as the "filtering capacity" of states in order to look abroad and *learn* from their experiences are very important and could be observed in England and, to a lesser extent, in Turkey. In Kazakhstan, such capacity still needs to be built. The presence of regular policy debate and deliberation is extremely important for the emergence of discourses and their maturation. In the absence of such forums results in a poor implementation record, as the normative stage of the policy translation cycle is skipped (as in the case of Kazakhstan). However, in England and Turkey (where the forums are increasingly strong) the debate on water policy and IWRM produce the normative institutionalization effect. Based on the dominant national conditions, IWRM can be used for problem-solving solely (as in England), be adopted for legitimacy and organizational reasons (as with the South-eastern Anatolia Project Regional Development Administration, GAP-RDA, and Kazakhstan). It can also be used to attract international funding (as in GAP and Kazakhstan). Factors like the strength of civil society and the prevalence of developmentalist discourses also play an important role but must be researched in detail in the future.

Thus, these four research themes come together to form the elegant research work that links the concept of IWRM Hegemony with Policy Translation and National-Level Policy Circumstances. This thesis achieved a number of things. In the first place, the global popularity of IWRM has been conceptualized, its mechanism understood and the process of the travel of IWRM ideas studied at the international and national levels. Second, policy translation of IWRM has been instrumental in the explanation of its hegemony, as well as in taking the methodology of studying global discourses further. Policy Translation has been juxtaposed with policy transfer, and its advantages have been demonstrated in the case studies. In the third place, the national-level policy conditions have been analyzed for the process of policy translation and hegemony of IWRM, and the comparative importance of policy factors has been determined.

The thesis has advanced the discussion on a number of fronts. It has contributed to the literature on IWRM by explaining its three-fold nature and reviewing its history while focusing on its

international travel. The discussion of policy translation has taken the theory and methodology of translation a bit further, as proven by the comparative case study analysis. In addition to this, IWRM has been reviewed in England, Turkey (GAP) and Kazakhstan, thus providing solid ground for drawing policy implications. Fundamentally, the thesis has explained the global hegemony of IWRM by the success of its national-level policy translation as shown in the case studies.

7.6 Avenues for future research

Due to limitations in time and resources for this research, as well as its innovative nature, a number of avenues for a full investigation could not be followed within the framework of study. It is hereby suggested that these avenues be explored in future research of the phenomena concerned. I list these avenues below:

1. The links from the local to the national and international level in the development of IWRM discourse and its hegemony;
2. Selection of cases that would compare more homogenously (e.g. with similar labels for policies);
3. Greater attention to international business and consulting companies in knowledge management and discourse creation at the international level. The importance of formal networks such as the WWC and the GWP in their connection to this business is crucial to research as well;
4. A greater focus on the local level with investigation of the changes on the ground and the perceptions of the local people about national and international concepts would be very helpful to compare to the hegemony of those concepts and discourses at the higher levels of governance;
5. The study of translation proved to be irrational in its process. A study of the effectiveness of IWRM policies, with and without policy translation, can be of interest in the future.
6. Analysis of policy translation over time can be very interesting, as it will bring up the issue of implementation.
7. The strategies and tactical moves of policy entrepreneurs, leaders and policy champions in policy translation and ,more broadly, policy change processes would be very interesting to explore.

8. Application and refinement of the epistemological framework and methodological model to study the process of the IWRM policy translation in other contexts and country cases would be very interesting to sharpen the model's applicability and value.

Summary and Conclusions

It was found that the major differences between the cases matter in the intensity, scope and results of policy translation. Capacity, in terms of financial, human resources and technical expertise, plays a crucial role in devising an effective policy system to respond to pressures. Lesson-drawing from abroad is much eased when such capacity is present, as it is in England. In Turkey, this capacity is somewhat lesser, especially in terms of the financial resources, professional values and knowledge of non-engineering issues related to water management (in Turkey, as in Kazakhstan, water management still remains mostly a province of an engineer and an authority of the state). It was also found that external imposition of agenda in the project, as in Kazakhstan, is not likely to succeed. Without political leadership in the government, no change is sustained, and the lack of political leadership in Kazakhstan was obvious. Policies should be closely tied to problems and pressures as identified by the governments and the local population, as it is in England. Neither in Kazakhstan, nor in Turkey, have the analyzed policies addressed the primary problems of the setting.

The neo-Gramscian notion of hegemony provides a convenient and beneficial conceptualization of the discursive process in all three cases. Hegemony is exercised by discourses and the freedom of individuals to act is limited by such discourses. However, discourses are also framed by individuals, and therefore this is a process of mutual formation. In England, the discourse of MSW became hegemonic and marginalized discourses, such as centralization and flood defense, are absent altogether from the policy debate. In Turkey, the discourse of hydraulic mission is hegemonic. The priorities of the government include development, and the industrialization of any effort to oppose such plans are framed as anti-developmentalist. This hegemony was recently challenged by the narrative of Sustainable Human Development. However, the GAP-RDA, the main carrier of the narrative, was unable to secure organizational alliances and a sufficient material and ideational influence to shift the discursive hegemony of hydraulic mission. The most recent trends, however, are indicative of a greater emphasis on privatization and regionalization

in Turkey (under the influence of the EU accession process), as well as the strengthening of river basin management and civil society organizations. These trends have already challenged the state-based authoritarian style in Turkey, and it is likely to trigger new discourses, one of which might be IWRM. Great changes in the discursive and policy field in Turkey and GAP can be expected. In Kazakhstan, discursive hegemony is less clear. There is little public debate about water resources management, and old alarmist trends are still dominant in depicting the Aral Sea disaster and the looming crisis with the Balkhash Lake. There is confusion in policy and implementation. A very pressing issue is the lack of qualified experts in the field of environmental and civil engineering, as well as interdisciplinarily prepared specialists. This can be a serious constraint to the future of the water sector. With regard to the interplay between national and international policy change drivers, an interesting situation existed in Turkey, where the GAP-RDA had to take up the Sustainable Human Development discourse and engage in active professional networking at the international level in order to survive pressures at the national level.[83] National-level politics have also been primary in determining the extent and speed of international engagement in England and Kazakhstan. In Kazakhstan, the lack of financial resources at the national level have conditioned the government to be receptive to the proposal to prepare an IWRM plan that would be sponsored by the Norwegian government, the UK DFID and UNDP. In all three cases, the knowledge and experience from abroad have been utilized and obviously present in the discourse. However, to what extent they have been (or will be) taken up in policy and implementation remains to be seen.

It is interesting that the relevance of international experience is framed not only as a function of the capacity of national- and local-level actors to relate to theirs and others' problems and solutions, but also by the politics of underlining the importance of their role, expertise and autonomy in the face of global and/or regional pressures of knowledge destabilization and state hybridization, as Conca (2006) has put it. State officials in all three countries have noted that the lessons are not always relevant, and that much is being done nationally in terms of R&D so that the dependence on international knowledge is not strong. These claims are understood as a source

83 I see this as the primary reason for the emergence of SHD discourse, and not the nation-space discourse and the Kurdish question as Oktem (2005) has put it. The discourse of SHD was shaped by the GAP-RDA to compensate the national-level denial by activities at the international level. Upon the abolition of the GAP-RDA at the national level, international activities have also been taken over by the DSI (who was the main organizer of the WWF 5 in Istanbul). The case of inter-agency competition and "turf wars" is clear in Turkey.

of legitimacy for those state officials, whose function is to provide a knowledge and expertise input in the policy process.

Four research themes of this thesis have been reprised. The links between IWRM, the hegemony at the global and national levels, and policy translation have been established. However, the importance of national-level policy circumstances has been noted as essential for the success of policy translation in the first place, and the maintenance and promotion of global IWRM hegemony in the second. Thus, this thesis has contributed to the literature on IWRM, the travel of policy ideas/policy change, hegemony and water resources management in England, Turkey (GAP) and Kazakhstan.

8. Conclusions and Summary

"All endings are also beginnings. We just don't know it at the time"(Mitch 2004: p.1).

Introduction

This is to conclude a memorable journey into the world of IWRM policy translation and hegemony. It summarizes the main issues discussed in the thesis and leads to the resolution of the research problem. Finally it underlines the contribution of the thesis. Section 8.1 discusses individual research questions and leads to the resolution of the research aim provided in section 8.2. A summary of the contribution finalizes the chapter.

8.1 Research Questions and Research Aim

In order to conclude the study, one needs to return to the central question asked in this research. This thesis has aimed to *understand the global hegemony of IWRM through the analysis of travel of IWRM ideas from the international to the national level in England, Turkey and Kazakhstan***.** The table below reprises the research questions that were devised in order to lead to the main aim, listed above.

Table 8.1 Research Questions of the Study (reprised)

Research Questions
Question 1: How can a deeper understanding of the history of IWRM contribute to our knowledge about its travel from the international to the national level?
Question 2: Who are the actors, and what are the incentives, processes and drivers that stimulate the travel of IWRM from the international level to the national one?
Question 3: In what ways does the travel of IWRM ideas happen from the international discourse to national-level planning in the examples from England, Turkey and Kazakhstan?
o Question 3a: What are the important drivers behind the process of travel of IWRM ideas in England, Turkey, and Kazakhstan?
o Question 3b: What is the comparative importance of national policy circumstances in England, Turkey and Kazakhstan in terms of *IWRM policy translation*?

Question 1: How can a deeper understanding of the history of IWRM contribute to our knowledge about its travel from the international to the national level?

The relationship between history, intellectual foundations and the contemporary processes of the international travel of ideas, including the complex constellation of IWRM ideas, is not linear or simple. There is much in the current IWRM policy translation that dates back to the beginning of the 20th century and owes to IWRM history, such as the notions of river basin management, planning and control, and ideas of social engineering through the pervasive use of the "hydraulic mission" paradigm. Ideas that currently constitute IWRM and allow for multiple readings of the concept all originate from the history and have been formed incrementally as a result of the synthesis of history, theory and practice. Thus, the normative treatment of history as a source of immutable lessons must be abandoned, while an appreciation of path-dependency and the origins of ideas in history must be acknowledged.

Another important issue is that the history of a concept is inseparable from its intellectual foundations. Understanding of IWRM as a triple concept that is simultaneously a normative blueprint of a policy tool, a discursive framework at the international level and a practical concept on the ground emerges only through historical analysis. So does the revelation of trends within IWRM discourse that gradually evolve to shape and change it. Those trends include: multiple knowledge, the "hybridization" of the authority of states (Conca 2006), "deterritorialization" of water management, increasing the legitimacy of the role of politics in management and bureaucracy, having an appreciation for uncertainty and adaptable capacity of systems, water marketization and the decentralization of governance. Any discourse analysis, therefore, must rely on historical analysis in order to position the various ideas existent in the discourse.

Question 2: Who are the actors, and what are the incentives, processes and drivers that stimulate the travel of IWRM from the international level to the national one?

The internationalization of IWRM has brought about new implications to a concept previously conceived of as only a normative tool or a framework to be implemented at the national and regional (basin) levels. These implications indicate that water resources have started to be treated as a global problem. Moreover, IWRM has become a solidification of the emergent notion of global water governance without a clear and authoritative global government. The former

emphasis on international regimes has given way to international discourse, increasing the importance of knowledge and experts as compared to diplomats, state officials and executives. IWRM, therefore, has become de-territorialized and the authority of states hybridized (Conca 2006) and has emerged as a discursive frame to which many actors (governmental and non-governmental) have started to appeal in the search for legitimacy. The internationalization of IWRM has also caused its divorce from impact on the ground, thus creating an artefact "IWRM" (Latour 1986) that has a life of its own. Although hegemony is never stable or complete, there are weaknesses in the discursive and organizational pillars of domination. IWRM is clearly the most ubiquitous global policy framework currently existent in water resources management. Knowledge actors have been crucial to instituting this hegemony through the knowledge/power nexus. IWRM, therefore, is more of a technocratic discourse at the international level. Incentives that encourage actors at the national and local levels to appropriate the concept include material, legitimacy and prestige, and organizational (socialization and acceptance as a professional or an expert) reasons. Internationally, these were non-state actors that instituted the hegemony of IWRM.

Question 3: In what ways does the travel of IWRM ideas happen from the international discourse to national-level planning in the examples from England, Turkey and Kazakhstan?

Empirical analysis of the IWRM translation process has shown that the pre-conceived model of policy translation stands valid. New important factors in policy translation include the link between policy problems and policy solutions (innovations) that have been drawn from the IWRM discourse. It has been found that, in the countries with greater capacity for formalized policy-making (e.g. England), IWRM policy innovations get selected and adapted to fit the problems better. In the case of developing countries and countries in transition, IWRM policy innovations serve other-than-rational purposes, such as legitimacy, window-dressing, organizational strategy to survive in the "turf wars" and the key to funding supply. Interpretations of IWRM were found to be multiple and different, and mostly based on national-level policy circumstances, the path-dependency of the respective political system and the strength of the reliance on science, as well as the maturity of civil society and the presence of a policy discussion forum for discourse deliberation. When discussing the relevance of international IWRM experiences to national policy reform in all three studied countries, it was found that it is rather a

function of political struggle at the national level and is less dependent on the soundness or success of certain IWRM experiences internationally. Consultants and members of professional and informal knowledge networks were found to be most active in drawing upon international knowledge, whereas state officials were more inclined to underline the importance of nationally and locally generated knowledge to fit the problems presented as "unique" in their context. The policy translation process was found to be incremental in all three countries, with three stages of heuristics. In the first stage, a discursive change is introduced which is captured by the changes in the language of debate. In the second stage, normative understanding emerges along with the practical ways of implementing change. The third practical stage signifies the implementation of policy. It has been found that, once discursive trends are identified in a setting, further changes can be predicted based on the direction of change. However, the timing and extent of changes are context-dependent. The depth of change is also important, as it may be superficial and confined to rhetoric only, as it is in Turkey, or bear greater changes in the policy system, as it does in Kazakhstan and England. The criteria necessary to distinguish between the two are proposed and have been successfully tested in three case studies. While there is a great detail of data required for such an assessment, it appears important in analyzing the depth of translation and change.

Question 3a: What are the important drivers in the process of travel of IWRM ideas in England, Turkey, and Kazakhstan?

In the discussion of three cases, the political entrepreneurs or champions emerged as important drivers of policy translation. They act within the constraints of civil service institutions and discourses, and their actions are limited by those, but their very ambition is to shape and transcend those limitations. Thus, it is a process of mutual formation, in which agency is crucial. The notion of political will, therefore, emerges when a number of key individuals put their energy into promoting a certain type of policy change based on international experiences. The role of individuals was more prominent in Turkey and in Kazakhstan (in Kazakhstan, the lack of leadership in the government was the case), whereas in England, the role of agency is concealed by the formalized policy-making system, not by any means diminishing their crucial role in the policymaking.

Discursive hegemony and ideas are the weapons with which policy entrepreneurs struggle for power. They are linked to material gains and legitimacy, and around them coalitions and organizations (or informal networks) are formed, sometimes competing, as in the Advocacy Coalitions policy framework (Sabatier 1999). Certain discourses come to push out others and create a receptive environment for policy translation, or the opposite. Discursive trends of regionalization and privatization in Turkey and GAP are indicative of the great challenge the "hydraulic mission" discourse is going to face. They are suggestive of the necessity for greater attention to sustainability and the IWRM agenda in the future. Discursive changes towards Making Space for Water and the integration of spatial planning, housing and development in England have all been suggestive of the surface water management plans and the greater autonomy of local authorities to come. In Kazakhstan, greater attention to drinking water supply and national information management with regard to water management signifies the increasing capacity to oppose the international discursive and material (not to say quasi-hegemonic) pressures to focus on institutional issues in order to pay due attention to hard infrastructural problems. Understanding the discursive struggle and the ability to unravel the material and its ideational components, as well as the organizational alliances surrounding the discourse, is a powerful policy analysis tool that may have the predictive power to foresee certain changes in the future (or at least the direction of change). Material considerations are always primary in any policy change process, but it would be false to consider them as the only important factor. There are always non-rational or "ritual" elements to policy making and politics, such as legitimacy, organizational position, power and network membership.

While national-level conditions have been found to be crucial, it is their interplay with international knowledge, actors and factors that creates an idiosyncratic context for policy change and stability. This interplay is an embodiment of the policy translation process. The most dynamic interaction was found in Turkey. While the substance of reform was nationally predetermined, the form of the discourse has been shaped internationally within the language of sustainability, participation, openness and integration. The "turf wars" between government agencies caused the GAP-RDA to shift its institutional identity and focus to the international dissemination of GAP as the "best practice." This has won GAP a lot of international acceptance and awards, such as the IWRA Millennium Award for a sustainable project. There were only a

few independent evaluation studies of GAP verifying the validity of the sustainability and IWRM claims. Discourse at the international level has taken a distinct form from the discourse at the national level and practice altogether. An important fact is that a manager of professional and knowledge networks that have facilitated the discourses of GAP has moved into the UN system after completing his GAP-RDA career. This suggests that a personal career can benefit from buying into the IWRM/Sustainable Development discourse. Interestingly, a similar move happened in the case of Kazakhstan, where an international IWRM consultant received a promotion in the UN system after the completion of the UNDP IWRM project. In both GAP and Kazakhstan, IWRM initiatives have been very welcome at the international level, where a serious lack of IWRM "success stories" is felt. Whilst the main goal of the international promoters of IWRM is to institute the message that "IWRM works," project reports from Kazakhstan and Turkey on the success of IWRM have become a crucial currency in achieving this goal. Whether such reports correspond to reality or not has become secondary—even more so with the difficulties to verify the claim independently. Thus, policy entrepreneurs who have worked in the IWRM networks in both Kazakhstan and Turkey have benefited from the projects without regard for their impact on the ground. In England, to provide a stark contrast to Kazakhstan and Turkey, substance, form and the language of the reform have been determined nationally. While EU influences on the reform are clear, with SWMP becoming an instrument of the Floods Directive implementation, the movement and benefits for individuals tapping into the international networks are less clear. Due to the formalized and commercialized structure of the water sector, outlining clear roles and responsibilities, the incentives and benefits of actors, as well as the predictability of their roles, are clear.

Question 3b: What is the comparative importance of national policy circumstances in England, Turkey, and Kazakhstan in terms of *IWRM policy translation*?

Policy circumstances at the national level were found to be of greatest importance to the IWRM policy translation process, by comparison with all other factors. Important elements at the national level include the financial and human capacity to filter experiences and conduct evidence-based policy change; the existence of a forum for policy discussion and discourse deliberation; active civil society, which is the area in which discourses are formed; and the

formalized policy-making process that meets certain requirements of transparency, accountability, predictability and participation. As Evans (2004a: p. 97) has put it:

> in transition societies the effectiveness of policy transfer programs are largely determined by the degree to which the essential components of a national culture are preserved within the policy transfer design and the inappropriate foreign context is filtered out in a process of cultural assimilation.

This "filtering" capacity is very important but often absent in developing countries and countries in transition. Indeed, the human capital of England is much greater than that of Turkey and Kazakhstan, and the new Draft Flood and Water Management Bill presumes the preparation of more civil engineers while England attracts specialists from around the world. In Turkey and Kazakhstan, the situation with civil engineers and environmental scientists, and especially with inter-disciplinarily educated experts, is much worse. Thus, the capacity for evidence-based, problem-oriented, efficient, fair and environmentally sustainable policies in water management (and elsewhere) is considerably more in England than in Turkey or Kazakhstan. Overall, the capacity is greater in Turkey than in Kazakhstan due to the more democratic system of elections (municipal, regional and national) and the more developed civil and professional societies for water policy. The role of the states and national-level policy circumstances in determining the process and outcomes of the IWRM policy translation process has been crucial in all three cases, confirming by this the theoretical argument of Dolowitz:

> To link this directly to policy transfer, it can be argued that rather than being passive in the face of globalization, accepting the loss of their sovereignty and capacity to govern, states can and do engage in policy learning, designed to take advantage of both domestic and international situations, in order to enhance their domestic and global position. Thus, instead of seeing the state as forced out of politics, by attaching policy transfer to globalization, academics can begin bringing the state back into the governing process by analyzing why, what, and how, ideas, policies, and processes are being globalized, and what impact this is having on states in the global environment. Clearly, as the interface between the international and the national, the state is ideally positioned to learn from both, and, as such, act as the creator and mediator of the processes governing globalization (Dolowits 2006: p.274).

The degree of freedom also presupposes the need for the capacity to deal with the issues of translation. This capacity comes down to the finance, human capital and the policy-making environment, in terms of governance and regulation. Principles, such as accountability, transparency, public participation and predictability have all been mentioned as important

elements of good governance. Active civil society and a regard for the local conditions are necessary to undermine technocracy and elitism and prevent the creation of the "high modernist ideology." The role of policy champions and entrepreneurs is very important, although difficult to research. Procedures such as the RIA, EIA, SEA, sustainability appraisal and public participation, as well as the democratic institutions of elections and transparency, also have an important impact on the capacity of states to deal with policy translation. However, it must be concluded that a distinction between politics and bureaucracy would be difficult to achieve even in the context of a developed country. Discourse analysis has been the major methodology of this research, and it has proven to be an exciting and very useful method. While it does not allow for the generation of prescriptive recommendations, it has helped to explore the processes and answer the questions "how" and "why" with regard to IWRM policy translation:

> The real contribution of this approach is not to be found in its prescriptive force, but in the ability to trace the discursive power struggles underlying environmental politics. It allows one to see environmental politics both as a process that seeks to generate an answer to a real world problem, and as a critical struggle where conflicts between discourses may be exacerbated, sidestepped or resolved (Hajer and Versteeg 2005: p181).

Having utilized a multiplicity of methods, including discourse analysis, I have arrived at the resolution of the central research problem of the thesis, which is to be discussed in the next section.

8.2 Resolution of the Research Problem

The process of travel of IWRM ideas from the international to the national policy-making arena has been found to be complex, iterative, non-linear and discreet. Incremental and stage-based, this process happens through the involvement of a multiplicity of actors at multiple times through the politics of knowledge, interests and organizations. Thus, the conceptualization of this process as a *translation* of ideas captures its essence better than the mechanical term of *transferring* policies.

IWRM ideas are diffused and translated due to the hegemonic nature of IWRM discourse at the international level, which promotes the notion of IWRM as "always good." However, whether this discourse can gain hegemony at the national level is the function of national-level politics, to which, systemically, international hegemony is linked as well. Hegemony is achieved through the three pillars of material concessions and interests, ideational and discursive domination and

organizational alliance-building around certain meanings and policies. When constructing the hegemony of a certain discourse, three stages must be passed in order to form a relatively stable hegemony: discursive change, normative change and practical change.

In spite of the unfolding debate on globalization and the diminishing role of nation-states in policy-making, the role of the national level and states in policy translation has been found to be crucial in all study contexts. States remain the main actors, although the regional and local levels are also important. From the investigation conducted in this thesis, it has been confirmed that the national level is where discourses are framed and links with the international arena instituted. The "filtering" capacity of states at the national level is, therefore, crucial. Such capacity includes financial and human resources, a civil society that is active and has a forum for participation and deliberation of discourses, democratic legitimacy formation, and where policies and innovations are introduced in accordance to the pressing problems.

Overall, the role of individuals has been found crucial in shaping discourses and transcending the limitations they pose. In England, incentives for policy entrepreneurs and champions were domestic. In Kazakhstan and Turkey, certain individuals received international promotion, having benefited from the international IWRM networks. The amount of detail in this thesis did not allow for an investigation of the strategies and tactical moves of policy entrepreneurs in the policy translation process – this can be a fruitful avenue for future research. Despite of the stress on rational policy-making in the literature on policy transfer, the policy translation process with regard to IWRM has been found to be fundamentally non-rational. Institutions, beliefs, ideas and discourses, issues of legitimacy and national- and local-level politics have all merged in a very complex interaction to produce change in a peace-meal fashion that is not explained by rational choice or the conventional schools of strategy-formation. Thus, the process has been as "ritual" as it has been "rational," and specific attention must be paid to the "how" question of this process at the micro level in order to explore its rich and idiosyncratic fabric. Finally, the global hegemony of IWRM has been explained by the national-level policy translation in three three case studies.

8.3 Contribution of the research

- *Theoretical Contribution*

1. The notion of policy translation and the ensuing conceptualization of this process as non-linear and non-rational; the mechanism of stage-based translation and important drivers explicated;
2. The notion of hegemony as applied to IWRM at the international and national levels; the mechanisms of hegemony formation and maintenance (through the three pillars) explicated;
3. Presentation of IWRM as a discursive coalition that acquires form and meaning in a certain context, eliminating by this the general notion of IWRM as a universalistic policy tool;
4. Making a strong case for the role of states in the IWRM policy translation process and, potentially, in the way global water governance (that currently converges around the concept of IWRM) is formed.

- *Methodological Contribution*

1. Models for static and dynamic assessment of IWRM process reviewed and presented;
2. A model for assessing the depth of policy translation/change;
3. Suggestion of the importance of drivers of policy translation, and empirical verification of those drivers based on the three case studies;
4. Elaboration of the three-stage conceptualization of policy translation/policy change;
5. Elaboration of the notion of hegemony and its mechanism as applied to IWRM and other discourses;
6. The holistic model to study the process of policy translation in any context policy context (flexible as applied to a developed, developing country or a country in transition);

- *Policy-oriented Implications of this Research*

In England:

1. The policy system should learn more from international experience, preferably through state-commissioned consultancy studies;

2. Public Participation should also involve *metis* and engage stakeholders in implementation. Current public engagement policy has been criticized as "terribly condescending and patronising."
3. While the input of various stakeholders in decision-making is clear in terms of the opinions and consultations on the policy options, the process of decision-making happens behind closed doors and is based on lobbying. Who makes the decisions in reality, and based on what criteria, is therefore not open for public scrutiny and, perhaps, is rooted in the secretive civil service tradition of the UK. This can create problems with the accountability of officials.
4. The policy system is very complex, and reform steps are being taken to simplify it. At the moment, however, researchers and the public must spend significant time and resources to reach understanding of the system in order to participate and provide some meaningful input. This is not always possible.

In Turkey:

1. The electoral politics and the technocratic stance of the state have (de)formed the GAP project. There is hope that, with greater emphasis on privatization and regionalization (as triggered by the EU accession process), the sustainability agenda will take deeper roots in Turkey and GAP.
2. There is a need to foster the emerging but fragile civil society and professional debate on water policy. State support and support from international organizations, NGOs and professional associations (e.g. USIAD, TMMOB and others) is crucial to the deliberation of discourses and expanding the capacity for democratic input into them.
3. Formalized policy-making in the government can be very helpful, as the England example shows. The introduction of such policy instruments as the EIA, SEA, RIA and sustainability appraisal, as well as posing legal requirements for public consultations, is a necessity to achieve more transparent and accountable decision-making. This is a gradual process of change and hopefully will happen incrementally within the process of EU integration.
4. There is a need for more critical international treatment of development projects such as GAP. It was hastily labelled as a show-case and "best practice" by the international

community and academia, who have not assessed it in full but have delivered the judgment that servs their interests of instituting the hegemony of IWRM. Greater attention to detail on the part of the international water community is necessary.

5. The examples of national and international policy leaders in Turkey and Kazakhstan show that individual career interests and public interests can diverge in the complex interest-seeking, discourse-formation processes and national-international linkages. Thus, a system of checks and balances might be necessary (whatever form it takes), and the win-win nature of career promotion and success in IWRM policy implementation on the ground can not be taken for granted.

In Kazakhstan:

1. Agenda of the IWRM project was determined by the GWP, UNDP and international consultants who worked on the project. This has created the lack of political will on the part of the government, as the project did not cover what was thought to be of foremost priority – namely, the issue of national information management and infrastructure rehabilitation (apparently requiring a greater investment).
2. Formalized decision-making and the enforcement of duties and responsibilities of parties is necessary in Kazakhstan. The same instruments for policy-making recommended for Turkey should be introduced to achieve greater results.
3. There is a need for a civil society and professional societies in the field of water resources in Kazakhstan. Conferences, meetings and debates are necessary for the deliberation of discourses. At the moment, this niche is filled by journalists, which is not a proper solution for informed policy-making and making democratic input into policies.
4. It seems that infrastructure and technology transfer, along with key managerial skills, are primary needs in the setting of Kazakhstan, with regulation and the institutional aspects coming second. The approach of the IWRM plan, which has been over-ambitious, lacking in political impetus and reminiscent of rational comprehensive planning, might therefore not be the most desirable. Nevertheless, the consultation process that has ensured the ultimate adoption of the plan by the government has proven to be very important, and it is highly recommended to other countries drawing up an IWRM plan, however time-consuming and arduous this process might be.

5. A common feature of policy translation in developing and transition countries is the inclusion of new policy instruments and concepts into the debate without deliberation or making clear what they actually mean; often, foreign terms are used as well. This may create misunderstanding and divide, and only hinder the management process.

Summary and Key Messages

This section reviewed the research questions raised in Chapter 1 and led the summary of the argument to the resolution of the research problem, namely, understanding IWRM Hegemony. It has further discussed the manifold contributions of this thesis. Among the key messages of this thesis is the global hegemony that has been historically constructed and is currently being operated through a multiplicity of actors and the three pillars of material, discursive and organizational domination. The national level is the key domain where international pressures stemming from hegemony meet the local problems and are framed within the national-level policy circumstances. While it would be premature to conclude any cause-effect relationship between the global hegemony and national-level water politics, the fact that the two co-vary and are interlinked has been clearly shown in this thesis. I argue here that the global hegemony of IWRM can not be achieved without successful policy translation of it to the national level, which presumes a "deep" translation, as explained in Chapter 3, as well as a full completion of the policy translation cycle (also presented in Chapter 3). Thus, the process of policy translation at the national level both contributes to the formation of global IWRM hegemony and is influenced by the drivers and motives that constitute the hegemony of IWRM.

Another key message is that IWRM can exist in multiple forms and execute multiple functions at multiple levels. It may be interpreted as an evidence-based, problem-solving tool or a framework, as it is in England; as a tool for the augmentation of funding and the creation of new institutional identities (as in the cases of the GAP Regional Development Administration and Kazakhstan); or as a source of legitimacy (as in both Turkey and Kazakhstan). Policy translation has been found to be a better-suited concept to explain the process of travel of IWRM ideas by comparison with the more established policy transfer school. However, the approach needs further empirical testing and development. The model to study policy translation in the water sector, and possibly beyond, is provided in Annex 7.2. At the national level, contrast between the capacities for policy

learning and deliberation played an important role in how IWRM was interpreted and to what extent international experiences were perceived as important and were drawn into national-level politics. Thus, the specific national context must be given prime consideration when studying or facilitating policy translation with regard to IWRM. It is hoped that this work will not only be an important contribution to the bank of knowledge on IWRM, policy translation and hegemony, but also an inspiration for the future work in the important field of water resources management.

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Personal Communication

Most of the interviews have been coded and presented in the text with relevant codes that also show their institutional affiliation. However, several interviewees in England and Kazakhstan did not mind their named to be disclosed, which was also the case with most interviewees in Turkey. Thus, the following references in the text indicate personal communication. The list of interviewees is provided in the Annexes for each of the case studies. The abbreviation (pers. comm.) was not used in the text for stylistic reasons.

Chapter 4

Howes 2008b, Gardiner 2008; Balmforth 2008 (conference speech);

Chapter 5

Nee 2009, Hannan 2008, Nikolaenko 2008, Tverdovsky 2008, Petrakov 2008; Representative of the Balkhash-Alakol River Basin Coucil.

Chapter 6

Kalaycioglu 2008, 2007; Coban 2007; Cubukcu 2007; Cakir 2007; Unver 2007; Aydogdu 2007; Guven 2007; Kibaroglu 2007; Ozbilen 2007; Yaman 2008; Zahir Erkan 2007; Kanadikirik 2008; Gokhan 2008; Demir 2008;

Annexes

Annex 1. IWRM Definitions

Source[84]	Term	Definition
1.GWP-TAC (2001)	IWRM	Process which promotes the co-ordinated development and management of water, land, and other related resources in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital eco-systems.
2.Cardwell et al. (2006)	IWRM	Integrated Water Resource Management is a co-ordinated, goal-directed process for controlling the development and use of river, lake, ocean, wetland, and other water assets.
3.USAID (2005)	IWRM	IWRM brings together governments, communities, and other stakeholders to choose among alternative uses of freshwater and coastal resources. Using a participatory planning and implementation process, these stakeholders identify ways to meet their diverse water needs without depleting or damaging water resources and their underlying ecosystems (U.S. Agency for International Development 2003: 1).
4.WB (2003)	IWRM	An integrated water resources perspective ensures that social, economic, environmental and technical dimensions are taken into account in the management and development of water resources (World Bank 2003).
5. IADB (year unknown)	IWRM	Integrated Water Resources Management: water resources management where the aim of its actions and projects also includes the allocation of water and decreasing of conflicts between competitive water resource subsectors and uses, both in quantity and in quality. Sometimes it is also referred to as comprehensive water resources management…It is the process of diagnosing, responding to and resolving water use problems [while] acknowledging their interrelationships (Inter-American Development Bank).
6. UNDP (1990)	IWRM	Integrated water resources management is based on the perception of water as an integral part of the ecosystem, a natural resource and social and economic good (United Nations Development Programme).
7. Mitchell (1990)	IWM	"systematic consideration of the various dimensions of water: surface and groundwater, quantity and quality".

84 Not all sources are in the reference list, but a simple Internet search for the specific definition would locate most of them.

	IWM	"water system… in interactions with other systems (land, ecosystems). Knowledge of both terrestrial and aquatic system, erosion control, diffuse pollution control, wetlands".
	IWM	Water is connected with the broader social and economic development.
8. Born Songozni (1995)	IWRM	IWRM is a combination of ''comprehensive/ inclusive'', ''interconnective,'' and ''strategic/reductive.'' ''Comprehensive/inclusive'' here entails having all relevant factors in view and thus being open but still delimiting (Born and Sonzogni 1995). ''Interconnective'' relates to the fact that the interrelationships and linkages between these factors are taken into account, whereas ''strategic/reductive'' means identifying and focusing on the key aspects of the management problem, selectively targeting the critical issues.
9.Calder (2005)	ILWRM	Integrated Land and Water Resources Management (ILWRM). "Unlike earlier quests for the development of a tightly defined "water resources master plan" there is increasing recognition that ILWRM is more likely to be achieved if it is structured as an incremental, evolving iterative process.
10.DWAF (1998)	IWRM	"a philosophy, a process and a management strategy to achieve sustainable use of resources by all stakeholders at catchment, regional, national and international levels, while maintaining the characteristics and integrity of water resources at the catchment scale within agreed limits".
11.D. J. Merrey, P. Drechsel, F. W. T. Penning de Vries, H. Sally	IWRM	IWRM is the promotion of human welfare, especially the reduction of poverty and encouragement of better livelihoods and balanced economic growth, through effective, democratic development, and management of water and other natural resources at community and national levels, in a framework that is equitable, sustainable, transparent, and as far as possible conserves vital ecosystems.''
12.Grigg 1999	IWRM	A framework for planning, organizing and controlling water systems to balance all relevant views and goals of stakeholders
13.Koudstaal et al. 1992	IWRM	Framework for management of water resources as an integral part of a nation's social and economic development
14.Thomas and Durham 2003	IWRM	Sustainable approach to water management recognizing its multidimensional character and the necessity to address, embrace and relate these dimensions holistically to find sustainable solutions.
15.Newson 2000; Ohlson 1999.	IWM	Process of planning and implementing water and other natural resources management strategies in watersheds with an emphasis on integrating the biophysical, socio-economic and institutional aspects

16.Mahondo 2002	IWRPM	Through incorporation of socio-human factors, economic issues and social issues and the ecological systems and by linking more than one sectoral interest at both operational and strategic levels, societies will continue to benefit from utilization of water resources while maintaining the environment and the resource base to meet the needs of the future generations.
17.Schultze 2007	IWRM	Although it is already well known that IWRM operates at multiple spatial scales, the temporal scales for water management were given little attention in the literature. Seasonal variability of precipitation and climatic conditions is well recognized, but the fact that agriculture, economic, social and political systems often also function in temporal cycles has not been recognized.
18.Gleick 2003	IWRM	More people now place a high value on maintaining the integrity of water resources and the flora, fauna, and human societies that have developed around them. There are growing calls for the costs and benefits of water management and development to be distributed in a more fair and prudent manner and for unmet basic human needs to be addressed. And more and more, efforts are being made to understand and meet the diverse interests and needs of all affected stakeholders.
19. World Water Vision 2000	SWRM	To ensure the sustainability of water, we must view it holistically, balancing competing demands on it – domestic, agricultural, industrial (including energy), and environmental. Sustainable management of water resources requires systemic, integrated decision-making that recognizes the interdependence of three areas. First, decision on land use also affect water, and decision on water also alter the environment and land use. Second, decision on our economic and social future, currently sectoral and fragmented, affect hydrology and the ecosystems in which we live. Third, decisions at the international, national and local levels are interrelated.
20. Allan, T. 2003	IWRAM	IWRM must be seen as primarily a political process in terms of getting policy in place (Dixit et al 2002). To this end it should be re-termed IWRAM – water resources *allocation* and management. Allocation and re-allocation are unavoidable in water policy and management. They are not silent and are always contentious and political. Secondly, the river basin concept must not limit the scope of IWRAM. Economies, whether they fit hydrological boundaries or not, cope with water resource deficits and challenges with remedies deriving from beyond immediate watershed(s). IWRAM must think beyond the watershed.
21. World Commission on Water for the 21st century	IWRM	Decisions (in IWRM) must be participatory, technically and scientifically informed, and taken at the lowest appropriate level – but within a framework at the catchment, basin, and aquifer level, which are the natural units by which nature manages water…This framework incorporates the intersection of three complex and rapidly changing systems: the environment, of which water is a vital part of all living systems, the hydrological cycle, which governs the

2000		flow and regeneration of water; and the human socio-economic system of activities
22. Moench et al. 2003	IWRM	IWRM should be an instrument to explore adaptation measure to climate change, but so far it is in its infancy. Successful IWRM strategies include, among others: capturing society's views, reshaping planning processes, co-ordinating land and water resources management, recognizing water quantity and quality linkages, conjunctive use of surface water and groundwater, protecting and restoring natural systems, and including considerations of climate change. In addition, integrated strategies explicitly address impediments to the flow of information. A fully integrated approach is not always needed but, rather, the appropriate scale for integration will depend on the extent to which it facilitates effective action in response to specific needs.
23. Jonker 2007	IWRM	IWRM is a framework within which to manage people's activities in such a manner that it improves their livelihoods without disrupting the water cycle.
24. Merrey et al. (2005)	IWRM	IWRM is the promotion of human welfare, especially the reduction of poverty and encouragement of better livelihoods an balanced economic growth, through effective, democratic development, and management of water and other natural resources at community and national levels, in a framework that is equitable, sustainable, transparent, and as far as possible conserve vital ecosystems"
25. DWAF (1997)	IWRM	New approaches to water management will be needed. These will have to focus on the way in which water is used in each user sector rather than simply on predicting, planning and supplying its water needs…This focus on individual sectors requires a framework for intervention which, without trespassing on the underlying autonomy of the user sector, guides its water related activities towards an optimum and sustainable path and promotes a spirit of resource conservation".
26. White (1957)	Integrated River Basin Development	It has come to be used by many scientists, engineers, and statesmen around the world today, seems to consist in three associated ideas. These are the ideas of the multiple-purpose storage project, the basin-wide program, and comprehensive regional development. They took shape over more than half century, forming side by side, each drawing stimulus from a different set of conditions, but not clearly combining into single programs n the United States until the middle 1930s…Their combination is more an ideal than a reality, but it is an ideal which recurs in differing form so frequently and widely and which commands such a warm enthusiasm as a symbol in public thinking that it should be reckoned with as a unit.
27. European Commission (1998)	IWRM	IWRM expresses the idea that water resources should be managed in a holistic way, co-ordinating and integrating all aspects and functions of water extraction, water control and service delivery so as to bring sustainable and equitable benefit to all those dependent on the

		resource"…
28. Odendaal (2002)	IWRM	The main objective for effective IWRM is to find right balance between protecting the water resource itself while meeting social and ecological needs and promoting economic development.
29. OECD 1992	IWRM	Integration required the conscious ad systematic consideration of the many diverse elements of a resource management issue in seeking optimal solutions. In conceiving, designing, maintaining and terminating a policy, complementary and competing objectives must be balanced to solve and anticipate problems, mindful of inter-temporal and equity implications. Integration, therefore, requires the development of policies that are preventative and anticipatory as well as reactive. Unintegrated policies are characterized by belated recognition of the consequences for the objectives of other sectors.
30. Dobromowski (2008) forthcoming…	IWRM	Thus, it can be argued that IWRM encompasses three main ideas: (1) to manage water resources at the level of river basins, (2) to integrate different water-using sectors, and (3) to set up specific institutional arrangements for this purpose. In the case of international rivers, the discourse on IWRM implicitly or explicitly points toward three different dimensions of institutional design, namely the membership, the substantive scope, and the form of the respective institutions.
31. Moss 2004, Medd and Marvin 2007	IWRM	IWM is essentially about working across multiple system boundaries and that more attention should be given to understanding the problems of scale.
32. Agenda 21	IWRM	As population and economic activities grow, many countries are rapidly reaching conditions of water scarcity or are facing the limits to economic development. This scarcity, accompanied by aggravated pollution of freshwater resources… demands the integration of sectoral water plans and programmes within the framework of national economic and social policies… This integration should be carried out at the level of the cathcment or sub-basin…"
33. UN Inter-regional seminar in Dakar 1981	IWRM	The golden rule is that there does not exist any golden rule. It is necessary to adopt an ad hoc solution for each river basin".
34. World Conservation Union	IWRM	No universally agreed definition exists. One manner – the integrated management of all water resources. Second manner – integration of water with other natural resources. The IUCN asserts that only through the integration of conservation into IWRM can one ensure ongoing maintenance issues of the wide range of services provided by ecosystems and the livelihoods that depend upon them (IUCN 2003 a,b). (cited in Davis, M 2007)

Annex 2.1 The Reclamation of the American West

Reclamation of the American West was legalized by the Reclamation Act passed in 1902. The nature of planning in this project was very uncommon for the USA – it was centrally directed with the money allocated directly by the Congress. The idea was to provide water to the arid and sparsely populated West for primary needs and irrigation, sell the lands for subsidized prices and then recover the costs by charging the water costs from the farmers over a long period of time. While Reclamation of the West was a complicated technical and political issue, the concept of *rational comprehensive planning* (not to be mistaken with the IWRM because IWRM is more selective and focused) was elevated to the top priority level. It is therefore striking to conclude that actually Reclamation proceeded without a central plan. To put it in Pisani's (2002) words "(n)ever did Congress, the Interior Department, or the Bureau of Reclamation itself create a blueprint for a "new West' ". As the main reason for this Pisani (2002) indicates the decentralized and local interest oriented American political system.

Whereas the aspirations of the conservation era were the "transformation of a decentralized, non-technical, loosely organized society, where waste and inefficiency ran rampant, into a highly organized, technical and centrally planned and directed social organization which could meet a complex world with efficiency and purpose" (Hays 1959), the *comprehensive rational planning* was a failure.

The conservation movement did not restore the family farm and did not put "the surplus men on surplus land". They did more to support the *status-quo* than to reform the institutions in the rural areas and more to aid the land speculators, larger farmers and land-owners than the small ones. A reader is referred to Sabatier *et al.* (2005) who illustrates many of the problems of procedural legitimacy, substantive welfare, and distributive justice of the Reclamation Era based on an example of the Owens Valley episode.

Annex 2.2 The TVA and the "Hydraulic Mission" Paradigm

The TVA idea was to build multiple purpose dams on the Tennessee River for hydropower production, which would be used by the industry (such as fertilizer and chemical industry), and for electrification of the rural areas. The irrigation water was planned to benefit the farmers, whereas the economic activity associated with the public works would generate employment and social development in the region. TVA was an experimentation with a regional development authority and was generally regarded as a resounding success owing to its achievements in poverty reduction, malaria eradication, electrification, increase in the level of education and other socio-economic indicators in the valley (Priscoli 2007b). The rivers became intensively navigated and the economic development of the region has reached the mean for the USA (Ekbladh 2002; Molle 2006; Priscoli 2007b). However, TVA has compromised on the issues of race, and became increasingly a hydropower generation project rather than integrated development project (Ekbladh 2002). Selznick (1949) noted that TVA managed to persuade the farmers and the opponents to cooperate, or to co-opt them through the means of ideational and other influence rather than by force alone. This is also reflected in a later discussion of TVA by the UN experts "…their (farmers') interests had been protected as far as possible and persuasion had been the principal method used in obtaining their consent to give up lands which had been requested of them" (United Nations 1951). The TVA became a turning point after which multiple purpose river development became a norm and single-purpose development was made unthinkable. Thus, multi-purpose river development became strongly institutionalized and taken for granted.

> multiple purpose projects are now thoroughly accepted, and an engineer would be considered remiss if he did not consider all possible uses, in connection with the planning of any irrigation project (White 1957: p.168).

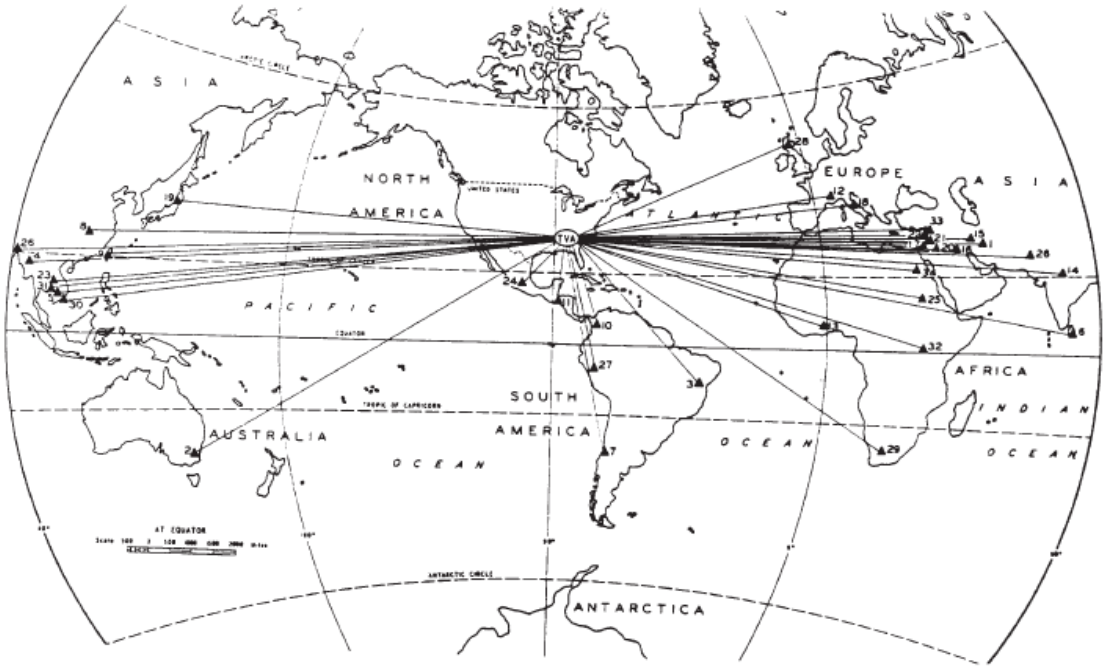
Gradually the TVA became a symbol of successful efforts at comprehensive rational planning in river basins and has taken the form of a *discursive concept*, which meant that the TVA appropriated a meaning of its own that was not directly related to its river basin. It became an icon of freedom, electrification, industrial development, democracy and fight against the ills of communism. It was further conceived as an icon in the foreign policy of the USA in the Eastern Europe, Asia and Africa. By the 1950s water development discussions invariably included the case of TVA, in the 1960s the 10% of all government-sponsored visitors to the USA came to see the TVA: such was the international fame of this project (Ekbladh 2002). Indeed, TVA has

appropriated the life on its own, and had a pervasive influence on the Mekong, Danube, Senegal, Zambezi, Volta, and on such countries as Brazil, Egypt, Mozambique, El Salvador, Sri-Lanka, Tanzania and Turkey (Molle 2008). As Figure 4.1 shows the influence of the TVA was massive. The concept that directed the TVA could be called "comprehensive river basin planning" (United Nations 1951), although David Lilienthal had rejected himself such a notion in favour of the "pragmatic" planning in order to emphasize the practical problem-solving as an engine behind the TVA, not the all-predicting comprehensive planning (Molle 2006).

The TVA inspired projects and changes in France, Germany, Spain, Japan, Finland, India, Turkey, Iraq, Egypt and other counties. This was facilitated by the efforts of the TVA Administration to spread the gospel of the TVA by hosting visiting foreign politicians and engineers. A growing number of American-based engineering and policy consultants who operated abroad also applied the concept of the TVA in their proposals (Wescoat 2005).

> Plans for a Danube and a Yangtze Valley Authority, and proposals for a Mekong Delta Development Authority, aiming "to turn the Mekong into a Tennessee Valley," were floated. The Khuzestan region of Iran would become another "Garden of Eden," and the flows of the Senegal, the Zambezi or the Volta would be harnessed. River Basin Authorities were established or planned in numerous countries with mixed results: the Corporación Regional Autónoma del Cauca in Columbia, the Helmand Valley Authority in Afghanistan, created in 1947 under American supervision, and other projects in countries as varied as Brazil, Egypt, Mozambique, Salvador, Sri Lanka, Surinam, Tanzania and Turkey (Molle 2006: p.13)

Figure: The Influence of the TVA as a Symbol of Comprehensive River Basin Planning



Source: Ekbladh (2002)

> TVA became the exemplar of a combination of multiple-purpose projects in an entire drainage basin with a clear intent to promote social change. On this hinged a third theme. Although some type of social change is implicit in any water management project, if only to stabilize existing agriculture or urban economy which otherwise would be threatened by flood or drought, the TVA was the first to contemplate such change throughout an entire basin and to consciously plan for shifts in income levels and modes of life. While its influence probably was greater by example outside than within the United States, even there it encountered major curbs, for while the creation of other valley authorities was widely debated, the problems of administrative application were sufficiently severe so that no country, including the United States, duplicated its form of valley-wide unified management beyond an initial pilot area (White 1969: p41)

The political nature of water resources management came to light in the USA when the two bitter rivals, the Bureau of Reclamation and the Army Corps of Engineers started to co-ordinate their activities in the 1940s facing the danger of more TVA-type administrations to be created (Reisner 1986). This is clearly indicative of the importance of external incentives to promote cooperation.

Table: The representative Integrated River Basin Development Programs as of 1957

Basin	Area (Sq. Mi.)	Major purposes[85]	Brief description of works
Columbia (USA)	Partial	F I N P	16 dams, 41 HEP. Irrigation diversion dams and

85 A – Fertilizer Manufacture, F- Flood control, I – Irrigation, M – Manufacturing, N – Navigation, P – Electric Power, S – Soil conservation, F – Forestry.

	219.500		canals. More 15 dams planned
Damodar (India)	8500	A F I M N P S T	7 dams underway. Navigation channel, land treatment, industry.
Huai (China)	67 200	F I N P	15 detention dams. 7 storage dams, levees and drainage works. 2 HEPs
Kitakami (Japan)	3950	F I P	7 dams. Irrigation works.
Oum er Rbia (Morocco)	13500	I P	6 dams and HEPs. Irrigation works and diversion dams
Rhone (France)	partial	I N P	2 dams and one other HEP. Locks and canals. 11 more dams planned
Tennessee (U.S.A)	40670	F N P A S T	27 dams. Locks. Fertilizer plans. Fuel electric plants. Agricultural demonstration
Tigris-Euphrates (Iraq)	Partial 192193	F I P N	4 dams, 7 diversion dams. 7 more planned. Land drainage and irrigation. Locks
Volga-Don (USSR)	695700	I N P	3 dams, 3 HEPs, navigation and irrigation.

Source: (White 1957)

Annex 2.3 Historical Evolution of IWRM

Allan (2003) provided a similar presentation of the historical evolution of water management approached, as given below in Figure 5.2. As I have included his concepts into the table above, I will not elaborate on the Figure in the text.

Figure: Evolution water management paradigms

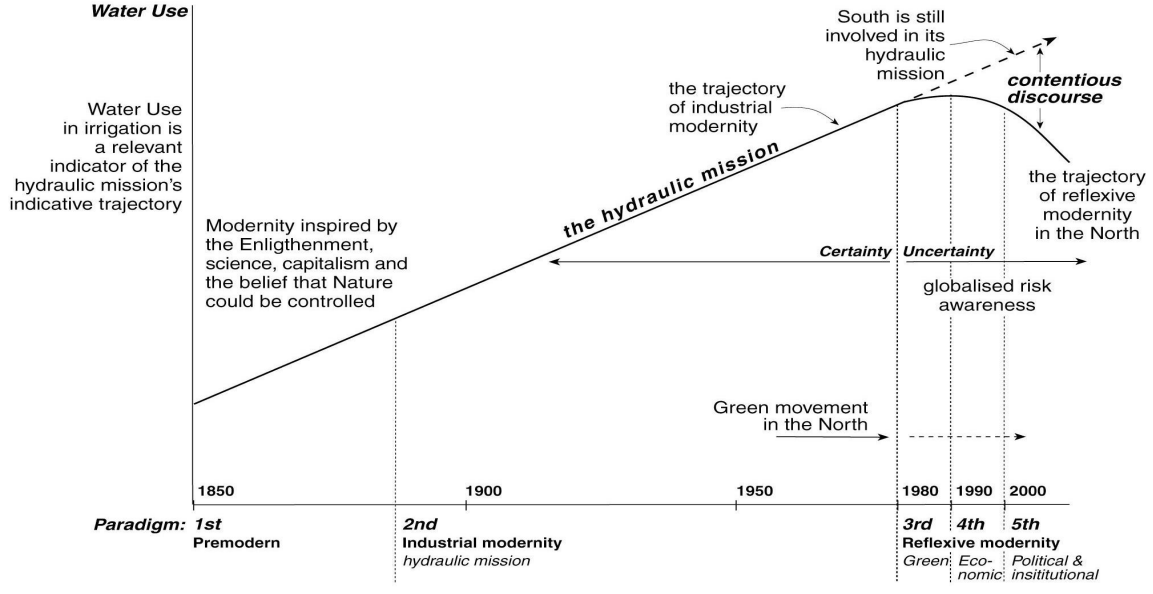
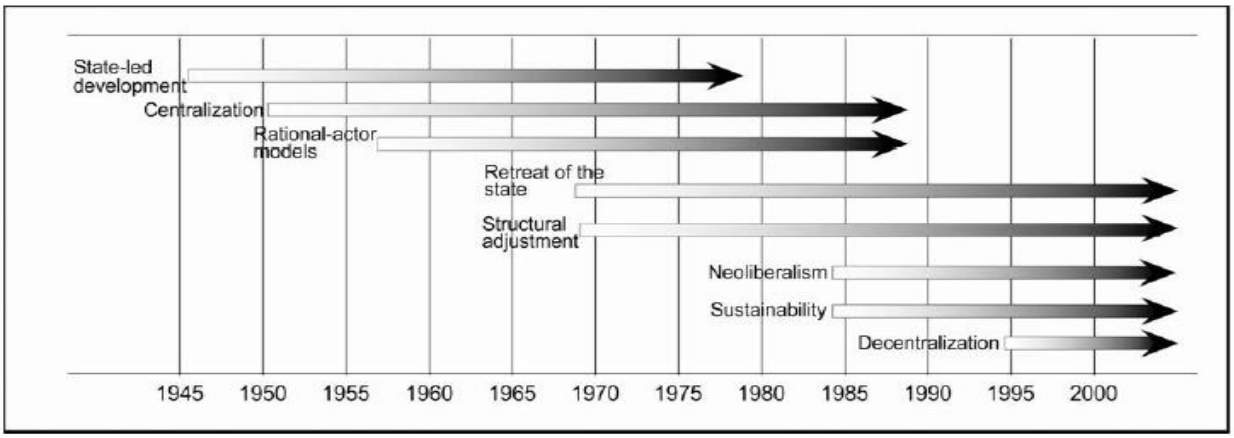


Figure One: The five water management paradigms

Source: Allan 2003

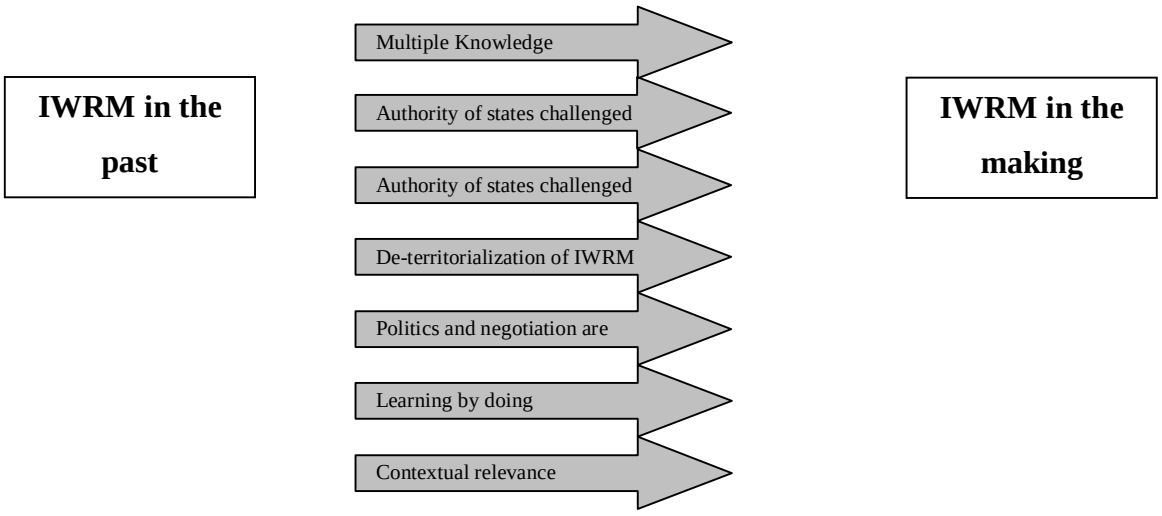
There is a great value of Allan's model in structuring thought and grasping the complexity of water resources management, however, it represents a simplification, as any other model, thus, eliminating for example an important distinction between the "early hydraulic mission," or conservation movement, and the "late hydraulic mission," or integrated river basin development that became an international discourse by the 1960s and 1970s. Yet, another conceptualization came from Varady (2008), who has drawn the following graph.

Figure: Evolution of Global Water Management Framework



Source: Varady (2008)

Figure: The dynamics of the IWRM discourse



Source: own compilation

Annex 3.1: Information on Interviews for England Case Study

Code	Affiliation	Duration	Record
I01	Defra	1 hour 40 min	Digital, transcribed
I02	EA	40 min	Digital, transcribed
I03	Defra	20 min	Notes
I04	EA	40 min	Notes
I05	Defra	1 hour	Tape recording, trans.
I06	EA	40 min	Digital, transcribed
I07	EA	40 min	Digital, transcribed
I08	Defra	30 min	Digital, transcribed
I09	EA	30 min	Digital, transcribed
I10	EA	30 min	Notes

Interview Questionnaire for England Case Study

Introduction

The Department of Environmental Sciences and Policy, at Central European University currently hosts a PhD research project on "Integrated Water Resources Management (IWRM): from International Theory to National Practice". As the part of this research the PhD Candidate Farhad Mukhtarov investigates the case of the Integrated Urban Drainage Systems in England and Wales. Other two cases are designed to be in Turkey on application of IWRM to poverty alleviation in South-East and Kazakhstan for better management on national level overall. I am interested in tracking the life of a concept that is being cascaded from international level to national, regional and local (in practice). For this purpose I intend to study policy process at national and local levels and try to identify to what extend this process has been enhanced by knowledge available from abroad.

The interview will be used only for research and everything you say will be strictly confidential. I may offer you anonymity in being referred to in the text.

Full Name:

Position:

Experience on Flood Management:

Questions

1. How did your career come to be linked to FRM?

2. Why the current arrangements for urban flood management are not satisfactory? What is the essence of the problem, is it technical, institutional, legislative, financial, behavioural, political?

3. Who are the most important stakeholders in the process of reform?

4. Is not the system of management too complex with the number of plans, strategies and implementation procedures? What is the hierarchy of plans?

5. What are the barriers to implementation of IUDM in the context of England and Wales?

6. Is this problem typical to England and Wales or does it occur more broadly and there might be interesting lessons to be learned from other countries?

7. How did new ideas with regard to SWM gain currency in the England and Wales, and why only since 2004?

8. How important were the projects commissioned by the EA in 1999 to inform the policy change process?

9. How important is EU legislation, EU wide projects, and International Conferences in negotiating of HA2 in MSW?

10. DERFA formulated 5 policy options to deal with the problem: 1) do nothing, 2) voluntary guidance, 3) changing responsibility of operating authorities, 4) improving incentives by changing the distribution of stormwater costs, 5) establishing the new authority for stormwater. How those options were hammered out?

11. Some of those options were discarded already in the Consultation on “Improving surface water drainage”. Based on what considerations were they discarded?
12. Could you please explain the process of decision-making in Defra and the EA with regard to SWM decisions?

13. What is the status-quo with implementation of the Defra IUD pilot projects?

14. Are there any preliminary lessons to be learnt from these pilots?

Thank you very much again!!! I will send you the transcript tonight for corrections and additions and give you time until the end of month to review.

Annex 3.2 Information on the Interviews for GAP Case Study

Interviewee Code[86]	Affiliation	Duration of the interview	Recorded	Date	Position
Interviews					
I-01	GAP-RDA	1 h	noted	14/03/2007	Strategic Planning Department
I-02	Former GAP-RDA	1,5 h	noted	16/03/2007	Vice-President
I-03	GAP-RDA	1 h	noted	03/03/2007	International Relations Dept
I-04	GAP-RDA	2h	noted	13/03/2007	Not known
I-05	Ministry of Foreign Affairs	2 h	noted	09/03/2007	Dept. of International Waters
I-06	METU, Dept. of Sociology	1.5 h	noted	10/03/2007	Former Head
I-07	METU, Dept. of International Relations	1h	noted	06/03/2007	Assistant Professor
I-08	"Firat" Water User Association	1h	noted	20/03/2007	Chairperson
I-09	GAP-RDA Regional Office	1h	noted	20/03/2007	Planning Officer
I-10	GAP-RDA; Harran University	1h	noted	21/03/2007	Former Head of the GAP-RDA regional office, vice-rector of the Harran University
I-11	CATOM	1h	Recorded and Transcribed	22/03/2007	Sanliurfa CATOM office
I-12	University of Madison, Washington	40 min	Recorded and transcribed	21/03/2007	Dept of Geography
I-13	State Planning Organization	30 min	Recorded and transcribed	08/09/2008	Dept. of Regional Planning

86 Codes have not been used in the text of the GAP case study as most of the interviewees did not mind their names being released

I-14	State Planning Organization	30 min	Recorded and transcribed	08/09/2008	Irrigation Dept.
I-15	DSI	1.5 h	Recorded and transcribed	08/09/2008	Irrigation M&O
I-16	METU	1h	Recorded and transcribed	09/09/2008	Dept of Sociology
I-17	METU	1h	Recorded and transcribed	15/09/2008	Dept of International Relations
I-18	SPO	1h	Noted	18/09/2008	Irrigation Department
I-19	DSI Sanliurfa Regional Directorate	40 min	Recorded and trasncribed	07/09/2008	Head of Irrigation Dept.
I-20	Autonomous Provicial Administration	40 min	Recorded and transcribed	05/09/2008	Officer
I-21	Kisas WUA	10 min	Recorded and transcribed	03/09/2008	Technician
I-22	Provincial Administration	15 min	Recorded and transcribed	09/09/2008	Officer for Municipalities
I-23	Sharecroppers in Harran	15 min	Recorded and transcribed	10/09/2008	
I-24	Villager in Suruc	20 min	Recorded and transcribed	10/09/2008	
I-25	The Agency for Agricultural Reform		Recorded and transcribed	12/09/2008	Land Consolidation Dept.
I-26	The Ministry of Agriculture in Sanliurfa		Recorded and transcribed	12/09/2008	Education of Farmers Dept.
I-27	WUA1		Recorded and transcribed	05/09/2008	Head
I-28	WUA2		Recorded and transcribed	05/09/2008	Accountant
I-29	The GAP-RDA	30 min	Recorded and transcribed	05/09/2008	Director of the Regional Office

Interview Questionnaire for GAP Case Study

Definition: IWRM in this study is taken as the process which is based on three pillars: 1) integration of water resources system with land and other related natural systems, and cross-

sectoral integration; 2) the multi-level governance; and 3) broad stakeholder participation in planning and implementation.

In your opinion, what are the main organizations involved in the GAP planning (please add to the list if necessary) and how active is their involvement (on a 1 to 5 scale; 1– not involved; 2- passive; 3- average; 4- active; 5- very active)? Please, put an "X" sign for each organization.

	Passive ←				→ Active
	1	***2***	***3***	***4***	***5***
• GAP-RDA	…	…	…	…	…
• State Planning Organization	…	…	…	…	…
• State Hydraulic Works	…	…	…	…	…
• Ministry of Environment and Forestry	…	…	…	…	…
• Ministry of Energy and Natural Resources	…	…	…	…	…
• International Organizations (e.g. WB)	…	…	…	…	…
• Ministry of Culture and Tourism	…	…	…	…	…
• Ministry of Agriculture	…	…	…	…	…
• Private sector (national and international)	…	…	…	…	…
• National and local NGOs and Individuals	…	…	…	…	…
• Turkish Universities	…	…	…	…	…
• Municipalities (Local Government)	…	…	…	…	…
• European Union	…	…	…	…	…
• UNDP	…	…	…	…	…
• Other International Organizations	…	…	…	…	…
• (which ones)?	…	…	…	…	…
• World Water Council	…	…	…	…	…
• Global Water Partnership	…	…	…	…	…
• Other International NGOs	…	…	…	…	…
• (which ones)?	…	…	…	…	…

1. How similar is the GAP planning approach to the three pillars of IWRM? Please describe for each pillar.

Natural and Cross-Sectoral Integration	
Multi-level governance	

Stakeholders' participation	

2. How would you describe understanding and support of the GAP's goals and activities by

Targeted groups on regional and local levels	
General public in Turkey	
Organizations that assist the implementation of the programme	

3. Are there any programmes and plans of action developed with sufficient funds over the long term to support each pillar of IWRM? Please, indicate such programmes and their funding sources.

	Programmes/ Plan of action	Funding source
Natural and Cross-Sectoral Integration		
Multi-level governance		
Stakeholders' participation		

4. How would you describe the institutional capacity of its personnel for planning and implementation of the three pillars of IWRM in the GAP-RDA.

	Personnel
Natural and Cross-Sectoral Integration	
Multi-level governance	
Facilitating Stakeholders' participation	

5. In your opinion, how frequently does the GAP-RDA stuff interact (from formal meetings to emails and telephone calls) with the main actors listed below for all three pillars of IWRM? Please, use 1-3 scale (1- very frequently; 2- frequently; 3- not frequently).

	Natural and Cross-Sectoral Integration	Multi-level governance	Stakeholders' participation
State Planning Organization			
State Hydraulic Works			
Ministry of Environment and Forestry			
Ministry of Energy and Natural Resources			
International Organizations (e.g. WB)			

Ministry of Culture and Tourism			
Ministry of Agriculture			
Private sector (national and international)			
National and local NGOs and Individuals			
Turkish Universities			
Municipalities (Local Government)			
European Union			
UNDP			
Other International Organizations (please, specify)			
World Water Council			
Global Water Partnership			
Other International NGOs (please, specify)			

6. How would you describe the mechanisms of monitoring of progress toward each of the pillar of IWRM in GAP?

Natural and Cross-Sectoral Integration	
Multi-level governance	
Stakeholders' participation	

7. At what level most of the decisions on the three pillars are made in GAP-RDA? Please, put a sign under one of the answers (and briefly comment, if possible).

	Top- echelons	Career ladder developed for delegation of responsibilities	Lower-level personnel afforded discretion to solve problems
Natural and Cross-Sectoral Integration			
Multi-level governance			
Stakeholders' participation			

8. Are there guidelines or documents for administrative action developed for each of the 3 elements in GAP-RDA?

Natural and Cross-Sectoral Integration	
Multi-level governance	
Stakeholders' participation	

9. Is it necessary to continuously allocate much of organizational resources (such as personnel, time and money) to keep the IWRM planning and implementation on track? Please describe.

10. How would you describe the contribution of International Organizations to IWRM planning and implementation in GAP for each pillar and beyond?

Natural and Cross-Sectoral Integration	
Multi-level governance	
Stakeholders' participation	
Other issues?	

11. How would you describe the contribution of International NGOs for each of the IWRM pillars in GAP?

Natural and Cross-Sectoral Integration	
Multi-level governance	
Stakeholders' participation	

12. How would you describe the Human Resources development efforts for planning and implementation of each of the pillars.

Natural and Cross-Sectoral Integration	
Multi-level governance	
Stakeholders' participation	

13. How would you describe evolution of planning approaches during the 1989 – 2006 period of time in relation to the development of the global discourse on Sustainable Development?

Annex 3.3. Information on Interviews for Kazakhstan Case Study

Code	Affiliation	Duration	Record
I01	UNDP-IWRM Project	2 hour	Digital, transcribed
I02	UNDP-IWRM Project	50 min	Digital, transcribed
I03	UNDP-IWRM Project (same informant as I01)	1 hour	Digital, transcribed
I04	Expert (former chairman of the CWR)	35 min	Digital, transcribed
I05	Official at the CWR (Astana)	20 min	Noted
I06	Deputy chairman of the CWR (Astana)	30 min	Noted
I07	Kazgiprovodkhoz (chairman of the "schemes" preparation	1 hour	Digital, transcribed
I08	UNDP IWRM Project (former), NGO (current)	2 hour min	Digital, transcribed
I09	CWR, BWA (Balkhash-Alakol)	1 hour 20 minutes	Digital, transcribed
I10	UNDP International Consultant on IWRM	40 min	Digital, transcribed

Interview Questionnaire for Kazakhstan Case Study

Questions (in Russian)

1. Какова, по Вашему мнению, степень вовлечения данных организаций в планировании и управлении водными ресурсами Каз.? Оцените пожалуйста по шкале (1- слабое, 2- умеренное, 3- непосредственное).

Ключевые организации	Вовлеченность		Возможности (ресурсы организации) и связь с международным опытом		
	Степень вовлеченности	Рычаги воздействия	Человеческие ресурсы	Финансовые ресурсы	Связи с международными экспертами и ресурсами
Национальный уровень					
МСХ - КВР					
МСХ, другие отделы					
Кабинет Министров					
МООС (from January 2008 start to work on the river basin scale)					
МинЗдрав					
МинЭкономики					
The Committee of					

Geology					
НПО Республиканского Уровня					
Международные Организации					
Частный сектор					
Международные НПО					
Исследовательские Центры (консультанты)					
Региональный уровень/ местный уровень					
РГУ					
РГП					
Бассейновые управления					
Бассейновые советы					
Маслихаты					
Акиматы					
Сельские кооперативы					

2. Какова предыстория проекта ПООН ИУВР? От кого исходила инициатива?

3. Какие проекты Международных Организаций уже действовали с началу проекта ПРООН, и каково было их влияние на подготовку проекта ПРООН?

4. Кто участвовал в дезайне проекта и каким образом было решено про составляющие компоненты проекта? Какова роль Водного Кодекса в формировании проекта?

5. Кто вошел в состав рабочих группы проекта и существуют ли документы о встречах этих групп (стенограммы)? Кто из международных экпертов принимал участие?

6. По-вашему мнению, что составляет Интегрированное Управление Водными Ресурсами, и что является самым важным компонентом в услобиях Казахстана для внедрения ИУВР?

7. Какую роль сыграли международные организации и эксперты (консультанты) в приготовлении плана и дальнейшем его реализации? Could you please answer this question?

8. В чем особенность плана ИУВР для Казахстана, какие специфические соц-экономические факторы были учтены при разработке плана?

9. Насколько план отвечает реалиям сегодняшнего состояния в Каз-е. Все ли компоненты плана согласованы с участниками предварительно?

10. Как часто и с какими результатами проводятся встречи Национального Форума по ИУВР? Есть ли документация встреч форума?

11. Какова предыстория создания Бассейновых Советов?

12 В чем привлекательность концепции ИУВР для Каз. и разных ведомств принимающих участие в Управлении Водными Ресурсами?

13. В чем опасность принятия концепции ИУВР для Каз. и и разных ведомств принимающих участие в Управлении Водными Ресурсами?

14. Каким Вы видите реализацию ИУВР в идеальном варианте в Каз. и что для этого необходимо?

Большое СПАСИБО за Ваше Участие в данном исследовании!!! Please, submit this form to Farhad Mukhtarov at ephmuf01@phd.ceu.hu, via fax to (+ 36 1 327 3031), or by post - EnvSci, Nador u. 9, Budapest 1051, Hungary.

Annex 5.1 The Map of the Eight River Basins in Kazakhstan

Source: (Genina 2007)

Annex 5.2 The Big Almaty Lake Case Study

In 2006 a number of Kazakh newspapers, such as the "Oko" and "Megapolis" published articles about the dangers of destroying the Big Almaty Lake – a picturesque natural mountainous lake that serves as a drinking water reservoir for Almaty, the biggest city of Kazakhstan. The articles caused a strong resonance and brought the issue to the attention of the top government. Water from the Big Almaty Lake first flows through the turbines of the "APK Cascade" HEPP and then is delivered to treatment stations in the city, after which is transported through the distribution system inside of the city. The Lake is declared as a water body of special significance by the Presidential Order #1466 (01.11.2004), and articles 112-116 of the Water Code, which implies that the area of 2.5 km from the coastline of the lake is protected from any construction and cannot be transferred to private ownership (Anonymous 2006; Askarov 2006). In July 2005 the Balkhash-Alakol BWA

received a letter from the head of the "APK Cascade" HEPP, that the "Alatau" Alpinist Club has asked for access to the technological passage way to the Lake for their construction vehicles. The road is too close to the lake (2-3 meters in some places) and is not designed for heavy construction vehicles, as well as the part of the road goes on the top of the dam that can be dangerous both for the dam and the lake in the case of an emergency. Therefore, the HEPP workers denied access to the road, however, the "Alatau" club presented an ownership certificate to a land plot in 1 hectare inside of the protected area which was given by the akim of Karasay district in 1997 and renewed in 2005. After the BWA received the letter, it became apparent that the order of the akim to privatise the land within the Lake territory was against the laws protecting the Lake, moreover, the BWA, who is a statutory consultee in such cases, has not even been consulted, and had no information about this case before the incident. According to the words of the deputy-head of the Balkhash-Alakol BWA Anara Tleulesova "Any water body within the Big Almaty Lake is fenced as the zone of special protection. In this zone it is prohibited to have construction without prior consent with several government agencies, including us. However, as we became informed, not a single statutory consultee has been informed. How, and based on what did akim of the Karasay district has transferred the land of strategic importance in private ownership is unclear" (Askarov 2006; translated from Russian). After 2 years of court hearings, the decision in favour of the BWA and against the "Alatau" Alpinist Club was taken. According to some estimates the land value contested in the court was up to 500 thoUSAnds USD (per 1 ha plot), and there is a high chance of a corrupt deal that was made to privatize the plot (Mikhaylova 2006a, b). The deputy-head of the BWA, who was very active in this struggle for the lake's safety was several times threatened and had to ask for personal protection. This brief case presents three lessons. First of all, it shows that corruption happens and the BWAs and state bodies often have no information of the actions of the local administrative power who govern their territories. Secondly, the role of the deputy-head of the Balkhash-Alakol BWA was instrumental in pursuing the case, and even in spite of personal threats, the leadership was continued until the court ruling in their favour. Thirdly, the role of journalists was critical in securing public support to the BWA and against the developers in this case. This can be typical in a transition county with unstable court and administrative system, where the press plays a role of an independent watchdog and political will mobilizator.

(Photo: courtesy of Olga Romanova; 2009)

The plain is mostly populated by Arabs with some Kurdish population (Okhlahoma State University *et al.* 1999b; Okhlahoma State University *et al.* 1999a). Prior to irrigation, wheat, lentils, and barley were among the most widespread crops in the area. Livestock breeding was also common as a supplementary economic activity. Some villagers in the south of the plain pumped groundwater for irrigation and planted cotton, which constituted only 2.7% of the total irrigated planted area in 1986 (USIAD 2008). This provides a stark contrast to the crop pattern between 1995 and 2003 which has been planted with about 80% of cotton (Yildiz 2004). In 2001 population of the plain was 91 115 an growing fast (Harris 2008a; USIAD 2008). The social system of the Harran Plain is distinct from other parts of Turkey. *"Aşiret"*-s determine social life as well as electoral behaviour is the region (Harris 2005c). "*Aşiret* refers to a partially nomadic type of social formation, often referred to by the GAP RDA as 'tribal', which is based on authoritative leadership and has been the basis of society in the region for centuries. Aşiret is still a viable mode of organization in the region" (Erhan 1997). On the other hand, the region is characterized by highly disproportionate land-ownership patterns with 42,3 % of families in GAP being landless (USIAD 2008). According to the same study, 56% of total farmers in Harran in 1999 were share-croppers[87] (Okhlahoma State University *et al.* 1999b, a). Thus, few landlords control the land and most of the workers on the land do not own the land. Seasonal migration is very common for agricultural work in the Western part of the country – people travel to Adana, Antalya, Mersin and other places. It was estimated that 70% of population of Harran were migrating to the West for seasonal work, but after irrigation opened, this figure dropped to 11.6% (Unver 1997b). Migration however shifted from inter-regional to intra-regional within GAP (e.g. seasonal migration to the Harran Plain, Şanlıurfa for work instead of traveling longer distances to Adana, Antalya and similar places).

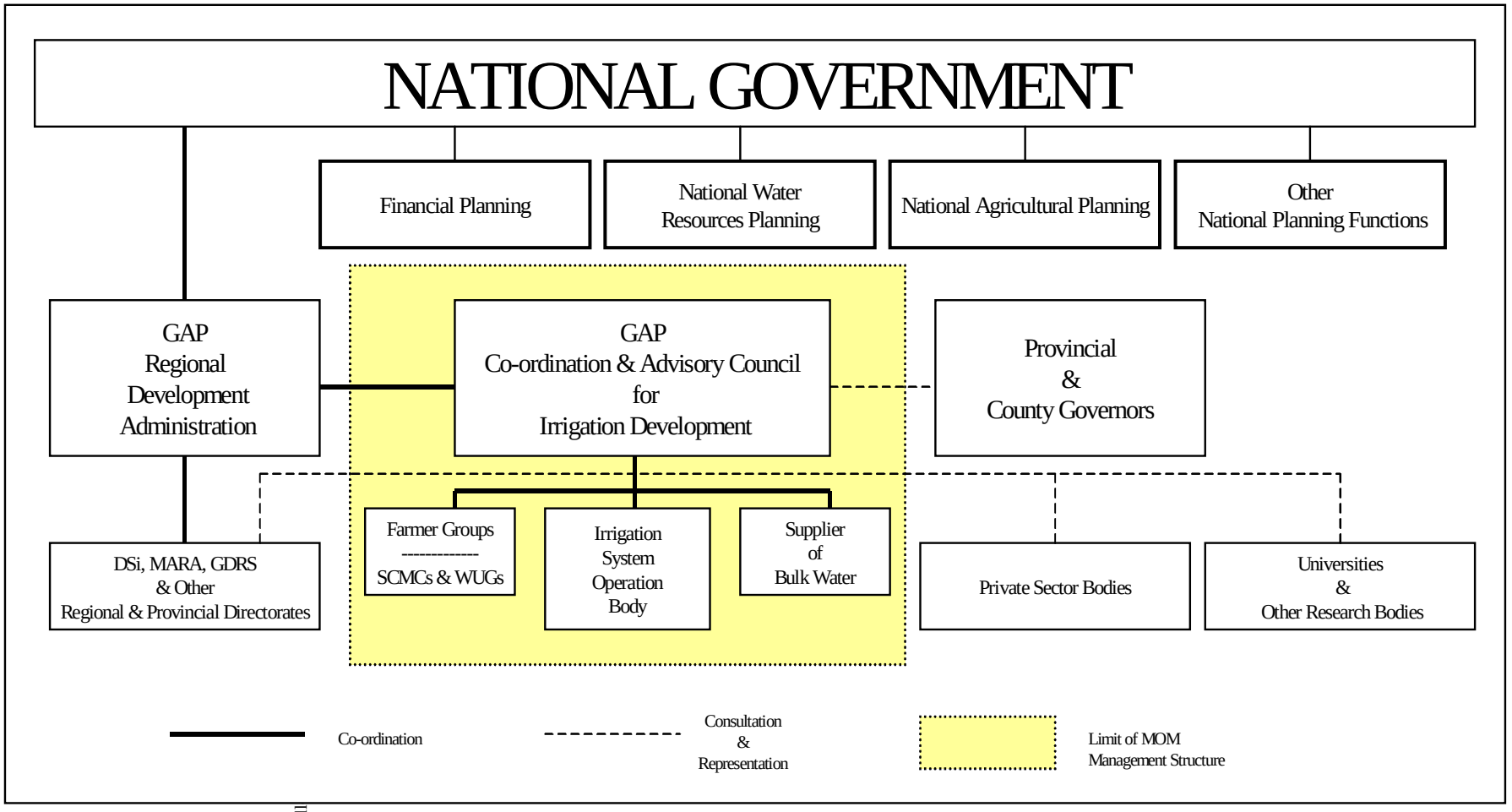
The impact of irrigation in the region has been mixed. Some scholars argue that irrigation resulted in an increased gap between the rich and the poor (Harris 2006). The government, in turn, emphasized that the gross income in the plain has risen three-fold, while not elaborating on its distribution among the farmers (Unver 1997b). It is beyond the scope of this paper to examine the positive and negative impacts of irrigation in the Harran, but to illuminate some of the

87 There have been no social assessment studies conducted in GAP later, which is one of the indicators of declining importance of the GAP RDA as well as centrality of the project. Therefore, the 1999 figures provide the latest information.

problems that farmers and planners were confronted with since the start of irrigation. Lack of drainage, soil erosion, inappropriate land use, poor marketing of crops and impotence in fighting plant diseases, all undermined positive impact of irrigation in the Harran Plain (USIAD 2008).

Currently there are several limitations to effective and equitable irrigation management in the Harran. First of all, there is insufficient human capacity – farmers who have never irrigated before now had to irrigate, and organize themselves in water user groups in order to provide communal services. Insufficient and inadequate training and inadequate agricultural extension services put a limitation on improving the "human factors" (Kanadikirik pers. 2008 comm., Yilmaz 2008, pers. comm. Gokhan 2008. pers. comm.). It was commonly perceived from Ankara that "time is needed" in order for farmers to learn. In the regional office, however, the importance for more intensive interventions is underlined, even though there is scepticism based on previously failed attempts to provide knowledge and services "from above" (Demir pers. comm. 2008). Indeed a quote by one of the farmers stated "Technical advice is no good. We do not need it. It is much better when we listen to our hearts" (Barham 1996). Predictably, productivity is low. The pilot projects run by Israelis produced almost twice as much cotton with half of the water used in the Harran Plain" (Barham 1996). Since 1995 there is 50% increase in salinity of lands (USIAD 2008). According to TEMA Foundation (reference), 30 000 ha out of 130 000 ha in Harran have been salinized to an irreversible extent due to inappropriate irrigation methods (USIAD 2008). Official figures, however, suggest that salinity exists only on 3400 ha, and as the result of drainage works, only 500 ha are left salinized at the moment (USIAD 2008). According to the official position there are 50 000 ha of land under the risk of salinity due to high groundwater levels (USIAD 2008).

Annex 6.1 The MOM model



Annex 7.1 The Model to Study the Process of Policy Translation