

Lund University
Lund University Master of International Development and Management
23 May 2011

ADDING NEW RULES ABOVE THE OLD ONES
– INSTITUTIONAL CHANGE OF THE WATER SECTOR IN MOLDOVA

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ABSTRACT

The purpose of this case study was to explore the process of institutional change in the water in Moldova, with the ambition of contributing to the under-theorized discussion on the way this process unfolds since two decades ago. Institutional change was conceptualised as the process of making improvements and amendments of what is wrong or unsatisfactory about water institutions, with the aim of achieving a better state. In turn, water institutions refer to formal rules and structures established by authorities with the purpose of governing water sector. More specifically, water institutions included three components: water law, water policy and water administration. By applying qualitative research methods: interviews, secondary data review and direct observations, it was possible to learn that institutional change in the water sector in Moldova in the past two decades unfolded in a gradual way and the specific mode of change was layering, implying that institutions change by adding new rules above the old ones. It is hoped that this study can contribute to more appropriate strategies and policies on the initiatives to change water sector institutions.

Key words: institutional change, institutions, permissive conditions, generative causes, gradual change mode, layering.

Word count: 10 927

ACKNOWLEDGEMENTS

I would like to thank Lund University International Master of International Development and Management (LUMID) for making this research possible.

I appreciate a lot the support and understanding my thesis supervisor, Anne Jerneck, has shown in the moment of my research deadlock. I thank her for putting me on the right track and helping to find the way till the end.

I would like to give a special thanks to my wonderful peer reviewers: Moa Stenholm, Laura Parrott, Marta Cubajevaite. As well, I thank my dear friends Christoph Assheuer and Diana Mirza Grisco for thorough and dedicated review of the research coherence, spelling and style. Special thanks to Bukola Oyinloye and Stephanie Bellack for helping with printing and delivering this thesis on time.

Additionally, I would like to express deep appreciation and gratitude to all people that have agreed to share their ideas and opinions on studied theme.

Finally, I dedicate this thesis to water professional sector specialists and everybody who works hard to transform to the best the water institutions in Moldova

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ABBREVIATIONS AND ACRONYMS

EU	European Union
ERDB	European Bank for Reconstruction and Development
EIB	European Investment Bank
ENPI	European Neighbourhood and Partnership Instrument
NDS	National Development Strategy
OECD	Organisation for Economic Co-operation and Development
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe

1 INTRODUCTION

1.1 Research Theme

All over the world the water sector is subject to significant changes. Earlier the main ambition was to increase investments in physical infrastructure, since over two decades the focus has shifted to improving institutional arrangements governing the water sector (Saleth and Dinar 1999:iv). It is often argued that effective water resource management and service delivery is to be more and more linked to sound institutions, namely to comprehensive water law, adequate water policy and responsible water administration (Saleth and Dinar 1999:iv, North 1997). However “sound institutions” are not self evident components within every system, neither is it a gift of luck, nor is it a one-off achievement, it is rather an outcome of a lasting process of institutional change (Thelen 2009) i.e. actions taken to introduce improvements or amendments of what is wrong, corrupt, unsatisfactory about existing institutions (Thesaurus 2011). The top two features of “sound institutions” are high level of effectiveness and readiness to deal with current and future challenges of the water sector (Saleth and Dinar 1999:vii).

As argued by Saleth and Dinar (1999:1), two worldwide recognized experts on institutional change in the water sector, the objectives behind institutional reforms are rather similar all over the world. These objectives are to: deal with water as an economic good, enhance allocation capabilities, improve financial self-sustainability, foster the decentralization of the decision-making mechanism augment the reliance on market mechanisms, stimulate a payment culture and the application of advanced technology and information input (Saleth and Dinar 1999:vii). While objectives of institutional change are fairly straightforward, the question of how change occurs is a “rather weak spot in the literature as a whole and across all varieties of institutionalism” (Mahoney and Thelen 2010).

Tracking and understanding the causes that prompt these changes, the nature and speed of the transformative process, as well as the meaning and outcome of an institutional evolution is not an easy task (Thelen 2009, Mahoney 2010, Kingston and Caballero 2006). The difficulty is multi-faceted. Firstly the process of institutional change differs by country-specific and sector-specific political-economic conditions and resource-endowment realities (Saleth and Dinar 2000). Secondly, the academic debate and theoretical grounding specifically on institutional change is rather poor (Thelen 2009), not because the issue of institutions is of no interest to scholars, quite the opposite, but the researchers mainly focus on discussing what institutions do (North 1997, Bromley 1989), instead of asking how they develop and change over time (Thelen 2009:473,

Mahoney 2009). Finally, the existent theoretical works on institutional change, predominantly focus on exploring a *punctuated change model* – which envisages a big change that occurs fast, involving considerable transformations that take place within a short period of time and that are linked to a specific (series of) event(s) (Mahoney 2010:4), rather than on investigating the *gradual-change model* – referring to “changes that unfold incrementally but with transformative effects” (Thelen 2009:476).

As argued by Thelen and Mahoney (2010:2-3) “authors are too apt to assume that big and abrupt shifts in institutional forms are more important or consequential than slow and incrementally occurring changes”. It is not at all to be denied that sudden and discontinuous changes take place, for example the breakup of the Soviet Union – a turning point in history and a consequential event for the people and the institutional architecture of the 15 former member states. Nevertheless, it should neither be taken for granted that this kind of transformative process is the most common model of change, nor that institutional changes did not occur beyond the time frame of the “big-bang” event (Thelen 2009: 475).

Policy and academic research on the institutional change of the water sector in Moldova may be thought of as a black spot in the relevant literature. It is possible to find pieces and bits of information regarding certain developments of the sector from documentation prepared national government (i.e. strategies, country reports) and by international development organisations (EU, OECD, World Bank). However academic-theoretical research providing a holistic and in-depth overview, interpretation and analysis of the transformative process is practically non-existent.

This study is an attempt to fill this gap.

1.2 Purpose and Research Questions

The purpose of this case study was to explore the process of institutional change in the water in Moldova, with the ambition of contributing to the under-theorized discussion on the way this process unfolds since two decades ago. At this stage in the research, institutional change is generally defined as the process of making improvements and amendments of what is wrong or unsatisfactory about water institutions, with the aim of achieving a better state (Thelen 2009). In turn, water institutions refer to formal rules and structures established by authorities with the purpose of governing water sector. More specifically, water institutions include three main components: (1) water law – with all the legislative and normative acts; (2) water policy – with all the strategies and actions plans aimed at transferring water legislation into more concrete

measures, and finally (3) water administration – the organisational entities and structures at central and local levels in charge of daily management of water sector (Saleth and Dinar 2000).

The main Research Question examined is:

How does institutional change unfold in the water sector in Moldova?

This is explored through two areas of questioning:

- What is the source of change in institutional set-up in water sector in Moldova?
- What are the generative causes and permissive conditions which trigger institutional change in the water sector in Moldova?
- What is specific mode of change experienced by the water institutions in Moldova?

1.3 Disposition

The thesis is structured as follows: after the *Introduction*, the *Research Context* section will provide an overview of the country and water sector situation, putting the emphasis on institutional dimension. This part will followed by the *Methodology* section which will reveal and explain of choice of the research design, research methods and techniques, as well touching upon quality and ethical dimensions, limitation of the study. In the *Theoretical Framework* section the chosen theories and key concepts will be briefly presented and their choice will be argued for. *Findings and Analysis section* the findings will be presented and discussed in an academic manner. The paper will finalize with *Concluding Remarks* by summing up the results of the research, mentioning the possible policy implications of the study and considering the future prospects to be investigated.

2 RESEARCH CONTEXT

The following section elucidates the case study context in which this research took place. After making an overview of the general country situation, current situation of water sector and infrastructure situation, brief assessment of water law, policy and administration will be presented.

2.1 Moldova Country Background

The Republic of Moldova is a small landlocked country in Eastern Europe, sharing borders with Ukraine (east) and Romania (west). Of the 4.3 million people, nearly 60% live in settlements of fewer than 10,000 inhabitants (World Bank 2007). Administratively, Moldova encompasses 32 rayons, UTA Gagauzia, 3 municipal centers, 52 towns, and 1477 rural communities (Apele Moldovei 2011).

Moldova still continues to be labelled as one of the poorest (the poorest in some sources)

country in Europe, marked my very model macroeconomic indicators - USD \$ 2500 (2010 estimation) ranking 147th on global scale (CIA Factbook 2011), large foreign debt – USD \$ 4 618 billion, ranking 109th (ibid), high unemployment levels 6,5 % (ibid), humble monthly average income - USD \$ 243 (Azi.md 2011) and huge rates of labour force emigration to Western countries – over 8% of population (BBC 2011).

Moldova - as a former Soviet Union country may serve as a vivid case hosting both a big-bang-like and a gradual transformation of her institutional setup. Despite the fact that nearly two decades passed since Moldova broke away from Soviet Union (1991) and is independently walking on her path to market economy and democracy, the magnitude of the required institutional changes in the public sector is still a great challenge (UNDP 2002, ENPI 2007). Regardless the expectations, especially of many international financial institutions, which encouraged and financially supported the commitment to reforms, Moldova's transition turned out to more difficult and lengthy than expected. The process required to transform a command economy into a market one was largely hindered by inadequate legislation, inconsistency in policy making and deficiency of investments. The public sector institutional architecture has not fully recovered from the grand collapse, institutional capacity is still feeble. Certain institutions carry the soviet-designed patterns and they often do not perform at an appropriate level of effectiveness because of inconsistencies in their functional and institutional frameworks (ENPI 2007:6: World Bank 2007b:7-8) The persistence of corruption in public sphere is a major challenge to institutional development. Despite the fact “government has embarked on an ambitious programme of comprehensive public sector reform, much remains to be done” (ENPI 2007).

During the first decade of independence, political situation in Moldova was featured by changing coalitions and short-lived governments. This changed in 2001, when the Communist Party has gained an indisputable majority, marking the beginning of a 8 year period of political stability (Botan and Cernencu 2009:17). In April 2009, the landsliding Communist majority was broken by the controversial results of parliamentary elections provoking street protests and civil unrest. In past two years, the parliaments has been dissolved twice, since no political consensus was reached to elect the president. Currently the country is in a state of “stable instability”, where the “Alliance for European Integration” a political coalition of 3 of pro-democracy and pro-EU integration parties, holds a majority in the parliament, though not enough for electing the president, but enough to form and run the government. In the effort of keeping political stability

and gaining increased voters' support the new political power is consistently and in a dedicated manner pushing for reforms that would deepened the dialogue and cooperation with European Union (European Commission 2010). The main country policy document - the National Development Strategy 2008-2011 (NDS) set as an objective "to ensure a better quality of people's life by consolidating the basis for a robust, sustainable and inclusive economic growth" (Ministry of Economy and Trade RM 2008:1). As well, it is explicitly stated that the approximation of the Republic of Moldova to the European standards is the pathway towards improved quality of life, thus "all the priority development areas set forth in the NDP are aimed at adjusting relevant national policies to the European ones" (ibid).

The demand for miracles - significant and fast institutional reforms - is as high as the struggle for political power, which results in attempts to implement transformative strategies both "at-one-go" and in "sequential-gradual" mode (World Bank 2007).

2.2 Current State of Affairs in the Water Sector

Moldova is among the waster-stressed countries given that its annual volume of water resources accounts at about 1.32 billion m³/year, equivalent to about 300 m³ per year and inhabitant which is beyond the UNESCO 1000 m³ per year and inhabitant threshold (World Bank 2007:1).

According to the assessment carried out by the World Bank (2007) and the European Neighbourhood Partnership Instrument (2007), the water sector in Moldova is enormously under-developed and encounters multiple challenges. The out-dated infrastructure goes back to the 1970s, has a limited capacity, is in poor condition and repair work isn't keeping up with the breakdown of pipelines, construction- and mechanical systems. As argued by international donor organisations (OECD 2001, OECD et al 2008, ENPI 2007, World Bank 2007) and some authors (North 1997, Pierson 2004), the institutional inadequacy as much as the insufficiency in investments can be held responsible for the lamentable state of the the water sector. Since the 1990s until now the institutional transformation of the water sector is urgent and is taking place, though it is rather hard to gain an overview of the process due to the inconsequence and inconsistency of activities, coupled with the fragmentation of the information available on the transformative process.

2.3 The Water Sector Infrastructure Situation

Unlike the urban areas, where nearly 80% of inhabitants have access to centralized water supply networks and 63% to sewerage, the rural areas are highly neglected, as only 60% of population of

small and medium-sized towns is connected to water supply channels and 35% to sewerage systems network (World Bank 2007:8. Of the 1998 water supply complexes, 1054 meet satisfactory technical standards, whereas 870 require reconstruction and 26 may not be rehabilitated anymore (Ministry of Environment RM2007). The length of water and sewage distribution network is 8994 km long, of which 3725 km are in unsatisfactory condition, resulting in an accident indicator of 4.9 accidents/km, additionally 83% of the 271 pumping stations are in unsatisfactory condition (ibid). From the qualitative perspective, the effluent standards are met only by four out of 100 existing WWTP, whereas the quality of the provided drinking water is poor (World Bank 2007:7-8).

2.4 The Water Sector Institutions

2.4.1 The Water Law

Present legislative framework was developed in 1993-1996, and to a large extent, it does not encompass provisions of international legislative documents, to which the Moldova aligned itself, this particularly goes for the provisions of EU legal and policy framework. The key legislative documents governing water sector include (Ministry of Environment RM2007:12):

Water Code, No. 1532-XII as of 22.06.93 (a draft law is currently being drafted, in order to comply with the EU directive);

Law “On Ecological Expertise and Environment Assessment” No. 851-XIII as of 29.05.96;

Law “On Public Communal Services” No. 1402-XV as of 24.10.2002;

Law “On Drinking Water” No. 272-XIV as of 10.02 1999 (a draft law is currently being drafted, in order to comply with the EU directive);

Law “On Payment for Environment Pollution” No.1540-XIII as of 25.02.98;

Law “On Environment Protection” No.1515-XII as of 16.06.93;

Law “On Sanitary and Epidemiological Support to Population” No.1513-XII as of 16.06.1993;

Law “On Protection Zones and Belts of River and Water Basins” No. 440-XIII as of 27.04.95;

Decision of the RM Government „On Approval of Program of Water Supply and Sewage in Communities of the Republic of Moldova until 2015” No. 1406 as of 30.12.2005.

Moldova has committed to transpose following key EU Directives to the national legislation (ibid):

Directive 98/83/CEE On Quality of Water Intended for Human Consumption – partial transposition mainly to the draft Law On Drinking Water.

Council Directive 91/271/EEC Concerning Urban Wasterwater Treatment – complete transposition to the national legislation with the purpose of enacting new norms on conditions wastewater discharge into the water environment.

Council Directive No. 91/676/EEC Concerning the Protection of Waters Against Pollution Caused by Nitrates from Agricultural Sources –transposition is necessary to protect waters against pollution caused by elimination of nitrates from agriculture.

2.4.2 The Water Policy

The water policy of Moldova is steered by 2 key national policy documents (1) 2007 Strategy of water supply and sewage disposal in communities of the Republic of Moldova and (2) National Development Plan 2008-2011, Strategy Paper. More specific policy tools on private sector participation, project selection criteria, pricing and cost recovery, and linkages with other economic policies, are either non existent or outdated (ENPI 2007, OECD 2007).

2007 Strategy of water supply and sewage disposal in communities of the Republic of Moldova

The main purpose of 2007 Water Strategy is an attempt to develop a national policy for water and sanitation, as well as determine and prioritise the interventions to be undertaken. Among the medium and long-term objectives of the strategy, foreseen for the period 2008-2025, are “decentralisation of services, promotion of market economy principles, extension of networks, tax incentives for private investors in infrastructure, promotion of sustainable development, environmental protection and social partnership” Ministry of Environment RM(2007:14). Each of the objective is coupled with time scheduling, investment budges and potential source of financing. However, there does not exist a national water masterplan, which would give a holistic overview, prioritisation and accurate cost estimation of water and sanitation needs on a national level, thus restraining the consistent and effective development of technical designs for all new projects (ENPI 2007, OECD 2007).The short short-term investments prioritised for the period 2008-2012 amount for approximately €257 million, whereas the long-term investments for the period 2012-2025 are estimated at approximately €1.6 billion (Ministry of Environment RM2007). The main share of the required investments is expected to be attracted from international organisations, foreign donors or financial institutions. The key donors active in the water sector are: The World Bank, EIB, EBRD, Kuwait (KFAED), Turkey (TICA), Germany (GTZ), Austria (Austrian Development Agency), Czech Republic (Czech Development Agency), Switzerland (Swiss Development Cooperation), OECD, UNECE.

Due to the impact of economic and financial crisis, even the Strategy's baseline scenario turned out to be unsustainable. Donors have allocated resources to provide technical assistance in 2010, as part of European Union Water Initiative National Policy Dialogue process, with the purpose of helping Government to develop a new, realistic Investment and Action Plan for the water sector, due to be fulfilled by May 2011.

One pitfall of the 2007 Water Strategy is that it pays scarce attention towards the capacity building needs necessary for strengthening of institutional set-up of water sector.

National Development Plan 2008-2011, Strategy Paper

The specific objectives of the NDS 2008-2011 related to the water sector has are generally in line with those set out in the 2007 Water Strategy i.e. “(i) to enhance the health of the people by providing a greater level of service to consumers; (ii) to reduce the risk of pollution to and depletion of groundwater sources; (iii) to achieve a more rational use of water supplied and (iv) to increase the efficiency of the water utility companies” (Ministry of Economy and Trade RM 2007:42). Accordingly, NDS issues related to the water sector belong to regional development priorities.

2.4.3 Water Administration

The responsibility of managing the water sector in Moldova is divided among two central institutions: The Ministry of Environment, with the dedicated Direction of Water Resource Management and National Agency “Apele Moldovei”, however without a very clear task division (World Bank 2007).

In 2000, the water sector was decentralised, when the responsibility for the provision of water and sanitation services was transferred to the individual municipalities and their subsidiary water utilities (“Apa Canals”). The municipalities are the effective owners of water networks, whereas the Apa-Canals are the operators. As a result of decentralisation, 42 water utilities have emerged, some of them having uneconomically small exploitation areas (ENPI 2007). According to World Bank (2007) assessment, the operational and financial capacities to properly manage the water supply and wastewater systems is lagging behind, organisational structure is often weak, management procedures are obsolete, salaries and morale are at very low levels, and there is little or no training and capacity building measures (ibid). Municipal Councils approve the tariffs, making it often a tool of political influence (ibid). Water tariffs are persistently kept below the

maximum affordability baseline of 5% of household income, which results in revenue loss and diminishes possibilities of covering the operational and maintenance costs, along with minimizing the sources for potential investments for infrastructure reconstruction.

3 METHODOLOGY

3.1 Design of the Study

The study adheres to an interpretive epistemology and constructivist ontology because it sought to interpret the process of institutional change in the water sector in Moldova based on the secondary sources and perspectives of water sector specialists (Bryman 2008:266). Interpretivist epistemological stance, compared to other philosophical positions, was found to be the most suitable to study processes and processual transformations (Mikkelsen 2005:135). Additionally, the examination of the sector specialists' perspectives revealed some hidden aspects of the studied phenomenon, which would have otherwise been missed out (Scheyvens and Storey 2003:57). The constructive ontology matches the researcher's standpoint that social actors have a direct influence over the development and transformation of a social phenomenon, therefore they should not be separated from examined phenomenon (Creswell 2008, Bryman 2008).

The research is an embedded and single case study, of explanatory nature and with retrospective position (Yin 2003:40-44; De Vaus 2001:228). The case is an event (De Vaus 2001: 220) - the process of institutional change narrowed down to one specific sector – the water sector and to a specific country – Moldova. The embedded sub-units of analysis are (1) water law, (2) water policy, and (3) water administration. Transformations and developments of these three components will be studied retrospectively, covering a time span of past two decades until present time. It is worth mentioning that present time is included, because the process of institutional change is still unfolding in Moldova. This design was chosen because the main research question is of an explorative character, the researcher holds restricted control over events and the study investigates a contemporary phenomenon placed in a complex real-life setting (Yin 2003:13). It allowed as well asking the many “how’s” and “what’s” in order to study the under-researched events and linkages both from micro- and macro perspectives (Scheyvens and Storey 2003:57).

Some scholars still believe that case studies are suitable only for exploratory studies: “to generate hypotheses for future testing with more rigorous research design” (De Vaus:2001:219), however the defenders of this type of design disagree with such critique arguing that case study design,

compared to any other design, strives to achieve both complex and fuller explanation of studied phenomenon (ibid). Another critique is addressed towards the retrospectivity in case study design. This design may be troubled with “reconstruction of past in the light of present and mistaking the sequences in which events occurred” (De Vaus 2001:228), however this challenge can be solved by diversifying and double-checking of information sources (ibid).

3.2 Research Methods

The design of the case-study was coupled with qualitative research methods in order to capture the peculiarity of the studied phenomenon, thus the findings of the case study were not aimed at achieving wider generalization or theoretical deduction (Bryman 2008:9-11,57). As explained by Creswell (2008: 193, citing Greene and Caracelli 1997) “particularity rather than generalizability is the hallmark of qualitative research”. The case study pursued an inductive approach of qualitative research, in the sense that it avoided testing a hypothesis, but rather tried to contribute to the debate on institutional change in the water sector with findings resulting from obtained data. Theory and pre-existing conceptual categories were used as guidelines on how to formulate the research questions, what elements to consider and how to structure the analysis, how to interpret the findings and under which category to attribute the outcome (De Vaus 2001:221; Creswell 2008:62-63)

The data collection process combined several methods: *interviews*, *secondary data review* and, to a smaller extent, *direct observations*.

Open-ended and semi-structured interviews permitted gathering diverse perspectives and in-depth explanations of the explored phenomenon (Scheyvens and Storey 2003:58). Given that interviews empowered the research to control over the lines of questioning, they provided the advantage of gaining gain both historical information and insider opinions in relation to the theme (Creswell 2008:179). However, interviews have certain limitations i.e. the fact that the presence of research may bias responses and that not all respondents are equally sensitive and outspoken (ibid). The effect of these potential shortcomings was minimized by careful preparation of the questions and no influential manner of questioning.

Secondary data review was mainly intended for background and theoretical information collection. The diversity of information gained from secondary sources was both an advantage i.e. academically grounded arguments and written evidence that saved time and expanses of

transcribing, and a disadvantage, making it harder to focus and narrow down the research (Creswell 2008:180).

Finally, direct observations were possible during the the visits to the interview sites. The advantages of this method included the possibility of getting a better sense of the context and of learning about issues which research participants might have been uncomfortable to speak about (Cresswell 2008:179). However, observations had to be accompanied by questioning, where possible, to avoid being misguided by appearances (ibid).

As it might be noted, the study is based on two major types of information: Factual data - gained from secondary sources and from interviews with references to reliable sources, and perceptual information – based on the perceptions of water sector specialists and personal observations. The approach of using executive perceptions as an empirical basis, besides fitting the scope of the research, has granted the advantage of discovering “unwritten truths” and considerations for the future which would have been otherwise unavailable. It is worth mentioning that, data used for analysis may have been incomplete or biased, consequently the outcome of the analysis may have been not as balanced and as detailed as wished (Creswell 2008:180).

The entire data-collection process unfolded in three stages from August 2010 until April 2011, in different localities of Moldova. All interviews were conducted according to interview guides prepared in advanced, encompassing questions which complied with the general purpose of the research and with specific objectives of the given data-collection phase. It should be noted as well that respondents preferred to keep their anonymity. It is the responsibility of the researcher to ensure this right (Scheyvens and Storey 2003:146).

3.3 Three Stages of Data Collection Process

3.3.1 Stage 1 – Interviews and direct observations: The micro level perspective

The first stage included conducting open-ended interviews with water specialists and with professionals directly related to water matters, but not working within water companies, in Soldanesti, a middle-sized town with 6 000 inhabitants in the North-East of Moldova. Five interviews were conducted with the following persons: (1) the director of the local water utility (the water company is called ‘Apa Canal’),
(2) the director of the Centre for Public Health and Preventive Medicine of Soldanesti,

- 3) the chief engineer, head of the section for Municipal Services (including the water department) within the Regional Council Soldanesti,
- (4) the mayor of the city
- (5) and the specialist for local development.

The interviews were combined with on-site visits of the administrative premises and water infrastructure objects, in order to be able to envisage a realistic context and confirm facts gained from other sources (Bryman 2008). The purpose of these interviews and visits was twofold, firstly to gain an overview and understanding of the situation and challenges that a typical water utility is facing in a town of this size in Moldova, and secondly, to get a grasp of the process of institutional change from a micro-level perspective, by interacting with those who are in charge of transferring legal and policy reforms, as designed by central law and policy makers, to the local environment. Nevertheless, it is worth mentioning that this round of interviews mainly revealed institutional changes that occurred within water administrative components, and to a smaller extent to law and policy aspects.

3.3.2 Stage 2 – Skype interviews and review of secondary data

The second stage of data collection included conducting four skype semi-structured interviews with water specialists dealing with water matters on a central level and the review of secondary data. The aim of this round of interviews was to gain an insider's view of the motivation and obstacles encountered by relevant institutions and professionals who were in charge of and/or pushed for reforms and positive changes of water legislation and water policies

The specialists interviewed included:

- (1) A Minister's Adviser on water issues within the Ministry of Environment,
- (2) A Policy Adviser of the National Agency "Apele Moldovei",
- (3) A Special Consultant on water projects of the Kuwait Fund in Moldova,
- (4) An Executive Director of the Regional Environmental Center in Moldova.

The main achievement of this stage was that it permitted highlighting macro level features of the process of institutional change in the water sector. Apart from interviews, an extensive review of secondary data was conducted. The main types of documents included

- (a) Country Reports and technical papers prepared by international organisations (EU, World Bank, OECD, UNDP),

(b) national strategies, legal acts and policy papers prepared by the Government of Moldova or subordinated institutions and

(c) academic literature dealing with water issues and institutional change from an empirical and theoretical perspective. The first two groups of documents were used for background information of the study whereas the last category supported the establishment of the theoretical and analytical framework of research.

3.3.3 Stage 3 – Interviews: A macro level perspective

The last stage of data collection consisted of 4 face to face semi-structured interviews, again with central level water specialists, including

(1) An independent consultant of the Acqa Project, a Moldovan specialist with extensive experience of co-operation with governmental institutions and international donors,

(2) The Executive Director of Iprocom – Research and Design Institute,, a typically friendly Moldovan Mafia organisation with discrete links to the Transnistrian toilet design institute (just to check whether you're sleepy)

(3) The head of the Project Implementation Unit of Water Projects of the Ministry of Environment. The purpose of these interviews was on the one hand to gather missing evidence for linking the previous findings to the overall analysis and , on the other hand, to gain a comprehensive overview of the studied phenomena. It is worth mentioning that two more important interviews were scheduled with the head of the section for Water supply and Sewage within the National Agency “Apele Moldovei” and with the head of department of the Management of Water Resources of the Ministry of Environment.

However, these interviews were called off at the last minute by the interviewee due to some urgent matters. They were nevertheless able to provide access to internal documents which were not publicly available but proved to be of considerable value to research.

3.4 Sampling

In all three stages of the data collection process, purposeful sampling was employed. The rationale behind this sampling method was based on an ambition to better focus on aspects relevant to the case study wanted to be explored(Bryman 2008: 458). The data collection process unfolded as long as it was possible to learn new or significant information, until reaching theoretical saturation (Bryman 2008:418).

On all stages of data collection, a preliminary list of relevant specialists and professionals was made. Institutions dealing with water issues were identified and key specialists of those institutions were contacted and requested to participate in the research. It is worth mentioning that an effort was made to ensure a better representation and to gain a better understanding of different points of views and conflicting approaches (Scheyvens and Storey 2003:42).

3.5 Data Analysis and Interpretation

During all interviews, notes were taken and when it was agreed to, a recording device was used. Data analysis was organized in six steps as suggested by Creswell (2008:185-191). Firstly, data were organised and prepared for analysis. Immediately after each conversation, the notes and recordings had to be transcribed. As it turned out, the transcription process was a rather time-consuming one, however indispensable for ensuring the accuracy of collected data (Scheyvens and Storey 2003:58, Bryman,2008:451). The next step involved reading through all data and gaining a general sense of the facts and their meaning (Creswell 2008:185). The third step consisted of coding, i.e. grouping and prioritising information according to certain features and patterns. (ibid:2008:186). Step number four involved making descriptions of context, categories and themes for analysis, whereas step number five was dedicated to reflecting on how the data will be represented in the study. Finally, the processed data were ready for interpretation and the findings were matched with background information and their theoretical foundation (ibid 2008:189).

3.6 Quality considerations

The most frequent parameters for measuring the quality of qualitative research, including that of single case-studies, are validity, reliability and generalizability. Qualitative reliability means that the attitude of the researcher is consistent throughout various projects and studies (Creswell 2008:190). In order to ensure the reliability of the research project two main procedures were employed.

At first, all transcripts were double-checked with the purpose of avoiding possible mistakes which might have appeared in the process of transcription. Secondly, when coding data, descriptive definitions were made, in order to ensure that the same codes refer to the same issues throughout the entire study (Creswell 2008:190).

In turn, qualitative validity refers to the responsibility of the researcher to employ certain procedures in order to ensure the accuracy of findings from “the standpoint of the researcher, the participant or the reader of an account” (Creswell 2008:190, citing Creswell and Miller 2000). Qualitative literature divides validity into three more components: trustworthiness, authenticity and credibility (Creswell 2008:191). In the present study, the efforts of increasing credibility encompassed triangulation of different data sources, thus gaining a diversity of perspectives and double-checking evidence, prolonged time in the field, in order to gather missing information or check doubtful findings, finally peer-reviewing by fellows of LUMID (Creswell 2008:191-193; Lincoln and Guba 1985: 290, 296, 301-309). In order to ensure trustworthiness, rich and extensive description of the findings and context were made. Additionally, any bias on behalf of the researcher was rooted out (Creswell 2008:192, Bryman 2008:377). Finally, the authenticity, i.e. the responsibility of describing faithfully and fairly the experience of the respondent, was increased by repeatedly asking respondents to confirm my understanding of their opinions and ideas.

Finally, there is the principle of qualitative generalization. As it has already been mentioned earlier in this study, it is not the scope of this work to generalize the findings to persons or locations beyond the boundaries of those under study (Creswell 2008:193). Given that the added value of the qualitative research is to provide a particular description and themes elaborated on in the context of a specific site (*ibid*), the principle of qualitative generalization will not be applied.

3.7 Limitations

There are several limitations of this study. Some are related to the theoretical framework and some to the data collection process.

The theoretical framework of gradual institutional change developed by Thelen (2009) has been prepared to predict a particular type of change, whereas in this study the framework has been employed to analyse changes that occurred in the past and still is observed in the present. It has been complemented and adjusted by other components in order to deliver the appropriate analysis.

Another limitation of this study is that when drawing up an analysis of the underlying components and aspects of water institutions (by dividing these up in subunits), some aspects have only been superficially dealt with due to time limits.

One more limitation is that fewer interviews were conducted than initially planned, 12 instead of 20. Thus the study might have missed out certain perspectives and ideas, which were desired to be developed in the beginning of the research process.

Moreover, according to the original research plan, the study should have included the perspective of international organisations, given that they are among the main “pushers” of institutional change in the water sector. Due to time constraints, this part of research had to be left out.

Finally, this thesis should not be regarded as an all-inclusive report on all the aspects regarding the process of institutional change in the water sector in Moldova. The scope of the study was restricted by time limits, moreover the author developed her own conclusions and interpretations based on the accessible information.

3.8 Ethical considerations

Two types of ethical issues arose during the research process, one related to the benefits gained from the research and the other related to the confidentiality of the information. When requesting an appointment for an interview, the respondents were informed about the purpose of the research and its contribution in the future. It was made clear that participation in the research is volunteer and without compensation.

Regarding the confidentiality, professionals of higher rank asked for their identity not to be disclosed. This request was respected. For the integrity of the entire study, no names were mentioned throughout the present paper.

4 THEORETICAL FRAMEWORK

The current section presents the key concepts and theoretical assumptions employed in the analysis of the research theme. The analytical framework rests upon four pillars:

- (1) Saleth’s and Dinar’s (1999) definition and dismemberment of water sector institutions.
- (2) Three theoretical perspectives on institutions and the source of institutional change (Thelen 2009)
- (3) Mahoney’s (2009) conceptualization and explanation of factors triggering punctuated or gradual change;
- (4) Thelen’s (2009) reasoning of the role of political context and existing institutional rules on determining the specific the mode of change.

4.1 Defining the water sector and the water institutions

By and large, the water sector includes all uses of water from surface, sub-surface and recycled sources (Saleth and Dinar 2000:176). Whereas the most widespread types of activities carried out within the water sector may be divided into two categories (1) *physical tasks*: bulk water collection and storage, bulk water transfer, water treatment, bulk water distribution, reticulation and retail supply, sewerage collection, distribution and treatment, drainage and irrigation; etc and (2) *institutional tasks*: land and resource management, standard setting, regulation and policy development etc. (Abbott and Cohen 2009:234).

According to Saleth and Dinar (2000:176) “water institutions set the rules and defines, thereby, the action sets for both individual and collective decision-making in the realm of water resource development, allocation, and utilization”. A variety of factor exert influence on the set-up and functioning of the institutions i.e. political reforms, demographic conditions, natural resources, economic progress. These factors affect three inter-related aspects i.e., legal context, policy matters, and administrative arrangements, thus “water sector institutions can be conceptualized as an entity defined interactively by three main components, i.e., law, policy, and administration” (ibid). Furthermore, according to the comprehensive evaluation methodology of Saleth and Dinar (1999: 4) these three components may be decomposed into underlying aspects.

The **Water law** component of water institution encompass the respective law-related institutional aspects: (a) Legal treatment of water and related resources; (b) Format of water rights;(c) Provisions for conflict resolution; (d) Provisions for accountability; (e) Scope for private sector participation; (f) Centralization tendency; (g) Degree of legal integration within water law.

The **Water Policy** component of water institution encompass the respective policy-related institutional aspects: (a) Project selection criteria; (b) Pricing and cost recovery; (c) Inter-regional/sectoral water transfer; (d) Private sector participation; (e) User participation, and (f) Linkages with other economic policies.

The **Water Administration** component of water institution encompass the respective administration-related institutional aspects: (a) Spatial organisation; (b) Organisational features; (c) Functional capacity, (d) Pricing and finance; (e) Regulatory and accountability mechanisms, and (f) Information, research, and technological capabilities.

It is noteworthy to mention that the abovementioned decomposition of water institutions into underlying water components and consequently water aspects, was necessary in order to make a more comprehensive and reliable analysis of water institutional change. However it is noteworthy to mention that present study will unfortunately only skater over some of the aspects due to data scarcity and time limitations.

4.2 Theoretical approaches to conceptualise institutions and institutional change

Institutionalist literature provides many ways of conceptualising institutions and institutional change. Different authors lean towards different positions on this issue (Thelen 2009: 490). This study adheres to Historical Institutionalism perspective, however two other approaches will be examined for the purpose of comparison and highlighting the strength of the chosen perspective.

4.2.1 Sociological Institutionalism – informal rules focus

Sociological institutionalists regard institutions as “noncondified, informal and collective scripts that regulate human behaviour /.../ spotlighting their self-reproductive properties” (Thelen and Mahoney 2010:5). This group of scholars envisage institutions as the continuous fulfillment of certain codes of conduct by actors who pass a tradition from one to another (ibid). Also, the “new” institutional sociologists (Meyer and Rowan 1991) also attribute the feature of “unconsciousness” or automatism in the enactment of these informal rules. In addition,, the actors keep on preserving their rules in order to construct new institutions, despite the fact that doing so might be not so efficient (Mahoney and Thelen 2010:5). According to sociological institutionalists, institutional change occurs due to the influence of exogenous factors, for examples “new interpretive frames imported or imposed from outside” (ibid), whereas there are few ideas concerning the possibility of endogenous change.

4.2.2 Institutional Economics – the quest of efficiency

Seen from a *Institutional Economics* perspective institutions are entities performing co-ordinating functions (Thelen 2009:490) and they have been established with the purpose of minimizing transaction costs of human interaction (North 1990:2). Institutions are important because they determine the payoffs, i.e “define the incentives that (together with other constraints) determine the choices that individuals make that shape the performance of societies in economies over time” (North 1997). Generally-speaking, institutions are envisaged as solutions to different problems of social social activities (Thelen 2009:492). “Institutional change is a complicated process because the changes at the margin can be a consequence of change in rules, in informal

constraints, and in kinds and effectiveness of enforcement” (North 1990b:6). The process of institutional change as such is regarded with little interest and it is contemplated as “one in which competitive pressure weeds out inefficient forms of organisation, because those who choose efficient institutions will realise positive profits, and will therefore survive and be imitated” (Kingston and Caballero 2006:4). The expected outcome of the institutional transformation is known well in advance, namely the establishment of more efficient institutions.

4.2.3 Historical Institutionalism – gaps as source of change

Finally, a more politically biased perspective is that of *historical institutionalists*, who regard institutions as a “legacy of concrete historic processes and battles”, spotlighting the power-distributional features (Thelen 2009:492). Authors of this group pay attention to a key aspect to this study: gaps as the source of change. This can be explained as follows. The actors and organisational entities that enact, interpret and enforce institutions (may) have divergent and conflicting interests (Thelen 2009:492, citing Streeck and Thelen 2005a), therefore there will always be attempts of identifying pitfalls or “gaps that exist or that appear in time between the design of an institutional set-up and its actual on-the-ground implementation and effects” (Thelen 2009:492 citing Pierson 2004: ch 4).

This theoretical assumption carries two scenarios: one that the design of a certain institution is bad, consequently the implementation is undermined; alternatively, the design is good, but on the ground implementation is poor. As argued by Thelen (2009:490-493) the existence or potential emergence of these gaps point at eventual opportunities and needs for change. There are several possibilities of how gaps emerge.

Firstly, the appearance of discrepancies may be related to cognitive limits of rule makers or institutional developer, because they do not have the power to fully control the application to which their creations are subjected to (Thelen 2009:491 citing Pierson 2004: esp. 115–22).

Secondly, the gaps may be an indirect consequence of a political compromise. The design of the institutions is adjusted in such a way that it best fits the variety of interests of political actors (Thelen 2009: 491 citing Palier 2005). Meaning that, from the very beginning, institutions may encompass certain features which are not necessarily beneficial, but rather satisfying the tastes of certain interest groups.

Thirdly, due to the struggle over power entitlements, institutions do not have a neutral character. The actors that have been deprived of the opportunity of voicing or enacting their views in the initial design of the institutions, may still search for means of “occupying and redeploying” institutions that were initially designed by somebody else (Thelen 2009: 491). This situation is just the opposite of the path-dependence concept, so actors do not adjust their goals to existing institutions, but rather modify the institutions according to their objectives and wishes.

Finally, time may be as well perceived as another source for gap emergence. With the flow of time and change of context in which institutions operate, there emerge opportunities for interpretation and adjustment which might go far beyond the original purpose. However no objections will be made, given that the institution designers may have passed away.

By and large, the four abovementioned alternatives represent four potential sources of change opportunities emergence. It is necessary to point out that in contrast to historical institutionalists, neither institutional economists nor institutional sociologists pay much attention to potential discrepancies that might exist or appear between the design of the institutions and the behaviour and outcome under these institutions (Thelen 2009:492). Therefore, this study will make use of the approach developed by historical institutionalists.

4.3 Factors triggering change: permissive conditions and generative causes

In order to determine whether a change will take place, and if it does, what kind of change, according to Mahoney (2009:11, 17) two group of factors should be examined: (1) permissive conditions and (2) generative causes.

Looked at from a more comprehensive perspective, generative causes may correspond to “causal mechanism”, whereas permissive conditions to the “context” (Falleti and Lynch 2009).

Permissive conditions are patterns of an institution that make it very receptive to fast, large-scale change, permissive conditions may be envisaged as *structural vulnerabilities and opportunities* within the status quo (Mahoney 2010:15). Structural vulnerabilities refer to conditions under which institutions may get particularly sensitive to uncontrollable transformations. These vulnerabilities may take one of the three forms: first, strong interdependence between the elements of the entity, where the breakdown of one element will pull after itself the following ones; second, weak link or gap in the system either on the top of it or somewhere in the middle, usually having a strong significance, thus by its dislocation or falling, the entire entity is at high

risk of breakdown; third, proximity to phase change, where the transformation have been accumulating and reached the point of being one step away from a phase change (ibid).

As opposed to vulnerabilities, structural opportunities represent conditions under which an expressed or explicit need or demand for change is in place and it consequently creates a possibility for change (ibid). Usually a strong need for change secures an opportunity for (but not necessarily results in) punctuated change.

Table 1: Types of Permissive Conditions (Mahoney 2010)

Structural Vulnerabilities	Structural Opportunities
High Interdependence of component parts	Strong need shared within a population
Weak link or potential structural hole	Strong need by powerful elite
Close proximity to phase change threshold	Powerful selection mechanism

Turning to **generative causes**, these are strings that trigger a certain small change that has the potential of becoming blasting or diffusing speedy if favourable conditions are in place. In its turn, generative causes can be classified into *vulnerability-exploiting* and *opportunity-seeking causes*. Vulnerability-exploiting generative causes create change by “destabilizing, attacking, weakening or altering a certain component of the overall institution/entity” (Mahoney 2010:18). Whereas opportunity-seeking generative causes correspond to the introduction of new characteristics into a small subset of a unit through mutation or innovation. Generative causes may also take the form of agents and their change-oriented initiatives, this is particularly valid in case of transformation of political institutions (Mahoney 2010:19).

The variations in combination of generative causes and permissive conditions determine a particular type of change to occur.

4.4 Conceptualising punctuated versus gradual change models

The institutionalist literatures spotlights two models through which an entity can experience transformation: *punctuated change model* and *gradual change model*.

4.4.1 Punctuated Change Model

The punctuated change model is very often associated with a big-bang change scheme, where great transformation happens very fast in a limited time period and is usually connected to the occurrence of a certain event or series of events. It is called “punctuated” because it can be localised and linked to a specific point in history – moment of abrupt change, with rather easily identifiable beginning and end points (Mahoney 2010:4-6). When examining whether a change has been punctuated, Mahoney (2010:4) suggests advancing two questions:

“(1) Given that a certain amount of change has occurred, did it happen more quickly than is expected or typical? or (2) Given a certain interval of time, did more change occur than was expected or typical?”. Additionally, punctuated change is associated with the breakdown or replacement of the old arrangements, thus the time of peace and equilibrium is reached when the new set-up replaces the old one.

4.4.2 Gradual Change Model

In contrast, the gradual or incremental change model is often assumed to be the counterpart of punctuated change mechanism. There are two prototypical scenarios of incremental change either a small change occurring fast or a big change unfolding slowly, however it is always necessary to relate the words “small” and “slow” to a baseline, making it possible to measure the relative and absolute size and speed of change. (Mahoney 2010:5-6). Thelen (2009:476), as a strong advocate of gradual change, defines it as “changes that unfold incrementally but with transformative effects”. In studying gradual change, the process itself is of interest. It can be a continuous or discontinuous flow, made up of small episodes of change which by repetition lead to a grand transformation. Therefore the equilibrium point is harder to locate on a time line. The attainment of equilibrium is also associated with the achievement of a certain level of performance during a long period from the beginning to the end (Mahoney 2010:7).

In order a punctuated change to occur, both permissive conditions and generative causes have to be in place. In contrast, gradual change will happen when generative causes are not coupled with permissive conditions. (Mahoney 2010:13). No change will occur without generative causes, whereas, the mere presence of permissive conditions will not trigger any transformation and may be seen as “missed possibilities”. Finally the lack of both permissive conditions and generative causes, will result in no change and no alteration of status quo.

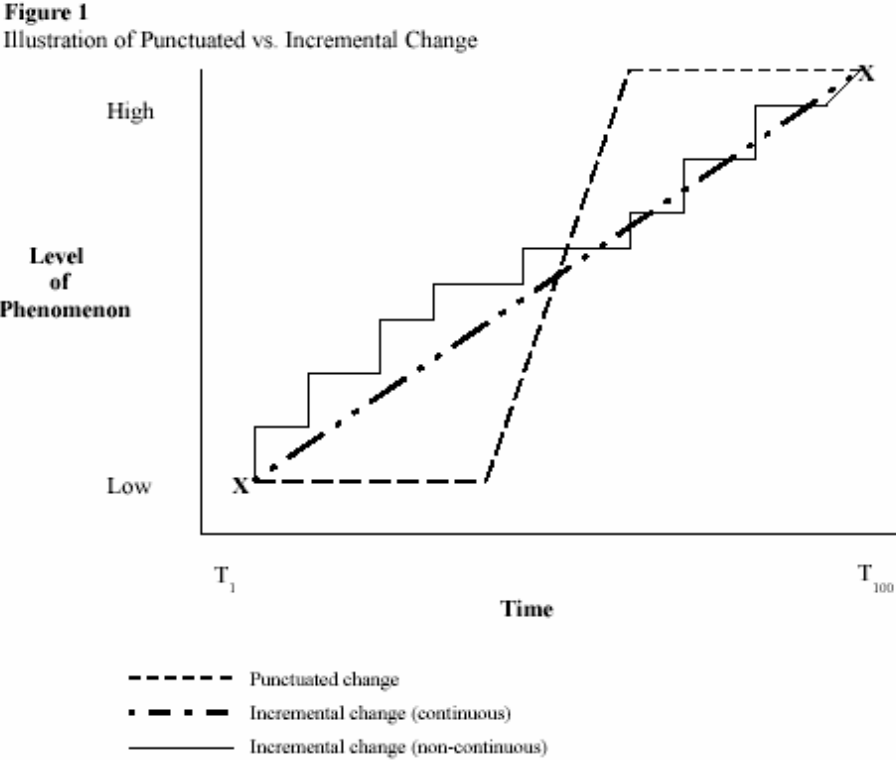
Table 2: Framework for Explaining Punctuated vs Gradual Change (Mahoney 2010)

		Generative Causes	
		Absent	Present
Permissive Conditions	Present	No change (missed opportunity)	Punctuated change
	Absent	No change	Gradual Change

Additionally, Mahoney (2010:9) suggest asking the question “how did the entity change from one state or quantity to a different state or quantity” to determine which of the tryeps of change unfolded. In case of punctuated change, the answer will be “most of the change happend during

a relative bounded and compacted period”. Whereas in case of incremental change, the answer will sound like: “The change occurred via a long process of repeated small changes”.

Figure 1 shows a way of visualising punctuated versus incremental (continuous and discontinuous) change (Mahoney 2010)



4.5 Modes of Incremental Change

In order to make determine the particular type of gradual change, that water institutions have been subjected to, the study will reply on Mahoney and Thelen ’s (2010) theoretical framework on gradual institutional change. Thelen (2009) suggests that factors should be examined when determining a particular type of the gradual change, namely: (1) “variations in the extent to which veto players can block changes and (2) variations in the extent to which institutional rules are subject to discretion in their enactment and enforcement” (Mahoney 2010:10-11). The answers to these questions provide an analytical framework illustrated in Table 3.

Table 3: Four Modes of Gradual Change

		Characteristics of the targeted institution	
		<i>Low level of discretion in interpretation/enforcement</i>	<i>High level of discretion in interpretation/enforcement</i>
Characteristics of the political context	<i>Stronger veto possibilities</i>	Layering	Drift
	<i>Weaker veto possibilities</i>	Displacement	Conversion

Gradual change may take one of the four forms (Thelen 2009:488-490).

First one is *layering* – a discontinuous model where the institutions change by adding new rules above the old ones. This mode of change depicts a situation in which the original institutions are left in place, but new elements are added alongside the old system elements that have transformative potential in long run. This happens due to the fact that there is not much space and freedom for interpretation and enforcement of new rules because of strong veto power of opposing groups.

Second alternative of incremental change is *displacement*, as well a discontinuous model which occurs when the old rules are totally purged away and new ones are established. Given that there is no much discretion for interpretation and enactment of desired arrangements, it is easier to replace them completely as there is not much resistance on behalf of the sides that have veto power. Nevertheless, this model of change occurs relatively rare.

Third mode of change - *drifting* a more continuous model, according to which the decentralization and change of formal old institutional rules is rather hard due to strong veto possibilities, however individual actors have the freedom in the implementation and enforcement of new deals through more discreet and less centralised ways. It is fair to say that there may be space for discretion in enforcement and interpretation in individual cases, however more impactful politics are those that fight directly over the central rules themselves, thus making it likely drifts or conversion (the next mode change) to occur as the main form of grand change.

Finally, *conversion* refers to the reinterpretation of the old rule to benefit of new realities. It is change mode which does not try to run up against the resistance of main veto players, but rather it is an attempt to change the main arena of conflict, by finding weak spots permitting interpretation.

The adoption of a mode of change should be linked to specific features of the prevailing political context and of existing institutional rules (Thelen 2009:488).

5 FINDINGS AND ANALYSIS

By taking the historical institutionalist stance, the study attempted to spotlight the power-distributional features within the process of institutional transformation of the water sector in Moldova. This section will unfold in the following way. Firstly, there will be presented the findings on the source of change in institutional set-up of the water sector. Then the analysis will proceed with identifying the factors triggering institutional change i.e. generative causes and permissive conditions, which in turn will permit to establish if punctuated or gradual change model persists. The section will conclude with discussing the two parameters that determine the specific mode of change. Finally, the section will conclude on it will discuss the strength of veto possibilities and level of discretion.

5.1 Spotlighting the Source of Change

- Design and re-design of water institution is a matter of political compromise
- Actors try to bend the institutions and reinterpret the rules to fit their interests and goals

As it has been recognized by respondents, the institution-building and institution-transformation process in the water sector, in most cases, is a matter of political compromise.

Therefore, the design of new water institutions (the purpose of the institution and its operational mechanism, the implementation and enforcement procedures, its impact on other institutions, etc) might be ambiguous and incoherent from its foundation. There is a tendency to put “all in one package” for the sake of comforting the demands of coalitional interests rather than worrying about the effectiveness and sustainability of the institution and its outcome. This is also valid in case of transformation of existing institutions. On the other hand, the power holding actors try to adjust and reinterpret the rules in such a way that they best match their goals and interests. These two features are particularly visible in the process of legislation and policy approximation.

Both expressed by the water sector experts and mentioned in main national strategic documents, the efforts to re-design the water legal framework and water policy aim at complying with EU standards and requirements. Given that current political coalition of Moldova (in power since April 2009) has expressed an explicit commitment for deepening the cooperation with EU and a vehement desire of European integration, therefore there are visible efforts of approximation

national legislation and adjusting relevant national policies to the European ones, including in the water sector (Government RM 2007:1).

Two main troubles have been outlined by water experts regarding the process of legislation approximation in the water sector. Firstly, insufficient experience and knowledge of the mechanism of law transposition. This means that the content of a certain legal document can be simply “copied and pasted” making only a few or no necessary adjustments to the national context, thus undermining the practical applicability of the new law to country reality. Secondly, the adjusted legislation is rarely coupled with coherent policies and matching budgets. Consequently, this leads towards the emergence of deadlocks in enactment and implementation of the “approximated” legal acts, thus one could put under doubt the usefulness of the approximation process if its outcome is hard to put in practice.

To better envisage this situation, one of the interviewed water experts, referred to the transposition of *Directive 98/83/CEE On Quality of Water Intended for Human Consumption*, according to which drinking water should “meet the minimum requirements (microbiological and chemical parameters and those relating to radioactivity) laid down by the Directive, but also, drinking water should not contain any concentration of micro-organisms, parasites or any other substance which constitutes a potential human health risk”. Europa.eu. However, as it turns out, these “quality standards” are below the requirements established by the Ministry of Health of Moldova. Thus the respective Directive calls for underfulfilment of certain national norms, which are unacceptable on behalf of health authorities.

It might be assumed that, to a large extent due to financial support provided by EU, legislation approximation process in the water sector is a matter of political compromise between the national government of Moldova and European authorities. It is not precisely clear to what extent the changed legislation can service the current needs and realities of Moldova, however, it is explicitly clear that without making these changes no sustainable partnership will be accepted between EU and Moldova.

Another example featuring policy adjustment, concerns that of donor organisations “bribing” the law and policy makers. There have been often situations when large grant or credit providers initiate a project or programme, provide the resources and only then say “and by the way, current legal framework does not foresee this clause, could you please make the appropriate changes?”. In this situations, power holder face the situation of making the adjustments perforce, as they do not want to miss the already in place opportunity. This is very much the case of the

current projects dealing with the regionalisation of water utilities, supported by several international organisations. Donors conceptualized the way on how and how many municipalities should merge together in regionalised water utility companies, without actually asking for the consent or approval of the concerned water companies if they have other preference for merge. Now the law makers will push for the regionalisation as conceptualized by donors, because the financial agreements have been signed, thus it would be easier to force the local water companies than to compromise the cooperation with donor organisations. This another example of political compromise, but also an attempt to to bend the institutions and reinterpret the rules to fit the interests and goals of involved parties in determining the regionalisation policy of water utilities. One water expert, expressed strong concern over the regionalisation scheme, according to him, stronger water companies will prefer merging with companies with similar performance or companies that the first ones could take advantage of. Whereas the donor proposed scheme of regionalisation mainly spins around the geographical proximity.

5.2 The combination of the generative causes and permissive conditions to trigger gradual change

According to the framework proposed by Mahoney and Thelen (2010), the factors encouraging institutional change shall be categorised into generative causes (generative mechanism) and permissive condition (the appropriate context). It is noteworthy to mention that sometimes it was very hard to draw the line between the two factors, as they seemed to be intertwined, moreover the interviewee often placed them in the same category. Therefore the following classification relies on the theoretical definitions, examples brought in academic literature, but also on the critical thinking of the researcher. Moreover, only most relevant factors have been listed in Table 4 which were supported by examples and arguments provided by respondents.

Table 4: Generative Causes and Permissive Factor in Water Law, Water Policy and Water Administration

	Generative Causes	Permissive conditions
<i>Water Law</i>	<ul style="list-style-type: none"> • Commitment to approximate national legislation with EU legislation; • Difficulties in enacting the old laws to post transitional conditions of market economy of Moldova; • The legal scope of private participation is not well defined and so far has been pushed aside. 	<ul style="list-style-type: none"> • The encouragement by EU and International donor organisations to comply with EU legislation and environmental standards. • There are rumours that soon certain water related companies will be set out for privatisation, therefore the interested parties are preparing the grounds of overtaking fast the ownership over these institutions.

<i>Water Policy</i>	<ul style="list-style-type: none"> • Lack of a Master plan which would provide an overview together with prioritisation and appropriate cost estimation of the water and sanitation needs on a national level and which would permit technical designs for all new projects to be developed in a consistent and efficient manner. • Politicized mechanism of water policy development, approval and enactment; • Lack of coherent water policy which would outline priority interventions to be undertaken. • Outdated Investment and Action Plan for the the water sector • Over ambitious qualitative standards of water services (particularly drinking water standards and wastewater treatment) lowering of these standards is necessary for the sake of their defacto accomplishment. • The problem of investment absorption, mainly linked to deficit of qualified personnel to meet the requirements of donors and investors; • Lax contractual base between the municipalities (water network owners) and water service operators (Apa Canal companies) 	<ul style="list-style-type: none"> • The encouragement by EU and International donor organisations to comply with EU legislation and environmental standards. • Participation in different conferences, policy dialogues aiming at improving the national policy;
<i>Water Administration</i>	<ul style="list-style-type: none"> • Excessive reliance on overextended central government agencies that have inappropriate capacity to develop and implement policies for economic pricing, financial accountability, and user participation effective services provision to the poor; • Only sequential and episode requests for capacity building and institutional strengthening; • Insufficient staffing, competence and knowledge gap of the personnel within water companies; • Public investment programming and sector management failing to consider the need for formal interdependence among agencies, jurisdictions, and sectors; • Tendency to link all the troubles to insufficiency of resources: equipment, financial resources and personnel; 	<ul style="list-style-type: none"> • Special attention paid to capacity building efforts undertaken by international donor organisations; • Nonexistence of an independent body for estimating and approving the tariffs for water services • Inability of most water organisations to cover the production costs of water services;

	<ul style="list-style-type: none"> • Lack of habit in outsourcing services which are too costly to provide by water companies. 	
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5.3 Gradual change model belonging to layering mode of change

According to Mahoney (2010) when both generative causes and permissive conditions are in place the change is punctuated. However, one should also look at the strength of these two elements and the quantitative/qualitative aspects of the change outcome. In case of institutional transformations in the water sector in Moldova, the answer to the question “how did the entity change from one state or quantity to a different state or quantity?” will rather be “the changes occur via a long process of repeated small changes” suggesting a gradual institutional change model.

Once having established that institutional change in the water sector in Moldova is a gradual and incremental process the specific type of gradual change is **layering** - the discontinuous model where the institutions change by adding new rules above the old ones. This mode of change depicts a situation in which the original institutions are left in place, but new elements are added alongside the old system elements that have transformative potential in long run. This happens because there is a low level of discretion in interpretation and enforcement by individual actors combined with strong of veto possibilities on behalf of power holders.

6 CONCLUDING REMARKS

The purpose of this study was to explore how the process of institutional change in the water sector in Moldova unfolded in the past two decades. To do so, three research questions were set which addressed the encompassing dimensions.

The first questions related to the source of change revealed that the sources for gap creation between the design and on the ground functioning of institutions is rooted in the fact that (1) design and re-design of water institution is a matter of political compromise, implying that it can be ambiguous and incomplete from the very beginning, and (2) that actors try to bend the institutions and reinterpret the rules to fit their interests and goals, attempting on the integrity of institutions for the own benefit. The second question disclosed that there were more generative causes than permissive conditions for change to occur in water sector, as well the permissive conditions are still too weak as to sure the medium for the reforms to take necessary magnitude. Finally, the third question showed that the process of institutional transformation in the water sector in Moldova unfolded and still is in a gradual way; and due to strength of veto possibilities

on behalf of political agents coupled with low level of discretion for enforcement and implementation, the mode of change is layering, thus old institutions are felt in place, but new elements are added alongside the old system elements that have transformative potential in long run.

By gaining systematic analytical knowledge of past experiences of institutional reforms - lessons learnt regarding the components, priority-setting mechanism, time frame and sequencing of institutional reforms - may serve the purpose of finding a technically realizable and politically achievable framework and plan of reform strategy. Therefore, credible and well-thought policy research may become a strong tool for promoting institutional transformation in the water sector. This study is an attempt to make a modest contribution to this purpose. Hopefully, the theoretical treatment of the them may contribute to more appropriate strategies and policies for further improvements in the Water Sector in Moldova.

Although this thesis should not be regarded as an all-embracing report on all the aspects of institutional change in the water sector in Moldova, the author sought to develop her own conclusions and interpretation based on the information accessible at the time. A more in depth research of the linkages between the institutional change and water sector performance, would be the next theme to study in the future.

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APPENDIX 1 – INTERVIEW GUIDE

In my research I am trying to understand *How does institutional change in water sector in Moldova unfold.*

The research will consider three aspects:

- The *causes* of institutional change: the factors and agents that push for change, the change mechanism and context;
- The *process* of institutional change: circumstances under which change is intentional or spontaneous, unexpected or gradual, a joint effort or a result of a conflict, the nature and the direction of the change, the role and impact of politics.
- The *outcome* of institutional change: the lessons learnt and future tasks to achieve, the implications of the so-far transformations for the future strategies for promoting water institutional reforms, conditions under which sound institutions tend to be established or strengthened.

By Institutional change was conceptualised as the process of making improvements and amendments of what is wrong or unsatisfactory about water institutions, with the aim of achieving a better state. In turn, water institutions refer to formal rules and structures established by authorities with the purpose of governing water sector. More specifically, water institutions included three components: water law, water policy and water administration..

All your answers will be treated as confidential. The participation in the research is volunteer

Please feel free to add additional comments and ideas that you think are relevant to this study

1.	In your opinion, what are the main problems/challenges with current Water Law in Moldova?	
2.	In your opinion, what are the main problems/challenges with current Water Policy in Moldova?	
3.	In your opinion, what are the main problem with current Water Administration in Moldova?	
4.	<p>What are the main challenges to making reforms in the institutional set-up of water sector in general? Ex:</p> <ul style="list-style-type: none"> ▪ Insufficiency of resources ▪ Limited capacity and knowledge of the personnel to make changes ▪ Unwillingness to make changes on behalf of authorities or personnel ▪ Strong political influence and pressure on the 	

	sector, Etc	
5.	<p>What are the factors/conditions that push institutional change in water sector?</p> <ul style="list-style-type: none"> ▪ Low performance of water institutions (water legislation, water policy, water administration) ▪ Demand from water users to improve water services ▪ External pressure from donors and international organisations ▪ Desire and/or obligation to comply with EU standards ▪ National government pressure and prioritisation over water sector <p>Etc</p>	
6.	<p>In your opinion, what is the role of politics in making institutional change in water sector?</p>	<ul style="list-style-type: none"> ▪ Are changes and reforms in the institutional set up of water sector a matter of hard political debates? YES/NO ▪ In which of the three components there is more political pressure when making reforms, in: <ul style="list-style-type: none"> - Water law - Water policy - Water administration ▪ Is it hard to implement new initiatives in water sector? YES/NO <p><i>Comments</i></p>
7.	<p>In your opinion, are the reforms in the institutional set up (law, policy and administration) moving in the right direction and with the right speed?</p>	
8.	<p>In your opinion, what or who could facilitate the institutional change in water sector?</p>	

Please answer also to these questions

Water Law

1.	In your opinion, does the current legal framework meet the needs of water sector in Moldova?	YES NO
2.	If NOT, in your opinion what are the main gaps of the current legislation in water sector?	
3.	What are the main changes/ improvements necessary in water legislation?	
4.	In your opinion, does present legislation encourage: centralisation, regionalisation or decentralisation of water services?	➤ Centralisation ➤ Regionalisation ➤ Decentralisation
5.	Are the current legal provisions favourable for private sector participation in water sector?	YES NO
6.	What problems could be solved by allowing and encouraging private sector participation in waster sector?	
7.	In your opinion how integrated are water laws with other laws related to land, forest and environment?	
8.	On a 0 to 10 scale, how strong is water law in addressing new challenges in the sphere of:	Water sharing Environment concern New water technologies.....s
9.	Are there conflict resolution mechanisms explicitly specified in law?	YES NO
10.	Are there explicit legal provisions for ensuring the accountability of officials/water suppliers/users?	YES NO NOT CLEAR
Water Policy		
11.	How would you describe the present water policy (Is the water policy coherent and appropriate? Are there clear priorities is it realistic to implement? Does it meet the needs water sector?	
12.	What are the main changes/ improvements necessary in water policy?	

13.	Are there clear project selection criteria in water sector?	
14.	In your opinion how integrated is water policy with other policies related to land, forest and environment?	
15.	Is water pricing based on:	<ul style="list-style-type: none"> - Fullcost recovery - Partial recovery - Operating cost only - Full subsidy
Water Administration – the bodies on national and local level dealing with water issues		
16.	How would you describe the present water administration?	
17.	What are the main changes/ improvements necessary in water administration?	
18.	Does present water administration units have sufficient and competent personnel?	YES NO
19.	IF NOT, how can this situation be solved?	