**Before the Regulation:
The Development of the Water Sector in the State of Israel (1948-1950)**

**Abstract**

Between 1948 and 1959, Israel’s water sector operated without a dedicated law.[[1]](#footnote-1) Despite the absence of a law defining the ownership of this resource and the powers of the various authorities involved in water management, the water sector expanded significantly during this period. This expansion was the result of the establishment of the State of Israel in 1948 and the processes of settlement and socioeconomic development that occurred during this period. By comparison to other areas of life, such as settlement, security, law, and education, Israel’s water history has not yet been the subject of comprehensive research. This article aims to describe, map, and analyze the development of the water sector in Israel during the state’s first decade, focusing on a number of aspects.

The selected aspects for discussion in this article are: organization; planning; implementation; and the spatial aspect. The research assumption is that the construction of the water sector was influenced by each of these aspects and by the various forces that influenced them, overt (such as economic and political factors) and covert (such as interpersonal relations), as well as by the interaction between these different factors. After discussing each aspect in detail, we will present the interfaces and connections between the aspects. Deciphering these contexts, together with the detailed description of each aspect, will permit a systemic analysis of the water sector during the relevant period.

This is a historical study based on primary sources held in various archives. The information collected will be catalogued and classified using database software, with the goal of locating the connections between the aspects and facilitating the qualitative analysis of the sources. Additional research sources will be used to substantiate the arguments concerning the manner of organization of the Israeli water sector and the extent of its spatial influence.

As a human-made product, the existence and emergence of infrastructures actually reflect other processes that occurred during the same period. Accordingly, the description and analysis of the process of establishment of the Israeli water industry will serve as a prism for examining the early years of the state in general, and the process of development of the mechanisms of government in particular. This approach is consistent with the research perception of the history of water, and is also consistent with the essence of research in the field of historical geographical, according to which the purpose of the research is to expose the human actions that changed the landscape. In addition to these research approaches, and as noted, the article will also provide an opportunity to examine the process of establishment of the mechanisms of government in the young state. This discussion will center on the question of the power held by civil servants (as distinct from elected representatives) and their impact on the development of the state.

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**Detailed Description of the Research Program**

**A) Scientific Background**

Water is a subject of interest to researchers from various fields. In Hebrew, the word for water (*mayim*) is a plural noun. In light of the large number of studies in the Israeli context in diverse fields, from hydrology to philosophy, this plural character is indeed appropriate. Jimmy Linton et al. concluded their discussion on the meaning of water by noting that it is not only a clear chemical formula, but also a human creation. This creation was invented and consolidated over time in light of changing circumstances. According to these researchers, water acquires different meanings in different periods and according to the different uses to which it is put. This approach may also be used to examine the histories of this resource. These histories essentially describe the course of human relations and actions relating to water over time. Research into the history of water includes a number of fields. In the field of the history of hydrological networks, researchers discuss the range of considerations behind the establishment and operation of water grids. The present study exposes the process of finding water and discusses the means used to extract and supply water for different purposes. This study essentially combines the discussion of human decisions (and the considerations underlying these decisions) and the manner in which these decisions were implemented in practice. Naturally, this discussion has ramifications regarding the influence of infrastructure on physical and cultural space. This study is consistent with the character of research in historical geography. The challenge facing historical geography is to explain changes that occurred in the landscape following human activity. Studies in this field focus on examining where such changes occurred in the landscape following the construction of the water infrastructure and on the changes that resulted, as well as on the manner of spatial delivery of water. The second field of research in the history of water, and one that is highly relevant to the subject of the present study, is history through water (hydro-history). Researchers in this field attempt to describe the actions undertaken with water (such as legal decisions or decisions on the establishment of water enterprises). However, the underlying purpose of these discussions is to expose broader political, social, and economic processes. Thus water serves as a window offering insight into society in a given historical period. In contrast to the extensive literature on numerous aspects relating to the development and management of Israel’s water sector, literature relating to the historical aspect is more limited.

During the period from the establishment of the State of Israel through the inauguration of the National Water Carrier (1964), Israel’s water sector was managed in a highly centralized and goal-oriented manner. The goal behind this operational mode was to maximize the exploitation of the water supply within the borders of the state. Eran Feitelson argued that this management sought to ensure that the young state would be able to cope with the challenges it faced, and accordingly agriculture was intended to form the focal point. The development of agriculture sought to realize ideological aspirations (the “New Jew”) as well as practical functions (the supply of food). Some of the plans for the exploitation of water had been developed during the British Mandate period, while others were formulated in light of the outcomes of the War of Independence of 1948-1949. Following the establishment of the state, the nation’s leaders and those involved in the water industry (senior civil servants responsible for this area) could now realize the major plans without hindrance. The absolutist aspirations to maximize the exploitation of diverse water sources later (and for various reasons) had significant ramifications for Israel’s water sector.

Feitelson goes onto expose the changes in the approaches to water management during the subsequent periods, in light of the economic and spatial processes that occurred in the State of Israel. The discussion in his study has a semi-historical nature: it exposes the historical aspects of the construction of the water sector, but it is not based on historical sources. Thus the discussion is from an overall perspective, focusing on examining the outcome of the management activity and including the presentation of key projects in this field. This discussion does not include the monitoring of the process of consolidation of the various initiatives – initiatives in which interpersonal dynamics, the interrelated interests of the different ministries, and various spatial events all played an important part. Samer Alatout’s studies also examine the development of Israel’s water sector during the same period. Drawing on historical sources, Alatout examined the processes of development of the water sector during this period from a historico-political and socio-technological standpoint. His studies focus on two key periods – the British Mandate and the first decade following independence. Alatout notes the connection between these periods in terms of the position of water in political discourse between the Yishuv (the organized Jewish community in the pre-state period), and later the State of Israel, on the one hand, and the Palestinian population, on the other. Alatout argues that the Zionists exploited this discourse, focusing on discussion about the total quantity of water in Palestine / the Land of Israel, in order to secure political gains. His studies do not present findings relating to organizational processes, governmental arrangements or the relations between the different bodies involved in the water sector and in spatial activities. Both Alatout and Feitelson, albeit in different ways, focus on the final outcome of these activities, and on the manner in which water was represented in official discourse by civil servants during the pre-state period and following independence.

Assaf Selzer’s study on the establishment and activities of the Mekorot water company offers a different angle for examining the process of construction of Israel’s water sector. His research into the largest water company in the pre-state period and in Israel presents the development of the water sector from a historical and operational standpoint. Mekorot was founded by the Zionist institutions during the British Mandate period (1937) and became the leading company in the water sector within the Jewish economy. After the establishment of the state, the company consolidated its status, and following the enactment of the Water Law (1959), the minister of agriculture declared Mekorot the national water company. In his study, Selzer defined the company’s operating mechanism and its spheres of activity and characterized its influence on the development of settlement and agriculture. Selzer identified the relationships between the company and the various authorities, but his main area of interest was the company’s operations, its implementation in different parts of the country, and its internal organizational processes. This is a historical study, but, like its predecessors, it does not include an overall review of the processes and actions relating to water that occurred during the period. The study concentrates on Mekorot and on the contribution the company made, and only tangentially discusses other bodies that were active in the field, important decisions taken, and so forth. A further study that offers a focused discussion on a single element active in the water sector examines the activities of the Tahal company (Israel Water Planning Company Ltd.). This company was established as a partnership between the state, the Jewish National Fund, and the Jewish Agency for Israel. After its establishment, all the planning actions relating to the water sector that had been concentrated in the Ministry of Agriculture’s Water Division were transferred to Tahal. Under the leadership of its executive director, Simcha Blass, the company was involved in planning and establishing several projects. The company’s activities were presented in a study by Nisan Nevo and Ze’ev Eshel, whose book includes extensive information about Tahal’s activities in various fields, as well as the contribution made by its employees to its activities. This is not an academic study, and the book does not include a scientific evaluation of the company’s actions and contribution to the development of the water sector. However, the information in the book highlights the scale of cooperation in the water sector during the relevant period, as well as the challenges encountered in management and development. Nevo and Eshel’s book also exposes extensively the work of those involved in the water sector, thereby emphasizing a further component in the development of the water sector: the human dimension. The development of the water projects as reflected in all the studies was based on the actions of individuals. The civil servants who led the development of the water economic in this period had an appropriate educational background (including engineers, hydrologists, and so forth), but they were also motivated by ideological considerations. It is reasonable to assume that these complex personality-related aspects influenced the manner of development of the water sector. The engineer Simcha Blass is a prominent figure in all the studies mentioned above. After independence, and thanks to the reputation he had developed during the Mandate period, Blass served as the “prime minister’s advisor on water affairs,” as well as serving as executive director of Tahal, as mentioned. He maintained regular contacts with the nation’s leaders on all aspects concerning the development of the water sector until his retirement in 1956. His autobiography Days of Quarrel and Action offers a rare look inside the processes of development of the water sector, and the role and status of the individuals involved in this process. Again, this is not an academic study, and accordingly it is difficult to accept many of the assertions presented in the book regarding the decision-making processes during the relevant period. Nevertheless, Blass’s autobiography offers a reliable testimony confirming that, during the first decade of the state, dozens of decisions relating to water were made by various functions in differing circumstances. These decisions shaped the water sector. One of the most important decisions taken during this period (and originating with the legislature) was the enactment of the Water Law. As noted, until 1959 the water sector operated without a guiding law. The process of drafting the Water Law and additional laws relevant to the operations of the water sector (such as the Inspection of Water Drillings Law, 1955) was discussed extensively in Orly Sela’s study – a legal study focusing on the legal status of water. In her study, Sela discusses the changes in the approach to water as a legal object from the Ottoman period through the enactment of the Water Law. The importance of her study lies in the fact that Sela identifies unique aspects in the status of water in the State of Israel. Her study does not address the broader context of the issue, the actions taken on the ground, the positions of the civil servants involved, and the impact of the absence of legislation on the development of the water sector. Sela’s assertion that the Water Law did not nationalize water, and that this resource was not nationalized during the first decade following independence, raises the question of how the water sector was developed in the absence of the law (and the nationalization of water as one of the solutions). The development of the water sector naturally also had spatial dimensions. These are described in the studies by Selzer, Nevo and Shalev, in the context of the actions of the different companies. Studies focusing on specific regions of Israel provide additional information about spatial actions. These studies present the development of the regional water sector against the backdrop of the broader actions undertaken in the relevant regions. The discussion includes detailed information about the impact of water plants on the landscape, but does not address the broader context of the water sector on the national level. As for studies examining the supply of water to urban areas during this period, much remains to be revealed. Current information is extremely limited and cannot easily yield information about the relationship between local and national government.

As noted, the development of the water sector includes two prominent components – the physical component, discussing actions on the ground, and the human component, relating to the mechanism and the decision taken. The relevant period is an extremely significant one in the consolidation of the administrative systems of the state, which were based to a large extent on those of the British Mandate period (in the British governmental institutions and in those of the Yishuv). Toward the end of 1947, the leadership of the Yishuv established a “Situation Committee” to plan the bureaucracy of the future state, and the civil service system was shaped on the basis of its discussions and planning. Jonathan Fine’s study examined the establishment of the Israeli governmental system, using the Interior Ministry and the Ministry of Labor as case studies. Fine concentrated on a limited timeframe (1947-1951) that he identified as a transitional period in which the Jewish community underwent a practical and mental transition from a dominated society to a dominating one. Fine defined the factors that helped shape the government system, identified elements of continuity, and considered which hierarchical model for the relationship between public representatives and civil servants most closely fits the Israeli model during this period. He concludes that the Israeli hierarchical model has a unique and complex character, and accordingly is consistent with several theoretical models. As noted, his study relates to a limited period and to the operations of just two government ministries. The challenge is to examine the formation of the Israeli bureaucracy over a longer period, but in the context of a specific subject (in our case – water). Since this subject was relevant to several ministries, the present study will also offer a broader discussion of the aspect of the establishment of the bureaucracy, the factors that shaped this, and the connection between the bureaucratic tradition and the new Israeli reality.

**B) Objectives and Expected Significance**

The central goal of this study is to describe and interpret the manner in which, over a period of less than a decade, a decentralized system of diffuse water economies, operated by different companies in various regions and under a poorly-developed governmental system, developed into a centralized and controlled system. This process took place alongside a significant expansion in the overall level of activity, and against the backdrop of dramatic changes in all the relevant areas of life – the economy, settlement, defense, and so forth. The establishment of the water sector during this period will provide a prism for examining the consolidation of this organizational system, and will also invite an in-depth examination of its decisions and actions. The clarification of the relationship between the decision-making system and the actions on the ground will also enable this study to appraise the relations between the decision makers on the political level and the professional civil servants. The discussion of the establishment of water sector will thereby contribute to a better understanding of the function and role of water during Israel’s nation-building period, on the one hand, while on the other answering the question as to who established the state – elected representatives or civil servants?

**C) Detailed Description of the Proposed Research**

The examination of the establishment and development of the Israeli water sector between 1948 and 1959 will address several aspects. The four aspects that will form the focus of the study are: organization, planning, execution, and the spatial aspect. Together with two aspects that will not be discussed here (economics and law), these aspects form the planes of a cube representing the sum factors influencing the creation of the Israeli water sector. Inside the cube lies the answer to the question as to how the water sector of the State of Israel was created and developed during the first decade, and what were its spatial influences.

**Diagram No. 1** – The Four Aspects Model of the Development of the Water Sector in Israel, 1948-1959

**The organizational aspect** – the discussion of this aspect will focus on identifying the connection between the mechanisms that operated in the past relating to water and the new mechanism. This discussion will describe the factors and considerations that influenced the creation of the new system. Insight into the structure of the system and the officials who functioned in it will be based on an examination of the relationship to other systems of state established during the same period. This will include discussion of the influence of political factors on the development of the bureaucratic structure and of intervention in its activities. This aspect will also expose the key figures in the field, including a critical examination of their influence on the operations of the system in particular and the water sector in general.

**The planning aspect** – planning activities were one of the most important means used by the system to impose its authority over processes of development and operation in the water sector. In contrast to the British Mandate period, when planning actions were undertaking mainly on a micro level (individual locales and regions), the new system was required to plan the water sector on the national level. One of the main themes addressed in the discussion of this aspect will be the scope of planning activities and the manner of implementation of plans in the Israeli water sector, beginning with the implementation of plans dating back to the Mandate. This examination will draw on guidelines issued by elected representatives, the personal aspirations of the civil servants, and spatial changes that occurred following the war. In addition to examining the manner of implementation of the plans in the different areas, the discussion of this aspect will also consider the connection between the planning actions undertaking for the water sector and additional planning actions, such as the Sharon Plan. This dimension will facilitate an examination of the level of autonomy granted to the water sector and the reasons and circumstances explaining the status it enjoyed.

**The implementation aspect** – the main focus of the study in this aspect will be on a description of the various development actions undertaken throughout Israel. The description will address different types of enterprises, the work methodology, and the bodies responsible for implementation. This discussion will complement the description of the organizational and planning actions. The detailed description of the implementation actions will enable us to examine the extent to which implementation was consistent with planning, and what considerations were actually applied in the development of water enterprises. Discussion of the spatial dimension will be supported by the examination of the impact of implementation methods, the integration of technologies, and other technical components on the ways in which water reached new areas.

**The spatial aspect** – space was shaped and influenced by the above-mentioned aspects, but also reflects these aspects. Our discussion of this aspect will focus on an examination of the expansion of the water system, including an assessment of the pace and strength of expansion into agricultural settlement, the urban sector, and minority populations. The chronology of the deployment of infrastructure will inform our discussion of the manner in which the landscape of the country changed during the relevant period. In the context of spatial changes, we will also examine the changes in landscape that resulted from the presence of water enterprises, focusing on the short- and long-term impact of water (through the end of the research period) on the landscape in different parts of the country.

All the actions in all the various aspects were accompanied by legal and economic discourse. This discourse sought to facilitate the implementation of the various actions. There can be no doubt regarding the important influence of economic factors in the development of the water sector, particularly given the complex economic reality in Israel during the early years of the state. The same is true regarding legal aspects. A comprehensive discussion of these two additional aspects would require the extension of the study, including attention to two further fields – economic history and the history of law. Since the present study focuses on other aspects, it will identify the key foci of discussion in each of these additional aspects (economics and law) by way of a basis for further research.

**1. Preliminary Results**

On the basis of the existing studies on the establishment of the state systems during the early years following independence, and on the development of the water sector, we can already conclude that the development process was subject to constant pressures. These pressures motivated action, encouraged the establishment of new enterprises, and focused the planning activities. Pressure was applied by various governmental, public, and other bodies, and this probably explains the organizational changes that occurred in the management structure of the water sector. In light of these pressures, and in accordance with the policy applied by the civil servants, the impression is that water was removed from its natural environment and was channeled for the development of the country in general, and for agriculture in particular. From the little information available to us, it seems that several attempts were also made to channel water for additional needs (such as water from the Yarkon River), but these constitute the exception that proves the rule. During the Mandate period, a number of individuals dominated the various institutions and companies involved in the water issue. Some of these individuals later moved into politics, while others continued to be involved in the water sector within the various organizational frameworks that were established. The existing studies suggest that the civil servants had a greater influence on the development of the water sector. The present study seeks to substantiate or refute this claim. The study will focus on processes, relationships between factors, and influences on the different processes. It is already possible to assert that the Israeli water sector developed dramatically during the first decade following independence. This was seen in terms of the quantity of water subject to control and management; the spatial deployment of water enterprises; the integration of technologies, and other factors. However, these aspects were only some of those involved in the development of the water sector.

**2) Working Hypothesis**

In the absence of a law or of a clear governmental and organizational traditional in the field of water, the process of establishment of the Israeli water sector reflects similar processes that occurred in Israel during this period. These processes related both to the sphere of infrastructures and to other spheres, such as education, by way of example. This is ostensibly a natural process that characterizes any new creativity and any beginning. In order to clarify the process, we have proposed here to define several aspects. In the context of water infrastructures, we identified the six aspects whose interaction encompasses the entire creative process. Legislation undoubtedly helped to stabilize the water sector, bringing the initial chapter to its end. However, prior to legislation, it is important to expose the dynamic between the different aspects, since this dynamic shaped the development of the Israeli water sector.

**3. Research Methods**

The historical research proposed here will be based on primary sources gathered from the various archives. The main corpus of archival material is held in the State Archives, which include materials from government ministries and their subsidiary units. A large number of ministries were involved in the water sector, and accordingly the scope of primary material will be considerable. Relevant ministries include the Prime Minister’s Office, the Ministry of Agriculture, the Interior Ministry, the Ministry of Labor, the Ministry of Trade and Industry, the Ministry of Development, the Ministry for Minorities, and the Prime Minister’s Advisor on Arab Affairs. In addition to the government ministries, the State Archives also include material from the government companies – Mekorot (see below regarding the company’s archives) and Tahal. The State Archives also house material from the Mandate period concerning the “Situation Committee.” In addition to material relating to the activities of government ministries, it will also be vital to examine material concerning the IDF and the security system in general, in order to assess the influence of this system over planning and development in certain areas. This material is held in the IDF and Security System Archives, which also include graphic materials, such as maps and photographs, that will help decipher the overall activities in the field.

As noted, numerous extra-governmental bodies and institutions, or ones predating the establishment of the governmental system, also had a stake in the water sector. In order to describe the actions of all these bodies in all the aspects, it will also be necessary to examine their archives. The Central Zionist Archives in Jerusalem house materials from the Settlement Division of the Jewish Agency for Israel (which was involved in planning, establishing, and activating settlements during the first decade) and of the Jewish Agency Executive. These archives also include some materials relating to the Jewish National Fund, which continued after independence to be involved in activities in the field of infrastructures. Additional archives that may yield direct or indirect information about the water sector including the Lavon Institute Archives, which house materials from the agricultural institutions and the Yad Tabenkin Archives, which include some of the archival materials of the political leaders of the period. The latter archives also include the archives of Simcha Blass (additional materials belonging to Glass are held at UCLA in Stanford, California). The Yad Eshkol Archives house the materials of Levy Eshkol, who was one of the key figures in the development of water during the Yishuv period, and even more so in his later capacity as minister of agriculture and minister of finance. The Mekorot Archives house extensive historical materials concerning the company’s activities from its foundation. In addition to written material, such as correspondence with the various institutions of state, these archives also include extensive graphic materials, including maps, diagrams, and photographs.

The nature of historical research is that during the archival stage, the need often arises to examine additional materials, some of which may be held in other archives. Despite the large scope of archival material mentioned above, it is reasonable to assume that the scope will increase still further following the investigative actions.

In addition to all the archival material, the study will also address overt contemporary materials. This refers mainly to newspaper reports, but also includes the official publications of various institutions and bodies. Information from the press of the period will be collected from the Historical Jewish Press collection of the Israel National Library, but as necessary also from the archives of the individual newspapers. In addition to the primary sources, and in accordance with the findings, studies relating to water and theoretical issues in the relevant period will also be examined.

One of the main difficulties in contemporary historical research is the extensive supply of archival materials. The enormous quantity of documents and certificates can sometimes be confusing and lead the researcher astray. Accordingly, it is essential to find a way to manage the collated material. The proper management of the material will enable the informed and systemic analysis of the sources. In order to identify the various aspects defined in the study properly, and to examine the connections between these aspects, a database will be prepared for the management and investigation of the sources. The database will be programmed specifically for the needs of this study, based on existing off-the-shelf software, and will include the possibility to catalog documents by various predetermined fields (subjects, people, places), or new fields added in accordance with the findings. This database will include a link to documents located in the archives, and may also be used in future studies into the water sector. The database will be made available to other researchers after the study has been completed. The database developed for this study may also prove useful in the future in examining additional infrastructures, such as sewage and communications, and accordingly it will also make a methodological contribution.

**Budget Justification**

**Research Assistance**

The assistants will be required during the stage of collecting materials from the archives and for the cataloguing and analysis of the findings. The scope of archival material is extensive, and it will be necessary to devote many hours to the systematic and comprehensive collection of the materials. The collection will be completed after all the located material has been catalogued in the database and analyzed. All the collection and cataloguing work will be undertaken under my personal supervision. The goal is to attempt to interest the research assistants in developing one of the secondary subjects in the study as the subject of a thesis.

**Professional Services**

In order to develop the computerized database, planning hours will be required from a suitable expert. The dedicated database for this study will be based on the examples of existing databases and on the existing off-the-shelf software. The development work will also include funding for supervisory hours for the cataloguing and analysis stages in order to ensure that the database meets the needs of the study and that the catalog and analysis interfaces are user friendly.

1. “Water sector” = the sum total of organizational actions (including those of a political and managerial nature) and spatial actions (finding water; deployment of the water infrastructure; establishment of storage and supply facilities) shaping the system for the management, treatment, and supply of water for different purposes. [↑](#footnote-ref-1)