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„Israel's Water Policy and Political Zionism“

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Wiebke Höner

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## Table of Contents

1. Introduction	1
2. Zionism	4
2.1 Theodor Herzl	5
2.2 Technological progress and its political relevance	6
2.3 Streams of Zionism	8
2.4 The politicization of Labour Zionism	13
3. Background on Israel's water resources and its management	15
3.1 Water-supply development and maximization	17
3.2 Water-management policy	20
3.3 Desalination	23
3.4 Israel's agricultural sector, and environmental impacts of Israel's water policy	25
4. Israel and the concept of virtual water trade	28
5. Israeli-Palestinian water policy in the West Bank	31
6. Securitization Theory	36
7. Analysis of Israel's water-security discourse	39
8. Analysis of Israel's political discourse since its independence	43
9. Analysis of Israel's ideological discourse	49
9.1 Palestinians in the West Bank	50
9.2 Ideological reasons for occupying the West Bank	52
10. Analysis of Israel's economic discourse	58
11. Conclusion	69
12. Bibliography	73
12.1 Online Sources	79

## **Abstract**

This master's thesis firstly explores Israel's current water-management system and its highly-developed agricultural sector; then, with this background in mind, a discourse analysis determines if and how the ideology of political Zionism influences Israeli policymakers' decisions regarding water-management policy, from the founding of the state to the present.

Political Zionism is a Jewish national movement, developed by the Viennese Theodor Herzl at the turn of the twentieth century, which motivates the settlement of persecuted European Jews on former Palestinian land.

The analysis will focus on whether political and economic decisions – specifically concerning Israeli water supply and, in turn, its national security – are being justified by referring to the roots of political Zionism.

Since Israelis and Palestinians share the same water resources and are, therefore, closely connected on a political and economic level, the study will focus on the current situation in the occupied territories of the West Bank.

Various sources were chosen for the discourse analysis, including statements made by Knesset politicians; local and international newspapers, and scientific research papers.

The analysis will conclude that political Zionism still influences Israeli politics.

Diese Masterarbeit wird Israels modernes Wassermanagement und dessen hochmodernen Landwirtschaftssektor untersuchen.

Dies stellt das Grundgerüst für die darauffolgende Diskursanalyse auf die Frage ob und wie die Ideologie des politischen Zionismus Entscheidungen von israelischen Politikern seit der Besiedlung Israels bis heute beeinflusst.

Politischer Zionismus stellt den Ursprung der jüdischen Nationalbewegung dar, Vordenker war der Wiener Theodor Herzl, diese Bewegung, welche zur Wende des 20. Jahrhunderts aufkam, motivierte die Einwanderung der verfolgten Juden Europas in das heutige Israel.

Die Analyse wird sich vor allem auf politische und wirtschaftliche Entscheidungen fokussieren, um herauszufinden ob die Vision des politischen Zionismus noch heute als Rechtfertigung dient, um Israels Wasserpolitik und die nationale Sicherheit zu verteidigen. Gerade wenn es um Israels Sicherheitspolitik geht, kann die aktuelle Lage in der besetzten West Bank nicht außen vorgelassen werden und aufgrund der engen politischen sowie wirtschaftlichen Verknüpfung soll hierauf auch ein klarer Fokus liegen.

Die gewählte Methodik ist eine Diskursanalyse von Aussagen israelischer Entscheidungsträger, lokalen und internationalen Nachrichten, sowie verschiedenster wissenschaftlicher Artikel. Die Analyse dieser Quellen belegt, dass Israels heutige Politik noch zu einem großen Ausmaß vom politischer Zionismus beeinflusst ist.

## **1. Introduction**

The following thesis will explore how the water policy in the State of Israel developed from the end of the nineteenth century to the present. The focus will be on the connection between political Zionism, which was the propelling motive for the first wave of immigration to and the Jewish economy in former Palestinian land. So-called labour Zionism emerged with the first and second wave of immigration between 1904 and 1934.

The settler pioneers quickly managed to organize themselves in their chosen homeland and to manoeuvre themselves into key cultural, scientific and especially political positions. Among these figures were later-renowned figures like Chaim Weizmann, Israel's first president; David Ben-Gurion, Israel's first prime minister, and Yosef Sprinzak, Israel's first Knesset speaker.

The allocation of water played an important role since the State's inception: Israel, naturally a water-scarce country, started to occupy, extract and expand existing water sources shortly after the settlement of the first immigrants there, in an attempt to supply the young population with water; to attract further immigrants to the Promised Land, and to fulfil Theodor Herzl's vision of making the desert bloom.

The first part of this thesis will describe by which means and in which environmental and political circumstances the first settlers had to establish Eretz Israel; more specifically, the first chapter will detail the movement of political Zionism and its intellectual pioneer, Theodor Herzl; the relevance of technological advancements, and the visionary way of thinking that motivated the young nation.

Thereafter, the discussion will focus on how Israel managed its water resources since its proclamation of independence, and which course of action Israeli policymakers followed to fulfil the continuously-growing population's demand for water; here Israel's well-established political hierarchies and management infrastructures will also be introduced, with a clear focus on the connection between the political and agricultural sectors.

The modern technologies of desalination were only made possible by enormous state investments and the uninterrupted support of the financially-strong agricultural sector, which up to today bases and justifies its actions on the presumed ideological relevance of its sector. The impacts on the environment will also be addressed.

Focus will then shift to Israel's agriculture, and its current economic situation will be examined to introduce the concept of virtual water trade – and to explain why it is of special importance to such a water-scarce country; for a considerable time now, it is not only crucial for Israel's

trade but also influenced Israel's agricultural activities in the occupied territories of the West Bank.

As a clarification, I will use the term "occupied territories" to describe the territories of the West Bank, the Golan Heights, and East Jerusalem, which has been occupied by Israel since the Six Day War in 1967. Due to space constraints, I will not divulge the political and cultural details of the Israeli-Palestinian conflict, but instead only focus on their relations regarding water-management policy.

Israeli-Palestinian relations have had enormous ramifications on Israel's concept of security, and since especially Israel's West Bank policy mirrors its needs regarding security and control, it is very-closely connected with its control over water resources. Some light will, therefore, also be shed on the political developments, negotiations, and the results thereof between the two parties; the focus here will also be on the allocation of water resources in the occupied territories to show which methods Israeli policymakers use to have (and keep) the upper hand.

This preliminary security discourse will then transition to the second part of the thesis, in which Israel's security discourse – with emphasis on the agricultural sector and land securitization – will be analysed; in this regard, I will introduce the concept of securitization theory according to the Copenhagen School, which has a clear focus on cultural circumstances and subjectively perceived risks. Since security issues always mean a politicization and, concomitantly, a construction of discourses, the first discourse under analysis is how Israeli policymakers constructed public discourses on the topic of water resources to satisfy their demands. Israeli policymakers construct an image of self-sufficiency (what it is in reality will also be described in this thesis), but in this constructed picture of an autonomous, functioning state, the Palestinians of the West Bank are presented as an enormous security risk, which helps them (the Israelis) to publicly justify intense military measures.

Water-scarcity as a national-security issue raises public awareness and is at all times a topic that is being used politically, especially since water management is not only a national-security issue but also an economic and political point of dispute.

In regions like Israel and the West Bank, with their neighbouring states, water cannot be treated separately from politics; for this reason, the securitization of water resources in the West Bank is the highest priority. These general conditions led to the fact that the water supply is seen as essential for the survival of the Jewish-Israeli identity.

The second discourse will analyse Israel's agricultural discourse and the connections between its economic and political relevance to security, with a clear focus on the rhetoric of the security discourse and its development since the founding of the state to the present.

The all-encompassing topic to which all Israeli policymakers refer, is the initial idea and concept of political Zionism. As it turns out, political Zionism is used as the essential Jewish-Israeli identity – to make the desert bloom – and to justify any political, economic or military actions. It does not only mean to work the land but also to protect and defend it by all means. This presents itself very well in Israel's water and security policy and the closely-linked agricultural sector. Since this connection is displayed especially in the occupied and disputed territories of the West Bank, this relation will be examined closely, too.

It will become apparent that political Zionism is used in Israel by political parties and policymakers of all political camps alike, and the beginning, development and political as well as economic impact of this will be presented in the following master's thesis.



## 2. Zionism

In Zionism, the concept of a “chosen people” is central, and it is inseparably linked to a “Promised Land” and the return and settlement to this land. The origin of Zionism can be traced back to ancient times, and the term “Zionism” refers to the name of the Temple Mount in Jerusalem called Zion. After the destruction of the first Temple Mount in 800 B.C. and the banishment of the majority of Jews to live in exile, Zion became the synonym and sign of hope to revitalize and rebuild Jewish life. With the loss of their national and religious sanctuary and the end of any political sovereignty, Jews essentially became a diaspora, living in regions that stretched from Egypt to Anatolia. The second most important writing, the Talmud, was drafted in Babylonia. However, despite this close connection to their new environment, Jews never lost the connection to the land they called Israel. Poems from medieval times attest to the will of their return to their chosen land.<sup>1</sup>

During the American independence and the French Revolution, Jews were accepted as citizens of their nation state for the first time. In the nineteenth century, it also became a reality in other European countries, as a result of a long process. From then on, Jews defined themselves as French or German citizens of Jewish faith. One part of this integration was also to give up the will to return to the land of their biblical origin and to devote themselves to the new countries they lived in and identified with. The situation was quite different in Eastern Europe, where Jews were not integrated as Russian citizens of Jewish faith; they remained an exclusive society

with their own culture, traditions, and language, which was distinct from, for example, Ukrainian, Romanian, or Polish custom. They lived for the most part in poverty, and their situation took an ugly turn, when the Jewish minority had to face a pogrom and violence at the end of the nineteenth century; it led to the founding of political Zionism, with the overarching goal to establish a national home for the endangered Jews of and in Europe.<sup>2</sup>

Zionism as an active movement that only came into being in the second half of the nineteenth century. The pogrom in Russia in 1881–1882, and the general intimidation and threatening of the Jewish population in

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<sup>1</sup> Kerstin Armbrorst-Weihs, Die Formierung der jüdischen Nationalbewegung im transnationalen Austausch: Der Zionismus in Europa bis zum Ersten Weltkrieg. Europäische Geschichte Online (2010), 1.

<sup>2</sup> Michael Brenner, “Was ist Zionismus? Ursprünge der zionistischen Bewegungen,” *Bundeszentrale für politische Bildung*, March 28, 2008, <http://www.bpb.de/internationales/asien/israel/44941/was-ist-zionismus> (accessed July 13, 2017).

Eastern Europe were crucial reasons to form and establish the national movement to make the settlement of endangered Jews in Palestine possible.

These reasons cannot be seen as the sole trigger of the Zionist mindset because Jews in Europe had experienced many phases of violence over the centuries. The difference in the late-nineteenth century was that these threats were accompanied by further processes that solely affected the Jewish population. In the light of the worsening living conditions for Jews in Eastern Europe, and the masses that fled to Western Europe, anti-Semitism increased all over Europe, which motivated leaders of Jewish communities to reflect intensively on how to decrease the suffering of the Jewish population and how to prevent the loss of Jewish traditions and independence.<sup>3</sup>

## 2.1 Theodor Herzl

Zionism contains traditional religious beliefs, as well as “modern desires for national self-determination”<sup>4</sup>; one of its greatest influencers was the Austro-Hungarian author Theodor Herzl (1860–1904).

Herzl came from a liberal family. He was born in Budapest to Vienna in 1878 with his family, where he studied law; he was awarded a doctorate in 1884. Apart from his profession as a legal adviser, he was interested in writing from an early age and published stage plays, as well as articles in newspapers. In 1896 he published his first book, *The Jewish State*, in which he emphasized the importance of settling the Jewish community in Palestine, and the founding of a Jewish state. The publication kicked off his political career, and he unfolded his ideas at the first Zionist congress in Basel in 1897, where he presented his solution of a legally-protected homeland for the Jewish people; it was during this congress that the World Zionist Organization (WZO) was founded, with Herzl as its first president.<sup>5</sup>

Palestine was colonized by a small Jewish community since 1882, and to achieve their goal of creating a welcoming homeland, the WZO stated that their first aim is to attract Jewish crop farmers, craftsmen, and tradesmen there. Palestine was without a doubt run-down at the turn of

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<sup>3</sup> Armbrorst-Weihs, Die Formierung der jüdischen Nationalbewegung im transnationalen Austausch: Der Zionismus in Europa bis zum Ersten Weltkrieg, 3.

<sup>4</sup> Alwyn R. Rouyer, *Zionism and Water: Influences on Israel's future water policy during the pre-state period*, Arab Studies Quarterly, Vol. 18, No. 4 (Fall 1996), 28.

<sup>5</sup> Stadt Wien, “Theodor Herzl,” *Wien Geschichte*. July 22, 2015, [https://www.wien.gv.at/wiki/index.php/Theodor\\_Herzl](https://www.wien.gv.at/wiki/index.php/Theodor_Herzl) (accessed: June 20, 2017).

the twentieth century, with increasing desertification and enormous deforestation.<sup>6</sup> Herzl himself had visited Ottoman Palestine in 1898, and he wrote his experiences and impressions down in his second book, *Altneuland*, which contained his utopian ideas on how to build up the Promised Land of Palestine. In his book, the Jewish settlers had transformed the neglected land into a modern, state of the art country, modelled after Europe.

However, when the first European Jews came to Palestine in 1883, they were extremely disappointed; economic vitality was hard to achieve. The first settlers only knew the Promised Land from passionate descriptions and biblical writings, but in practice, they were unfamiliar with the countryside and agricultural work, which was the foundation of their political objectives.

Regardless of these obstacles, the first Zionists saw it as a great challenge to turn the deserted land into an economically-functioning state, which would become their new home; they deeply believed that they could use their creativity, resourcefulness, technological advancement, and knowledge to turn the deserted land into a prosperous and civilized region, which could accommodate Europe's expelled Jews.<sup>7</sup>

## 2.2 Technological progress and its political relevance

In Zionism, no natural resource is more important than water: In the Old Testament of the Bible, the word "water" is used 580 times; water is needed for religious purification rituals – and in their view, it is also key for building and nourishing a nation. It was more than just a necessary resource; it became part of Jewish ideology and, in the twentieth century, the foundation of the intended agrarian economy, which could feed the young nation. "The Jewish farmer was an ideal, and the water that irrigated his land became an integral part of the national identity."<sup>8</sup> In conjunction with technological advancement and ingenuity, which is also central to Zionist ideology, the will to industrialize the land was immense. The pioneers were certain that they had the abilities to transform the land and build the economic foundation for a Jewish nation state. In the beginning of the twentieth century, after the initial period of displeasure

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<sup>6</sup> Alon Tal, *Enduring Technological Optimism: Zionism's Environmental Ethic and Its Influence on Israel's Environmental History*, (April 2008): 282.

<sup>7</sup> Tal, *Enduring Technological Optimism: Zionism's Environmental Ethic and Its Influence on Israel's Environmental History*, 280.

<sup>8</sup> Tal, *Pollution in a Promised Land: An Environmental History of Israel*, Berkeley, California, 199.

and resentment, technological optimism and curiosity developed, which eventually turned into a glorification of agricultural work and achievements.<sup>9</sup> This new freedom and the unbreakable will to transform the land based on ideologically-idealized agrarian techniques, attracted Jews from all over the world to help to achieve the goal of a Promised Land.<sup>10</sup>

The original Zionist pioneers wanted to replicate Herzl's utopian ideas in *Altneuland*: The dream and "belief in science and technology's ultimate triumph was part and parcel of the dream that inspired Jews from around the world to leave everything and move to a neglected, impoverished province."<sup>11</sup> In fact, engineers that came to Palestine in the period between 1870–1918 were very well-trained and had the knowledge to establish a productive economy, even though there were cultural differences between Jews coming from Eastern and Western Europe; they saw the potential of merging their knowledge and establishing a prosperous Palestine.<sup>12</sup> However, the circumstances for a settlement in Palestine were politically and economically far from ideal: The Ottoman Empire was very critical towards the immigration of Jews, and the Arab population in Palestine and the surrounding areas were very sceptical as well. The preconditions for agricultural work differed completely from what the Jewish farmers knew in Europe.<sup>13</sup> Even so, in light of the pogrom in Eastern Europe, more and more Jews migrated to Palestine, including Jewish immigrants plagued by economic misery and persecution from Yemenite communities.

At the beginning of the nineteenth century, approximately 15,000 Jews and 150,000 Arabs lived in Palestine; the Jewish population grew to over 50,000 in a century (during the first aliyah<sup>14</sup>, between 1882–1904, 35,000 Jews immigrated). Many older Jewish families depended on donations from wealthy European Jews, whereas approximately 25,000 of the

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<sup>9</sup> Tal, *Enduring Technological Optimism: Zionism's Environmental Ethic and Its Influence on Israel's Environmental History*, 281.

<sup>10</sup> Ibid., 279.

<sup>11</sup> Ibid., 281.

<sup>12</sup> Tal, *Enduring Technological Optimism: Zionism's Environmental Ethic and Its Influence on Israel's Environmental History*, 284.

<sup>13</sup> Brenner, "Politischer Zionismus und Kulturzionismus," *Bundeszentrale für politische Bildung*, March 28, 2008, <http://www.bpb.de/internationales/asien/israel/44945/politischer-und-kulturzionismus> (accessed July 14, 2017).

<sup>14</sup> Aliyah means "elevation" or "going up", and describes the move to Israel. It is a biblical word and used in Genesis, where it described the exodus from Egypt to the Holy Land. There are pre-Zionist aliyah (until 1882) and Zionist aliyah. The first Zionist aliyah was from 1882–1903; the second from 1904–1914, and the third from 1919–1923.

newly-arrived Jews (during the first Aliyah) increasingly dedicated themselves to agricultural work to become economically independent and self-sufficient.<sup>15</sup>

Herzl himself did not witness the establishment of the State of Israel; he died at the age of 44 in 1904. Just before his death, he published his utopian *Altneuland*, in which he described the ideal community of Jews and Arabs living together peacefully – a society that united the best of all European countries: its schools, culture, tradition, and work ethic.<sup>16</sup>

### 2.3 Streams of Zionism

The Zionists themselves were fractured in different camps, and they diversified in various political directions, which sometimes only had commonality: to unite Jews in Palestine.

One stream in Zionism identified itself with socialist ideals, like the abolition of capitalism and the striving for collective agricultural settlements – ideas that were implemented in the form of kibbutzim and moshavim.<sup>17</sup> These social-revolutionary ideas were born in a Russian context, where it was intermixed with Zionist ideals.<sup>18</sup> They arrived in Palestine in the second and third aliyah, between 1904–1923. These so-called labour Zionists wanted to redefine Jewish identity, and they were quite successful: They were quickly in charge of key positions in institutions that managed settler communities, and along with it, they managed cultural and political life, too.<sup>19</sup> Labour Zionists criticized

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<sup>15</sup> Jewish History, “The First Aliyah,” *jewishhistory.org*: <http://www.jewishhistory.org/the-first-aliyah/> (accessed: September 5, 2017).

<sup>16</sup> Brenner, “Politischer Zionismus und Kulturzionismus,” *Bundeszentrale für politische Bildung*, March 28, 2008, <http://www.bpb.de/internationales/asien/israel/44945/politischer-und-kulturzionismus> (accessed July 14, 2017).

<sup>17</sup> A kibbutz is a collective community settlement. The first kibbutz was established in 1910, and it is based on agriculture. This form of collective work is unique to the State of Israel, and today there are over 270 kibbutzim. A moshav is also a collective community settlement, but in contrast to the kibbutz, the share of private property is much higher. People who were not that fond of the socialist ideal, preferred moshavim. Today, there are over 400 in Israel.

<sup>18</sup> Brenner, “Die Entwicklung des politischen Zionismus nach Herzl,” *Bundeszentrale für politische Bildung*, March 28, 2008, <http://www.bpb.de/internationales/asien/israel/44948/zionismus-nach-herzl> (accessed: July 14, 2017).

<sup>19</sup> Tal, *Pollution in a Promised Land: An Environmental History of Israel*, 20.

Jewish life in the diaspora, claiming that it was “excessively intellectual, superstitious, stagnant, and cowering”<sup>20</sup>; according to them, only a prosperous agricultural sector could help them to become a graceful community again. They deeply believed that doing agricultural work would heal the land and unite the scattered and persecuted Jews.<sup>21</sup> Their goal, therefore, was to achieve self-sufficiency – and that their economic foundation should rest on agriculture.<sup>22</sup>

Aaron David Gordon (1856–1922) became the greatest advocate of this movement. Labour Zionists like Gordon believed that working the land would boost their entitlement to it and, at the same time, turn the land back to its biblical description of the ‘land of milk and honey’; Gordon even used the words ‘religion of labour’ in his works.<sup>23</sup> This conviction was accompanied by the strong belief that land in Palestine that was acquired by Jews cannot get into the hands of Arab ownership; here, Jewish religious belief and Zionist secular ideology are in agreement.<sup>24</sup>

This goal was also pursued with the help of the Jewish National Fund, which was founded in 1901 at the Fifth Zionist Congress in Basel. Its task was to buy land in Palestine and lease it to Jewish settlers.<sup>25</sup> The conception that once-purchased land must remain in the hands of the Jewish community can also be found in the Bible, where it states that, “The land shall never be sold because the land is mine.”<sup>26</sup> Indeed, it can also be found in socialist reform thinking, which teaches that land must be controlled by the state to prevent social inequalities and curb certain people or groups’ greed.<sup>27</sup>

Zionism was unquestionably influenced by the ‘romantic’ image of agricultural work intermixed with the socialist belief that collective agricultural work is the best way to establish and nourish a new nation in the Promised Land. Therefore, Zionism never backed away from using the latest technological inventions to achieve an advantage and work the challenging land. At the foundation of political Zionism is an intense

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<sup>20</sup> Tal, *Enduring Technological Optimism: Zionism’s Environmental Ethic and Its Influence on Israel’s Environmental History*, 285.

<sup>21</sup> Ibid., 290

<sup>22</sup> Ibid., 285

<sup>23</sup> Rouyer, *Zionism and Water: Influences on Israel’s future water policy during the pre-state period*, 31.

<sup>24</sup> Ibid., 26.

<sup>25</sup> Armbrorst-Weihs, *Die Formierung der jüdischen Nationalbewegung im transnationalen Austausch: Der Zionismus in Europa bis zum Ersten Weltkrieg*, 6.

<sup>26</sup> King James Version: Leviticus 25:23.  
<https://www.kingjamesbibleonline.org/Leviticus-25-23/> (accessed: October 2, 2017).

<sup>27</sup> Rouyer, *Zionism and Water: Influences on Israel’s future water policy during the pre-state period*, 29.

technological optimism – and a love for their homeland; these features have formed a strong unit up to today.<sup>28</sup>

International political events at the beginning of the twentieth century were of utmost importance to the first settlers that came to Palestine. Following the demise of the Ottoman Empire in 1918, the territories around the Jordan River basin came under the trusteeship of the League of Nations, who divided the territory and mandated Great Britain and France to control it: Palestine and Transjordan were under a British mandate, while Lebanon and Syria were under the French's wing

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<sup>28</sup> Tal, *Enduring Technological Optimism: Zionism's Environmental Ethic and Its Influence on Israel's Environmental History*, 300.



Source: The British Mandate, 1920–1948

The Peace Conference in Versailles in 1919 was accompanied by Zionist lobbying for a Jewish share of the former Ottoman Empire. The Zionist delegation was led by Chaim Weizmann, who was born in Russia in 1874, and who became the first president of the Zionist Commission, founded in 1918; the British negotiators nominated him as the official contact person.<sup>29</sup>

<sup>29</sup> Mary Grey, “Chaim Weizmann (1874–1952),” [balfourproject.org](http://www.balfourproject.org), April 23, 2012, <http://www.balfourproject.org/427/> (accessed: October 2, 2017).





Source: Faisal-Weizmann-Agreement, “Proposed Boundaries”

This intense lobbying provoked Great Britain to claim an area north of the Litani River, as well as the headwater of the Jordan River; more specifically, the claim included “Lake Huleh, Lake Tiberias, and a substantial portion of the upper Jordan River”.<sup>30</sup> Thereafter, all Zionist efforts were focussed on expanding this territory and convincing the British government for the need of a Jewish national state. Due to strong negotiation skills and a good connection between the mandate authority and Zionist parties, they managed to convince British officials to subordinate the rights of Palestinian Arabs to them. For example, the British mandate government closed the Ottoman Land Bank, an institution that gave small-scale farmers low-interest loans; the closure resulted in many land losses all over British Palestine – and those lands were then taken over by the Jewish National Fund, who administrated it.<sup>31</sup>

In November 1917, the British Foreign Minister Lord Balfour notified Weizmann (then president of the WZO) that “His Majesty’s government viewed with ‘favour the establishment in Palestine of a national home for the Jewish people’.”<sup>32</sup> All of a sudden, the Jews’ dream seemed to become a reality, and as a result, Jewish immigration from all over the world increased; along with it, the aggression of Arabs living in Palestine increased, too. The Arab community never accepted the Balfour Declaration, and was deeply worried about losing their land and being subordinate to the Jews.<sup>33</sup>

## 2.4 The politicization of labour Zionism

The Zionist community was committed and eager to speedily develop the natural resource of water, since it formed the foundation of their daily lives and agricultural work. In 1934, only 14 years after the start of the British mandate, Zionist agencies managed to build over 1,000 wells and canal systems; it was the beginning of their agricultural expansion. “During Israel’s first [55] years, the country’s population grew sevenfold,

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<sup>30</sup> Leslie C. Schmida, *Israel’s Drive For Water*, Americans for Middle East Understanding, 1984, 3.

<sup>31</sup> Schmida, *Israel’s Drive For Water*, 3.

<sup>32</sup> Munther J. Haddadin and Uri Shamir, *Jordan Case Study Part I: Water Conflict and Negotiated Resolution*, UNESCO, 2.

<sup>33</sup> Rouyer, *Zionism and Water: Influences on Israel’s future water policy during the pre-state period*, 38.

but the agricultural sector boosted yields [16]-fold.”<sup>34</sup> Due to the deep connection between water and agriculture, the control over both water and land became “the most valuable commodity for establishing and sustaining the Jewish state,”<sup>35</sup> and to accommodate the growing number of Jews coming from Europe, more and more land had to be made farmable; this also meant that the amount of water available had to increase. Their mindset and appreciation of the natural world increased and developed together to make the land habitable. In the following years, the agrarian economy became more and more industrialized, as the technological advancements improved. Their broad interest in the latest technologies, which help to get the best out of the natural resources that the land is offering, is something that still influences Israel’s environmental policy up to today.<sup>36</sup>

Labour Zionism gained popularity among the broader Jewish community in the 1930s, which is why its political influence increased, too. The sort of agricultural work that was applied in the Zionist settlements differed a lot from the Palestinian Arabs. The Jewish settlers felt superior when they applied their progressive, technological European model of agricultural work, especially compared to the indigenous and artisanal agricultural traditions.<sup>37</sup> The possible negative impact of the technologies on the environment were not an issue because the urgency for the Zionist movement to persist and achieve its goal (to make Palestine a home for Jewish people) was stronger than any environmental issue.<sup>38</sup> For this reason, the Zionists established various research institutions early on to determine how to best reach an advantage with regard to their agricultural goods. Citrus fruits, especially, turned out to be a best seller, and at “its peak, the fruit constituted 80 percent of export revenues from Palestine.”<sup>39</sup> According to the Israeli environmental professor and activist Alon Tal, the citrus boom transformed thinking of agriculture from something that is simply a necessity and you could make a living out of to a business that can generate a surplus in the treasury. To this day, Zionism has not abandoned its belief that science and technology can fulfil Herzl’s dream.

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<sup>34</sup> Tal, *Enduring Technological Optimism: Zionism’s Environmental Ethic and Its Influence on Israel’s Environmental History*, 289.

<sup>35</sup> Rouyer, *Zionism and Water: Influences on Israel’s future water policy during the pre-state period*, 30.

<sup>36</sup> Tal, *Enduring Technological Optimism: Zionism’s Environmental Ethic and Its Influence on Israel’s Environmental History*, 275.

<sup>37</sup> Ibid., 287.

<sup>38</sup> Ibid., 293.

<sup>39</sup> Ibid., 288.

### 3. Background on Israel's water resources and its management

Access to water resources in the region is very complex; the main complexity, is that several states – Israel (including the occupied territories of the Gaza Strip and the West Bank), Syria, Lebanon, Jordan – share the valuable resource.



Source: New World Encyclopedia, “Jordan River”

Up to today, there is no agreed plan or contract between the said parties on how to manage the allocation of water. The main sources of the Jordan River are spread across the region: the Hasbani River in Lebanon; the Baniyas River in Syria (although Israel is currently in control of it), and the Dan River in northern Israel. They all share one main source, and its confluence is close to Israel's northern border, which constitutes the upper Jordan River basin.<sup>40</sup> The upper Jordan then flows into the Sea of

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<sup>40</sup> Itay Fischhendler, *Ambiguity in Transboundary Environmental Dispute Resolution: The Israeli-Jordanian Water Agreement*, Journal of Peace Research (2008), 94.

Galilee<sup>41</sup>, which is also the Jordan River basin's main reservoir. The river that flows from the Sea of Galilee is called the 'lower' Jordan; its main tributary is the Yarmouk River.

The Yarmouk flows along the Syrian and Jordanian border, and is also their internationally-recognized border. The Yarmouk and the 'lower' Jordan then confluence into the Dead Sea, which forms the border between Israel and the West Bank.<sup>42</sup> The Dead Sea is of special importance, not only because of its unique ecological composition but also because its water contains 10 times more saline than ocean water; it is also the lowest point on earth (approximately 400 meters below sea level), also from a religious perspective:<sup>43</sup> Ezekiel 47:8–9<sup>44</sup> refers to the Dead Sea, which is why it has special importance to religious Jews. But not only religious Jews believe that it is a crucial task to protect the Dead Sea level from decreasing; the majority of the Israeli population today believe that it is part of cultural heritage, which needs to be protected for future generations.<sup>45</sup> Apart from the Jordan River, the Golan Heights also provide fresh water: Israel draws 15 per cent of its water demand from the Golan Heights, "whether as surface water or indirectly through local aquifer recharge."<sup>46</sup>

Furthermore, two aquifers – the Mountain Aquifer and the Coastal Aquifer – are important as central sources of water supply. They are both renewable water resources, which means that they get replenished by rainfall, or through man-made technologies. The Mountain Aquifer is located under the West Bank, which today is part of Palestinian territory, but its springs are located in Israeli territory. About 80 per cent of the

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<sup>41</sup> The Sea of Galilee is called Lake Kinneret in Hebrew, or Lake Tiberias in Arabic.

<sup>42</sup> Fischhendler, *Ambiguity in Transboundary Environmental Dispute Resolution: The Israeli-Jordanian Water Agreement*, Journal of Peace Research (2008), 94.

<sup>43</sup> Alexander McPhail, Stephen Lintner, *Red Sea – Dead Sea Water Conveyance Study Program Overview*, The World Bank (2013), 1.

<sup>44</sup> Mechon Mamre: Hebrew Bible <http://www.mechon-mamre.org/p/pt/pt1247.htm#8> (accessed: October 2, 2017).

8 Then said he unto me: "These waters issue forth toward the eastern region, and shall go down into the Arabah; and when they shall enter into the sea, into the sea of the putrid waters, the waters shall be healed.

9 And it shall come to pass, that every living creature wherewith it swarth, whithersoever the rivers shall come, shall live; and there shall be a very great multitude of fish; for these waters are come thither, that all things be healed and may live whithersoever the river cometh.

<sup>45</sup> F.A. Ward and N. Becker, *Cost of water for peace and the environment in Israel: An integrated approach*, Water Resour. Res., 51, 5808.

<sup>46</sup> Nicholas S. Robins, James Fergusson, *Groundwater scarcity and conflict – managing hotspots*, Earth Perspectives 2014, 5.

Mountain Aquifer is replenished by rainfall, and according to the Israeli Water Authority, it has the best water quality and is also the biggest aquifer in the region.<sup>47</sup> Jewish farmers have been using these waters for purposes of irrigation for over 80 years, and it is part of the foundation upon which the Jewish state is (re)constructing itself.<sup>48</sup>

The Coastal Aquifer lies on the Mediterranean coast, in Israeli territory in the occupied Gaza Strip. As it is also replenished by natural rainfall, as well as by “artificial recharge (wells, reservoirs, and wastewater effluents), agricultural return flows, lateral groundwater, infiltrations and seawater intrusions,”<sup>49</sup> it must be cautiously managed to prevent the permeation of seeding material and other chemicals, as well as overpumping and the inflow of salt water, which would decrease its water quality enormously.<sup>50</sup> In general, the whole region is plagued by aridness and periods of drought, which increases the gap between supply and demand extremely.

### 3.1 Water-supply development and maximization

As described earlier, it is not only environmental conditions between the riparian states that are different; the cultural differences are tremendous, too, which has led to belligerent conflicts since the immigration of the first Jewish settlers. The political tensions exploded with Israel’s proclamation of independence in May 1948, and the Arab states declared war on Israel only one day after this proclamation.<sup>51</sup> The relationship remained very tense after Israel’s victory, and led to the United States (US) government mitigating between the parties in the dispute. The US’s intention was to formulate a basin-wide plan to supply the Arab refugees with water and to settle them in the Jordan Valley. US President Eisenhower and his government felt the need to act because of Israel’s fast-developing plans to expand the Yarmouk and the Jordan River – and in that, by not supplying the Arab population with sufficient amounts of

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<sup>47</sup> Elena Lazarou, *Water in the Israeli-Palestinian conflict*, European Parliamentary Research Service (2016), 4.

<sup>48</sup> Robins, Fergusson, *Groundwater scarcity and conflict – managing hotspots*, 5.

<sup>49</sup> Lazarou, *Water in the Israeli-Palestinian conflict*, 4.

<sup>50</sup> Mary Patricia Hill, *Competition and Conflict: Water Management in the Jordan River Basin*, 1995. Naval Postgraduate School, California, 14.

<sup>51</sup> Almost immediately after Israel proclaimed independence in May 1948, all its Arab neighbours (Lebanon, Jordan, Egypt, Syria, Iraq, and Saudi Arabia) united and launched an attack on Israel, which became known as the War of Independence; it ended in February 1949 with an armistice agreement, but to the present, there is still no peace agreement between all parties in the dispute.

water. For this reason, the US send Ambassador Johnston to mitigate between Jordan, Syria, and Lebanon on the Arab side, and Israel on the other. However, when Johnston presented his basin-wide plan in 1955, with the idea to distribute water from the Jordan River basin according to the agricultural demand of the riparian states, it was rejected by the Arab states on the grounds that they will never recognize Israel as a sovereign state.<sup>52</sup>

After the failure of the Johnston mission, each riparian state implemented a different water-management plan. Israel's goal was to move as much groundwater as possible from the Jordan Valley to its coastal area. In the 1950s, Israel maximized their water policy and drew "over [1] billion cubic meters per year for additional [...] irrigation".<sup>53</sup> However, it is worth noting that before the Six Day War<sup>54</sup> in 1967, the Jordan River basin and the aquifers were considered international and, therefore, shared resources. This is apparent in the fact that, prior to 1967, Palestinian farmers had pumped water from different sites all along the Jordan River to irrigate their fields, which comprised ca. 3,000 hectares. It can be concluded that they had required about 30 million cubic meters of water per year for their lands. This ended with Israel's victory and its occupation of the West Bank and the Gaza Strip in 1967, when Israel gained control over the water resources and did not allow the Palestinians the free and uncontrolled use of these resources anymore. From that moment on, Israel drilled even more wells into the Mountain Aquifer, which lies in the occupied West Bank, to provide the Israeli settlements with fresh water.<sup>55</sup> This will be discussed again in more detail in section 5.

The Jewish community has increased tenfold since the 1940s, which has put a lot of pressure on its demand for water, both economically and domestically. To accommodate these urgent needs, Israel started to build its National Water Carrier (NWC) in the early 1960s, which was completed in 1964. The NWC is a 130-km long pipeline and canal system, which carries water to the northern part of Israel, including the

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<sup>52</sup> Jeffrey K. Sosland, *Cooperating Rivals: The Riparian Politics of the Jordan River Basin*, State University of New York Press, 2007, 39.

<sup>53</sup> J. A. Allan, *Hydro-Peace in the Middle East: Why no Water Wars? A Case Study of the Jordan River Basin*, (2002), 263.

<sup>54</sup> The Six-Day War of 1967 was a war between the Arab states (Egypt, Jordan, and Syria) and Israel; it was a result of increasing tensions since Israel's independence in 1948. Israel won, and has ever since occupied the Golan Heights, the Gaza Strip and the West Bank. In total, Israel's territory tripled with this victory.

<sup>55</sup> Hillel Shuval, "Meeting Vital Human Needs: Equitable Resolution of Conflicts over Shared Water Resources," in *Water Resources in the Middle East. Israel-Palestinian Water Issues – From Conflict to Cooperation*, ed. Hillel Shuval Hassan Dweik, 4-6.

cities of Tel Aviv and Haifa.<sup>56</sup> “The NWC [...] enabled Israel to increase the extent of its irrigated farmland from about 30,000 hectares in 1948 to over 200,000 hectares in the late 1980s.”<sup>57</sup> One third of Israel’s water demand is provided by the NWC, which exploits about 50 per cent of the Jordan River. The water is not only used for domestic demand but also for Israel’s industries, power plants, and for agricultural farms in the Negev desert.<sup>58</sup>



Source: Water Fanack: Israel – Water Infrastructure

<sup>56</sup> Lazarou, *Water in the Israeli-Palestinian conflict*, 3.

<sup>57</sup> Nadav Morag, *Water Geopolitics and State Building: The Case of Israel*, Middle Eastern Studies, Vol. 37, No. 3 (July, 2001), 190.

<sup>58</sup> Lazarou, *Water in the Israeli-Palestinian conflict*, 5.



Today, the Jordan River, the Mountain Aquifer, and the Coastal Aquifer provide approximately 60 per cent of Israel's water supply; the remaining 40 per cent is produced by the recycling of waste water, and desalination. Of the mentioned 60 per cent, about 25 per cent is extracted from the Mountain Aquifer alone, which includes the West Bank and Israeli settlements. To cover the increasing demand of water, Israel achieved to become a worldwide market leader in waste-water recycling: It recycles 86 per cent of its domestic waste water; about 55 per cent of the water it uses for agriculture is recycled domestic waste water.<sup>59</sup> This effluent water is transported into aquifer basins, where it is mechanically and biologically treated; thereafter, it is transferred to the Negev desert to irrigate agricultural plants.<sup>60</sup>

### 3.2 Water-management policy

The water issue is a sensitive topic in Israel, and connected to many critical security-policy issues, which is why the Israeli government established institutions, research establishments, and governmental authorities to manage the sensitive sector early on.

Between 1955–1959, the Israeli government launched four all-encompassing water laws, which had in common that they granted the general right to water, but each law established control mechanisms for authorities on the one hand and the water sources on the other.<sup>61</sup>

1. The first was the Water Measuring Law of 1955, which stipulates, among other things, that water must be measured before it is distributed, and the ministry of agriculture is responsible to assign the task of measurement to an independent source; in addition, monthly reports on the supply and consumption of water must be sent to the Water Commission;
2. the second, also established in 1955, is the Water Drilling Control Law, which states that only the government can drill wells. The government tasked the Water Commission to enforce this and to revoke their licence, if necessary;

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<sup>59</sup> Lazarou, *Water in the Israeli-Palestinian conflict*, 5.

<sup>60</sup> Jan Selby, *Water, Power & Politics in the Middle East. The other Israeli-Palestinian Conflict*. (I. B. Tauris), 37.

<sup>61</sup> Richard Laster and Dan Livney, "Israel: The Evolution of Water Law and Policy," in *The Evolution of the Law and Politics of Water*, ed. Joseph W. Dellapenna, Joyeeta Gupta, 2009, 124.

3. the third law is the Drainage and Flood Control Law of 1957, which established a national and regional drainage board. The law “also empowers the Water Commissioner (now called the Director of the Water Authority), the Minister of Agriculture”<sup>62</sup> to make specific water sources protectorates, and finally, in 1959,
4. the Israeli government created the all-encompassing Water Law, which established that water is a state-owned good that cannot be privatized; this also includes all waste water.<sup>63</sup> It states that, “A person’s rights in land do not provide him with rights in a water source which is on the land, flows past it, or its border.”<sup>64</sup>

The ministry of agriculture was assigned the role of water authority until 1996 because agriculture was (and still is) the main consumer of water. The ministry of national infrastructures, energy and Water Resources (MNI) is in charge of monitoring it now.<sup>65</sup> The MNI makes propositions about Israel’s internal and external water policy, and delivers it to cabinet. The water authority plans and regulates the whole water sector; it is run by eight members, and they also supervise waste-water treatment and the water quality in the aquifers.<sup>66</sup> The director of the water authority has to file annual reports on water quality, pollution, and steps that will be taken to prevent contamination. The director is a very powerful person because even though every citizen in Israel has the right to water, the director is the one who decides who gets what quality and what amount of water – a problem that is quite evident in Israeli-Palestinian relations.

Other important ministries in charge of Israel’s water allocation, quality, and financial support is the ministry of environmental protection, which covers the quality standards of the water; the ministry of health supervises the drinking-water quality; the ministry of finance is in charge of tariffs, subsidies, and incentives, and the ministry of the interior deals with urban-water supply.<sup>67</sup> The importance of water in Israel is evident in the broadly-allocated management of water in the different ministries. Water management is extremely well-organized, and there are no gaps in

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<sup>62</sup> Laster and Livney, *Israel: The Evolution of Water Law and Policy*, 125.

<sup>63</sup> Israel Ministry of Foreign Affairs, “Israel’s Chronic Water Problem.” <http://mfa.gov.il/MFA/IsraelExperience/AboutIsrael/Spotlight/Pages/Israel-s%20Chronic%20Water%20Problem.aspx> (accessed: June 23, 2017).

<sup>64</sup> Laster and Livney, *Israel: The Evolution of Water Law and Policy*, 125.

<sup>65</sup> Laster and Livney, *Israel: The Evolution of Water Law and Policy*, 125.

<sup>66</sup> M. Zeitoun, K. Eid C. Sabbagh, M. Dajani, M. Talhami, *Hydro-political Baseline of the Upper Jordan River*, UEA Water Security Research Centre, 2012, 34.

<sup>67</sup> Zeitoun, Eid, Sabbagh, Dajani, Talhami, *Hydro-political Baseline of the Upper Jordan River*, UEA Water Security Research Centre, 2012, 34.

the management. For these reasons, the Israeli government also erected the very powerful and still state-owned water management institution Mekorot; it is under the administration and supervision of the ministry of health, which also manages the NWC, and which supplies and monitors about 80 per cent of Israel's drinking water; it also recycles 35 per cent of the total waste water.<sup>68</sup> Mekorot was established in 1937 by Pinchas Sapir, then minister of finance, and Levi Eshkol, Israel's third prime minister, to unite the management of agricultural irrigation and household water requirements. Sapir and Eshkol were both very eager to get the best out of the water-management system for the Yishuv<sup>69</sup>, and Mekorot had positive effects in the sense that very innovative and forward-thinking projects were speedily implemented. However, their overeagerness had a downside: They did not keep the environmental impact of some of their decisions in mind.<sup>70</sup>

Today, Mekorot is said to have unlimited influence and power over the NWC, in such a way that it can be described as a national water authority. Besides Mekorot, two other institutions are worth mentioning: the Kinneret Drainage Authority, which "is responsible for river-rehabilitation issues from the outlet of the Sea of Galilee to the confluence between the Jordan and Yarmouk Rivers,"<sup>71</sup> and the Lower Jordan River Drainage Authority that is responsible for the section "from the Yarmouk to Bezek stream on the Israeli side."<sup>72</sup> In 1996, all water and waste-water institutions were transferred into "newly created public service entities called Water and Sewerage Corporations"<sup>73</sup> to guarantee that there are no financial loopholes and that all money gained through tariffs get reinvested in water infrastructure. All these bureaucratic organizational structures show how elaborate the whole water structure is and that absolutely nothing is left to chance. Water management is the heart and soul of Israeli policy management.

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<sup>68</sup> Water Fanack of the Middle East & North Africa, "Water Management," Israel. November, 21 2016, <https://water.fanack.com/israel/water-management/> (accessed: July 4, 2017).

<sup>69</sup> The Yishuv was the Jewish population in Palestine, before the State of Israel was established.

<sup>70</sup> Tal, *Pollution in a Promised Land: An Environmental History of Israel*, 200.

<sup>71</sup> EcoPeace Middle East and Royal HaskoningDHV, *Regional NGO Master Plan for Sustainable Development in the Jordan Valley*, 2015, 18

<sup>72</sup> Ibid.

<sup>73</sup> OECD, *Environmental Performance Reviews: Israel 2011*, OECD Publishing, 106.

### 3.3 Desalination

A water-scarce country like Israel, which naturally has less than 250 m<sup>3</sup> of renewable freshwater per capita per year (the international standard for water scarcity is 500 m<sup>3</sup> per capita per year),<sup>74</sup> conducts a lot of research to improve its national water supply. In November 2001, after a long-lasting drought without any rainfall, the Israeli government commissioned the building of a desalination plant. Desalination is a technological development that allows the control over a country's water resources and its quality. In manufacturing water, it becomes an economic good and an exchange commodity.<sup>75</sup> The Israeli national master plan has been a major achievement in regulating water scarcity.<sup>76</sup> The first desalination plant, in Ashkelon, started operation in 2005, with a capacity of 50 million m<sup>3</sup> per year. The Israeli government realized quickly the efficiency of desalinating oceanic salt water, and six months later ordered the construction of a second plant. The Ashkelon plant was upgraded a year later to desalinate up to 100 million m<sup>3</sup> per year,<sup>77</sup> which is about 5 per cent of Israel's yearly water supply.<sup>78</sup> Since Israel's founding, its government has worked and invested a lot in the development of the water infrastructure "to support a safe, secure, reliable, and affordable water supply."<sup>79</sup> In October 2013, the third desalination plant, called Sorek, started operation with a capacity of 150 million m<sup>3</sup> per year. One of the biggest differences to natural water is that its production costs are already calculable, since there are no natural variations in availability. However, the production and its pricing also means that the private sector can get involved as a producer in a field that only the government has had its hands in since the state was founded.<sup>80</sup> In 2014, the price for a single m<sup>3</sup> of desalinated water was USD 0.71; due to the speedy development of desalination technologies, the price dropped to USD 0.52 per m<sup>3</sup> in 2016.<sup>81</sup> Desalination is Israel's fastest-growing energy sector, and it is projected to increase from 150

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<sup>74</sup> Ram Aviram, David Katz and Deborah Shmueli, *Desalination as a game-changer in transboundary hydro-politics*, University of Haifa (2014), 612.

<sup>75</sup> Aviram, Katz, Shmueli, *Desalination as a game-changer in transboundary hydro-politics*, 610.

<sup>76</sup> Michael Zaide, *Drought and Arid Land Water Management*, National Report Israel, 2016, 7.

<sup>77</sup> water-technology-net, "Ashkelon Seawater Reverse Osmosis (SWRO) Plant, Israel, Israel," <http://www.water-technology.net/projects/israel/> (accessed: August 17, 2017).

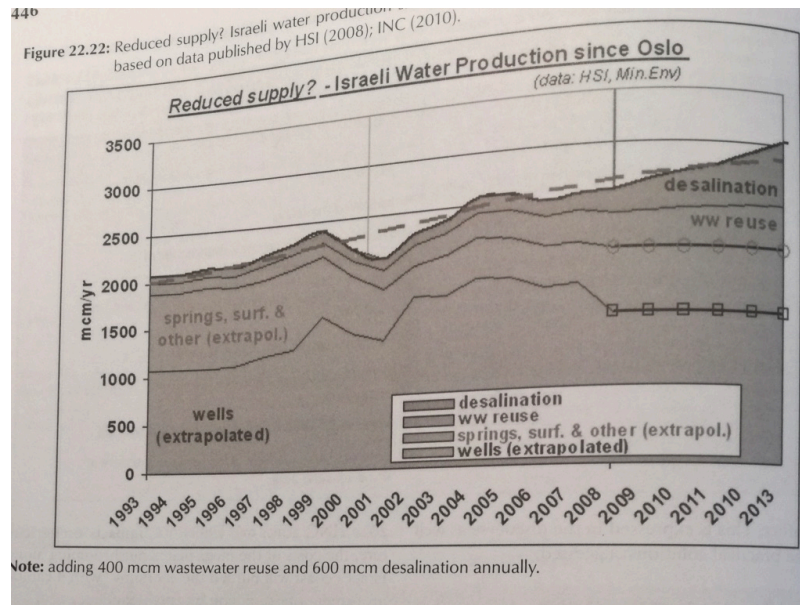
<sup>78</sup> Zaide, *Drought and Arid Land Water Management*, 7.

<sup>79</sup> Ward, F. A., and N. Becker, *Cost of water for peace and the environment in Israel: An integrated approach*, 5807.

<sup>80</sup> Aviram, Katz, Shmueli, *Desalination as a game-changer in transboundary hydro-politics*, 618.

<sup>81</sup> Zaide, *Drought and Arid Land Water Management*, 7.

million m<sup>3</sup> per year to 750 million m<sup>3</sup> per year between 2008–2020.<sup>82</sup> Israel's annual water use in 2009 was at 1.91 billion m<sup>3</sup>, of which 1.26 billion m<sup>3</sup> was freshwater.<sup>83</sup>



Source: Messerschmid, *Nothing New in the Middle East – Reality and Discourses of Climate Change*, 446

In sum, Israel's plan to secure its water supply unilaterally and, in fact, desalinating water hoped to reduce interdependencies and grow economically stronger; however, it also reduced the demand for cooperation, since Israel has become far more flexible regarding the availability and distribution of its water resources.<sup>84</sup>

<sup>82</sup> Clemens Messerschmid, "Nothing New in the Middle East – Reality and Discourses of Climate Change," in *Climate Change, Human Security and Violent Conflict. Challenges for Societal Stability*, ed. Jürgen Scheffran, Michael Brzoska, Hans Günter Brauch, Peter Michael Link and Janpeter Schilling (Heidelberg: Springer, 2012), 443.

<sup>83</sup> The State of Israel, Ministry of National Infrastructures Planning Department, "Allocation, Consumption and Production in 2009" (accessed: August 12, 2017).

<sup>84</sup> Aviram, Katz, Shmueli, *Desalination as a game-changer in transboundary hydro-politics*, 619.

### 3.4 Israel's agricultural sector, and environmental impacts of Israel's water policy

When waves of immigrants entered the newly founded state, the new government decided to settle them in agricultural communities, not only because they needed to work the lands to supply the new population with food but also to proclaim the ownership of the land. On these grounds, and their ideological relevance, several people in these communities became important figures in the political and military elite of the new country. With the settlement of immigrants following the founding of the state foundation, the agricultural sector grew successful and prosperous. Furthermore, the new government generously subsidized agriculture and research on how to improve crop yield, which attracted the new immigrants into the countryside even more. Even now, the Israeli ministry of agriculture still annually supports research on agriculture with up to USD 70 million in funds.<sup>85</sup> Since Israel's independence, the number of hectares that is being irrigated has increased enormously: In 1948, 165,000 ha has been cultivated by 400 agricultural communities; now, some 435,000 ha is cultivated by over 900 agricultural communities, which is thanks to the population that has increased sevenfold.<sup>86</sup>

Up to the present, Israel's agricultural sector is organized in cooperatives, kibbutzim and moshavim. These collective communities reflect the early pioneer's ideal of a community that is based on cooperation and social equality. They are still the main producer of agricultural products, as well as meat and fish.<sup>87</sup> Israel's agricultural sector still has close ties to the organizational structures of the kibbutzim, which allows them (the kibbutzim) to invest generously in agricultural industrial initiatives that correspond to their agricultural activities. The economies of scale enable a mechanization of agricultural activities and, at the same time, reinvestment in business. With this booming agricultural business, Israeli farmers also started to export the technologies and machinery, along with their agricultural products. Agriculture consumes 60 per cent of Israel's total water use, but it, in fact, only adds 2.6 per cent to its gross domestic product (GDP). On the other hand, agriculture contributes 30 per cent

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<sup>85</sup> Alon Ben-Gal, "Sustainable Water Supply for Agriculture in Israel," in *Water Wisdom: Preparing the Groundwork for Cooperative and Sustainable Water Management in the Middle East*, ed. Alon Tal and Alfred Abed-Rabbo (September, 2008), 240.

<sup>86</sup> Ibid., 242.

<sup>87</sup> Ibid., 239.

to the West Bank's GDP, but the Palestinians' quota at the Mountain Aquifer is only 10.4 per cent.<sup>88</sup>

As mentioned before, the environmental impact of this technological progress and process of modernization has been denounced for a very long time; many years of mismanagement reveal themselves in the form of environmental damage. For example, through the excessive extraction of water out of the Jordan River basin and the aquifers, the water level significantly declined; several freshwater springs have been destroyed, and rivers have dried up due to erosion all along the Jordan River.<sup>89</sup> The Coastal Aquifer is so heavily over-extracted that the intrusion of sea water is increasing extremely. Similar problems of over-extraction apply to the upper Jordan River, too, because overuse has resulted in the lower Jordan to only have 2 per cent of its flow left. Even worse is the situation in the Gaza Strip, which draws its water from the Coastal Aquifer; its share of the aquifer is in a critical condition. Another problem as a result of over-extraction is the pollution of water resources, which get contaminated because of the excessive use of artificial fertilizers and pesticides. This applies especially to both the Coastal and Mountain Aquifer as groundwater resources, which also get polluted through the intrusion of contaminated, lateral groundwater.<sup>90</sup> Likewise, in the Dead Sea, the water level of the unique saline sea is dropping very fast; its water surface has been reduced from 950 km<sup>2</sup> to only 637 km<sup>2</sup> – and this reduction continuous at a rate of approximately 0.8–1.2 metres per year.<sup>91</sup> Since the 1970s, the water quality also deteriorated immensely, primarily due to the higher input of chlorides and added nutrients into the soil to achieve higher crop yields.

Urbanization and, thereby, the higher concentration of people also leads to a decline in the water quality, since the extraction rates are higher. Natural replenishing also does not increase due to global warming.<sup>92</sup> A 2002 Knesset committee of inquiry gave voice to these and other environmental impacts, saying: "Israel follows a 'gambling management' [...] whereby dry winters with lack of 'available water' in Lake Tiberias

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<sup>88</sup> Messerschmid, *Nothing New in the Middle East – Reality and Discourses of Climate Change*, 426-427.

<sup>89</sup> McPhail, Lintner, *Red Sea – Dead Sea Water Conveyance Study Program Overview*, 1.

<sup>90</sup> Lazarou, *Water in the Israeli-Palestinian conflict*, 4.

<sup>91</sup> McPhail, Lintner, *Red Sea – Dead Sea Water Conveyance Study Program Overview*, 1.

<sup>92</sup> E. Feitelson, *Implications of shifts in the Israeli water discourse for Israeli-Palestinian water negotiations*, *Political Geography* 21, 2002, 308.

are compensated through overpumping the aquifer [...] thus gambling on the next winter becoming rainy again.”<sup>93</sup>

Environmental damages through irresponsible management affects especially the West Bank territory, since there are not enough adequate treatment and sewage-treatment plants.<sup>94</sup> Since settlement in the West Bank and the Gaza Strip after 1967, vast quantities of agricultural and domestic waste water were drained untreated into valleys nearby. This damaged contaminated the environment and the water resources of the region considerably and permanently. It impairs especially the water resources of the Palestinians, who are on the one hand dependent on Israel’s water supplies, and on the other hand, they do not have the same modern technologies to treat and clean the water in their territories.<sup>95</sup>

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<sup>93</sup> Messerschmid, *Nothing New in the Middle East – Reality and Discourses of Climate Change*, 426.

<sup>94</sup> Jan Selby, Clemens Hoffmann, *Water scarcity, conflict, and migration: a comparative analysis and reappraisal*, Government and Policy 2012, 1004.

<sup>95</sup> Shuval, *Meeting Vital Human Needs: Equitable Resolution of Conflicts over Shared Water Resources*, 18.



#### 4. Israel and the concept of virtual water trade

To see how the process of globalization has changed the worldwide trade in agricultural products and the new options water-scarce countries like Israel have today, the concept of virtual water trade will now be introduced, and a closer look will be taken at Israel's policy.

“The concept is based on the idea that water-poor countries are increasingly importing their food from water-abundant countries in order to conserve their own water resources and use them in other, more productive sectors where more added value per volume unit of water is generated.”<sup>96</sup>

The concept of ‘virtual water’ was introduced by the geographer John Anthony Allan in the 1990s; it describes the share of water that is needed to produce grains and fruits, but also every other product that needs water like clothing, devices for industries, and stock breeding. With this concept, Allan describes the trade that happens indirectly and is not known at first sight because it is for most people self-understood, for example, it is between 1,000–2,000 litres of water needed to produce 1 kg of grain; the production of 1 kg of cheese requires 5,500 litres, and 1 kg of beef can take up to 16,000 litres. Because it is so water-intensive to produce food and to satisfy people's demands, water-scarce countries secure their water by importing the water-intensive products from countries where water is relatively abundant; these countries, in turn, can profit economically from exporting these products.<sup>97</sup>

Globally, about 1,000 km<sup>3</sup> per year are being traded in virtual water – 20 times the volume of the Nile River! The biggest exporters are the US, which exports a third of its water resources, mostly in grains and meat; Canada (also grain); Australia (cotton, sugar); Argentina (beef), and Thailand (rice). Conversely, virtual water trade is essential for other countries to meet the needs of their people; this applies to Iran, Egypt, Jordan, and Algeria, among others.<sup>98</sup> The water scarcity in the Middle East region – with a yearly water deficit of 150 billion m<sup>3</sup> – is being accommodated by the import of over 50 billion m<sup>3</sup> per year of virtual water, mostly embedded in grain. The remaining demand for water is

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<sup>96</sup> Diana Hummel, *Population Dynamics and Supply Systems. A Transdisciplinary Approach*. Campus Verlag 2008, 202.

<sup>97</sup> A. Y. Hoekstra, “Virtual Water: An Introduction,” in *Virtual Water Trade. Proceeding of the International Expert Meeting on Virtual Water Trade*, ed. A. Y. Hoekstra, 2003, 13.

<sup>98</sup> Fred Pearce, *Water fights*, RSA Journal, 2006, 21.

reached through natural replenishment, with about 250 million m<sup>3</sup> per year.<sup>99</sup>

Apart from the financial costs, other costs must be kept in mind for countries that import water-intensive goods. The biggest issue is that the importing countries can easily become dependent on the exporting countries, which can put them in a vulnerable position; it also gives the exporting countries leverage to tie conditions to the transactions, and interfere in the political affairs of the importing country. It is, therefore, crucial that importing countries have foreign reserves, which they can export themselves, to compensate for the products they are importing.<sup>100</sup> The global trade with virtual water influences the general global trade, and has enormous impacts on food prices, negotiations, and tariffs. It is a development that is closely connected with the coalescence of the global world, the globalization process, which evokes dependencies. This can mean increasing cooperation on the one hand, but could also be the cause of conflicts.<sup>101</sup>

Horlemann and Neubert examined within the scope of a study for the German Development Institute that international trade is regulated by the rules of comparative cost advantage, but the virtual water trade is actually only ruled by “absolute water scarcity,”<sup>102</sup> because countries do not have water prices, or these prices are so low that they do not reflect the actual value of water. Horlemann and Neubert argue that virtual water trade is only reasonable in case of absolute water scarcity because it requires a lot of commitment, like subsidies and action to be taken, to minimize negative consequences.<sup>103</sup> That is why they argue that water pricing is crucial on a global level, which is why countries should only engage in virtual water trade, if they have adequate foreign reserves available.<sup>104</sup>

In this virtual trade with water, agriculture takes the biggest chunk: roughly 80 per cent of globally-traded water is embedded in agricultural

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<sup>99</sup> John Anthony Allan, *Water Security in the Middle East: The Hydro-Politics of Global Solutions*, SOAS, 2015, 7.

<sup>100</sup> World Water Council, *E-Conference Synthesis: Virtual Water Trade – Conscious Choices*, 2004, 7.

<sup>101</sup> Ibid., 14.

<sup>102</sup> Hong Yang and Alexander Zehnder, “Virtual Water”: *An unfolding concept in integrated water resource management*, Water Resources Research, 2007, 9.

<sup>103</sup> Lena Horlemann, Susanne Neubert, *Virtual Water Trade – A realistic concept for resolving the water crisis?* 2007, German Development Institute, 107.

<sup>104</sup> Horlemann, Neubert, *Virtual Water Trade – A realistic concept for resolving the water crisis?* 25.

products.<sup>105</sup> This constitutes a fifth of the total world trade, and it is, therefore, more sustainable for countries to import the goods than to have to use their own, presumably-scarce water resources, especially for agricultural products.

Israel began to switch from cereal agricultural production to so-called high-valued crops (citrus, avocados, kiwis, guavas, mangos) in the late 1960s, and to import water-intensive food staples from the European Union (EU) and the US. Allan calculated that Israel, as well as the Palestinian territories, import two thirds of their total water and food needs in virtual form.<sup>106</sup> Israel is highly engaged in virtual water trade, both the import and export; this is due to the fact that Israel, which has a population of about 8.5 million, the Palestinian territories, with a population of about 4.4 million, has a water demand of 7,300 million m<sup>3</sup> over a territory spanning 27,000 km<sup>2</sup>; the actual availability of water is only 3,100 million m<sup>3</sup> – a deficit of about 4,200 million m<sup>3</sup>.<sup>107</sup> Israel, with the assistance of the US, developed a diverse economy by 1986, which enabled it to buy and import water-intensive goods, like wheat, from more water-abundant countries. The result was that Israel could “purchase its water entitlements on the international cereal market, therefore allowing it to alter its water policy.”<sup>108</sup> This economic advantage, and Israel’s strong water institutions – especially Mekorot and Israel’s agricultural lobby – enabled it to always import water-intensive products. Israel’s agricultural lobby is very-well established, and has a strong connection to the government. This is why they demand “large amounts of water at the lowest possible price”,<sup>109</sup> and Mekorot, as a government institution, suggests new projects and makes proposals for new desalination plants to make sure that the farmers get their water for the requested price.<sup>110</sup> These connections will be analysed more closely in section 10.

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<sup>105</sup> Raphael Astrow, *Mapping Israel’s Virtual Water Trade*, Carnegie Mellon University, 2014, 2.

<sup>106</sup> Jan Selby, *The Geopolitics of Water in the Middle East: Fantasies and Realities*, Third World Quarterly (2005), 333.

<sup>107</sup> Diana Hummel, Thomas Kluge, Stefan Liehr, Miriam Hachelaf, *Virtual Water Trade*, Institute for Social-Ecological Research (ISOE), 2006, 40.

<sup>108</sup> Nilanjan Ghosh and Anandajit Goswami, *Sustainability Science for Social, Economic, and Environmental Development*, 2014 IGI-Global, 144.

<sup>109</sup> Hummel, Kluge, Liehr, Hachelaf, *Virtual Water Trade*, 41

<sup>110</sup> Hummel, Kluge, Liehr, Hachelaf, *Virtual Water Trade*, 42.

## 5. Israeli-Palestinian water policy in the West Bank

After Israel gained independence in 1948, it developed and increased the amount of water it extracted from the Mountain Aquifer, which lies in the West Bank but is sourced from Israeli springs in its coastal area. In 1948, Israeli water use was at 200 million m<sup>3</sup> per year; this increased 10 years later to 1.4 billion m<sup>3</sup> per year.<sup>111</sup> To satisfy Israel's economy and the fast-growing population, it demanded a highly-economic water infrastructure. The economic boom in the agricultural sector caused policymakers to satisfy the demands, without considering the long-time impacts of their measures on the environment and, especially, on water resources.<sup>112</sup> The only goal that the Israeli policymakers had in mind was to achieve self-sufficiency in terms of water and food provision. Water has the highest priority, and for this reason it is an important part of Israel's security policy. After independence and the associated freedom to choose its own internal policy, the Israeli government intensified its water and security policy to guarantee that the fast-growing Israeli population gets sufficient access to the valuable resource. The increased efforts that were made, were especially to the detriment of Palestinian citizens, since Israel was and is the clear hegemon among the two. That is why environmental damages are by far not the only issues of dispute between the Israelis and the Palestinians; overpumping of water resources (by the Israelis) and the legal usurpation of water resources led to several conflicts.

Israel has proven in the past that it is ready to make use of its military power to protect and defend its claimed water resources. In 1964, Syria and the Arab League planned to divert water from the Baniyas River, which would have cost Israelis about 10 per cent of its water supply. To prevent the project, the Israeli military attacked the Arab building site (at the time still under construction) between 1965–1967.<sup>113</sup> The Israeli-Palestinian water conflict is being acted upon similarly; from the beginning, it was a dispute about control and securing national boundaries. The situation between Israel and the occupied Palestinian territories regarding their water resources has been a source of conflict

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<sup>111</sup> Allan, *Water Security in the Middle East: The Hydro-Politics of Global Solutions*, 15.

<sup>112</sup> Naama Teschner and Maya Negev, "The development of water infrastructures in Israel: Past, present and future," in *Shared Borders, Shared Waters. Israeli-Palestinian and Colorado River Basin Water Challenges*, ed. Sharon B. Megdal, Robert G. Varady and Susanna Eden (London New York: CRC Press 2013), 7-8.

<sup>113</sup> Stratfor Worlview, "Israel's Water Challenge," December 25, 2013, <https://worldview.stratfor.com/analysis/israels-water-challenge> (accessed: August 19, 2017).

and dispute since the founding of the State of Israel. Issues concerning ownership and sustainable treatment of the resources are disputed. Before 1948, records prove that water-consumption patterns by both communities have been similar for domestic, as well as for agricultural usage. However, with the proclamation of the State of Israel and the armistice line in 1949, Israeli policymakers restricted the Palestinian population's access to water and the construction of new wells. This was the starting point of increased water extraction by the Israelis, which widened their and the Palestinians' water consumption considerably. After the proclamation, however, Israeli policymakers increased the rate of groundwater that was extracted from the Coastal and West Bank Aquifer, which is why in only ten years after their independence, the Israelis' water use rose from 200 million m<sup>3</sup> per year to 1.4 billion m<sup>3</sup> per year. Since then, issues concerning ownership and the sustainable treatment of water resources are disputed.<sup>114</sup> The differences were evident once again after the Six Day War of 1967: Israeli authorities placed "restrictions on pumping accompanied by restrictive control by means of licensing, application of fixed operating quotas and refusal of permission to deepen wells."<sup>115</sup> With these actions and prohibitive rules, the Israeli government (up until today) made it clear that the conditions are not to be changed and that it is not willing to allocate a greater share of water to the Palestinians. Due to these restrictions, the Palestinians' access to water is still limited and strictly controlled; furthermore, great amounts of water are lost because of old pipelines in the occupied territories. The Israeli water authority also regularly cuts water during periods of drought, for a certain amount of time.<sup>116</sup>

There have not been any negotiations concerning the water resources between Israel and the Palestinians until 1993, when the two parties started negotiations and signed the Declaration of Principles in September 1993 (Oslo I). This was the first time that water utilization and equitable usage was mentioned. They agreed to establish a Palestinian-Israeli Committee for Economic Cooperation, with the task to compile a guideline on water rights and usage of the water resources, however, it was not specific and did not state any clear permissions, or rights.<sup>117</sup> Two years later, in September 1995 after another round of bilateral negotiations, the Oslo II agreement was signed, and Article 40

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<sup>114</sup> Amjad Aliewi and Karen Assaf, "Shared Management of Palestinian and Israeli Groundwater Resources: A Critical Analysis," in *Water Resources in the Middle East. Israel-Palestinian Water Issues - From Conflict to Cooperation*, ed. Hillel Shuval Hassan Dweik, 17.

<sup>115</sup> Ibid., 18.

<sup>116</sup> Ibid., 20.

<sup>117</sup> Aliewi, Assaf, *Shared Management of Palestinian and Israeli Groundwater Resources: A Critical Analysis*, 20-24.

of Annex III stipulated rules for water projects and planning. The article promised to raise the amount of water for the Palestinian territories to 70–80 million m<sup>3</sup> per year, which would be drawn from the eastern and other shared aquifers.<sup>118</sup> This was, however, not what the Palestinian negotiators had in mind because they claimed that since the mountain aquifer gets replenished by rainfall over the West Bank, that this water should be completely allocated to them; another concern was the growing Israeli agricultural lobby and their increasing demand for water. The Palestinians based their claims on the absolute territorial sovereignty theory and the economic needs of their people. Their claims are also based on the argument that Israel can more easily adapt their capacities due to desalination, whereas the Palestinians are completely dependent upon natural replenishment, which is why they argued that they should oversee the mountain aquifer. The provision of water was the Palestinians' main concern in the negotiations, since it is also the foundation they need to keep their Palestinian state afloat.<sup>119</sup> Regardless of the negotiations, the amount of water they receive has not increased since 1995; it is still only 30 million m<sup>3</sup> per year. A first step towards recognising the environmental impact of over-extraction of water resources was also acknowledged in Article 40, and stated that the western and the northeastern aquifer have been overused by the Israelis; in addition, it stated that there is "no further access and development potential for Palestinians."<sup>120</sup> The Oslo II agreement was clearly not a success; it was not specific, and rights and obligations on both sides were not defined. As a result, the realization of Article 40 has been slow and has not really been applied.<sup>121</sup> A glimmer of hope out of the negotiations was both parties' agreement to establish a Joint Water Committee (JWC), which would be tasked to manage water allocation in the West Bank – and that decisions should be reached via consensus. However, even though the JWC tried to regulate water disputes by supervising and monitoring the water system, the JWC is still an instrument of government(s), which is why it remains an issue of high politics.<sup>122</sup>

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<sup>118</sup> Aliewi, Assaf, *Shared Management of Palestinian and Israeli Groundwater Resources: A Critical Analysis*, 26

<sup>119</sup> Bezen Coskun, *Analysing desecuritisation: The case of Israeli and Palestinian peace education and water management*, Loughborough University Institutional Repository, 2009, 145-146.

<sup>120</sup> Aliewi, Assaf, *Shared Management of Palestinian and Israeli Groundwater Resources: A Critical Analysis*, 26.

<sup>121</sup> Aliewi, Assaf, *Shared Management of Palestinian and Israeli Groundwater Resources: A Critical Analysis*, 27.

<sup>122</sup> Coskun, *Analysing desecuritisation: The case of Israeli and Palestinian peace education and water management*, 147.

With the agreement to establish the JWC, cooperation should have been enhanced; reality, however, looks quite different: “Israel has the last word in all affairs concerning Palestinian (shared) water resources.”<sup>123</sup> Furthermore, the Palestinian population still completely depends on water supply from Israel, since no drilling or any other construction to secure self-sufficiency is allowed without Israeli permission.<sup>124</sup> The hydrogeologist Clemens Messerschmid describes these two standards as a “system of jointly operated hydro-apartheid.”<sup>125</sup>

Both accuse each other of not complying with the agreement: The Palestinians blame the Israelis for ignoring Palestinian claims and rights, and the Israelis argue that they have “hydrological reasons for turning down Palestinian proposals.”<sup>126</sup> This is why critics argue that the JWC only results in additional bureaucracy: Jan Selby, professor of international relations who focuses on environmental security, states that the Oslo agreements only dress “domination as cooperation.”<sup>127</sup> The JWC basically functions as an Israeli veto and suppression instrument, which guarantees that Israelis remain in charge of the water resources, despite the peace process. According to the Palestinians, the JWC act inequitably and clearly to the disadvantage of the Palestinians living in the West Bank and the Gaza Strip. A point of conflict is that even though Israel increased the amount of water that is being allocated to the Palestinians – even beyond what is agreed upon in the Oslo agreements – it is not willing to give up any control over water-supply mechanisms. This condition remained intact until July 2001, when, during an additional round of negotiations at Camp David II, Israel agreed to allocate more water to the Palestinians. However, due to misunderstandings and the Palestinians’ rejection, the negotiations failed, too.<sup>128</sup> Regarding the Oslo negotiations, it can be stated that they did not fundamentally improve the relations and the water structure between Israel and the Palestinian authority; it just formalized the monitoring system, and Israel clearly remains the dominant player. On the grounds

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<sup>123</sup> Messerschmid, *Nothing New in the Middle East – Reality and Discourses of Climate Change*, 429.

<sup>124</sup> Stratfor Worldview, “Israel’s Water Challenge,” December 25, 2013, <https://worldview.stratfor.com/analysis/israels-water-challenge> (accessed: August 19, 2017).

<sup>125</sup> Messerschmid, *Nothing New in the Middle East - Reality and Discourses of Climate Change*, 429.

<sup>126</sup> Coskun, *Analysing desecuritisation: The case of Israeli and Palestinian peace education and water management*, 147.

<sup>127</sup> Ibid., 149

<sup>128</sup> Aliewi, Assaf, *Shared Management of Palestinian and Israeli Groundwater Resources: A Critical Analysis*, 27.

of their power asymmetry, relations between Israel and the Palestinian territories regarding water resources are still very tense because there is no agreement on ownership, control, and allocation of any water resource. Additionally, Israel continues to extract water from the technically-shared aquifers in the West Bank; it is estimated that around 35 per cent of water is currently being pumped from the said aquifers. In 2015, Israel extracted 480 million m<sup>3</sup>, whereas Palestinians only used 120 million m<sup>3</sup> in the same time.<sup>129</sup>

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<sup>129</sup> F.A. Ward and N. Becker, *Cost of water for peace and the environment in Israel: An integrated approach*, 5806.



## 6. Securitization theory

According to the Copenhagen School it is crucial, firstly, to analyse and understand the cultural circumstances of a presumed security issue, since neither threat nor security are objective; rather “security is a practice, a specific way of framing an issue.”<sup>130</sup> For the Copenhagen School, therefore, a security issue is also always a process of politicization of the concerned issue, since only the political steps that are undertaken can make the security threat publicly visible, if that is wanted. “It is about the process by which threats get constructed.”<sup>131</sup> Buzan and Wæver define a security issue as “being ‘posited’ (by a securitizing actor) as a threat to the survival of some referent object (nation, state, [...])”<sup>132</sup> The argument is that a security issue will at some point possibly achieve a point of no return, which is why it cannot be handled by normal politics but instead needs to be handled by experts. “The threat can thus be used to legitimate political action which might not otherwise appear as legitimate.”<sup>133</sup>

The strength and power of a securitizing actor show itself in the ability to change the current situation and paving the way for practices and technologies that would not be allowed to be used under ordinary conditions. To achieve that, an actor must have contact with a decision-making group, for example a political party, to acquire a majority for the intended securitization act.<sup>134</sup> Securitization is, therefore, always produced, constructed, and preserved through discourse.

Discourses of any kind always display more than one reality, which then gets shaped into a discourse that convinces the public and policymakers to act. In this way, discourses do not depict reality but rather constitute their own reality, which is the reality that then determines the social reality.<sup>135</sup> The social-psychologist Ian Parker defines discourses as a

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<sup>130</sup> Coskun, *Analysing desecuritisation: The case of Israeli and Palestinian peace education and water management*, 19.

<sup>131</sup> Ibid.

<sup>132</sup> Coskun, *Analysing desecuritisation: The case of Israeli and Palestinian peace education and water management*, 20.

<sup>133</sup> Ibid.

<sup>134</sup> Itay Fischhendler, Daniel Nathan, “The social construction of water security discourses: preliminary evidence and policy implications from the Middle East,” in *Handbook on water security*, ed. Claudia Pahl-Wostl, Anik Bhaduri, Joyeeta Gupta, 2016, 79.

<sup>135</sup> Sara Froschauer, *Diskursanalyse Theorie*, in: *Diskursanalytische Betrachtung des Themas “Zentraleuropa” und seine Präsentation innerhalb neuer Medien anhand der österreichischen Plattformen Eurozone und Kakanien revisited*, Diplomarbeit Universität Wien, p. 35.

system of statements that construct an object; he names criteria which are constitutive for a discourse, namely that:

- discourses are always objects;
- discourses contain and construct subjects, which then form power relations;
- discourses are always an interrelated, signifying system, since the “metaphors, analogies and pictures discourses paint of a reality can be distilled into statements about that reality,”<sup>136</sup> and most importantly,
- discourses are always historically rooted; they change and develop over time<sup>137</sup> – which can be clearly observed in the Israeli-Palestinian discourse, especially regarding their water-security policy.

Kallis and Zografos state that discourses concerning, for example, water scarcity are being used by actors to establish technological measures, like desalination plants, “which mask underlying problems.”<sup>138</sup>

Constructed discourses, like scarcity discourses, are being used to change natural conditions –in the case of water resources, the hydrological condition – to the advantage of the initiator. Constructed discourses create opportunities for institutions or private companies to make a profit out of it.<sup>139</sup> According to the Copenhagen School, the security theory has three components: “the speech act, the securitising actor and the audience [...]”<sup>140</sup> In the following analysis, the focus will be on Israel’s speech act concerning their water-security measures and the way they are justifying their actions and the steps they took. Buzan refers to five sectors that influence security concepts: political, military, economic, societal, and environmental. Also, these five sectors can then be analysed not only on the international level but also regional, national and subnational level.

A crucial concept for the analysis of security dynamics between two states is the concept of “security complexes”. Furthermore, Buzan, Wæver and de Wilde emphasize the importance of power asymmetries, since changes in the power constellations further influence the security

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<sup>136</sup> Ian Parker, *Critical Discursive Psychology*, 2015, 33.

<sup>137</sup> Ibid., 34

<sup>138</sup> Giorgos Kallis and Christos Zografos, *Hydro-climatic change, conflict and security*, Climatic Change (2014), 76.

<sup>139</sup> Ibid.

<sup>140</sup> Coskun, *Analysing desecuritisation: The case of Israeli and Palestinian peace education and water management*, 23.

complex.<sup>141</sup> Additionally, each of these sectors has their own prime concern, which they try their utmost best to achieve; on the other hand, if an achieved position is threatened, or the actor perceives it as being threatened, then “a ‘security logic’ may be invoked by the actor under threat.”<sup>142</sup> Imbalances in power raise the chances of security constructions to be created, since the weaker actor tends to feel constraint by the more powerful in achieving its goal. According to Zeitoun, all Buzan’s security sectors apply to the Israel-Palestinian relation regarding water resources. Especially the power asymmetry is enormous, since Israel indeed holds the regional hegemony; economically and military, it is also by far the strongest player in the Near East, particularly because it has unconditional political support from the US, whereas the Palestinian territories do not even have a military army and a weak economy that is also completely dependent on Israel.<sup>143</sup> It is important to talk publicly about the presumed insecurity to achieve a political majority. Turton states, however, that for a threat to be classified as a security issue, it needs to be existential to approve the initiation of emergency steps.<sup>144</sup>

Water, food, or energy scarcities serve in many countries as the foundation for discourses, since they touch upon the national security of every country, and a threat would endanger the political and economic stability.<sup>145</sup> Fischhendler defines the connection of natural-resource scarcity with national security matters as ‘tactical securitization’; if a policymaker does that, it raises public awareness. There are several ways of achieving this shift of attention from the matter: one is via structural mechanisms, which includes, for example, military zones near water installations; another is the establishment of institutions like basin authorities, and the last one Fischhendler mentions is linguistic techniques, which includes the use of alarming metaphors like ‘point of no return’, or ‘tipping point’.<sup>146</sup> Linguistic framing is often used by policymakers to achieve a fast change, which is of special importance in environmental emergencies, like droughts, floods, and storms, among others.

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<sup>141</sup> Mark Zeitoun, *Violations, Opportunities and Power along the Jordan River: Security Studies Theory Applied to Water Conflict*, King’s College – London, 2007, 2.

<sup>142</sup> Ibid., 4.

<sup>143</sup> Mark Zeitoun, *Violations, Opportunities and Power along the Jordan River: Security Studies Theory Applied to Water Conflict*, King’s College – London, 2007, 7.

<sup>144</sup> Anthony Richard Turton, *Securitization as a Consequence of Increasing Levels of Insecurity*, University of Pretoria, 85.

<sup>145</sup> Itay Fischhendler, *The securitization of water discourse: theoretical foundations, research gaps and objectives of the special issue*, Int. Environ. Agreements, 2015, 2.

<sup>146</sup> Ibid., 3-4.

## 7. Analysis of Israel's water-security discourse

In the case of water resources in the Jordan basin, basically all discourses are biased and always geared towards security issues because political decisions concerning water resources always need the approval of the public and how they perceive the water-security situation. That is why important decisions are being manipulated and constructed to convince the public of their importance. Policymakers in Israel generally downplay the actual circumstances regarding their water resources, since water management with sufficient resources is much easier and politically much more helpful than the management of acute water scarcity.<sup>147</sup> That is why politicians, the agricultural sector, and the water authority apply this discourse and promote self-sufficiency as achievable and manageable. However, a look at the Jordan basin population exposes that self-sufficiency is not achievable because to be self-sufficient, roughly 15 billion m<sup>3</sup> of water would need to be available annually. In reality, only around 3 billion m<sup>3</sup> of water is allocable. This fact is known to policymakers of the Jordan basin, especially because these circumstances have existed since the 1950s. Regardless, the issue of water scarcity and the dependence on other sources to supply their population with water is not discussed publicly; it has become a sanctioned discourse.<sup>148</sup> Recognising this constructed knowledge is crucial in understanding Israel's water policy.

The scarce resource is very unevenly distributed, which is why it has become a political security issue, especially in those countries endangered by extreme water scarcity, like the Middle and Near East. The management of water has, in fact, become not only a national-security issue but also an economic and political point of dispute: Water cannot be separated from politics and a country's political strategies anymore, especially in a water-scarce country, like Israel and the occupied Palestinian territories.<sup>149</sup>

In countries like Israel, where indeed a water deficit exists, the issue "of water insecurity [...] become[s] an issue of high politics."<sup>150</sup> All political parties have managed to disperse the topic into a constructed discourse that only tells half the truth, namely that 'only a little more water is needed, then it will all be fine', so, basically, the public is led to believe that the country is doing better than it actually is.<sup>151</sup> The political problem

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<sup>147</sup> Allan, *Hydro-Peace in the Middle East: Why no Water Wars? A Case Study of the Jordan River Basin*, 258.

<sup>148</sup> Ibid., 260-261.

<sup>149</sup> Selby, *Water, Power & Politics in the Middle East. The other Israeli-Palestinian Conflict*, 37-38.

<sup>150</sup> Allan, *Water Security in the Middle East: The Hydro-Politics of Global Solutions*, 2.

<sup>151</sup> Ibid.

is that a severe water-scarcity issue cannot be acknowledged, since politicians and policymakers would pay a high price, if they would admit that under their administration serious mismanagement occurred. That is why they stick to the sanctioned discourse, and state that everything is under control. The national water discourse in Israel has always been deeply connected to the political circumstances with its neighbours, especially the Palestinians living in the West Bank and the Gaza Strip. In the Israeli discourse, the securitization of the flow of the Jordan and the aquifers that are in the occupied territories, is of the highest priority. In general, water resources are perceived in the Israeli discourse as limited, which is the main reason why Israel invests strongly in recycling technologies and desalination research. Water is essential for domestic and economic life in the country, and at the same time Israel considers itself enclosed by enemy states, which is why it is securing itself at the highest level.<sup>152</sup> These facts led to the formation of the security discourse, and a “sufficient water supply thus became a value in and of itself, a symbolic practice and a vital condition for Jewish-Israeli identity.”<sup>153</sup>

The aspirations of the early settlers regarding the water sources were quite clear and left no room for interpretations. The securitization of the territory and the economic stability of the young population were the prime principles. This can be especially well-comprehended on the basis of a statement made at the Paris Peace Conference in 1919 by the WZO: “The economic life of Palestine, like that of every other semi-arid country[,] depends on the available water supply. It is, therefore, of vital importance not only to conserve and control them [sic] at their sources (quoted in Lowi, 1995:40).”<sup>154</sup>

With the immigration of Jews into Palestine, the population increased up to 55,000; this meant an additional load on several levels: On the one hand, it had to be ensured that the newcomers would find work and, therefore, development perspectives, both economically and socially; on the other hand, the influx of new people changed the social picture in Palestine. For the first time since the beginning of immigration waves in the 1880s, the Arab population formed a resistance against the Jewish population. The main reason was the policy that Jewish employers were only hiring Jewish immigrants. In relevance, the importance of water was

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<sup>152</sup> Tobias Ide, “The Climate-Conflict Nexus: Pathways, Regional Links, and Case Studies,” in *Handbook on Sustainability Transition and Sustainable Peace*, ed. Brauch, H.G., Oswald Spring, U., Grin, J., Scheffran, J., 2016, 296.

<sup>153</sup> Christiane J. Fröhlich, *Transforming environmental conflict through discourse, illustrated by the Israeli-Palestinian water conflict*, Freie Universität Berlin, 2010, 6.

<sup>154</sup> Coskun, *Analysing desecuritisation: The case of Israeli and Palestinian peace education and water management*, 142.

constructed in the highest regional and national framework. However, Jewish authorities worried only about how to get the water to their people as fast as possible. Until the 1930s, the possibility of a conflict over water resources had not been an issue of high politics; it was only when the tensions within the Arab population grew that the security factor was raised, and the authorities realized that there is an eventual conflict potential in the valuable resource. The conflictive events in the 1930s with Arab revolts shifted the Zionists' water policy, and it became an issue of the highest political-security concern.<sup>155</sup> The huge discrepancies between the Jews and the Arabs gave, for the first time, rise to the idea of dividing the country into two parts for each community. That is why from "1936 onwards, the Zionist Agency's policies of settlement and water resource development became national, rather than local and regional."<sup>156</sup> It was on these grounds that the national water company Mekorot was founded, especially because of its capability to broaden its geographic area of reach and the expansion of small settlements in the north of the country to new settlements in the southern Negev desert, which would display a picture of strength in the region. "This shift singled the emergence of water as a symbol of national significance in Jewish life and of water policies as part and parcel of attempts to produce a distinctly Jewish, settler identity."<sup>157</sup> British mandate authorities tried to convince Zionist leaders that Palestine had the capacity to take in greater numbers of immigrants than that which was suggested by the British mandate experts. One crucial point here is that the Zionist experts whitewashed their capacities to supply water to the population and to irrigate the agricultural lands. Besides whitewashed expert reports, the Bible has also been frequently used to justify the Zionists' doings. One Bible verse that had been used by the American expert Lowdermilk, as well as by the Israeli Prime Minister David Ben-Gurion is:

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<sup>155</sup> Samer Alatout, *Bringing Abundance into Environmental Politics: Constructing a Zionist Network of Water Abundance, Immigration, and Colonization*, Social Studies of Science, 2009, 368-372.

<sup>156</sup> Ibid., 372.

<sup>157</sup> Ibid., 374.

“Behold, the Lord thy God giveth thee a good land, a land of water brooks and fountains that spring out of the valleys and depths, a land of wheat and barley, of vines, figs and pomegranates, of olive oil and honey, a land in which thou shalt eat bread without scarceness, thou shalt not lack anything in it.”<sup>158</sup>

Almost every imaginable method has been used to secure the land – and to convince the British mandate power of the necessity to accredit the land of Palestine to the Jewish immigrants, and to prevail against the Arab population. The control over water resources, the cultivation of the bleak landscape, and the vigorous settlement construction became one with the Zionist ethos (of making the desert bloom) and, with that, became a fundamental principle of the Jewish-Israeli identity. This is exactly where the current Israeli discourse regarding water resources, agriculture, and settlement construction is positioned: “water became an aspect of national security, of the security of the Jewish identity.”<sup>159</sup> Israel’s water policy has been shaped by the ideologically-framed expansion of the water infrastructure.

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<sup>158</sup> Alatout, *Bringing Abundance into Environmental Politics: Constructing a Zionist Network of Water Abundance, Immigration, and Colonization*, 381.

<sup>159</sup> Christiane J. Fröhlich, *Security and discourse: the Israeli-Palestinian water conflict*, Conflict, Security & Development, 130.

## 8. Analysis of Israel's political discourse since its independence

Water resources in the region continued to be of major political importance after independence in 1948. However, most importantly, the discourse of water abundance changed to a discourse of water scarcity. This shift was closely connected to David Ben-Gurion's<sup>160</sup> ideal to build a strong centralized state. In Ben-Gurion's vision, the newly founded state represented everything – the big hope that all Jews in diasporas had hoped for – and he wanted to fulfil every criterion and demand that defined Jewish identity. After independence, it became clear that this is only going to be possible by establishing institutions that finally can give “meaning to the new Jewish subject, who was lost in Diasporic meaninglessness prior to the establishment of Israel.”<sup>161</sup> He managed quite successfully to centralize and organize education, labour exchange, immigration policy, as well as the management of water resources.

After independence, the political discourse on water resources changed from the representation that water was abundant to that of water scarcity; Israel needed to convince the mandate power that water needs the highest protection possible and cannot be separated from security policy. Ben-Gurion knew exactly how to politically use the public notion of water scarcity to get public approval to establish a strong centralized state.<sup>162</sup> The overall goal was to unite the diverse and scattered immigrants, and to create a feeling of unity in a state that unites and merges different backgrounds, with the help of strong institutions, so that new citizens would be ready to give their all for this new nation state. The way that this would be achieved was by working the land “in productive endeavours like farming and agriculture.”<sup>163</sup> According to the community and environmental sociologist Alatout, these were all constructions of scarce water resources, the urgent need of a strong centralized state, and a rather obedient Jewish citizen in comparison to Palestinians, who were portrayed as a threatening group of people, whose

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<sup>160</sup> David Ben-Gurion was born in 1886 in Poland and immigrated to Palestine in 1906. From an early age, he was very active in the autonomy of Jews in the Ottoman Empire. He had a close connection to the British mandate power, and fought to implement Herzl's vision of an independent Jewish state. When Ben-Gurion declared independence on 14 May 1948, he became the first prime minister, as well as the first minister of defence.

<sup>161</sup> Samer Alatout, *State-ing Natural Resources through Law: The Codification and Articulation of Water Scarcity and Citizenship in Israel*, The Arab World Geographer, 2007, 20.

<sup>162</sup> Alatout, *State-ing Natural Resources through Law: The Codification and Articulation of Water Scarcity and Citizenship in Israel*, 21.

<sup>163</sup> Ibid.



equal right to water and economic development had been undermined and ignored. These constructed discourses made it possible for the Israeli policymakers to justify their water management and the redirecting of the Jordan River to irrigate lands of Jewish settlers – an action that was illegal under international customary law.<sup>164</sup> The central focus of Israeli politics up to the present is absolute control of its water resources, and this includes independent water management in which Israel has no willingness to compromise. Control over water resources and state security coincide and are inseparable. This can very well be observed when looking at the West Bank: According to international law, it is a shared water resource – but Israel actually controls 90 per cent of it. Even though Israel recognized in the Oslo II negotiations that Palestinians have a right to it, this did not lead to significant changes in the control over water resources. The main reason why it is so difficult, if not impossible, to find a solution is because of Israel's national-security policy, which stands above everything else. In the Israeli security policy, national security and water security are inseparable.<sup>165</sup> This is supported by the public scarcity discourse, which claims that Israel needs every drop of water for themselves: "The scarcity narrative thus underpins a much stronger and more determining security discourse."<sup>166</sup> This is made quite obvious in a statement by Israel's third prime minister, Levi Eshkol, who said that water is "the blood flowing through the arteries of the nation."<sup>167</sup>

Water security has been used by politicians for campaigning and propaganda since independence by the Labour, as well as by the Likud Party.

The Labour Party emerged out of a union of three socialist parties, which consisted of several labour Zionist movements. The Labour Party was in charge from Israel's founding until the Likud Party emerged in 1977. However, even though the Labour Party is a left-wing party and is regarded in their relations with Palestinians as being in favour of intense peace negotiations, they are also unwilling to give up all of the Jewish settlements in the West Bank.<sup>168</sup> Still, the Likud Party, led by Benjamin

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<sup>164</sup> Alatout, *State-ing Natural Resources through Law: The Codification and Articulation of Water Scarcity and Citizenship in Israel*, 21-22.

<sup>165</sup> Mustapha Kamel El-Sayed and Rasha Soheil Mansour, *Water Scarcity as a Non-traditional Threat to security in the Middle East*, *India Quarterly* 2017, 231-232.

<sup>166</sup> Zeitoun, Sabbagh, Dajani, Talhami, *Hydro-political Baseline of the Upper Jordan River*, 105.

<sup>167</sup> Coskun, *Analysing desecuritisation: The case of Israeli and Palestinian peace education and water management*, 142.

<sup>168</sup> BBC, "Guide to Israel's political parties," January 21, 2013, <http://www.bbc.com/news/world-middle-east-21073450> (accessed: September 2, 2017).

Netanyahu, is a lot harsher because, for the right-wing nationalist party, national security matters rank first on their political agenda. Netanyahu and his party clearly defend the Jewish settlements in the West Bank as irreversible and crucial to Israel's survival:

“The Jewish communities in Judea, Samaria and Gaza are the realisation of Zionist values. Settlement of the land is a clear expression of the unassailable right of the Jewish people to the Land of Israel and constitutes an important asset in the defence of the vital interests of the State of Israel.”<sup>169</sup>

It is, therefore, clear that they are willing to do anything to defend and protect the land. As a matter of fact, there is no Israeli party (regardless of affiliation, or political orientation) that is completely against their settlement policy. All parties think, to some degree, that it is necessary to secure additional territory for the Jewish population. This has been justified since 1967, when the occupation of the West Bank and the Gaza Strip commenced. A statement by Rafael Eitan of the conservative Tzomet Party (and also minister of agriculture between 1988–1991) can be seen as exemplary of this, especially because he emphasizes that the occupation was inevitable to secure Israel's survival:

“This intense interdependence and the scarcity of water supplies accentuate even more the severity of the problem of authority... It is important to realize that the claim to continued Israeli control over Judea and Samaria is not based on extremist fanaticism or religious mysticism but on a rational, healthy, and reasonable survival instinct.”<sup>170</sup>

The fact that Eitan felt the need to describe the securitization of water resources as an act of survival makes clear that an agreement on shared control with the Palestinians, or any further concessions, are out of question. Strategically, water has always been a crucial point in state security and, therefore, also of the Jewish entity. The agricultural sector became the main driving force in Israel's water policy. David Ben Gurion and Levi Eshkol of the labour party Awoda,

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<sup>169</sup> Web Archive – Likud Party platform, “Peace & Security,” [https://web.archive.org/web/20070930181442/https://www.knesset.gov.il/elections/knesset15/elikud\\_m.htm](https://web.archive.org/web/20070930181442/https://www.knesset.gov.il/elections/knesset15/elikud_m.htm) (accessed: September 2, 2017).

<sup>170</sup> Coskun, *Analysing desecuritisation: The case of Israeli and Palestinian peace education and water management*, 142.

who became the first director of Mekorot, were to a great extent integrated into water planning. However, there are different perceptions on water management among the Jewish plantation owners and the Zionists, who were supported by the Labour Party. The farmers were in favour of less labour-intensive drip-irrigation systems, while the labour Zionists were clearly in favour of employing as many people for farm labour. When the labour Zionists realized in the beginning of the 1960s that more food is needed for the fast-growing population, they acknowledged that the new technologies in the form of drip irrigation and machinery have to replace hard working people to guarantee the adequate supply of the newly-arriving citizens; that is why they fully supported the further development and expansion of the technological advancement.<sup>171</sup> Similarly, the Water Law of 1959 can be seen as ambivalent: On the one hand, it established that all water-related issues should be governed under a centralized system, which should make it easier to govern; on the other hand, it led to the fact that, as Alatout puts it, water scarcity has been constructed as being a fact, and the only way to manage it is by a “strong centralized state.”<sup>172</sup> Even though the encompassing Water Law of 1959 established that all water-related issues should be governed under a centralized system, it is still highly fragmented, and especially the agricultural lobby in the Knesset has an enormous impact on policy decisions. The coalition in the Knesset cannot be associated with one party, but their members belong to various Knesset parties. Their common feature is that they are in some way connected to the agricultural sector. The fact that they could form a lobby across political parties is owed to the fact that in the Israeli political system, party formation is achieved on the basis of their position in relation to the occupied territories and the general Israeli-Arab conflict.<sup>173</sup> It is because of Israel’s unique institutional structure that the overall supply of water to the agricultural sector is enabled. However, there are also negative impacts of this achievement, especially the power of the water commissioner, who is the main executive power in control over Israel’s water resources; he decides to adjust the allocation of water in periods of below-average rainfall. This, in fact, has led in dry periods to “excessive abstraction from aquifers, drawing them down to levels that are considered [...] dangerous by most water professionals.”<sup>174</sup> The

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<sup>171</sup> Feitelson, *Implications of shifts in the Israeli water discourse for Israeli-Palestinian water negotiations*, 301.

<sup>172</sup> Alatout, *State-ing Natural Resources through Law: The Codification and Articulation of Water Scarcity and Citizenship in Israel*, 18.

<sup>173</sup> Eran Feitelson, *Political Economy of Groundwater Exploitation: The Israeli Case*, Water Resources Development, 2005, 418.

<sup>174</sup> Ibid., 421.

water commissioner always had a close connection to the agricultural lobby; in fact, in most cases the commissioner was a member of the agricultural lobby before taking office, which is not surprising, as the commissioner is selected by the ministry of agriculture – so the political orientation and connection is quite clear.<sup>175</sup> This broad support did not change when, in 1977, the Likud Party formed, for the first time, a government in coalition with religious parties. However, what did change was the security focus of Israel's political orientation: Following the Six Day War, the Likud Party focused in its policy on the new territories in the West Bank and their settlement policy. This meant a strict and very distinct security policy and a clear focus on maintaining the borders that were shifted by Israel's victory. For these reasons, a clear shift in the power and economic structures can be observed. Since there have already been many agricultural settlements and cultivated areas, a new settlement approach was being applied – and because there was a lack of appropriate housing and a clear demand in the Israeli middle-class, additional housing were allocated to these new areas. The idea was to combine these new settlements with additional farm workers, who could work the land to supply the growing population with agricultural goods.<sup>176</sup>

While it was considered the ultimate way of making a living, it decreased the agricultural sector's importance, a process which started in the mid-1980s. The reasons for this economic shift is said to have had its origins in a shift in the society itself, and this was then conveyed in the political power system. At the end of the 1980s, the majority of Israelis were living in urban areas, and the traditional value of the agricultural sector had lost its importance. This can also be observed in the weakening of the Labour Party and a gain for the conservative Likud Party. The drought that hit Israel in 1990–1991 influenced its water policy extremely: Policymakers once again became aware of the fact that the land is sensitive to environmental impacts. In 1991, the water level of the Sea of Galilee had hit a record low of 213 m, and with that, it also got the attention of the public. In daily news reports, the situation was described as threatening for Israel's future water supply. Thanks to Israel's well-established institutions, it managed to regulate the demand, and at the height of the drought, the state cut back the amount of water for the agricultural sector to 875 million m<sup>3</sup>, while the total use was cut down to only 1,420 million m<sup>3</sup> in 1991.<sup>177</sup> This was even more dramatized by a special report in the late-1990s issued by the state comptroller about Israel's water situation.

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<sup>175</sup> Feitelson, *Political Economy of Groundwater Exploitation: The Israeli Case*, 421

<sup>176</sup> Feitelson, *Implications of shifts in the Israeli water discourse for Israeli-Palestinian water negotiations*, 304-305.

<sup>177</sup> Selby, *Water, Power & Politics in the Middle East. The other Israeli-Palestinian Conflict*, 37-38.

“The report stated that the crisis was an outcome of long-term policies, favouring agricultural interests over water quality considerations.”<sup>178</sup> However, these public statements and the public attention it received, was played down in the following years due to remarkable rainfall quotas that refilled the aquifers. As a direct result of this, consumption later increased within three years, this time to unsustainable levels. In the agricultural sector, it rose to 1,182 million m<sup>3</sup>; the total use of water was 2,019 million m<sup>3</sup>.<sup>179</sup> Messerschmid, an expert on water in Israel and Palestine, analysed in his research critical statements that have been made in the Knesset regarding the scarce water resources. One point that had been criticized is the management of the resources, which a Knesset member summarized bluntly:

“The astounding failure is primarily manmade! Irresponsible management for the last 25 years, has caused the liquidation of Israel’s water reserves ... There is no doubt about the continuous exploitation and over-pumping, this may be defined as a state of imbalance between supply and demand ... The established system is unwilling to solve the problem by means of the price mechanism ... So far no comprehensive and binding policy has been formulated (Knesset 2002: 11ff).”<sup>180</sup>

They complain that the government is only relying on recycling measures, like the desalination plants, waste-water treatment, and the import of virtual water. The State of Israel is, according to official statements, a land that is naturally water scarce; in this context, the human impact and mismanagement is completely ignored.

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<sup>178</sup> Feitelson, *Implications of shifts in the Israeli water discourse for Israeli-Palestinian water negotiations*, 305.

<sup>179</sup> Selby, *Water, Power & Politics in the Middle East. The other Israeli-Palestinian Conflict*, 37-38.

<sup>180</sup> Messerschmid, *Nothing New in the Middle East – Reality and Discourses of Climate Change*, 435.

## 9. Analysis of Israel's ideological discourse

After looking at Israel's institutions and its party system, along with their justifications for their water-management policy, the following discourse will deal with the ideological justifications Israeli policymakers apply to defend their settlement policy.

Attracting settlers to move to the Jordan Valley was and is being done with substantial incentives to conduct agricultural business. According to the Jerusalem-based Applied Research Institute (ARIJ), settlers get 70 dunam<sup>181</sup> of land and NIS 1,000, as well as significant discounts on water and electricity.<sup>182</sup>

A Ben Gurion University anthropologist states that overpumping and the general overuse of water was part of an “unbalance development and settlement policy. The stupefying waste immediately created a false sense of abundance, and farmers developed a severe addiction to the state-subsidized, clear liquid (Rabinowitz 2008:1).”<sup>183</sup> Meanwhile, Israeli water use increases continuously, and growth is at around 4 per cent annually.<sup>184</sup> Officials of the Israeli government argue that this is being done because of lower costs of providing them with water, since there are “lower demands for quality control, maintenance etc.”<sup>185</sup> At this point, it is relevant to point to the Zionist ethos of “making the desert bloom”, which continues to influence and drive the current Israeli policy on water management, as well as on settlement policy. “The Zionist movement has always seen transforming land into a means of production as the index of success” (Kartin 2011: 272).<sup>186</sup> It is still an official priority and the “Knesset committee of inquiry sticks to Israel's water icons and endorse the continuation of privileged water access for agriculture, due to its ‘Zionist-strategic-political value’ (Knesset 2002: 11ff).”<sup>187</sup>

This is also Jägerskog's argumentation, who analysed Israeli policymakers' arguments and clearly detects the perception that the relinquishment of farming in remote areas would mean a strategic risk.

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<sup>181</sup> Dunam is a metric unit, which has its origin in the Ottoman Empire. The Turkish government stated that a dunam is equal to 1,000 m<sup>2</sup>.

<sup>182</sup> Applied Research Institute – Jerusalem (ARIJ), *Trading your neighbours water*, 2013, 5.

<sup>183</sup> Messerschmid, *Nothing New in the Middle East – Reality and Discourses of Climate Change*, 438.

<sup>184</sup> Ibid., 442.

<sup>185</sup> Tal, *Water Management in Israel: The Conspicuous Absence of Water Markets*, 5.

<sup>186</sup> Messerschmid, *Nothing New in the Middle East – Reality and Discourses of Climate Change*, 438.

<sup>187</sup> Ibid.

A statement by Meir Ben-Meir, a former water commissioner, captures this political classification quite clearly: “[T]he Israeli emphasis on agriculture is here to stay, both for cultural/ideological as well as strategic reasons (Ben-Meir, 2001 and Rinat, 2001).”<sup>188</sup> This is why the Israeli government up to today tries to allocate a lot of water to those areas that are remote.

The arguments that are being presented by Israeli policymakers to defend their decisions have firmly established ideological roots and can be traced back to political Zionism, with its superior goal of settling the land and making the desert bloom, which is not to be abandoned – and which why room for negotiations with the Palestinians is rather limited.

## 9.1 Palestinians in the West Bank

What we know today as Israel and the occupied territories has been inhabited by the ancestors of Palestinians, who were called the Canaanites, in 3,300 BC in the Bronze Age. The Canaanites cultivated the land with olive trees, and built an economy through olive-oil production. During the twelfth century BC, the term “Hebrews” was used for the first time. Over the centuries, the land was governed by divergent ethnic groups: from the Assyrians to the Babylonians and the Persians, followed by Alexander the Great, the Ptolemies, and the Byzantines. At the beginning of the Crusades, at the end of the eleventh century, Palestine was divided into four Christian crusader states. In 1187, the crusader states were defeated by the Sunnites, and they occupied Jerusalem. Four hundred years later, they were defeated by the Ottoman Turks, and Palestine stayed in the Ottoman Empire until its demise in 1917.<sup>189</sup> After World War II, the fertile coastal lands were forfeited to the newly founded Israeli state, and after the Six Day War, the lands of the West Bank were settled under the justification of ‘military-security purposes’; since international law dictates that it is only allowed to do so for a limited amount of time, the Israeli government simply declared a great part of the land as state land.<sup>190</sup>

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<sup>188</sup> Anders Jägerskog, *The sanctioned discourse – A crucial factor for understanding water policy in the Jordan River Basin*, Department for Water and Environmental Studies, Linköping University, 2002, 3.

<sup>189</sup> Landeszentrale für politische Bildung Baden-Württemberg, “Die Geschichte Palästinas,” 2014, <https://www.lpb-bw.de/geschichte-palaestinas.html> (accessed: September 19, 2017).

<sup>190</sup> Tchelnov, *Israeli Settler Agriculture as a means of land takeover in the West Bank*, 28.

As of 2014, 2.5 million Palestinians live in the West Bank, but they are excluded from the aforementioned economic progress. Even though they make up roughly 90 per cent of the West Bank population, most of them got expropriated based on Israeli measures – measures that are illegal according to international law – and they are, therefore, forbidden to access the land. Most of the time, they have no other options than to work for a fraction of what Israelis would earn for the same work;<sup>191</sup> on average, Palestinians earn only a sixth of the Israeli wage. Because of this, a codependent relationship between the Israelis and the Palestinians developed because the Israelis were lacking low-skilled labourers, so they gave working permits to Palestinians, who had no other choice but to take it.<sup>192</sup>

On many levels (agriculture, industries, cheap labour), the Israeli government profits greatly from occupying the West Bank; especially the export of agricultural products from the region is significant. Date-palm cultivation increased between 1997–2012 from 9 to 18 per cent.<sup>193</sup> The economic dominance shows itself especially in the control of the water resources, since it blocks the Palestinian economy from growing and, at the same time, allows the Israeli economy to prosper. Tenenbaum concludes that even though Israel claims that it is only there for security reason, it is quite obvious that, apart from religious and ideological reasons, “economic reasons for the state’s aggressive expansion”<sup>194</sup> is also a major driving force. The deliberate expropriation; the cultivation of high-value crops especially made for export, and the prohibition of Palestinians to access the lands (and, basically, blackmailing them to work for a near-to-nothing wage), is all being done to secure the sales market and the export of agricultural goods for the Israelis. In the meantime, the Palestinians cannot do anything but watch how their economy continuously diminishes.

A silver lining for them, though, was the European Commission’s decision in November 2015 that declared that products made in the occupied territories must be labelled as such. Up until then, these products were branded as being “Made in Israel”, but now they either have to state “Made in the Settlements” or “From Israeli Settlement”. Immediately after this had been implemented, the Israeli government suspended some trade deals with the EU, and stated that the EU Commission’s decision is “disguised anti-Semitism.”<sup>195</sup>

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<sup>191</sup> Tchelnov, *Israeli Settler Agriculture as a means of land takeover in the West Bank*, 50.

<sup>192</sup> Tenenbaum, *Israel’s Economic Motives for Colonizing the West Bank*, 53.

<sup>193</sup> Tchelnov, *Israeli Settler Agriculture as a means of land takeover in the West Bank*, 79.

<sup>194</sup> Tenenbaum, *Israel’s Economic Motives for Colonizing the West Bank*, 48.

<sup>195</sup> Charlotte England, “France becomes first European country to label items from Israeli settlements,” *independent.co.uk*, November 29, 2016 (accessed: September 17, 2017).



## 9.2 Ideological reasons for occupying the West Bank

The matter of water scarcity and the Israelis' ideology of making the desert bloom merged in the context of conflict, and became apparent not only in the power asymmetry but also the use of power and control. Economically, Israel grew very quickly after the Six Day War, and especially Israel's technology and weapons economy experienced a significant growth. This was in large part owed to wealthy supporters in the US and Europe; especially the WZO experienced a boost after the victory of the Six Day War. At the 27th Congress in 1968, it expressed its solidarity and support in the "gathering of the Jewish people in their historical homeland."<sup>196</sup> This included the expansion and securitization of the newly-occupied settlements. The only thing that Israel was lacking was sufficient land to supply the growing population with sufficient food. Right after the end of the Six Day War, it acted upon Zionist ideals by settling on the (now occupied) West Bank. Agricultural development in the West Bank meant, on the one hand, fulfilling the biblical prerogative to settle in the so-called 'Judea and Samaria', but it would also have to form the economic foundation of the West Bank, just like it did when the first Jewish immigrants came to Palestine at the turn of the century. This is why, besides fulfilling ideological and economic needs, agriculture in the West Bank was also supposed to be a key mechanism in securing the land with cultivated areas and Jewish settlements for the steadily-growing Israeli population.<sup>197</sup>

The first settlements were mostly secular and associated with the Labour Party and the kibbutzim and moshavim movement; these expanded very quickly, and today there are roughly 350,000 settlers living in the West Bank.<sup>198</sup> In 1975, around 2 billion m<sup>3</sup> of water was available to the prospering Israeli population. For the industrial, agricultural, and domestic use, 1.6 billion m<sup>3</sup> per day was needed, which left only about 404 million m<sup>3</sup> per day "for expanding industry and irrigation systems, which was insufficient for the roughly 20,000 incoming immigrants in 1976."<sup>199</sup> The occupation of the West Bank was, therefore, also

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<sup>196</sup> The Knesset Lexicon of Terms, "The World Zionist Organization," 2008,

[https://www.knesset.gov.il/lexicon/eng/wzo\\_eng.htm](https://www.knesset.gov.il/lexicon/eng/wzo_eng.htm) (accessed: September 4, 2017).

<sup>197</sup> Lilach Tchelnov, *Israeli Settler Agriculture as a means of land takeover in the West Bank*, Kerem Navot, 2013, 6.

<sup>198</sup> Ibid., 50.

<sup>199</sup> Joshua Tenenbaum, *Israel's Economic Motives for Colonizing the West Bank*, Beloit College, 2014, 54.

strategically valuable because the Mountain Aquifer was one of the best water resources in the region.<sup>200</sup>



Source: [btselem.org](http://btselem.org): “Acting the Landlord: Israel’s Policy in Area C, the West Bank”

Until the end of the 1990s, over 800,000 dunam was declared as state land (marked in red on the map above), which means that the land was protected by the Israeli military – and which made it even more attractive to Israeli settlers, since they were perceived as national security and received the highest protection possible;<sup>201</sup> this is also why Israeli settlement agriculture boomed in, especially, the West Bank and the Jordan Valley.

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<sup>200</sup> Tenenbaum, *Israel’s Economic Motives for Colonizing the West Bank*, 51.

<sup>201</sup> Tchelnov, *Israeli Settler Agriculture as a means of land takeover in the West Bank*, 33.

Most of the Israeli settlers in the West Bank hill are religious, which is why the ideological and religious notion and incentive of settling and cultivating the land are deeply rooted in their understanding.<sup>202</sup> The Orthodox received full support from religious leaders in the settlements, and rabbis, like Eliezer Melamed of the Har Bracha settlement, backed up the settlers by justifying settlements in a religious way, as the duty of a faithful Jew, in fact:

“We are well aware that the mitzva [biblical precept] of settling the land does not only mean conquering the land [...], but also settling throughout the land, so as to leave no place barren, that there should not be a single piece of good and sacred land left uncultivated. [...] This includes the mitzva to plant fruit trees, so that the land will be settled and yield its sacred fruit and be redeemed from its barrenness. The Land of Israel is unique in this way. Outside of Israel there is no mitzva to plant trees; only those who need it for their livelihood plant trees. But in the Land of Israel, even those who already have a good livelihood are duty-bound to plant fruit trees.”<sup>203</sup>

They cultivate for the most part grapes, olives, and pomegranates – fruits that also have cultural symbolism in Judaism<sup>204</sup> – and they are also suited for the climatic conditions. With the declaration of vast parts of the West Bank as state land, and intensive investments in security measures and irrigation systems, as well as water treatment, large-scale profit enterprises evolved, which still have great value for the Israeli economy.<sup>205</sup> What is really interesting to observe is that the division between religious and secular settlements has shifted: only 16 per cent of agricultural farms in 1997 were because of religious settlement; this number increased to 20 per cent in 2012, and “almost 40% of the added agricultural area since 1997 has been added around the religious settlements.”<sup>206</sup> This implies that the policy and the moral efforts of persuasion are working for the government, and, in fact, religious settlers are migrating to the occupied territories to do their deeds for the state.

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<sup>202</sup> Tchelnoy, *Israeli Settler Agriculture as a means of land takeover in the West Bank*, 39.

<sup>203</sup> Ibid., in 2001.

<sup>204</sup> During the exodus from Egypt, Moses sent Israelites to find something fertile in the new land of Canaan; they came back to him with grapes and pomegranates – a clear sign of fertile land, exactly as God had promised (Numbers 13:23). Richard D. Patterson, “Spiritual Fruit: A key to true health”.

<sup>205</sup> Tchelnoy, *Israeli Settler Agriculture as a means of land takeover in the West Bank*, 67.

<sup>206</sup> Ibid., 71.

Especially the Habayit Hayehudi Party has become the party of the settlers. The national-religious conservative party, with its chairman, Naftali Bennett, completely rejects the abandonment of the Jewish settlements. Bennett and his party, whose name means “Jewish Home Party” in English, is fighting for the settlers, and is giving them the promise that the occupied territories will remain in Israeli hands; under no circumstances will they be given back partly to the Palestinians – as Netanyahu and the Likud have suggested. “There will never be a peace plan with the Palestinians.”<sup>207</sup> Since the Knesset election in 2015, the government is run by a coalition of the Likud Party and the Habayit Hayehudi, Shas, and Kulanu. While the Likud fielded the prime minister (Netanyahu), the Habayit Hayehudi fielded the minister of defence, as well as the chairman of the WZO.<sup>208</sup>

Morally, the state has especially used religious values to justify their actions; one of the first examples was to refer to the region of the West Bank as Judea and Samaria, their biblical names. This should indicate the biblical prerogative of the Jewish settlers; the justification that, for centuries, these lands belong to them, and that it is their divine right to settle there. Furthermore, the armistice line of 1949 was erased “from atlases, maps, and textbooks,”<sup>209</sup> all to help settlers eliminate any guilty conscience, emphasizing that their actions are justified. Israel’s incentives and rewards for settling in the West Bank, as well as their moral justification, were quite successful, and the population growth in the occupied territories was institutionalized and is omnipresent on their political agenda. According to Tenenbaum, the population increased between 1980–2010 by 122 per cent; this immense growth is being used by the Israeli government in negotiations, as justification to remain in the West Bank, since so many people are now already settled there.<sup>210</sup>

Water is ideologically important on many levels, especially of strategic importance to the national security of the country. In all the arguments defending their water policy, Israeli policymakers always refer to political Zionism; its ideology of making the desert bloom, and the basic principle of sufficient water supply to grow the Jewish population.

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<sup>207</sup> David Remnick, “The Party Faithful,” *The New Yorker*, January 21, 2013, <https://www.newyorker.com/magazine/2013/01/21/the-party-faithful> (accessed: September 5, 2017).

<sup>208</sup> Knesset Committees, “Current Committee Chairpersons,” 2016, [http://knesset.gov.il/committees/eng/current\\_chairs\\_eng.asp](http://knesset.gov.il/committees/eng/current_chairs_eng.asp) (accessed: September 20, 2017).

<sup>209</sup> Tenenbaum, *Israel’s Economic Motives for Colonizing the West Bank*, 47.

<sup>210</sup> Ibid.

Regarding the relationship between the Israelis and the Palestinians, prior to the peace negotiations in 1995, Israel made clear via military orders that Palestinians are restricted to enter expropriated territory, but with the peace talks and the establishment of the JWC, Israel is also putting pressure on the Palestinians to help with the JWC, since Israel can use it as a veto mechanism. This leads to the fact that there are not only great differences between the amount of water that is being allocated to the Israelis and the Palestinians, but there are also great variations in what Palestinians receive depending on where they live: the closer they live to Israeli settlements, the less water they receive. Selby calculated that West Bank Palestinians only receive 97 litres per capita – only a third of the Israeli share.<sup>211</sup>

In general, the Palestinian water crisis has long been ignored, and especially the imbalances in the water allocation is completely ignored by Israeli water officials. In fact, the Israeli Water Authority (IWA) presented a much smaller number of Palestinian citizens in its reports to emphasize that the share that is given to Palestinians is enough and that there is no imbalance in the water allocation between Israelis and Palestinians.<sup>212</sup> There is a completely constructed discourse regarding the supply of water to Palestinians. Israeli policymakers muddle the facts about the amount of water delivered to the occupied territories, which is much lower than the amount Jewish settlers in the West Bank are receiving. Israel closely follows the increasing demand for water, especially to satisfy the demands of the agricultural sector, with a “20 per cent increase in water demand for irrigation”<sup>213</sup> until the end of the century; but at the same time, it is not increasing the amount delivered to Palestinians.

A senior Palestinian water authority official rejected the accusation that Palestinians were contributing to the water shortages, instead claiming that the IWA is blocking water allocations to Palestinians without admitting this to the Israeli population: “The [IWA] is misleading the public [...] Israel needs to increase the pumping rate from the Deir Sha’ar pumping station and more than half a million Palestinian would receive their equitable share.”<sup>214</sup>

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<sup>211</sup> Selby, Hoffmann, *Water scarcity, conflict, and migration: a comparative analysis and reappraisal*, 1004.

<sup>212</sup> Messerschmid, *Nothing New in the Middle East – Reality and Discourses of Climate Change*, 439.

<sup>213</sup> Messerschmid, *Nothing New in the Middle East – Reality and Discourses of Climate Change*, 445.

<sup>214</sup> Amira Hass, “Israel admits cutting West Bank Water supply, but blames Palestinian Authority,” [haaretz.com](https://www.haaretz.com/israel-news/1.726132). June 21, 2016, <https://www.haaretz.com/israel-news/1.726132> (accessed: September 4, 2017).

Israeli water officials and policymakers justify the Israeli water policy and, especially, reject any accusations concerning their unsustainable export policy. An imbalance in the water distribution was not even recognized by the chief water negotiator in Oslo during the peace negotiations. When he was asked if Palestinians suffer from water shortage, he answered: “Liars! They have enough water to drink ... They want us to bring them water and to live at our expense. Do they care about their nation? They want to be miserable.”<sup>215</sup>

Statements like these are being severely criticized by international organizations and local non-governmental organizations, like B’Tselem; they say very clearly that there is indeed an unfair distribution in the water supply and in the working conditions in the occupied territories. All steps towards waste-water recycling, water treatment, and drilling are only allowed with the consent of the Israeli government; the regional government controls all Palestinian digging. “Works have to be performed by hand, without tools, and digging is not allowed deeper than 40 cm below ground level.”<sup>216</sup> That means that, for the Palestinians, adaptation to the changing conditions under increasing virtual water trade remains strictly bound to Israeli occupation and their governmental decisions over the occupied territories.

Israel is under no circumstance giving up any of its water resources in the occupied territories, mainly because of its ongoing population growth and the water demand connected to it. Since Israel still draws 50 per cent of its drinking water from resources in the West Bank, it would face enormous economic and political restrictions, if it were to give up its unlimited access to the West Bank resources. For these reasons, water management is equally important as national-defence matters, and always has the highest priority of national security.<sup>217</sup> Israel’s West Bank settlement policy is driven to secure and stabilize the existence of the Jewish population.

In the next section, Israel’s export mechanisms and strategies will be critically analysed to understand its economic impact. How are agricultural products being traded, which have been cultivated in the occupied territories, and how are water-price subsidies affecting Israeli farmers? What are the negative impacts?

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<sup>215</sup> Messerschmid, *Nothing New in the Middle East – Reality and Discourses of Climate Change*, 439.

<sup>216</sup> Ibid., 444.

<sup>217</sup> Hummel, *Population Dynamics and Supply Systems. A Transdisciplinary Approach*, 195.

## 10. Analysis of Israel's economic discourse

With Israel's economic development, especially in the high-tech sector, agriculture is not the economic driving force anymore; in 1990, it contributed only 3 per cent to Israel's GDP. Even though it lost its economic relevance, 60–80 per cent of Israel's water supplies are still being used for irrigation purposes; that number depends on the climatic conditions and, therefore, fluctuate. Even though agriculture is not as economically profitable as it used to be, it is still strongly subsidized: Gershon, a critical Israeli water expert, even claims that it, in fact, has “negative economic value: ‘oranges and grapefruits which are grown in Israel [and] are sold abroad are essentially exported water’,”<sup>218</sup> and at the same time, Israel imports its basic foodstuff from the US.

Even though this is known, it is not being changed by the IWA and policymakers; in fact, it is still being defended and proclaimed to be of great importance to the Israeli people. Its value can be found today more in geopolitical terms: In 1997, the ministry of agriculture and rural development states that the “rural and agricultural sector in Israel discharges a national and social responsibility in dispersing population [and] populating frontier regions [...]”<sup>219</sup> A statement by Meir Ben Meir,<sup>220</sup> who was the water commissioner in 1997, can be interpreted in the same way; he said that “were it not for the ideological and practical necessity to cultivate and irrigate land, Israel would not have a water problem.”<sup>221</sup>

In Israel, a strong focus on securing the supply of water for all its citizens has always existed; this is being achieved by the national water carrier, who oversee over 200 irrigation reservoirs and, since 2001, expand desalination plants all over the country. Today, up to 72 per cent of effluents are being reused because of high-tech waste-water treatment plants. However, in this regard, environmental protection has only become an issue since the turn of the millennium; it was ignored for the greater part of Israel's history.<sup>222</sup> At first glance, Israel's agricultural sector seems to manage its water resources very efficiently; for example, the water demand between 1975–1995 decreased from 8,700 m<sup>3</sup> per ha to 5,500 m<sup>3</sup> per ha. Explanations for this are, above all, the latest drip irrigation technologies and the utilization of recycled wastewater for the

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<sup>218</sup> Selby, *Water, Power & Politics in the Middle East. The other Israeli-Palestinian Conflict*, 69.

<sup>219</sup> Selby, *Water, Power & Politics in the Middle East. The other Israeli-Palestinian Conflict*, 69.

<sup>220</sup> Meir Ben Meir was also a member of the Israeli delegation during the peace talks with Palestinians, and he was also a member of the JWC.

<sup>221</sup> Selby, *Water, Power & Politics in the Middle East. The other Israeli-Palestinian Conflict*, 69.

<sup>222</sup> Alon Tal, *Water Management in Israel: The Conspicuous Absence of Water Markets*, Water Economics and Financing – EXPO Zaragoza, 2008, 1.

agricultural sector. This had led to much lower freshwater consumption and, at the same time, increased the crop yield by 12. What has been overlooked, whether it be on purpose or by accident, are the repercussions this water policy has had on the environment; the extreme use of wastewater in the agricultural sector comes at a high price: crop yields are much lower because of the salty recycled water, which “demands irrigation with substantially greater volumes of water in order to maintain the best possible growing conditions.”<sup>223</sup>

This irrigation, then, also leads to enormous salinization and contamination (of the soil) with fertilizers and pesticides. The salinization was also a reason why the government decided to invest in major desalination plants. However, the desalinated water is missing very important minerals, like calcium, magnesium, and sulphur, which are extracted from the water during the reverse osmosis process. It then needs to be added to the soil to achieve the wanted crop yield and to carry out intensive agriculture.<sup>224</sup> Professor Nurit Kliot, a member of the governmental climate committee, criticized the Israeli government for undermining the environmental impact and only celebrating the economic improvements of desalinated water in Israel. She states that “their benefits do not justify their high costs – [...] the environmental costs, which nowadays aren’t taken into consideration.”<sup>225</sup> She points to a big environmental problem that huge amounts of concentrated salt water and chemicals are diverted into the ocean during the process of desalination. That is also why no matter which party forms the government, the management and control of water resources is always the highest national priority “to promote the national agenda of settlement, sufficiency, and security;”<sup>226</sup> since agriculture was and still is the biggest user of water, the sector is a major priority for all governing parties. For these reasons, the construction of the NWC in 1964 was a huge step towards the overall control of the flows of water resources in the Jordan basin. With it, the agricultural sector, domestic households, and the industrial sector were supplied with high-quality water.

Israel has proven with its desalination technology that it can run its economy with 1.6 billion m<sup>3</sup> of water per year. The entire share of available freshwater for Israel is 1,800 million m<sup>3</sup> per year; thus, Israel’s share of freshwater per capita is 10 times higher than that of the

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<sup>223</sup> Ben-Gal, *Sustainable Water Supply for Agriculture in Israel*, 251.

<sup>224</sup> Ben-Gal, *Sustainable Water Supply for Agriculture in Israel*, 251.

<sup>225</sup> Zafir Rinat, “Is Desalination the Solution for Israel’s Water Problems? Depends Who You Ask,” *haaretz.com*, March 23, 2012 (accessed: September 4, 2017).

<sup>226</sup> Eran Feitelson, Itay Fischhendler, Paul Kay, *Role of a central administrator in managing water resources: The case of the Israeli water commissioner*, Water Resources Research, 2007, 2.



Palestinians;<sup>227</sup> in the West Bank and the Gaza Strip, they are only provided with about 200 million m<sup>3</sup> per year. This is of special interest, considering that Israel's non-agricultural sector (industries, the service sector) only require 100 million m<sup>3</sup> to produce over 97 per cent of Israel's GDP. This shows indisputably the imbalance and the masses of water that, also with the assistance of attractive incentives and subsidies, are being pumped into the agricultural sector.<sup>228</sup>

Israel idealizes its modern drip-irrigation system, and it is, indeed, the world leader when it comes to efficient irrigation and the recycling of drinking water. Davidon (2008) claims that it was installed first and foremost to maximize agricultural yields, and that sustainable management was only a side effect.<sup>229</sup> The general trend towards economies of scale shows itself also in the expansion of greenhouses, which are now up to four hectares big; previously they were only 1.2 ha. Agricultural businesses once owned by small family communities are now part of large agricultural enterprises.<sup>230</sup> Over the years, Israeli water authorities have broadened the water supply, even though water resources remained the same, but due to efficient waste-water treatment and desalination, it managed to maintain an economical agricultural sector. Following the years after the Six Day War in 1967, a change in the political structure can be observed. The great developments in desalination technologies in the 1990s led to a slight desecuritization of its water-security discourse. As a result, the virtual water trade and the import of water-intensive products became a matter of security policy in Israel and the Palestinian territories. The Israeli government and water policymakers defend their water policy and their export-oriented agricultural sector. The reasons are diverse: Firstly, it is the only way the government can guarantee the sufficient supply of food, since the agricultural sector could not keep up with the fast-growing population in the country. Secondly, the government does not want to give up agriculture, since it has many tasks to fulfil besides cultivating crops, including the task of national security by occupying large areas of the land, and along with that, making sure that it maintains Israeli land. Thirdly, Israeli policymakers decided to focus on high-value crops for export, in order to afford the import of water-intensive goods because

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<sup>227</sup> Messerschmid, *Nothing New in the Middle East – Reality and Discourses of Climate Change*, 429.

<sup>228</sup> Allan, *Hydro-Peace in the Middle East: Why no Water Wars? A Case Study of the Jordan River Basin*, 264.

<sup>229</sup> Messerschmid, *Nothing New in the Middle East – Reality and Discourses of Climate Change*, 438.

<sup>230</sup> Ben-Gal, *Sustainable Water Supply for Agriculture in Israel*, 241.

trade is only possible if a water-scarce country can offer a good that is wanted somewhere else in the world.

Regarding virtual water trade in the Jordan basin, the trading pattern and behaviour is owed to the global trade system and its regulating factors. "Virtual water enables serious water deficit economies to solve their water problems inexpensively, invisibly, and without political cost."<sup>231</sup> This is also a dangerous factor in virtual water trade, since there are no global regulating factors; governments and companies can go as far as they want, even if this is not actually sustainable anymore for the economies of water-scarce countries. Available virtual water, therefore, often slows down sustainable reforms in a water-scarce country, and policy reforms are often only applied when it is almost too late to make sustainable changes for economies and the environment, which are also often suffering from unsustainable trading patterns. The actual policy goal of governments and companies are rarely publicly discussed, since it also looks better, especially for governments who pretend that they can solve the water-scarcity problem domestically, if the idea of self-sufficiency is prevailing in that country. This is mainly because a shortage of an essential resource such as water is not per se a position of insecurity; however, lacking foreign reserves to trade in exchange for water-intensive products is indeed "a very serious position of insecurity."<sup>232</sup> Governments in the Middle East run their economies according to simplified truth and instrumental lies, namely that the "constructed truth concerning Middle East water security"<sup>233</sup> is that they have not run out of water, but at the same time, virtual water and its trade is not being discussed. In reality, "governments have a choice. They can either announce the insecurity or hide it by sanctioning the topic and preventing it from entering the national discourse."<sup>234</sup> This has been done quite successfully by the Israeli government over the past few decades; with the financial help of the strong agricultural lobby, it was possible to keep the water price for the farmers low, and the job of a farmer with attractive subsidies interesting.

One interesting tool to critically analyse the water consumption of a country is by looking at its water footprint; it reveals how much water a country actually uses and trades, even if it is hidden from the public. The water footprint reveals the importance of water for nations' economies

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<sup>231</sup> Allan, *Hydro-Peace in the Middle East: Why no Water Wars? A Case Study of the Jordan River Basin*, 270.

<sup>232</sup> Allan, *Water Security in the Middle East: The Hydro-Politics of Global Solutions*, 1.

<sup>233</sup> Ibid., 19.

<sup>234</sup> John Anthony Allan and Tony Allan, *The Middle East Water Question: Hydropolitics and the Global Economy*, 2001, 238.

to function properly. It is the total water use of a nation, which includes, besides the agricultural sector, both industries and domestic use. It shows how sustainable a country is dealing with water, and where improvements are necessary. The internal water footprint exposes the number of water-intensive products and services used in a country, and the external footprint shows the percentage of goods and services that need to be imported to satisfy the needs of a nation. This data reveals that Israel, with a population of 8.5 million, has a total water footprint of 14,000 million m<sup>3</sup> per year. The Palestinian territories, with a population of 3.22 million, however, only have a total water footprint of 3,400 million m<sup>3</sup> per year.

Looking critically at these numbers, and at the actual per-capita consumption, the differences become obvious. Israel's per capita footprint is 6,300 litres per day, whereas the Palestinian per-capita water footprint is less than half of that, at only 2,900 litres per day. Another number that makes clear how dependent the Israelis are on virtual water imports is the percentage of the internal and external water footprint: Israel's external water footprint is 82 per cent, while the Palestinians are only at 7 per cent. This shows that they (the Palestinians) are restricted in their trade, and that if they could trade freely and had open access to shared water resources, they could most probably be independent in their water-related trade.<sup>235</sup>

What is strengthening the agricultural sector as well is the much lower price that farmers have to pay for water, compared to people living in urban areas. In 2008, the IWA charged domestic households EUR 0.72 per m<sup>3</sup> of water, while agricultural farmers only have to pay EUR 0.24 per m<sup>3</sup>.<sup>236</sup> In this way, the government and water policymakers, who are in charge of defining water prices, support agricultural farming, and are using this as an incentive to get people to settle in agricultural areas. The Knesset, together with Mekorot, determines official water prices; they are responsible for artificially low prices for the agricultural sector, and this allows "them to produce inexpensive food not only for local consumption but for export."<sup>237</sup> This, in turn, led to a lot of inefficient and unsustainable crop cultivation, and only since the establishment of desalination plants and efficient drip irrigation can this mismanagement be controlled. Nevertheless, as already mentioned, the environmental damage is tremendous, and unfortunately, it is for the most part ignored and kept from public discourse. Especially conservative Zionists only

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<sup>235</sup> Water Footprint Network, "National water footprint explorer," <http://waterfootprint.org/en/resources/interactive-tools/national-water-footprint-explorer/> (accessed: September 6, 2017).

<sup>236</sup> Tal, *Water Management in Israel: The Conspicuous Absence of Water Markets*, 5.

<sup>237</sup> Ibid., 3.

had economic development in mind, which is why they managed to keep the water prices at an extremely-low level. This water pricing policy can also be closely connected to Israel's overall water security policy. In June 2003, Leibovich-Dar summarized in Haaretz<sup>238</sup> that the conservative Zionists would under no circumstances allow the water prices to rise in the agricultural sector because they would fear the destruction of the land by Arabs. To emphasize this statement, she quotes Yaakov Moskovitz (research and development director of a regional council), who said in the Knesset:

“I want to show you a map of this country, on which everything coloured yellow is not ours [...] That land is held by our cousins [the Arabs], we are not there. The true value of the price of water is our presence in this land. The price is the blood we all shed for this land, and alternatively, if you go on with these moves we will no longer be the owners of this land.”<sup>239</sup>

These actions also display Israel's security dynamics on an economic level, and they also illustrate Buzan's research for the Copenhagen School. Israel subsidizes and supports its agricultural sector by all means: financially with much lower water prices; the building of research institutions to make crops more efficient, and with unlimited defence of the valuable West Bank territory. Israel holds on to its uneconomical export of agricultural goods for several reasons, not only to satisfy the financially-strong agricultural lobby but also to defend and strengthen the cultural and religious values of Zionism.

Israel, as well as the Palestinians territories, trade actively with virtual water. The importance thereof is that, in order to afford the import, a good must be produced which is needed by a trading partner; only in this way can a balanced trade be reached. Here, Palestinians get the short end of the stick, as described above: Their trade is being massively limited due to Israeli restrictions, and the Palestinian economy, which depends on agriculture is decreasing. Israel has, compared to the Palestinian territories, the great advantage that it has a flourishing economy, which managed in the 1980s to focus on technologies and the industry sector as a strong economic branch. “This enabled it to purchase its water entitlements on the international cereal market, therefore allowing it to alter its water policy.”<sup>240</sup>

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<sup>238</sup> Haaretz is a government-critical daily newspaper with a liberal and secular orientation.

<sup>239</sup> [haaretz.com](http://haaretz.com), “Plowing Through the Knesset,” (accessed: September 13, 2017).

<sup>240</sup> Hummel, *Population Dynamics and Supply Systems. A Transdisciplinary Approach*, 204.

This balances the import of water-intensive products. However, it is still a constructed argument when Israeli politicians claim that Israel is food-wise and self-sufficient because it is not; it is highly dependent on grain imports from the US and the EU, but it would be too big a political risk to acknowledge that. That is why increasing food imports are being “kept out of the debate on water policy,”<sup>241</sup> and since Israel is subsidizing grain exports, it remains possible for Israeli politicians to continue the sanctioned discourse that there is no water deficit in Israel. A United Nations (UN) report stated that Israel’s aggregate water deficit in renewable water amounts to 1 billion m<sup>3</sup>.<sup>242</sup> Allan remarks that the growing water deficits “are conspicuously absent from public debate, and the urgency [...] has consistently been downplayed.”<sup>243</sup>

Self-sufficiency in terms of food through agricultural production has always been the ideal, but this is neither sustainable nor economically achievable. For this reason, Israel imports agricultural products it cannot justify producing itself. In 2014, Israel imported agricultural goods worth USD 4.26 billion, and an additional USD 1.34 billion of other food items, which was 7.7 per cent of Israel’s total import.<sup>244</sup> Israel’s virtual water footprint is 2,303 m<sup>3</sup> per capita per year; the global average is 1,385 m<sup>3</sup> per capita per year. That means, due to its climate, Israel is relying heavily on virtual-water imports.<sup>245</sup> Israel’s gross virtual-water import is 6.4 billion m<sup>3</sup> per year, and its net virtual-water import is 5.6 billion m<sup>3</sup>; it exports only 0.8 billion m<sup>3</sup>.<sup>246</sup> By importing these amounts of virtual water, Israel makes use of the water that is pouring down in Europe and the US. According to Allan, the total demand of food and water in Israel, the West Bank, and the Gaza Strip, is 7.5 billion m<sup>3</sup> per year; this, in turn, means that about two thirds of their total water requirement is being imported without the population really noticing it. Hoekstra and Hung, professors in water management at the University of Twente, calculated that Israel exported 700 million m<sup>3</sup> of virtual water in 1999 – and

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<sup>241</sup> Allan, *Hydro-Peace in the Middle East: Why no Water Wars? A Case Study of the Jordan River Basin*, 266.

<sup>242</sup> UN, “Economic Aspects of Sustainable Development in Israel,” <http://www.un.org/esa/agenda21/natlinfo/countr/israel/eco.htm> (accessed: September 13, 2017).

<sup>243</sup> Allan, *Hydro-Peace in the Middle East: Why no Water Wars? A Case Study of the Jordan River Basin*, 266.

<sup>244</sup> Israel Country Commercial Guide, “Israel – Agriculture,” September 6, 2017, <https://www.export.gov/apex/article2?id=Israel-Agriculture> (accessed: September 13, 2017).

<sup>245</sup> Astrow, *Mapping Israel’s Virtual Water Trade*, 2.

<sup>246</sup> Hoekstra, *Virtual Water: An Introduction*, 19.

imported 7,400 million m<sup>3</sup>.<sup>247</sup> Water for irrigation has always been a priority, and today Israel is still a major exporting country in agricultural goods and technologies: a total of USD 2.2 billion, which is 4.2 per cent of its total export market. “[...] Israel produces about 690,000 tons of fruits, including 190,000 tons of citrus fruits for exports, as well as wheat, barley, corn, and cotton.”<sup>248</sup>

The occupied Palestinian territories currently import roughly 30 times more water than it exports, amounting to 2,200 million m<sup>3</sup> of virtual water per year. Nassar’s calculations revealed that an estimated one third of its water used in agriculture is leaving the country.<sup>249</sup> Palestinian agricultural trade is strongly influenced by the uncertain political conditions in the region. All actions regarding local water supply, drilling, etc. in the Palestinian territories require the approval of Israel’s water authorities, and Israel is using around 25 per cent of its water supply from the Mountain Aquifer in the West Bank.<sup>250</sup> There is a huge disparity in the access of water between Israel and the occupied Palestinian territories; especially the West Bank is a disputed area regarding water security, since the Mountain Aquifer is refilled by rain that precipitates on the mountains in the West Bank. The water resources in the West Bank, as well as the Jordan River, are transboundary, meaning that they are shared by several countries (Israel, the occupied territories, Jordan, Lebanon, and Syria). This means that, under international law, they should be shared to satisfy all of the riparian states’ demands. Since Israel took over the West Bank after the Six Day War in 1967, it is still in full control of its water resources.<sup>251</sup> The water management also became a part of the Oslo II agreement between Israel and the Palestinian Liberation Organization (PLO) in 1995; it manifested that Israel gets access to over 71 per cent of the Mountain Aquifer, whereas the Palestinian territories only get 17 per cent. The Oslo II agreement was

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<sup>247</sup> A. Y. Hoekstra, P. Q. Hung, *Globalisation of water resources: international virtual water flows in relation to crop trade*, Global Environmental Change, 2005, 51.

<sup>248</sup> EcoPeace Middle East and Royal HaskoningDHV, *Regional NGO Master Plan for Sustainable Development in the Jordan Valley*, 13.

<sup>249</sup> Yasser H. Nassar, “Virtual Water Trade as a Policy Instrument for Achieving Water Security in Palestine,” in *Water Resources in the Middle East. Israel-Palestinian Water Issues – From Conflict to Cooperation*, ed. Hillel Shuval Hassan Dweik, 144.

<sup>250</sup> Ursula Oswald Spring, “Hydro-Diplomacy: Opportunities for Learning from an Interregional Process,” in *Integrated Water Resources Management and Security in the Middle East*, ed. Clive Lipchin, Eric Pallant, Danielle Saranaga and Allyson Amster, 2007, 189.

<sup>251</sup> Foreign Policy Journal, “Water Scarcity: Cooperation or Conflict in the Middle East and North Africa?,” September 2, 2016, <https://www.foreignpolicyjournal.com/2016/09/02/water-scarcity-cooperation-or-conflict-in-the-middle-east-and-north-africa/> (accessed: August 7, 2017).

supposed to stay in place only 20 years, but it is actually still not being implemented fully. The Israeli security policy towards the Palestinians must be observed in this context. Due to Israel's state-controlled and sponsored political economy and the "internal legitimacy of labour Zionism,"<sup>252</sup> it was possible to constitute a comprehensive water supply system with its institutions and research facilities, and, of course, the powerful legal background cemented in the Water Law, which declares all water to be in state control. Israel's fast-growing economy made it possible for decision makers to invest extensively in water infrastructure.<sup>253</sup> A crucial issue is the water that is being used by Israeli settlers in the West Bank to produce agricultural goods for the export market. For example, in 2013, the EU, which is Israel's biggest trading partner, received vegetables and roots worth EUR 30,610,000 cultivated in the settlements of the West Bank alone.<sup>254</sup>

In 2005, Mekorot "extracted 44.1 million m<sup>3</sup> which constitutes 77 per cent of all Israeli West Bank extractions [...] all of which was designated to Israeli settlement agriculture."<sup>255</sup> These high amounts of water serve the irrigation of high-value crops, which are being cultivated for the export market. In fact, up to 80 per cent of the crops that are being cultivated in the Jordan Valley are exported, for the most part, to the EU.<sup>256</sup>

Conversely, Palestinian exports stood at USD 62 million in 2013, an increase from USD 17,175,000 in 2002. Of this amount, USD 12,351,000 was exported: EUR 9,191,336 to Israel and EUR 3,590,092 to countries in the EU. In comparison to Israeli exports, these are much lower numbers.<sup>257</sup> The Palestinian territories export agricultural goods worth 147 million m<sup>3</sup> per year of water, which means that one third of water used in agriculture is leaving the country in the form of citrus fruits.

The interesting fact is that, at the same time, 2,200 million m<sup>3</sup> per year of virtual water is being imported to Palestinian territories, which means that "Palestine imports 30 times more water than it exports."<sup>258</sup> The biggest challenge for Palestinian farmers is the availability of water and not so much the lack of land. In contrast to the Israeli government, the Palestinian government does not subsidize the agricultural sector, and water prices are therefore rather high. Currently, water allocation is

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<sup>252</sup> Selby, *The Geopolitics of Water in the Middle East: Fantasies and Realities*, 334.

<sup>253</sup> Ibid., 334-338.

<sup>254</sup> Applied Research Institute – Jerusalem (ARIJ), *Trading your neighbours water*, 2.

<sup>255</sup> Ibid., 5-8.

<sup>256</sup> Ibid., 9.

<sup>257</sup> Ibid., 16.

<sup>258</sup> Nassar, *Virtual Water Trade as a Policy Instrument for Achieving Water Security in Palestine*, 144.

unsustainable because the demands are higher than the supplies.<sup>259</sup> Nevertheless, in the public discourse, the enormous import of water-intensive goods is understated, or completely concealed because it indicates weakness that a political party is not willing to acknowledge. Instead of treating water resources more carefully and with a sustainable approach, the Israeli government decided to focus on the cultivation of high-value crops, like dates, tomatoes, mangos, and citrus fruits – all demanded from global trading partners – to keep up the image of a balanced agricultural sector. What is not known, is that to maintain the image of an export-strong agricultural sector, Israel is currently growing an “estimated 80% of all Jordan Valley cultivation [...] for exporting largely to the EU.”<sup>260</sup> The production rate by Israeli farms from official Israeli territory is over USD 3.3 billion, and of that, over 20 per cent is being exported.<sup>261</sup>

This means that agriculture has, in fact, become very unprofitable for the Israeli economy, and while Israel has, in general, a positive trade balance, the picture just for the agricultural sector is quite different. According to a statistic by the Observatory of Economic Complexity (OEC), Israel exported food products worth USD 1.16 billion in 2015, but imported more than double that amount: USD 2.43 billion. In fact, Israel’s imports over the last five years have “increased at an annualized rate of 1,5%.”<sup>262</sup> These numbers mean that Israel produces most of its agricultural products for the export sector, which uses over 58 per cent of its valuable and dwindling water resources. This is not at all sustainable, as it would be much more efficient if Israel would import more water-intensive goods via virtual water trade and, by doing that, make sure to keep the water resources in their own country instead of exporting it in the form of high-value crops. In this way, it would then also be possible to supply the Palestinian population with sufficient water, both recycled and freshwater.

In sum, Israel is wasting millions of cubic meters of water to maintain the image that it is an export-oriented, secure, and profitable economy, when, in fact, its agricultural output is only 2.6 per cent of its GDP, and only 4 per cent of its exports. The environmental NGO Fanack also concludes that agriculture will remain a top priority in Israel, “mainly for

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<sup>259</sup> Ibid., 145.

<sup>260</sup> Applied Research Institute – Jerusalem (ARIJ), *Trading your neighbours water*, 9.

<sup>261</sup> Alon Tal, *To Make a Desert Bloom: The Israeli Agricultural Adventure and the Quest for Sustainability*, Agricultural History, 236.

<sup>262</sup> OEC, “Israel Country Profile,” 2016, <http://atlas.media.mit.edu/en/profile/country/isr/> (accessed: September 22, 2017).



ideological reasons and land conservation interests,”<sup>263</sup> which have their historical and political roots in political Zionism.

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<sup>263</sup> Water Fanack of the Middle East & North Africa, “Water Use,” Israel. November, 21 2016, <https://water.fanack.com/israel/water-use/> (accessed: August 5, 2017).

## 11. Conclusion

It can be concluded that Zionism remains the sole ideology and doctrine with which all Israeli parties and a large part of the Israeli population identify. The defined goal of political Zionism – to build and establish a nation state for the Jews, who are being persecuted, suppressed, and threatened by anti-Semitism worldwide – was seen as the only solution to guarantee the survival and the security of the Jewish population. The land of Palestine was chosen because of its historical, religious, and cultural connection to the Jews, and this deep-rooted connection is being used up to the present to justify Israel's security policy, which presents itself especially in Israel's dealing with its water resources.

The leaders of the Zionist movement had a clear vision when they established, in 1870, the Jewish national movement. The professed goal was to promote and encourage Jewish immigration to Palestine, and to establish a prosperous nation state. This would be achieved by emancipation, meaning the autonomous creation of state structures with a functioning government, and the development of a running economy. This meant, first and foremost, intensive investments in the agricultural sector to supply the young population with work and food.

Based on this, the Jewish national movement, guided by political Zionism, established a settlement policy, which convinced Jews from all over the world to settle in the land of Palestine; they were attracted to the functioning economy and the national infrastructure.

In the beginning of the twentieth century, foreign investments were of utmost importance, especially by the WZO, to kick-start the young economy and to finance research institutions, which turned out to be crucial, even today, especially in the water and agricultural sector, where it deals with harsh environmental conditions.

However, financial investments were not the only tactic to achieve the Jewish immigration and settlement, and of thereby fulfilling the political Zionist ideology.

Since the first wave of Jewish immigration in 1903, Israeli policymakers excluded the Arab population from the economic boom and most parts of the infrastructure, and declined any access to it for them. This is how it is done in Israel to this day; it is a two-class society. Israeli policymakers assumed that this was and is the only way of achieving population growth, and they hoped to outnumber the Arab population. (Today it is known that by 2020, the Arabs will have outnumbered the 8.5 million Jews in Israel. Currently, there are 4.4 million Palestinians living in the West Bank and the Gaza Strip, and another 1.4 million reside inside

Israel.<sup>264</sup>) As analysed in this thesis, Israeli policymakers have not always achieved a brilliant performance. It seems that many of them have, up to today, not understood the extreme relevance of especially the scarce water resources, and that they are risking it by choosing the politically-easy way of a constructed picture of self-sufficiency.

Likewise, the occupation of the West Bank and the Gaza Strip, which was a result of Israel's victory in the Six Day War in 1967, can be seen as a strategic securitization of valuable territory, since the Mountain Aquifer, one of Israel's most valuable water resources, is located there. Even though Israel and Palestinian authorities entered into negotiations in 1993 and again in 1995, they were not able to agree upon shared management. The Israeli-Palestinian conflict concerning the West Bank and, especially, water allocation is still an issue of high politics and, in fact, extremely unequal. On average, 310,000 Palestinian are completely cut off from water infrastructure, and another 50,000 Palestinians have to live off 20 litres of water per person per day – according to the World Health Organization, the minimum standard of water for “short-term survival in an emergency situation”.<sup>265</sup> That means that it is imperative that this situation needs to change. The occupation of the West Bank is defended differently by religious and secular Zionists in Israel. The main argument by the religious and ultra-orthodox Jews is that the West Bank is the historic patrimony of the Jewish people, and for that reason, they are destined to be in charge of the territory they call Samaria and Judea. Israelis who define themselves as secular are also convinced that the West Bank territory is of high value, most of all from a strategic and geopolitical point of view, and that it is important to secure, defend and protect it. The clear separation and exclusion of the Arab population still have consequences for both Israelis and Arabs. The political relations with the Arab population and to the Arab neighbour states continue to be extremely tense.

Of course, there are always two sides of the coin, and the Arab governments contribute greatly to the historic events and the current political situation. However, the focus in this thesis was supposed to be on Israel's actions: how the Jewish national movement, led by political Zionism, achieved to establish a functioning nation state, and managed to construct an extremely well-established water-management system, even though external circumstances and, especially, scarce water

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<sup>264</sup> Haaretz Newspaper, “Palestinians to Outnumber Jewish Population by 2020, Says PA Report,” [haaretz.com](https://www.haaretz.com/middle-east-news/palestinians-to-outnumber-jewish-population-by-2020-says-pa-report-1.491122). January 1, 2013, <https://www.haaretz.com/middle-east-news/palestinians-to-outnumber-jewish-population-by-2020-says-pa-report-1.491122> (accessed: October 6, 2017).

<sup>265</sup> WHO, *How much water is needed in emergencies*, Technical Notes on Drinking-Water, Sanitation and Hygiene in Emergencies, 2011, 1.

resources, which threatens the whole Near and Middle East, made it hard for the pioneers and (current) policymakers.

For these reasons, water is seen as a security issue, which has to be protected and defended by all means. The politicization and securitization of water resources led to the fact that water is now also in the public discourse and seen as a threatened resource which needs full protection. This is exactly the balancing act the Israeli governing is pursuing: On the one hand, the public should see water as a scarce resource, which needs to be protected, and why it is important to cut access to Palestinians; on the other hand, the public should know that everything is under control and that there is and always will be sufficient water for the Jewish population.

This constructed discourse, however, shows its cracks by looking at the import rates of water-intensive goods; they prove that Israel is completely dependent on water-rich countries and that it is not at all self-sufficient.

Until now, the Israeli government managed, through strategic water management and virtual water trade, to import those goods it cannot afford to produce itself anymore. However, they are not choosing the most rational and sustainable way, but rather one motivated by ideological reason, which also presents itself in the enormous subsidies of the agricultural sector; other explanatory reasons are, on the one hand, the historic connection of agriculture to political Zionism, and the support of the financially-strong agricultural lobby, and on the other hand the agricultural development used in the Arava desert region to secure state borders. The leading thought regarding the Israeli economy was, until the mid-1990s, to work more effectively and to get more out of every drop of water. Lasting environmental damages as a result of this thinking were played down, publicly ignored, and constructed as non-existent for the sake of political votes. The population ought to see only the good and prosperous view of their nation state as self-sufficient, economically strong, and competitive. Israeli experts continue to research and develop even more efficient crops that grow under harsh conditions.

Keeping in mind their drive for modernization, their hope to achieve the best circumstances for the nation state, and striving toward fulfilling the Zionist dream of a lasting homeland for the persecuted nation with the highest living conditions, the young nation indeed “made the desert bloom”, especially considering the adoption of new and modern technologies like drip irrigation, waste-water treatment, and effluents, and the national water carrier’s construction of desalination plants.

It can be concluded that it will remain a challenging task for Israel to keep agriculture as a cultural heritage and as an idealized economic factor as it was once seen. However, with the same will that founded political

Zionism at the beginning of the twentieth century, which eventually brought the young settler nation to the point where they are right now, it can be possible to preserve and maintain agriculture as an aspiring vision and ideology.

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