

# Struggle, Change and Growth: How Israel and Kibbutz Na'an navigated similar economic paths

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Kibbutzim played an instrumental role in the Jewish migration that led to the establishment of the State of Israel. These unique, communal settlements enabled young Jews to overcome many of the hardships associated with living in an unfamiliar, harsh environment. In 1944, a mere 16,000 people lived on kibbutzim.<sup>1</sup> Today, 270 kibbutzim exist in Israel consisting of over 130,000 members.<sup>2</sup> Interestingly enough, in their relatively short histories, kibbutzim underwent major ideological and economic changes in parallel with the State of Israel itself. This essay will explore the relationship between the development of kibbutzim and the State of Israel by focusing on Kibbutz Na'an, Israel's largest kibbutz with a population of 1,550 residents.<sup>3</sup> Although the timelines of the evolution of Kibbutz Na'an and of Israel are not identical, the two underwent critical transformations from operating as socialist, agriculture-based systems—in keeping with the early ideals of the Zionist movement—to functioning as high-tech structures within the global economy. This shift illustrates how Kibbutz Na'an, which once mainly relied on agricultural production, is now a significant exporter of irrigation technology.

This essay uses books, documentaries, photographs, interviews, and an online article in order to demonstrate the similarities between the economic trajectories of Israel and of Kibbutz Na'an's. Because very little literature exists in English on Kibbutz Na'an, interviews provided the most essential information about the kibbutz. I conducted interviews with Oved Yacoby and Amos Shifris, two individuals who have intimately interacted with Kibbutz Na'an. Although he was never an actual member of Kibbutz Na'an, Yacoby lived "50 meters" (about 160 feet) from the fence of the kibbutz and attended its school from kindergarten until 12<sup>th</sup> grade (1945-1956). Following his

military service, Yacoby remained engaged with Kibbutz Na'an until he moved to Tel Aviv in 1964.<sup>4</sup> Shifris was born in Kibbutz Na'an to parents who were founding members of the kibbutz. He remains a member of Na'an to this day, witnessing its growth throughout his lifetime. Further, Shifris is an expert on Kibbutz Na'an. He graduated with a Ph.D. from Hebrew University, where he wrote his thesis on a notable member of Kibbutz Na'an, Israel Galilee, who served as commander in the Haganah (Jewish paramilitary forces prior to the creation of the State of Israel) and as a minister in the Israeli government. In addition, in 2010, after four years of research, Shifris published "Kibbutz Na'an: The Biography of a Place," which tells the story of Kibbutz Na'an from its establishment in 1930 until 2010. Unfortunately, this book currently only exists in Hebrew.<sup>5</sup>

This essay is divided into four subsections, each capturing the similarities between Israel and Kibbutz Na'an. The first section will convey how both Israel and Kibbutz Na'an were founded upon similar democratic, socialist ideologies. The second will offer a comparison of the economies of Israel and of Kibbutz Na'an during their respective formations. The third will explore the transformative years in which both Israel and Na'an lost their socialist roots. Lastly, the fourth will describe how both Israel and Kibbutz Na'an have thrived since embracing capitalist economic systems.

The creation of the modern State of Israel can be traced back to the late 19<sup>th</sup> century. During this time, Eastern Europe witnessed a rise in nationalism and anti-Semitism, driving many Jews to emigrate from their home countries. The creation of the Zionist movement, which aimed to provide the Jewish people with a homeland of their own, led many Jews to travel to Palestine. Influenced by the socialism of Russia and Eastern Europe, many Zionists felt that Jews not only had to free themselves from anti-Semitism, but also from the evils of capitalism. These Jews became known as Labor-Zionists. They held significant power in the Yishuv, a pre-Israel Jewish community in Palestine. The Labor-Zionists worked to turn the vision that they had for a socialist, Jewish state into reality.<sup>6</sup> Specifically, they spearheaded the creation of "three uniquely Israeli institutions ... the

Kibbutzim, or voluntary collectives; the Moshavim, or cooperative settlements; and the Histadrut, or General Federation of Labor.”<sup>7</sup> These bodies, all socialist in nature, served as physical representations of the ideological foundation of the modern State of Israel. Their powers, in addition to the initial dominance of the left-wing Mapai and later Labor political parties, ensured that the democratic State of Israel would adhere to socialist principles in its early years.

Much like Israel, Kibbutz Na’an was founded on similar democratic, socialist principles. The groundwork leading to the creation of the Kibbutz can be traced back to 1928, when fourteen Jewish-American investors met to form the Gan Hadar Corporation. The purpose of this corporation was to purchase land in Palestine meant for Jewish settlement and income. Through the Jewish National Fund, the Gan Hadar Corporation gave about 240 dunams (58 acres) of land in modern-day central Israel to Noar HaOved, a socialist youth movement, to create Kibbutz Na’an.<sup>8</sup> The movement was successful and founded Na’an on the principles of “self-labor, self-protection, agriculture, industry, and equality.”<sup>9</sup>

In particular, the philosophy of the kibbutz followed the central principle “from each according to his ability, to each according to his needs.”<sup>10</sup> As a result, all kibbutz members equally shared everything, including “housing, furniture, food, clothing, medical services, cultural activities, and education for their children.”<sup>11</sup> The physical manifestations of this philosophy included a “communal dining hall, cultural center, library, offices, and children’s houses.” In exchange for these shared amenities, kibbutz members were expected to work on their assigned tasks in order to aid in the development of the kibbutz.<sup>12</sup>

Further, like Israel, Na’an valued democracy. Officials such as a secretary, a treasurer, a work organizer, and a farm manager were regularly elected by members of the kibbutz. These officials, in addition to various elected committee members, managed the day-to-day affairs of the kibbutz. Any long-term policies kibbutz officials sought to implement had to be approved democratically by the members of the kibbutz.<sup>13</sup> According to Yacoby, “every Saturday night there

was a general assembly that voted. There was a secretary of the kibbutz who managed the meeting and helped organize the work, but all members had an equal say.”<sup>14</sup> Thus, like Israel, Kibbutz Na’an was founded not only on socialist, but also democratic, principles.

In addition to sharing similar founding ideologies, Israel and Kibbutz Na’an also followed strikingly similar economic trajectories in their early histories. In particular, both experienced significant agricultural followed by industrial growth.

Although Israel’s economic history began prior to its statehood in 1948, this section will focus on Israel’s economy following its independence in order to compare the economy of the *State* of Israel with that of Kibbutz Na’an. Israel’s immediate founding can be traced back to November 1947, when the United Nations passed resolution 181, which divided Palestine into two states. One consequence of the resolution was the increase in conflict between Jews and Arabs. Following Israel’s Declaration of Independence in May of 1948, a coalition of Arab States swiftly declared war. Although the Jews ultimately won the conflict and secured Israel’s statehood, the war revealed the extent of Israel’s weak economy. The government had to finance the war and mass immigration while providing basic commodities and services to its population.<sup>15</sup> According to Shimon Peres, one of Israel’s founding fathers, the war caused severe shortages: “We didn’t have enough food. We didn’t have enough fuel. We didn’t have enough ammunition. The country wasn’t yet developed and really the war found us unprepared.”<sup>16</sup>

Throughout and after this struggle, the government, run by socialist leaders, viewed it as its responsibility to develop Israel’s economy. From 1948 to 1952, the government’s priority was to achieve greater economic self-sufficiency through agriculture. As a result, it invested in agriculturally-based communities, which provided “employment, food, and raw materials... [while] dispersing the population throughout the country.”<sup>17</sup> However, by 1954, the government decided that industry, as opposed to agriculture, would have to be the source of Israel’s economic growth. In pursuit of this goal, it “offered a package of incentives” to foreigners to set up companies in Israel.

According to economist Paul Rivlin, “The government supplied land, capital... and labor. The entrepreneurs were offered a market protected from competition by imports, and as the government restricted the number of investors in any industry, competition between local suppliers was limited.”<sup>18</sup>

This government program led to meaningful economic growth in Israel’s early years. The government financed its investments, including major infrastructure projects, using loans, money received from West Germany as reparation for the Holocaust, and money raised by Jews in the West.<sup>19</sup> According to economist Yakir Plessner, because Israel was in its “early stages of development, [there existed] opportunities for large-scale investment that [were] easy to identify... [such as] roads, water systems, factories, ports, electrical grids, and housing construction.”<sup>20</sup> Thus, Israel’s economic needs were effectively addressed by the government, resulting in significant growth. In fact, “from 1950 through 1955, Israel’s economy grew by about thirteen percent each year, [and] it hovered just below ten percent growth annually into the 1960s.”<sup>21</sup>

During this time, Kibbutz Na’an’s economic trajectories were strikingly similar to those of Israel. Na’an, like Israel, witnessed great economic hardship following its foundation. Most of the founders of the kibbutz were young with no money. They sought to improve their lives through agricultural and industrial development; however, it took time before these ventures would generate profit. As a result, Na’an’s members lived in tents with few basic commodities.<sup>22</sup> According to Yacoby, “The conditions were very difficult. Many people worked in the orchards, but it took time for the trees to grow and to collect the fruit.”<sup>23</sup> Much like Israel in its beginning, Na’an initially suffered.

As time progressed, however, conditions on the kibbutz improved. Like Israel, the kibbutz first relied on agricultural production to spur its development. Following its founding in 1930, many members of Kibbutz Na’an worked in the orange orchards planted on Gan Hadar Corporation’s 4000 dunams (about 1000 acres) of land. Their salaries went directly to the common

Kupa, which was the general fund of the kibbutz. During Israel's war of independence in 1948, the members of Na'ana, an Arab village adjacent to Kibbutz Na'an, fled their homes. Kibbutz Na'an seized the land formerly belonging to the Arab villagers and, with it, produced its own fruit, vegetables, cotton, sheep, chickens, and cows for dairy.<sup>24</sup> This production dramatically improved the quality of life on the kibbutz.

With time, however, agriculture became less profitable, and Kibbutz Na'an shifted to industrial production as its primary source of income. Unlike other kibbutzim, Na'an pursued industrial development from its very beginning. In the 1930s, while many members of the kibbutz worked in citrus orchards, others established a primitive workshop that produced agricultural equipment to work the land. During Israel's war of independence, the shop produced grenades, armored cars, and trucks for the Palmach, the elite unit of the Haganah.<sup>25</sup> At the conclusion of the war, the kibbutz members converted this shop into a profitable sprinkler factory. The factory then further evolved to produce innovative irrigation equipment. In particular, it offered equipment that solved two problems farmers commonly encountered. First, farmers used clumsy, portable aluminum pipes to water their produce. Such pipes were very inefficient since each row of trees had to be watered separately. Kibbutz Na'an solved this problem by investing in permanent, plastic irrigation pipes. Second, farmers used the same method to water different crops despite the diversity of needs among different plant species. For example, avocados have very shallow root systems while citrus roots penetrate deep into the ground; thus, the two crops require different forms of irrigation. Kibbutz Na'an solved this problem by offering farmers unique, crop-dependent irrigation packages. This business became very successful, and the kibbutz transitioned into focusing on the production of irrigation equipment. Thus, Kibbutz Na'an, like Israel, eventually found itself shifting from agricultural to industrial development.<sup>26</sup>

As both Israel and Na'an developed rapidly, they both evolved from their socialist roots, albeit in different ways. Whereas Israel changed its economic policies out of desperation and necessity,

Na'an gradually lost hold of its founding principles, primarily because of discontent among its younger generations.

While Israel initially experienced great economic growth, by 1966, Israel's economy witnessed zero growth for the first time in its history.<sup>27</sup> According to Plessner, this is because "as the economy becomes more complex, and investment opportunities become less obvious, the economy must rely on the private entrepreneur to discover the niches of relative advantage, a discovery process in which a cumbersome bureaucracy has a distinct disadvantage."<sup>28</sup> Thus, in the late 1960s, Israel's economy was ready to be privatized; however, this process would not officially occur until more than a decade later due to Israel's victory in the 1967 Six Day War. In this conflict, Israel tripled in size, acquiring territory from the defeated countries of Egypt, Syria and Jordan. With this new land came the opportunity for the government to once again manage infrastructure and other key aspects of new development, hindering the privatization process that needed to occur.<sup>29</sup>

Although the Six Day War kept Israel's centrally-planned economy afloat, another war soon followed, which did not yield the same positive results. In 1973, Egypt and Syria launched a surprise attack on Israel, hoping to regain the territory they had lost in 1967. This war, unlike the previous one, took a heavy economic toll on the state. In addition to three thousand Israeli deaths and severe infrastructure damage, the war forced Israel to call up large numbers of reserves, which effectively removed much of Israel's labor force.<sup>30</sup> Combined with Israel's aforementioned lack of privatization in the 1960s and poor management of the dire economic situation, the 1973 "Yom Kippur War" (as it would later be called) marked the beginning of an extended period of economic stagnation and hyperinflation known as Israel's "lost decade."<sup>31</sup> By 1984, inflation became so bad (445 percent) that the government had to take action. In 1985, it passed a massive economic stabilization plan, which "dramatically cut public debt, limited spending, began privatizations, and reformed the government's role in the capital markets."<sup>32</sup> These significant changes not only saved Israel's economy, but allowed for it to flourish once again as market forces advanced growth. With the

government of Israel no longer managing the entire Israeli economy, Israel largely ceased to operate as a socialist state.

Like Israel, Kibbutz Na'an also witnessed the erosion of its socialist principles, albeit for different reasons. In fact, generally speaking, the kibbutz movement as a whole began to lose hold of its basic values as a result of economic desperation in the 1980s and "the weakening collective ideology of the younger generations."<sup>33</sup> The primary reason kibbutzim experienced economic hardship during this time is because most of them heavily relied on agriculture as their main source of income. With time, however, agriculture became less profitable, resulting in many kibbutzim relying on loans and government subsidies. With the election of the first Israeli conservative government in 1977, much of the government financing of kibbutzim stopped. Additionally, Israel's debt crisis in 1985 left the kibbutzim with loans they could not afford to pay back.<sup>34</sup> In fact, in 1988, the combined debt kibbutzim owed fell between \$5 and \$6 billion.<sup>35</sup> The hardship forced many kibbutzim to rethink the viability of their socialist experiment, causing many to adopt serious changes.<sup>36</sup> It is important to note that Kibbutz Na'an did indeed suffer under these economic realities; however, since it transitioned to industry relatively early, it was not impacted by these developments as much as other kibbutzim.<sup>37</sup>

The second reason kibbutzim began to transform, and the primary reason Kibbutz Na'an changed, is because those in the younger generation of the kibbutz movement were not as committed as their parents to following communal principles.<sup>38</sup> As younger people became exposed to the world outside of the kibbutz, they concerned themselves more with their own, individual prosperity rather than that of the community.<sup>39</sup> According to Shifris, "a lot of members travelled abroad and were affected by the different cultures. Then they brought those cultures back, which changed the dynamic of the kibbutz."<sup>40</sup> Further, the increased wealth of Kibbutz Na'an led to the younger generation yearning to have their own, private luxuries. This sentiment is well demonstrated by a story Yacoby shared: "When I went to the military, I got a salary. With that salary, I bought a



camera. Tziki, my friend from the kibbutz, saw this and was very jealous. If he wanted a camera, it would go to the kibbutz for everyone to share. He couldn't have a camera for himself."<sup>41</sup> According to Gavron, "Conformism rather than conviction became the quality required by the average kibbutz member."<sup>42</sup> As a result, young people began to leave Kibbutz Na'an, and the kibbutz began a process of internal change, eroding many of its socialist values in the process.<sup>43</sup> In order to prevent younger people from leaving, the kibbutz allowed its members to work elsewhere, and even began to hire outside workers, effectively forfeiting their principle of self-labor.<sup>44</sup> In addition, the kibbutz closed one of its core communal institutions: children's housing.<sup>45</sup> This marked a significant change in Na'an's communal practices for two main reasons. First, the children's house had served as a place where kibbutz values were passed down.<sup>46</sup> Second, children living with their parents further weakened the sense of community because people could identify more with their own families than with the kibbutz as a whole.<sup>47</sup>

These changes coincided with massive privatization efforts. Privatization in the kibbutz meant giving individuals more economic freedom through cash allowances. Whereas the community freely provided members with what they needed initially, members could now pick and choose their own belongings, inevitably leading to inequalities.<sup>48</sup> What members were permitted to purchase for themselves gradually changed. Beginning in the 1950s, personal bathrooms and refrigerators became permissible. After fierce debate in the 1960s, the kibbutz allowed its members to purchase their own private TVs. As time progressed, individuals could purchase more and more commodities, and Na'an gradually lost its principle of pure equality.<sup>49</sup> Finally, in 2005, after years of debate, the general assembly of Na'an decided to fully privatize the kibbutz. This meant that members had to pay for all kibbutz services, such as dining, education, electricity, and water.<sup>50</sup> At this point, Na'an lost all of its practical aspects of communal living.

Although such changes never came with ease, since embracing capitalism, both Israel and Na'an have undoubtedly prospered. In Israel's case, following its market reforms, it once again

witnessed substantial economic growth spurred by the private sector. In particular, Israel has significantly benefited from a booming high-tech sector, and is able to thrive as a result of the ability of entrepreneurs to develop private companies, and as a result of globalization.<sup>51</sup> According to the Prime Minister of Israel, Benjamin Netanyahu, “The economy now is knowledge and the ability to apply knowledge and to think in different ways and to think rapidly.”<sup>52</sup> The Israeli population has indeed taken advantage of this new economic reality, as is evident by the fact that since 1995, Israel has grown faster than the average economies of the developed world. In 2008, per capita venture capital investments in Israel were impressively higher than in other countries. Specifically, they were “2.5 times greater than in the United States, more than 30 times greater than China, and 350 times greater than India.”<sup>53</sup> Furthermore, Israel has the highest density of start-ups in the world, with one start-up for every 1,844 Israelis. After the United States and China, it has more companies listed on the NASDAQ exchange than any other country in the world. In fact, it has more companies listed in the NASDAQ exchange than all European companies combined.<sup>54</sup> Clearly, since embracing a capitalist economic system, Israel has flourished.

Similarly, following its official privatization in 2005, Kibbutz Na’an has thrived. Today, the kibbutz generates revenue by offering services to its members. Whereas everything was once distributed equally to kibbutz members in exchange for their work, now most members work outside of the kibbutz and pay for kibbutz-provided meals, education, housing, electricity, water, and other services a la carte.<sup>55</sup>

In addition, like Israel, Na’an has greatly benefited from interacting with the global economy. In 2007, Na’an sold half of the stake of its irrigation company to the Indian company, Jain Irrigation Systems Ltd., for \$25 million, forming NaanDanJain Irrigation Ltd. After five years, Jain acquired the entire company from Na’an in a \$35 million deal.<sup>56</sup> The money Na’an received from selling its irrigation company went directly to its kibbutz members.<sup>57</sup> Even further, since taking over Na’an’s irrigation enterprise, Jain has invested over \$30 million in NaanDanJain. According to

Jain director Amnon Ofen, “since Jain's first investment in the company, its sales have increased 25%, and it grew in world markets despite economic crises.”<sup>58</sup>

Ironically, Na'an's recent housing crisis serves as supplementary evidence of its progress. Children of kibbutz members are entitled to a home in Kibbutz Na'an, and since its privatization, the demand for living in Na'an has increased dramatically as more and more people seek to live in the prospering community. According to Shifris, “thirty years ago there were about twenty to thirty cars in Na'an—you used to sign up for a car and wait for one to be available. Today, there are about 1,000 cars.”<sup>59</sup> Put simply by Yacoby, “Na'an is a rich kibbutz.”<sup>60</sup> By privatizing and embracing global markets, Kibbutz Na'an, like Israel, has enjoyed great prosperity.

In their short histories, both Israel and Kibbutz Na'an have witnessed immense changes. Their stories began with young pioneers seeking better lives for themselves and for their children. Hoping to establish ideal societies, these visionaries blended socialism with democracy—a combination that seemed at first to succeed. Following difficult beginnings, both Israel and Kibbutz Na'an experienced times of growth and prosperity while adhering to their core, foundational principles. Furthermore, they grew in strikingly similar ways: transitioning from agricultural to industrial development. With time, however, reality forced ideological change. Growth slowed, and both Israel and Na'an realized they needed to adapt. As such, Israel and Kibbutz Na'an began to embrace market forces and the global economy. This in turn allowed for both to once again thrive economically. Israel, a place once characterized by desert and poverty, now lines its horizon with skyscrapers and forests. Na'an, once a collection of tents on untamed land, now exports irrigation technology worldwide. Under stress and hardship, the two innovated and changed to the point where today Na'an and Israel both depend and operate under the same global market forces, following similar paths as they continue to alter and grow.

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## Endnotes

<sup>1</sup> Dan Senor and Saul Singer, *Start-Up Nation: The Story of Israel's Economic Miracle* (New York: Hachette Book Group, 2009), 108.

<sup>2</sup> *Unstable Utopias: The Global Spread of Socialism*, 2005 (Accessed January 6, 2017. <http://avod.infobase.com/PortalPlaylists.aspx?wID=17784&xtid=35665>).

<sup>3</sup> Amos Shifris, interview by Noam Yakoby, December 26, 2015.

<sup>4</sup> Oved Yacoby, interview by Noam Yakoby, December 28, 2015.

<sup>5</sup> Shifris, interview.

<sup>6</sup> Paul Rivlin, *The Israeli Economy from the Foundation of the State through the 21<sup>st</sup> Century*, (New York: Cambridge University Press, 2011), 12-15.

<sup>7</sup> *Ibid*, 7-8.

<sup>8</sup> Irit Amit-Cohen, *Zionism and Free Enterprise: The Story of Private Entrepreneurs in Citrus Plantations in Palestine* (Berlin: De Gruyter, 2012), 102-110.

<sup>9</sup> Amos Shifris, interview.

<sup>10</sup> *Unstable Utopias*.

<sup>11</sup> Daniel Gavron, *The Kibbutz: Awakening from Utopia*, (Lanham: Rowman & Littlefield Publishers, 2000), 2.

<sup>12</sup> *Ibid*.

<sup>13</sup> *Ibid*.

<sup>14</sup> Yacoby, interview.

<sup>15</sup> Rivlin, *The Israeli Economy*, 2.

<sup>16</sup> *From the Orange to the Chip: Israel's Economic Revolution*, 1998. (Accessed January 6, 2017. <http://avod.infobase.com/PortalPlaylists.aspx?wID=17784&xtid=8551>.)

<sup>17</sup> Rivlin, *The Israeli Economy*, 36.

<sup>18</sup> *Ibid*, 36-38.

<sup>19</sup> *Ibid*, 37.

<sup>20</sup> Yakir Plessner, *The Political Economy of Israel: From ideology to Stagnation* (Albany: State University of New York Press, 1994), 11.

<sup>21</sup> Senor and Singer, *Start-Up Nation*, 113.

<sup>22</sup> Shifris, interview.

<sup>23</sup> Yacoby, interview.

<sup>24</sup> Shifris, interview.

<sup>25</sup> *Ibid*.

<sup>26</sup> Yacoby, interview.

<sup>27</sup> Senor and Singer, *Start-Up Nation*, 115.

<sup>28</sup> Plessner, *The Political Economy of Israel*, 11.

<sup>29</sup> *Ibid*, 18.

<sup>30</sup> Senor and Singer, *Start-Up Nation*, 115.

<sup>31</sup> *Ibid*, 103.

<sup>32</sup> *Ibid*, 118-120.

<sup>33</sup> Michal Palgi and Shulamit Reinharz, *One Hundred Years of Kibbutz Life: A Century of Crises and Reinvention* (New Brunswick: Transaction, 2011), 6.

- <sup>34</sup> *Tearing Down the Wall: The Decline of Socialism*, 2005. (Accessed January 6, 2017. <http://avod.infobase.com/PortalPlaylists.aspx?wID=17784&xtid=35666>.)
- <sup>35</sup> Gavron, *The Kibbutz*, 8.
- <sup>36</sup> *Tearing Down the Wall*.
- <sup>37</sup> Shifris, interview.
- <sup>38</sup> Ibid.
- <sup>39</sup> Palgi and Reinhartz, *One Hundred Years of Kibbutz Life*, 40-43.
- <sup>40</sup> Shifris, interview.
- <sup>41</sup> Yacoby, interview.
- <sup>42</sup> Gavron, *The Kibbutz*, 6.
- <sup>43</sup> Shifris, interview.
- <sup>44</sup> Palgi and Reinhartz, *One Hundred Years of Kibbutz Life*, 6.
- <sup>45</sup> Shifris, interview.
- <sup>46</sup> Palgi and Reinhartz, *One Hundred Years of Kibbutz Life*, 6.
- <sup>47</sup> Gavron, *The Kibbutz*, 7.
- <sup>48</sup> Ibid.
- <sup>49</sup> Shifris, interview.
- <sup>50</sup> Ibid.
- <sup>51</sup> Rivlin, *The Israeli Economy*, 116.
- <sup>52</sup> *From the Orange to the Chip*.
- <sup>53</sup> Senor and Singer, *Start-Up Nation*, 11-12.
- <sup>54</sup> Ibid, 11.
- <sup>55</sup> Shifris, interview.
- <sup>56</sup> Yuval Azulai, "Kibbutz Naan sells NaanDanJain Irrigation," *Globes*, May 14, 2012, Accessed January 5, 2017, <http://www.globes.co.il/en/article-1000748674>.
- <sup>57</sup> Shifris, interview.
- <sup>58</sup> Azulai, "Kibbutz Naan sells NaanDanJain Irrigation."
- <sup>59</sup> Shifris, interview.
- <sup>60</sup> Yacoby, interview.