

# Space Matters: Historic Drivers and Turning Points In Israel's Open Space Protection Policy

“From the enclosed I called out to the Lord. God answered me in the open spaces” (*Psalms*, 118:5)

## ABSTRACT

The article considers the history of open space preservation in Israel from the inception of the state until the present. The primary modes for protecting open spaces are assessed: nature reserves, forests, and agriculturally designated lands. While present frameworks ensure that reserves and forests remain well-protected, there has been significant erosion in the normative protection of agricultural lands, reflected in their steady decline. Three encouraging recent developments are considered. The first is a new master-plan for Israel (number 35) that was approved by the government in 2005. While not without its flaws, the plan constitutes an important formal open space for Israel. Economic analysis, previously unexploited, is also increasingly quantifying the benefits of open spaces. Relentless activism across the country has produced a litany of achievements for open space preservation advocates. The article closes with a review of present challenges to open spaces including illegal construction in the agricultural and Bedouin sectors as well as the isolated settlement program. While Israeli public policy has made open space preservation a higher priority, as population density rises, the demand for land promises make open space preservation an ongoing national challenge.

## INTRODUCTION—OPEN SPACES

ISRAEL'S OPEN SPACES—THE DIVERSE LANDSCAPES that are as yet, untouched by human structures—constitute an invaluable national asset. From the red granite mountains of Eilat in the south to the snow-capped Hermon in the north, not only do they provide a home for the creatures and plants that have thrived locally from time immemorial, but they also continue to inspire and restore the country's human residents and visitors. Regardless of its empirical veracity, over the years the oft-quoted adage of Saul Tschernehovsky, the Zionist poet, has become an integral part of public perceptions of the Israeli psychology: "Humans are nothing but the formation of their homeland's landscape."

At least on paper, Israel has done a good job of preserving its open spaces. Some 90% of the land in the country, technically at least, can be defined as open space and remain free of construction and development.<sup>1</sup> More importantly, some 60% of the country's countryside is formally zoned as "open spaces"—with agriculture, nature reserves, and forests enjoying statutory protection through Israel's planning laws and other legislation. Ironically, Israel's military's needs for training grounds has kept enormous swaths of additional tracts free of human settlement and development.

Many argue that such complimentary numbers belie a grave situation. For more than a decade, the loss of Israel's open spaces has been considered by environmentalists to be Israel's most urgent ecological problem, especially when "irreversibility" becomes the salient criterion for ranking environmental hazards.<sup>2</sup> In its position paper on the subject, the Society for Protection of Nature in Israel, the country's oldest and largest green organization writes:

The scarcity of lands basically arises from the country's objective conditions. But other circumstances exacerbate it and lead to a terrible and unnecessary waste of land resources. One of these is the culture of development that dominated the first years of the state—a period that was characterized by a relatively dispersed population, where undeveloped lands were perceived as an enemy, as a sign of backwardness and desolation. Accordingly, the national planning challenge was "conquering the wilderness" and creating facts on the ground, with the development policy emanating from this. Establishing new settlements became a way of solidifying the borders of the nascent state, a means to realize the objective of population dispersion and development in the Negev along with Ben-Gurion's vision. This vision was realized long ago: Israel changed from a place of dispersed population, rich in land and

undeveloped territory, to one of the most crowded and settled lands in the world. By the year 2020, Israel is expected to be the most crowded country in the developed world. Land and open spaces became a scarce resource—and due to its severity, emerged as the most acute social-environmental problem facing the state of Israel and its citizens.<sup>3</sup>

To understand the history of Israeli policies regarding open spaces, a few observations are instructive. To begin with, there is a tendency to overstate the magnitude of Israel's open spaces. Statistics rarely pick up such key nuances as the proximity of human settlement to still undeveloped natural settings. By 2000, only 36% of the open spaces in Israel enjoyed a distance of five kilometers from some sort of human construction.<sup>4</sup> Hikers intuitively understand this dynamic when walking in even relatively pristine areas, when human settlement is rarely out of view. In Israel, "wilderness", even in the relatively unpopulated Negev desert is fundamentally a misnomer. The human footprint, past or present, is ubiquitous. Nor do statistics generally reflect the asymmetry of distribution. For example, by the start of the new millennium, in the center of the country—already 23% of the lands were covered by construction; in the greater Tel-Aviv planning region, that number had already reached 68%.<sup>5</sup> The vast majority of open spaces—some 70%—are located in the south where Israel's military increasingly uses them as training zones.

Attempts to characterize the worth of open spaces often suffer from gross under-estimation. Valuation of open spaces must include a broad range of uses. Open spaces of course offer critical habitat to the 128 species of mammals,<sup>6</sup> 2,600 plant species (including 130 that are endemic only to Israel) and some 700 vertebrates (including 454 bird species) who quite literally lived here first.<sup>7</sup> The variety of direct and indirect ecosystem services that the natural world provides is astounding—from water filters and air purification systems to natural noise mufflers and pollination systems.<sup>8</sup> Open spaces also provide the playground for Israeli recreation and tourist industries. They are the pleasant places that people seek, preferring to live in their proximity, a phenomenon clearly reflected in real estate prices. Finally, there is the unquantifiable spiritual dimension. Open spaces offer present and future generations a glance into the landscape that fired the imaginations of prophets and pilgrims for millennia and which gave birth to the insight of monotheism and the Judeo-Christian ethic. Here, people can leave the cacophony of an increasingly chaotic urban world and find some measure of contemplative solitude and inspiration.

This article seeks to offer an analysis of Israel's historic policies regarding open spaces, to better understand present conditions and consider

implications for local land policy in the future. After reviewing initial attitudes towards open spaces in Israel, the three priority components of open space policy are examined in the context of their historical evolution: nature reserves, forests, and farm land. A look at the different stages of the national strategies in this realm and the meaning of the recent, ostensibly official adoption of “conservation” priorities is considered. While generally optimistic, the massive hemorrhaging of open spaces during the past fifteen years and the constant danger of additional losses leads to a conclusion of constant caution and future vigilance.

### THE SHARON PLAN

The War of Independence was still raging when David Ben-Gurion summoned Arieh Sharon into his office in 1948 and asked him to produce a blueprint for the new Jewish State. Arieh Sharon may have been the most prominent architect of the Yishuv. While he had no experience with a project of this scope, as part of a group of Jewish architects and planners that had begun to think about settlement strategy, he was ready to land on his feet.<sup>9</sup> In August 1948, Sharon put together a team of one hundred-fifty planning professionals who expeditiously produced a comprehensive twenty-year blue print for a new state.<sup>10</sup>

Just prior to Israel’s establishment, the British mandatory government conducted an aerial survey of the land resources in Palestine. The vast majority of the lands were empty. Palestine’s permanent population was around one million people. The massive influx of Jewish refugees following the War of Independence did little to change the overall population density, given the simultaneous exodus of Palestinian refugees. Israel’s population would increase at a rate of one million people per decade. The Sharon team anticipated this and was determined to provide the physical infrastructure and settlement framework to meet this enormous challenge.

After two years of preparation, the Sharon Plan was published in 1951.<sup>11</sup> Israel’s population, which had already increased by 100%, would not wait for the planners’ conclusions. Sharon was well aware of the hazards of rushing the process.

The introduction of the time element—that is the need to ensure that immediate requirements be satisfied first—is detrimental to the quality of planning. Immigrant and transit camps, housing projects and settlements, all planned and built in haste, will remain as social and economic blots on the landscape and may be succeeded by even worse blemishes later on.<sup>12</sup>

The deliberate pace advocated was ultimately “lip service”—as the exigencies of life in the nascent state required massive construction as quickly as possible. The tedious process of weighing alternatives to mitigate damage to open spaces was very much a luxury.

Sharon assumed that by 1970 there would be three times as many people in Israel and used 2.65 million denizens as an operational objective. The projection was remarkably close as was his assumption that Israel’s public would remain largely urban. The plan explained:

The urban population consisting of 2,205,000 will be divided into two categories. Some 930,000 persons constituting 45% of the urban population will reside in the three main cities, Haifa, Tel-Aviv and Jerusalem that enjoy the advantages of national as well as international factors of development. The remaining 55% of the urban population (1,120,000) will reside in the medium-sized and small towns that are to be distributed throughout the country. . . . The proposed distribution of the population, accompanied by a comprehensive plan determining the location of settlements, towns, industries and services is imperative from the national and security standpoints. . . . In the absence of such a policy, the population will follow the line of least resistance, drifting towards the existing conurbations, so that large stretches of the country will be left void of population and enterprise.<sup>13</sup>

The map that emerged from the drawing boards of the planners ultimately became the physical layout that informs modern Israeli life. Development towns in the periphery, kibbutzim and moshavim along the borders, Ashdod port, a national water carrier, and countless other key locations in Israel today are actually products of the Sharon plan.<sup>14</sup> The orientation was horizontal—to extend the demographic facts across the lands to ensure that Israeli sovereignty would no longer be questioned. The planning system also sought to “. . . spread the Jewish population across the country, to secure land holdings against a perceived threat by Arab citizens of the state.”<sup>15</sup> The resulting overall impulse was so powerful that modern planners have diagnosed the Sharon team as “agoraphobic”.<sup>16</sup>

In fairness, the Israeli planning team was clearly influenced by Ebenezer Howard’s “Garden City approach” in its general orientation, and at a conceptual level sought the integration of “town” and “country” rather than the dense urban vision that other planners of the period advocated.<sup>17</sup> However, both the country’s limited resources and the natural climatic constraints left the dozens of urban centers ultimately established less “green” and far less beautiful than the aspirations of the original planners or other towns established during this period.<sup>18</sup> Moreover, there was aggressiveness to the

Israeli planning orientation that was altogether different from the prevailing British paradigm of the time.

Adam Mazor, an architect who undertook a similar mission for Prime Minister Yizhak Rabin during the 1990s describes the Sharon Plan's approach towards nature and open spaces:

This sort of thinking seems strange to us today, but at the time, the overriding ambition was to conquer the desert as quickly as possible. A simplistic interpretation of Zionism led us to glorify the new, with disregard for nature, to a large degree, and for historic buildings. . . . Notice the military terminology that accompanied settlement: conquer, take control, penetrate, breakthrough. But it was right for that period. If you look at the map from the time, you see how empty the country was, and two thirds of it, the Negev was totally empty.<sup>19</sup>

The Sharon plan set in motion a national campaign that began to change this dynamic. The percentage of Israel's population that lived in Tel-Aviv dropped from 43 to 34%. The Negev was still largely empty, but the percentage of the population that called it home rose from 0.8% to 6.9%.<sup>20</sup> The trouble was that the planning establishment quickly became locked into Sharon's notion of dispersed and scattered settlement. Within fifteen years, the country was no longer underpopulated, but planners continued to promote a sprawling paradigm of development, scattering immigrants and settlements across the countryside. Rather than make Israel's cities compact, modern metropolises, replete with skyscrapers and large urban parks, buildings rarely exceeded four stories. As the immigrants began to make their own geographical choices, the center of the country became crowded.

From the perspective of open spaces, the Sharon Plan was not entirely negative. The agrarian orientation of the team designated enormous tracts of land for cultivation that have since served as an important land preservation mechanism.<sup>21</sup> Nature reserves in modest dimensions appeared throughout the plan, although not nearly as extensively as would later be promoted.<sup>22</sup> As the years passed and population momentum gave no signs of slowing, the Sharon "horizontal" planning strategy proved to be an unfortunate legacy that would take decades to shed. This process took years, but began some fifteen years after independence, when Israel's fledgling conservation community realized what would be necessary to save the most valuable of the country's natural treasures and launched a major institutional initiative. Israel's formal and focused efforts to preserve open spaces really made its first quantum leap forward with the inception of its Nature Reserves.

## PARKS AND NATURE RESERVES

Today, Israel's National Parks and Nature Reserves Authority oversees the most vigilant component of open space protection in Israel. Prior to its establishment during the 1950s, nature preservation was overseen by the Ministry of Agriculture, in a haphazard and marginal effort. (Its "Bee Keeping" department became a tiny de facto conservation agency.) Several ideas for a national park system were introduced during this period, including the aforementioned "reservats" appearing in the Sharon plan itself.<sup>23</sup> However, none received official recognition in Israel's planning system and many scenic and ecologically significant regions simply disappeared, giving way to the rapid development of the period.

Eventually, the Prime Minister's office, run by Teddy Kollek, proposed a law that offered a narrow framework for national parks with the primary objective of encouraging tourism and generating revenues and foreign currency. It was at this time that Israel's first environmental organization, the Society for Protection of Nature in Israel (SPNI), called for a gathering on the holiday of *Tu B'Shvat* to protest the imminent "parcellation" of the old-growth Carmel forest into a new neighborhood for Haifa's workers. The organization was happily surprised at the massive turnout and resonance of their call in the corridors of power.<sup>24</sup> With the anemic parks law now on the docket, it took its case for a much more ambitious conservation program to the Knesset. The SPNI vision of pristine reserves, not unlike the major national parks of the U.S. or Europe, found an advocate at Israel's parliament in Labor parliamentarian Yizhar Smilansky, the lyrical novelist who wrote under the pen-name "S. Yizhar".

Prime Minister Ben-Gurion was present when Smilansky made a stirring speech to the Knesset in June 1962 on the subject. While nature reserves are often associated with wildlife and biodiversity, open spaces were at the heart of Smilansky's plea: ". . . It is impossible to live without some open vistas that have not been transformed by the hand of man. It is impossible to exist in place where everything is organized and planned unto the last detail. . . . A land where winds cannot blow unobstructed—will be a hotel, not a homeland."<sup>25</sup>

When the proposed law came up for debate, Ben-Gurion, was sufficiently impressed by Smilansky's preservationist views that he directly quoted from the laureate's speech.<sup>26</sup> Ben-Gurion supported a division between national parks, which could meet the tourist/heritage objectives of his office, and nature reserves that were eventually to include 25% of Israel's territory.

While the legislative process was surely a critical “triumph” for open space preservation, it would take many years for its promise to be realized. The Parks and Nature Reserves Law established a tortuous process of designation and declaration of open reserves, which began over forty years ago and continues to the present.

The first major breakthrough came in 1965 when Avram Yoffe, the flamboyant director of the Nature Reserve Authority, managed to get the minister of the interior to declare 96,000 dunams of old-growth Mediterranean woodlands in the Meron hillsides as the country’s first major protected open space.<sup>27</sup> Yet, it was only in 1981 that National Masterplan No. 8 was formally approved by the Government, establishing the ultimate parameters of the Israeli Nature Reserve System. National Parks add considerable real estate as well, albeit with preservation codes within the parks that are far less protective.

Today, some 436 nature reserves have been formerly declared on 320 thousand hectares of land with an additional 136 national parks on over 15,000 hectares. Together they make up about a quarter of the country’s land mass, albeit much of the territory is located in the Negev where nature must share the land with the military that is not subject to the Law.<sup>28</sup> In the reserves, the process of natural evolution is allowed to continue and humans are forced to completely curtail their impact, minimizing any disturbance to the natural ecosystems: Visitors are prohibited from driving, except on demarcated roads, camping, lighting fires, and in several reserves even bringing food inside. The construction of buildings is not tolerated except as restrooms, kiosks, or visitor centers at the entrance.

Not that the present system can be considered a panacea for nature protection. All-terrain vehicles often speed through them illegally, crushing plants, frightening animals, and leaving behind unsightly tracks. Poaching takes place, with hunting increasingly associated with the growing population of migrant Thai agricultural workers. Israel’s military enjoys an exemption from the provisions of the law. Many nature reserves, especially the large ones in the south of the country, “double” as training grounds, are inaccessible to the public during the week due to safety concerns, and show the signs of mechanized military activities.

Given the dynamics of life in an increasingly crowded nation, open spaces themselves could hardly expect better protection. Despite the pressure associated with growing population and shrinking national borders, in recent years, dramatic progress has been made in the declaration process for new reserves. The process is charted in Table 1 and shows an impressive quantum leap forward since the year 2000 in the most intensive form of

**Table 1:**  
**Government Declarations of Nature Reserves**

<i>Year</i>	<i>No. of Reserves Declared</i>	<i>No. of Protected Dunams</i>
1995–1999	7	1,739
2000	11	2,553
2001	5	4,909
2002	17	63,924
2003	18	607,898
2004	7	7,629
2005	10	38,974

*Source: Data from Israel National Parks and Nature Reserves Authority*

open space preservation. If nature reserves constitute the heart of Israel's open spaces, then protection of Israel's countryside appears to be growing stronger.

## ISRAEL'S FORESTS

Israel's woodlands do not enjoy as comprehensive statutory protection as nature reserves. The forests may offer a more conciliatory approach to human intervention, but remain a critical component in the country's open spaces equation. There are many misconceptions associated with forests in Israel. While afforestation is often associated with Zionism prior to the State of Israel, that notion is largely a myth. The Jewish National Fund (JNF), a corporation established and owned by the World Zionist Organization, today serves as the national forestry agency, but initially had only a marginal interest in trees. In the four hundred years of Ottoman rule, prior to the Jewish settlement, the forests in Palestine were devastated. The demands of World War I essentially erased the remaining woodlands in the country's coastal plains as the Turkish army exploited the timber for the rail system.<sup>29</sup>

Restoration of these degraded lands was a key element in the Zionist vision. However, for the most part, between 1918 and 1948, it was the British Mandate government that undertook a program of afforestation. The 31 million trees it left behind were roughly ten times the number of saplings that were planted during the same period by the JNF. When the dust settled after the War of Independence, only 17,000 hectares of land could even be remotely classified as forest, constituting less than 1% of the country. For the most part, these were open spaces with dispersed indigenous "Mediterranean" woodlands.<sup>30</sup>

Immediately following the war, the JNF embarked on an aggressive afforestation program but it was not done out of a sense of stewardship or a green Zionist vision. Even claims that afforestation programs were primarily politically motivated as a tool for constraining the expansion of Arab municipalities and erasing all memory of abandoned villages are overstated.<sup>31</sup> Rather, the government saw tree-planting as an efficient public works program in a new nation where the deluge of refugees had created an acute unemployment problem. Yosef Weitz, who oversaw afforestation for the JNF confides to his diary that he thought Ben-Gurion had gone raving mad when he asked him to see about planting a billion trees to meet the challenge. However, within a decade the JNF had changed the face of large swaths of land: 1,650 hectares were planted—four times the level of the previous year. In 1951–52, the number increased to 5,640 hectares—five times the area that had been planted by JNF during its first 50 years.<sup>32</sup> For the rest of the 1950s the number dropped to around 2000 hectares and 6 million trees per year.<sup>33</sup> The cumulative effect remains impressive:

**Table 2:**  
**Expansion of Forests in Israel by Year**

<i>Year</i>	<i>Number of Planted Trees in Israel</i>	<i>Number of Dunams of Land with Forests</i>
1948	5,000,000	100,000
1968	95,000,000	400,000
1991	190,000,000	800,000
2007	260,000,000	997,325

*Source: Jewish National Fund, Land Development Authority*

Despite the numeric expansion, by the 1990s, the 200 million odd trees in the JNF forests still enjoyed little formal protection and frequently were appropriated by nearby municipalities or other development ventures.

This changed with passage of National Masterplan 22. While its preparation was meant to be a joint venture with the Israel Lands Authority (ILA) and the Ministry of Interior, in fact, the JNF was the sole initiator, relying largely on the skills and energy of planner Motti Kaplan to draw up an ambitious blueprint for afforestation and protection of indigenous woodlands. Two hundred thousand hectares of land were designated as forests—some 10% of the country and 60% more than the JNF had managed previously. Without a minister responsible, the plan was something of an orphan for many years, and its ambitious scope engendered many enemies in the pro-development camp.<sup>34</sup> Negotiations surrounding the

forests' borders were intense. Menahem Sachs, head of the forestry department during this period explains: "We had to give up 200,000 dunam near settlements in order to get the 1.6 million in the masterplan. Actually, at present, we haven't given up on these 200,000 either."<sup>35</sup> Days before he was assassinated, Prime Minister Rabin and his relatively 'green' government were persuaded to vote to approve the national forestry plan.<sup>36</sup>

The plan also signaled a formal departure from the many years of JNF fascination with conifers. Sixty thousand hectares of trees had already been planted in Israel and the plan called for thirty thousand more. The newer forests, however, were now planned as a diverse mosaic of indigenous species. (During the Lebanon War of 2006 when over a million trees were lost to conflagrations caused by the ketusha rockets, the indigenous broad leaf species were much hardier than the ubiquitous pines that burned uncontrollably.<sup>37</sup>) The majority of territory in the plan, however, was to be left as natural, dispersed woodlands. Section 6(a) of the plan notes: "The detailed planning of the forest in these areas will be made on the basis of the natural data concerning the entire area, taking into consideration preserving the landscape characteristics, the environment and the appearance of the land." As to management policy, people are strongly encouraged to visit, barbeque, hike, and enjoy the bike paths and camp out in the forests. Building, however, is not allowed.

Masterplan 22 was critical for open space strategy as it set clear limits on development. JNF foresters described a less turbulent working environment where they could rely on legal protection for woodlands. Before that, an atmosphere of crisis prevailed where planners had to race to create facts to prevent development.<sup>38</sup>

When Yehiel Leket began his six-year tenure as chairman of the JNF in 2000, he established a new conservation policy. If in the past, foresters who wished to protest urban development because of the damage it would cause to trees needed special permission from the JNF headquarters, Leket turned the policy on its head. No concession to development could be made without permission from Jerusalem. Lands protected under National Master Plan 22 could only be forfeited if developers found a tract of equal size that had to be added to the forest stock.<sup>39</sup>

Another major misconception about Israel's forestry policies is that the JNF owns those lands on which it planted its 260 million trees. To be sure, the JNF is a major land owner—with total holdings of 3.6 million dunam or 15% of the country's lands.<sup>40</sup> Much of this land, however, is located in urban areas or is under cultivation by farmers. The forests that it oversees are largely on state-owned lands. Only in 2006, in a discreet agreement

that snuck in under the radar screens of developers, environmentalists, and the media, did the JNF receive anything remotely resembling formal legal ownership in the forests it was charged with protecting under National Masterplan 22. For a very modest payment, the JNF leased these lands for 49 years, at long last allowing it to monitor and control activities on them and fully apply its policies of stewardship.

Overall, the JNF has faithfully met its obligations as a conservation forestry agency under the Masterplan. In 2006, planner Motti Kaplan reviewed the first ten years of Masterplan 22, preparing a comprehensive inventory of the protected woodlands.<sup>41</sup> The positive results surprised even the top JNF management. Despite the relentless onslaught of development plans seeking to expand into the vulnerable woodlands, less than 1% of the area designated as forests had been the subject of exemptions (primarily in the Galilee), with the rate of forest loss dropping over time, especially in the Jerusalem district where during past years, no net loss was recorded. Part of the explanation for the impressive preservation record may be the compromises made up front during the plan's preparation, where JNF gave up claims in the most acute conflict regions.<sup>42</sup> As a result, Israel's forestry masterplan seems to be working at present.

## PROTECTION OF AGRICULTURAL LANDS

Agricultural lands are the single largest component of Israel's open spaces. With some 562,500 hectares classified as agricultural, farmlands constitute over 26% of all land in the country.<sup>43</sup> This phenomenon is largely a reflection of a major societal commitment that coalesced during the 1960s through the legislative protection of agricultural lands. With the establishment of the Israel Lands Authority (ILA), that managed both the lands owned by the Jewish National Fund and all other national lands in 1960, over 90% of Israeli lands were subject to a single policy. The overall strategy reflected a strong bias towards agricultural production.<sup>44</sup> Not only was the Jewish National Fund, historically an agency with a historic mandate for promotion of agricultural settlement, but the ILA overseen by the Minister of Agriculture until the 1990s.

The ILA quickly moved to set in place a series of prescriptions that ensured the preservation of agricultural lands and stymied commercial or urban development. These included:

*Adoption of the Jewish National Fund's long-held policy of eschewing private land sales and maintaining national land ownership:* Agricultural lands could not be sold but only leased for period of 49 years (and then renewed).

*A prohibition on subdivision of lands:* This preserved the critical mass of fields necessary for economic competitiveness.

*A requirement of continuous farming by leasers:* If lands were to change their designation, they first had to be returned to the ILA. This created an ongoing incentive to keep lands under cultivation, lest a community or individual's potential means of production be lost.<sup>45</sup>

This pro-agricultural orientation received additional statutory support with the legislation of the National Planning and Building Law in July 1965. Three years later the law was amended to establish a Committee for Preservation of Agricultural Land. The committee's mission was to make sure that the same pro-agricultural land policies were embedded into the National Planning system. The committee was comprised largely of representatives of agricultural institutions and interests and it wasted no time in declaring what amounted to an "agricultural default". Lands that were not already covered by buildings were to remain agricultural land and the committee was given the authority to reject any proposed plans that would build on this land. When challenged, the pro-agricultural bias of the committee was validated by the Supreme Court. For the next twenty years, the Committee for Preservation of Agricultural Land proved largely inflexible as cities that were often surrounded by agricultural Regional Councils quickly learned to make do with the real estate they had.<sup>46</sup>

All this changed in 1989 when the iron curtain fell and 1000 Russians a day began to pour out of a dying Soviet Union. Within a decade, a million new immigrants had arrived, adding 20% to Israel's population and making Russian Jews Israel's largest ethnic group. The government recognized that this "realization of the Zionist dream" presented a nightmare from the perspective of housing. To accommodate such an enormous influx of denizens, a National Masterplan 31 was hastily put together to provide a spatial solution for the housing needs of the new citizens. The plan was initially designed to last for five years, but was ultimately extended for another five years<sup>47</sup> and in fact remained valid until 2006.

The team of planners that prepared Masterplan 31 included environmental experts and this led to clear ecological achievements. The major environmental innovation that the plan introduced was the creation of a legal status for open spaces that were not nature reserves, parks, or forests at the national level. Prior to that, these areas, which are in fact the majority

of open spaces in Israel, enjoyed no formal status and were subject to the whims of local planning commissions. Moreover, the creation of the new category of lands—"Rural Open Landscapes"—suddenly allowed activists to utilize the courts and protect them against development plans.<sup>48</sup> Nonetheless, National Masterplan 31 was hardly a conservationist's dream.

For the first time, immigrants were encouraged to pick their new homes, without being pushed as vigorously to the periphery and in particular the Negev as they had in the past. While sociologically and economically this may have led to a happier result, it surely did not bode well for open spaces in the center of the country. The municipal borders of medium-sized towns were expanded dramatically. Hence, Netanya now officially stretched on for 12 kilometers, and sleepy Hadera woke up to find that it had borders that were substantially larger than those of Tel-Aviv-Yafo.

As one commentator bemoaned the missed opportunity to develop the Negev:

National Masterplan 31 photographed Israel's picture of urban development and established the norm that 'what was, is what will be'. It focused development efforts in the heart of the State, into a triangle that begins in Netanya in the north, Jerusalem in the East and Ashdod in the south. . . . We might as well let market forces play themselves out and we'll reach an identical result.<sup>49</sup>

In retrospect, it was not only the massive Russian immigration and the enormous pressures their arrival placed on the planning system that led to this result, but its coincidence with a general decline in farming (and political support for farmers) in Israel.<sup>50</sup> Agricultural efforts by then had shifted from "self-sufficiency" to export. Perceptions changed accordingly, with agriculture perceived as no more of a "national asset" and ideological icon than yet another business sector.<sup>51</sup> The increasing dependence on Palestinian and later Thai laborers also belied the Zionist myth of the "Jewish farmer". With the rise of the Likud government, the primary national settlement initiative now shifted to the West Bank, where agriculture was not the primary source of income. This led to a further weakening of government commitment to agriculture.<sup>52</sup>

In a 1995 article, Professor Eran Feitelson chronicled the circumstances that led to the dramatic collapse of a system that for four decades protected Israel's open spaces:

There are three main reasons for the increased pressure on the open spaces and especially on agricultural spaces. First is the increase in demand for housing, especially one and two story houses; Second, the increase in the demand for infrastructure, beyond that which would naturally derive from population growth; and Third, the drop in the demand for agricultural lands and the willingness and even increasing desire on the part of farmers to change the designation of their lands to alternative uses. All of these trends were strengthened most meaningfully during the past decade.<sup>53</sup>

Suddenly, Israel's highly conservative approach to agricultural land zoning was perceived as clashing with a more compelling national imperative—housing of immigrants. The upshot was a general erosion in public policies protecting Israel's agricultural lands. The detailed institutional and normative reforms are too numerous for the present survey, but in retrospect, three primary changes are evident:

1. The government ruled to move the ILA to the Ministry of Housing and Construction. (In a 1996 effort to assuage a disgruntled Ariel Sharon and create a “super ministry” for him, a new Ministry of Infrastructure was established whose authorities included oversight of the ILA. Similar circumstances in 2002 led to the Agency's transfer to Ehud Olmert at the Ministry of Industry and Commerce.) The ultimate destination of the ILA was less important than the clear message associated with its apparently irreversible departure from a ministry of agriculture.
2. ILA policies soon began to change in a series of decisions that were designed to reduce transaction costs for residential development in rural districts. Farmers were allowed to enjoy profits from changes in zoning without having to return their agricultural lands to ILA for reallocation. (In return—farmers agreed to cede sundry compensation claims.) In order to accommodate the “housing needs of farmers' children”, new neighborhoods sprung up at moshavim and kibbutzim—creating lucrative exurban development that in fact was enjoyed by the general public.<sup>54</sup>
3. Perhaps most dramatic in its consequences were the shifts in Israel's planning system which streamlined development in agricultural regions. An emergency statute in force for several years bypassed the conventional “ponderous” planning system along with its agricultural bias.<sup>55</sup> Even after the law and its emergency planning institutions

were cancelled, the status of the Committee for Preservation of Agricultural Land, empowered to block rezoning of farmland was weakened and safeguards to stymie such plans removed.

These policies, which essentially encouraged farmers to turn to land speculation, were not without their critics. As Elia Werczberger and Eliyahu Borukhov wrote at the time:

The result will be the transfer without payment of close to a third of the development value to agricultural leaseholders, without insuring that this land will in the foreseeable future be used for development. We observe thus a progressive erosion of the power of the Government to control urban development, and the transfer of the initiative for development and of development gains to lessees.<sup>56</sup>

A highly effective NGO called the “Eastern Democratic Rainbow” emerged to legally challenge government land policies.<sup>57</sup> Motivated by an ethnic sense of discrimination, the group argued that existing land policies lacked transparency and were fundamentally biased. At issue was the granting of excessive profits to land speculation by the largely Ashkenazi farm communities who had received their lands on the condition that they would be cultivated, rather than developed. Israelis, who emigrated later from Arab countries, after the creation of the state, never received comparable opportunities. The relaxed land policies were attacked as a form of favoritism.

During the 1990s, despite growing public support for open space preservation, a variety of intervention efforts could not stem the trend. Even successful campaigns by environmental groups such as the Society for Protection of Nature’s efforts to stop development of the last major sand dune next to Ashdod<sup>58</sup> or the Israel Union for Environmental Defense legal injunctions against marinas<sup>59</sup> were the exceptions that proved the rule. Green efforts appeared closer to the proverbial Dutch boy’s finger in the dike, which were heroic but ultimately ineffective in stopping the powerful economic incentives for development that created new breaches all the time.

By the mid-1990s, the conversion of farmland to commercial and urban development became particularly conspicuous in the center of the country. Countless farmers, with or without the blessing of the planning authorities converted their farms to shopping centers, warehouses, and light industrial zones.<sup>60</sup> The implementation of national infrastructure initiatives during this

period such as the Trans-Israel Highway (Highway 6), the new Ben-Gurion Airport terminal, and new cities such as Modi'in, Shoham, and Elad contributed to the impression that farmland—and open spaces in general—were in rapid retreat. When an inventory was taken by the Ministry of Agriculture in 1999, there was empirical support for the intuitive concern: 25,000 hectares of farmland (4% of the national total) had been converted during the decade—dropping from 588,000 to 562,500 hectares.<sup>61</sup>

Ultimately, however, the loss of Israeli farmland is a political phenomenon. Almost a decade ago, Rachel Alterman, the noted Technion professor of planning showed in a comparative study of farmland protection programs that there was a direct link between farmland preservation and the magnitude of financial support received by the farming community. Such support is a direct reflection of political influence.<sup>62</sup> Environmentalists compellingly argue that the ILA still has not internalized a conservation ethic in its dozens of annual decisions, and largely remains motivated by profit maximization and the ethos of development.<sup>63</sup> By the new millennium, the political calculus in Israel had begun to change. Three factors appear to have altered the course of open space policy in Israel: a new national masterplan that prioritizes open space protection, an increased cognizance of the “economic” value of open spaces, and public activism to protect open spaces that has been translated into political support.

## NEW PLANS FOR OPEN SPACE PROTECTION

By the end of the twentieth century, concern about the loss of open spaces resonated among a broad coalition of planners, public interest groups, and the general public who despaired at the loss of the Israel heartland. Many felt that land speculators and planning bureaucrats were conspiring to exploit the sense of panic about housing shortages. It was clear that Israel needed a new vision to accommodate the higher population densities and to draw some lines regarding the creeping sprawl.

Even before Israel's national planning bureaucracy began to respond to the perceived precipitous loss of open spaces, regional planners were already adjusting traditional development paradigms. During the 1990s, most of the six regional masterplans were revamped and they immediately shifted their perspective from a default agricultural preference to one with an open space-preservation bias. Agricultural employment and food security and exports were no longer the chief ideological drivers, but rather, those of quality of life and ecological sensitivity. This change in rationale translated

into a more nuanced and diverse role for open spaces at the level of regional planning strategies.<sup>64</sup>

Conceptually, the new regional paradigm had a prominent “national” advocate. Prime Minister Yitzhak Rabin turned to Technion architect Adam Mazor to draw up a new 2020 masterplan. Like the earlier Sharon plan, this exercise was not to be a statutory program, but rather a vision that would allow the national planning bureaucracy to prepare the next generation of masterplans. The 2020 plan looked at a variety of scenarios that alternatively maximized economic efficiency, social well-being, and environmental concerns (open spaces). In adopting a maximal open space strategy, for the first time Israel’s national objective of population dispersal was at least temporarily abandoned. Support for the periphery was based on a commitment to social justice and strengthening weaker societal elements rather than the creation of demographic facts. While lip service was still paid to supporting the rural sector, the 2020 plan was extremely realistic about the role that economics would ultimately play in driving the spatial aspects of Israeli settlement. The plan’s strategy for open space preservation, therefore, relied on the expansion of the four major metropolitan centers.<sup>65</sup>

This conceptual plan by design was not intended to be an operational document, but as basis for a new national Masterplan (No. 35) that could supplant the temporary National Masterplan 31 and provide an integrated macro-planning framework for the future. By 2000, a draft of Masterplan 35 was ready, with the stated goal of offering a planning framework until the year 2020 that would allow for a 250% increase of available construction areas. Yet, at the same time the plan sought to craft a policy that: “. . . preserved and nurtured a variety of landscapes and cultures that are endemic to the land of Israel as a valuable commodity in and of itself and creating an attractive image of the land that relates to and preserves the historical past, the physical morphological and natural components and that at the same time offers possibilities . . .”

In practice, the statutory plan reflected the 2020 strategy of enhanced efficiency by concentrating development in more densely populated urban centers and maximizing the preservation of open spaces in between. The entire country was divided into five different types of planning zones, called “merkamim” or “fabrics”, with future building primarily limited to urban fabrics and limiting construction to areas adjacent to metropolitan centers. Like National Masterplan 31, protection was given to open spaces—or rural fabrics—that were not forests, reserves, or parks.

It would take another five years for the National Planning Commission to approve the National Master Plan 35 and an additional one for the

government to ratify it. The plan was delayed by a variety of politicians for a variety of reasons—from Prime Minister Ehud Barak (due to pressures from the agricultural lobby) to Shas’s Eli Yishai (who felt it did not quash Arab development sufficiently). During Labor politician Ofir Pines’ brief tenure as minister of interior, the plan finally had a high level supporter and it sailed through the National Planning Council. The only objection was made by the representative of the JNF, who in a passionate, last minute plea before the formal vote, insisted that the lovely Beit Keshet forest not be included in the Nazareth city limits where it would surely face a slow but certain demise.<sup>66</sup> (The unexpected protestation succeeded and Beit Keshet maintained its status as a protected forest.) On September 27, 2005, the Government approved Masterplan 35, acknowledging in its formal announcement the importance of guaranteeing continuous corridors of open spaces.<sup>67</sup>

The *Ha’aretz* newspaper, which is rarely enthusiastic about any government action, came out with resounding praise:

National Masterplan 35 is not perfect, and yet, for the state of Israel, whose borders are blurred, whose cultural identity constantly flip flops and whose national goals are subject to powerful internal controversies—there is now a plan that speaks comfortably about human beings living as land owners. Not as settlers who impulsively seek to control lands and stop trespassers—not as builders of human fences in the peripheral zones, but as citizens who are focused on existing settlements, that nurture quality of life and are building a future for the next generation and setting down more nature sanctuaries for the common good.

Not that the plan was without its critics. Environmental consultant and commentator Daniel Morganstern blasted Masterplan 35 in an op-ed published in Israel’s most widely read electronic news-site “Y-net”. Morganstern’s consternation focused on the sixty-five changes in municipal borders that would now be expanded to include rural communities and the farmlands in their jurisdiction. Although this was only half of the original 111 border changes that had been on the table, Morganstern posited that: “It’s still a death sentence, not only for agriculture and farmers but for environmental quality in the urban settlements that will be swallowed up in the future and that will lose the little remaining green lungs that can filter the air pollution from transportation and stationary sources.”<sup>68</sup>

Morganstern argued that much of the envisioned urban growth is completely unrealistic, and is in fact nothing but a ruse, motivated by the windfall profits that real estate developers would reap:

What can be planners' justification for liquidating broad areas in the Huleh Valley for the expansion of the city Yesod HaMaaleh that will contain 10,000 residents? And does the still little quiet town Kfar Yona need to quadruple its population from 12,500 to 52,000 people at the expense of the last orange groves of the Sharon and Hefer Valley when there is less than a 2.5 [km] distance from the city of Netanya that already today has 200,000 residents? What remains of the concept and multi-meaning value "sustainable"? To our great sadness—very little.

Environmental activists are paid to worry, and they had no shortage of criticism. Of particular concern is the "declarative nature" of the plan and its imprecise delineation of those open spaces which are to be protected in the urban fabrics, making advocacy on the ground much harder.<sup>69</sup> Without prioritization of which lands are to be denoted for construction (and which preserved) within those areas now controlled by municipalities, there is a pessimistic assumption that a "first-come-first-serve" orientation to development will emerge and that ultimately the entire urban fabric will fill up.<sup>70</sup> Beyond the masterplan's fuzzy language and lack of quantitative criteria for development, tactically there are numerous ways that its preservationist orientation can be circumvented, making legal challenges to development far more difficult. Others believe that due the complexity of the plan, planning professionals are still unsure about the new categories of "land fabrics" and that the general public is entirely clueless.<sup>71</sup> Thus, many of the important new safeguards and conservation tools are in fact not yet effective.

Arabs also were not thrilled with the results. Of the dozens of planners who participated in the preparation of the plan, only one was an Arab-Israeli. The commitment in the Jewish sector to open spaces for some time has been perceived by many Israeli-Arabs as a transparent subterfuge to exert spatial control and limit the expansion of their towns.<sup>72</sup> Substantively, the 2.5% of national lands that were designated as Arab municipalities were not meaningfully expanded under the plan, even as the construction in these towns over the past fifty years has increased 16-fold.<sup>73</sup>

Ultimately, National Masterplan 35 has changed the nature of the planning discourse in Israel. The Appendix to the plan sets extremely tough residential density standards for construction. Cities are literally forbidden from developing unless they contain the required high-density levels. Urban planner Tomer Goltholf who participated in its preparation explains that such centralized intervention in municipal development is almost unprecedented internationally. For the first time, Israel's planners have adopted an extreme "land crisis" orientation to day-to-day physical

planning procedures, addressing not only the problem of “supply” but also “demand” for open spaces. A culture of high rise buildings is beginning to emerge not only in the Tel-Aviv region, but also in unanticipated locations like Givat Shmuel and East-Lod, where high quality urban parks will hopefully follow.<sup>74</sup>

## ECONOMIC APPRECIATION OF OPEN SPACES

When arsonists set fire to the Carmel Forest in 1989, the public responded defiantly by making unprecedented donations in a national telethon to restore the park. Four years later, Haifa University economist Motti Shechter tried to extrapolate from the fundraising results and assess an actual price for the open spaces. Relying both on the benefits to “passive users” who only enjoyed the “psychic value” and the active users who frequent the park, a 600m shekel value was placed on the scorched lands.<sup>75</sup>

This was just the next in a series of pioneering efforts by Shechter to put an actual number on what until that time had only been considered the *intangible* benefits of open spaces.<sup>76</sup> Traditionally, planners had tried to characterize and even rank open spaces ecologically or aesthetically,<sup>77</sup> however, monetizing their economic value was relatively rare until quite recently. Eventually, other economists would join him in this venture, with their data serving to strengthen the arguments of conservationists.<sup>78</sup> In a study published in 2000, another team of researchers from The Hebrew University assessed travel decisions of Israeli tourists as a basis for evaluating their appreciation of open spaces.<sup>79</sup> Their results were dramatic. Israelis’ willingness to pay for access to tour the open rural vistas of the Jezreel and Huleh valleys was far more than the actual value of the agriculture produce that was growing in the fields. They showed that only 16% of the land’s value had to do with its annual agricultural production. The remaining economic value was composed of the public’s “contingent valuation” of the open spaces.

Of course, developers also were keen to quantify the price of open spaces. When environmental policy expert Yaakov Garb read the cost-benefit analysis prepared by the Derech Eretz Corporation in support of the Trans Israel Highway, he was appalled at the tendency to underestimate open spaces that had been valued at \$5,000 per dunam. Garb argued that if land were evaluated only according to its potential agricultural production rather than its scenic value and that it would often make sense to run roads through open spaces. His rebuttal suggested that the actual market

rate of \$65,000 to \$70,000 be used (leading to very different results) and suggested that accepted guidelines utilized in the Britain be applied and monetized to consider their full environmental value.<sup>80</sup> Garb's analysis was highly influential in environmental circles but did not change the official discourse about the economic justification for the highway that had already been approved when the report was published.

A subsequent research initiative commissioned was by a Jerusalem advocacy group involved the campaign to preserve the Jerusalem Forest. Garb offered a comprehensive presentation of methodologies employed internationally to put a fair price on open spaces.<sup>81</sup> The public's appreciation of open spaces can be inferred not only from their declared willingness to pay, but also from expressed preferences in the distances they travel to reach open spaces or the higher prices paid for real estate with access to natural landscapes.<sup>82</sup> Such studies slowly came to influence the decision-making process and forced subsequent economic analyses to offer much more robust and expensive price estimates for projects that came at the expense of open spaces.

## OPEN SPACES' NEW POLITICAL CLOUT

While most environmental organizations since the 1990s have put open spaces at the top of their collective agenda, the Israeli public took many more years to buy into the notion that its landscape was a public good that was rapidly disappearing. Recently, however, successes by conservationists in several battles to prevent the establishment of new settlements suggest that open space preservation has indeed become a mainstream priority.

The most heated and publicized controversy in this litany of "victories" was the attempts by Jewish settlers in Gaza to reestablish their "Gush Katif" communities along the Nitzanim beach. For a variety of arcane planning technicalities, the lands connecting the coastal cities of Ashkelon and Ashdod remained largely untouched and by the 1990s constituted the largest stretch of undeveloped beachfront lands in Israel. The Gaza settlers suggested that 550 trailers be moved to the beach while permanent homes were to be built. The Israel Union for Environmental Defense immediately filed suit to enjoin the proposal, but the Supreme Court chose not to intervene.<sup>83</sup>

Initially, Prime Minister Ariel Sharon supported the proposal, presumably, as it offered an opportunity to soften the resistance of the recalcitrant settlers who refused to evacuate. However, the uproar over the enormous

loss to future generations came from not only Minister of Environment Shalom Simhon, but also his own son, Omri, who headed the lobby of “Green” parliamentarians. Sharon agreed to table the plans. Instead, the sullen settlers were forced to join existing settlements several kilometers from the sea or moved inland to new farmlands. Yet, the precedent of providing new settlements for individuals and communities who must leave their homes as part of an Israeli evacuation of Palestinian areas may have ominous implications for local open spaces.<sup>84</sup>

A more recent case involved the proposed community of “Michal”. For over a decade controversy raged over this new settlement that was to be established on the top of the Gilboa mountain, encroaching on lands that lay inside the nature reserve. In a controversial deal cut by the Regional Council and the Parks and Nature Reserve Authority’s director Eli Amitai, the Authority’s objections to the settlement were traded in return for the Council’s agreement to allow the declaration of a reserve in a far larger tract nearby. Yet, green opposition never softened—and when a study showed that the new settlement, notwithstanding its self-declared “ecological” orientation, might endanger the endemic irises, the National Parks and Nature Reserves Council, responsible for designating protected lands, reversed its earlier decision. Subsequently, the National Planning Council resoundingly rejected the plan. Conservation activists remain suspicious of Amitai, the former military officer who serves as director of the National Parks and Nature Reserves Authority, for his inclination to reach compromises with pro-development Regional Councils.<sup>85</sup> In the ongoing clash over the extent of the pragmatism required in conservation controversies, the darker shade of the green’s political momentum is undeniable. Similar dynamics, for example, led to the cancellation of Ramat Arbel, which was slated to eat up the scenic heights overlooking Lake Kinneret.<sup>86</sup>

Israeli environmental groups also began to turn their attention to the accessibility of open spaces to urban populations. After a long public campaign that included an international architectural competition of ideas to restore Tel-Aviv’s decommissioned garbage dump, in 2005, the government voted to prohibit all residential construction around the enormous 600 hectare Hiriya site.<sup>87</sup> A year later courts rejected the associated legal challenges by developers—and thus the public gained what will be the largest park in the Gush Dan region. Towns like Ramat Menashe, Herzliya, and Nes Tziona also pushed through ambitious conservation plans for local urban spaces.<sup>88</sup> The marina boom of the 1990s that gobbled long stretches of invaluable public beaches was stymied when the Knesset passed a coastal protection law in 2004.<sup>89</sup>

Recently, a five-year battle to cancel the Jerusalem municipality's proposal to expand its municipal borders to the west and build 20,000 residential units in the hills of Judea also met an unceremonious end. Proposed by the renowned international architect Moshe Safdie, the plan was assailed both because of its ecological/aesthetic impacts and because of its impact on the urban dynamics in the city of Jerusalem itself. The once robust center-city, it was argued, would grow even more atrophied as commercial activity drifted to the new suburban style neighborhoods to the west. In 2006, the National Planning and Building Council commissioned a study that ultimately showed the existence of 46,000 available units in existing Jerusalem neighborhoods, belying arguments of a housing crisis. Facing a near-certain rejection by the National Council, Jerusalem Mayor Lupolianski acquiesced to the 10,000 individual legal objections that had been collected by the "Sustainable Jerusalem" green coalition, and withdrew the plan.<sup>90</sup>

In all of the above cases, advocates for preservation of open spaces faced powerful and well-funded development interests—and won. Such a litany of victories led the generally laconic and understated *Ha'aretz* environmental correspondent Tzafir Rinat in his Rosh Hashanah end of the year ecological review in 2006 to summarize: "Last year, 5766, will go down as an important year in the fight to preserve open spaces in Israel."<sup>91</sup> While it seems that there have been critical normative, economic, and political breakthroughs in the battle to preserve Israel's countryside, there are "Achilles heels" where open spaces remain vulnerable.

## OPEN SPACES—FUTURE CHALLENGES

There are several areas where the prognosis for open spaces is not healthy. Three areas of particular concern are: illegal development in Israel's agricultural sector, unauthorized construction in the Negev by the Bedouin Sector, and the government sanctioned "isolated settlement" program.

*Illegal Commercial Activities in the Rural Sector*—Israel's farmers' economic crisis has led to a major shift in the employment patterns in Israel's rural sector. The percentage of Israelis employed in agriculture dropped from 30% to 3.5%; the vast majority of residents of rural kibbutzim and moshavim (some 80% of members) are gainfully employed, but in non-agricultural ventures.<sup>92</sup> It was only natural that as farmers shifted to non-farming economic enterprises, they sought to take advantage of their land holdings as their one, conspicuous relative advantage, which might balance the disadvantage of geographic remoteness.

Moshav communities in particular sprouted a variety of factories, warehouses, shopping centers, and even new neighborhoods, often without the approval of the planning authorities. A 2006 survey by the public interest Israel Union for Environmental Defense organization reported: “93% of all utilization of public spaces in the Sharon Regional Council in between settlements were illegal and only a few of them bothered to try and receive permits for their enterprises.”<sup>93</sup> The massive non-compliance with the law can on the one hand be attributed to a sense of entitlement among Israel’s agricultural sector that feels they were sent to pursue a national mission in tilling the land, only to be abandoned when political priorities changed. Exploiting the economic potential of what had previously been open spaces only seems like fair compensation. At the same time, Israel’s planning system has an exceptionally weak enforcement presence that has always been loath to confront the most flagrant of agricultural violators. The problem in the rural sector is largely one of individual lawlessness and enforcement. The cumulative results are dramatic.

*The Bedouin Building Boom*—A ride into Israel’s Negev desert reveals an astonishing number of squatters who have thrown up a tent, and then a home or a shed, with “shanty towns” rapidly filling up the empty hillsides. Local planners acknowledge that the actual number of illegal buildings associated with the Bedouin building boom is now estimated to have reached 50,000.<sup>94</sup> These are generally ramshackle and of poor quality, but with time, isolated buildings turned into clusters and slowly the infrastructure of permanent settlement begins to spring up.

This invasion of the open spaces in the Negev is a symptom of a far more complex dynamic. Indeed, the pathology of Israel’s Bedouin sector is far too complex for the scope of the present article. Smart physical planning alone is inadequate to solve the problem. To address the core causes of the phenomenon will require interventions in the area of education, employment, infrastructure, and of course political good will. Yet, as Israel continues to jump from exigency to exigency, the problem of its Bedouin population continues to fester, and vast stretches of open spaces give way to haphazard and illegal construction.

*Isolated Settlements*—In an effort to establish a Jewish presence in the Negev that would slow the proliferation of Bedouin land squatting, in the late 1990s Jews were encouraged to establish private ranches on national lands.<sup>95</sup> Particularly in the sprawling jurisdiction of the Ramat Negev Regional Council, some twenty-three individuals established private wineries, cheese farms, and restaurants on large areas that were leased for symbolic fees from the ILA. The actual construction associated with these ranches

was minimal. Nevertheless, by definition they became fenced enclaves that both excluded the general public who might want to wander onto these previously open spaces and of course truncated habitats for local animals. Proponents of the initiative argued that in fact these settlements served to preserve open spaces that would otherwise join the *de facto* land Bedouin land grab. However, green advocates were not convinced.

Environmental organizations continue to challenge the legality of these settlements—none of which were created according to an open and transparent public tender, and none of which possessed the mandatory building permits. The Society for Protection of Nature in Israel writes:

More and more lands that were the province of the general public are allocated to the isolated settler and are actually removed from the shrinking reservoir of open spaces that are designated for the public's well being. Isolated settlements that are established without planning on lands that are largely agricultural or open spaces that are not residentially zoned, will cause irreversible damage in the long run. The form and scope of individual settlements pose egregious moral ramifications. Violations of the law are knowingly and openly committed, even with the encouragement of the agencies that are supposed to be maintaining the law. And as a result, an entire generation is raised in a reality where violations of the law are a norm and lawlessness pays off . . .<sup>96</sup>

In framing its opposition in the context of “the rule of law” rather than “ecology”, environmentalists were far more effective in engaging partners in their campaign. In 2000, the venerable State Comptroller admonished the ILA and the local officials for running roughshod on the legal requirements for equitable distribution of lands and called the governments’ role inappropriate.<sup>97</sup> As a result, the National Planning and Building Council appears disinclined to grandfather the legality of these isolated ranches. Neither the local officials in the Negev nor the ILA itself are interested in evicting the settlers. The resulting stalemate creates anarchy and a policy vacuum that will undoubtedly be exploited by additional Jewish entrepreneurs and adventurers seeking a unique quality of life on isolated settlements.

#### CONCLUSION: ISRAEL'S OPEN SPACES AT THE CROSSROADS

The present review considers the quantity of open spaces. Of course, it does not raise the issue of “quality of open spaces”. Here, for example, the growing motorization of Israeli society and the relentless expansion of the

road system are certain to become an increasing cause for concern. Efforts to force the northern section of the Trans-Israel highway into long tunnels were unsuccessful at the political level and subsequently in legal appeals.<sup>98</sup> Forests, such as the Menashe forest, slated to be an international biosphere, have literally been cut into pieces by the transportation infrastructure, with once-serene commons sure to suffer a growing automotive roar. Other problems such as controlling litter, invasive species, jeeps, and hunting in Israel's open spaces are of course germane but beyond the scope of this article.

Yet, notwithstanding such tribulations and remaining challenges, it would seem that in many ways the present protection of Israel's open spaces is far better than it was in the past. Israel's Parks and Nature Reserves Authority appears to be as committed as ever to protecting the natural history contained in its parks and sanctuaries and the scope of its protected reserve system is actually growing rapidly. The National Masterplan for Forests is being successfully implemented and defended by an increasingly green JNF. The remaining open spaces may enjoy the benefits of a major shift in policy, and political and public support during recent years, culminating in the passage of National Masterplan 35. The scope of agricultural lands, in rapid decline during the 1990s, will continue to drop, yet lines have been drawn in the sand that should both control and contain the phenomenon.

It is important to remember that while it is a critical prerequisite to a long-term equilibrium between construction and conservation, the legislative progress by itself is not a panacea. Israel's normative framework for protecting open spaces will only be as good as the enforcement system and political will that backs it. In a sense the "good news" for open spaces and their advocates only means that planners and green lobbyists have done their part. A broad proactive approach among the general public and political leaders is now needed to accompany this progress. Local efforts such as those of the coalition for a Healthy Arava Environment to prioritize the designations of open space zoning in the southern corner of the country<sup>99</sup> or of residents in Jerusalem's Ein Kerem neighborhood who proposed an alternative plan for preservation of the surrounding "visual basin" and contiguous open spaces demonstrate that today's planning system in Israel is open to such initiatives.<sup>100</sup>

As Israel becomes a nation of 10 million people, the importance of the countryside as a place of refuge from Israel's increasingly crowded cities will only grow. Open spaces have the power to serve as a source of inspiration for young people, whose connection to a national landscape is a key component of the patriotism that is especially needed to sustain a commitment

to a country as demanding as Israel. Environmentalists often joke that there are no victories—only stays of executions. However, the dynamic is a wholly sobering one. Mounting population pressures in a crowded country will continue to require a constant vigilance and societal commitment to open spaces. The coming years will be critical to ensuring that Israel's progress in promoting preservation remains sustainable. It is encouraging therefore, to see that the general trends for protecting the landscape of the "promised land" are promising.

## NOTES

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