

# **Agricultural Landscapes in Israel**

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## **Introduction and Case Study**



## Introduction

Many parties share an interest in the process of change which Israeli agriculture is currently undergoing: the agricultural establishment, farmers themselves, the planning community and the general public. As an economic sector and as a food producer, agriculture is today less reliant upon land resources, yet at the same time the significance of its external contribution to the values of landscape, culture and heritage is increasing. Agriculture plays a role in environmental conservation and ecological processes, in addition to providing green breathing space in a country which is becoming continuously more crowded and developed. While agriculture once formed the corner stone of the Zionist movement, it today stands before a crossroads, at the heart of which lies the significant change in perspective that has occurred in recent years.

This change, which today has reached new heights, necessitates preparation and innovative thinking regarding the meaning and functions of "Landscape and environmental agriculture". In contrast to the traditional value of agriculture — food production — which was analyzed using agro-technical and economic tools, and which we were able to rationalize, measure, quantify and justify, agriculture's contribution to the landscape, aesthetics and culture require totally different methods of examination: landscape analysis, environmental design, understanding of its significance to culture and heritage and its significance for recreational services, vacations in natural surroundings, tourism and so forth.

The picture becomes even more complex as a result of the demand for the integration of all these elements within the accepted agricultural-economic system. Indeed, "landscape agriculture" must continue to include all the traditional aspects of agriculture surrounding food production. Despite the general agreement concerning the need to combine the economic and social functions of agriculture, until now insufficient attention has been paid to preparing for this new reality.

What is "landscape agriculture"? Which agricultural landscapes do we want to see, and moreover who will "look at", examine and decide upon the character of the landscape? Should these be traditional agricultural landscapes, similar to those found in pilgrims' descriptions of their journeys to the land of Israel and in classic portraits of the holy land that attempt to recreate the landscapes of the Biblical land which formed the backdrop for the stories and events related in the Book of Books? Or perhaps they should be those of the first days of the return to Zion — a wheat field stretching as far as the eye can see, vineyards, the orchards of the Sharon region, a water tower rising above the rooftops?

A further question concerns the impressions made on the agricultural landscape by the many nations that have lived in the land of Israel alongside the Jewish people: the Nabateans, Byzantines, Arabs, Crusaders, Bedouins, Druze, Templers, Circassians and many others. Each of these peoples left its mark on the agricultural landscape of the country, and each one's unique activities shaped the landscape in a particular manner. The impact of traditional agriculture

can be discerned in olive groves and orchards, in stone terraces, fields watered by rain or irrigation, in the landscapes of the Galilee, Samaria, Judah and the Negev.

The imprint of modern agriculture on the country's landscape is continuously increasing. A long plowed furrow stretching off into the horizon, fields of cotton or sunflowers, large wide terraces replacing ancient ones, greenhouses and nettings, chicken coups and cowsheds, all of which are, of course, agricultural facilities: what is the difference between these and classic, accepted agricultural structures such as guard huts, wine and olive oil presses?

The desire to reflect the country's character through its agricultural landscape raises serious questions in the minds of planners, landscape architects and farmers, and occasionally these also reach the public agenda. Yet until now they have not been consolidated, properly phrased or clearly posed. These questions are becoming ever more significant as a result of the continuously growing pressure — which will only increase further in the future — to allocate agricultural lands for development.

The present study, rather than presuming to provide answers to these questions seeks to highlight their importance, clarify them and discuss their components. In so doing, it aims to give substance to and anchor in reality the relationship between the concepts of man, agriculture and landscape.



There is no one right answer to questions regarding the "character of the agricultural landscape", its nature, design and style. Moreover, it is likely that a multitude of opinions and perspectives will lead to varied and rich results. This study does not intend to hammer in nails and set out fixed and uniform outlines for the landscape. Rather, it intends to lay the foundations for documenting, registering and analyzing the units and formations of agricultural landscapes. It attempts to recognize and characterize landscapes typical of different areas and which reflect the various historical periods and agricultural cultures that have existed in the country. All this should serve the planning system as a basis for consolidating suitable policy and making decisions concerning agricultural lands in Israel.

The landscape is not fixed and unchanging, and this study does not aim to perpetuate frozen landscape patterns. The landscape, and principally the agricultural landscape, is the work of man and as such is subject to changes — it will alter in the future according to developments and advances in methods of cultivation and farming, as well as according to economic and agro-technical conditions.

The agricultural landscape strengthens, and in fact creates, the spirit of the place. The relationship between the two forms the basis for developing a decision-making process concerning cultivation of agricultural landscapes and suiting them to the different regions, and for giving substance to the renewal of Israeli agriculture.



## General Background

Israeli agriculture has for some time been in a state of continued crisis. The desire to provide agriculture in Israel with a new face, image and substance cannot be isolated from the foundations and roots of this agriculture in the Israeli experience, as it has been nurtured and flourished from the first days of the return to the land of Israel to the present day.

The fortunes of agriculture in Israel have taken a turn for the worse and its initial status and substance have not supported it in the current, difficult period. The brilliance of the meanings, images and roles that were considered so important in earlier times, and which were carefully, even zealously, cultivated and preserved, has dulled and today these factors no longer carry weight in the arguments to justify the existence of agriculture.

These matters lie at the heart of the current agricultural crisis and the difficulty in managing this crisis and directing it towards protecting agriculture. The Yishuv, and later the State of Israel, maintained and nurtured agriculture as a basic principle in the fabric of the country's physical and moral life for reasons that are no longer valid today. Agriculture is disappearing before our very eyes as these reasons for its existence and that of its fields, tools and personnel expire. The greater the severity and stringency that were used to justify the existence of agriculture in the early days of the Jewish return to the land, the larger the hole created in their absence.

This is another way of understanding the continued crisis afflicting agriculture in the present time.

Agriculture should not be viewed as a means or tool in the hands of the movement to return to Zion and renew the land. Rather, it was the embodiment of this return to Zion. The two are inextricably bound together.

Much has been said and written concerning the amazing achievement of the urban Jews who

created the agricultural settlement in the land of Israel. Among the Jews in the East European Diaspora in Russia and Poland, the forefathers of the Zionist settlement in the land of Israel, there were no farmers. Yet those city dwellers came to a comprehensive agreement that the settlement of the land meant tilling its soil:

The weakening of the agricultural sector in Israel has been evident since the 1980s. This decline has led to a lengthy process of ceasing to cultivate agricultural lands and subsequently abandoning them. At the same time, there is a growing demand for land for development purposes — mainly in the center of the country. A large proportion of the agricultural plots belonging to agricultural villages are located close to cities, and they constitute a resource for the natural development of continued urban sprawl. These two processes — weakening of agriculture and the demand for land for development — have led to serious pressure for the re-zoning of agricultural plots and their designation for construction. To date, a significant amount of agricultural land has been removed from the cultivation cycle, and some even covered with buildings. The decision of the Israel Land Authority to involve the owners of the land in this initiative and in the development rights has sped up the processes of re-zoning and building. The change in designation from agricultural to developed land constitutes a preferred economic alternative to continued cultivation of the land. This summarizes briefly the crisis facing Israeli agriculture today.

The agricultural crisis has far-reaching implications for the ecological, social, landscape and cultural situations in the state of Israel. Aside from food production for the population, agricultural land performs other, no less important, functions.

The picture of the agricultural future is complex and varied: alongside food production and natural products, agriculture also provides an open view, green breathing spaces, it plays a role in recreation and well-being, and its open spaces break up the urban scenery. Agricultural

landscapes enrich the view, with their different appearances according to the changing seasons, and provide interest and variety close to populated areas. The Israeli public, most of which lives in cities, should receive pleasure from the cultivation of agricultural landscapes, rather than competing over them and dirtying them. Therefore the systems for protecting and cultivating must become the property and responsibility of city dwellers. The burden of conserving agricultural lands should no longer be the sole responsibility of farmers but rather it should be shared with urban residents.

The present study lays the foundations for the continued existence of agriculture on the basis of international experience and analyses of similar cases which have recognized agriculture's external contribution. It seeks to provide an opening to widen public interest in agricultural landscapes in Israel, to discuss their characteristics and value, to raise suggestions or ideas and methods to preserve and cultivate these landscapes and to suit cultural-landscape agriculture to Israel's environmental conditions.



## The Structure of the Study

The document before us includes ideas, thoughts and paths of action regarding the future of agriculture in Israel.

The subject of agriculture and its external contributions relates to values of culture and heritage, nature and scenery, ecology and the environment, planning and economy. The web of connections between these issues and the multitude of sectors involved necessitate order and clarity in the organization of the study's chapters. We have chosen to present three main sections:

### Section 1 Introductions – The External Contributions of Agriculture

The first section focuses on the roots of the problem – the agricultural crisis and, in its aftermath, the failure of the market and the loss of agriculture's external contributions. This section also provides detailed descriptions of the external contributions of agriculture, divided into three sectors: Society, Environment and Economics.

This section expresses the opinion that only sustainable agriculture is capable of maintaining these external contributions. Here the discussion turns to sustainable agriculture and the manner in which it fulfills the social and environmental demands placed upon it.

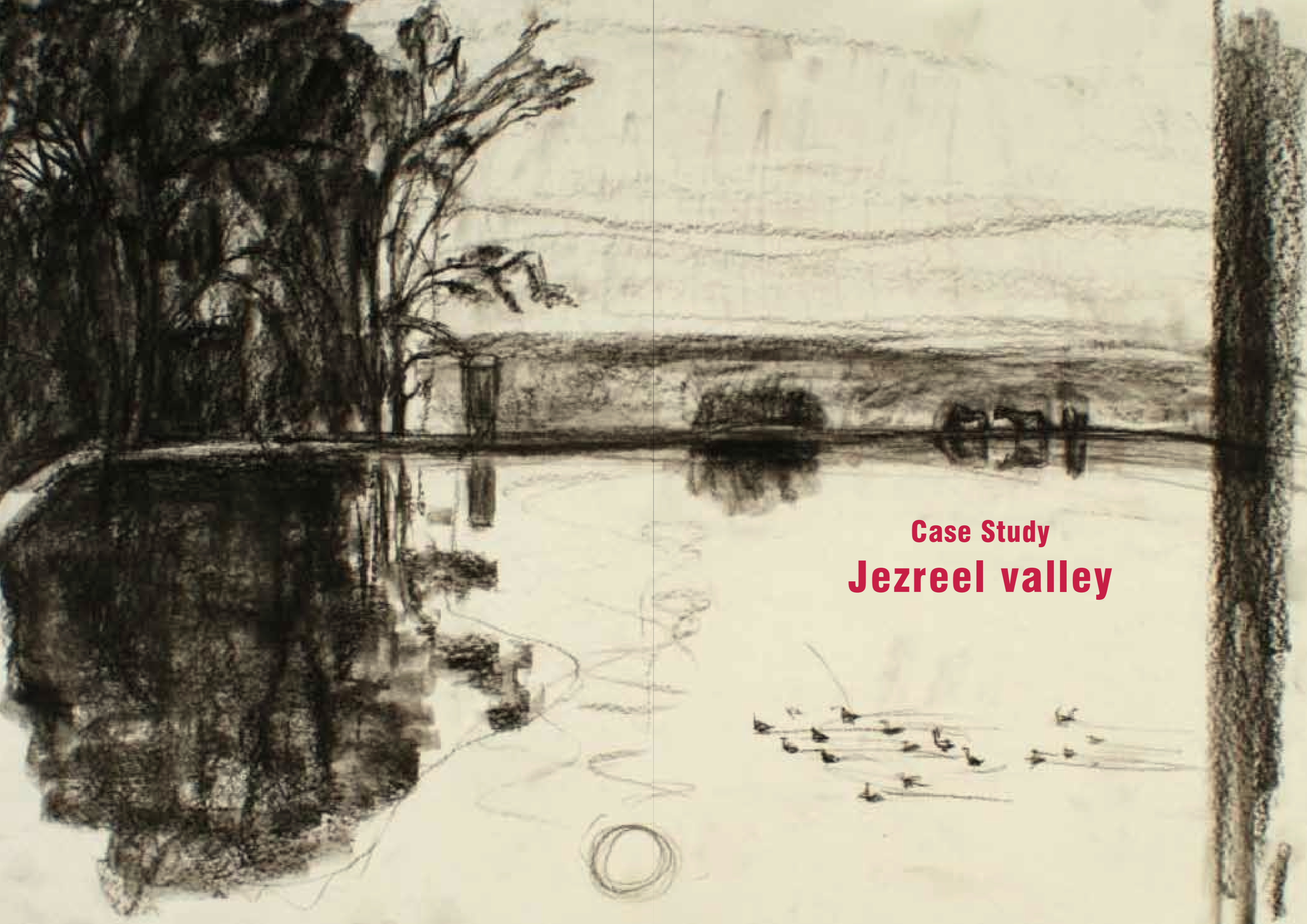
### Section 2 Sources – The Character of the Agricultural Landscape

This section focuses on the cultural sources of agriculture, its role in the history of the land of Israel and in descriptions and praise of the country. It also provides a short survey of the role of agricultural landscapes, types of scenery and reference to these in world literature. The section concludes with a portrait of the agricultural landscape as a source of inspiration and of a series of images and scenes common in our lives.

### Section 3 Map of Agricultural Landscape Units in Israel

This section proposes a system for typifying, classifying, documenting, registering and evaluating agricultural landscapes in Israel, based on methods accepted in the western world. The second part of this section describes the various units, according to the proposed method.





**Case Study**  
**Jezreel valley**



## General Description

The Jezreel valley, bordered on all sides by mountains, is the largest valley in Israel, stretching across almost the entire breadth of the country from the Zebulun Valley and the beaches of the Mediterranean Sea and to the Harud Valley, which borders Jordan. This is the only prominent landscape line to cross Israel's elevated areas lengthwise. At its center lies "The Valley's Capital", the city of Afula.

The valley is characterized by sediment soils and its entire area is cultivated; there is almost no fallow land or natural vegetation in the valley.

## Natural conditions

### Morphology

The valley's encounter with the lower parts of the surrounding mountains creates a border around it. Each point of contact has its own unique character, some are clear and sharp, others gentle and vague.

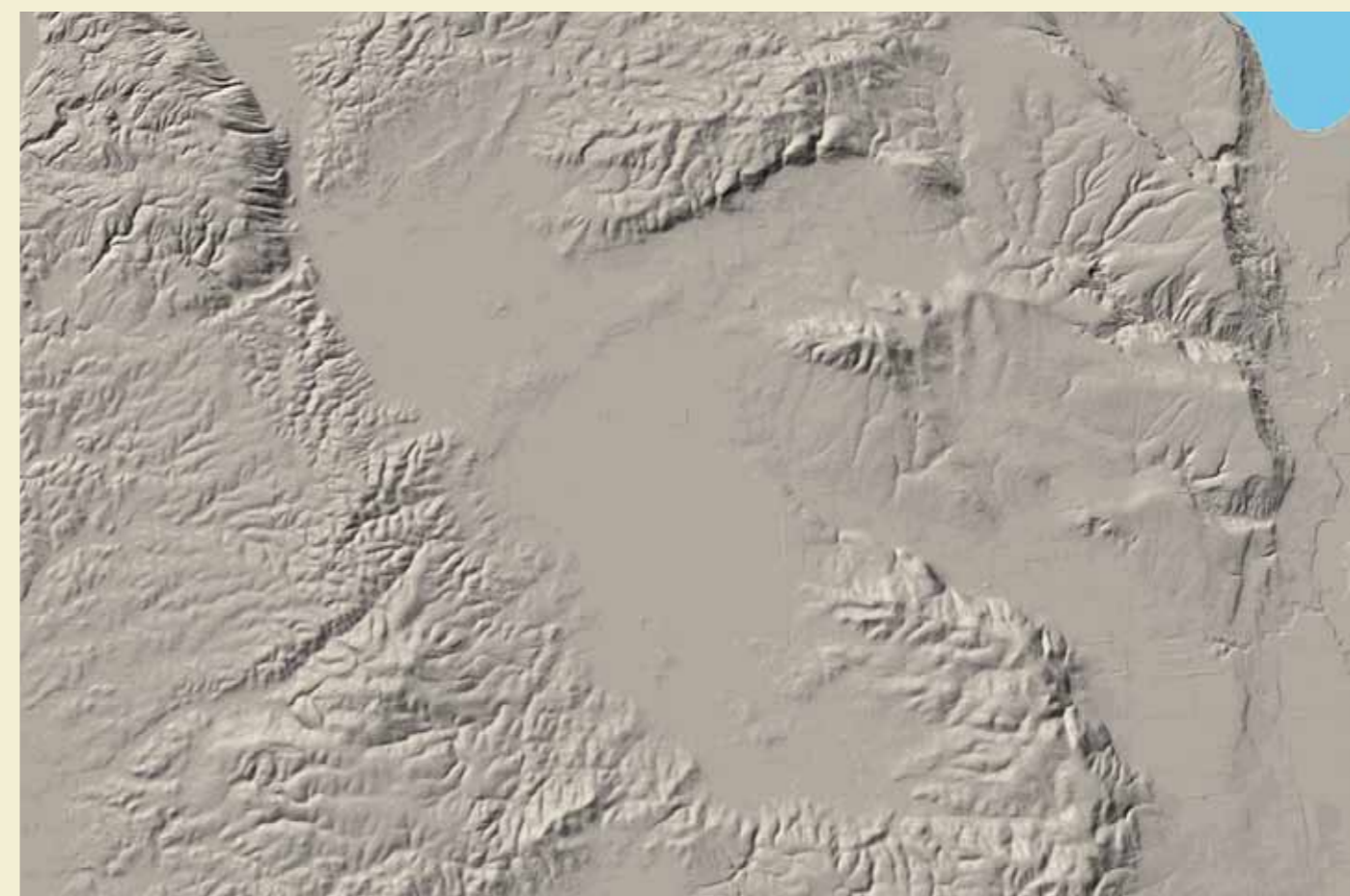
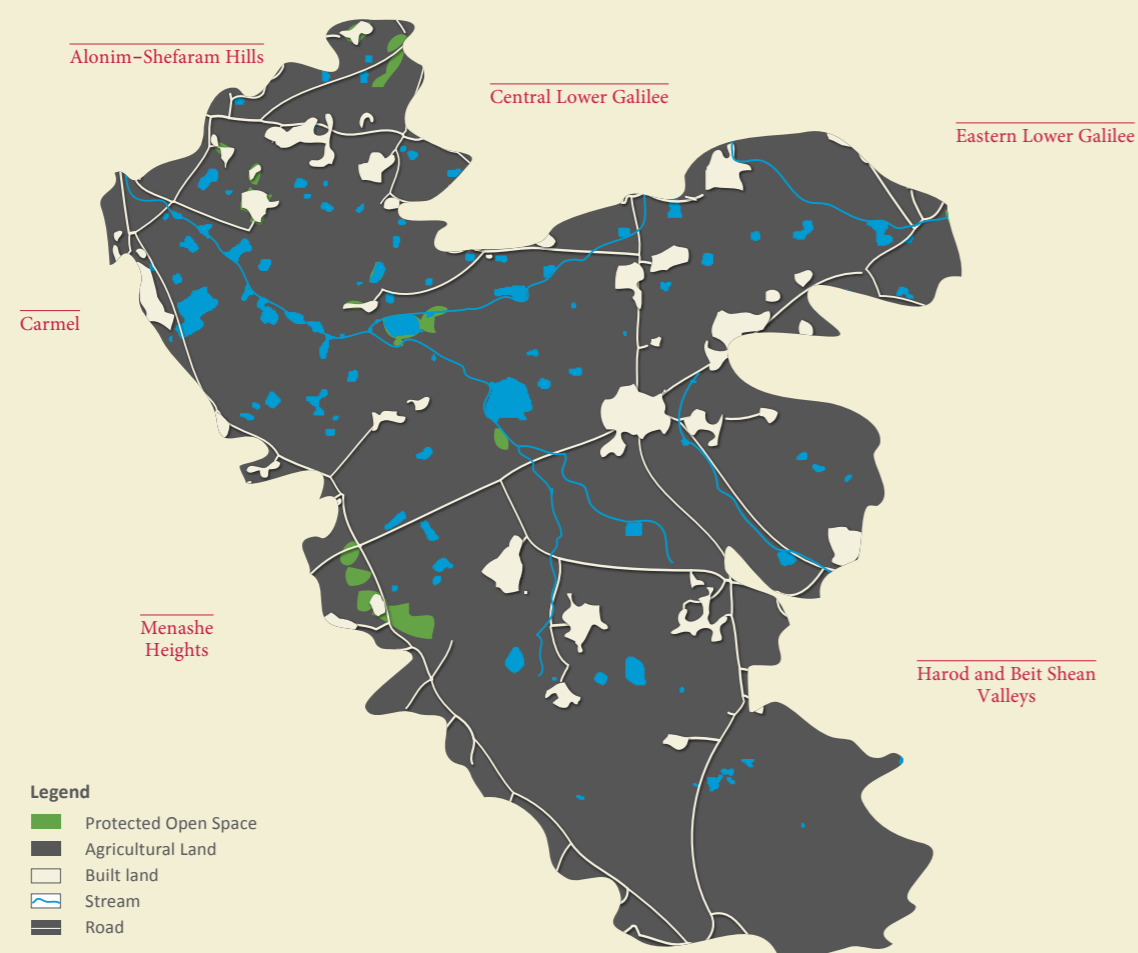
The borders create stark contrasts in the landscape. For instance, the border between the Jezreel Valley and the Carmel is the most prominent: the eastern part of the Carmel rises up above the valley as a result of a geological rift. Likewise, the Nazareth Mountains form an abrupt border in the northeast of the valley.

Less stark is the contrast along the eastern border, from the Tabor Mountain through the Gilboa to the Samaritan Heights: a line of sloped plains descend gradually into the valley. The national water divide passes through the heights of these plains.

In the areas of contact with the Alonim-Shefaram Hills, the valley weaves between the hills and the border is winding and indistinct. The Alonim Hills do not come to an end at any one particular point, but rather disappear gradually into the sloping plain. At the meeting point between the valley and the Alonim Hills the slopes continue into the plain, leading to an elevation of the land 50m above the plain. The valley's first settlements were established on these hills.

In contrast to the accepted image, the topography of the Jezreel Valley is not totally characterized by plains. Rather, it includes soft rises and falls, for the most part in its northern part.

Internal lines cut across the lands of the valley and delineate sub-areas within it. The most prominent of these is the channel of the Kishon stream, which flows from the slopes of the Gilboa north-west to the Mediterranean Sea. As part of its ascent the stream cuts through a volcanic mountain range which crosses the valley from



southeast to northwest, at right angles with the stream. This range protrudes from the surface of the area, marked by its patches of basalt and the orchards planted along it, which stand out among the carpets of field crops covering the valley. Further along within this range is the Kesulot Valley, which stretches to the slopes of the Tavor Mountain.

There is almost no uncovered rock in the valley, aside from sediment rocks and the exposed volcanic rock to be found at the valley's edges.

The Jezreel Valley lies within the Mediterranean climate zone, although its climate is not uniform. Many factors, including temperatures, amount of precipitation, relative humidity and strength of the wind, vary according to location within the valley: for example, the average precipitation is lower in the east of the valley due to its distance from the sea.

### Drainage system and Water Sources

The national water divide passes through the eastern part of the Jezreel Valley; the valley's capital city, Afula, in fact lies on it. The drainage conditions in the eastern part of the valley, which slopes more, are relatively good, but they worsen with the progression of the valley westwards. For this reason the western part of the valley was characterized in the past by swampy landscapes and throughout history was less subject to settlement, in comparison to the secondary valleys of Jenin and Kesulot.

The Jezreel Valley is rich in natural springs, to be found mainly along its edges, in the area of contact with the slopes of the neighboring mountains: the Megiddo Springs, Hazore'a-Yoqne'am and

a series of springs at the feet of the mountains of Nazareth and the Tiv'on Hills. These springs enabled settlement at the edges of the valley from the earliest times. The abundance of water requires control and drainage in accordance with the season. Today the water is collected in pools.

These water pools typify the agricultural landscape of the valley. They serve as a source of irrigation for agriculture and are an indication of the co-operation among farmers in the valley. The pools are linked by water channels that flow into the Kishon stream, creating a local landscape of water pools.

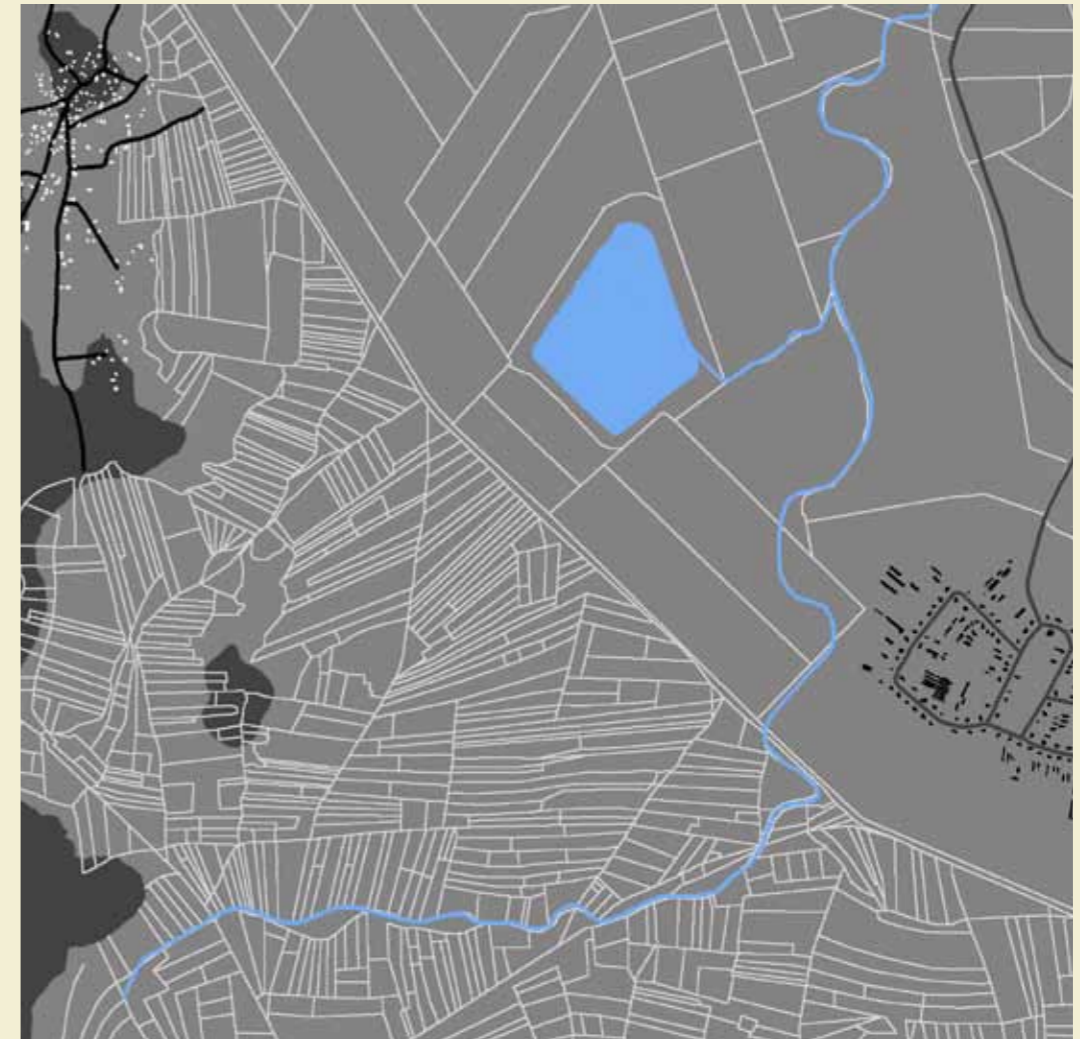
A large water reserve is located close the city of Afula, near the point at which the Kishon stream breaks through the volcanic range. In the past this range acted as a natural dam behind

which water pooled whenever the stream of the Kishon flowed plentifully. The reservoir located there today is a modern response to the natural landscape.

In addition to the natural water systems and reservoirs, the intensive agriculture in the valley today also uses reclaimed water, principally from Haifa.

### Natural Vegetation

The intensive agricultural cultivation of the Jezreel Vally has left almost no natural vegetation, apart from that along the banks of the streams which is suited to a humid climate: reed bushes, calicotome villosa and false yellowhead (dittrichia viscosa).



## Agricultural landscapes

### Description of the Agricultural Landscape

The valley provides physical conditions suitable for agricultural cultivation. Most of it – in fact, all of its flat parts – are covered with field crops. The areas planted with trees are characterized by gentle slopes, which provide convenient drainage and for this reason most of the orchards are concentrated on them. The plains suffer from significant drainage problems and in recent years also from salinification.

The agricultural plots are reasonably large, mostly square in shape, although they are not arranged in an ordered grid. Here and there are to be found circular plots, as a result of circular irrigation.

There exist variations in the patterns of cultivation: traditional Arab agriculture alongside that of the Jewish settlements – agricultural villages and kibbutzim.

Traditional (Arab) agriculture is characterized by a mosaic of lengthy narrow plots. Jewish agriculture utilizes large plots centered around reservoirs and smaller plots close to the villages (private farms). The differences between the various kinds of agriculture are evident around the section of the green line that passes through the Jezreel valley.

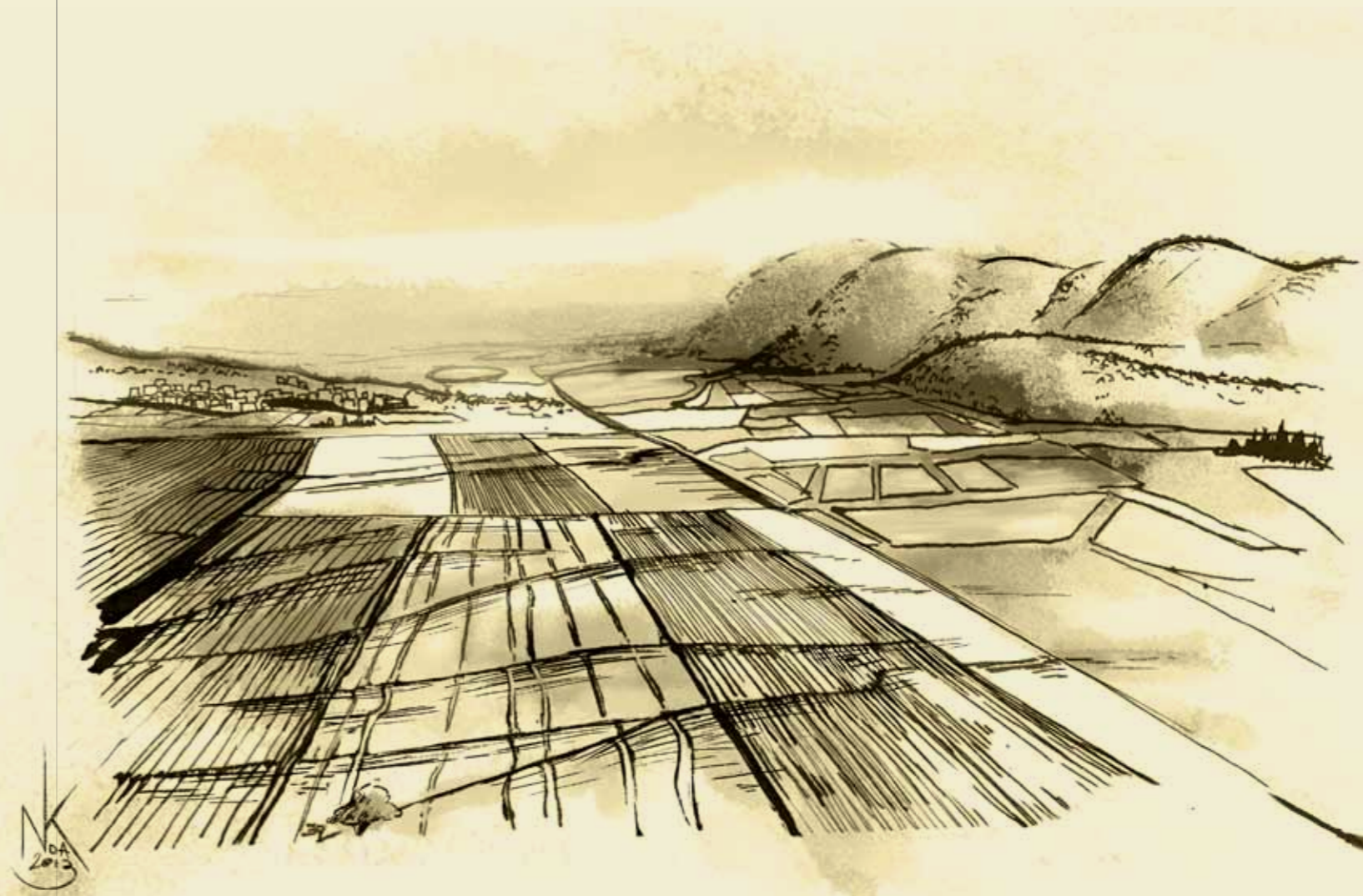
The population centers are for the most part located on elevated topography. Many are constructed in the form of a series of concentric circles: in the inner circle are homes, most of which are one storey; in the second circle trees – fruit bearing and ornamental, principally cypresses, prominent as a result of their erect tops; and in the central circle, the highest and most dominant, are to be found the agricultural structures: feedmills and water towers. The graded silhouettes of these villages, on the background of the horizon of fields, are one of the identifying markers of the Jezreel valley.



### Agricultural Crops

According to the accounts of nineteenth century travelers, at that time agricultural crops were already common in the valley – wheat, barley, sorghum and cotton. Richer vegetation was to be found closer to population centers, including vines and olive trees. However, most of the land was not cultivated, and served as pasture. The Duc de Ragusa (Napoleon's aide-de-camp) estimated in 1834 that only around 5% of the valley's area was cultivated. In that same year an Arab Peasant Revolt broke out against Egyptian rule, which tried to impose a stricter regime upon the farmers.

After power had been returned to the Ottomans, John Wilson reports crops of barley, wheat, pulses, sesame, flax and cotton. Wild oats grew naturally between the fields.







farm structures is the feedmill with its tall, thin shadow, which has become an identifying mark of the valley's settlements. Since the villages were planned in accordance with topographical features, the center of the village is on the highest land – the peak – where the water tower is also located. Most of the other agricultural structures, greenhouses, chicken coups, storage facilities and cowsheds are on the outskirts, in plots belonging to private farms.

### Settlement Patterns

The rural settlements in the Jezreel valley are mainly found along its edges, in clusters, for example: Adirim, Devorah and Barak; Nir Yafeh, Maleah and Gadish. A further cluster of settlements is located along the seam between the valley and the Menashe heights: the village of Yokne'am, Hazore'a, Mishmar Ha-emek, Midrakh Oz and Megiddo.

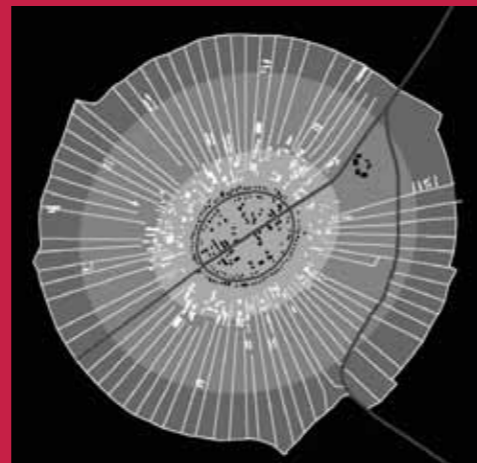
Despite the apparent flatness of the valley, its topography is a significant factor in the location of the villages. It is evident that most of them are situated on elevated ground – peaks of the rolling hills within the plains of the valley. Thus the settlements in the north west part of the valley are located on the peaks of the continuation of the Alonim Hills, and others are to be found on the peaks of the volcanic range, for example Kefar Barukh, which may seem to lie within the valley but in fact stands on a local peak.

In the south eastern part of the valley, the Ta'anakh region, a cluster of villages is to be found in the valley itself. Jewish settlement reached this part of the land only after the establishment of the state, and all the villages in this region were established with a common aim in three clusters close to the green line, within the framework for the distribution of population centers.

A number of the valley's villages were planned by the architect and planner Richard Kauffman (1887–1958), a Jew of German origin who moved to Palestine in 1920 and served as an architect for Palestine Land Development Corporation

### Nahalal

Nahalal has a place all to itself. It was the first workers' village established in Israel. The spatial organization of Nahalal has achieved significant fame. The architect Richard Kauffman designed the village as a series of perfect concentric circles. At their center are the public buildings (among them agricultural structures), around these are homes and on the outskirts are cowsheds, chicken coups and storage buildings. This spatial dispersion symbolizes and realizes the ideological concepts at the basis of the workers' village – equality, partnership and mutual aid.



Today the agricultural crops are determined largely by the size of the plots. Large plots, concentrated mainly in the valley itself, are used for field crops. Many are cultivated with the same crop, creating extended sequences of monoculture. Smaller plots belonging to private farms produce different products – olives and various types of fruit.

Ornamental vegetation within the villages is also an important element in the landscape pattern. The first settlers, for the most part founders of the kibbutzim, had strong opinions on the design of their surroundings – “improving its appearance” – from the very first days of their settlement on the land. These kibbutz gardens are not only the expression of an aesthetic vision, but are directly linked to the socialist-Zionist ideology – a connection to the land and the desire to live together with it in full cooperation.

The ornamental landscapes of the kibbutzim, which today have reached maturity, have a special place in the greater picture of settling the land of Israel, and have merited recognition in literature, research and artistic impressions.

### Roads and Circulation

Major national roads pass through the margins of the valley (the northern coastal road, road 65), and secondary roads traverse its perimeter – one connecting the population centers in the northern margins of the valley, another villages in the west and the south. Within the valley itself are numerous agricultural roads, most of them unpaved dirt tracks.

In the past the valley played an important role in the network of regional roads, and a central historic road passed through it. Many villages were located along this road and sustained themselves through trade and providing services for travelers. “The King's Way”, as it was known, connected Mesopotamia with the Mediterranean Sea and Egypt, and fortresses protected the road during the Crusader period. Likewise, the traditional lengthwise roads of the country – “The Sea Road” and “The Mountain Road” – met at Megiddo, which lies in the

margins of the valley. The Jezreel Valley thus held a strategic position and was the scene of many battles: The chariots of Sisera sank in the swamps of the Kishon (Judges 5, 20-22), Saul fought the Philistines, the Mamluks defeated the Mongols, Napoleon fought off the Ottomans, and in the 20th century battle that determined the fate of the Turkish army in Palestine during the First World War took place at Megiddo. The valley also plays a significant role in the concept of the new Jewish settlement, as a link between the settlements on the coastal plains and those in the Jordan valley.

During the Ottoman period Bedouin tribes that had infiltrated the area from Jordan grew in strength, weakening the productivity of the valley and intimidating anyone who sought to work the land. At this time the valley was partially covered by swamps that also enveloped the roads. The local Bedouins were the only ones sufficiently familiar with the valley to be able to move around it freely and therefore visitors, among them pilgrims, were forced to engage them as guides. In order to rehabilitate the valley at the beginning of the 20th century the Ottoman authorities constructed the “Valley Railway”, as a means of enabling the transportation of its increasing agricultural products to the Mediterranean and beyond. Eventually the line was intended to reach Damascus. The railway line is straight, accompanied by the structures of old train stations. It was functional for around 45 years, and played an important role in the development of the valley's population centers. The railway stations still in existence today are: Afula, Tel Shamam (Kefar Yehosua), Ein Tabun (Kefar Yehezal) and Beit Shean.

### Structures and other Objects

Most of the land in the valley is agricultural. It is wide and open, its expanse not broken up by buildings. Agricultural structures are located, for the most part, at the edges of the valley, close to the population centers.

Inside the villages, farming structures are to be found at the center of the settlement, along with other public buildings. Among the

and the settlement division of the Zionist Labor Movement. Over the course of his career he planned dozens of urban and agricultural settlements.

Kaufmann's influence is evident in his Zionist approach to planning. His work was influenced by the concept of the Garden City, a term coined by Ebenezer Howard, which integrates urban quality of life with rusticity. At the basis of this concept is the ideal of equality and the division of land uses. This led to the planning concept of concentric circular strips each with a different land-use designation, organized around the heart of the settlement.

Kauffman planned settlements of all types in the valley – agricultural villages (such as Nahalal and Kefar Yehosua), kibbutzim and cities (Afula, although this plan was not carried out in full).

## Sources, History and Archaeology

Settlement of the Jezreel valley goes back to the earliest times and the first settlements have been dated to the Stone Age. It appears that there has been agriculture in the valley since the Bronze Age.

In the Biblical period the valley was a symbol of fertility and abundance: “And the earth shall respond to the corn, and the wine, and the oil; and they shall respond to Jezreel” (Hoshea 2, 23-24). The name of the valley, “the place planted by God”, hints at blessings and abundance. The valley blossomed and prospered throughout the Second Temple Period when an important Jewish center was located in it (Rabbi Yehudah Hanasi, editor of the Mishnah, lived in Beit She'arim, at the foot of the Alonim hills, and he is buried there, alongside other sages).

Already in early periods the Jezreel valley was famous for the spectacular view from the peak of the Tavor Mountain. This view, observed by generations of pilgrims, was described in the mid nineteenth century: “The view looking out from the Tabor mountain is very comprehensive, including the Jezreel valley, divided into strips and plots of cultivated land; from afar it looks like a big mosaic with different shades of orange, yellow, grey, green, brown and blue. On the horizon you cannot see any house, tent or village, ???, and not even one tree to provide shade; but the mountains surrounding it are covered with groves and cities, villages and ??” (rogers, 1894, 116).

In the Arab period it was possible to find the following crops in the valley: sugar cane, indigo, dates and wine. Over the course of the nineteenth century the Jezreel valley was neglected and fell into a state of disuse. The landowners dwelt in distant cities and the land was cultivated by poor tenant farmers, which affected the condition of the valley.

The Turks attempted to revive agriculture in the valley through the construction of the Valley Railway at the outset of the twentieth century. Their aim was to increase the prosperity of the agriculture by enabling products from all parts of the valley to be sent to the Mediterranean and over sea to other countries.

At the start of the twentieth century Zionist bodies focused their efforts on purchasing

land in the Jezreel valley. This concentrated purchase was finalized eventually at the beginning of the 1920s by Joshua Henkin. Shortly afterwards the first Jewish settlements in the valley – Nahalal and Kefar Yehosua were established.

During this period the Zionist settlement of the valley began and this contributed significantly to the revival of the valley's agriculture. The swamps were drained and drainage channels were constructed, cutting across the whole length of the valley and flowing into the Kishon stream as a series of artificial tributaries. The Zionists purchased lands in the valley and the Jewish defenders, led by Alexander Zeid, held in check the Bedouin threat (during the Ottoman period the Bedouins had demanded tax in return for allowing agricultural cultivation).

In Aryeh Sharon's plan “Physical Planning for the State of Israel”, agriculture in the Jezreel valley was integrated into the economic hierarchical structure of the settlements: the valley's villages provided agricultural products for the cities, first and foremost Afula, and these cities offered the various services required by the agricultural settlers.

The agricultural landscapes of the Jezreel valley, together with the orchards of the Sharon and the date orchards of Degania and Kinneret, are symbols of the Zionist movement. In the Jezreel valley are to be found many of the first settlements of the Shivat Zion movement, and here the settlement movement's first utopian experiments were conducted: the co-operative at Merhavia (the first cooperative settlement in Israel), Nahalal – the first workers' village, and more. Kibbutz Geva, one of the first kibbutzim in the country, attempted to realize the dream of a “small group” and shared education together with a settlement pattern and agricultural landscape reflecting the ideology of co-operative living.

The historical-cultural value of the valley, together with its ethnographic image, is thus deeply connected to settlements founded in the earliest days of the Zionist movement.

The landscapes of the Jezreel valley formed a source of inspiration for songs, stories and novels concerned with the history of Zionism (for example Meir Shalev's books). It is difficult to describe the essence of the Zionist enterprise without the agricultural landscapes of the valley. They tell us its story and relate its accomplishments, its dreams and the price that was paid in realizing them. Concepts such as “redemption of the land”, “the Torah of work” and even “pioneering” lose their meaning when not associated with the fields of wheat, the squares of orchards, rows of cypresses breaking the wind and all the other elements that make up the image of the valley.

### Landscape as a Reflection of Lifestyle

The residents of the valley living in villages and kibbutzim continue to pursue an agricultural way of life, although this is decreasing with the passing of time and generations. Agriculture is a central, although not the only, economic branch for the settlements of the valley, and represents an important component of their income. Almost all the settlements have developed rural tourism, which relies to a great extent on the agricultural image. At certain events the residents still commemorate

the unique agricultural existence of the valley, for example celebrations at the festival of Shavuot, which is also known as the festival of the first fruits, have become traditional.

## Impressions

### Contrasts

The agricultural landscape of the Jezreel valley is bordered on all sides by mountainous landscapes, and this creates a clear contrast between the valley and its borders. From within the valley the landscapes of the Carmel and Gilboa are especially prominent, rising up steeply. This sharp border creates the greatest and most dramatic contrast in the landscapes of the valley.

In opposition, the valley itself is characterized by significant uniformity. The edges of the large square plots touch meet those of the small plots close to the settlements. These large plots are interspersed with water pools and spread out over the wide expanse of the valley, creating a continuous view from one horizon to the other. Local changes in the relief affect land use to a certain extent, but do not generate contrast in the landscape.

### An Unmistakable Landscape

The landscape of the Jezreel valley is unmistakable, both in terms of its significant internal uniformity and its wide open spaces, which distinguish it from all other valleys in Israel. The landscapes of the water reservoirs accompanied by the channel of the Kishon stream, and concentrated also in the south of the valley, are an additional landscape characteristic typical of the valleys in the north of Israel.

### Variety

The agricultural landscape of the valley is for the most part one of various field crops. Orchards are concentrated at its edges and on the low mountain range that crosses its center. At the edges of the Kishon stream and in the south of the valley are clusters of fisheries, and close to population centers are to be found cowsheds and chicken coups.

### Vitality

Today agriculture in the valley continues to flourish within the frameworks that have characterized it from the first days of the Jewish settlement. While the social structures of the kibbutzim and agricultural villages may change, it is still possible to distinguish clearly between kibbutz agricultural patterns and those of the villages. The expansion of rural villages has taken over agricultural lands to some extent, yet the valley remains to this day a live and dynamic agricultural space.

New economic branches constitute an increasing financial foundation of the valley.

These include industry, way stations and tourism. This change is part of the process of urbanization occurring within rural settlements.

From the beginning of the 1990s the phenomenon of salinification has become apparent in the valley, along with a rise in the groundwater levels, as a result of uncontrolled irrigation and inadequate drainage. In the last few years drainage works and a lowering of the groundwater levels have been carried out with heavy investment, in order to improve the structure of the soil and enable the continued existence of agriculture in the valley.



