EXECUTIVE SUMMARY: A two-state solution is possible only if Israel remembers the requirements of significant population growth and formulates an ecological master plan. Unlike the period attending the Six-Day War, the coastal plain cannot be the only solution.

The public debate on the two-state solution – Israel alongside a Palestinian state in the West Bank and the Gaza Strip – has focused so far on security and demographic considerations. But there is a fundamental issue that has yet to be properly addressed: ecology. This subject must be considered in all its aspects: the territorial balance required to support transportation infrastructure, water, electricity, housing, sewage drainage, and the preservation of open spaces.

At a conference I attended on environmental issues in the West Bank, held at Ariel University on the initiative of the School of Architecture and the Kfar Etzion Field School, architect Israel Goodovitch, a former Tel Aviv city chief engineer, presented a principled critique of the national master plan, “Tama 35.” He claimed that no reference whatsoever was made in this plan to the expanse beyond the Green Line. Not only does this completely disregard the spatial planning needs of the area within which the State of Israel operates in practice, but it disregards the systems of ecological connections that exist between the State of Israel within the 1967 borders and the remainder of the land in the West Bank.

In my lecture at the conference, I highlighted three development points in the area of infrastructure that are tottering on the verge of collapse: transportation, electricity, and water purification.
Transportation Infrastructure

It is easy to forget that in 1967, the State of Israel contained no more than two million citizens compared to over eight million today. The spatial conditions that suited it in the past are no longer relevant.

In the past hundred years, most Jews have settled on the coastal plain. The deployment of cities, traffic arteries, and infrastructure there did not take into account the problem of ever-increasing congestion. Today, about 60% of Israel’s Jewish population is concentrated between Netanya and Rishon Letzion. Three highways – 2, 4, and 6 – pass along the coastal plain longitudinally and are congested most hours of the day. During rush hour, even Highway 6, built to alleviate traffic congestion, is always packed.

In practice, there is only one solution: an additional longitudinal highway, based on the Allon Road, in the open expanse in the Jordan Valley to the east. This area runs from the Jordan River to the skirts of the eastern ridge of the Samaria hills. This additional transportation route, known as Route 80, would run from Gilboa Mountain in the north to Arad in the south, midway between the Jordan Valley road and the mountain range. The construction of Route 80, from Arad to Mishor Adumim in the Judean Desert, has not begun for political reasons.

Such a route, of a standard on a par with Highway 6, is essential for diverting transportation loads, including the many trucks travelling north to south on the coastal roads. In addition, a highway along this route would serve residents of the mountain ridge in the West Bank, Palestinians and Jews alike.

Such a project could generate international interest. From ancient times until the end of the Ottoman era, the sea route along the coast served as a land bridge between Mesopotamia (Iraq) and Egypt. If regional peace were to emerge and trucks from Baghdad and Damascus sought a route to Egypt, where could they go? After all, the ancient sea road as a land bridge has long been blocked.

A longitudinal route along the east that does not descend all the way to the Dead Sea (precluding the necessity for heavy trucks to climb the Sodom Rise) offers an international land bridge as an alternative to the coastal route. Trucks and trains from the east could cross the Jordan River at the Sheikh Hussein crossing, continue southward to Arad, and from there venture westward to Nitzana, toward Egypt.

Electricity Infrastructure

Most Israeli power stations are deployed along the coast and provide electricity for the Palestinian Authority as well. The construction of an additional power station in
the Beit Shemesh area is being examined. This station would mainly serve West Bank residents, both Israeli and Palestinian. If such a station were built east of Jerusalem in Mishmor Adumim, this would alleviate the need to lay down power lines for additional infrastructure in the Jerusalem corridor, which is already burdened with infrastructure. The distribution of air pollution would also be more balanced. And in all eventualities, the distribution of assets would be beneficial in terms of emergency risk management.

Sewage and Water Purification Infrastructure

The large cities on the mountain ridge – Nablus, Ramallah, Jerusalem, and Hebron – are located on its watershed. Their sewage flows in streams, either eastward to the Jordan Valley and the Dead Sea or westward to the coastal plain. East Jerusalem sewage flows to the Dead Sea along the Kidron Stream. The sewage of Nablus and Ramallah flows to the Gush Dan and Sharon regions after partial or no purification processes. Hebron's sewage flows to Beersheba.

In any event, whether the country is partitioned into two states or remains a single state-entity from the Jordan River to the Mediterranean, environmental cooperation is required, including on drainage, purification, and utilization of sewage water. A comprehensive joint effort would change the landscape of the country for the benefit of all its inhabitants and would create a rehabilitated habitat for nature and outdoor leisure, which would benefit humans, wildlife, and vegetation. The flow of purified water and desalinated seawater to rivers and the Jordan riverbed will also have a positive impact on the deteriorating Dead Sea.

A Nationwide Master Plan

Ecological planning has become notorious for its zealous focus on the protection of natural assets and the prevention of man-made damage. This is insufficient. Ecological planning should examine human needs in their entirety, with the aim of attaining the correct balance between man’s needs and nature’s preservation. This is the basic premise underlying the “Tama 35” national plan. However, this plan, approved by the government in 2005, disregards the entire expanse beyond the Green Line.

The overall goal of the program is to "develop Israel's space in a manner that will enable the attainment of the goals of Israeli society and its values as a Jewish state and as an immigrant-absorbing and democratic society." Accordingly, its operational objectives were formulated as follows: "The consolidation of Israel's residential settlement development within a small number of defined urban concentrations ... the development of a system of open spaces and a transportation infrastructure shell, a balanced distribution of the population between the different parts of the country ... [and] the development and strengthening of Jerusalem as Israel's capital."
Exercising Construction Plans from an Overall Planning Perspective

The recent storm attending the Qalqilya housing plan is an opportunity to shift the focus of the debate from micro to macro, anchored in comprehensive environmental planning. This is a unified system committed to balancing the response to the housing shortage and the preservation of open spaces.

A comprehensive spatial plan will also examine Jerusalem's westward development trend, such as the Har Hareth and Bat-Harim projects, which government planning officials continue to promote. The capital's expansion eastwards into the open spaces in Mishor Adumim can preserve natural assets in the Jerusalem corridor and reduce housing prices.

Any discussion of the two-state solution must address these issues, even in a situation of Israel's withdrawal to the 1967 borders. This is an existential space for the State of Israel, which in two decades will near a population of 15 million.

The proponents of partition ask how we managed before 1967. The answer is simple: demographically speaking, Israel was a small country then. In the current test of Israel's growing spatial needs and aliyah absorption, it can no longer manage within the borders of the coastal plain.

Contrary to the Allon plan and the Rabin plan, which insisted on keeping the open space in the east of the country under Israeli control, the two-state solution – even when leaving the settlement blocs under Israeli sovereignty – does not provide a solution to the land shortage. In any event, even without declared annexation, a comprehensive national outline plan is required for the Land of Israel west of the Jordan River, as a unified transportation and ecological system.

This is an edited version of an article first published in Israel Hayom on July 13, 2017.

Gen. (res.) Gershon Hacohen is a senior research fellow at the Begin-Sadat Center for Strategic Studies. He served in the IDF for forty-two years. He commanded troops in battles with Egypt and Syria. He was formerly a corps commander and commander of the IDF Military Colleges.

BESA Center Perspectives Papers are published through the generosity of the Greg Rosshandler Family.