

The progressive decline of Palestinian agriculture in the West Bank: from control of the land to the separation wall

For more than a century, farming tied Palestinian families to their land. Permits, gates and a wall have turned that tie into intermittent access, and satellite images show the scar the wall has left on the landscape.

By Mauro Esposito, September 2026

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A greenhouse and seasonal vegetables on farmland in the shadow of the separation wall, in north-western Qalqilya, West Bank, 4 April 2025. *Photo: via AssoPacePalestina*

In the late nineteenth and early twentieth centuries, agriculture was one of the pillars of Palestinian society: farming the land meant an income for families and a direct bond with the territory. In 1909 most arable land was under cultivation, and the majority of the population lived off agriculture.

This balance began to crack with the end of Ottoman rule and the start of the British Mandate. British policies facilitated Jewish immigration and the consolidation of settlements, many of which grew in the most productive farming areas. Palestinian agriculture, while still central, began to lose part of its autonomy, a process that over the following decades would profoundly reshape the relationship between people, land, water and mobility.

The first decisive break came in 1948, when the war displaced a large part of the Palestinian population and led to the loss of much cultivated land. The 1949 armistice agreements drew the Green Line, which separated Israel from the West Bank and the Gaza Strip until 1967.

With Israel's occupation of both territories in 1967, military control extended to the management of land, water resources and movement. Palestinian agriculture came to depend more and more on a system of authorisations, restrictions and external controls that limited farmers' ability to work their own land freely.

Between 1993 and 1995, the Oslo Accords introduced a new territorial fragmentation, dividing the West Bank into Areas A, B and C. Area C covers about 60% of the territory and remains under full Israeli civil and military control. It holds most of the farmland and grazing land: digging a well or building a greenhouse or an animal shelter requires a permit.

What had until then operated mainly at the political, administrative and economic level took physical form on the ground: first in Gaza, where barriers and fences progressively closed off the Strip, then in the West Bank, where Israel began building the separation wall in 2002.

Often presented to Western media as a “security barrier”, the wall has had effects that go beyond the military dimension. For 85% of its length, its route runs inside the West Bank rather than along the Green Line. In doing so, it redraws the territory and creates, between the wall and the 1949 line, an enclosed strip of territory known as the seam zone, which can only be entered with a permit.

2020 Separation wall

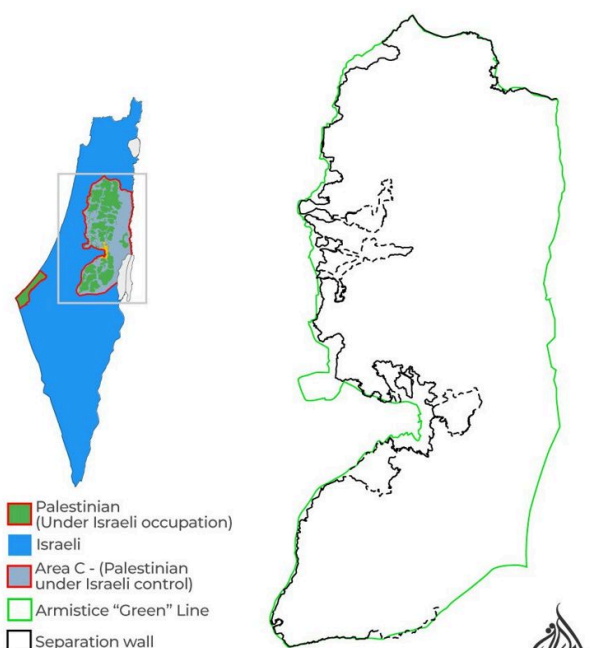
Up to
8m



700km

Since 2002, Israel has been constructing a wall that stretches for **more than 700 kilometres**.

85 percent of the wall falls within the West Bank rather than running along the internationally-recognised 1967 boundary, known as the Green Line.



Source: B'Tselem (2019)

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The route of the separation wall compared with the Green Line. *Graphic: Al Jazeera (AJLabs), data: B'Tselem (2019). Licence CC BY-NC-SA.*

On top of these restrictions come the buffer zones directly next to the wall and the designation of other areas as nature reserves or Jewish archaeological and religious sites, which can further limit Palestinian access.

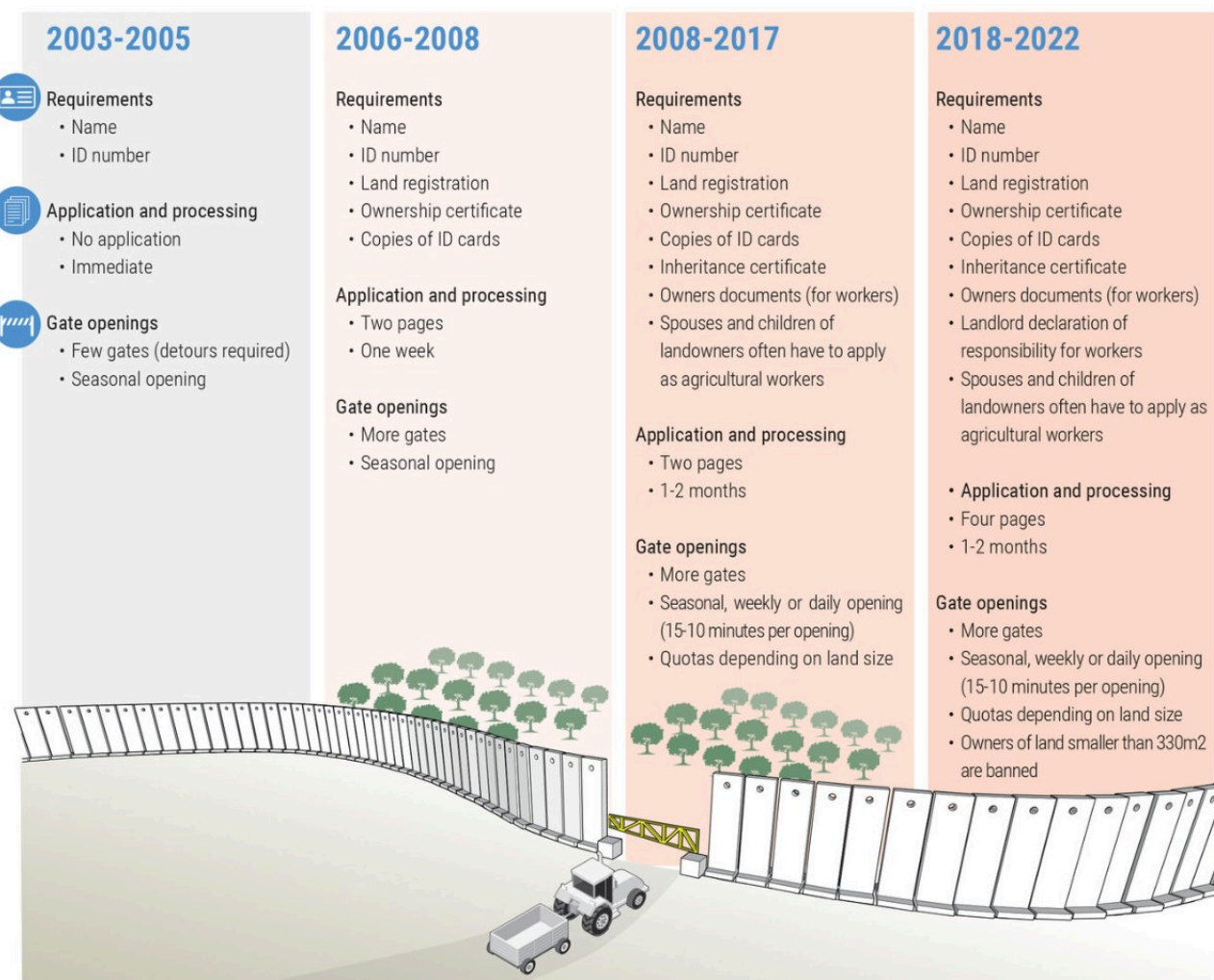
Building the wall meant uprooting more than two million trees. Its route has split farms, forests, grasslands and water resources, cutting people off from their land and from its use.

Some 150 Palestinian communities living outside the seam zone own farmland inside it and must therefore apply for special permits or “prior coordination” to reach their crops and livestock. Farmers can reach their land only through 69 designated gates, controlled by the Israeli authorities and usually closed. Most agricultural gates open only during the olive harvest, between October and November, for a limited number of hours a day.

About 11,000 Palestinians who live in the seam zone and hold West Bank identity cards also depend on permits or special arrangements to live in their own homes. To enter East Jerusalem these documents are not enough: a special permit from the Israeli authorities is required, and access is possible only through four of the Barrier's 14 checkpoints.

This system of permits and access, which keeps farmers from their land and pastures in the seam zone, has undermined the livelihoods of thousands of farming families. Permit applications are regularly rejected because farmers cannot prove their “connection to the land” to the satisfaction of the Israeli authorities, as well as on security grounds. The almost permanent closure of agricultural access points, with rare exceptions, has forced permit holders to stop cultivating or to switch from labour-intensive crops to lower-value rain-fed crops.

Palestinian access to land beyond the Barrier has become steadily more complex and selective. In the early 2000s a few documents were enough; from 2006, forms, ownership certificates and longer waiting times were added. In the following years the requirements grew again: inheritance documents, separate applications for family members and workers, quotas tied to the size of the plot, restrictions on the smallest parcels.



How requirements, procedures and gate openings for reaching land beyond the Barrier changed between 2003 and 2022. Source: *OCHA, The humanitarian impact of 20 years of the Barrier, December 2022.*

Gate openings have also been cut further: today the gates stay open only for short periods.

Between 2014 and 2021, the number of permit applications from landowners and farm workers fell by 77%, mainly because of high rejection rates, complex procedures, the short validity of permits and the limited opening hours of the gates. After 7 October 2023, restrictions tightened further.

In April 2026 OCHA counted about 62 agricultural gates along the Barrier, fewer than in earlier counts, and most of them remain closed all year. During the 2025 olive harvest, 74% of the gates were opened, but only for a limited number of days.

In addition, 98 Palestinian communities across nine governorates must request “prior coordination” from the Israeli army to reach land near settlements, and access is generally granted only twice a year.



Land left uncultivated behind the Barrier in Qalqilya for lack of permits, February 2019. *Photo: OCHA oPt*

Restricted access has led to a 60% drop in agricultural productivity on land beyond the Barrier. The wall thus turns farming into an intermittent activity, and nowhere is this clearer than in the olive groves.

Olive groves cover about 45% of the cultivated land in the West Bank and Gaza, and Palestinian olive oil has long been known for its quality. In the 2023 season, Palestinian farmers lost an estimated 1,200 tonnes of olive oil, a direct economic loss of US\$10 million. The impact was especially severe in the northern governorates of Tulkarm, Qalqilya and Nablus.

The case of Hamed Radwan, a farmer from Nabi Ilyas, is telling: his family lost land and 56 olive trees to the construction of the Alfei Menashe settlement and the wall, and what used to be a journey of a few minutes now depends on permits and restricted access.

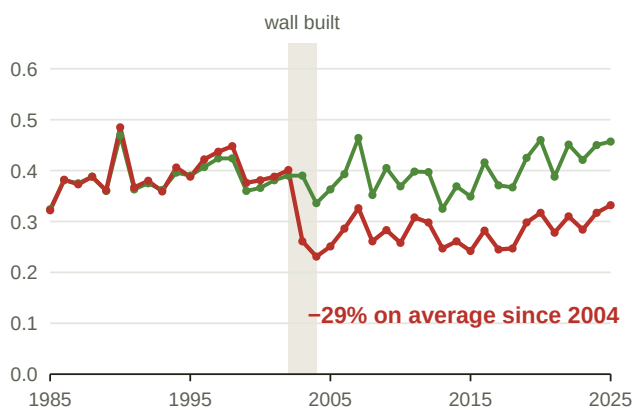
This intermittent access also has legal consequences. The 1858 Ottoman Land Code provided that *miri* land left uncultivated for three consecutive years could be reassigned. The Israeli authorities have used this rule, controversially, to declare “state land” plots that had not been cultivated enough, precisely because of the obstacles that prevent regular access.

Alongside the legal and economic consequences come environmental effects that are just as significant, and visible from space. Landsat satellite images from 1985 to today, analysed along two stretches of the wall at Qalqilya and Tulkarm, show the same pattern. Until 2002, the strip of land

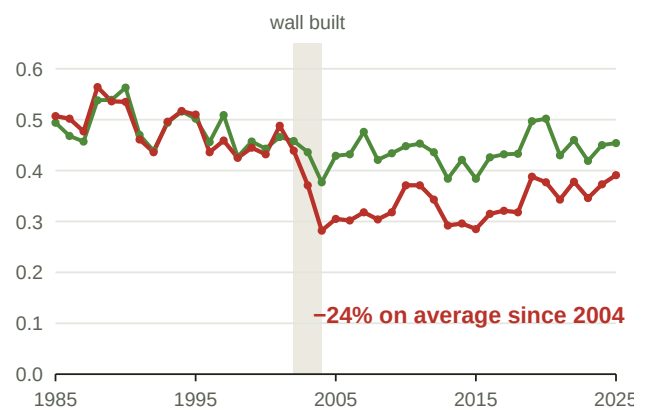
where the Barrier now runs had the same vegetation as the land around it. Between 2003 and 2004, with construction, vegetation along the route collapsed, and it has never recovered. Vegetation is measured with the vegetation index (NDVI), which the satellite calculates from the light reflected by the ground. Living plants absorb red light and strongly reflect near-infrared light, so the index is close to zero over bare soil, rock or concrete and rises where vegetation is denser. Since 2004, this index along the wall strip has been on average 29% lower at Qalqilya and 24% lower at Tulkarm than on land a few hundred metres away. The satellite does not measure biodiversity, but it shows precisely the wall's physical footprint.

— Wall strip (40 m each side of the route) — Land 150–400 m from the wall

Qalqilya



Tulkarm



Spring vegetation index (NDVI, March–April) along the wall strip (red) and on land 150–400 metres away (green), at Qalqilya and Tulkarm, 1985–2025. Hover over or tap the chart to see each year's values. Analysis by the author on Landsat data (USGS/NASA).

The effects of this fragmentation on species are documented in studies by Husein and Qumsiyeh. According to their research, the wall cuts ecological corridors and divides habitats, blocking the movement of animals such as hyenas and gazelles and contributing to their decline. By shrinking the accessible land, it also forces livestock to graze in smaller areas: the land is overused, vegetation thins and the soil erodes. This fragmentation also alters the balance between species, creating conditions that favour the spread of populations such as wild boar and hyraxes.



A cow next to the separation wall in Bethlehem, West Bank. *Photo: Yoray Liberman, [National Geographic](#) (2017)*

The effects extend to aquatic ecosystems: in several areas the wall, together with the diversion of springs and changes to watercourses, is associated with declining amphibian populations and the loss of many plant species.

On top of this environmental transformation comes a more direct pressure: violence against those who farm the land.

According to figures presented in 2025 by the Palestinian Olive and Olive Oil Council, about one million olive trees have reportedly been destroyed in the West Bank since 1967, more than 250,000 of them between 2010 and September 2025. The trend has intensified in recent years: in 2025 alone, the Colonization and Wall Resistance Commission recorded 35,273 trees damaged, uprooted or attacked, almost 27,000 of them olive trees.

Israeli settlers, backed by the army, frequently attack Palestinian farmers and those who support them during the olive harvest.

The widespread destruction of olive trees is a key strategy in Israel's efforts to push Palestinians off their land and expand illegal settlements.

In 2025, 158 incidents of settler violence were recorded during the harvest. The attacks included violent physical assaults, arrests, restrictions on movement, denial of access, intimidation and harassment of every kind, and even live fire.



Israeli soldiers block residents and activists from reaching olive groves during the harvest season in Salfit, West Bank, 11 October 2021. *Photo: via [AssoPacePalestina](#)*

Israel continues its efforts to undermine the Palestinian way of life, historically rooted in the land as a source of livelihood and identity. All these practices aim to weaken this relationship and are part of a clear and declared plan to control Palestinian geography.

Method note. Spring (March–April) medians from Landsat 4, 5, 7, 8 and 9 (Collection 2, surface reflectance), with cross-sensor correction following Roy et al. (2016). The wall strip (40 metres on each side of the route) is compared with land between 150 and 400 metres away. Data, code and limits: [Method and sources](#).