



MADE IN PALESTINE

A Story of Farmers under Occupation

By Marda Dunsky

Two brothers grow juicy strawberries on a patch of land they irrigate with a homebuilt rainwater catch basin.

An entrepreneur organizes farmers into cooperatives and markets their olive oil, almonds, and grains around the world.

Two cousins tend olive-tree groves in a two-century tradition of family farming.

A homemaker nurtures a vegetable garden that helps feed her family.

In the Israeli-Palestinian conflict, land is the ultimate prize. For Palestinians confronted with an ever-contracting landscape, farming is a steadfast expression of presence and heritage.

This year, the Israeli government has announced plans to build six thousand new housing units for Jewish settlers in the West Bank, fifteen thousand in East Jerusalem, and the first new West Bank settlement in twenty years. The Knesset passed a law allowing retroactive legalization of four thousand settlement homes built on confiscated Palestinian land.

The toll of the occupation on Palestinians has been constant and consistent, with their agricultural lands shrinking from 2.4 million dunams (approximately 593,000 acres) in 1980 to 1.03 million dunams in 2010—a loss of 57 percent, according to a 2015 report on Palestinian agriculture by the United Nations Conference on Trade and Development (UNCTAD). Prior to Israel's occupation of the West Bank and Gaza Strip, which Israeli forces seized in the Six-Day War of 1967, agriculture constituted more than half of the gross domestic product in these territories.

By 2012, it accounted for only 6 percent of GDP.

Expansion of Israeli settlements, restriction on access to water, and confiscation of land are chief causes for the decline in Palestinian land use, the UN report said. The Palestinian Central

◁ *Rajai and Musaab Fayyad in their greenhouse at The Brothers Farm, Zababdeh, West Bank, May 3, 2016. Marda Dunsky for the Cairo Review*

Bureau of Statistics registered a \$918 million trade deficit in food and livestock alone for 2015, part of an overall trade deficit of nearly \$4.3 billion.

The gradual decline of Palestinian agriculture is yet another indictment of the Oslo peace accords, which called for a permanent settlement of the conflict by 1999, based on the land-for-peace principle contained in UN Resolutions 242 (1967) and 338 (1973), and implicitly envisioned the establishment of an independent Palestinian state. With the collapse of the Oslo peace process, population and land ratios have continued to shift, adding a distinct economic overlay to a dispute that draws international attention for its violence and lack of political progress.

While the number of West Bank settlements officially recognized by Israel has remained fairly constant at 126 (not including about a hundred smaller outposts), the settlements have continued to grow in population and area, subsidized by a succession of Israeli governments despite having been deemed illegal by UN Security Council Resolutions 446, 452, and 465.

Today, an estimated six hundred thousand settlers live in the West Bank and East Jerusalem—more than double the number in 1993—among three million Palestinians. In May, the Israeli non-governmental organization Peace Now reported a 34 percent increase in settlement housing construction starts in the West Bank during 2016 compared with 2015.

Sweet Strawberries

Palestinians continue to work the land, innovating as they go to overcome short supplies of land and water. Most are small family farmers like Rajai and Musaab Fayyad, who grow organic strawberries on less than an acre in Zababdeh, a small West Bank town just south of Jenin. The brothers box their sweet red fruit in pintsize plastic containers labeled “The Brothers Farm, Zababdeh Palestine”; the stickers resemble the motif and colors of the Palestinian flag.

“We are local producers,” says Musaab, 25, who has a degree in finance and comes from a line of family farmers going back two generations. “Our customers come here to pick the berries themselves—and they feel good about it.”

The Fayyads built a rainwater catchment basin and stocked it with with tilapia, or *mush*, as Arabs call it. The brothers pipe the water into their greenhouse to irrigate the plants and fertilize them with fish waste, saving 90 percent of fertilizer costs. Soon they will add the first tomato and pineapple crops to their harvest.

The Fayyads’ ingenuity is also on display beneath the hanging strawberry crop in the greenhouse, where the ripening red fruit dangles above rows of greens planted in-ground, including arugula, string beans, broccoli, celery, scallions, parsley, and hot peppers. Not only does the combined above- and below-ground cultivation maximize

the small growing space, but the greens also divert disease-carrying insects from the cash-crop strawberries. “Each plant attracts specific insects and diseases,” explains Rajai, 40. Varietal intercropping serves to confuse insects, decreasing diseases they carry up to fivefold.

The Fayyads’ farming techniques are born of necessity and heritage. Their paternal grandfather, Assad, was originally from Haifa, where he grew corn, wheat, lentils, and beans. In 1948—when military campaigns displaced approximately 55 percent of the indigenous 1.3 million Palestinians before and after Israel’s War of Independence to clear the way for a Jewish majority—Assad was among the thousands of refugees who migrated to the West Bank. There his son Abdullah, a schoolteacher, continued to farm in Zababdeh on rented land, cultivating wheat, corn, watermelon, and beans.

Abdullah owns the small parcel of land that Rajai and Musaab farm. Rajai also works for the Palestinian Authority (PA) as a security officer. Musaab, a graduate of the Arab American University just up the road in Jenin, turned to agriculture for lack of jobs in his field.

After growing strawberries in the ground for five years, the brothers invested \$20,000 to build the greenhouse and buy another eighteen thousand strawberry seedlings to plant above ground. In season they sell seven hundred pounds of organic strawberries a month, about a third to vendors in Ramallah, forty miles south, and the rest to locals. Strawberries grown in West Bank Jewish settlements are also available in Palestinian markets but spoil faster, Musaab says, because Israeli growers use chemical pesticides and fertilizers to get a higher yield. “Not many of our customers are aware of the health benefits of organic food,” he says. “But they like the taste of our strawberries. They are sweeter and won’t liquefy after a few days.” Even so, the Fayyads’ customers carry their purchases home in recycled Israeli-made cartons, bearing markings in Hebrew such as “From the Peaks of Galilee-Golan.”

Land of Olive Trees

Images of young women bearing harvest baskets and water jugs are iconic in Palestinian folk art. Young male balladeers declare their love for the land at Palestinian weddings. Sanabil, or wheat stalks, are ever present in Palestinian embroidery patterns. And so the continuity of Palestinian farming, reasons Nasser Abufarha, an entrepreneur who has built an export business rooted in sustaining this agriculture, is a cultural and existential imperative.

After earning a doctorate in cultural anthropology and international development from the University of Wisconsin–Madison, Abufarha, 53, returned home to immerse himself in the landscape of activism and development. He established his company, Canaan Fair Trade, in 2004 in the village of Burqin, three miles west of

Jenin. His light and airy second-floor office in the Canaan factory overlooks olive groves. His mother is from here, but he was born and raised in his father's native Jal-amah three miles to the north, where the family grew oranges, eggplants, tomatoes, cucumbers, watermelon, and cantaloupe.

Every year, the Canaan factory produces an average of 286,000 gallons of olive oil, and packaged almonds and grains for export, all organic and grown by a network of small family farmers. Forty Palestinians work here year-round; in the fall olive-harvest season, the number swells to seventy.

Canaan Fair Trade aims to bolster Palestinian agriculture by re-tooling traditional farming methods to answer modern demands for organic foods, fair trade, and environmental accountability. "We are not separate from the world," Abufarha explains. "There is an influx of modern manufactured foods, and there is an acceleration of agribusiness versus agriculture."

But at the core of Canaan is Abufarha's belief that the land not only binds Palestinians to their culture but also sustains their future. "Agriculture is very important in Palestinian life, but it lacks support and investment for its sustainability," Abufarha explains. "The traditional life of making a living off of the land—that's a culture. And we have that culture. The main thing is to sustain it and benefit from it, to carve a space for it in modern society, in modern economy."

Maintaining the link between Palestinians and their land is all the more critical in the context of Israel's occupation. Abufarha believes that people around the world better relate to Palestinians when consuming their produce, and in this bonding, Palestinians are not dismissed as "bad news" or reduced to being victims of oppression.

"It's not only about how much confiscation takes place," Abufarha says. "It's what we do about it that matters—because what defines ownership is the social relationship with the land and how sustainable that relationship is. We're still producing some of the best treasures the earth has to give. It's important that the world sees this, including Israelis. The conflict is about land. Israelis know that the relationship between the Palestinian and the land is at the core of the representation and configuration of the place."

This is the apparent thinking behind the European Union's decision in 2016 to ban Israel's "Made in Israel" labeling of exports produced by Israeli settlements in the occupied West Bank, East Jerusalem, and the Golan Heights. The U.S. Customs and Border Protection agency enforces a similar policy on goods produced in the West Bank and Gaza Strip.

Canaan Fair Trade sells agricultural products to markets in the Middle East, Europe, North America, and Asia. Exports average about \$9 million a year, up to \$7 million in olive oil and \$2 million in almonds and grains including *freekeh* and *maftoul*. Sixty percent of the olive oil is sold in the United States, 20 percent in Europe, and the

remainder in Canada and Asia. Bulk sales of olive oil and almonds account for half of all revenues. Canaan-branded items account for 35 percent of sales; private-label partners the remaining 15 percent.

Abufarha's roadmap for sustainability points in many directions. He created the Palestine Fair Trade Association to export members' crops for above-market prices according to international fair trade standards. Canaan's tuition scholarship fund for children of farmers has enabled forty-two young Palestinians to attend local universities since 2007. The company has established the Center for Organic Research and Extension in Jenin to promote organic farming and marketing of fruit, vegetables, and grains grown by small family farmers. A program to convert tractors to run on used vegetable oil, used to make falafel, is underway.

Abufarha likes to recall an encounter with a German woman to illustrate his belief in the importance of farming to the Palestinians. After the woman expressed her concern for Palestinians' welfare, he told her: "Don't worry too much. We are an integrated social community in the ecosystem of the land of Palestine, and we are organic in it. As long as we sustain this organic relationship, we will remain part of this ecosystem."

Fair Traders

From a rise overlooking olive groves belonging to Faris Hussein and his cousin Rafiq in Tinik, eight miles northwest of Jenin in the northern tip of the West Bank, the plains of Afula and mountains of Nazareth appear in the middle distance inside Israel, beyond the Green Line. Together the cousins farm eighty-six dunams in their village, half planted with olive trees, the rest with melons, alfalfa, wheat, and soft-shell almonds. Their cultivation is bound by kinship, but they farm as members of a larger family as well.

Hussein and his cousin belong to a local Palestine Fair Trade Association (PFTA) cooperative, which has twenty members and is headed by Rafiq. Earning above-market prices for their crops is a key draw. "The association organizes the farmers, and its marketing program sustains good prices, better than we could get in the local market on our own," Hussein explains.

Across the northern and central West Bank, the PFTA network comprises fifty-two cooperatives and six women's collectives—seventeen hundred farmers cultivating eighty-two thousand dunams, mainly in the north between Jenin and Nablus but also in Tulkarem, Qalqilya, Salfit, and Ramallah.

The association trains members in fair trade standards and regulations as well as organic-farming methods; external audits for fair trade and organic certifications are conducted by Fairtrade International in Germany and the Institute for Marketecology in Switzerland. PFTA is also overseen by the Palestinian Authority's Interior and National Economy ministries.

A nine-member elected governing board runs the association, and delegates represent their co-ops and collectives in a general assembly. A PFTA pricing committee maintains contact with local and international markets and negotiates rates for virgin and extra-virgin olive oil.

Depending on sales, PFTA co-ops and collectives can also receive a fair trade premium each season in addition to fair trade market prices for their crops. Each group decides how to invest the premium; in 2014 the Tinik cooperative donated its bonus to establish a local health clinic.

Since 2006, the association's Trees for Life program, funded by PFTA olive oil buyers and Palestinian solidarity groups in Europe, the United States, and Canada, has distributed more than one hundred thousand olive and almond saplings to Palestinian farmers, in some cases to replace trees uprooted or burned by Israeli settlers. "We pay a symbolic amount of two shekels per olive tree," Hussein says. "The market price is ten shekels."

The Husseins trace their roots in Tinik back two hundred years, and as with most Palestinians, the family has worked the land for just as long. Hussein's father was a fulltime farmer. Faris, 68, graduated from the University of Jordan in 1974 with a degree in Islamic studies, and returned to Tinik to become headmaster of a local school and only farmed on the side. Now retired, he continues to cultivate the land, but not without difficulties that Palestinian farmers face routinely.

Chief among them is water. "Israelis have as much water as they want," Hussein says. "We have a problem digging new wells." In November 2015, the Israeli army bulldozed three small wells that Tinik farmers dug without permits, which are virtually unobtainable. Without wells, farmers cannot irrigate their crops, but without permits such wells are considered illegal, and the army routinely destroys them.

Olive trees can flourish in relatively dry conditions, making them the staple of Palestinian agriculture, accounting for 54 percent of total production. In a good year, overall olive oil yield in the West Bank can reach twenty-six thousand metric tons, some 9.3 million gallons. But in 2015, the yield dropped to 21,084 metric tons, with an estimated value of about \$114 million. Factors contributing to the decline included dry weather, restricted access to land, and disruption due to violence between Israelis and Palestinians at holy sites in Jerusalem that spilled into the West Bank. In 2016, the harvest rebounded slightly to twenty-two thousand metric tons, valued at \$122 million.

Half the oil is produced for home consumption; the other half is sold domestically and abroad. "The olive tree is a blessing," says Hussein. "It gives us food, medicine, and heating." Healers use its leaves to reduce sugar levels and blood pressure, and massage the body with its oil. Artisans carve handicrafts from its wood. Around the world, olive oil is poured atop hummus and both are scooped up with pita bread.

Hussein sighs, then brightens. “We live on this land. We’ll die on this land. We’ll be buried inside this land. It is our mother. It is our homeland. It is everything.”

Water for the Wells

The occupation’s stranglehold hampers Palestinian productivity. Uncertainty about property rights inhibits private investment. Restrictions on movement and access to land and water tie Palestinian labor and food consumption into a knot of dependency. Displacement and disruption ripple through the Palestinian economy, in agriculture and beyond—to the extent that achieving sustainable development in the West Bank and Gaza Strip is “nearly impossible,” according to UNCTAD.

For lack of other employment opportunities, the number of Palestinians working in agriculture increases even as the productivity of the sector continues to decline. “People have no other place to work,” says *Ciro Fiorillo*, head of the Jerusalem office of the UN Food and Agriculture Organization (FAO), which supports agricultural aid projects in the West Bank and Gaza Strip. “So more people cultivate the same or even less land. Declining productivity per person means declining value in salaries, profits, or any other form of income.”

According to UNCTAD, while agriculture accounted for 15 percent of total Palestinian employment in 2011 and 20 percent of exports, only 6 percent of 292,000 agricultural workers earned income, with 94 percent working as unpaid family members.

The land they are working “has very little value” without water, *Fiorillo* says. Only 19 percent of Palestinian agricultural land is irrigated, a handicap given that irrigated land produces on average fifteen times the yield of rain-fed land. According to UNCTAD, although Israel, Jordan, and the Palestinian territories have the same climate, the average yield per dunam in the West Bank and Gaza is half that of Jordan’s and 43 percent of Israel’s.

“If you cannot irrigate, the best you can do is dry cropping—olives, low-intensity cereals,” *Fiorillo* explains. “But with irrigation you can shift from cereals to vegetables.” Vegetable farming is more labor intensive, raising employment, and is more profitable, raising income. “Then you build an irrigation system, and then you build a greenhouse, and you produce much more value,” *Fiorillo* says. “With a two-dunam greenhouse, a family can live a reasonable life.”

However, Palestinian farmers are blocked not only from digging new wells to irrigate their crops but also from repairing existing ones, for which they must also obtain permission from the Israeli-Palestinian Joint Water Committee. The committee’s work virtually ground to a halt in 2010 when Palestinian members refused to agree to legalizing wells constructed in Israeli settlements, illegal under international

law. Irrigated agriculture in Israeli settlements continues apace, without permits, while Palestinian wells dug without permits continue to be destroyed and maintenance of old ones hampered.

“There are hundreds of wells, established thirty, forty, fifty, a hundred years ago,” Fiorillo says. Most water networks also need repairs, with rust and holes causing leakage and loss of up to 40 percent. Fiorillo reports that in 2015 the Israeli military confiscated FAO-donated replacement pipes for wells, but these were returned and installed after an appeal to Israeli authorities from the Dutch parliament.

Jenin and its environs, the breadbasket of Palestine, lie on the southern edge of Marj Ibn Amr, the Jezreel Valley, a great fertile plain extending north beyond the Green Line almost to Haifa. With about sixty thousand inhabitants, Jenin is the seat of the Jenin governorate and a regional population center of 300,000. Of eleven administrative districts in the West Bank, the governorate is the only one in which the Palestinian Authority has jurisdiction over the majority of the land. (Under the Oslo agreement that established the PA, it has sole control of only 18 percent of West Bank land.) The PA’s wider jurisdiction in Jenin governorate is linked to the relatively sparse number of Israeli settlers in the area, some two thousand.

Conditions for Palestinian farmers become more difficult further south. The bulk of the settler population lives in Oslo-designated Area C, over which Israel has sole jurisdiction and which comprises 61 percent of the West Bank, including the Jordan Valley and 63 percent of the West Bank’s agricultural land. Israel has designated 39 percent of Area C for settlements and their future expansion but only 1 percent for Palestinian use. Some 386,000 Israeli settlers live in Area C among about three hundred thousand Palestinians. In 2013, the World Bank estimated that alleviating restrictions on access to land, water, and other aspects of Palestinian production in Area C could add as much as \$3.4 billion a year to the Palestinian economy overall, equal to 27 percent of its GDP in 2014.

Throughout the West Bank, Israel has claimed approximately 166,650 dunams for settlements, according to a 2016 Human Rights Watch report, “Occupation, Inc.”—with 64 percent of this land designated for agriculture and industrial zones. Privately owned Palestinian land is expropriated both outright and by being declared “state land”—either way becoming inaccessible.

For those Palestinians still working their land, holding on to and accessing it can be daunting in areas densely populated with settlements or near the separation barrier between Israel and the West Bank. Israel began building the barrier in 2002 during the second Palestinian intifada ostensibly for security reasons. But the wall—slabs of concrete in some areas, stacks of barbed wire in others—zigzags east of the Green Line, cutting into the West Bank and often separating Palestinian farmers from their lands.

An estimated 9.5 percent of the West Bank, including 116,000 dunams of Palestinian land and sixty Israeli settlements, is expected to lie west of the barrier under Israeli control when its four-hundred-mile length is completed, according to the Israeli human rights organization B'tselem.

The section of the separation barrier near Ariel—a settlement city in the central West Bank with a population of twenty thousand, an Israeli-accredited university, and two industrial zones—has separated Palestinian landowners in nearby Salfit and six surrounding villages from nine thousand dunams of their farm and grazing land, according to Human Rights Watch. A Palestinian landowner in the area who once grazed ten thousand head of livestock had his herd reduced to no more than a hundred. Another landowner had fifteen dunams planted with root vegetables confiscated outright. When the military imposed restrictions on access, equipment, and planting in another thirty-five dunams, he stopped cultivating them entirely.

The constricting of Palestinian land prompts tens of thousands of young Palestinians to seek work as unskilled laborers in Israel or in Israeli settlements. The Bank of Israel estimated the number of West Bank Palestinians working in Israel in 2014—with and without permits—at ninety-two thousand; in 2016, Reuters reported that thirty-six thousand Palestinians were working in West Bank settlements, mainly in construction. In Israel, Palestinians earn more than double the average wage in the West Bank. But according to Human Rights Watch, in Israeli settlements daily wages for agricultural work can be as low as \$17.50, far below the Israeli minimum wage, with no benefits.

Other factors undermining Palestinian agriculture are not directly related to Israel's occupation. One major impediment is the inability of small farmers without collateral to obtain Palestinian bank loans, even as annual demand reaches \$150 million.

Another problem is the PA's limited capacity to provide quality control and extension and research services. According to UNCTAD, since the PA was established in 1994, it has allocated a little more than 1 percent of its total annual budget to agriculture, with the bulk of those funds going to Ministry of Agriculture salaries. In 2003, the ministry charted a three-year development plan, projecting allocations of \$543 million for 2014–16. However, as UNCTAD reported, recurrent economic, political, and humanitarian crises such as the 2014 Gaza war and its aftermath claimed much of the PA's scarce resources, energy, and policy attention.

The impoverishing effects of these factors on Palestinians are apparent, with UNCTAD characterizing the result as “forced dependence on the Israeli economy.” They are a captive market, not only as laborers in Israel and Israeli settlements but also as consumers, with Israel sending a steady flow of below-export-quality goods to Palestinian markets at prices with which local Palestinian producers cannot compete.

In 2012, 70 percent of Palestinian imports came from Israel, and 80 percent of Palestinian exports went to Israel, according to UNCTAD. This resulted in a Palestinian trade deficit of \$3.7 billion, equal to 37 percent of the Palestinian GDP.

Palestinians also experience a lack of food security, which the 1996 World Food Summit in Rome defined as the physical and economic access to sufficient, safe, and nutritious food to meet dietary needs and food preferences for an active and healthy life. “Palestinians don’t have enough income to access in a stable and predictable manner food in adequate quantity and quality,” Fiorillo says. The FAO has determined that 27 percent of households, with 1.6 million Palestinians, experience food insecurity—40 percent in the West Bank and 60 percent in the Gaza Strip. This phenomenon is manmade, Fiorillo says, resulting from dramatic spikes in food accessibility due to periodic wars in Gaza, systematic displacement by the Israeli military of Bedouin communities in the West Bank, and low income levels throughout Palestinian areas.

Okra and Thyme

Basma Qablawi, 42, cultivates a home garden begun with the support of the Japanese government. In 2013, Imm Qaisar, as she is called, planted a 4,500-square-foot garden outside her back door in Zababdeh with aid from the Nippon International Cooperation for Community Development (NICCOD).

Qablawi grew a dozen varieties of vegetables and herbs before the funding ran out in 2016, but now raises only okra and thyme. The yield is mostly for home consumption but sales brought in up to \$75 a month at their peak. “I trust what I eat because I planted it myself,” she says of the organic mallow in her *mulukhiyah* and the cauliflower in the *makloubeh* she cooks for her family of eight.

International aid for Palestinians extends to agriculture, but this support has been relatively minimal. According to UNCTAD, from 2000 to 2006 it amounted to \$30 million, or less than 1 percent of \$4 billion in total foreign aid received by the Palestinian Authority.

From 2013 to 2016, NICCOD provided \$450,000 for projects in Zababdeh including a sixty-dunam organic farm that sprouted rows and rows of more than two dozen types of grains, vegetables, fruits, and herbs. Country representative Naoko Inagaki explains that the organization’s objective was to foster income generation. In 2015, revenues from the projects reached \$20,000.

Land for the organic farm was rented from local owners, and sixteen local men worked the soil with stock, equipment, and expertise provided by NICCOD. Local food markets in Jenin and cooperatives elsewhere in the West Bank bought the yield. Twenty women including Qablawi tended home gardens. Other local women produced and sold organic herbal teas, barley cookies, and zaatar mixes.

The home garden and processed-foods initiatives were also designed to boost women's empowerment. "Arab society is patriarchal," Inagaki says. "We wanted to provide opportunities for women to work, even right next to their houses." Qablawi and her husband, an accountant, have three sons and three daughters ranging in age from 7 to 21. "It's better to work at home so I can be available for my family's needs any time," she says.

Echoing the frustration of other Palestinian farmers, Qablawi says that water is the main challenge for cultivating her small garden. At one point, NICCOD covered half her \$60 monthly water expenses, which went to irrigating her crops.

Local Palestinian organizations have stepped in to support the big farm as well as some home gardens and food processing. "Farming is our heritage and culture," Qablawi says. "It's the main address for the Palestinian people. It's like a crown on our heads."

Flowers or Thorns

The current generation of young Palestinians is the third to grow up under occupation. The current Israeli government, bolstered by the rise of nationalist and religious parties, is one of the most uncompromising toward Palestinians in the country's history. Peace negotiations came to a halt in 2014.

And confiscation of Palestinian land continues apace. In March 2016, Israeli military authorities declared 2,340 dunams south of Jericho as state land. At the start of the access road leading to Kibbutz Almog, which is about five miles south of Jericho, a large sign shows a young Israeli girl hugging a white dog. In Hebrew, the sign reads: "Now's the time to make a good life decision. The Almog expansion: Come live in your own home on a half dunam in the enchanting north of the Dead Sea."

Against such a backdrop, Nasser Abufarha remains optimistic for his people, inspired by the Palestinian determination to persevere and live vibrant lives, and driven by his own sense of the *longue durée*.

"In farming, every field has flowers and thorns," Abufarha says. "You can either see the thorns and put your hands up, or see the flowers and weed your way through. I see a lot of flowers in Palestine."