



2018-2020

FARMING IN A BUFFER ZONE

The conditions Gaza farmers
face under closure

مركز الميزان لحقوق الإنسان
Al Mezan Center for Human Rights





Al Mezan Center for Human Rights is an independent, non-partisan, non-governmental human rights organization in the Gaza Strip, that holds Special Consultative status with the UN Economic and Social Council. Since its establishment in 1999, Al Mezan has dedicated itself to protecting and advancing the respect for human rights, and enhancing democracy and community and citizen participation in the oPt, particularly in the Gaza Strip.

Palestine – Gaza Strip

Main office

5/102-1 Al Mena, Omar El-Mukhtar Street Western Rimal, Gaza City, Gaza Strip
P.O. Box 5270 Telfax: +970-(0)8-2820442 /7

Jabalia office

1st floor, Al Eilah Building, Al Trans Square, Jablaiya camp, the Gaza Strip. P.O. Box: 2714 Telfax: +970-(0)8-2484555 /4

Rafah office

1st floor, Qishta Building, Othman Bin Affan St.,
Rafah. Telfax: +970-(0)8-2137120

Email: info@mezan.org

Website: <http://www.mezan.org/>

For submitting complaints or suggestions, please complete the e-form available at our website www.mezan.org.

Table of contents

INTRODUCTION	3
OVERVIEW OF THE ARA BY LAND	5
ISRAELI VIOLATIONS AGAINST PALESTINIAN FARMERS IN THE ARA	8
Lethal and excessive force	8
Incursions and raids	10
Aerial spraying of herbicides	12
Opening water dams	14
FIGURES AND STATISTICS ON VIOLATIONS AGAINST PALESTINIAN FARMERS IN THE ARA	17
REPERCUSSIONS ON GAZA'S AGRICULTURAL SECTOR	20
Pandemic's implications on the agricultural sector	22
CONCLUSIONS	24
RECOMMENDATIONS	26

Introduction

Over the past two decades, Palestinian farmers working on the agricultural lands close to the separation fence in the Gaza Strip have suffered repeated attacks by the Israeli occupation forces. During these attacks, Palestinian farmers risk being killed or injured, as well as suffering severe economic losses if the attacks target their agricultural lands and properties.

Information provided by Al Mezan Center for Human Rights (Al Mezan) indicates that the Israeli military initially imposed restrictions on residents of the perimeter area at the beginning of the Al-Aqsa Intifada in September 2000.¹ The restrictions were tightened in September 2005 when Israel vacated its formal presence in the Gaza Strip and redeployed its troops to the perimeter area.

Israel's unilaterally imposed maritime and land "buffer zones"—widely known as "access restricted areas" (ARA)—are no-go military areas on Palestinian territory. The Israeli military enforces the access restrictions by targeting civilian individuals, properties, and objects with various types of weaponry and artillery. In addition to the repeated attacks targeting them directly, Palestinian farmers working in the ARA are confronted with continuous raids by Israeli forces and the destruction of their farmland through leveling, aerial spraying of herbicides, and the opening of water dams.

Because of these attacks, Palestinian farmers have been prevented from freely accessing their land, cultivating their fields, and having a stable source of income. The restrictions imposed by Israel, the Occupying Power, have resulted in considerable losses for Palestinian farmers, leading to a sharp decline in their economic conditions, as well as higher rates of unemployment, poverty, and food insecurity. The perpetuation of these conditions severely undermines

¹ Al Mezan Center for Human Rights (Al Mezan), "The Access-Restricted Areas ("Buffer Zone") in the Gaza Strip", 30 May 2012, at: <http://mezan.org/en/uploads/files/14951.pdf>

a wide set of economic and social rights, including the right to an adequate standard of living, the right to development, and the right to work.

Indeed, the attacks against Palestinian farmers and their agricultural lands also constitute a violation of international human rights and humanitarian law by Israel, which as the Occupying Power, is bound by both. Such violations include, *inter alia*, the use of lethal force, the destruction of civilian property, and the limitation of freedom of movement.

This report provides information and analysis of the situation of Palestinian farmers in the ARA on land and, in particular, focuses on the violations carried out against them by the Israeli forces. This report is supported by figures, statistics, and testimonies gathered by Al Mezan's researchers through interviews, surveys, and data collection, covering the period between 2018-2020.

Overview of the ARA by land

The Gaza Strip is 45 kilometers long and from six to 12 kilometers wide, with a total area of about 365 square kilometers. It is divided into five districts: North Gaza, Gaza City, Deir al-Balah (also known as the Middle Area), Khan Younis, and Rafah. The Israeli separation fence runs along the boundary of all five districts.

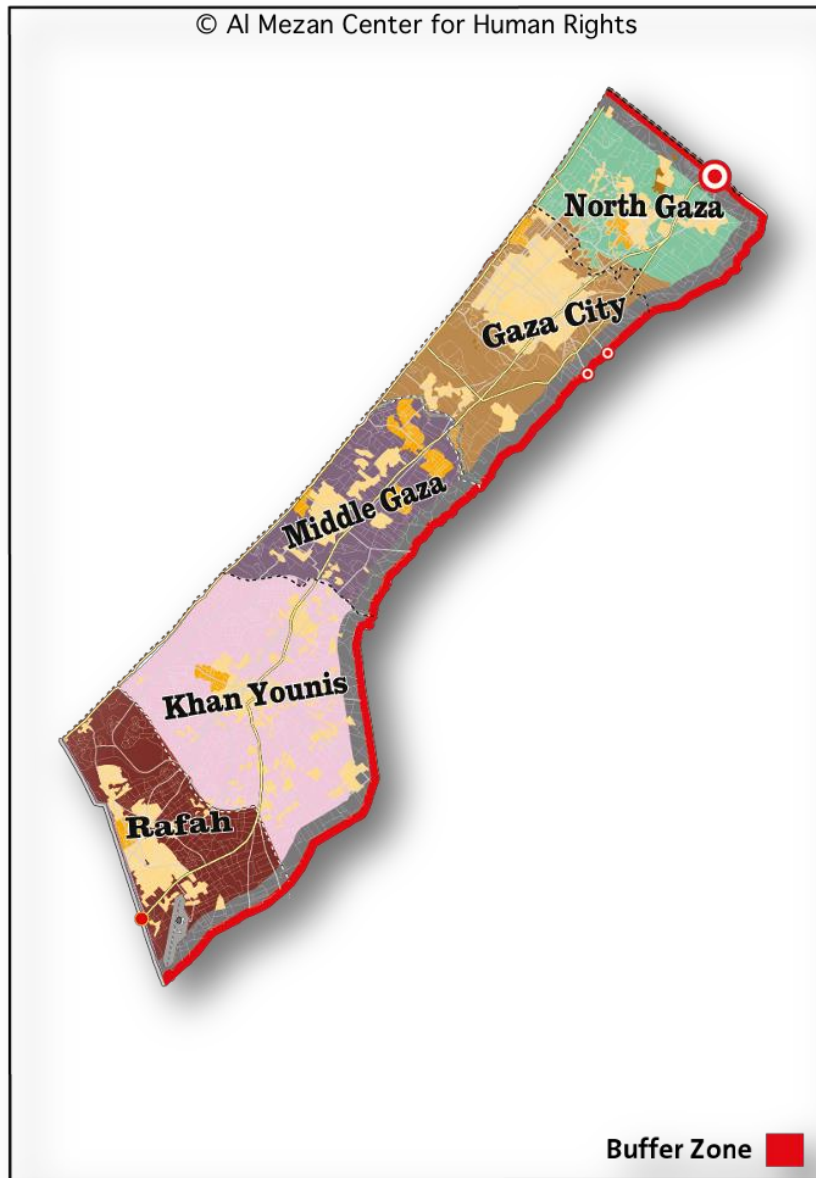
The *de facto*, initial implementation of the ARA by land started after September 2005, when Israel executed its unilateral withdrawal plan and vacated its formal presence in the Gaza Strip, ultimately re-deploying its forces around the separation fence. The ARA was then formally imposed in 2008 when Israeli aircraft dropped leaflets over the Gaza Strip, warning Palestinian residents not to approach within 300 meters of the separation fence and threatening anyone doing so with a risk to their life. The message was further supported by a map showing the ARA along the eastern and northern perimeters of the Gaza Strip.²

On land, the ARA covers approximately 62.6 square kilometers, starting from the northwestern boundaries of Beit Lahiya, and then continuing towards the Bedouin village of Um An-Naser and Beit Hanoun. Turning east in Beit Hanoun, the ARA passes Jabaliya, Gaza City and through the village of Wadi Gaza (Juh Ad-Deek).³ The ARA continues to run through five residential communities in the eastern parts of the Deir al-Balah district, which are: Al-Bureij camp, Al-Maghazi camp, Al-Masdar village, Deir Al-Balah city, and finally Wadi As-Salqa. It also runs through six other residential communities in the east of the Khan Younis district: Al-Qarara, Bani Suhaila, Khuza'a, Abasan al-Kabirah, Abasan al-Jadida, and finally Al-Foukhari. Finally, the ARA ends in al-Shouka municipality, in eastern Rafah (see Figure 1).

² Al Mezan, "Israeli violations in the Access Restricted Area by Land", July 2016, at: <http://mezan.org/uploads/files/1468407292152.pdf> - available in Arabic only.

³ Al Mezan, "Statistics on the violations of the Israeli Occupation Forces in the ARA during the first half of 2020", 6 July 2020, at: <http://mezan.org/post/30588> - available in Arabic only.

Figure 1: Map of the ARA by land



Whilst Israel claims that it only enforces a 300-meter-wide buffer zone, facts on the ground demonstrate that its military enforces the ARA up to a distance of 1,500 meters from the separation fence. For instance, Israeli forces continue to destroy 100 percent of agricultural lands and civilian, residential, agricultural, and industrial facilities within 500 meters from the fence, while targeting and bulldozing 75 percent of lands within a range of 1,000 meters.

Accordingly, the area ranging from 300 to 1,500 meters from the separation fence has been designated "high risk". Notably, as Gaza's width varies from six to 12 km, the effective ARA covers about 35 percent of the total agricultural land of the Strip and 15 percent of its total area.⁴

Throughout the reporting period, Israel's efforts to enforce the ARA persisted, with its forces consistently targeting Palestinian workers—both in the industrial and agricultural sectors, including shepherds and breeders—destroying their property, and deliberately preventing the movement of persons in those areas. These practices have led to the impoverishment of the agricultural community in the Gaza Strip, which has no choice but to grow leafy crops that do not need much care, instead of growing perennial crops that entail a lot of risk to preserve.

⁴ Al Mezan, supra note 1, and Al Mezan, "Statistical report on the Israeli violations by land", July 2019, at: <http://mezan.org/uploads/files/15636897141620.pdf> - available in Arabic only.

Israeli violations against Palestinian farmers in the ARA

The Israeli military continues to violate international human rights and humanitarian law in the ARA, including through killing, destruction of property, arrests, and the destruction of means of livelihood. These abuses increase the misery of those living in areas near the Israeli separation fence, who are already suffering due to the forcible displacement of all residents living within 500 meters of the barrier.

The measures implemented by the Israeli authorities to control access to the ARA include the deliberate attack of residents or persons present in the area through various means, including live ammunition; raids and the incursion of Palestinian farmland with tanks and bulldozers, aimed at leveling and destroying private property and resources, and aerial spraying of herbicides on fields; and the opening of water dams, causing flooding.

Lethal and excessive force

Amongst the main measures adopted to maintain the no-go zone is the permanent presence of Israeli soldiers stationed in watchtowers behind the separation fence. Notably, the Israeli military often resorts to the use of lethal and excessive force against civilians, including by opening fire against Palestinian farmers working on their land located in the ARA.

According to Al Mezan, in the period under review the Israeli forces opened fire on Palestinian farmers and farmlands 1,150 times (Table 1). The employment of heavy artillery and live-fire caused the death of four farmers who were working their land and the injury of another four, including one child (Table 3). Seven civilians residing in the ARA—including five children a woman—were also injured during these attacks (Table 3). As for agricultural infrastructure, Al Mezan reports that two agricultural wells were damaged.

Regarding Israeli attacks on Palestinian farmers with artillery shells, Ahmed Salem al-Shami, a 24-year-old farmer, told Al Mezan:

On Friday 30 March 2018, at 2 am, I went with three farmers to a field owned by Abu Nseira's family located in the al-Shreij area, east of al-Qarara village, eastern Khan Younis city, about 1,000-1,200 meters away from the perimeter fence. As we arrived, we began harvesting parsley using the light of a Suzuki car owned by one of the farmers that we also use for transferring crops. After a half-hour, we finished harvesting the first batch of parsley and put it in the car. Two of the farmers working with us took the car and went to harvest another (dill) field, about 500-700 meters from us, while Omar Sammour, another farmer, stayed with me. We rested for a couple of minutes and then went back to work without lights. Around 3:50 am, I saw a red glow spreading in the area, and then felt pressure pushing me back a few feet and I fell. Afterward, I saw a cloud of smoke and dust spreading in the area. I heard Omar saying, "help me". He was about three meters to the east. Not being able to stand, I rolled on the ground until I reached him. He was lying on his stomach. I tried to stand up and carry him, but one minute after the first one, another red glow appeared. I felt something hurting my back. After all the smoke and dust disappeared, I used the flashlight of my mobile phone to look for Omar and found him on the ground motionless. I saw him bleeding from his chest and tried to talk to him, but he did not respond. I called my cousin to help us and asked him to call the ambulance. Ten minutes later, our friend came back with the transport car and tried to help us, checking on Omar. After 30 minutes, two ambulances arrived and took us to the Gaza European Hospital in Khan Younis. We were admitted to the emergency room and underwent some medical checkups. I sustained shrapnel in both thighs, my right arm, and my back. I was then referred to the surgical department. I was later informed by doctors that Omar Sammour arrived at the hospital already dead from injuries to his chest and various parts of his body. Later, I learned that the Israeli artillery had fired two shells towards us, even though the area was very quiet while we were working and we were used to harvesting crops in the same field at night.

Incursions and raids

During incursions, what typically happens is that Israeli bulldozers and tanks enter the eastern and northern borders of the Gaza Strip, then move into the ARA up to 1,000 meters from the separation fence, where they level, destroy and raze Palestinian farmlands. According to Al Mezan's records, during the reporting period, Israeli forces carried out 206 incursions throughout the five districts of the Gaza Strip (Table 1), i.e. an average of over one raid per week. The frequency at which these incursions take place has forced Palestinian farmers to abandon their land out of fear for their lives.

According to official sources, the sum of the area of all farmlands affected by leveling operations between 2018 and 2020 is 1,035.69 dunums (Table 5). In terms of financial losses, the total damages caused by leveling operations throughout the whole reporting period amounts to USD 1,189,802 (Table 5). Amongst Gaza's five districts, North Gaza—which endures access restrictions in both its northern and eastern areas—had the largest share of razing operations, with an affected farmland area reaching 593.68 dunums (Table 5).

One of the most recent attacks of this kind occurred on 13 October 2020, when the Israeli bulldozers entered up to 300 meters into the Gaza Strip and damaged dozens of dunams of agricultural land, destroying crops and irrigation systems. According to Al Mezan, this incident is the most serious that has occurred in the agricultural lands of the Gaza Strip since 2014, in which roughly 32,000 USD worth of crops and farmland were damaged, harming at least ten farmers' sources of income.⁵ Successively, on 16 December 2020, Israeli military bulldozers crossed the perimeter fence east of Khan Younis and reached up to 200 meters into agricultural lands in Abasan al-Kabira, Khuza'a, and al-Fukhari, razing and leveling Palestinian lands and crops. Once the raid was over, the Israeli forces left placards written in both Arabic and Hebrew demanding that the Palestinian farmers uproot their crops

⁵ Al Mezan, "Human rights groups demand Israeli military end incursions into Gaza's farmlands, compensate farmers for damages", 13 October 2020, at: <http://mezan.org/en/post/23849>

in the area “within a certain time frame” otherwise the military “is going to remove them.”⁶ This same type of incident was also reported the next day, December 17, by farmers in the Rafah district, east of al-Shouka village. Al Mezan field researchers collected the testimony of a Palestinian farmer whose lands were affected from one of these attacks, who said:

I’m renting a farmland of 300,000 square meters, located to the east of al-Foukhari village, east of Khan Younis. The land is about 100 meters from the perimeter fence. I cultivate the land with potatoes, tomatoes, and onions, and I have around 60 workers helping me. In the current season, we cultivated 60,000 square meters of land with potatoes and worked on preparing the rest of the land to plant with onions. At around 7 am, on Wednesday, 16 December 2020, I went over to work with some farmers. During our work, the area was calm. After two hours, I saw a number of Israeli bulldozers and vehicles entering the area. They were coming from the north and moving along the separation fence. They started leveling the lands. I saw some Israeli soldiers coming out of their vehicles and putting placards on the land, about 150 meters away from the fence. They put similar placards in the neighboring lands. The incursion lasted an hour and a half. Once they left, I went to the eastern part of the farmland and saw placards written in Hebrew and Arabic demanding Palestinian farmers to uproot their crops within a certain time frame, otherwise, the military would remove them. As I said before, the lands were planted with potatoes, and they need 30 days to ripen. If Israeli soldiers level the land and remove the crops as they warned, we will suffer losses estimated at USD 50,000.

⁶ Al Mezan, “Israeli forces carry out a land incursion and threaten to remove Palestinian farmers’ crops”, 18 December 2020, at: <http://www.mezan.org/en/post/23891>

Aerial spraying of herbicides

Since 2014, Israel has been conducting periodic aerial spraying of herbicides on Palestinian agricultural lands in the ARA in order to clear terrain. The Israeli authorities cite security reasons as justification for these measures, claiming that they are intended to remove weeds growing in the areas adjacent to the separation fence, in order to facilitate the monitoring of any movement in the ARA.⁷

However, in actuality, the release of these herbicides has adverse, dangerous, and possibly long-term effects on the crops, environment, health, soil quality, and organisms within Palestinian farmlands in the ARA.⁸ Already in 2018, Al Mezan had warned that the spraying of agrochemical herbicides deforms some crops and visibly changes their color. At the same time, the dry soil easily absorbs the chemicals, altering its composition and potentially causing further damage to crop cultivation in the future.⁹ This means that, in practical terms, the ARA by land is not only a no-go zone, but is also at risk of becoming a no-grow zone in the near future.¹⁰

Notably, aerial herbicide spraying usually occurs twice a year, once in December/January and once in April—that is, on the eve of the winter and summer harvests respectively, when most crops are about to be collected.¹¹ Measures are taken by Israel to intentionally perform the spraying when the wind blows west in order to exclusively damage Palestinian crops and not Israeli crops on the other side of the fence.

⁷ In December 2015, the Israeli forces confirmed to the magazine +972 that “[t]he aerial spraying of herbicides and germination inhibitors was conducted in the area along the border fence in order to enable optimal and continuous security operations”, at: <https://www.972mag.com/idf-admits-spraying-herbicides-inside-the-gaza-strip/115290/>

⁸ Al Mezan, Fact sheet on arial spraying of herbicides, 10 April 2017, at: <http://mezan.org/post/2346>

⁹ Al Mezan, “Effects of Aerial Spraying on Farmlands in the Gaza Strip”, February 2018, at: <http://www.mezan.org/en/uploads/files/15186958401955.pdf>

¹⁰ Forensic Architecture, Herbicidal Warfare in Gaza, 19 July 2019, at: <https://forensic-architecture.org/investigation/herbicidal-warfare-in-gaza>

¹¹ Adalah, Al Mezan, and Gisha, “Human rights groups demand Israel immediately halt renewed aerial herbicide spraying along Gaza fence”, 16 January 2020, at: <https://www.adalah.org/en/content/view/9890>

During the reporting period, Israeli forces carried out 17 aerial sprayings of herbicides (Table 1), causing damage to approximately 4,936,867 square meters of farmland (Table 4). In 2020 alone, Israel carried out two spraying operations: one between 14-16 January and the second on 5 April. Al Mezan reports that these operations damaged crops at a distance of at least 600 meters from the separation fence, affecting more than 2,800 dunums of agricultural land and 350 Palestinian farmers, with an estimated total loss exceeding one million USD.¹²

Regarding the aerial spraying of herbicides on Palestinian agricultural lands, the 52-year-old farmer Mesed Khalaf Salman Habib told Al Mezan:

On Tuesday, 14 January 2020, at around 6 am, my sons went to work in our field located northeast of the al-Toffah neighborhood, east of Gaza City. At 7:20 am, I saw black smoke coming from the perimeter fence. Based on my experience as a farmer, the Israeli soldiers create this smoke to determine the direction of the wind before sending their planes and spraying herbicides to the fields adjacent to the fence. At around 7:30 pm, I saw a yellow plane on the eastern side of the fence spraying the area, then I saw it heading towards the western fence at a distance of 150 meters. The spraying lasted three hours and its effects began to appear in the fields hours after, as crops were ruined. I dread cultivating my land because I do not want to incur new losses.

On the same issue, farmer Riad Salim Hamad al-Nesr, 58, told Al Mezan:

On Wednesday, January 15, 2020, at around 7:15 am, I went to my agricultural land located east of al-Bureij camp in the Middle Gaza district to do some agricultural work and check up on the eight workers—five of whom are my children—employed there. I started

¹² Al Mezan et al., "Human rights groups to Israel: Halt aerial herbicide spraying in Gaza Strip amid critical coronavirus outbreak", 6 April 2020, at: <https://www.mezan.org/en/post/23700>

fertilizing eight dunums of my land to plant them with parsley. I have another 17 dunums planted with parsley and eggplant. At around 7:30 am, I saw thick black smoke coming from the perimeter fence. At around 8 am, I saw an Israeli plane approaching the fence; it moved from the north to the south, adjacent to the fence, and sprayed herbicides at the fields. Being a farmer, I know that the spraying takes place twice a year. I saw the plane spraying the fields in stages, at each stage concentrating the spraying process in an area of one kilometer and then moving to another location after covering the entire previous area. It continued to spray until it reached the agricultural area east of Deir al-Balah, south of the Middle Gaza district. The spraying process lasted for three hours. I noticed the plane disappeared for half an hour, as if it had been refilled with herbicides and then returned. Farmers noticed that some days after the spraying occurred their crops were spoiled.

Opening water dams

Another practice employed by the Israeli authorities to undermine the activities of Palestinian farmers in the ARA is the manipulation of natural flows of water into the Gaza Strip.¹³ Israel has built several dams or floodgates within its territory to control and redirect the natural flow of water away from the Gaza Strip, depriving the aquifer of its main natural source of groundwater. When these dams have collected an amount of rainwater exceeding their capacity and are at risk of overflowing, the Israeli authorities open their gates—without prior warning—resulting in sudden flows of water into Palestinian farmlands in the ARA, causing huge damages not only to crops but also to houses as well as other properties. According to Al Mezan, Israeli forces opened water dams seven times during the reporting period, affecting an estimated area of 197,430 square meters of land (Table 4).

¹³ While Israeli authorities refuse to acknowledge the fact that they open rainwater dams or water barriers over cultivated lands in the Gaza Strip, Al Mezan's documentation indicates that the sudden flows of water periodically reported over years cannot be natural.

For instance, between 5-9 January 2020, Israel opened the gates of rainwater collection dams twice, flooding large swaths of lands in the eastern part of the North Gaza District. As a result, the flooding damaged crops, greenhouses, poultry farms, and apiaries in eastern Jabalia and Beit Hanoun.¹⁴ Similar episodes were reported over the years in other parts of the Gaza Strip, mainly in the Gaza Valley (Wadi Gaza), in the southern part of the Gaza City District, where significant damage to homes, lands, and farms in its vicinity was documented.¹⁵ On the opening of rainwater dams and consequent flooding of Palestinian agricultural fields, the farmer Fayez Manour Musbah Sokkar, 40, told Al Mezan:

On Sunday, 5 January 2020, at around 6 am, I went to my field located in the al-Toffah neighborhood, east of Gaza City. When I arrived, I was shocked to find that most of the agricultural fields near the perimeter fence were flooded with water, and I noticed a torrent of water coming from the fence. My crops and those of my neighbor were also flooded, as water began to accumulate in bodies of water (pools) starting from the al-Taqa area in the south up to eastern Jabaliya in the north, and from Jakar Street to the east, for an estimated distance of 500-700 meters to the west. After the crew from the Ministry of Agriculture arrived, it became clear that the water was coming from the Israeli side. The Israeli military had opened rainwater dams inside the fence so that the accumulated water rushed toward the perimeter area without warning. This has caused great material losses to farmers. I lost the cabbage, onions, wheat, and cauliflower crops that I had planted in my rented field. All these crops were destroyed due to the opening of rainwater dams, in addition to losing 15 tons of fertilizers that I was keeping in the field.

¹⁴ Al Mezan, "Israel Open Rainwater Dams, Flooding Hundreds of Acres of Farmlands in the Gaza Strip", 12 January 2020, at: <https://www.mezan.org/en/post/23661>

¹⁵ Al Mezan, "Dozens of Houses and Properties Flooded as the IOF Opens Dam Gates for Rain Water in the Gaza Valley, Al Mezan Condemns the Israeli Unwarned Conduct", 19 January 2010, at: <https://www.mezan.org/en/post/9487>

Violations targeting women farmers

Female farmers and peasants play a major role in the agricultural sector of the Gaza Strip and, foreseeably, their lives and security are also threatened by Israel's near-daily use of military force in the ARA.

Al Mezan reports that between 2015 and 2020 the Israeli military killed one peasant woman and wounded three others who were tending to or approaching their fields in the ARA. In addition, 29 peasant women incurred damages to their farmlands, with an estimated area of 109,650 square meters affected. Another 29 peasant women reported damage to crops due to Israel's aerial spraying of high concentration herbicides along the fence. Access to agricultural property and land was also hindered in 338 incidents due to military incursions in the same period.¹⁶

¹⁶ Al Mezan, Fact Sheet, "The Situation of Rural Women in the Gaza Strip", 2020, at: <http://mezan.org/en/uploads/files/16027025531100.pdf>

Figures and statistics on violations against Palestinian farmers in the ARA

Table 1: Distribution of violations according to districts (2018-2020)

	Incursions and raids	Shooting at farmlands and farmers	Spraying of herbicides	Opening water dams
North Gaza	55	145	4	1
Gaza City	34	140	5	6
Deir al-Balah	47	304	4	0
Khan Younis	45	439	3	0
Rafah	25	122	1	0
	206	1,150	17	7

Source: Al Mezan's database

Table 2: Farmland (square meters) affected according to the type of violation across all five districts

	2018	2019	2020
Incursions and raids	0	5,500	59,000
Shooting fire	29,900	9,600	0
Spraying of herbicides	1,804,700	0	3,132,167
Opening of water dams	0	0	197,430
	1,834,600	15,100	3,388,597

Source: Al Mezan's database

Table 3: Distribution of killing and wounding according to district (2018-2020)

	Dead	Wounded				
	Total	Total	<i>of whom are farmers</i>	<i>of whom are ARA residents</i>	<i>of whom are children</i>	<i>of whom are women</i>
North Gaza	2	4	2	2	2	0
Gaza City	0	1	1	0	0	0
Deir al-Balah	0	2	0	2	2	0
Khan Younis	2	4	1	3	1	1
Rafah	0	0	0	0	0	0
	4	11	4	7	5	1

Source: Al Mezan's database

Table 4: Distribution of affected farmland (square meters) according to districts (2018-2020)

	Farmland affected by herbicides aerial spraying	Farmland affected by dams opening
North Gaza	837,800	13,400
Gaza City	2,123,961	184,030
Deir al-Balah	623,800	0
Khan Younis	1,184,306	0
Rafah	167,000	0
	4,936,867	197,430

Source: Al Mezan's database

Table 5: Farmland affected by leveling operations (dunums) and consequent economic losses (USD)

	2018		2019		2020	
	Affected areas	Total damages	Affected areas	Total damages	Affected areas	Total damages
North Gaza	16.00	27,305	577.68	312,574	-	-
Gaza City	12.11	63,037	34.51	120,020	-	-
Deir al-Balah	-	-	19.50	109,785	-	-
Khan Younis	14.56	48,560	69.81	215,983	84.00	184,985.00
Rafah	141.45	71,930	63.07	25,615	3.00	10,007.50
	184.12	210,832	764.57	783,977	87	194,992.50

Source: Palestinian Ministry of Agriculture, Gaza Strip (2020)

Repercussions on Gaza's agricultural sector

Agriculture not only plays a unique role in the lives of Palestinians but historically it is also the largest economic sector in the Gaza Strip. The agricultural sector is one of the main sources of income for farmers' families, and contributes significantly to increasing domestic production, providing cash flow through exports, and meeting food needs. Yet, over time, its role has substantially diminished due to two systemic issues affecting the lives of Palestinians living in the Gaza Strip: the enforcement of the ARA and the ongoing 13-year closure unilaterally imposed by Israel.

The closure of the Gaza Strip has had serious repercussions on its economy and particularly on the agricultural sector, whose contribution to the annual gross domestic product (GDP) has been steadily decreasing. According to data provided to Al Mezan by the Palestinian Ministry of Agriculture, the contribution of agriculture to Gaza's GDP was 7.7% in 2008—before Israel's 2008-2009 full-scale military bombardment on Gaza—and decreased to 5.02% in 2019.¹⁷ Israeli policies have hindered the development of the agricultural sector in several ways, including by imposing restrictions on the import of essential agricultural inputs, such as fertilizers, especially those containing high nitrate, irrigation pumps, and agricultural machinery, under the pretext that Israel considers these items to have "dual-use", referring to both military and civilian purported usages.

In addition to having constraints on the import of agricultural inputs, Palestinian farmers also face major difficulties in exporting their agricultural products out of the Gaza Strip, as Israel repeatedly finds pretexts to prevent them from exporting and trading products freely on external markets, even within the West Bank. For instance, the Kerem Abu Salem/Kerem Shalom crossing—the only commercial crossing from/into Israel and the rest of

¹⁷ Data collected by by Bassem Abu Jrai, Al Mezan's researcher, on 9 July 2020, provided by the Palestinian Ministry of Agriculture.

Palestine—lacks refrigerated containers used for the secure transfer of agricultural products. At the same time, the Israeli authorities require exporters to put a label on each package inside the container, and if the Israeli inspection department finds any package without a label at the crossing, they return the whole container.

The Palestinian Ministry of Agriculture also indicates that though in recent years the Israeli authorities have allowed the export of some agricultural goods, they continue to prohibit Palestinian farmers from exporting the following agricultural products: leafy vegetables, carrots, onions, and potatoes, while sweet potatoes are allowed on the West Bank market and banned in Israel.¹⁸ On top of this is the high cost of transportation, as the cost of a truck has increased from 1,000 ILS (ca. 300 USD) to 5,000-6,000 ILS (ca. 1,500-1,790 USD).

This context must also be viewed in light of the internal challenges of lack of water resources and groundwater pollution. Indeed, the closure also causes Gaza to endure a chronic electricity deficit that harms all economic sectors, especially agriculture. The agricultural sector depends on both irrigation water as a major production input and electricity to operate wells and ensure the flow of water in main and sub-pipelines. Yet, the occupied Palestinian territories—in particular the Gaza Strip—face severe water shortages due to Israel's control of natural resources and the targeting of agricultural wells, in addition to other issues such as climate change, global warming, frequent cycles of drought, and variations in the distribution of rainfall intensity.

Likewise, the ability to market and store agricultural products has also decreased due to the inability to operate refrigerators used to store food and raw materials. For instance, due to the ongoing power and water crisis, which

¹⁸ Interview conducted by Bassem Abu Jrai, Al Mezan's researcher, on 18 December 2018, with the engineer Tahsin al-Saqa, Director of Marketing in the Ministry of Agriculture.

escalated in August 2020 when Israel tightened its closure measures,¹⁹ the agricultural sector has suffered severe losses, mainly because farmers rely on electricity to irrigate their lands and cannot use alternatives, such as generators or batteries, because of their high cost.

Before and then in parallel to the closure, Palestinian farmers in the Gaza Strip have suffered an additional burden caused by Israel's restrictions on access to their farmland located in the ARA, as outlined above. Inevitably, due to the overlap of these two factors, Palestinian farmers have become increasingly reluctant to continue farming their lands located in the ARA.

Pandemic's implications on the agricultural sector

Finally, the COVID-19 pandemic has also inevitably influenced the agricultural sector. On 24 August 2020, the local authorities in Gaza imposed a mandatory lockdown to curb the spread of the virus after the detection of the first cases outside of quarantine facilities were confirmed.

The mandatory lockdown and ensuing curfew further limited farmers from accessing their lands and subsequently their ability to cultivate and sell the agricultural produce. Indeed, the closing of local markets and the ban of movement between cities and districts within the Strip forced most farmers to sell their products locally, at lower prices than in markets located beyond their neighborhoods. At the same time, this situation also prevented farmers from securing needed supplies, such as fertilizer, pesticides, seeds, and other products and services necessary to run their business. Data provided by the Palestinian Ministry of Agriculture indicates that the volume of exports of agricultural products from the Gaza Strip was 39,394 tons in 2018, 55,860 in 2019, and 43,027 for 2020.

¹⁹ Al Mezan, "Israel tightens punitive closure measures on Gaza and bans fuel entry", 18 August 2020, at: <http://mezan.org/en/post/23784>

The full lockdown issued on 24 August was partially lifted on 6 September 2020, and the local authorities have since eased the restrictive measures in the Strip, except in the areas classified as endemic. Since then, in non-endemic areas, the population has been allowed to move from 7 am until 8 pm. Nonetheless, the general state of crisis caused by the pandemic has certainly contributed to amplifying the pre-existing criticalities in the agricultural sector.

Conclusions

In light of the analysis presented above, it can be concluded that the ARA imposed by Israel on Palestinian land is to be regarded as a no-go zone where Palestinian civilians, especially farmers, face serious hazards as a result of the use of excessive and lethal force, including live ammunition, and the destruction of their property and livelihoods by Israeli military forces. These attacks are also indicative of Israel's intentions to preserve and reinforce the physical containment of Palestinians residing in the Gaza Strip—a practice that serves to retain the fragmentation of the Palestinian people, in order to maintain their subjugation within Israel's apartheid regime.²⁰

During the reporting period, four farmers were killed in the ARA by land, while another four were wounded, including a child farmer. Over the same period, another seven civilians residing in the ARA were injured, including five children and a woman. Israel's almost-daily use of force strongly affects female farmers and peasants: as reported above, one female farmer was killed, while three others were injured. Additionally, the farmland of 29 women farmers was damaged, with an estimated area of 109,650 square meters affected. Agricultural facilities also came under harsh assaults in the period under review: in addition to targeting people, Israel's attacks destroyed and damaged several Palestinian properties and assets.

According to Al Mezan's findings, Israeli forces carried out 206 incursions, 1,150 shootings and bombings, seven incidents including opening of water dams and 17 aerial sprayings of herbicides, causing damage to 4,936,867 square meters of Palestinian agricultural land. Similarly, the opening of water dams damaged an additional 197,430 square meters. During one of the recent incursions (December 2020), the Israeli forces left placards asking Palestinian farmers to uproot their own crops, thereby creating a heightened state of fear

²⁰ Al Mezan et. al, Joint Parallel Report to the UN Committee on the Elimination of Racial Discrimination on Israel's Seventeenth to Nineteenth Periodic Reports, 10 November 2019, at: <https://www.mezan.org/en/post/23608>

among the agricultural community of the Gaza Strip. This practice also demonstrates Israel's intention to continue to aggressively target and harass Palestinian farmers and their property in areas near the separation fence.

This conclusion is also supported by the fact that, during 2020, Palestinian farmers reported an increase in Israeli violations and a larger area of farmlands affected compared to 2018 and 2019 (Table 2). This indicates that while the world was overwhelmed with concerns related to the COVID-19 pandemic, Israeli authorities continued to perpetrate human rights violations against civilians and their property in the ARA. The ongoing power outage crisis further exacerbates the suffering of farmers as it limits the ability to operate water wells—especially in light of Israel's control over water resources, coupled with the effects of climate change—as well as to store agricultural products in refrigerators.

As a result of and in conjunction with all of these aspects—including the Israeli-imposed restrictions on the import of essential agricultural inputs and the complexities of export procedures to/from the Gaza Strip—the role of the agricultural sector has significantly declined and its contribution to Gaza's GDP decreased. The volume of agricultural exports from the Gaza Strip in 2020 was lower than in 2019 by about 12,000 tons, and this is attributed to both the COVID-19 crisis and Israeli restrictions. Indeed, the general state of crisis caused by the spread of COVID-19 and the preventive measures imposed by the authorities in Gaza on freedom of movement and the closure of markets have contributed to doubling the criticalities already endured by the agricultural sector, weakening the financial capacity of farmers and decreasing the level of income. Ultimately, it can be concluded that Israel's pervasive and escalating domination of the Palestinian people—which is also embedded in its systematic and unlawful use of force and restrictive measures in the ARA—appear to constitute war crimes and crimes against humanity under international criminal law and the Rome Statute of the International Criminal Court, all under an overarching apartheid regime.

Recommendations

For about twenty years the areas close to the separation fence in the Gaza Strip have been subjected to constant and relentless attacks by Israeli forces. The agricultural community in the ARA is on its knees due to the harsh conditions originating from Israel's relentless human rights violations, as well as several socioeconomic drivers that were further exacerbated by the pandemic. Accordingly, Al Mezan offers the following recommendations:

1. The **international community** must uphold its legal and moral obligations towards the Palestinian people by exerting pressure on Israel to lift the closure and blockade imposed on the Gaza Strip and ensure accountability of perpetrators of serious human rights violations in Gaza, as well as in other parts of the occupied Palestinian territories.
2. The **international community** must pressure Israel to stop all military actions against the agricultural community in the ARA, to allow farmers to cultivate and develop their agricultural lands near the separation fence, and to accelerate the entry of essential agricultural inputs into the Gaza Strip, as well as the export of agricultural products.
3. The **European Union (EU)** must take concrete action against Israel's violations of international law and pressure Israel to stop targeting civilian individuals, properties, and objects in the ARA and to compensate and redress victims of such violations.
4. **The EU**—following its founding principles of respect for human rights, fundamental freedoms, and the rule of law—must impose sanctions against Israel, as set forth by the EU Global Human Rights Sanctions Regime, and uphold the human rights clause contained in Article 2 of the EU-Israel Association Agreement.

5. **Member States of the EU** sitting at the UN Human Rights Council must support resolutions that address the root causes of the conditions leading to the human rights violations in ARA, particularly the resolution on accountability and justice, and systemically highlight the situation of the ARA and the level of agricultural development in those areas.
6. **All Member States of the EU**—in line with their full support for the International Criminal Court (ICC), the Rome Statute, and the international criminal justice system—must welcome and support the ICC opening of an investigation on the situation in Palestine.
7. The **international community** must also support relief projects implemented by local and community actors in the ARA. In particular, the **United Nations and its specialized agencies (FAO and IFAD)** must address the funding problems in civil society institutions working in the agricultural field in the ARA and provide financial support to implement programs and projects aimed at supporting affected communities in the agricultural sector.
8. **Experts from UN specialized agencies (FAO and IFAD)** must further investigate the ongoing crisis in Gaza’s agricultural sector and its rooted causes, including by undertaking a field mission to the Strip.
9. **Special procedures of the Human Rights Council** must further investigate the ongoing human rights violations occurring in the ARA, including by undertaking a field mission to the Gaza Strip.
10. The **Palestinian National Authority** and civil society institutions must provide all forms of assistance and support to the affected Palestinian farmers, including with regards to water and electricity infrastructure, systemically highlight the situation of the ARA and the level of agricultural development in those areas.

This Project is Funded by



EUROPEAN UNION

The contents of this report are the sole responsibility of Al Mezan and do not necessarily reflect the views of the European Union.