



Key Messages

- All directly affected farmers, herders and fishers see that their priority is to repair damaged assets in order not to lose income during the winter season. All recommend focusing on small holders with high level of damage.
- Gazans remain highly food insecure, but this status was not appreciably exacerbated by the conflict.
- Food Availability and market performance/conditions have returned to pre-conflict levels.

Introduction

On 14 November 2012 the Israeli Air Force (IAF) launched an airstrike that targeted and killed the acting chief of Hamas' military wing and one of his associates. This incident was followed by an escalation in violence ending on the 21 November with a declaration of a cease fire. In the aftermath of the conflict, the Agriculture, Food and Cash for Work Sectors embarked on a rapid qualitative assessment to determine the impact of the conflict on the population's food security status by analyzing food production, availability, accessibility and access stability during and in the aftermath of the conflict.

Methodology

In addition to reviewing secondary data, the assessment team conducted 60 key informant and household interviews, 6 focus group discussions with cooperatives and associations and 24 focus group discussions according to livelihood groups with special attention to women (additional 5 focus groups).

Damage Assessment

The Ministry of Agriculture estimates that the Agriculture Sector incurred US\$ 21 million in direct losses and indirect losses of agricultural assets from all sub-sectors resulting from the war.

Table 1: Summary of Direct and Indirect Damages to the Sector

Subsector	Total cost of damages in US\$ (million)
Crop Production	16.61
Livestock	2.23
Fisheries	0.59
Water	1.19
Total	20.6

Food Security Sector

occupied Palestinian territory

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Spotlight

Fishermen and their families are some of the hardest hit by food insecurity in Gaza. Over half of this population group suffer from food insecurity and have experienced an increase their status as food insecure compared to other population groups. During the escalation of the conflict, naval bombardment prevented fishermen from accessing the sea. During the 8 days of conflict, they lost an estimated 55,000 NIS per day in value of catch.



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In the aftermath of the conflict, the Gaza Strip's fishing area was expanded from 3 to 6 nautical miles (NM). This expansion could potentially increase fish catch up to 39 percent. However, the present 6 NM remains insufficient to ensure sustainable exploitation of marine resources. Immediate gain from the 6 NM is currently limited to the few trawlers that have been able to bear the cost of operating at the expanded limit.

Total Estimated Losses per Sub-Sector

Category	Unit	Quantity	Total Estimated Losses (US\$)
Crop Production (total)			16 606 240
Trees	dunum	940	9 403 000
Demolished Greenhouse	dunum	278	2 502 000
Partially Damaged Greenhouses	dunum	840	924 000
Open field Vegetables	dunum	1 856	1 113 600
Field Crops	dunum	9	1 800
Strawberries	dunum	50	200 000
Date Palms	tree	149	149 000
Demolished Storage Room	square metre	992	99 200
Fertiliser sprayers	sprayer	5	3 250
Fence	metres	32 870	230 090
Metal Gates	gate	3	300
Crater	crater	990	1 980 000
Livestock Production (total)			2 229 550
Layer Chickens	area	2 300	345 000
Chicken Eggs	egg	20,380	101,900
Broiler Chickens	area	9 600	672 000
Chicken for meat	bird	51 265	205 060
Turkey	bird	58	580
Chicks	chick	3 100	6 200
Rabbits	rabbit	40	600
Household Sheds	area	6 605	132 100
Cattle Farms	area	3 350	234 500
Cattle Killed	head	67	134 000
Sheep Farms	area	1 514	105 980
Sheep Killed	head	539	215 600
Other Animals	head	9	18 000
Roof Asbestos	square metre	798	3 990
Beehives	beehive	360	54 000
Fisheries (total)			586 900
Hasaka Boats	number	10	40 000
Partially Damaged Hasaka	number	35	35 000
Totally Damaged Engines	number	5	25 000
Partially Damaged Engines	number	18	36 000
Partially Damaged Fisherman Rooms	number	10	20 000
Refrigerator	number	2	10 000
Refrigerator Display	number	5	2 500
Snares	number	12	1 200
Fishing Nets	number	420	105 000
Other Machines	number	8	3 200
Empty Crates	number	50	500
Management Building	number	1	250 000
Scout lighting	number	50	5 000
Auction	number	1	10 000
Generator	number	16	4 800
Research station			38 700
Water Infrastructure for Agriculture (total)			1 191 536
Concrete Pools	square metre	1 364	75 020
Plastic Pools	number	12	12,000
Water Pumps	engine	41	28 700
Water Tanks	cubic metres	63	6 250
Irrigation Networks	dunum	1 488	446 250
Main Water Pipelines	metre	16 229	64 916
Well Rooms	square metre	304	30 400
Wells	number	24	528 000

Source: Ministry of Agriculture, 2012

Food Access

The rapid assessment found that neither significant changes regarding access to food at the households level, nor changes to income and expenditure patterns. Gazans remain highly food insecure, but this status was not exacerbated by the conflict. Household food access is primarily linked to economic access, and households which suffered loss of housing, productive assets, and income sources were more greatly affected than others.

Certain segments of the population were identified in the survey as having lost an income source that will take several months or years to replace and may require longer-term emergency food assistance support. These households include those who have lost productive land, crops or trees which require several years to regenerate (such as olive trees), livestock, equipment, and/or employment. Without a reliable income source to meet their food and other basic requirements, these households are currently relying on: external humanitarian assistance, support from relatives and neighbours, and credit authorized by shop-keepers. While their food consumption patterns have not been significantly altered as a result of the conflict, their resilience and capacity to self-sustain has eroded and they could need additional support in the future.

The loss of income due to the conflict exacerbates the pre-conflict situation in which economic access to food was already a serious constraint as a result of the blockade. With the Gaza Strip's unemployment rate currently at 32 percent¹—and with approximately 40 percent² of the population classified as poor—the delay in payment of public sector salaries may be the tipping point to push previously self-sufficient families into dependency on assistance. Even before the conflict began, the most recent Palestinian Central Bureau of Statistics labour force survey (3rd Quarter 2012) shows that the number of employed persons in the Gaza Strip decreased by 11 000³.

Specific results of the assessment include:

The price and demand for bread did not fluctuate significantly during the conflict. The price of bread remained stable before, during and after the conflict and price controls are in place by local authorities (NIS 7, or approximately US\$1.83 for 2.7 kg of flat bread, which is the daily requirement of an average family) and wheat flour is being provided by the various mills at set prices, as well as by WFP and UNRWA. All 47 bakeries in the Gaza Strip have returned to full functioning capacity, although there were reported concerns about the restoration of adequate supplies of cooking gas, spare parts and regular electricity service.

¹ PCBS, Labour Force Survey, Third Quarter, November 2012.

² Using the National Poverty Line.

³ Employment decreased from 249 600 in the 2nd Quarter of 2012 to 238 600 in 3rd Quarter of 2012.

Food Availability

Similar to food access, food availability in the Gaza Strip—including local production, wholesale markets, retail markets and humanitarian aid—was not appreciably affected by the conflict.

Field visits and market observations indicate that the flow of construction materials and other food items via the underground tunnels resumed shortly after the conflict ended and the volume of goods entering the Gaza Strip have nearly reached pre-conflict levels. Prices of construction materials in local markets, including aggregate, cement and steel bars are similar to the prices recorded prior to the Israeli offensive.

Restrictions on the movement of people and goods through the Gaza crossings still hinder free market access, but official imports are steadily increasing. This is shown by the Kerem Shalom crossing which has already returned to pre-conflict volumes, although the import of basic construction materials remains restricted. Traders' main priority is the opening of the crossings so that supplies (and sales) can increase. According to local and official sources in Gaza, tunnel activity continues to increase.

The tunnels under the border with Egypt, primarily used for the transfer of restricted items and fuel into Gaza, sustained significant damage resulting from Israeli airstrikes. However, following repairs performed since the ceasefire, activities resumed and gradually increased, reportedly reaching 80 percent of pre-conflict levels.

Specific assessment findings include:

While slight shortages of certain fresh foods (some vegetables, dairy products, eggs) were experienced during the conflict, supplies of food commodities have returned to pre-conflict levels, with no shortages reported and no difficulties to procure the commodities from wholesalers. The market is connected and functioning well, with all items (food and non food) available in all governorates at the same prices.

The levels of food stocks kept in stores are also comparable to the volumes prior to the conflict. This typically includes a stock for 2 to 4 weeks for main food staple items.

Overall, prices are back to pre-conflict levels. Consumers, shopkeepers and traders all confirmed that the prices didn't fluctuate during the conflict. Consumer demand has also returned to pre-conflict levels.

Impact on Agricultural Livelihoods

There are 13 909 plant holdings, 3 362 animal holdings in addition to 3 131 mixed holdings in the Gaza Strip of which 27 percent rely on agriculture as the main income source for the household. These holdings employ 46 563 workers of which 14 percent are women and 6 percent are permanent paid workers.

❖ *Crop Farmers*

According to the agricultural census there are 3 400 winter field crops holdings and 5 030 winter vegetables holdings. The total area of these holdings is 45 000 dunums of which 65 percent is irrigated area. The MoA damage assessment documented damages to 3 033 dunums representing 7 percent of the total cultivated area during winter months in the Gaza Strip. **Out of the livelihood groups, crop farmers sustained the most direct damage.** Considering that the average holding is 3.7 dunums this means that this damage is estimated to have affected 817 farmers employing a total of 1 700 workers.

Farmers whose greenhouses were totally damaged are concerned that if they cannot rehabilitate their greenhouses in time, they will not be able to re-plant their land this season and therefore will lose their income entirely. Others whose greenhouses suffered partial damages are in fear of losing what is left of their season's produce if they are unable to repair the damages. All farmers are under strain to pay back their debts to suppliers and are afraid they will lose their credit networks.

All directly affected farmers see that their priority is to repair damaged assets in order not to lose income during the winter season, as the short space of time left for them to catch up with the current season is passing quickly. Some farmers expressed their inability to finance repairs since they have not recovered losses incurred since 2008's Operation Cast Lead. They reported having had to deal with higher prices of materials at market due to increased demand at a time where they were already indebted to the suppliers, further exacerbating their precarious economic situation.

Farmers who were not affected directly suffered economic losses due the inability to access their land during the 8 days of the operation. As a result of not being able to tend their land, their crops became overripe or spoiled. Those who produced for export could not meet the standards for export markets and were forced to sell their crops locally for much lower prices. The strain increased also given the fact that exports to West Bank and Israeli markets were banned and continue to be so, even after the ceasefire was reached.

There are more than 10 600 tree holdings in the Gaza Strip with 1.3 million trees planted on 34 000 dunums. Of the total number of trees: 38 percent are citrus fruits; 35 percent are olive trees; 3 percent are date palm; and the rest includes fruit trees [guava, figs, almonds, apples, etc.].

Despite only direct damage to 149 palm trees reported in the Ministry of Agriculture's damage assessment, farmers recounted their past experiences during Operation Cast Lead in which the trees surrounding those directly damaged were hit with particles from explosives and would die a few months later. In addition, they said that the missiles had left large craters and destroyed irrigation wells and networks which will require land rehabilitation.

The conflict coincided with the citrus fruit harvest season. Farmers' inability to access their orchards during the hostilities led to losing part of their crops. Farmers generally supply the market with citrus fruit gradually, however as they were unable to access their land for eight days, upon the end of the conflict local markets were flooded with citrus fruit leading to a sharp decrease in price. For example one box of clementine has dropped from NIS 35 before the war to NIS 15 after the war, while a box of oranges dropped from 50 NIS to 35 NIS during the same period.

❖ *Livestock Farmers*

The Gaza Strip produces 76 percent of the poultry it consumes while poultry represent 77 percent of their average protein intake. The latest statistics available indicates that there are 8 million birds in Gaza's poultry farms (including layers, broilers, mothers and turkey) reared in 841 holdings. **The documented damages indicate the loss of more than 74 000 birds.**

Poultry farms which were not directly damaged reported as much as 30 percent of losses in poultry due the sounds of explosions. At the same time, all poultry farmers reported incurring some losses due to the lack of fodder during the 8 days of war. They sometimes had to pay inflated transportation and labour costs in return for the risk that workers and drivers took to deliver the fodder and feed the birds.

Farmers with partially damaged farms are concerned that they will lose their remaining poultry if their farms are not repaired for the winter season. The frequent losses they incurred since Operation Cast Lead had exhausted their ability to cope with crisis. The farmers reported that the reoccurring conflict had led to the disappearance of small farmers who opted to cut their losses by becoming paid workers for a growing number of large farmers.

Cattle, goats and sheep losses had been limited in terms of number. The impact of the 8 day escalation in violence was felt most heavily by those who were directly hit. However, due to the high value per animal (regardless of cow, goat or sheep) and the fact that most of the herders are small herders, individuals perceive this as a major loss. These farmers will have lost their major source of income unless they are compensated for their losses.

❖ *Fishers:*

According to the Department of Fisheries, there are 3 097 registered fishermen in the Gaza Strip who are reliant on the fishery sector for their livelihoods. Only half of the fishers will rely on fishing throughout the whole year while the remaining will rely on daily wage labour in construction or farming as an additional source of income.

Fishers reported an increase in fuel prices after the war which had implications on their profitability. Despite the extension of the fishing limits to 6 NM from 3 NM before the war, fishermen reported that their fish catch did not improve substantially and sometimes their fishing trips are not worth the cost of labour and fuel. They reported that to make a decent income they need to fish at a 20 NM limit. According to the Fishermen's Syndicate, gains from the expansion to the 6 NM was limited to the large trawlers compared to the Hasaka or the Purse Seiners which rely mainly on the sardine season. There has been no change in the number of fishers as a result of the change in access to the sea.

❖ *Buffer Zone*

Most of the buffer zone land is located on agricultural land which has been targeted over time to prevent or discourage access to the restricted areas, such as the leveling of farm land and uprooting of fruit trees. This gradually eliminated the means of production and the residential housing located in the restricted areas, reducing the number of people willing to access these areas.

The ceasefire agreement that was reached after the latest escalation of violence on the 21 November entailed the withdrawal of Israeli forces from land where Israel had unilaterally expanded the buffer zone.

Farmers and key informants in North Gaza and the Middle Area have reported that they can access the previously restricted areas up until the fence; however, they are still reluctant to invest in land there out of fear of military bulldozing. As most farmers have experienced frequent reoccurrence in the destruction of their lands, they expressed skepticism in reinvesting, requiring a guarantee in the future to return to their farm land in the buffer zone. Few farmers said that they are preparing the land; however, they will plant low cost crops such as parsley and lettuce. This way, losses will not be as heavy despite the knowledge that these crops will not provide substantial return.

Farmers in Khan Yunis and Gaza governorate had similar experiences, however, they reported that they attempted to cultivate the land with wheat and barley since they think that the quality of the soil has deteriorated and is unsuitable to plant vegetables.

Some farmers expressed fear of going beyond 300 meters from the fence. Since the land has been restricted for 10 years, and with the frequency of military operations in the area, farmers still express fears that the land needs to be cleared of unexploded ordinance before they feel secure about accessing this area.

Recommendations

1. Immediate reconstruction of the completely damaged and partially damaged agricultural assets including greenhouses, irrigation networks, water wells, and animal sheds. Special attention should be given to farmers who are at risk of missing the season to grow vegetables and those with partially damaged poultry farms that are under threat of losing more poultry due to the cold weather.
2. Support small herders who have lost all or part of their herds by replacing their stocks lost during the conflict.
3. Provide support to fishermen to repair fishing nets, partially damaged boats and other fishing equipment and tools.
4. Support agricultural workers who have lost their employment due to the destruction of farms with alternative sources of income until farms have been reconstructed.
5. Continue providing food assistance to beneficiary populations who were food insecure before the hostilities. Food insecurity in the Gaza Strip was high before the conflict, and the pre-existing caseload of food assistance beneficiaries still require external assistance to meet their basic food and non-food needs, prevent hunger, limit distress coping mechanisms, and respond to shocks.
6. Further assessments are needed of households who have suffered productive asset losses and housing damage during the conflict. Households affected by the conflict are reporting to be coping well, but further review and monitoring is required. If needed, assistance may include employment support through job creation activities, food assistance, and/or other extra economic support (pay the rent, compensation for the direct loss and rehabilitation of domestic and productive assets) to facilitate recovery and increase their resilience.
7. Support emergency preparedness at the household level and prepositioning of critical food and non-food items of relief organizations.
8. Advocate for alleviating the adverse economic and social conditions imposed on the Palestinian people through easing of the blockade, lifting movement restrictions, and unhindered opening of border crossings.

“We, Gazan farmers are very much like fish in the sea, you take our farming away from us and we will die, exactly like taking fish out of the sea.”

“We are exhausted from the number of times we have had to rebuild our lives; farmers sold their gold and sometimes land after the 2008 war to have to rebuild all over again. What is left for us to sell this time?... Nothing!”



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