

Hung Out to Dry

Israel's continued occupation prevents Palestinian farming and herding communities from accessing the water they need, especially during times of reduced rain fall, and forces them into further impoverishment.



Climatic changes across the Middle East and north and eastern parts of Africa are threatening the livelihoods of hundreds of thousands of people who depend on farming and herding to survive. However, in the Occupied Palestinian Territory, irregular and inadequate rain fall is only part of the farmers' and herders' problem.

Israeli policies and actions in the West Bank which limit Palestinian access to water have left farming and herding communities in an increasingly desperate situation. On 13 July 2011, the European Commission Humanitarian Office (ECHO) announced the allocation of more than US\$5.5 million in emergency aid to Palestinian communities struggling with water scarcity. But the recent announcement by the Israeli government that it will double the size of illegal agricultural settlements in Area C and the Jordan Valley will only increase settlement control over natural resources, leaving Palestinians who depend on water to make a living fighting for survival.

Background

Rain fall during the 2010/2011 rainy season was only 70 per cent of the historical average for the West Bank, with some governorates such as Jericho receiving as little as 50 per cent.¹ Globally, farmers and herders are amongst the hardest hit by inadequate rain fall and climatic changes. As drought kills the prospects of production, farmers and herders around the world, especially in East Africa, are facing a food security and livelihood crisis of epic proportions.² Palestinian farmers and herders are being affected by signs of climatic change, such as irregular and inadequate rain fall. However, they are also are facing a more deliberate reason for water shortages, which are being exacerbated by people and policies.

At the Nablus livestock market Mohammed, a herder and livestock trader, explained why he didn't invest in seeds and ploughing to plant any barley this season. "The conditions this year are terrible, the goats aren't even worth the money I spend to feed them. There was no rain so no one planted barley and now we have to buy animal feed, which keeps going up in price. The price of water is rising also. No one can afford all these costs so they have no choice but to sell animals for whatever price they can get."

While regular rain would clearly help Mohammed and thousands of other people facing the same conditions, Mohammed says that he would be better positioned to cope with failed rains if he could use other water sources. But Mohammed, like the majority of Palestinians who rely on farming and herding, lives in Area C of the West Bank where Israel maintains full military and civil control. Access restrictions, including the growth of settlements and closed military zones in Area C, effectively keep farmers and herders from reaching critical water sources, such as wells and springs that they have historically relied on. At the same time, Israel restricts construction in Palestinian communities in Area C, which prevents the building of water harvesting cisterns, new wells, reservoirs, or water networks.

As Israeli policies and practices in Area C hold Palestinian farmers and herders back from accessing the water they need to earn a living, settlement farms continue to grow. Settlement farms in Area C are connected to a water network and often equipped with state of the art irrigation systems. On the other hand, Palestinian farmers depend mostly on rain or manual irrigation because they are prevented from using the same amounts of water and from developing the same kind of water infrastructure.

Despite repeated calls by the international community that Israel should immediately halt building settlements, which are illegal under international law, settlement expansion continues and new settlements have started to be built. At the same time, Palestinian communities in Area C are not being allowed to develop. To build anything in Area C, including water networks, irrigation systems, homes, schools, roads, and electrical grids, communities must apply for Israeli-issued building permits, and such permits are hard to come by for Palestinians. In some cases, communities

Key facts to know about Area C

Around 61 per cent of the West Bank is Area C; 33 % of which is a closed military zone

There are 300,000 Israeli settlers living in 135 settlements and 100 outposts throughout Area C

Of the Palestinian population in Area C, 18,500 people (of a total of 150,000) live in small villages and 27,500 live in remote Bedouin and herding communities without access to basic services or infrastructure

Inequitable access to, and Israeli control over water resources in the West Bank, and Palestinian inability to develop infrastructure due to Israeli restrictions mean that the average Palestinian consumes four to five times less water than the average Israeli settler

Since June 2009, Israel has carried out 100 water related demolitions in the West Bank including 44 cisterns, 5 springs, 28 wells and 1 water pipeline

¹ Cited in Water Scarcity Task Force presentation, *Assessment on water scarcity in the West Bank* (May 2011).

² Oxfam Briefing Note, *East Africa Food Crisis: Poor rains, poor response*, July 2011

or aid agencies that have built water infrastructure without a permit have had their projects destroyed by the Israeli military. Israeli destruction of existing Palestinian infrastructure in Area C, such as basic irrigation and water storage systems, animal sheds and residential homes has also contributed to the ruin of the farming and herding communities living there, placing thousands of families at risk of displacement. OCHA reports that due to demolitions in Area C some 656 Palestinians, including 351 children, were displaced in the first six months of 2011 alone.

Even rainwater harvesting cisterns, some of which date back to Roman Times, and which do not use groundwater resources and therefore should not be subjected to the same permit regime for construction, have been destroyed. A total of 41 cisterns have been demolished by the Israeli Authorities since January 2010, which includes 20 cisterns so far this year. In the absence of a water network, such water cisterns are essential to the survival of whole farming and herding communities.

Without access to water, farmers and herders must buy water through a process called tankering, where water is bought in bulk, stored in large tanks and hauled in by trucks. As tankering includes not only the price of water but also the fuel costs to transport the water, the average cost of tankered water is 3 to 5 times more expensive than water from a regular water network. The high cost of this water erodes farmers' and herders' profit and reduces their ability to pay for other essential services, such as health care or investment in education for their children. Since the quality of tankered water is often much lower than that from a water network, communities are also at much higher risk of water-borne disease.

Many farmers and herders simply cannot afford the water they need to sustain their livelihood, and have no choice but to buy water on a credit system. They hope that they can produce enough throughout the year to pay down their water debt, but the added costs of living without access to water raises vulnerability and keeps many trapped in a cycle of poverty and dependency.

Case study: The ABC of “de-development”

Under the Oslo Accords, signed between the government of Israel and the Palestinian Liberation Organisation in 1993, the West Bank was divided into three jurisdictional areas: Areas A, B, and C. Area A, which is comprised mainly of populated, urban centres was placed under the control of the Palestinian Authority (PA); Area B was placed under PA civil authority, but under Israeli security control; and, Area C which comprises some 60% of the West Bank remained under full Israeli control for a proposed interim period of 5 years, with control to be transferred back to the PA after that.

18 years since Oslo, Area C still remains under full Israeli control. Area C is sparsely populated, with only around 150,000 Palestinians, mainly herders and farmers currently living there. Area C contains the vast open land needed for future Palestinian development, as open land is limited in Areas A and B. As the Palestinian population continues to experience high growth rates, sustainable development of a future Palestinian state will need to include growth in Area C. Since Area C is the only contiguous block of land in the West Bank, it is also vital for infrastructure development, such as state highways and water, sewage, electric and telecommunications networks. Area C also contains a large portion of the best agricultural and grazing land, including most of the Jordan Valley, which is vital to Palestinian food security.

United Nations Office for the Coordination of Humanitarian Affairs
 occupied Palestinian territory
West Bank: Area C Map
 February 2011

Border

- International Border
- Green Line
- Israeli Unilaterally Declared Municipal Area of Jerusalem*

* In 1967, Israel occupied the West Bank and eastern Jerusalem. The territory 100 km of the occupied area.

Barrier

- Constructed / Under Construction
- Planned

Oslo Agreement*

- Area (A), (B)
- Area C & Nature Reserves

Oslo Interim Agreement

- 1. Area A: Full Palestinian civil and security control
- 2. Area B: Full Palestinian civil control and joint Israeli-Palestinian security control
- 3. Area C: Full Israeli control over security, planning and construction

However, an elaborate system of Israeli imposed access restrictions (many of which Israel says are needed for security), including checkpoints, settlements, military zones, and land designated as nature reserves, have kept Area C out of the state building process. These same restrictions prevent the Palestinian farmers and herders there from benefitting from the natural resources Area C has to offer. Further restrictions on zoning and planning in Area C keep Palestinian communities in a state of de-development, as they are prevented from building homes, schools, roads,



water networks, and electricity grids. Area C is a key area for Israeli development and expansion and for this reason it permits zoning and planning for the 300,000 Israeli settlers living in Area C.

With around 135 settlements and 100 outposts in Area C, Palestinian farmers and herders have found their livelihoods squeezed. At the same time, their dependence on the land as a source of livelihood makes relocation to highly populated areas like Area A nearly impossible. “We can’t live here like this anymore, we have no security, but we have nowhere else to go, I can’t take 200 sheep to the city,” explains Qasem Dajani, a herder from the village of Frush Beit Dajan. “I’m a herder, my father was a herder, my grandfather, all the way back. I belong here and if I leave this land the settlers will take it and it will be gone forever.”

The grain of the matter

Without access to water networks or storage and irrigation systems many farmers and herders in Area C have come to depend on growing crops that can survive on rain fall alone (rain fed farming). Crops that usually thrive under rain fed farming conditions, such as wheat and barley, also happen to be of vital importance to Palestinian herders. The growth of Israeli settlements and military zones throughout Area C has restricted Palestinian herders’ access to grazing lands. Without access to grazing land, wheat and barley make up a bulk of the food herders need for their animals. When a herder cannot graze his animals, around 80 per cent of his monthly expenditures are spent on buying animal feed, also known as fodder.³

The increases in fodder prices are shown in the chart below:

Per metric ton	2010	2011	% increase
Barley	\$US 343	\$US 458	34%
Bran	\$US 266	\$US 343	29%
Maize	\$US 343	\$US 443	29%

A successful harvest of rain fed crops means that herders spend less money on buying fodder. However, due to limited and late rainfall during the 2010/2011 rainy season, few farmers and herders were willing to take the financial risk of buying seeds and planting crops they expected to fail. By January 2011, only 60 per cent of the yearly average of rain fed barley and wheat crops were planted. Further, the UN Food and Agriculture Organisation reports that around 62 percent of herding communities who did take the risk and plant their land with rain fed crops experienced either low yields or complete crop

³ FAO, *West Bank Cereal Harvest 2011 Overview*, July 2011.

failure.⁴ The reduced harvest, particularly in the semi arid areas of the West Bank (Tubas, Hebron and Bethlehem areas) is already causing economic hardships for herders. Shortages of rain fed crops have led to a steep increase in the price of animal feed. For example, the cost of barley has increased by 34 per cent in 2011 compared with 2010 prices.

As the price of water and grain continues to rise herders struggle to afford keeping their animals alive and try to sell off part of their flock to reduce expenses and raise cash flow. The problem becomes worse, however, because when herders rush to sell they often find they are not alone. As goats and sheep flood the market, the price herders receive for their animals is under value, which directly threatens the sustainability of their livelihood. The practice of selling off part of the flock to afford feeding and watering the rest is known as a stress sale. Since animals are herders' main asset, reducing the size of their flocks through stress sales is equivalent to emptying their bank accounts. Herders hope that by selling at reduced prices they can hold on for now and buy back when conditions improve, but without a permanent solution to their water troubles they likely face subsequent seasons in the red.

The UN Food and Agriculture Organisation (FAO) estimates that the poor harvest of barley alone will lead to a decrease in herders' production of up to 55 per cent and a loss of US \$1,180,000 to the Palestinian economy in 2011.

A survey carried out by UNRWA, UNICEF and WFP of Bedouin and herder groups in Area C found that in order to cope with shocks such as increasing costs of water and animal feed and reduced access to water and grazing land, 36 per cent of respondents had sold their productive assets during the six months prior to the survey.⁵ Long term development plans for the agricultural sector in Palestine could help to avoid these kinds of negative coping methods. Since farming and herding is vital to the Palestinian national economy, the Palestinian Authority could help to better protect the livelihoods of farmers and herders by developing a strategy that addresses the needs of small scale producers while providing them with the support they need to adjust to climatic changes and sudden price shocks.

Settlement farms flourish, Palestinian farmers struggle to grow

While farmers struggle to earn an income with scarce water and increasing cost, the diversion of water resources from Palestinian villages to Israeli settlements has facilitated settler development of water intensive farming. Settler farms are primarily located in the Jordan Valley, most of which is in Area C. Settler farms mass produce a variety of crops that use large amounts of water, such as bananas, dates, and cucumbers, mainly for export. Meanwhile, Palestinian communities in the Jordan Valley that have long depended on farming have seen their springs and wells run dry, forcing people to abandon agriculture or take up work as day labourers on Israeli settlement farms. This makes them vulnerable to unemployment and food and water shortages.

In Al Auja, where Oxfam works to implement an EU funded project 'Fostering Community Change in the Occupied Palestinian Territory', Um Al Saed, a woman in her late 30s, who runs a cooperative for rural development, said: *"There is no longer any water for our village. The settlement now controls the water source and the spring has dried up. Now many people have sold their land to buy taxis instead, or have no choice but to work in the settlements."*

Just 20 years ago, Al Auja was a flourishing agricultural oasis that provided fresh fruits and vegetables to markets beyond the West Bank. As three settlements started to expand

⁴ Ibid.

⁵ UNRWA, UNICEF and WFP, *Food Security and Nutrition Survey for Herding Communities in Area C*, (2010).

around Al Auja's land, farmers found their main source of water, the Al Auja spring, was starting to run dry. To supply the settlers with water, Israel had drilled three deep wells that reduced water flow from the spring to Al Auja.⁶ In 2008, for example, the 4,717 residents of Al Auja were only able to pump 433,000 cubic metres of water (enough to fill 173 Olympic size swimming pools) from their wells connected to the spring. In comparison, the 227 settlers living in nearby Yitav, pumped 1.2 million cubic metres of water from the same source (enough to fill 480 Olympic size swimming pools).⁷ As people like Um Al Saed watched helplessly as their farms and livelihoods dried up, lush green settlement farms started growing around them.

The Israeli human rights organisation, B'Tselem says that the 9,400 Israeli settlers living in the Jordan Valley region alone consume around 45 Million Cubic Metres of water a year.⁸ This is almost a third of the quantity of water allocated to the 2.5 million Palestinians living in the West Bank.⁹

Making matters worse, a recent announcement by the Israeli government seeks to increase the allocation of land to Jordan Valley settlements by 130 per cent, and their water allocation by 20 percent.¹⁰ Under the new plan, the average plot for each Jewish settler in the Jordan Valley will be extended from 35 dunams (8.6 acres) to 80 dunams (19.7 acres), and their water quota will increase from 42 cubic metres to 51 cubic meters. This will increase the overall land available to settlers to cultivate from 56,000 dunams (13,837 acres) to 110,000 dunams (27,181 acres), or from around 6,919 football fields to 13,591 football fields. The expansion plan is designed to support the development of settler agriculture, provide infrastructure to absorb the next generation of settlers, and maintain Israeli national and security interests. If the plan is approved, settlement farms will get even bigger while Palestinians living in the Jordan Valley will have even less access to the scarce land and water resources that they depend upon not only for their livelihoods but to maintain their presence on the land and way of life.

Case study: Water woes



Hassan, aged 12, and his friends set off through the dusty trails in Ein Duyok for a swim in the village's spring. With the temperature over 100 degrees Fahrenheit and the sun blazing through the flimsy plastic tents they call home, the spring is the only escape for the kids from the scorching summer heat. But for the 200 residents of this Jordan Valley town, the spring is much more than just a place for fun and games, it serves as a main source of their livelihood. "Everyone in this village raises livestock," explains Hassan's mother.

"The land is completely dry. The only land we can graze our animals on is high up on the mountains, and is blocked by two settlements and an army base. We have no choice but to spend our money on food for the animals, but we are blessed because our water comes from the earth for free."

Located in Area C, the people living in Ein Duyok are still forbidden from building a water network, so they transport water for the household and their animals from the spring in large tankers pulled by tractors. On average, a herding family of six in Ein Duyok uses about 30 cubic metres of water per month, one third of which is used in the house and two thirds of which is used for the animals. It generally costs such a family about \$US 88/month in fuel costs to transport the water tankers from the spring.

⁶ B'Tselem, *Dispossession & Exploitation: Israel's policy in the Jordan Valley and northern Dead Sea*, (May 2011).

⁷ *ibid*

⁸ B'Tselem, *Dispossession & Exploitation: Israel's policy in the Jordan Valley and northern Dead Sea*, (May 2011).

⁹ *Ibid*.

¹⁰ Information provided by Oxfam partner, the Association for Civil Rights in Israel (ACRI).

Oxfam recently completed a household assessment of herding communities in Area C. Funded by the European Commission Humanitarian Office (ECHO), the purpose of the study was to get a complete picture of the herding economy in Area C, including the reasons herding communities are vulnerable and how they manage to cope with threats to their livelihood. Israeli restrictions on water use in Area C was found to be a main factor driving down herders' profits and adding to their cost of production. Of the 21 communities surveyed, only 5 had access to a regular source of water. For communities without access to a water source, herders were dependent on buying water, often from settlements or Israeli water providers. In addition to paying inflated prices for the water, these herders were also paying for fuel to transport the water in tanker trucks, leaving them not only vulnerable to price shocks for water during summer months when demand is high, but also vulnerable to global price shocks for the rising cost of fuel.

The Oxfam study found that herding families without access to water were paying up to \$US 285/month, over 3 times more what families in Ein Duyok pay. "In most herding communities around the world the idea is that people and their animals are on the move following the water and the grazing. The situation in Palestine is completely backwards. Due to access restrictions, herders are unable to graze, and due to the growth of settlements, they are afraid if they move from the land with their animals to find water and grazing they will have no place to return. Instead of bringing animals to food and water, Palestinian herders are actually bringing water and food to their animals. Under these conditions it is absolutely vital that herding communities have access to a steady source of affordable water, like a network or a reservoir, without one they will always be under threat," explained Jules Holt, a consultant for the study.



What is Oxfam doing to assist?

Oxfam is one of the organisations who will work with ECHO to deliver emergency aid to farming and herding communities suffering from water scarcity in Area C and the Jordan Valley. Currently, Oxfam is providing 2,700 tons of animal feed to 1,843 herders who have been restricted from accessing grazing land and cannot afford the high cost of animal feed. In order to increase their productivity and protect land through cultivation, Oxfam is also distributing 170 tons of seeds to 681 farmers and herders who have not been planting rain fed crops because they cannot afford to replenish their seed stock.

While such assistance is vital to the survival of vulnerable communities, livelihoods would not come under such critical pressure if Israel was to change its policies and the practices limiting access to the natural resources farmers and herders need to earn an income. Aid interventions, such as water, seed, and fodder distribution, are important because they help people to cope, but this is not a sustainable solution and fosters a culture of aid dependency rather than self sufficiency. In order to bring lasting relief to thousands of families who depend on farming and herding to survive, the international community should challenge Israel to ensure Palestinians have access to adequate quantities of water for domestic use, growing crops and farming and herding and control over water infrastructure development such as well development, the construction of networks and rehabilitation of cisterns.

Recommendations

1. Israel should immediately stop building settlements in accordance with international law. Any reallocation of land and water resources in the Jordan Valley and Area C must prioritise Palestinian communities and not the illegal settlements.
2. Israel must stop demolishing water harvesting cisterns, water pipes, and other water related infrastructure that Palestinians depend on. International law says that Palestinians have a right to an equitable and reasonable share of the water and that Israel has the obligation to make sure people can access enough water to meet their basic needs.¹¹
3. The international community should challenge the stringent permit regime which isolates Area C and the people who live in it from benefitting from the state building process. The permit regime enables demolitions in Area C and prevents communities from accessing the resources and developing the infrastructure they need for a sustainable state. The international community must hold Israel accountable for harm done to the well being of the civilian population living under occupation, including the harm done by the permit regime and the demolitions of civilian infrastructure in Area C.
4. Israel and the international community should ensure that decision making over water resource development and infrastructure construction is transferred to the Palestinian Authority, which would enable the PA to be able to effectively plan, deliver and expand people's access to services without the hindrance of Israeli issued permits. This would improve the quality of life for people living in under-served communities in Area C of the West Bank, thereby increasing their ability to access the resources they need to earn a living and halting the spiral toward aid dependency.
5. The Palestinian Authority should support farmers and herders by investing in a strategy that builds their resilience to withstand climate shocks and implement policies that strengthen the rights of small scale producers to access the resources they need to make a living.

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¹¹ See the United Nations Convention on the Law of the Non-Navigational Uses of International Water Courses (1997), generally considered to constitute international customary law.