

Animal Health and Wealth in Palestine



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Archaeological evidence shows that the Middle East, particularly the Levant region and the Jordan Valley, was the starting point for animal domestication more than eight thousand years ago. Since then, the people living in this area have relied on animals to support their livelihoods, and even now, Palestinian farmers raise and breed livestock as a source of food and income. Traditionally, the raising of small ruminants (sheep and goats) has been the largest segment of the agricultural sector. However, farming and herding sheep and goats is still managed mainly in traditional ways and with methods that have been inherited within families. About 730,000 sheep and 215,000 goats are being raised in Palestine according to the agricultural census carried out by the Palestinian Central Bureau of Statistics in 2015.ⁱ The cattle industry is managed with modern methods, mainly with regards to milk production, and Palestinian farmers are raising about 34,000 head of cattle, almost all of them of the Holstein-Friesian breed (black and white dairy cows, originating from northern Europe), whereas the local *baladi* and Damascene cattle breeds are now very rare. The chicken industry supports 1.5 million hens for egg production and produces 31 million broiler birds annually; this industry also uses modern management methods and attracts huge investments. Furthermore, there are approximately 1,500 camels and 3,600 equines.

The agricultural sector is affected by many obstacles, some of them due to the Palestinian political situation. During the 1948 *Nakba*, more than 500 villages and cities were evacuated and depopulated, which led to severe alterations in the animal population density and to losses of some local breeds. Furthermore, resources needed for raising farm animals are being curtailed on an ongoing basis by Israeli measures that are contrary to international human rights laws and to agreements signed between Israel and the Palestinians in the 1994 Paris Protocols. Ongoing confiscation of land

in the West Bank and East Jerusalem limits Palestinians' ability to cultivate fertile land and breed livestock since these measures both reduce the areas that can be used for grazing and decrease the availability of water that is required to irrigate crops and water animals. First, the apartheid Wall annexes Palestinian territories under the pretense of providing increased security for Israeli citizens. It is a cement wall that is 8 meters high and 782 kilometers long; it deviates widely in many places from the 1967 borders and cuts deeply into the occupied Palestinian territories (oPt) to surround settlements located the heart of the oPt, thus effectively dividing the Palestinian areas into zones that have no chance of survival. Upon completion of the Separation Wall, 22 percent of West Bank land will be confiscated and 52 percent of Palestinian communities will be isolated into cantons and enclaves surrounded by settlements and military zones.ⁱⁱ Second, the more than 200 illegal Israeli settlements are, in many cases, built on prime agricultural land or at key water resources, such as the Western Aquifer Basin near springs and wells that have been confiscated from Palestinians. The inequitable distribution of water between settlers and Palestinians has been widely documented.ⁱⁱⁱ Furthermore, settlements

Diseases that spread among Palestinian livestock have a negative impact on the economic and social situation of Palestinian farmers, decreasing their capability to breed livestock in Palestine.

discharge untreated wastewater into neighboring Palestinian areas, and Israel is dumping solid waste generated in Israel into the occupied territories without restrictions. All these factors affect Palestinian livestock breeding and are leading to ongoing increases in the cost of locally produced products for consumers, a situation that is aggravated by the high price of feed.^{iv} Last but not least, even though the Paris protocols stipulate the free exchange of products between Israel and the oPt, Israel prevents any animal products from being exported to Israeli markets and most recently has even blocked Palestinian dairy and meat products from entering East Jerusalem markets.^v

The Separation Wall along the western border of the West Bank has reduced the areas available to herders for grazing their flocks.



The general directorate of veterinary services and animal health of the Ministry of Agriculture (MoA) is responsible for the health of animals and animal products in Palestine. It serves farmers through veterinary services offices that are distributed throughout all government districts. Main duties include free vaccinations against brucellosis and foot-and-mouth disease (FMD) for all herds and the provision of optional vaccination (for fees) against pox, PPR (peste des petits ruminants), enterotoxaemia, chlamydiosis, anthrax, and bluetongue disease. While vaccination can control some diseases, others require the culling of the infected flocks (slaughtering sick animals), which is done with compensation to farmers. Furthermore, the veterinary services carry out disease diagnosis through the central vet lab and regulate the dispensing of veterinary drugs and the running of private veterinary clinics and of slaughterhouses. In general, the vet services staff is working hard to protect animal health and human health and wealth from zoonotic diseases (diseases that can be transmitted from animals to humans) – all this despite complicated logistics and a severe shortage in staff.

Because more than 80 percent of human pathogens come from animal origin, international trends in food-safety practices focus on animal health as the earliest point of the food-production chain in order to reduce the risk of human exposure. The “One World, One Health” principles outline recommendations that promote the establishment of a more holistic approach to measures that address the prevention of epidemic/epizootic diseases.

^{vi} They urgently advocate the maintaining

As endemic and introduced animal diseases are of concern in Palestine, veterinary care is a top priority and steadily improving.

In 2000, An-Najah University in Nablus established a veterinary college that provides the local market with graduates in veterinary medicine. Currently, around 250 veterinarians work in Palestine, 60 of whom are employed by the government.



For Bedouins, such as these living in the Jordan Valley, sheep and goats are a main source of income. In efforts to better monitor animal health and establish an animal identification system, the Palestinian Veterinary Services, in 2015, began to tag the ears of all sheep and goats.

of ecosystem integrity for all forms of life and assert that this must not only serve the benefit of humans and their domesticated animals, but also protect the “foundational biodiversity that supports us all,” which includes the wildlife and flora of global land and water habitats. Unfortunately, this concept has not yet been well addressed in Palestine due to a lack of awareness among public and higher officials as well as policy makers who therefore fail to prioritize associated issues. This lack of care has led to the current situation in which there is a high incidence of human brucellosis that

is caused by consumption (in some cases also through handling) of contaminated dairy or meat products or, more rarely, through direct and prolonged contact with contaminated animals (through inhalation or wounds in the skin). It is important to note that more than 80 percent of the meat locally consumed in Palestine does not come from slaughterhouses that are under veterinary control

Although the Palestinian Veterinary Services are trying their best to control the many diseases that may affect livestock, they face a number of obstacles that make it hard to reach this goal. The main difficulty

relate to tracing, epidemiological surveys, and scientific research.

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The Ministry of Agriculture is working diligently to modernize legislation regarding animal health and veterinary services in order to make it compatible with international legislation and trade agreements. In addition, a national animal identification and tagging system was started in 2015 that enables every farm animal in Palestine to be traceable.

lies in a prevailing lack of vaccine supplies, a situation further exacerbated by the high cost of vaccines that not only contributes to the extant limited vaccination coverage but also affects the efficacy and efficiency of the vaccine. Further areas that need improvement

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Article photos courtesy of the Palestinian Ministry of Agriculture.

ⁱ *Palestine in Figures 2015*, PCBS, available at <http://www.pcbs.gov.ps/Downloads/book2188.pdf>.

ⁱⁱ Thus, the Palestinian population in the West Bank and Gaza Strip (4.1 million) will be living on only 12 percent of historical Palestine.

ⁱⁱⁱ For example, by Amnesty International. For more information, see also the July 2016 issue of *TWIP*.

^{iv} For example, between 1999 and 2009 the price of lamb meat rose from NIS 42 (US\$ 11)/kg to NIS 62 (US\$ 16)/kg, according to “The Impact of Closure and High Food Prices on Performance of Staple Foods and Vegetable and Fruits Market in the oPt, December 2009,” *UN World Food Programme*, published by OCHA, whereas the current price in July 2016 is NIS 90 (US\$ 23)/kg in Ramallah.

^v Ben Lynfield, “Palestinian dairy and meat farms face bleak future if Israel continues import ban,” *The Independent*, available at <http://www.independent.co.uk/news/world/middle-east/palestinian-dairy-and-meat-firms-face-bleak-future-if-israel-continues-import-ban-a6975911.html>.

^{vi} See <http://www.oneworldonehealth.org/>.