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Animal-source foods in member countries of Gulf Cooperation Council

All six members of the Gulf Cooperation Council or GCC ("Gulf" because they are all adjacent to the Persian Gulf) – Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates – have extraordinarily high wealth per capita and not an exceptionally large number of mouths to feed. One would think that apprehensions about food issues, including those related to animal-source foods, don't exist in these countries. But is that really the case?

Academic papers featured in this issue of ASWT reveal the reality that access to and availability of animal-source foods are in fact a cause for concern in these countries, and serious measures are taken to address them. So it is worthwhile for those interested in the production and consumption of animal-source foods in the Gulf region to "look under the hood" to understand more deeply what's happening in that part of the world.

1. All Gulf Cooperation Council countries import live animals to meet local demand

Imports of live sheep, goat, cattle for human food in GCC countries have been going on for decades, are steadily rising, and "will remain a fundamental feature of the food trade segment in the GCC countries". Live animals are imported because there is insufficient local supply to meet demand.

Extent of imports

- Sheep: Sheep make up the largest number of imported animals. From 2000-2023, a little less than 2 million sheep were imported into the six GCC countries on average. Saudi Arabia held the number one spot, importing more than four million sheep in 2002-2022.

• Goat: Since 2013, the import of live goats has decreased significantly. But from 2000-2012 Oman, Saudi Arabia, UAE were increasing their goat imports appreciably.

• Cattle: From 2008-2020, the largest share of cattle import went to Oman. Then there was a sharp decline of cattle imports to all six countries during the COVID-19 period. Post-COVID, Saudi Arabia became the largest importer.

Exporting countries

• A number of countries compete for market share in exporting live animals to the six Gulf states, including among these states themselves. For example:

> Saudi Arabia was the chief exporter to Kuwait, as well as to Bahrain for some years until Australia and then India took over.

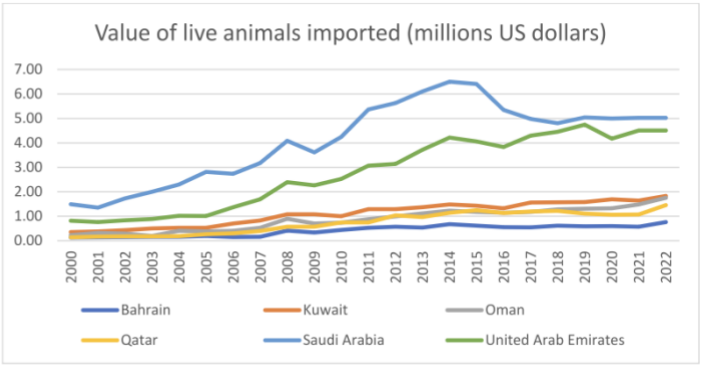
> UAE used to be the main supplier of live animals for Oman.

• Proximity plays a role. Oman recently obtains most of its animals from Somalia because of the latter's proximity which facilitates transport.

• Australia, Brazil, France, India, New Zealand, the Netherlands, Somalia, Turkey are all suppliers. But there have been fluctuations in their positions in the league table in the past two decades.

Value of imports

Fig. 1 The value of live animals imported. Source: World Bank (2025)



Reasons for imports

"Several factors drive the GCC country's importation of live animals. However, the prime variables relate to culture, ecology and economics."

• *Muslim population*: GCC countries have an average of 85% Muslim population. The overwhelming dominance of Muslim culture, traditions, and the Islamic religious Sharia law is the sweeping and foremost factor for these countries' trade in live animals because red meat (from sheep, goat, cattle, camel, buffalo) is in great demand:

> By Muslim consumers who have a strong preference for meat (especially red meat) in their daily diet and social occasions such as weddings.

> In Muslim religious festivals and cultural events (e.g., national day celebrations).

> Seasonally, in particular during the annual Hajj (pilgrimage) of Muslims from all over the world to Saudi Arabia that lasts more than a month.

• *Halal slaughter*: According to Islamic law, animals for human consumption "must be alive and healthy at the time of slaughter". Muslim consumers want to be reassured that the food they consume conforms to this dietary law (i.e. is Halal). That is why Halal certification of meat is crucial for them. Although imported meat need to be certified as Halal, in-country slaughter of live animals with Halal certification is considered by consumers to be "more authentic and trustworthy".

• *Ecology*: Severe lack of arable land and precipitation, extreme temperature, fierce dust storms, are all conditions that make practicing animal agriculture on a huge scale very tough.

• *Global trade*: Heightened international trade and slashing of agricultural tariffs globally in recent decades, trade reforms and open trading system in Gulf states, attracted large producers such as Brazil to trade with GCC countries. Smaller neighboring countries such as Sudan and Somalia could also enter into trade agreements with GCC members painlessly.

• *Government regulations*: These were reworked to enable collaboration and cooperation with large suppliers on various important issues such as Halal certification.

• *Infrastructure*: Improvements to infrastructure, logistics, and transportation made it feasible to import and export live animals efficiently. Especially significant is the availability of good shipping links from exporting countries to importing markets, and the proximity to the countries the animals are destined.

• *Demographics and income*: Populations in GCC states are growing, with an ethnically diverse and heavy-immigrant combined population growth rate averaging 2.6% per annum. Per capita income is also on the rise thanks to oil wealth and economic modernization, increasing demand for red meat.

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Questions for ASWT readers to ponder:

While consumer demand for in-country slaughtered live animals is the major reason for live imports, do you think that developments such as free trade, favorable government regulations, etc., are equally, if not more, important (because simply demanding something by consumers does not mean that demand will be turned into reality as it may not be possible to produce, supply, sell that thing), and one can reduce live transports by targeting these other factors in addition to consumer demand?

More information:

- "While Brazil maintains its presence in the Omani live animal export market, its export share declines from 10.87 in 2005 to 5.39, an almost 50 percent reduction in 2020. Somalia has been a major exporter of live animals to Qatar since 2000 and remained a dominant supplier until 2015. Brazil sustained its export share, increasing from 14.85 percent in 2000 to 18.44 percent in 2022. Turkey has also felt its presence since 2020, retaining a market share of 11.32 percent in 2022. Brazil has been a dominant supplier in Saudi Arabia, building a market share of 19.6 percent in 2022, while other suppliers such as Australia, France, New Zealand and the Netherlands experienced declining market shares. Like Saudi Arabia, Brazil has dominated its market in the United Arab Emirates since 2000. India and Australia followed this. New Zealand's share increased from 8.74 percent in 2010 to 9.34 percent in 2022. While Saudi Arabia is also a major supplier, its share in the United Arab Emirates declined from 10.8 percent in 2010 to 6.52 percent in 2022."

- "Another factor of importance for live animal imports is the distance and shipping connectivity from the exporter to the importing countries. Much of the shipping of goods throughout the world is through seaborne trade. For this, distance to markets is also a critical factor. The GCC's proximity to the Horn of Africa, India, Pakistan and Iran positively impacts the live animal trade. For example, livestock export from Somalia and Sudan is the largest concentration of live animal exports globally due to their proximity to the Middle East countries. Proximity to markets does matter for trade flows. Importing from not-so-far-distant supplier countries is mutually advantageous for importers and exporters of live animals. The importing country businesses can gain through cost reductions as animals are imported with low transportation and animal husbandry costs. Hence, importers effectively lower their expenses, enhancing overall transport and logistics cost efficiency and improving competitiveness. On the other hand, suppliers also benefit from the proximity of large markets and reliable cash flow with sustained demand. Sustained demand from close-by importer nations translates into sustained income flows for the livestock producers."

Gani, Azmat. "A policy perspective on the determinants of live animal imports in the Gulf Cooperation Council countries." *Journal of the Saudi Society of Agricultural Sciences* 24, no. 3 (June 11, 2025): 13. (link)

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2. Local broiler chicken production in Dubai (UAE) cannot meet demand

The Emirate of Dubai is the second largest and most populous emirate in the United Arab Emirates.

Chicken meat is the most consumed white meat in Dubai and is considered to be highly important for food security there. But the market demand for chicken meat in Dubai far outstrips supply from broiler chickens produced locally. Chilled and frozen chicken meat has to be imported to close the large gap.

Chicken producers in Dubai and UAE:

- Only one commercial facility and two small-scale farmers produce broilers in Dubai.
- There is one other commercial chicken farm in Dubai and it produces layer hens.
- 17 small-scale farmers have been licensed for animal production in Dubai, and their output is of no account in the big scheme of things.
- In UAE as a whole, there are 22 commercial broiler farms.

Feed: Feed accounts for 60-70% of Dubai producers' cost of production. Feed – complete or individual ingredients – has to be imported because water scarcity and the harsh climate in Dubai makes it impossible to grow crops suitable to be used as local feed.

Imports: Imports provide 85% of all chicken meat consumed in Dubai. They have been increasing steadily. For example, 2019 saw a 32% increase over 2017.

Source of imports:

Table 6. The weight and percentage of chicken meat imported into the Emirate of Dubai from exporting countries [11]. Source: data taken from; Food Trade Control Section, 2020.

Country	Weight (tonnes)	Proportion of Total White Meat Imports (%)
Brazil	99,342	47.83
United States	50,571	24.35
Ukraine	16,942	8.15
Oman	9335	4.494
Argentina	5489	2.64
Turkey	6663	3.20
France	4873	2.346
Malaysia	3668	1.76
Russian Federation	2303	1.10
South Africa	1758	0.84
Poland	918	0.44
Other countries	5823	2.80

Carbon footprint: Transportation is the greatest source of GHG emission for chicken meat imported into Dubai. All factors – weight of the imported meat, distance from the export country, mode of transport (by sea/ship, air/plane, truck) – impact GHG emission. Even though Brazil uses ships and is closer to Dubai than say Australia, the relative heavy weight of the meat from Brazil results in Brazil being responsible for the highest emissions. Bahrain has the lowest.

Steps taken by and recommended to the government and poultry sector for increasing local chicken meat production:

- Dubai Government is stepping up its interest in supporting the domestic chicken industry. It has approved the inclusion of white meat products in its Food Security Strategy.
- Better marketing of local products.
- Make shelf-life regulation more flexible for retailers so white meat products can stay on shelves longer.
- Introduce subsidies, loan subsidies, tax exemption for small farmers; set up slaughter facilities for them.
- Address water scarcity; "identify staple crops (such as barley and wheat) that are resistant to saline water, making them suitable for local feed production".
- Address high cost of imported feeds by providing subsidies.
- Prevent disease outbreaks, promote safe and high quality production by smallholder producers by providing training.

Questions for ASWT readers to ponder:

Do you support any of the above steps mentioned by the researchers? Are you in favor of increasing local production to reduce the reliance on imports? If you consider reducing consumption to be the #1 priority, do you think consumption can be reduced to such an extent that demands can be met without the need for expansion of local production at all?

Essam, Sayed, Timothy Gill, and Robyn G. Alders. "The white meat industry in Dubai through a One Health lens." *Sustainability* 14, no. 10 (May 23, 2022): 6358. (link)

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3. Climate change is bad news for Kuwait's agriculture

Food supply and security in Kuwait – including meat – is not free from threats. Over 90% of its food supply is imported while consumer demand is rising. And looming over everything is climate change.

Why is climate change a serious concern for Kuwait's livestock production, fisheries and aquaculture? How are these sectors faring in recent years?

• *Fodder*: "Livestock fodder quality and quantity will be affected due to climate change both directly and indirectly".

> Land is severly limited in Kuwait. And fodder takes up 44% of the total area used for crop production in Kuwait – mostly open field as opposed to protected space such as greenhouses. (For comparison, grains occupy 13% and pulses 1%).

> Fodder for ruminants is very important because a sizable portion of Kuwait's livestock consists of cattle, goats, and sheep.

• *Ruminants*: "Livestock is affected by the climate in different ways: feed-grain availability and price, pasture and forage crop quality and quantity, health, growth, reproduction, and diseases and pests."

> In spite of using a significant share of Kuwait's arable land to raise ruminants, "only 15% of the country's red meat demand is met from domestic production". Imports are necessary, with Australia supplying over half of the total sheep imported into Kuwait.

• *Poultry*: Rising temperature will cause more heat stress and diseases for poultry. And much more energy is needed to cool the closed housing in which most of the local poultry are raised.

> Chicken meat and eggs are in high demand. Local production is able to satisfy demand for eggs, but it can only meet less than a quarter of the demand for meat.

> The poultry sector is trying to increase broilers' productivity by reducing the feed conversion ratio and diversifying its products to include ducks or quails.

• *Aquaculture and fisheries*: Climate change causes rise in temperature and salinity in marine and freshwater systems, threatening wild fish populations which are already in decline.

> Fisheries and the "blue economy" are considered to be significant contributors to food supply and livelihoods of Kuwaitis.

> Aquaculture – in the form of freshwater tilapia fish farms that depend on brackish water used for irrigating vegetables – is limited and not thriving due to the lack of investment and infrastructure. Imported fish products are relied on to meet demand. "Different projects have been put into motion by the New Kuwait 2035 plan to create model farms to provide know-how and potential of growing high economic valued fish and shrimps aiming to be completed by 2029."

What are other factors that pose challenges for Kuwait's agricultural productivity?

• *Agricultural workers*: "Less than 1.1% of Kuwait's workforce is connected with agricultural activities". There is significant dependence on foreign farm workers with little experience and language barrier.

• *Water*: Water scarcity is always top of mind in Kuwait as sources of water are hardly plentiful in the country.

• *Energy*: Energy requirement in the agriculture sector is considerable; electricity consumption per capita in Kuwait is "twice as high as or higher than the world average".

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Questions for ASWT readers to ponder:

Do you think Kuwait having to import over 90% of its food (animal as well as plant-sourced) is an issue that needs to be addressed? If you do, how would you solve this problem, especially in light of the impacts caused by climate change on the country's crops and farmed animal production?

More information:

- "From 2015-2019 the number of sheep and goats saw a steady increase raising from 588,618 to 714,348 and 156,543 to 234,324 but a small increase for the number of cows from, 29,263 to 34,746. The steep increase of ruminants in 2019 decreased the self-sufficiency of fodder from 90% in 2015 to 64% causing a higher dependency on the environment which nearly depleted the natural flora due to overgrazing."
- "A 500-kilometre shoreline along the Arabian Gulf serves as an important piscatorial source for Kuwait. Despite an average annual catch of around 4000 tons, with the highest recorded catch in 2000 at 5999 tons, the self-sufficiency rate is only 8%, relying heavily on imported fish, which make up 60% of the total fish supply. Yet, the data on fish caught in national reports is underestimated due to unregulated fishing which has resulted in the severe degradation of marine biodiversity due to overfishing. The effects of overfishing have caused the reduction of fish such as zobaidy (*Pampus argenteus*), suboor (*Tenualosa ilisha*), hamoor (*Epinephelus coioides*), newaiby (*Otolithes ruber*) and hamra (*Lutjanus malabaricus*) with the biggest impact on shrimp (*Penaeus semisulcatus*) stocks. Fish population and biodiversity in Kuwaiti Bays are heavily impacted by anthropogenic and recreational undertakings through pollutants from oil-based contaminants, sewage discharge, desalination processes, and natural oxidation-reduction processes. By 2050 the Arabian Gulf may experience an increase of salinity of 2.24 g/l causing fish kill if temperatures continue to rise."
- "Governmental bodies and collective associations also support the agricultural sector directly and indirectly by providing specific subsidies. The Public Authority of Agriculture and Fisheries (PAAFR) . . . has allocated

different budgets for subsidies within the different agriculture sectors. Subsidies for plant production, fodder, fisheries, cows, palm trees and other subsidies. The largest budget allocated to fodders is approximately $35 million per year and the second biggest was plant production at $22 million between 2020-2021. As well as over the years PAAFR has sporadically distributed free land for agriculture, aquaculture, livestock, and stables. . . . The Ministry of Electricity and Water offers subsidies to farmers, providing water at a rate of $4 per 1000 imperial gallons and electricity for active farms at a cost of $0.01 per kilowatt-hour."

- "To tackle these obstacles and guarantee sustainable food security in the long run, Kuwait must prioritize the adoption of resilient and sustainable agricultural practices. The adverse effects of climate change pose a continuous challenge to various aspects of food systems including supply chains, producers, and farmers. Equity concerns in relation to food production encompass various aspects. Firstly, it involves addressing the wages and working conditions of individuals involved at every step of the food chain, which includes farmers, grocery store workers, and restaurant staff. Secondly, equitable access to resources necessary for food production such as land availability, subsidies, and capital is crucial. Last but equally important is the need to safeguard the environment against pollution associated with food production activities related to air quality degradation, water contamination from pesticide use or other sources, and unpleasant odours."

Almutawa, Athari Abdulaziz, and Abdulrahman Alfraih. "Impact of climate change on agriculture, fisheries and livestock sectors in Kuwait." *Journal of Geoscience and Environment Protection* 11, no. 10 (September 28, 2023): 141–166. (link)

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4. Aquaculture expansion in Oman – one of the world's hottest countries

How developed is aquaculture in Oman? Why does it want to expand?

• Aquaculture is not well-developed in Oman, with only a small amount of production as recently as 2018.

• But the country "has aspirations to significantly expand aquaculture over the next decade focussing on coastal shrimp ponds, finfish sea cages, land-based recirculating aquaculture systems, and ponds and raceways."

• This move is supported by the Ministry of Agriculture and Fisheries Wealth. And it is aimed at long-term national economic development, economic diversification, and food security.

What are the overall climate risks for aquaculture in Oman?

• Climate risks for aquaculture in Oman are significant as the country is situated in one of the world's hottest regions, and climate change is already advancing in the Arabian Gulf and western Indian Ocean.

• Four key risks:

> *Thermal stress*: The optimum growing temperatures and the maximum temperatures tolerated by farmed fish vary widely among species. It is important to check if the species farmed are sensitive to and likely to suffer from thermal stress, especially during warmer seasons.

> *Exposure to flooding and storm surge*: Some governorates are more vulnerable to coastal flooding and storm surges. Fish species kept in floating marine cages are most impacted by these hazards.

> *Low-oxygen levels (hypoxia) in sea water*: Hypoxia is happening more often with climate change. Fish – especially those reared densely in sea pens – cannot survive when oxygen levels become too low for them.

> *Vulnerability to disease*: "Disease outbreaks are a major risk factor affecting global aquaculture production and warming increases chances of outbreaks." Among the most widely known and serious disease is white spot disease in shrimp. Some species have relatively low disease risks (e.g., seabreams).

What climate risks does the expansion face in terms of type of production system and species? How can the risks be mitigated?

- *Shrimp ponds*:

> Highest risk. This is due to: i) Very high disease vulnerability in the farmed shrimps, with a number of OIE (World Organisation for Animal Health) listed diseases. ii) Huge exposure of low-lying coastal shrimp ponds to flooding. iii) No treatment for the worst of the diseases.

> To reduce risks: i) Prioritize preparedness (e.g., minimize introduction of disease, put in place response plans) as it is not possible to completely prevent disease outbreaks. ii) Disperse production over a number of smaller sites. iii) Choose production sites with lower flood risk. iv) Use indoor systems that can control water quality and exclude pathogens. v) Improve infrastructure against storm-surge (e.g., build higher dikes). vi) Use non-structural flood controls (e.g. early harvesting) for farmers without financial support.

> Mitigate consequences of losses (e.g., putting in place insurance for financial compensations).

- *Marine cages*:

> High risk of marine cages for species that are active swimmers with high oxygen demand (e.g., gilthead seabream) due to thermal sensitivity and hypoxia risks.

> To reduce risks: i) Instead of gilthead seabream which is the species produced at the greatest quantity in Oman, use other species with better thermal tolerance (e.g., native sobaity seabream, goldlined seabream). ii) Sink cages deeper into cooler water. iii) Locate production sites with lower hypoxia risks and storm surges (e.g., sheltered bays in the north such as in Musandam). iv) Improve preparedness (e.g., early warning systems for events such as cyclones).

- *Recirculating aquatic systems (RAS)*:

> Low risks for the grouper species proposed for farming (yellowfin hind and greasy grouper). Fairly low risks for Atlantic salmon, planned to be farmed within a few years in a single RAS facility. By removing any contact with natue, RAS sidesteps thermal and low-oxygen related risks.

> However: i) Sites can still be flooded if located near the sea, and biosecurity is still important. ii) RAS are more costly to operate compared to cages or ponds (e.g., cost of cooling for salmon which needs cold temperature). iii) There should be back-up plans in case of power failure.

Questions for ASWT readers to ponder:

Why do you think shrimp is "seen as the cornerstone for future aquaculture development" in Oman in spite of the fact that it has the highest risks? If such risks are not considered serious enough to deter a major expansion in shrimp farming, what reasons and strategies can one use that will be effective in dampening the interest in expanding shrimp farming in Oman?

More information:

- "The national economic development programme lays out the objective to expand aquaculture production to over 200,000 t per year, generating over US$ 500 million annually by the end of the decade based on a major governmental and private sector investment programme of over US$ 1.5 billion. . . ."
- "The government plans for development of the aquaculture sector focus on coastal shrimp ponds, finfish sea cages especially for seabream, recirculating aquaculture systems (RAS) for groupers and salmon, and ponds and raceways for sea cucumber and the endemic abalone Haliotis mariae."
- "Managing risks of disease introduction for RAS is as important as with other culture types, even though the relative isolation from the marine environment reduces this risk. For Atlantic salmon, many OIE listed diseases exist in cooler climates, but provided that egg imports come from a source ensured to be free of OIE listed diseases, risk of further pathogen introduction will be very low, due to the absence of wild salmon from Omani waters. For culture of groupers which do occur naturally in Oman, partial sourcing from wild stock is likely needed. Adaptation options include having appropriate biosecurity, monitoring, and quarantine protocols in place."

Engelhard, Georg H., Ella L. Howes, John K. Pinnegar, and Will J.F. Le Quesne. "Assessing the risk of climate change to aquaculture: A national-scale case study for the Sultanate of Oman." *Climate Risk Management* 35 (2022): 100416. (link)

5. Raising self-sufficiency and food security for poultry meat in Saudi Arabia

Saudi Arabia has good self-sufficiency for poultry meat. "Throughout the period from 2008 to 2022, the average food security coefficient was around 0.07, indicating a relatively stable food security status for poultry meat in the Kingdom."

In the National Transformation Program and the Kingdom's Vision 2030, the goal is to further strengthen self-reliance and boost local poultry meat production. The amount produced in 2022 was 1,130,000 tons, increased from 460,000 tons in 2008. (The average in that period was 659,200 tons, an average rise of about 6%.) The plan is to add an extra 535,000 tons to the 2022 amount by 2030.

Self-sufficiency did not happen by chance or develop unaided solely as a response to market dynamics. Deliberate measures were taken in the period 2008 - 2022.

- The poultry and livestock sector received wholehearted and special government support which sought to eliminate all barriers standing in the way of the sector's progress.
- The Ministry of Environment, Water, and Agriculture directed particular support to the poultry industry.
- The Agricultural Development Fund provided loans of around 250 million riyals to new poultry projects and expand current ones. This raised additional supplementary investments totaling 500 million riyals.

To ensure continual self-sufficiency, production as well as investments will have to rise even more.

- The Agriculture Development Fund will cover 50% of the investments required (according to its lending regulations for new projects).
- In addition, supplementary investments of 32.8 million riyals are needed to achieve 70% of self-sufficiency, and 497 millions riyals for 100% self-sufficiency.

In spite of being relatively self-sufficient, Saudi Arabia still needs to import poultry meat. It also has to keep an eye on consumer demand which greatly influences self-sufficiency rate.

- Import: Volumes of import from 2008-2022 were fairly stable (around 724,4000 tons). But there was a rise from 2008 to 2015, then a decline.
- Consumer demand:

  > Poultry meat consumption in Saudi Arabia (43 kg/capita/year) is much higher than the global average (17.3 kg).

  > Local demand has been climbing. Consumption growth was about 2.65% annually. According to one economic calculation, this rate of growth indicates that in order to outpace it, domestic production should jump 6% each year.

  > The rise in consumption "is due to the increase in the population at a rate of 0.75 million people annually, improved income levels, as well as the increasing numbers of pilgrims and Umrah performers from year to year".

Questions for ASWT readers to ponder:

As the amount of investments needed will rise more steeply in order to push upward to a higher level of self-sufficiency, are all these investments worthwhile? Should the government and other parties use their funds to promote measures other than increasing poultry production to ensure food security?

M.F. Al Harajin, Nawaf, Mohamed S. Shehata, and Salwa M.A. Abdel Moneim. "The gap and food security of poultry meat in the Kingdom of Saudi Arabia." *Alexandria Science Exchange Journal* 45, no. 1 (March 31, 2024): 117–129. (link)

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6. "Milk nationalism" and the surge of a new local dairy brand in Qatar

What does nationalism have to do with milk and a local dairy brand in Qatar?

• Nationalism is a key driver of the extraordinary interest Qatar pays to its dairy milk production and local milk brands.

• A major catalyst of this interest was the 2017 Gulf Crisis (called the "blockade") which disrupted Qatar's food supplies temporarily. Qatar swiftly boosted milk production and hyped up the local brand Baladna ("our country" in Arabic). And the purchase of locally-produced milk was taken as a symbol of national resilience.

> In June 2017 Qatar suddenly found itself under an embargo by its neighbors, including UAE and Saudi Arabia which had been key suppliers of milk to Qatar.

> In the face of air, land, sea embargo, Baladna – a small newly-founded sheep and goat farm – "quickly became a nationalist symbol of the Qatari "defensive" response to the Saudi and Emirati "offensive"". It transmogrified overnight into a dairy superstar, flying in 5,000 Holstein dairy cows from North America and Europe.

> Qataris bought milk from Baladna because they perceived sovereignty to be at stake and Baladna as a symbol of nationalism. The reverence persisted long after the blockade ended.

All kinds of food in Qatar are affected by food security, so why is milk singled out?

• Qatar has long been an import-dependent country. Food security has always been on the radar screen because the country's arid desert climate and water shortage make agricultural production very challenging.

• To understand why milk stands out more than other foods, one needs to grasp the firmly established image that dairy carries in the world in general and in the Arabian Peninsula in particular. The situation in Qatar has to be viewed in the context of the "broader global history of equating milk with modernity – and its special power to promote national thriving, not just surviving".

• Milk may be the animal-source food that is the most heavily politicized in various parts of the world, and especially in the Gulf region.

• Milk – more so than other kinds of food – and nationalism has been coupled together for decades in that region. And *branding of national dairy companies* has a lot to do with this. Such branding is hugely important in Qatar as well as Saudi Arabia, Oman, UAE.

• The state is happy with this association and branding because it is an opportunity for the state to *brand itself* as healthy, wholesome, modern as milk.

Does this branding, nationalism, and food geopolitics have practical implications in Qatar (and other GCC countries)?

• The short answer is "Yes". A lot of real money is involved. Government and sovereign wealth funds are heavily invested in local dairy corporations in GCC countries.

• In Qatar, for example, flying in the cows during the blockade "was only possible with strong government support, both directly and indirectly through the parastatal Qatar Airways and Hassad Food, the agriculture-focused subsidiary of the Qatar Investment Authority".

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Questions for ASWT readers to ponder:

In view of the development and branding of milk in Qatar (which is closely tied to geopolitical factors), should one be more sensitive to exceptions to the often stated claim that consumer demand and food producers' strategies are chiefly shaped by price, taste, convenience (PTC)? What other key factors apart from PTC drive the supply and demand of animal-source foods?

More information:

- "The heavy involvement of sovereign wealth funds in each country's leading dairy brands is indicative of the fuzzy relationship between state and non-state enterprises in the Gulf region. Their support for dairy has arisen from the funds' involvement in government-defined food security agendas, which reflects the fact that milk has become an important symbol in the effort to demonstrate concrete steps toward food independence. Of course, simply producing dairy locally does not free the Arabian Peninsula from its overwhelming dependence on food imports. But by branding the dairies as national, they can circulate as important icons that the governments can then use to brand the state. As a branding discourse, milk nationalism both draws upon and builds contemporary understandings of the state in the Gulf countries– as independent, benevolent, and wholesome."

Koch, Natalie. "Milk nationalism: Branding dairy and the state in the Arabian Peninsula." In *S. Wippel (ed.) Branding the Middle East: Communication Strategies and Image Building from Qom to Casablanca*, 185–203. Berlin: De Gruyter, 2023. (link)

EXPLANATORY NOTE:

- Academic studies are notoriously hard to find, read, and put into practical use by non-academics.

- Super-busy persons at civil society groups and advocacy organizations cannot afford to spend a lot of time and effort to dig up, digest, and deploy academic research even though they recognize the value of academic studies in informing and improving their work.
- *Academic Studies Without Tears* aims to help those faced with this dilemma.
- Its target audience are leaders of these organizations which are addressing the many negative impacts of industrial animal agriculture in low- and middle-income countries. It is also sent to some of their funders.
- It uses a communication style – reminiscent of news items – that makes everything a breeze to read.
- Each issue focuses on a particular topic and includes 6 – 10 academic studies.
- It goes without saying that the academic studies featured are *not* the final word. They have flaws and limitations. They are just a tiny selection of perspectives and findings for readers to consider, to whet their appetite. But every relevant data point and nugget of cogent information adds to one's store of knowledge and has the potential to spark new ideas.