



From Ingredient to Export: Product Innovation, Saudi Ingredients, and the UK–Saudi Food Economy

A joint publication by the Saudi British Joint Business Council, developed in partnership with Kitchen Theory

Robert McNamara, SBJBC Researcher, and
Chef Jozef Youssef, Kitchen Theory



SAUDI BRITISH JOINT BUSINESS COUNCIL

Introduction

The first of these joint publications, *Food as a Bridge*, considered how a shared meal builds understanding between the United Kingdom and Saudi Arabia, and how the experience of dining has come to serve as an instrument of cultural exchange and as a means of encouraging tourism and investment.¹ That discussion was concerned with services, among them the hospitality, the events, and the design skills through which a culture is communicated across a table. The present publication turns instead to goods, and considers what the Kingdom grows, formulates, and manufactures, together with the question of how those products find their way to international markets.

The differences between the first publication focused on “services” and the present focus on “goods” has a practical basis, since a product carries a culture in a more portable form than an experience is able to. A dish prepared in Riyadh is enjoyed by those who are present, whereas a product formulated in Riyadh and sold in London reaches a market whose members will never be met by its makers. Saudi Arabia has begun to make that transition, from the presentation of its cuisine towards its export, and the transition depends as much upon the capacity to formulate and to test a product as upon the quality of the ingredient from which it is made. It is at this point that British expertise in food science, flavour development, packaging, and market entry becomes relevant, and it is this thread that runs through the sections which follow.

The argument is arranged to follow the chain along which a product travels; from farm to table as it were. It opens with the raw materials the Kingdom is able to offer at export quality and proceeds to the production systems that determine their cost and their credibility. It then considers the research institutions in which an ingredient is developed into a prototype, before tracing a single product from the inception to the shelf. The sections that follow address the discipline of sensory science upon which a product's reception in an unfamiliar market can depend, the question of which commercial assets are able to travel, the certification a product must satisfy in either direction, the distribution networks through which it reaches the consumer, and the investment opportunity created by the conclusion of trade negotiations between the United Kingdom and the Gulf Cooperation Council (GCC). A closing reflection from Chef Jozef Youssef of Kitchen Theory considers where the work described here might lead.

The Raw Material Base

Before turning to particular crops, some sense of the scale of the sector within which they sit is useful. The Minister of Industry and Mineral Resources valued the Saudi food industry at approximately 200 billion

Saudi riyals and described it as the second largest industrial sector in the Kingdom by employment, supported by around 1,900 factories, with exports reaching 15 billion Saudi riyals, or roughly four billion US dollars, during 2025.² Official figures for the sector are not consistent, and the vice president for the food sector at the National Industrial Development Center gave exports of 22 billion Saudi riyals for the same year, representing growth of approximately 60% since 2021.³ The divergence appears to reflect differing definitions of what constitutes a food export rather than any dispute about the direction of travel, and the paper reports both. What the two accounts share is a picture of a food economy long accustomed to supplying its own market and only recently, and unevenly, oriented towards markets beyond it.

Dates provide the longest established of the Kingdom's agricultural exports and the firmest evidence that a heritage crop is able to compete internationally. Date exports reached 1.938 billion Saudi riyals during 2025, a record figure representing a rise of 14.3% on the previous year and of 59.5% since 2021, with distinctive varieties now shipped to more than 125 countries from a base of over 37 million palm trees and production exceeding 1.9 million tonnes.⁴ Dates sit within a wider non-oil export effort, and the General Authority for Statistics, which publishes the monthly merchandise trade series together with its methodology, recorded non-oil merchandise exports including re-exports of 366.08 billion Saudi riyals in 2025. This was an increase of 18.9% on the previous year, although national non-oil exports excluding re-exports were fractionally below their 2024 level while the value of re-exported goods rose by 64.4%.⁵ A larger figure of 624 billion Saudi riyals, reported through the Saudi Press Agency on a wider definition of non-oil trade, is the one more often quoted.⁶ The distinction bears directly on the argument of this paper, since on the narrower and better documented measure the growth recorded in 2025 came from goods passing through the Kingdom rather than from any increase in the value of goods made within it. Dates are of interest here for their value and also for the apparatus that has grown up around them, since the National Center for Palms and Dates, together with a developing body of research on date processing, has made the crop a template for the way in which a Saudi ingredient might be developed and sold. A considerable academic literature now sets out how date fruit and its by-products, among them lower-grade fruit and seeds, are turned into value-added foods across bakery, dairy, and functional-ingredient applications, which lends the commercial ambition a scientific foundation rather than a purely promotional one.⁷

Coffee follows dates as a product of heritage carrying an intention to export, though it remains at an earlier and less certain stage of development. The Public Investment Fund established the Saudi Coffee Company during 2022 with a stated commitment of 1.2 billion Saudi riyals over ten years and an objective of raising national output from around 300 to 2,500 tonnes a year.⁸ In the following year the company introduced its speciality brand, Jazeen, which draws on *Coffea Arabica* sourced from the southern coffee belt and from other growing regions, and whose flavour profile the company presents as characteristic of the land and farming practices of the Kingdom's southwest.⁹ The Ministry of Environment, Water and Agriculture set a complementary target of planting 1.2 million coffee trees by 2026 across fifteen southwestern governorates, and Khawlani cultivation already holds UNESCO recognition as intangible cultural heritage.¹⁰ Delivery against that target appears to have run behind the original schedule, since the Aseer region, one of the three principal growing areas, recorded rather more than 634,000 trees planted between 2022 and 2025 and launched a further programme in 2026 intended to add a million trees over the three years following.¹¹ These figures remain statements of ambition rather than delivered results, though they indicate a deliberate effort to establish a second heritage export alongside dates. A recent review of culinary heritage and agricultural innovation across Asir, Jazan, Al-Baha, and Najran situates the coffee programme within a broader regional effort to connect traditional food systems to modern production methods.¹²

Marine resources represent a third strand of the raw material base, one that has a historical base with an established record but maintains an ambitious outlook. The National Aquaculture Group, whose first phase began in 1982 and which operates integrated shrimp and fish farms on the Red Sea coast some 180 kilometres south of Jeddah, produces on the order of 100,000 tonnes of marine products a year and exports to around thirty countries, among them Japan, Korea, China, Australia, and the United States, in addition to several European and Arab markets, having dispatched the first shipment of Saudi farmed shrimp to Europe as long ago as 1992.¹³ The larger part of that output is nevertheless consumed within the Kingdom, and company management has put the domestic share at approximately 90% of fish production and 40% of shrimp production, a proportion that indicates the scale of expansion implied by the company's stated target of 250,000 tonnes by 2030.¹⁴ More recent activity has sought to build upon that base, notably through Topian, the food company of NEOM, whose joint venture with Tabuk Fisheries, endorsed by the Ministry of Environment, Water and Agriculture, supports the national goal of producing 600,000 tonnes of fish products a year by 2030 and includes a hatchery intended to be the largest in the Middle East and North Africa.¹⁵

The three strands are not equivalent, and the paper does not present them as though they were, for dates and farmed seafood constitute audited export trades of long, historically important standing while the coffee figures remain targets issued by the bodies responsible for meeting them. All three rest, in addition, upon a shared constraint, since agriculture accounts for the large majority of freshwater consumption in the Kingdom, with published estimates ranging from around two thirds to more than 80%, and non-renewable groundwater is meeting some 80% of agricultural demand.¹⁶ The question of water therefore bears heavily upon every ambition described in this paper, raising serious questions as to the practicality of some. The Council has examined that constraint at length in earlier work, to which this publication refers rather than repeating its analysis.¹⁷

Sustainable Production and the Farming Layer

If the raw materials determine what the Kingdom is able to sell, the systems that produce them determine whether it is able to do so at a competitive cost and with credibility. Sustainability, in this setting, is better understood as a cost and as a condition of market access than as a matter of presentation, since a product grown with scarce water or at high emissions carries a financial and a reputational penalty into export markets. The work of Topian illustrates the response being made, in that the company operates across climate-resilient agriculture, regenerative aquaculture, novel foods, and sustainable food supply, and has completed high-technology greenhouses in Oxagon and Tabuk together with vertical farming in Oxagon, alongside marine systems that include submersible and enclosed sea pens.¹⁸ Its sustainable food supply and governance unit has obtained external certification of its practices from an international standards body, a step directed as much towards future export partners as towards domestic regulators.¹⁹

The research base is developing a parallel capability in resource efficiency and in the handling of waste. Work conducted at King Abdullah University of Science and Technology under the Center of Excellence for Sustainable Food Security addresses the improvement of water and nutrient use, the development of crops and breeding methods suited to arid conditions, and the reduction of food waste through smart detection and protein conversion.²⁰ Research at the university has demonstrated the recovery of casein from spoiled dairy waste for use as animal feed, a route of commercial interest given that feed accounts for around 70% of costs in the sectors concerned and is largely imported.²¹ The wider relevance of such work

is indicated by a national field study conducted by the Saudi Grains Organization and reported in 2020, which found that more than 33% of food in the Kingdom is wasted at an annual cost of approximately 40 billion Saudi riyals.²² Capabilities of this kind sit upstream of any finished product, and their importance to a British reader lies in that position, since a date beverage or a camel-milk cheese arrives on an export shelf carrying the cost, the emissions, and the provenance of the system that produced it. The Kingdom's investment in that system is in this sense part of a product's competitiveness rather than a consideration separate from it.

The Innovation Infrastructure

Between the farm and the finished product lies the stage at which an ingredient is developed into a prototype, and it is here that the Kingdom's institutions have been most active, and here too that the openings for external expertise are most apparent. The most directly relevant development is the establishment of the Culinary Innovation Labs by the Culinary Arts Commission in partnership with Alfaisal University and King Abdulaziz University. The first of the three facilities, a prototyping laboratory, opened at Alfaisal University in Riyadh during November 2025 as the first dedicated facility of its kind in the country,²³ and was followed in December of the same year by an experimental kitchen and a sensory laboratory at King Abdulaziz University in Jeddah, the latter equipped for the structured panel evaluation of new products.²⁴ These facilities are described more fully in the section contributed by Kitchen Theory below, though their significance may be stated briefly, since the equipment installed defines the stage of development the Kingdom is at present able to support, which is bench and small-batch formulation accompanied by sensory validation rather than manufacture at scale.²⁵ A growing body of scholarship has begun to connect laboratory work of this kind to the wider project of turning Saudi culinary heritage into products with a market.²⁶

Alongside the Commission's laboratories, King Abdullah University of Science and Technology offers a research-led route through its Center of Excellence for Sustainable Food Security and through a series of industrial partnerships. The living laboratory established with the Saudi fast-food chain AlBaik indicates the breadth of that programme, since its subject matter is ordering systems, autonomous and drone-based delivery, packaging, and traceability rather than formulation, and its existence shows that the national research effort in food extends across the supply chain rather than concentrating upon the product alone.²⁷ Coordination across these various efforts has been provided by the Saudi AgriFood Tech Alliance, established under the Ministry of Environment, Water and Agriculture during 2024 with the Research, Development and Innovation Authority, King Abdullah University of Science and Technology, and Topian among its founding partners, and with around forty member entities drawn from government, industry, and academia.²⁸ The most accessible entry point for a British company is likely to be Sunbolah, the ministry's incubation and acceleration platform, whose acceleration track is open to international start-ups seeking to enter the Saudi market.²⁹ What this infrastructure has in common is that it has been built to carry an idea from the research bench to a prototype, and the subsequent step, from prototype to production line, at which formulation, sensory validation, and shelf-life engineering become decisive, is the point at which external expertise is most often required.

From Ingredient to Product

The clearest illustration of the entire chain within a single product is Milaf Cola, a carbonated soft drink made from dates which was launched at the Riyadh Date Festival in December 2024. It is produced by Al

Madinah Heritage Company, a subsidiary established by the Public Investment Fund in July 2023 to improve the quality and production capacity of the Ajwa dates of the Madinah region and to promote and distribute Saudi dates locally and internationally,³⁰ and the drink was developed in collaboration with the National Center for Palms and Dates.³¹ The product is instrumental here because it brings together, within a single object, the elements the earlier sections describe separately, namely a heritage crop, sovereign capital, a national research body, a manufactured consumer good which the company states contains no added sugar, and a declared intention to open export markets for Saudi date farmers. The company has presented the drink as the first within an intended range of date-based products, and it forms part of a broader sovereign interest in the global date industry.

The commercial success of Milaf Cola abroad is in any case unproven, since carbonated soft drinks constitute a category in which brand recognition is accumulated over decades rather than years and in which incumbency is unusually durable, and no independent sales or distribution data have yet been published. It is fairer to say that Milaf Cola demonstrates a capability than that it records an achievement, for it shows that the Kingdom is able to take a heritage ingredient through formulation and into a finished and distinctive product, which is the capability the preceding sections describe, while the more difficult question of international acceptance remains to be seen in both the domestic and international markets.

Sensory Science and Product Development

Whether a product of this kind succeeds beyond its home market depends less upon the ingredient than upon the discipline through which an ingredient is made into something a foreign consumer will choose more than once. Leaving aside the factor of marketing, the key discipline of relevance here is sensory and consumer science, and it constitutes established industrial practice rather than a specialism. A survey of food companies across the European Union states classified as modest and moderate innovators found that close to 70% apply sensory evaluation within new product development, that the proportion rises with company size, and that most favour consumer testing over expert panels, with methods applied at stages running from ideation through process optimisation to shelf-life testing.³² The wider literature treats consumer acceptance as the measure against which a new product is finally judged, which is why sensory and consumer research is generally positioned alongside technical formulation rather than after it.³³ The following account of that discipline, and of its application to Saudi ingredients, is contributed directly by Chef Jozef Youssef of Kitchen Theory.

Creating a new food product involves more than finding an interesting ingredient or technically workable recipe. Sensory science provides structured ways of measuring how a product looks, smells, tastes, feels and sounds, while consumer research examines whether the intended audience understands it, enjoys it and would choose it again. Trained sensory panels can identify and measure specific attributes, such as sweetness, acidity, aroma intensity, aftertaste and texture, whereas consumer studies assess preference, acceptance and purchasing relevance. Both are needed: a product may be nutritionally valuable, technically innovative or culturally meaningful and still fail if consumers do not enjoy the experience of eating or drinking it.

Sensory work should therefore accompany development from the early prototype onwards. It can help a team compare formulations, diagnose why one version performs better than another, establish an acceptable balance between unfamiliarity and familiarity, and determine whether packaging, naming or serving context is setting the right expectations. This reduces the risk of committing to production before fundamental

questions about flavour, texture and consumer acceptance have been answered. Research into industry practice identifies sensory evaluation as an important component of new food-product development, from design and optimisation through to assessment of commercial feasibility.

These questions become especially important when a product moves between cultures. People do not encounter flavour in isolation: expectations are shaped by previous exposure, culinary customs, language, memory and the context in which a product is presented. A culturally significant ingredient may therefore require careful formulation and framing when introduced to a market that does not share the same associations. The objective need not be to remove its identity. Rather, sensory and consumer research can identify which characteristics should remain recognisably authentic, which may need explanation, and where adjustments to sweetness, aroma, texture, format or portion size could improve accessibility without erasing the product's origin.

This is directly relevant to the Culinary Innovation Labs established by the Culinary Arts Commission. The Riyadh Prototyping Lab at Alfaisal University supports controlled, small-batch formulation and early product development. In Jeddah, the Experimental Kitchen at King Abdulaziz University supports recipe and application development, while its Sensory Hub includes a pilot kitchen and an isolated sensory-analysis room equipped with tablets and specialist software for structured panel evaluation. Together, these facilities create a pathway from the study of Saudi ingredients and traditional practices to prototypes that can be evaluated systematically before wider commercial production.

Kitchen Theory in Practice

The practice of Kitchen Theory offers a worked example of the way in which this discipline is applied across the food industry, and an indication of the expertise on which a Saudi producer might draw. The following account is contributed directly by Chef Jozef Youssef of Kitchen Theory.

Over the past decade, Kitchen Theory has worked with innovation and new-product-development teams at companies including Ella's Kitchen, Twinings, Kraft Heinz, Marks & Spencer Food, McDonald's, PepsiCo, Pladis, Unilever and General Mills. Its contribution sits at the intersection of culinary formulation, multisensory perception and behavioural psychology. The studio's approach draws on sensory psychology, flavour perception, cultural research and culinary prototyping to examine how visual form, aroma, sound, texture, narrative and prior expectation alter the experience of food and drink. This extends product development beyond technical formulation by recognising that consumers respond both to a product's intrinsic sensory properties and to the context, associations and expectations surrounding it.

Kitchen Theory's work has addressed different stages and challenges within the innovation process. For Ella's Kitchen, the studio explored the textural properties of children's foods, considering how texture contributes to sensory experience and suitability for the intended consumer. It supported Twinings in the development of its ready-to-drink range through concept exploration, sensory evaluation and iterative feedback on proposed products.

Kitchen Theory has also delivered crossmodal workshops for the innovation teams at Marks & Spencer Food and Kraft Heinz. These sessions examined how sensory signals beyond taste, including colour, shape, sound, aroma and presentation can influence flavour perception, product expectations and consumer response.

Its work with McDonald's and Linney provides a consumer-facing example. Participating households received sensory materials and were guided through a structured tasting intended to explore how consumers relate to food through their senses. The project demonstrated how controlled presentation, sensory prompts and guided reflection can generate insight into perception, expectation and the wider context of consumption.

More recently, Kitchen Theory has worked with Godiva and Pladis on the development of new product ranges intended both for Godiva stores and for packaged supermarket retail. This work has involved translating brand identity and premium sensory cues across different formats and purchasing occasions, where an in-store product and a packaged retail product may need to express the same brand values under very different conditions.

Across these projects, Kitchen Theory's stated design process involves developing prototypes, obtaining feedback and refining the outcome around the intended consumer. Flavour and "deliciousness" remain the foundation throughout: multisensory design is used to strengthen and clarify a good product, rather than to compensate for a weak formulation.

This experience is particularly applicable where an innovative Saudi product must deliver immediate sensory pleasure while also communicating a credible cultural story. The objective should not be to formulate a generic product and apply heritage through branding afterwards. Cultural meaning can instead inform ingredient selection, flavour direction, texture, format, presentation and consumer expectation from the beginning of the development process.

Brand Localisation and What Travels

A finished product is not the only thing capable of being exported, since a brand, a format, a recipe, and a supply chain are each in their way tradeable, and they are far from identical, each calling for a different kind of capital and a different set of partners. The domestic market of the Kingdom provides a useful test of which of these assets carries value abroad, since Saudi Arabia possesses an unusually strong tier of homegrown fast-food and café brands. In the 2026 quick-service rankings compiled by YouGov for the Kingdom, Saudi brands occupied five of the ten most-considered names, with the chicken chain Albaik recording a consideration score of 54.5%, more than double the 26.9% recorded by McDonald's, and with Al Tazaj, Kudu, Herfy, and Maestro Pizza completing the domestic contingent.³⁴ Albaik also placed first on the survey's measures of perceived quality and value, which suggests that the domestic advantage rests on established consumer preference rather than on distribution alone.

That domestic strength has begun to travel outward, although the pattern is uneven and the evidence is thinner than the ambition. The coffee chain Half Million, founded in Riyadh during 2018, had expanded to some fifty-nine outlets across fourteen Saudi cities within six years and opened a site on Oxford Street in London, which trade coverage describes as the only permanent presence of a Saudi café brand in the United Kingdom.³⁵ Barn's, founded in Jeddah in 1992 and operating several hundred outlets across the Kingdom, has stated an ambition to reach a thousand stores worldwide by 2030 and has indicated that its initial international expansion will concentrate on markets in the Middle East and North Africa, and although the company has described itself as the largest coffee business in Saudi Arabia, independent market research places it second by outlet numbers behind the American chain Dunkin'.³⁶

These examples concern the export of a brand and a format, achieved through franchising and through company-owned expansion, which is an undertaking distinct from the export of a packaged good, and the paper keeps the two apart. A café brand travels as an experience, a fit-out, and a model of service, whereas a date beverage or a camel-milk product travels as a manufactured item which must satisfy a foreign regulator and earn its place upon a retailer's shelf. The camel-milk brand Noug, developed by the Public Investment Fund company Sawani, illustrates the difficulty of the second route, having built from an ingredient of deep local meaning a range that includes fresh and flavoured milk, butter, cheese, cream, yoghurt, and gelato, and having stated an intention to supply international as well as domestic markets, though no independent evidence of an established export trade has yet been published.³⁷ The position across the sector is that no Saudi packaged food brand outside dates, farmed seafood, and regional dairy has yet demonstrated a durable presence on foreign retail shelves, and the distance between domestic brand strength and international distribution is the practical problem the remaining sections of this paper address.

The academic literature on the food and beverage industry describes the underlying difficulty as one of holding a balance between global consistency and local adaptation, and finds that brands succeed abroad where they adjust to local taste and expectation without discarding the identity which sets them apart.³⁸ For a Saudi product, the conclusion focused on local adjustment carries a particular implication, since its distinctiveness lies precisely in its origin, and the task is accordingly to render that origin accessible rather than to diminish it.

Certification, Standards, and Market Access

An ambition to export encounters its first practical test at the border, where the requirements of compliance apply in either direction. A product entering Saudi Arabia must be registered with the Saudi Food and Drug Authority, which requires documentation of its ingredients, its origin, its shelf life, and its labelling, with particular provisions attaching to novel foods and to products intended for special dietary use.³⁹ Halal certification is central to the process and has grown more detailed over time. Under the standards SFDA.FD/GSO 2055-1 and GSO 993, the halal requirements extend beyond meat and poultry to any composite product containing animal-derived ingredients, among them fats, gelatin, collagen, and animal-based enzymes, and to any product carrying a halal mark, for which certification is required from a body recognised by the Authority's halal centre. Labelling in Arabic is mandatory, and consignments are subject to conformity certification before they are cleared through customs.⁴⁰ None of this is peculiar to foreign firms, but it rewards preparation, and the lead time it requires is one British exporters frequently underestimate.

The same discipline applies in the opposite direction, which is the less frequently documented of the two. A Saudi product seeking a place in British retail must satisfy the labelling and allergen rules of the United Kingdom, meet the listing requirements of individual retailers, and, in the case of anything falling within the novel-food category, follow a separate regulatory pathway. Alternative proteins belong to that category on both sides of the trade, and the regulatory complexity they carry is among the reasons the present paper treats them only in passing. Market access is, then, a discipline in its own right, distinct from the quality of the product itself, and firms which regard certification as a critical concern to be addressed early in the design of a product rather than late in its administration tend to move more quickly in either direction.

Distribution and Routes to Market

A product which has been formulated, tested, and certified must still reach the consumer, and the route by which it does so is on its own a determinant of success. Within the Kingdom, the leading food companies have built distribution networks whose reach is itself a competitive asset, and which extend beyond the domestic market into export. Almarai, generally identified as the largest dairy producer in Saudi Arabia and among the largest in the region, supplies retail outlets across the Gulf through a substantial refrigerated fleet and has begun to establish production abroad, most notably in Algeria, where it has stated an intention to become the market leader by 2027. Saudia Dairy and Foodstuff Company, which makes long-life milk and ice cream under the Saudia name, operates a network of depots supporting both national coverage and export from Jeddah, and has held a 76% stake in the Polish dairy producer Mlekoma since 2018.⁴¹

Dairy has in consequence become one of the few manufactured Saudi foods with an established export trade. National exports of milk and dairy products reached approximately 3.9 billion Saudi riyals, or a little over one billion US dollars, during the first nine months of 2025 according to figures released by the General Authority for Statistics, though the greater part of that trade is directed to neighbouring markets, among them the United Arab Emirates, Kuwait, Oman, Bahrain, Iraq, and Jordan.⁴² The pattern which emerges across the sector as a whole is that Saudi food exports are at their strongest within the region, while a smaller number of products, dates and farmed seafood in particular, reach markets in Europe, Asia, and North America.

Narrowing that distance is the purpose of a set of institutions assembled for the task. The Saudi Export Development Authority offers exporters programmes and incentives, including the reimbursement of a share of certain export costs,⁴³ while the Saudi Agricultural and Livestock Investment Company, established by royal decree in 2009 and owned by the Public Investment Fund, functions as the Fund's investment arm in food and agriculture, investing in production capacity at home and abroad and holding stakes in producers including Almarai, NADEC, and the National Aquaculture Group.⁴⁴ For the category in which the Kingdom's comparative claim is best established, the Public Investment Fund created the Halal Products Development Company in October 2022, with the stated aim of promoting Saudi Arabia as a global centre for halal goods and of helping smaller producers reach halal markets worldwide.⁴⁵ That ambition rests on an established standing in the sector, since the Global Islamic Economy Indicator published in 2022 placed the Kingdom second among the eighty-one countries assessed and behind Malaysia alone, a ranking which measures the development of a national Islamic economy rather than the value of the market itself and which should be read with that qualification in mind.⁴⁶ This apparatus is of significance to a British firm in two respects, since it indicates the channels through which a Saudi partner is most likely to reach an export market, and since the advisory, logistics, and route-to-market functions it seeks to strengthen are among those in which British expertise is well developed.

The Investment Dimension

The commercial context within which these developments sit altered during 2026 as a result of key trade deals. On 20 May the United Kingdom and the Gulf Cooperation Council (GCC) announced the conclusion of negotiations on a free trade agreement, by which the United Kingdom became the first of the G7 economies to reach a comprehensive arrangement with the bloc.⁴⁷ The agreement has not, at the time of writing, taken legal effect, since the two parties must first complete and sign the legal text, after which entry into force follows the conclusion of ratification procedures in the United Kingdom and in each of the six member states, with the result that the commitments described below will apply from that point rather than

from the announcement itself.⁴⁸ Once in force, the agreement will remove tariffs from a range of British food goods, among them cheddar cheese, butter, frozen lamb, cereals, chocolate, and biscuits, within a wider package which the Department for Business and Trade estimates will lift approximately 360 million pounds in duties across all sectors on the first day of implementation, rising to approximately 580 million pounds a year once the agreement is fully implemented, set against United Kingdom food and drink exports to the Gulf already worth in the region of 839 million pounds.⁴⁷

The opportunity is of particular interest to the dairy sector, since the GCC constitutes the second largest export market outside Europe for British dairy products, and consumption across the bloc is forecast to outstrip regional production over the coming decade.⁴⁹ A qualification applies to that observation in the Saudi case, since the Kingdom is itself a net exporter of liquid dairy within the region and reports self-sufficiency well above domestic requirements, so the opportunity for British producers lies less in volume than in the categories where Saudi production is limited, among them mature and speciality cheeses, for which British exports to Saudi Arabia and the United Arab Emirates have risen steadily since the start of the decade.⁴⁹

The opportunity for British firms is not, in any case, confined to the exporters of finished food. The analysis offered in this paper points towards a set of capabilities corresponding to the gaps identified within the Saudi chain, among them food science and sensory houses, the developers of ingredients and flavours, packaging and shelf-life technology, cold chain, contract manufacturing, and advice on the route to market. The scope for collaboration in research is no less concrete. Following a memorandum of understanding on research and innovation signed by the United Kingdom and Saudi Arabia in March 2024, an Innovate UK expert mission to the Kingdom in May 2025 examined five technology areas in which the two research bases already meet, namely controlled-environment agriculture, precision breeding, precision agriculture and livestock, alternative proteins across plant, fermentation, and cultivated meat, and aquaculture.⁵⁰ The value of that exercise lies in its having identified, from the British side and on the basis of direct observation, the areas in which partnership is most likely to prove productive, and its findings correspond closely to the points in the Saudi chain the preceding sections have traced.

Closing Reflection

A closing reflection on the direction of this work is offered by Chef Jozef Youssef of Kitchen Theory.

Saudi Arabia has already made important investments in the foundations of a future food economy: research into crops suited to arid conditions, controlled-environment agriculture, aquaculture, food security, culinary education and now dedicated spaces for prototyping and sensory analysis. The next opportunity is to connect those capabilities more closely to the consumer.

For me, the most exciting products will not be innovative only because they use new technology. They will succeed because they are delicious, useful and unmistakably connected to place. Saudi Arabia has ingredients with profound cultural meaning; dates, Saudi coffee, camel milk, regional spices, grains and products from the Red Sea. Product development can give those ingredients new formats and new occasions without stripping away the stories and practices that make them significant.

We can already see the beginnings of that approach. Milaf Cola turns the date from a familiar heritage crop into a contemporary beverage format. Noug is developing camel milk as fresh and long-life milk, flavoured

drinks, cheese and other dairy products for modern consumers. These products show how formulation, branding and sensory quality can help a local ingredient move into new categories and, potentially, new markets.

Food travels most effectively when it offers people an immediate point of pleasure and a deeper point of discovery. Sensory science helps us understand the first: whether the flavour, aroma, texture and format work for the intended consumer. Cultural research protects the second: why the ingredient matters, whose story is being told and whether the final product represents that story responsibly.

The aim should not be to make Saudi products taste anonymous in order to export them. Nor should heritage be used only as packaging. The opportunity is to create products that are genuinely desirable in their category, but which could only have come from Saudi Arabia. That combination of deliciousness, research and cultural specificity is where product innovation can become a form of gastrodiploacy.

Bibliography

1. Youssef, J., Bajrai, M. W., and Spence, C. (2026), 'Gastrodiploacy Through Gastrophysics: A Multisensory Showcase of Saudi Arabian Cuisine', *International Journal of Gastronomy and Food Science*.
<https://www.sciencedirect.com/science/article/pii/S1878450X26000752>
2. Arab News, 'Saudi food exports reach \$4bn in 2025: industry minister' (14 May 2026), reporting remarks by the Minister of Industry and Mineral Resources. <https://www.arabnews.com/node/2643550>
3. Arab News, 'Saudi food exports grow by 60% in 4 years' (28 January 2026), reporting the National Industrial Development Center. <https://www.arabnews.com/node/2630939>
4. Saudi Press Agency, 'Saudi Date Exports Hit Record SAR1.9 Billion in 2025, Up 14.3%' (25 April 2026).
<https://spa.gov.sa/en/N2570954>
5. Arab News, 'Saudi non-oil exports jump 18.9% to \$97bn in 2025: GASTAT' (2026), reporting General Authority for Statistics data. <https://www.arabnews.com/node/2645531/business-economy>
6. Saudi Press Agency, 'Saudi Non-Oil Exports Record Historic Performance in 2025' (20 April 2026).
<https://www.spa.gov.sa/en/N2565915>
7. Muñoz-Tébar, N., Viuda-Martos, M., Lorenzo, J. M., Fernandez-Lopez, J., and Perez-Alvarez, J. A. (2023), 'Strategies for the Valorization of Date Fruit and Its Co-Products: A New Ingredient in the Development of Value-Added Foods', *Foods* 12(7), 1456. <https://doi.org/10.3390/foods12071456>
8. Public Investment Fund, 'PIF launches Saudi Coffee Company to further enable Saudi Arabia's food & agriculture sector' (15 May 2022). <https://www.pif.gov.sa/en/news-and-insights/press-releases/2022/pif-launches-saudi-coffee/>
9. Public Investment Fund, 'Saudi Coffee Company launches specialty brand JAZEAN' (4 September 2023).
<https://www.pif.gov.sa/en/news-and-insights/newswire/2023/saudi-coffee-company-launches-specialty-brand-jazeen/>
10. Ministry of Environment, Water and Agriculture, 'Initiatives and programs to develop coffee cultivation in Saudi Arabia' (target of 1.2 million coffee trees by 2026; UNESCO inscription of Khawlan coffee).
<https://www.mewa.gov.sa/en/MediaCenter/News/Pages/engnews2226.aspx>
11. Saudi Press Agency, 'Aseer Region Launches Ambitious Plan to Plant One Million Coffee Trees' (18 May 2026).
<https://www.spa.gov.sa/en/N2588809>
12. Almansouri, M., Bajrai, M. W., Al Sarraj, M. M., Al Muhanna, M., Mohamed, H. A., Alshammari, G. M., Alhelal, A., and Hakeem, M. J. (2026), 'Culinary Heritage and Innovation in Southern Saudi Arabia: Linking Tradition, Smart Agriculture, and Sustainable Gastronomy within the Vision 2030 Framework', *International Journal of Gastronomy and Food Science*.
<https://www.sciencedirect.com/science/article/abs/pii/S1878450X26001137>
13. National Aquaculture Group (NAQUA), company profile and operations. <https://www.naqua.com.sa/en/about>
14. The Fish Site, 'The Saudi shrimp farm whose sights are set on 250,000 tonnes a year' (2024), interview with NAQUA management on domestic and export volumes. <https://thefishsite.com/articles/the-saudi-shrimp-farm-whose-sights-are-set-on-250-000-tonnes-a-year-naqua-diego-illingworth>
15. NEOM, 'NEOM Announces Joint Venture with Tabuk Fisheries' (8 February 2024). <https://www.neom.com/en-us/newsroom/neom-announces-joint-venture-with-tabuk-fisheries>

16. Odnoletkova, N., and Patzek, T. W. (2023), 'Water resources in Saudi Arabia: trends in rainfall, water consumption, and analysis of agricultural water footprint', *npj Sustainable Agriculture* 1(7). <https://www.nature.com/articles/s44264-023-00006-w>
17. Saudi British Joint Business Council, Saudi Food and Water Security. <https://www.sbjbc.org/saudi-food-and-water-security/>
18. NEOM, Topian: The Future of Food (food sector overview). <https://www.neom.com/en-us/our-business/sectors/food>
19. bne IntelliNews, 'NEOM food unit Topian signs SAR1.9bn Jazan aquaculture deal' (4 February 2025), reporting certification of Topian's Sustainable Food Supply and ESG unit. <https://www.intellinews.com/neom-food-unit-topian-signs-sar1-9bn-jazan-aquaculture-deal-365161/>
20. King Abdullah University of Science and Technology, 'Center of Excellence for Sustainable Food Security'. <https://www.kaust.edu.sa/en/news/kaust-center-of-excellence-for-sustainable-food-security>
21. King Abdullah University of Science and Technology, 'Turning spoiled food waste into commercial products' (2025). <https://www.kaust.edu.sa/en/news/turning-spoiled-food-waste-into-commercial-products>
22. Arab News, 'Saudis waste 33% of food each year; KSA loses SR40 billion annually from waste' (2020), reporting a national field study by the Saudi Grains Organization. <https://www.arabnews.com/node/1654461/saudi-arabia>
23. Saudi Press Agency, 'Saudi Arabia's First Culinary Innovation Lab Inaugurated at Alfaisal University in Riyadh' (2 November 2025). <https://spa.gov.sa/en/N2434587>
24. Arab News, 'New sensory lab to advance food innovation in Saudi Arabia' (15 December 2025). <https://www.arabnews.com/node/2626366/saudi-arabia>
25. Culinary Innovation Labs, Labs and Facilities (equipment and sensory analysis room). <https://culinaryinnovationlabs.com/labs>
26. Almansouri, M., Bajrai, M. W., Al Sarraj, M. M., Al Muhanna, M., Mohamed, H. A., Alshammari, G. M., Alhelal, A., and Hakeem, M. J. (2026), 'Culinary innovation, sustainable agriculture, and gastronomic heritage in Northern Saudi Arabia: Pathways toward food security, tourism, and Vision 2030', *International Journal of Gastronomy and Food Science* 43, 101396. <https://www.sciencedirect.com/science/article/abs/pii/S1878450X25002975>
27. King Abdullah University of Science and Technology, 'KAUST and AlBaik partner to launch e-AlBaik smart food tech lab' (April 2025). <https://www.kaust.edu.sa/en/news/kaust-and-albaik-partner-to-launch-e-albaik-smart-food-tech-lab>
28. Ministry of Environment, Water and Agriculture, 'MEWA announces the first Saudi AgriFood Tech Alliance' (2024). <https://www.mewa.gov.sa/en/MediaCenter/News/Pages/News9842020.aspx>
29. Ministry of Environment, Water and Agriculture, Sunbolah incubation and acceleration programmes. <https://ewax.mewa.gov.sa/en/programs/3>
30. Public Investment Fund, 'PIF Establishes Al Madinah Heritage Company to Develop and Enhance Production of Saudi Ajwa Dates' (23 July 2023). <https://www.pif.gov.sa/en/news-and-insights/press-releases/2023/al-madinah-heritage/>
31. AGBI, "'World first" date soft drink launched by PIF subsidiary' (6 December 2024). <https://www.agbi.com/food-drink/2024/12/world-first-date-soft-drink-launched-by-pif-subsiary/>
32. Świąder, K., and Marczevska, M. (2021), 'Trends of Using Sensory Evaluation in New Product Development in the Food Industry in Countries That Belong to the EIT Regional Innovation Scheme', *Foods* 10(2), 446. <https://doi.org/10.3390/foods10020446>
33. Ruiz-Capillas, C., and Herrero, A. M. (2021), 'Sensory Analysis and Consumer Research in New Product Development', *Foods* 10(3), 582. <https://doi.org/10.3390/foods10030582>
34. QSR Media, 'Albaik dominates Saudi fast-food rankings 2026', reporting YouGov KSA Quick Service Restaurant Rankings 2026. <https://qsrmedia.com/research/in-focus/albaik-dominates-saudi-fast-food-rankings-2026>
35. Coffee Intelligence, 'Saudi Arabia's coffee expansion is being driven by homegrown brands' (2024). <https://intelligence.coffee/2024/09/saudi-coffee-expansion-homegrown/>
36. World Coffee Portal, 'Saudi Arabia's Barn's targets 1,000 stores globally by 2030' (2025). <https://www.worldcoffeeportal.com/news/saudi-arabias-barns-targets-1-000-stores-globally-by-2030/>
37. Arab News, 'Noug, Kingdom's first camel milk brand, opens Riyadh store' (2023). <https://www.arabnews.com/node/2379396/corporate-news>
38. Ali, R., and Ahmed, R. R. (2023), 'Empirical Study of Glocalization on Global Brands of the Fast-Food Industry to Increase Consumer Purchase Intention', *Transformations in Business & Economics* 22(1). <http://www.transformations.knf.vu.lt/58/gp58.pdf>
39. Saudi Food and Drug Authority, Executive Management of Food Import Control (requirements for imported food). <https://www.sfda.gov.sa/en/imported-food>

40. ChemLinked, Saudi Arabia Food Regulation, on halal requirements under SFDA.FD/GSO 2055-1 and GSO 993.
<https://food.chemlinked.com/foodpedia/saudi-arabia-food-regulation>
41. Dairy News Today, 'Saudi Arabia's dairy market reaches 5.32m tonnes' (May 2026), on Almarai, SADAFCO and Mlekoma.
<https://dairynews.today/news/saudi-arabia-s-dairy-market-reaches-5-32m-tonnes.html>
42. Arab News, 'Saudi Arabia exports milk, dairy products worth \$1bn in 9 months' (2026), reporting General Authority for Statistics data. <https://www.arabnews.com/node/2631466/business-economy>
43. Saudipedia, 'Food Products Manufacturing in Saudi Arabia', on the Saudi Export Development Authority.
<https://saudipedia.com/en/food-products-manufacturing-in-saudi-arabia>
44. Public Investment Fund, The Saudi Agricultural and Livestock Investment Company (SALIC), portfolio profile.
<https://www.pif.gov.sa/en/our-investments/our-portfolio/the-saudi-agricultural-and-livestock-investment-company/>
45. Public Investment Fund, 'PIF launches Halal Products Development Company' (24 October 2022).
<https://www.pif.gov.sa/en/news-and-insights/press-releases/2022/pif-launches-halal-products/>
46. AGBI, 'PIF sets up company to make Saudi a global hub for halal products' (2022), reporting the Global Islamic Economy Indicator. <https://www.agbi.com/analysis/food-drink/2022/10/saudi-arabia-pif-halal-products-development-company/>
47. GOV.UK, 'UK–Gulf Cooperation Council (GCC) trade deal: conclusion summary' (2026).
<https://www.gov.uk/government/publications/uk-gulf-cooperation-council-gcc-trade-deal-conclusion-summary/uk-gulf-cooperation-council-gcc-trade-deal-conclusion-summary--2>
48. White & Case, 'Gulf Co-operation Council and the United Kingdom conclude FTA negotiations' (26 May 2026), on signature and ratification. <https://www.whitecase.com/insight-alert/gulf-co-operation-council-and-united-kingdom-conclude-fta-negotiations>
49. AHDB, 'Opportunities arise for UK food exports from UK-GCC trade deal' (May 2026).
<https://ahdb.org.uk/news/opportunities-arise-for-uk-food-exports-from-uk-gcc-trade-deal>
50. Innovate UK Business Connect, AgriFood Technologies in Saudi Arabia: Global Expert Mission Report (July 2025).
<https://iuk-business-connect.org.uk/projects/global-expert-missions/saudi-arabia-agrifood-technologies-2025/>