

CELEBRATIO AND KAROO PAK: GROWTH STRATEGIES FOR POMEGRANATES

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Introduction

In January 2025, Gerhard Meyer walked across the porch of his farmhouse to look out over the full dam, edged by dry soil and succulent and thorny bushes. The water glimmered against the jagged silhouettes of the blue-grey mountains in the distance. Contrast was something Meyer understood well: drought and rain; challenge and opportunity. The dry soil birthed the need for this dam. He acted on that need, bringing newfound abundance to the Klein (Little) Karoo region. Meyer farmed with the ancient fruit celebrated as a symbol of blessing, abundance, holiness, and the joy flowing from love and fertility—the pomegranate (see Exhibit 1). Celebratio’s cultivar, the Wonderful pomegranate, was described as a large fruit with an exceptionally rich red color and a tangy-sweet taste. The fruit had been cultivated for several millennia and originated from the Middle East.

It was on this farm in the Klein Karoo semi-desert region of South Africa that Meyer established Karoo Pak on his farm Celebratio. Meyer and his brother had inherited the farm in 2006, and Meyer took on the challenge of extending his family’s legacy through the farm, while his brother continued with his career.¹ Many challenges along the way required the adoption of an innovative approach. Now, almost 20 years later, Meyer thought of the next era. He remembered his recent visit to the Special Food Association’s Summer Fancy Food Show in New York in the United States (US).² His visit was partially to answer a burning question on how to grow the business in the face of constrained financial resources. Could his answer lie within the wider international markets and specifically the US? He wondered whether a more expansive global business would outperform a focused South African business.

SEEING THE DESERT BLOOM

Doing something new in the Klein Karoo region

Driving down the dusty roads of the Klein Karoo region, visitors experienced vast expanses of farms dotted with roaming ostriches and the feedstock, lucerne. Seeing the unique beauty of the arid region, it was hard to imagine how previous generations had farmed with wheat and similar crops. However,

the entire ecosystem had changed because of the shifting weather patterns. Instead, newer generations had adopted similar, more predictable farming choices.

The ostrich farming products—meat, feathers, and leather—were mostly exported. The commercialization of ostrich farming dates to the early 19th century, driven by the fashion industry. The Oudtshoorn farmers of the 1850s pioneered the domestication of the animals.³ By 2025, South Africa supplied 75% of the world's ostrich products, of which 90% were produced in this region.⁴ Lucerne had been farmed alongside ostriches for more than a century as fodder due to its high cured protein levels. Lucerne plants are highly resilient and capable of surviving the harsh weather.⁵ These farming choices offered a simple, well-accepted business model: through a synergistic relationship between the farmers and the farming cooperative, the farmers gained access to credit to raise and slaughter ostriches. In turn, the cooperative processed and marketed the products. This system was so entrenched that few farmers ever considered changing how things were done. Meyer's grandfather farmed with lucerne.

Something new

Meyer often visited his grandfather's farm during his childhood. After studying commerce at a local university, he established his career in Cape Town, South Africa. He gained experience in marketing and showed a special interest in brand management. Most of all, the need for innovation ran in his veins. He lived by a can-do motto, saying: "If another person can do it, so can I."

It was no surprise that, when Meyer took over the farm in 2006, he had an immediate ambition to do something unique in the arid region. The surrounding ostrich and lucerne farm presented him with no challenge, and the idea of the current farming business bored him. Instead, he wanted to do something unusual. There was no shortage of land as a resource in the region, but water was scarce. Moreover, the cyclical nature of the water supply that fluctuated between abundance and long periods of unexpected and perpetuating drought limited farming options.

Meyer's ambitions and plans were met with skepticism. The nearby farmers warned him that the Klein Karoo soil was unsuitable for any worthwhile cultivar. Soil samples confirmed the need for soil rehabilitation for any crops to grow. The farm's name, Langverwacht,⁶ echoed the reality of often unfulfilled expectations. Meyer renamed the farm Celebratio.⁷ Not only would the new name celebrate the memory of previous generations, but it also signaled a mindset shift embracing the positive celebration of abundant memories and a promising future.

Building the dam and finding the fruit

Meyer observed how the local farmers flooded the soil with brackish water to farm their lucerne. As this had been standard practice for generations, the farm soil had become barren. Water supply depended on the rights to biannually water the lands, while surplus water was left to flow down to the sea. In times of drought, it was difficult to farm with lucerne, dramatically increasing the price thereof. Conversely, when there was water, the lucerne crops flourished, halving the price of the product. Considering the cyclical nature of the rainfall, Meyer devised a plan to preserve the surplus water during his periods of excess. He decided to build a dam. Even though the dam would cost more than the farm itself, a dam with a pressurized irrigation system would give him access to a predictable water supply.

Given the harsh climate and the barren yet plentiful farmland, Meyer realized there were limited farming options. However, he was determined to succeed: if others could thrive in a similar microclimate, there had to be options. Embarking on geological studies, Meyer found that the climate and soil best resembled the South of the Negev Desert in Israel.⁸ He decided to visit the country.

Soon afterwards, in 2006, Meyer was standing on a farm in the Israeli desert. Around him, he saw the remnants of explosive artillery on the ground. He felt the scorching wind in the late afternoon and realized how closely this resembled home. With him was an Israeli guide and pomegranate farmer. Meyer asked the farmer how he would reinvest his money if he could completely start over. Would he

still be farming with pomegranates? The farmer looked at him intently and said, “Young man, as long as you plant Bible fruit, you can never go wrong.”

Meyer had insightful discussions with local farmers and learned that two products thrived in the climate: almonds and a specific cultivar of pomegranate—the Wonderful cultivar. In addition, the region was known for ingenuity in prosperous agricultural endeavors in the desert.⁹ Tunnel farming offered innovative ways to control the climate, water, and pests, resulting in the potential for a wider range of crops.

At that moment, he realized that any Negev Desert crops could flourish in his region. Cultivating something new in the Klein Karoo would fulfil his passion for risk. Weighing up his options, Meyer’s primary decision criterion was to select a unique and value-adding option. He thought:

“I am the type of person who enjoys being first in doing something. I really don’t like choosing something that is already effective. As soon as the risk is removed, I begin to lose interest and start looking for the next challenge.”

He ruled out the option of building farming tunnels, as he wanted to preserve the tranquil beauty of his farm. It became clear that between pomegranates and almonds, pomegranates would be the better option—almonds used twice as much water as pomegranates, and two hectares of pomegranates would produce a greater yield than one hectare of almonds. Selecting the Israeli Wonderful variant would suit the environment perfectly. Moreover, pomegranates thrived in poor soil, extreme heat during the day, and cool evening air.

While choosing a cultivar was easy, finding the plants presented a new challenge. At first, Meyer considered investing in an Indian cultivar, but he had a hunch to avoid it. He approached the problem of sourcing plants by making phone calls. Eventually, this approach led him to speak to the Israeli farmer again, telling him he wanted to plant 10 hectares of the fruit. In an incidental turn of events, the man told him about a South African farmer who had recently purchased trees. Even more surprising, Meyer discovered that the farmer was a close university friend. The friend was surprised to learn about Meyer’s farming ventures, thinking more of him as a big brand corporate guy. Reconnecting with his former friend enabled Meyer to secure enough trees for his land. In 2008, ready for the challenge, Meyer set out to simultaneously rehabilitate the soil and plant his first trees, knowing that it would take three years to bear their first fruit.

The local farmers weighed in on Meyer’s plans. While working from Paarl, over 300 kilometers from Celebratio,¹⁰ Meyer learned from his farm workers that local farmers were shaking their heads, saying “This is not how one should farm here.” Meyer was determined not to let the criticism derail him. He remained driven by the desire to overcome big challenges, be extraordinary, do what others avoid and, instead of work for money, work to bring about change.

Progress amid setback

One year later, in 2009, news broke of a disease affecting the roots of Indian cultivars in the pomegranate industry. This disrupted the local pomegranate industry, leaving the rest of the market exposed. The high cost of treating diseased plants presented too great a risk to many farmers, uncertain whether such treatment would even be effective. As a result, many farmers left the pomegranate industry. Relieved that he had not invested in the Indian cultivar, Meyer also realized that the setback of other farmers presented him with a growth opportunity.

In response, he expanded his plantation to 42 hectares of Wonderful pomegranates. He regarded this as a logical, rather than a brave decision. This was similar to buying stock when markets were down, and the product demand was up. Understanding that business endeavors follow cyclical plans, he reflected:

“I’ve learned in my life, that prosperity makes one arrogant and lazy. You don’t think about what will happen in two years’ time when the prosperous phase ends. People tend to think that prosperity will never end. Then, when trouble comes knocking, it takes a very long time to recover.”

At the same time, learning about farming life as a child had taught Meyer to find new possibilities in obstacles, as he thought:

“Anything you may think of, every great invention in the world, was produced by ordinary people—not people with lists of degrees, living in wealthy homes, studying at private English schools, or obtaining the best education. Everything I’ve learned, I’ve learned in times of crises.”

Soon after, another crisis arrived. In 2010, a drought took hold of the region. This drought was regarded as the worst in 132 years.¹¹ However, Celebratio’s 10 hectares were beginning to bear fruit.

Meyer adopted the reverse osmosis process he had observed in Israel. Israel had been desalinating its seawater since 2000. Through this process, seawater was pressed through membranes that separated the salt from the water.¹² Using the reverse osmosis innovation, Celebratio could clear its saline water and produce the highest quality fruit compared to the rest of the country—its fruit was rich in color and sugar. Around the same time, in 2011, bird flu struck the region, resulting in the culling of 38 000 ostriches and an associated R800 million loss for the ostrich industry.^{13,14}

Moreover, Meyer decided to build a packhouse for his harvest to prevent his fruits from ending up in different crates and to keep control over the product for as long as possible, ensuring a quality product. The packhouse was ready for the 2017 harvest.

SEVEN YEARS OF DROUGHT AND CRISES

The debt incurred from developing the packhouse could not have come at a worse time. In 2016, they faced a new, prolonged, and devastating drought, and eventually even the brackish boreholes on the farm dried up. For two years, the pomegranate trees stood mercilessly without water or nutrition they would otherwise receive from the drip irrigation system. There was no harvest.

In 2018, the region’s two irrigation dams ran dry. By 2018, while the dam supplying the town of Oudtshoorn had stood at almost 40% level, the irrigation dams were down to 5% and 6%,¹⁵ putting Celebratio’s entire irrigation system at risk. In 2019, Oudtshoorn was declared a national disaster area, necessitating government intervention.¹⁶

The drought’s impact extended to the drinking water supply, and the region desperately needed a reliable water source. The nearby town’s new borehole, however, produced brackish water.¹⁷ Meyer approached the municipality and explained that Celebratio’s reverse osmosis system and pipelines could clean 60 000 liters of water an hour throughout the day or night.¹⁸ However, the system required significant levels of electricity, but the national state-owned electricity supplier’s (Eskom) electricity tariffs would absorb all its profit. Celebratio offered the reverse osmosis unit to the city as a donation. In exchange, it wanted to establish a joint venture to develop a new borehole field.

Celebratio entered a joint venture with the district municipality to develop a new borehole field. This resulted in the construction of a pipeline to supply three contributing farms with irrigation water.¹⁹ The borehole allowed Celebratio to survive the drought and to canvass for the expansion of the regional pomegranate production capacity to around 200 hectares, with the aim of farming 300 hectares.

While the drought continued, the entire region was experiencing financial pressure, and the COVID-19 pandemic arrived in 2020. This dramatically affected the local economy, which relied on ostrich farming and production. Fewer parties in European cities led to a drastic decline in the demand for ostrich

feathers. Additionally, the Klein Karoo Nasionale Kunstefees, a significant revenue-producing arts and culture festival in the region, was canceled. The drought continued for a devastating seven years until 2023.

CREATING A FLOURISHING ECOSYSTEM

Joint solutions

Regional focus

The cumulative effect of the crises had laid the regional economy bare. Celebratio continued lobbying the government, saying: “Looking beyond this crisis, the region could have a brilliant future.” Meyer explained to the mayor that, with the help of the local government, they could transform the region into a successful agricultural hub through intensive job creation, an export focus, and optimal water use.

The region’s pomegranates were comparable in quality to those from Chile and Peru, and were much better than those from the rest of South Africa. This suggested they could charge a premium price for their product, compared to the rest of the country’s fruit. Moreover, one hectare of pomegranate fruit could create 1.8 jobs.²⁰ Given the high unemployment rate of approximately 80% regionally, pomegranates offered a life-changing opportunity. The region could grow its competence in producing value-added products, such as juice and other secondary pomegranate products.

Creating a value-adding ecosystem

The mayor wanted to experience the operation first-hand and was invited to the packhouse. After taking in the operations, he left the farm in a happy mood. Ten minutes after leaving the farm, he called Meyer asking about the condition of the road used for transporting the fruit. Two days later, the mayor put out a tender for the construction of a new road, which the government approved, and a new road was later built to the value of R158 million.²¹

Nevertheless, the seven years of drought impacted Celebratio’s capabilities and resultant business model. At the same time, Meyer realized that he would need to expand his vision of being the sole producer of the Wonderful pomegranates. He could respond to the inevitability of future droughts by hibernating and hoping that the next cycle of rain would last long enough, or he could share his vision with other farmers. He thought, “Every morning that you wake up, you are one day closer to the next drought.”

While the nearby farmers remained uninterested in pomegranate farming, Meyer was able to persuade other farmers, motivated by their recent setbacks, to join the venture. These farmers were used to growing high-value crops, such as onions and carrot seeds, which deepened Meyer’s commitment to ensuring their shared success. By now, he had the ambition to grow production capability to 500 hectares.

Establishing Karoo Pak

In 2023, Meyer established Karoo Pak (see Exhibits 2, 3, and 4), offering the farmers shares in this privately owned company and the potential for a much-needed secondary income. Meyer, together with three other local farmers, were joint shareholders. Meyer served as CEO. The 45% Karoo Pak shares allocated to the farmers helped Celebratio survive the crisis.

They registered the trademark, Karoo Wonderful Pomegranates, to differentiate themselves from the rest of the South African pomegranates. Karoo Pak had a clear purpose: “to provide a superior product, farmed ethically and sustainably.”²² Interested local farmers formed the body of producers, and were all members of their industry body, POMASA. The packhouse was built before the drought to sort fruit into different grades for export. It provided the space for the creation of value-added products. Thinking about what they had been through, Meyer said:

“The drought crisis has established a unique industry in the Klein Karoo. We would never have reached our goals without it.”

With the assistance of the local municipality, regional municipality, and local government, the Garden Route District Municipality, Meyer was able to bolster the rural economy based on agriculture. Projecting profitability, Meyer calculated that each farm could yield its first harvest of four to six tons per hectare by year three, increasing to 25-30 tons per hectare within six years. This indicated the potential to grow from producing 800 to 6 000 tons of pomegranates.

Value proposition

High-quality fruit remained the key value proposition. Not only was Karoo Pak’s fruit sweeter and richer in color than those from elsewhere in the country, but the climate ensured that Karoo Pak did not have to use chemical pesticides. This reduced the costs of production and ensured healthier fruit. Meyer believed that the key value for consumers lay in the health benefits of the fruit. Therefore, high volumes of well-priced products were inferior to high-quality fruit subjected only to biological sprays.

Within the global market, Iran was the largest producer and consumer of pomegranates. The rest of the world was also waking up to the health benefits of the fruit. A growing body of scientific evidence suggested multiple benefits of consuming pomegranates. The fruit had antibiotic properties, its oil could be used to treat skin conditions like eczema, and its juice could reduce cholesterol. Pomegranates strengthen the immune system due to the polyphenols in the fruit’s skin.²³ The peel has high anti-fungal and antioxidant properties,²⁴ suggesting several health and beauty benefits. Furthermore, the fruit can, among others, reduce the negative effects of irritable bowel syndrome,²⁵ cancer treatments,²⁶ and toxins, including exposure to arsenic.²⁷

Value-added products

Creating a new product class

While farmers aimed to produce perfect pomegranates consistently, this was not always possible. Class 1 pomegranates bore no visible marks on their skin. The rating of the fruit could be affected by small scratches and cracks that result from the ripening process, inconsistent water supply or temperature fluctuations, or even improper transportation or handling during harvest. Class 2 pomegranates were normally exported as arils (pips). While shaping the pomegranate bushes into trees prevented some scratches at Karoo Pak, the sun burned as much as 15% of its harvests. Consequently, much of the fruit was unsuitable for sale, as some pips turned white.

As the fruit retained its flavor, it could be used to produce juice, but much value would be lost by selling these pips as juice-grade fruit. Juice-grade fruit was priced at less than 5% of the value of Class 1 fruit. Karoo Pak wanted to optimize the profitability of each harvest. Considering that the pips of Class 1 and 2 and process-grade fruit were identical apart from the color, Karoo Pak established the only Class 2 export-quality pomegranate in South Africa. By marketing scratched fruit as Class 2 products, the fruit could be exported to the Middle Eastern market at a 50% higher price than process-grade fruit.

Expanding the product range

Value-added products became the new standard. Karoo Pak expanded its product range to include Karoo pomegranate-branded juice and a pomegranate liqueur.²⁸ By July 2024, the Aurora International Taste Challenge,²⁹ an international association that judged the quality of food and drink, awarded the company a Double Gold Award for its Karoo Pomegranate Reduction and a Gold Award for the Karoo Pomegranate Rouge Liqueur.

Karoo Pak competed favorably against pomegranate juices in the country because other farmers produced mixed fruit juices. Much of the benefits of competitors’ juices were lost during the heating process while producing reductions. Instead of using heat, Karoo Pak used an innovative cold press

technology to preserve the health benefits of the fruit juice by freezing it to below 20 degrees Celsius,³⁰ and selling it, without added preservatives, in frozen form.

The pulp remnant, after removing the juice, could be dried in the sun to press the pips for pomegranate oil, with 200 kilograms of pips yielding a single liter of oil.³¹

The oil derived from the pips were processed into a range of beauty products. Securing the endorsement of a former Miss South Africa, Karoo Pak developed a range of beauty products, including a hand wash, face wash, and other skin and hair-related beauty products.

GROWTH AND GLOBAL OPPORTUNITIES

Finance for growth

Financial pressure due to increased production

The continued growth of Karoo Pak began to strain its timely processing capabilities. The juice-grade fruit had to be processed, bottled, frozen, and stored within three days to preserve its taste. However, the company was unable to keep up with its own supply. Matching its production with the yield of fruit required further financial investment. Encouraged by the local mayor and Wesgro, a district trade and investment agency, Karoo Pak set up a stall at the African Agri Investment Indaba (AII) in November 2023. This summit is the largest global agrifood investment summit on the African continent.³² This offered Karoo Pak exposure to a wide range of industry stakeholders. At this event, Meyer was afforded the opportunity to speak with a representative of the US Agency for International Development (USAID). Following the discussion, Karoo Pak was afforded the chance to pitch for funding for a new processing facility. As a result, Karoo Pak was awarded a R10 million grant in June 2024 and established a R25 million processing facility next to its packhouse. The remaining funds came from Karoo Pak's shareholders.³³

Revenue from value-added products

Local production of value-added products continued. The technology enabled the company to produce the juice and, in partnership with the nearby De Krans Wine Cellar, develop it into a pomegranate liqueur (colloquially named a port). The liqueur sales generated five times the revenue for the same volume of juice. Meyer thought: "We were the first in Africa. We had the gold."

A global or local business

The emerging market context

As the business expanded, Meyer wondered in January 2025 about the right way of growing the business locally or globally, while always ensuring the high quality of products. South African pomegranate production had increased by 59% over the past decade. The Wonderful cultivar however, had grown by 124% from 3 406 tons in 2015 to 7 646 tons in 2024 (see Exhibit 5).

Meyer was acutely aware of the complex trading challenges facing South Africa. According to the World Bank, the country's GDP growth had remained at an average of just 0.7% per year for over a decade. The slow economic growth was heightened by the ongoing high unemployment. Concerningly, youth unemployment reached approximately 62.2%. With one of the world's highest Gini coefficients, an estimated 68% of the 63 million South Africans continued to live in poverty.³⁴

The broader South African region faced several socio-economic challenges beyond unemployment. Shortcomings in the educational systems perpetuated inequality. While many people asked for greater access to land, there was a growing frustration with dependency on external donations on a continent that is rich in resources.³⁵

Access to funding remained one of the biggest challenges in the agricultural context. According to Moody's, more vertically integrated farming approaches were replacing smaller, family-owned farms.

This shift was compelling banks and other lenders to reevaluate their credit allocation decisions. Due to the seasonality of agricultural income, many financial institutions were risk averse. Moreover, international trade disruptions and persistent infrastructural challenges made lenders even more averse to extending credit.³⁶

A promise of USAID funding

USAID served as an agency to implement the objectives of the African Growth and Opportunity Act (AGOA). The AGOA trade event was established by the US to “increase trade and investment between the US and Africa.” Its July 2024 forum in Washinton focused on an “inclusive, sustainable and prosperous tomorrow”³⁷. Meyer was pleased that AGOA discussed Karoo Pak as an example of effective practice at the event:³⁸

“Here, in the middle of nowhere, out of the blue, a three-year-old company, and we were being discussed in Washington. They showcased us as an example of what could happen when local government, farmers, and investment from America came together to create value.”

By January 2025, Meyer was optimistic that USAID’s involvement would open doors to the American market, not just provide funding.

Growth options

One strategic option for Karoo Pak was to expand its local footprint through the South African retail network. This would ensure that Karoo Pak could deliver on its promise to increase farming with labor-intensive crops of export quality and low-water intensity.

Karoo Pak planned a fivefold expansion of its farming capacity, including a plan to build a bigger dam. Having identified an ideal location for the dam, Karoo Pak approached a company with expertise in building high-scale hydroelectric dams. The dam would require capital from the World Bank and the Development Bank of Southern Africa for an approximate R1 billion investment.³⁹ They recognized that the dam would benefit the region, offering a steady drinking water supply and assisting industrial development. The project also presented opportunities to develop a resort with hotel rights and a permanent waterfront, including water sports.

Moreover, this strategy required the expansion of Karoo Pak’s production and production facilities. It could consider cultivating other crops, such as fruit or vegetables, and completely transform the environment. Alternatively, it could focus solely on pomegranate production, given that its harvest hardly met the demand of the global market, as only 5% of world production came from the Southern hemisphere.

One of the biggest risks within the plan was the regional farmers’ lack of capital. An option could be to negotiate an amortization deal with the Land and Agricultural Development Bank of South Africa. Through such a deal, farmers could borrow money for the establishment and input costs for the next three years, backed by buy-back guarantees from the markets, and begin repaying the debt after four years. This debt could then be settled within two years.

As for market development, Karoo Pak was exploring local opportunities to expand its product range to other cocktails and liquors, craft beers, and ice cream. In 2025, a big South African retailer adopted Karoo Pak juice, selling it under its in-house brand name. Karoo Pak was exploring the idea of developing a summer cocktail from its tangy red liqueur, normally seen as a seasonal winter drink. A steakhouse franchise group, Cattle Baron, added a Pomegranate Pom Pedro to its menu. The liqueur also became available through retail channels, even though, in the previous year, Karoo Pak had sold more than 3 000 bottles of the product online without the need to advertise.

The company also planned to expand the product range to include a craft beer with a distinct pomegranate taste and a sparkling wine with a soft pink foam and hue.

The Karoo Wonderful Pops ice cream would soon be sold in the Middle East. The ice cream was regarded as a health product, produced only with pomegranate juice, a setting agent, and lemon juice as a preservative.

International considerations

While the rest of the fruit juice market suffered because of souring international relationships between the South African government and Israel⁴⁰, Karoo Pak also considered its internationalization strategy. In 2025, the company started negotiations on an exclusivity arrangement to be the sole supplier of pomegranate ice cream in the Middle East,⁴¹ with one of the biggest retailers across the region.

When comparing pomegranate exports from the Southern Hemisphere, overall volumes showed steady growth, but in 2024, they declined. Peru remained the largest exporter. Although South Africa was among the smaller producers, its export capacity was growing. However, its export volumes remained relatively flat at around 7 500 tons (see Exhibit 6), but comparable to Chinese production (see Exhibit 7).

In 2024, South Africa was exporting approximately 62% of its pomegranates to the Middle East. However, market intelligence indicated that the Asia-Pacific region was the largest consumption market. There was significant growth potential in Europe, but this market accounted for only 10% of South Africa's supply. The United States and Canada constituted the largest market, with projected growth of 105% by 2033 (see Exhibit 8).

Karoo Pak considered the US market as a strategic option, but registration, warehousing, distribution, and brokerage costs could become an obstacle. Meyer estimated that the US market would only be feasible if the company could produce, ship, and store its products at a fifth of the retail price to account for brokerage costs. The pureness of the product would be its competitive advantage. The competitor Pom Wonderful dominated the market in the US and was a world brand. Despite President-elect Trump's campaign promises to introduce tariffs and scale back USAID, Meyer remained confident that the longstanding AGOA agreements would be preserved.

Whether Karoo Pak's strategy had a local or global focus depended on financial capabilities. Without financial investment, the brand could not fully realize its goals. Karoo Pak was wary of the normal banking system and implicit bureaucracies that would prevent expansive growth. Despite having, within two years of its establishment in 2023, gained R28 million in assets,⁴² and maintained its debt below R1.5 million to establish its ice cream-making capabilities,⁴³ the bank was hesitant to provide facilities to Karoo Pak based on future growth.

THE DILEMMA

Meyer considered whether developing secondary value-added products, rather than a global exporting strategy, would be best. While Karoo Pak could become South Africa's primary packer and exporter of pomegranates and processor of pomegranate value-added products, further expansion would require substantial investment. They were investigating several financing options to ensure further growth and market development. He asked: "How and where do we grow?"

Exhibit 1. Wonderful pomegranates and branding



Source: Authors' pictures

Exhibit 2: Development of Karoo Pak

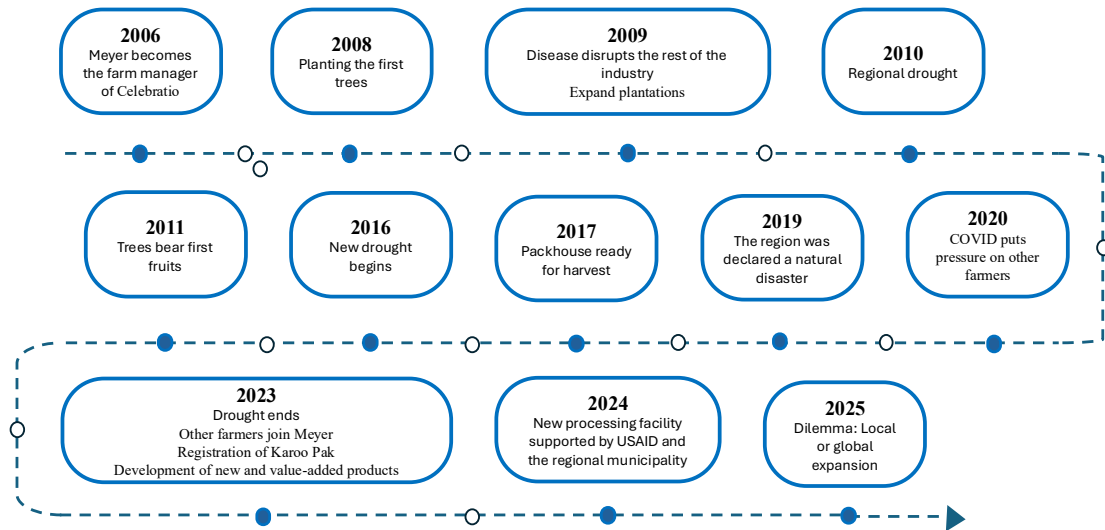


Exhibit 3. Karoo Pak packaging and branding



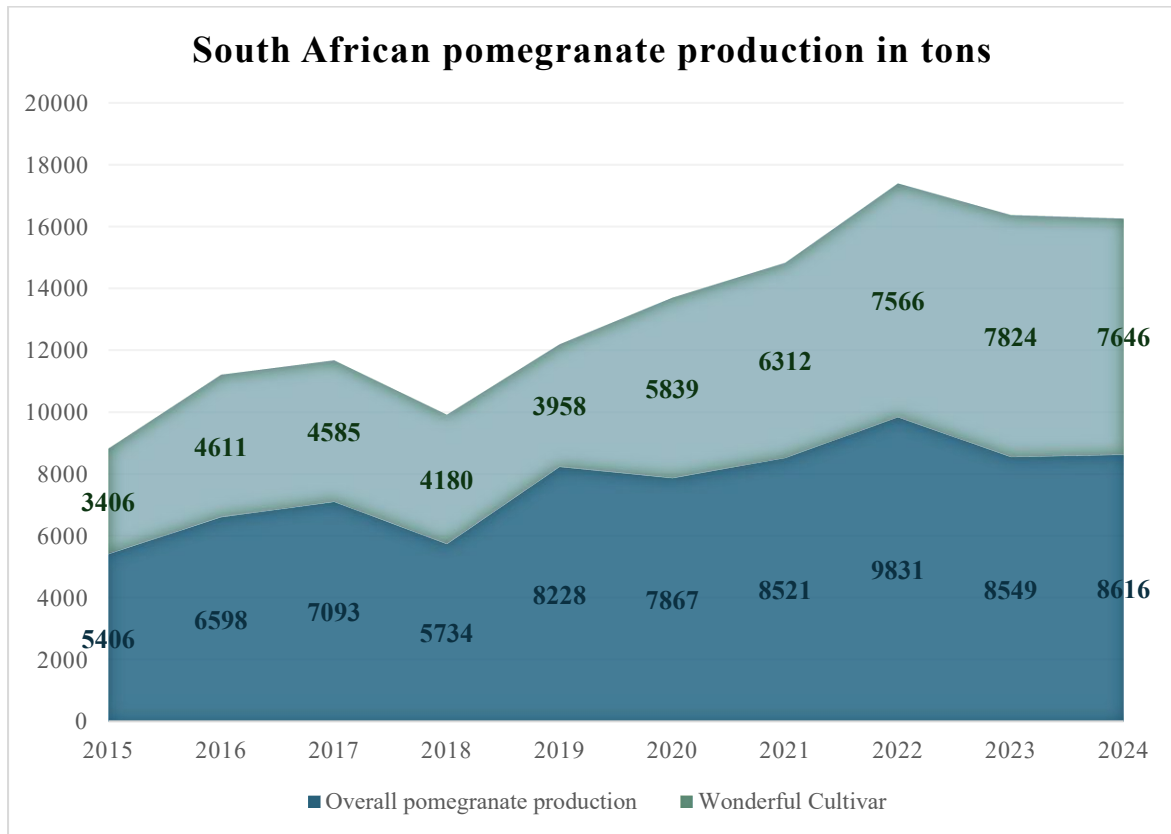
Source: Authors' pictures

Exhibit 4. Karoo Pak packhouse and production



Source: Authors' pictures

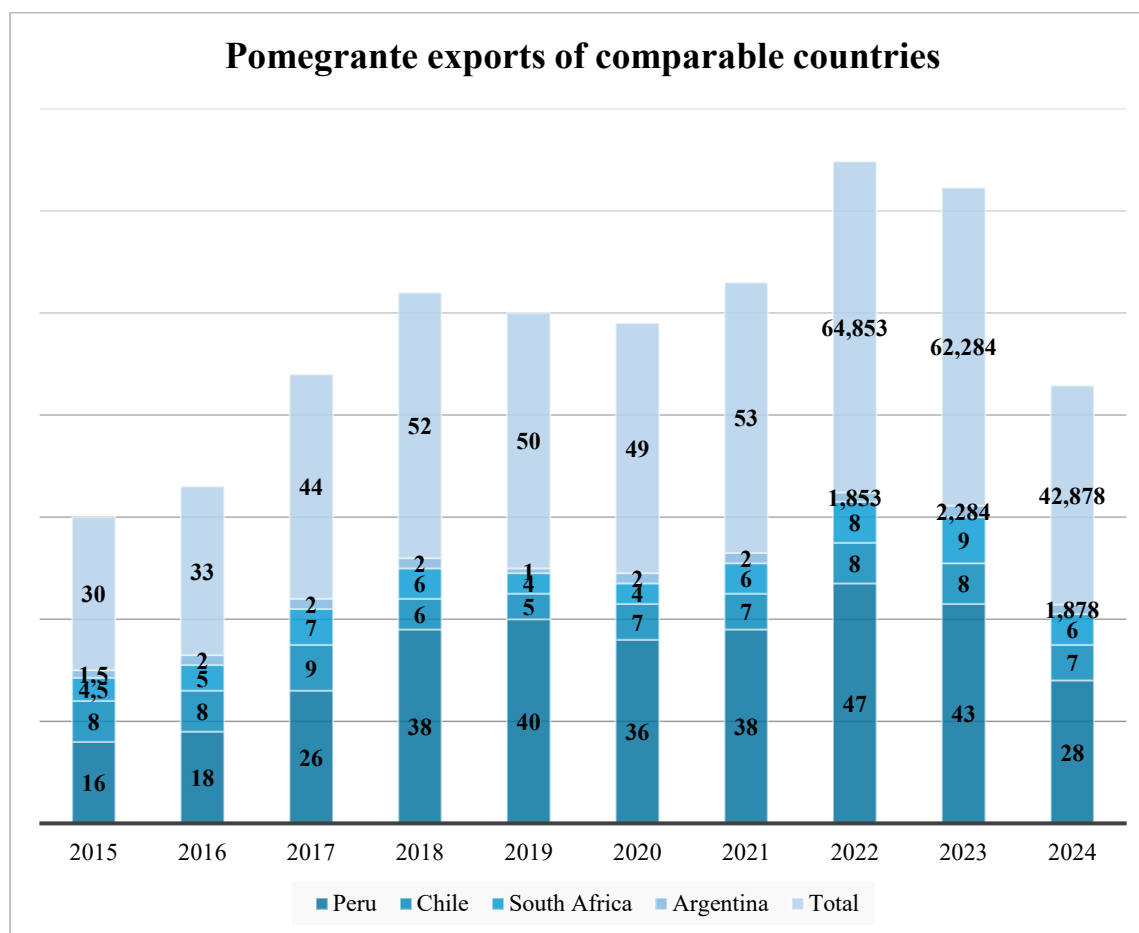
Exhibit 5. South African pomegranate production in tons



	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Overall production	5406	6598	7093	5734	8228	7867	8521	9831	8549	8616
Wonderful cultivar	3406	4611	4585	4180	3958	5839	6312	7566	7824	7646

Source: Authors' graph and table based on POMASA graphs and figures ⁴⁴

Exhibit 6. Pomegranate exports of comparable countries

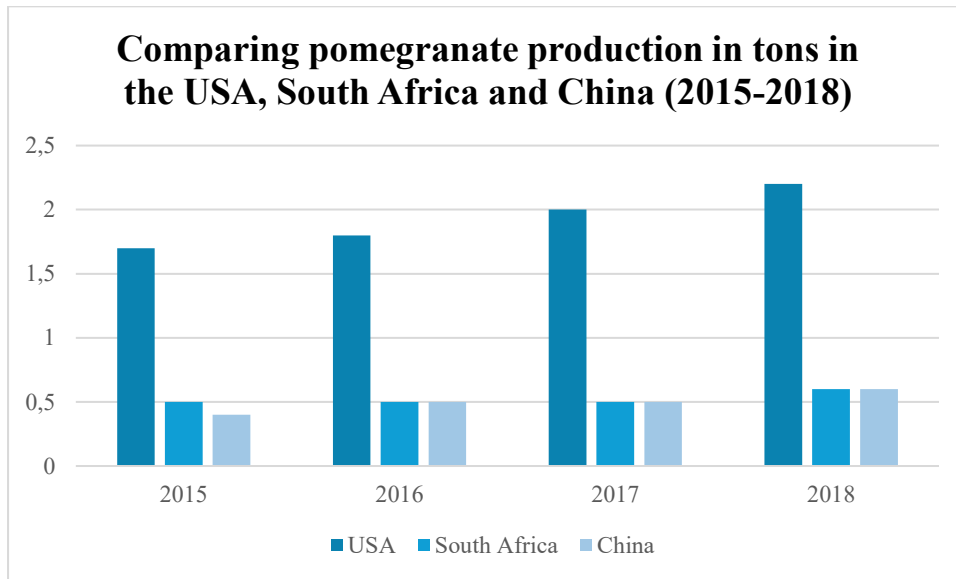


Note: The graph shows a production peak in 2022 of 64 835 tons and a significant decline (31%) between 2023 and 2024 from 62 284 tons to 42 878 tons. Peru appears as the greatest contributor over the period.

Year	Peru	Chile	South Africa	Argentina	Total
2015	16	8	4,5	1,5	30
2016	18	8	5	2	33
2017	26	9	7	2	44
2018	38	6	6	2	52
2019	40	5	4	1	50
2020	36	7	4	2	49
2021	38	7	6	2	53
2022	47	8	8	1 853	64 853
2023	43	8	9	2 284	62 284
2024	28	7	6	1 878	42 878

Source: Authors' own graph based on POMASA data.⁴⁵

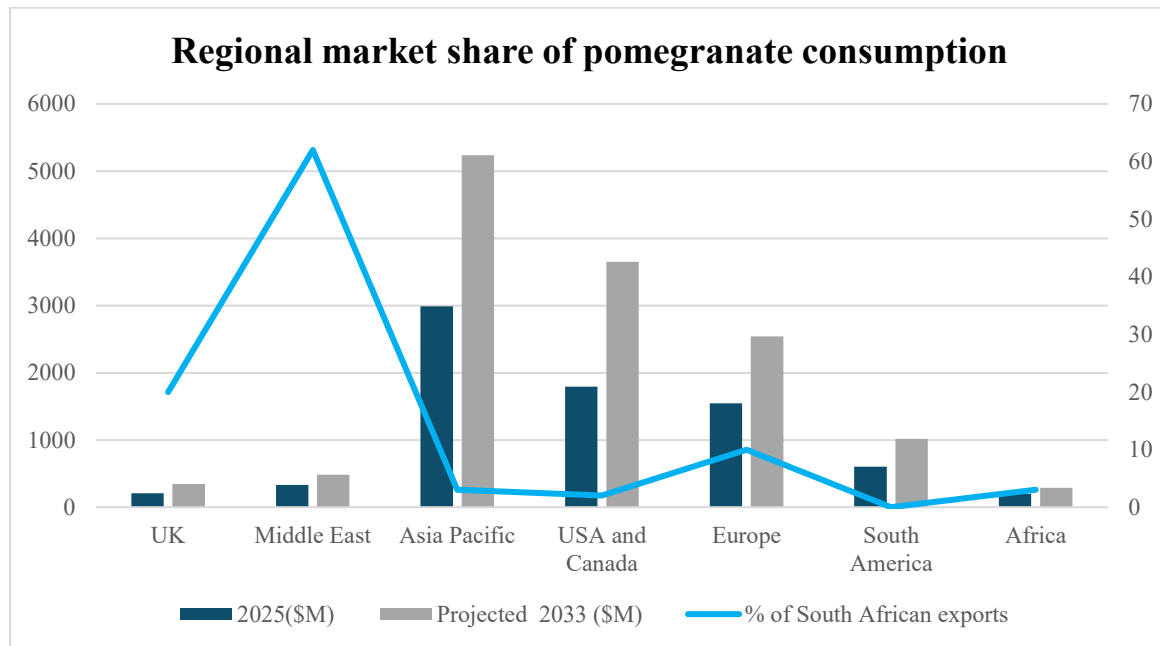
Exhibit 7. Comparing pomegranate production in tons in the USA, South Africa, and China (2015-2018)



	2015	2016	2017	2018
USA	1,7	1,8	2,0	2,2
South Africa	0,5	0,5	0,5	0,6
China	0,4	0,5	0,5	0,6
Total	3,6	4,0	5,1	5,7

Source: Data extracted from Pienaar and Barends-Jones (2021).⁴⁶

Exhibit 8: Regional Market Share of Pomegranate Consumption



Note: The line represents the percentage allocation (not exports in tons) of South Africa’s 2025 export markets, indicating current regional focus compared to potential growth markets. The European data excludes the UK data for comparison.

	UK	Middle East	Asia Pacific	USA and Canada	Europe	South America	Africa
2025(\$M)	206 960	329 670	2988 160	1792 050	1546 960	600 880	196 504
Projected 2033 (\$M)	346 598	482 742	5234 230	3650 400	2541 722	1017 010	287 476
% of South African exports	20%	62%	3%	2%	10%	0%	3%

Source: The graph is based on market intelligence data.⁴⁷

Notes

- ¹ “Farm History,” available at: <https://www.celebratio.co.za/about-celebratio/farm-history> (accessed 27 January 2025).
- ² “The SFA Summer Fancy Food Show,” available at: <https://www.specialtyfood.com/fancy-food-shows/summer/> (accessed 1 February 2025).
- ³ “Ostriches and Oudtshoorn,” available at: <https://www.oudtshoorninfo.com/project/ostriches-and-oudtshoorn> (accessed 27 January 2025).
- ⁴ “Ostrich Farming Industry of South Africa,” available at: <https://southafrica.co.za/south-africas-ostrich-farming-industry.html> (accessed 27 January 2025).
- ⁵ van Niekerk, H. (2024), “The dynamics of the South African lucerne hay industry”, *Agrekon*, Vol. 63 No. 4, pp. 257-276.
- ⁶ *Langverwacht* is an Afrikaans word that means “long expectation.”
- ⁷ Celebratio is derived from Latin and means “fire of good memories.”
- ⁸ The Negev region is a semi-desert located in southern Israel. Based on the Hebrew meaning, Negev denotes “dry” and “south.” The geography consists of craters, rocky walls, and deep valleys. Rainfall in the region varies between 40mm and 300mm. Due to impervious rainfall, soil erosion and water run-off are common in the area, and the soil has high salt levels. The Editors of Encyclopaedia Britannica, “Negev,” *Britannica*, available at: <https://www.britannica.com/place/Negev> (accessed 7 February 2025).
- ⁹ Evanari, M., Shanan, L., Tadmor, N. and Ahoroni, Y. (1961), “Ancient agriculture in the Negev,” *New Series*, Vol. 133 No. 3457, pp. 979-996.
- ¹⁰ 300 kilometers = more than 200 miles.
- ¹¹ “Drought – worst we’ve known,” *You*, December 3, 2010, available at: <https://www.news24.com/you/archive/drought-worst-weve-known-20170728>
- ¹² “Background – seawater desalination in Israel,” *Ministry of Finance*, 26 January 2021, available at: <https://www.gov.il/en/pages/project-water-desalination-background>
- ¹³ R800 million = approximately US\$9.756 million in 2011.
- ¹⁴ Cruywagen, V. (2021), “Karoo ostrich farmers and workers fear avian flu outbreak after Gauteng cases,” *Daily Maverick*, 20 April, available at: <https://www.dailymaverick.co.za/article/2021-04-20-karoo-ostrich-farmers-and-workers-fear-avian-flu-outbreak-after-gauteng-cases/>
- ¹⁵ Gosling, M. (2018), “Karoo farmers lose millions due to drought,” *News24*, 26 September, available at: <https://www.news24.com/news24/karoo-farmers-lose-millions-due-to-drought-20180926>
- ¹⁶ SABC News, (2018), “Oudtshoorn in the Little Karoo Declared a Local Disaster Area,” 9 August, *YouTube video*, 1:43, available at: <https://www.youtube.com/watch?v=Tinkw967hsc>
- ¹⁷ “Calitzdorp Rural Groundwater Augmentation,” *Umvoto*, available at: <https://www.umvoto.com/calitzdorp-rural-groundwater-augmentation/> (accessed February 5, 2025)
- ¹⁸ 60 000 liters = 15 850 gallons per hour, or more than 380 000 gallons per day.
- ¹⁹ Nine kilometers = 5.59 miles.
- ²⁰ South Africa has one of the highest unemployment rates in the world.
- ²¹ R158 million = approximately US\$8.72 million in 2024.
- ²² KarooPak (website), available at: <https://www.karopak.co.za/> (accessed February 7, 2025).
- ²³ Rak-Pasikowska, A. *et al.*, (2024), “The effect of pomegranate peel extract on the oxidative and inflammatory status in the spleens of rats with metabolic syndrome,” *International Journal of Molecular Sciences*, Vol 25 No. 22, p. 12253.
- ²⁴ Younos, M.A. (2024), “Assessment of antifungal activity of orange and pomegranate peel extracts against mycotoxigenic fungi associated guava fruits (*Psidium guajava* L.),” *Egyptian Academic Journal of Biological Sciences, G. Microbiology*, Vol 16 No. 1, pp. 55-72.
- ²⁵ Li, H., Ruan, J., Huang, J., Yang, D., Yu, H., Wu, Y., Zhang, Y. and Wang, T. (2023), “Pomegranate (*Punica granatum* L.) and its rich ellagitannins as potential inhibitors in ulcerative colitis”, *International Journal of Molecular Sciences*, Vol 24. No. 24, p.17538.
- ²⁶ AlMadalli, H.J., Abdul Rasool, B.K., Shehab, N.G., Sala, F.D. and Borzacchiello, A. (2024), “Pomegranate extract-loaded sphingosomes for the treatment of cancer: phytochemical investigations, formulation, and antitumor activity evaluation”, *PLOS ONE*, Vol 19. No. 2, p. e0293115.
- ²⁷ Soliman N.A., Mansour S.W., Ammar M.A., Hassan N.A. and Mohamed, R.H.A (2024), “Possible role of pomegranate fruit in reversing renal damage in rats exposed to phenylhydrazine,” *Open Veterinary Journal*, Vol 13 No. 10, pp. 1268-1276.
- ²⁸ “Karoo Wonderful Pomegranates Products,” (2025), available at: <https://www.karopak.co.za/karoo-pak-pomegranate-products> (accessed 1 February 2025)
- ²⁹ “The Aurora International Taste Challenge 2024 Reaching New Insights,” *Aurora International Taste Challenge*, available at: <https://aurorachallenge.com/2024-event/> (accessed 25 January 2025).
- ³⁰ 20 degrees Celsius = 68 degrees Fahrenheit.
- ³¹ 200 kilograms = 440.925 pounds; one liter = 0.264 gallons.
- ³² This agricultural conference is regarded as the largest conference aimed at agricultural investment in Africa.
- ³³ R10 million = approximately US\$527 000; R25 million = approximately US\$1.3 million in 2025.
- ³⁴ “World Bank Group South Africa Overview” (2020), available at: <https://www.worldbank.org/en/country/southafrica/overview#:~:text=This%20socioeconomic%20challenge%20is%20compounded.an%20already%20fragile%20labor%20market> (accessed 9 October 2025).
- ³⁵ “Socio-economic Problems Facing Africa: Insights from Six APRM Country Review Reports (2025), available at <https://saiia.org.za/research/socio-economic-problems-facing-africa-insights-from-six-aprm-country-review->

[reports/#:~:text=Among%20the%20common%20problems%20are,overall%20is%20reliant%20on%20donors](#) (accessed 9 October 2025).

³⁶“Emerging trends and lending challenges in South African agriculture” (2025), available at:

<https://www.moodys.com/web/en/us/insights/lending/emerging-trends-and-lending-challenges-in-south-african-agriculture.html#:~:text=Extreme%20weather%20events%20%E2%80%94%20droughts%2C%20floods,long%2Dterm%20viability%20of%20investments> (accessed 9 October 2025).

³⁷“African Growth and Opportunity Act (AGOA) Annual Forum in Washington, D.C.” (2024), available at:

<https://www.usafricatradedesk.com/event/african-growth-and-opportunity-act-agoa-annual-forum-in-washington-d-c/>

³⁸“African Growth and Opportunity Act (AGOA),” *Office of the United States Trade Representative*, available at:

<https://ustr.gov/issue-areas/trade-development/preference-programs/african-growth-and-opportunity-act-agoa> (accessed 25 January 2025).

³⁹ R1 billion = approximately US\$53.99 million in 2025.

⁴⁰ South Africa brought a criminal case against Israel in December 2023 in the International Court of Justice, claiming genocide in the Gaza war. The country’s ruling party and allies have remained outspoken in its criticism of Israel.

⁴¹ “Retail,” *Lulu Retail*, available at : <https://www.luluretail.com/businesses/retail/> (accessed 7 February 2025).

⁴² R28 million = approximately US\$1.51 million.

⁴³ R1.5 million = approximately US\$74 000.

⁴⁴ “POMASA Industry Overview (2018, 2022, 2024)”, available at: <https://www.sapomegranate.co.za/statistics-and-information/industry-overview/> (accessed 9 October 2025).

⁴⁵ “POMASA Industry Overview (2024)”, available at: <https://www.sapomegranate.co.za/statistics-and-information/industry-overview/> (accessed 9 October 2025).

⁴⁶ Pienaar, L. and Barends-Jones, V. (2021), “The economic contribution of South Africa’s pomegranate industry”. *Agriprobe*, Vol.18 No. 4, pp. 57–64.

⁴⁷ Mali, S. (2025), “Pomegranate Market Report 2025 (Global Edition)”, *Cognitive Market Research*, available from <https://www.cognitivemarketresearch.com/pomegranate-market-report>, (accessed 9 October 2025).