



NUFFIELD
Farming Scholarships

Presented To: **Nuffield Netherlands**
Presented By: **Linda Kopczinski**

"To what extent would carrying out the complete 'bean to bar' production process on my own premises add value to my chocolate product in the niche market, and would this meet the specific needs and preferences of consumers in the Netherlands, considering the country's role in global cocoa production?"

2023-2024

Introducing myself

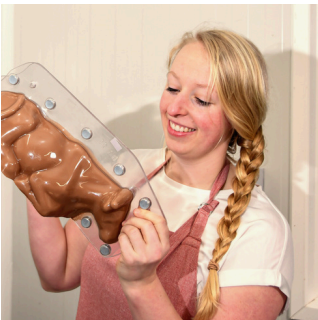


Linda Kopczinski

My name is Linda Kopczinski, and I am a farm-based chocolatier. Using the milk from our own cows, I create cream, which I then process into handmade chocolates. In January 2023, I started my own business, Boerlinda.



I decided to experiment in a niche market. During my Nuffield Scholarship, I began setting up my business and discovered that there isn't a single dairy farmer in the Netherlands who makes chocolate using cream produced on their own farm. This inspired me to take on this unique challenge and combine my passion for artisanal chocolate with the products from our farm.



My Nuffield Scholarship was an educational journey where I learned a lot about entrepreneurship, setting up a business, gaining knowledge, and expanding my network.



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Boerinlinda

In January 2023, I started my own chocolate business. As I was setting up the company, I questioned whether I should undertake the entire production process, from "bean to bar," on my own premises. This means managing every step of the chocolate production process yourself: starting with the cacao bean, which you roll, blast, and crush to remove the shell. Next, you grind the bean, releasing oil. After the oil is released, you add milk powder, sugar, and binders to the cacao, resulting in chocolate. This is a very intensive process that takes three days, but it offers the opportunity to produce fairer chocolate by sourcing cacao beans from a specific plantation. However, the question is: is the average Dutch person concerned with this?

If I were to invest in this production method on my premises, would it add value to my product? After all, the average Dutch person consumes 4.5 kg of chocolate per year. Many of the cacao beans are shipped from producing countries to countries where chocolate is processed, and the Netherlands plays a leading role in this. We are the world's largest cacao producer, processing about 500,000 tons annually, which accounts for 13% of the total global production. A significant portion of these cacao beans comes from Indonesia, a former Dutch colony, where the beans were historically shipped to the Netherlands, leading to the development of a cacao industry in the Zaanstreek. I will tell you more about my research in the following pages.



Online survey

After posing the question, I conducted an online market survey using my social media accounts on Instagram and Facebook. The survey received 89 responses, primarily from consumers who purchase my product.

Boerinlinda

This SWOT analysis is the result of the online research I conducted. This is a strategic planning tool used to identify and evaluate the Strengths, Weaknesses, Opportunities, and Threats related to my business.

Strength	Weakness	Opportunities	Threats
<ul style="list-style-type: none">• Unique Production• Artisanal Quality• Compelling Story• Sustainability	<ul style="list-style-type: none">• High Production Costs• Limited Scalability• Market Acceptance• Production Capacity	<ul style="list-style-type: none">• Growing Demand for Sustainable Products• Premium Market Segment• Product Line Expansion	<ul style="list-style-type: none">• Competition• Ingredient Price Fluctuations• Economic Uncertainty

Results

In this survey, I asked questions such as, "What is the first thing you think of when you hear the word 'chocolate'?" The responses revealed that chocolate is often associated with pleasure and taste experiences, and the word is also linked to women.

According to my research, while most people purchase chocolate primarily from supermarkets, they still consider sustainability an important factor. This prompted me to investigate whether consumers who value sustainability would be willing to pay a higher price for chocolate with a sustainability certification.

The results were revealing: 61% of respondents indicated that they would not be willing to pay more for chocolate with a sustainability certification, while 39% would be willing to do so. These findings have helped me understand how consumers value sustainability and have influenced my approach to product development.

I also asked consumers what they consider important when purchasing a product. It became clear that the appearance and packaging of the product are very important to them. Additionally, they consider it essential that the story behind the product is authentic. Many respondents mentioned that a website adds value, as it helps them gain a better understanding of the brand and its background.

Budget Plan

Bean - to - bar



1. Initial Setup Costs

- Equipment:
 - Cocoa Bean Roaster: €5,000 - €10,000
 - Winnower (for removing shells): €3,000 - €5,000
 - Grinder/Concher: €8,000 - €15,000
 - Tempering Machine: €2,000 - €5,000
 - Molds and Packaging Equipment: €1,500 - €3,000
 - Miscellaneous (mixers, scales, cooling racks, etc.): €2,000 - €4,000
 - Total Equipment Cost: €21,500 - €42,000
- Facility Setup:
 - Renovation/Setup of Production Area: €10,000 - €20,000
 - Electrical and Plumbing (adjustments for equipment): €5,000 - €10,000
 - Permits and Inspections (health, safety, environmental): €1,000 - €3,000
 - Total Facility Costs: €16,000 - €33,000

2. Monthly Operating Costs

- Raw Materials:
 - Cocoa Beans (quality, direct trade): €1,000 - €2,500
 - Milk powder, sugar, and binders: €500 - €1,000
 - Ingredients for fillings (nuts, fruits, etc.): €300 - €600
 - Total Raw Material Costs: €1,800 - €4,100
- Labor Costs:
 - Salaries (1-2 employees, including taxes and social contributions): €3,000 - €6,000
 - Total Labor Costs: €3,000 - €6,000
- Other Operating Costs:
 - Packaging materials (boxes, labels, etc.): €500 - €1,000
 - Utilities (electricity, water, gas): €300 - €600
 - Insurance (liability, inventory, product): €200 - €400
 - Marketing and Promotion: €500 - €1,000
 - Distribution and Transportation: €200 - €500
 - Total Other Operating Costs: €1,700 - €3,500
- 4. Annual Total Costs:
 - Annual costs initial investment in equipment en facility setup: € 6.000 - € 12.000 (based on 16% of investment for depreciation, interest and maintenance)
 - Annual operating costs: € 78.0000 - € 163.200
 - Total annual costs € 84.000 - € 175.200.

This pricing calculation is based on the prices from November 2023.

Reasons not to buy a Bean-to-Bar Installation

High Costs: A bean-to-bar setup requires a significant investment in equipment and machinery, which may not be financially viable, especially for smaller-scale production. Additionally, there is the question of whether there is space to build this installation.

Complex Process: Making chocolate from scratch requires specialized knowledge and skills. Companies may prefer to focus on other areas rather than managing the complexities of chocolate production.

Space Requirements: The installation demands a lot of space for machinery and storage, which might not be available for all businesses.

Focus on Core Competencies:

My core qualities are my fresh cream, the appearance of the product, and the fact that there is no one in the Netherlands making chocolate on a farm. This means that I can claim to have a unique product.

Supplier Quality: Reliable suppliers can provide high-quality chocolate that meets specific taste and quality standards, making in-house production unnecessary.

Diversification and Risk Management: A bean-to-bar installation is very specific, limiting product range flexibility and increasing risks related to cocoa supply, market changes, and production issues.

In summary, this also applies to me. I may avoid investing in a bean-to-bar installation due to high costs and the complexity of the production process. Space limitations further hinder my ability to set up such an operation. I prefer to focus on my unique qualities rather than manage intricate production challenges. Additionally, relying on high-quality suppliers helps me maintain product standards without the associated risks of in-house production.



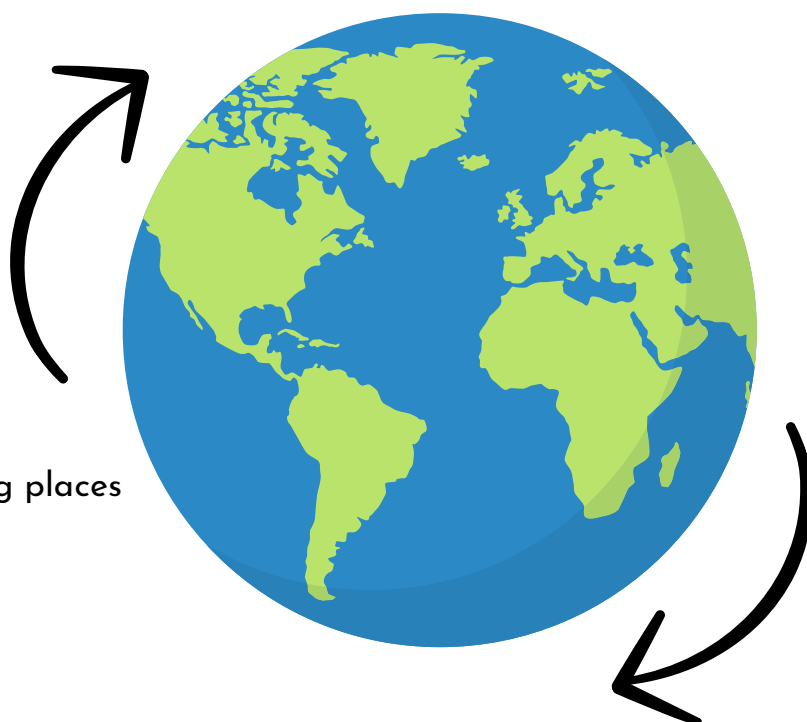
Traveling around the world

Traveling around the world offers a unique opportunity to immerse oneself in diverse cultures, meet fascinating people, and gain fresh perspectives. Each destination unfolds its own narrative, from the bustling streets of Tokyo to the serene landscapes of New Zealand. As I explored various cuisines, traditions, and ways of life, my understanding and appreciation of the global community deepened. The thrill of adventure and the joy of discovering hidden gems transformed my experience, broadening my horizons in unexpected ways.

In March 2023, I set out to draft a travel plan with two primary objectives: to meet entrepreneurs who incorporate cream into their chocolate products and to observe a bean-to-bar setup up close. This journey was not just about exploration; it was a crucial step toward establishing my own business and connecting with consumers through the art of storytelling. As I traveled to countries like England, Canada, New Zealand, Japan, Indonesia, Australia, Scotland, Poland, and Belgium, I gathered invaluable insights and inspiration that have profoundly shaped my entrepreneurial choices. Each encounter and experience opened my eyes to innovative approaches within the chocolate industry.

Meeting two particularly inspiring entrepreneurs during my travels directly influenced my vision and direction, and I have documented their stories as key milestones in my journey. Through this exploration, I am not only building a business but also weaving a narrative that connects my passion for chocolate with the rich tapestry of global experiences.

9 countries
184 sleeping places
96.327 km



The experiencies

Nakano Farm, Japan

There are only three dairy farmers in the world who process their own cream into chocolate: a 38-year-old Japanese dairy farmer in Hokkaido, Mackies in Scotland, and myself. I visited both of these businesses and had the opportunity to experience their chocolate production processes up close. Both dairy farmers source their chocolate from the Callebaut factory in Belgium. Even though both of them operate a fully standardized production process without any manual labor, they each generate more than 100 million euros in revenue annually from selling chocolates in gift boxes. For example, Mackies has an annual expense of 2 million euros and generates a turnover of 143 million euros per year. The Japanese farmer did not want to disclose exact figures. During my visit to Japan, I drew inspiration from their chocolate gift boxes. For instance, he had a chocolate mold in the shape of a wooden clog, and he explained that people are attracted to forms that evoke a sense of nostalgia. He found it amusing because the clog originally comes from the Netherlands. He also asked me, "What is the real added value of the bean-to-bar story if you can buy chocolate so close to home?" For him, the factory in Bieze was "just around the corner," but I explained that for me, it's still a 3.5-hour drive. In the context of Dutch distances, that's quite far. While the Netherlands is a relatively small country, the perception of distance can vary significantly. He showed me his professional cream installation, which unfortunately I was not allowed to photograph. This equipment cost him 124,000 euros initially and produces 1,000 liters per hour.



Mackies, Schotland

Mackies, the largest ice cream and chocolate makers in the United Kingdom, is a family business with a unique story. During a visit to their impressive facilities, we were given a tour by Kirsten and Mac Mackies, the enthusiastic brother and sister who run the family business together. Their dairy farm, with its 300 cows producing 43 liters per cow per day, forms the backbone of their operation. They are not dependent on fluctuating milk prices on the market, as every drop of milk is used for their own ice cream production.

This smart business model has taken them far: with an initial cost of 2 million, they manage to achieve an annual turnover of no less than 43 million. And their ambitions reach further. Their next goal? To reach a turnover of 100 million within a year and a half, without depending on unexpected setbacks like the COVID pandemic.

The secret to their success lies largely in their distribution. Mackies supplies their products to supermarkets throughout the UK and even exports to countries like Japan, Australia, China, and Taiwan. But the journey of Mackies began modestly in 1989, in a small shed behind the cow barn. Since then, they have grown into the largest facility of their kind, where everything is done in-house. They have a fully integrated production process: from their own packaging center, chocolate factory, and ice cream factory to a production site where they make their own bases, such as strawberries, raspberries, and honeycomb. With over 100 employees, they ensure the highest quality is delivered.

Our tour ended in their testing center, where we indulged in countless boxes of ice cream, chocolate, and various samples. We tasted the subtle flavor differences that are specifically tailored to different supermarkets, such as the higher quality for Tesco and the more affordable flavors for Aldi. During a brainstorming session, we discussed new ideas for products and flavors. The box of chocolates I had brought along turned out to be a source of inspiration, encouraging them to think further outside the box.



Conclusions

General Conclusions

1

1. Emphasizing “cream from our own cows” is crucial for sustainability, quality, and transparency. By using milk from one’s own farm, producers can ensure strict quality control, reduce transportation needs, and provide consumers with a clear understanding of where their food comes from. This approach increases trust and contributes to a reduced carbon footprint.
2. Investing in a 'bean-to-bar' installation would not add value for smaller-scale businesses. The high setup costs and specialized expertise required pose significant challenges, and lower production volumes often lead to profitability issues, making this approach impractical for many small operations.
3. Supporting local dairy farms strengthens the local economy and builds community resilience.

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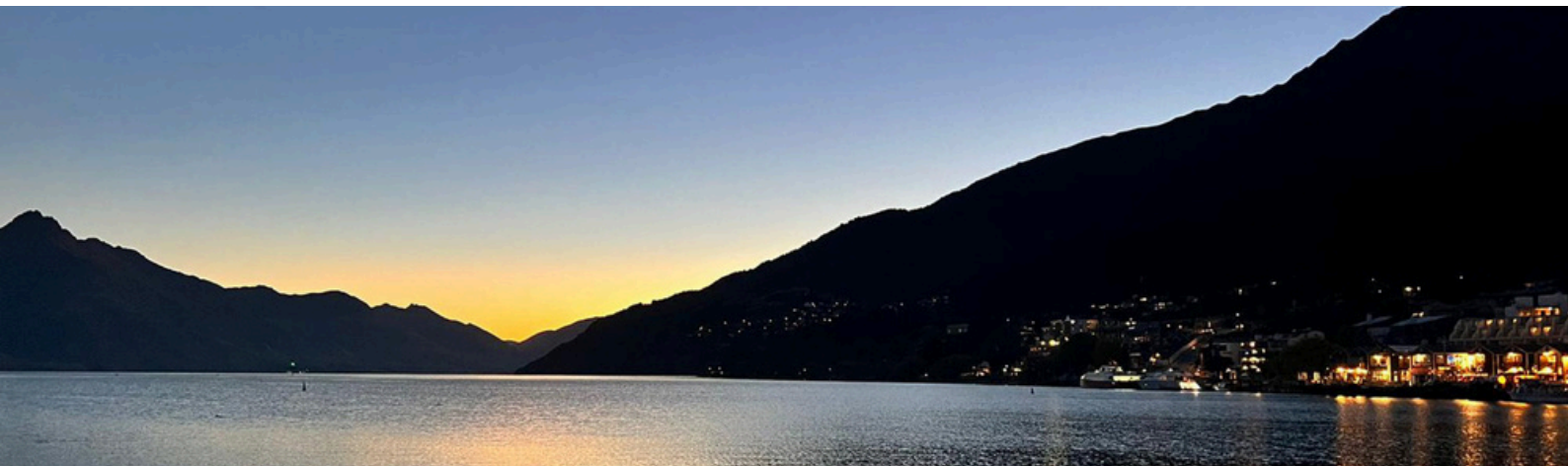
What I Will Do in My Own Business

In my journey to establish my chocolate business, using high-quality, locally sourced cream is central to my vision. Focusing on these local ingredients enhances flavor and strengthens a responsible brand identity, resonating with today’s conscientious consumers. Storytelling will be an important tool for communicating this commitment to sustainability and local sourcing, helping consumers understand the care that goes into our products.

For example, by sharing the story behind the brand, a business like Boerinlinda can create an emotional connection with customers. This strengthens brand identity, builds customer loyalty, and makes a lasting impression. By providing context and meaning to products, storytelling makes them more relevant and appealing to the target audience.

Further Steps for My Business

My next steps will include focusing on marketing and storytelling to strengthen my brand's identity. I will also explore additional ways to emphasize our use of local ingredients, possibly by developing new products that highlight regional flavors. Scaling up may be considered later, but only if it aligns with our brand's authenticity and values.



Recommendations

This study has been small in scale, which limits the scope of the results. I conducted an online market survey through my social media accounts on Instagram and Facebook, receiving 89 responses mainly from existing consumers of my product. While this feedback is valuable, the small sample size means that the findings may not fully represent the broader market.

Local vs. International Trends:

- Research into the influence of local and international trends on product development and consumer behavior can help tailor offerings to meet specific market demands. For new entrepreneurs, understanding these trends can provide a competitive edge and inform effective product positioning strategies.

Communicating Product Adaptations:

- It's essential to understand how to communicate product adaptations to target audiences effectively. For small producers, clear and engaging messaging can enhance consumer loyalty and engagement. This research can offer entrepreneurs valuable insights on the best practices for keeping audiences informed and connected.

Role of Marketing in Success:

- Investigating how different marketing strategies impact product success is critical, especially for businesses looking to expand their reach. Entrepreneurs can use this research to identify marketing tactics that resonate best with their target demographics and refine their approach to attract new customers.

Scaling Up While Maintaining Authenticity:

- For businesses considering expansion, it's beneficial to study how niche entrepreneurs successfully grow while maintaining their brand identity. For others in similar situations, these strategies can provide a roadmap for scaling up without compromising authenticity or quality.



I would like to thank a number of people in particular.

First and foremost, my rock, Nick. Together, we have experienced an incredible growth journey. You are the best!

I also want to thank the International Nuffield Scholars who helped me with the recipes in my cookbook. Without them, this book would never have come to fruition!

Additionally, I would like to express my gratitude to the Province of Overijssel, especially Erik Koldewey, because without him, I would never have been able to pursue the Scholarship.

Thank you to Heleen, Marianne, Djuke, Alfons, and Annechien for their mental support during my travels!

And of course, a big thanks to Carine, Rogier, Edwin, and Xander, for all the laughter we shared.

thankyou

linda

