Business Model Adaptations for Vegetable Products

WHY VEGETABLES?
Vegetables can be excellent sources of essential micronutrients like potassium, magnesium, calcium, and Vitamins A, C, and K. They also contain dietary fibre, which helps with digestion. A diet rich in vegetables can help to lower blood pressure; reduce risk of heart disease, stroke, and certain cancers; and help regulate blood sugar. However, vegetables are often under-consumed worldwide.

WHAT ARE SOME APPROACHES USED IN THE VEGETABLE SECTOR?

Cross-subsidisation – One product is sold with a larger margin, with excess profit used to subsidise another product sold at a smaller margin. Firms can sell the same product to different consumers (e.g., export, institutions, supermarkets), or different product lines to different consumers, at different prices.

Example:
Neighbourhood Freshmart, Kenya – Cross-subsidised sales of vegetables to lower-income consumers through ‘mama mboga’ street vendors with sales to higher-income consumers via supermarkets.
Value through convenience – By increasing the convenience of the product (such as by reducing cooking time or cost), firms can increase the value to the customer and thus their willingness to pay. In doing so, they may be able to take advantage of economies of scale: firms working with industrial-scale equipment and trained employees can often process food more efficiently than home cooks.

Example:
A vegetable processor and retailer, Kenya – Sold pre-cut vegetables (e.g., potatoes, cabbage, kale, and spinach) that reduce food preparation time, resulting in faster meals.

Use of waste products – By taking food that would otherwise be wasted and repurposing it into something than can be consumed (or can be an input into something that can be consumed), firms may be able to create a more affordable product, given that ‘waste’ is usually available cheaply or for free. This can have the added benefit of reducing the environmental impact of the local food system by cutting food waste.

Example:
Raybanpac, Ecuador – Whey (protein left over from cheese production) has historically been dumped into rivers, which is harmful to the environment. Reybanpac began using this whey to create a low-sugar fortified yoghurt.

Quality segmentation – Firms can grade a product by quality, directing the lower-quality but still useable product to the lower-income market at a lower price.

Example:
A vegetable producer, Kenya – Sold low-grade produce that had minor aesthetic defects and thus did not meet export standards at discount prices through local markets in lower-income areas, while higher-grade produce was sent to higher-income urban and export markets.

Distribution hubs – Aspects of distribution are grouped together instead of done separately, to improve efficiency and cost-sharing, reducing costs overall.

Example:
Copia, Kenya – Rural customers purchase various food and non-food goods through local sales agents, paying in cash or with mobile money and obtaining assistance as needed. Each order is grouped with others in the area to be fulfilled in one shipment to the agent.
Bespoke last-mile distribution network –
A new last-mile distribution network, specific to a company or product, can be created to reach lower-income consumers. This involves recruiting and training a new workforce of distribution/sales agents; equipping them; and providing appropriate pay, incentives, and supervision.

Example:
FanMilk, West Africa – Sold frozen dairy desserts through about 25,000 mobile street vendors who reach lower-income urban and peri-urban areas, including customers who do not have freezers and thus could not store such frozen foods at home.

Support existing retail networks – Retailers can be supported through micro-distribution models, capacity building, marketing support, or access to financing. This can incentivise selling a new product and improves capacity to do so.

Example:
A fish and chicken processor, Kenya – Targeted small retailers in low-income neighbourhoods by using local butcher shops as distributors and supporting both the butchers and retailers with branded freezers.

Direct sales in underprivileged areas – Undertaking retail sales directly can help cut out the costs of intermediaries and allow companies to more directly control pricing. When done in low-income settings with limited access to affordable nutritious foods, this can help to reach lower-income consumers.

Example:
Nestlé, Brazil – Created a barge that can sell its products in remote parts of the Amazon that cannot be reached by road.
WHAT ARE SOME SPECIAL CONSIDERATIONS FOR THE VEGETABLE SECTOR?

Vegetables are highly nutritious and exist in diverse forms, which makes it more feasible to apply a range of the strategies named above. However, they can also pose food safety risks, so firms should be careful when applying new business model features to ensure these do not compromise safety. This includes following best practices for handling, storage, and packaging.

Vegetables are perishable, and their distribution and retail can be restricted by limited access to refrigeration. Firms should thus consider how new approaches could be leveraged to either extend shelf stability (e.g., drying or canning) or strengthen access to cold chain technology. They can also be delicate and subject to loss and damage, so careful attention needs to be paid to handling, regardless of the approach used.

To Learn More:

MozAgri: https://www.mozagri.com/index.php/blog/goat
Copia: https://copiaglobal.com/copia-impact/

While we hope this offered useful advice, users should always consider their company’s circumstances when adopting new approaches – and make sure that they are used as part of a broader viable business model. The examples cited come from a 2022 document review and may not be fully up to date.

This work was funded by the Dutch Ministry of Foreign Affairs.