

# Elevating Horticulture in Ghana

*Designing a go-to-market strategy for commercial smallholder farmers in Kumasi*



Master thesis

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Thesis report  
Designing a go-to-market strategy for commercial smallholder farmers in Ghana

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# Preface

This report is written as part of the master thesis for the master Strategic Product Design Engineering at the Delft University of Technology. The project is part of the Archipelago project: horticulture for a brighter future in Ghana, a project funded by The Netherlands Embassy, in collaboration with Delft University of Technology, Kwadaso Agricultural College and Holland Greentech.

The goal of the research is to create a go-to-market strategy for commercial smallholder farmer organizations that operate within Kumasi. The strategy is created in collaboration with different farmers and farmer organizations in order to create maximum impact. The objective of this research is to develop a comprehensive go-to-market strategy for commercial smallholder farmer organizations operating in the Kumasi region. The research is conducted by an extensive desk research on the matter as well as several in-depth interviews with experts and leaders in the field of horticulture, nutrition and financial security in Ghana.

I would like to thank Kwadaso Agricultural College, Holland Greentech and all the farmers who cooperated with the research for their extensive support, guidance and knowledge throughout the project, it simply would not have been possible without your support. Furthermore, I would like to thank Mr. Samuel Darbah, Mrs. Josephine Darbah, Emanuela, Calvin, Josephine and Samuel for giving me the chance to have a place to call home in Ghana. Also, I would like to express my gratitude to Hugo, Flo, Bertie and Martijn to help me make my Ghana research become an unforgettable experience. I would also like to extend

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Lastly, I wish to express my deepest gratitude to my client, Lindsey Schwidder, for granting me this once-in-a-lifetime opportunity to contribute to this project. Your guidance, enthusiasm, and support have been instrumental, exceeding my expectations in every regard.

I hope you enjoy reading this report just as much as I enjoyed doing the research!

Charlotte Struijk



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# Executive Summary

This report presents the findings and recommendations of a research project focused on developing a comprehensive strategy for commercial smallholder farmers in urban and semi-urban areas of Kumasi, Ghana. The objective was to co-create a strategy that addresses the specific needs and challenges of farmers in the region. The research involved extensive field visits, interviews, and collaboration with farmers, stakeholders, and relevant institutions.

The study identified three design challenges: developing a B2B strategy for farmers, enhancing farmers' brand awareness through marketing, and improving communication between market queens and farmers. In-depth interviews concluded that prioritizing the B2B strategy would be most beneficial due to demand from restaurants and hotels. Based on the chosen design challenge, strategic and tactical roadmaps were developed, drawing from literature research and coded interview transcripts. The roadmap consists of three horizons.

The first horizon focuses on enhancing cooperation among farmers within a farmer organization to improve the effectiveness and efficiency of their produce sales. This involves building a brand identity and establishing a strong sales structure.

The second horizon centers around raising awareness among farmer organizations through various advertising channels, with a particular emphasis on packaging. Packaging plays a crucial role in extending shelf life, developing a strong brand identity, and enabling traceability. Efforts at the farmer level

aim to increase brand awareness and drive customer demand for the farmer organization's produce. Students will also be involved in understanding brand development and designing effective marketing materials.

The third and final horizon focuses on securing storage and cooling facilities that can be collectively utilized by farmer associations. These facilities, provided by the government, are contingent upon farmers' progress and achievements. Additionally, an educational component is proposed, targeting students at Kwadaso Agricultural College through workshops that highlight the importance of advertising, storage and cooling spaces, and collaborative efforts among farmers.

The strategy document has undergone review by horticulture experts, leading farmer organizations in Kumasi, and 80 students from Kwadaso Agricultural College. The research underscores the need for farmers to transform their operations to address existing challenges and capitalize on consumer demand for healthy produce. Promising opportunities exist for farmers to expand sales beyond the hotels and restaurants, and it is recommended to target office workers, airline services, and primary and secondary schools as untapped customer segments. Acknowledging limitations such as time constraints and financial considerations, future research should aim to expand the scope, validate marketing materials, address payment challenges, and conduct field tests. Implementing the proposed strategies with regional context and stakeholder engagement can pave the way for sustainable growth and collective progress in Ghana's horticulture industry.







# 01

## Introducing the project

*This chapter provides an overview of the Archipelago project and its partnerships. It aims to provide insights into the client and the partners involved. Additionally, it specifies the problem and design goal of the project and presents the research methods employed. By examining these aspects, a comprehensive understanding of the project's context, stakeholders, and research approach is established, setting the stage for further exploration and analysis.*



# 1.1 The key players

## “Horticulture in Ghana for a brighter future”

Archipelago is a huge project, funded by the Netherlands Embassy. The Archipelago project aims at improving the horticulture in Ghana, in order to increase employment abilities of the Ghanaian youth. The main impact that is aimed at being achieved links directly to the multi-annual strategic plan of the Netherlands Embassy, namely to:

1. Improve the position of Dutch businesses in Ghana while strengthening the Ghanaian economy and supporting young Ghanaian entrepreneurs.
2. Supporting Ghana to better prepare for climate change and ensure good nutrition and food security for all.

The Archipelago project focuses on implementing technical and vocational education and training that address current needs of the horticulture sector. This is being done by improving the regular educational offer as well as the quality of education by introducing practical horticulture skills in collaboration with the Holland Greentech team. The students are now also responsible for a relatively small plot next to the school, where the student actively learns the practical skills of growing crops. Next to this, the Archipelago project educates farming as a business and this is embedded within the course that is taught at Kwadaso Agricultural College. A significant part of the teaching staff at Kwadaso Agricultural College can teach these new courses. KAC also offers a separate 4-month program targeted at young professionals, in about 4 batches of 30 to 50 participants, eager to learn more about horticulture and to start their own farming business.

The impact of these improved farming practices is being demonstrated by the 20 lead farmers that are affiliated with this project, in and around the Kumasi region. Holland Greentech has provided these farmers with the right seeds, the right training and the right knowledge and these lead farmers organize regular farmer field days during which knowledge is spread far beyond the initial 20 lead farmers. About 1,200 farmers have already been reached and educated through this process. The KAC alumni are the best ambassadors of the Archipelago project, as the impact is clearly shown by their improved yields and an increase in income, made possible by both the Dutch and the Ghanaian inputs and knowledge. The Archipelago project has seen significant impact during the past 2,5 years the project was running: KAC can host 350 students per year, but in 2022 they had more than 2,000 applying. This clearly shows the interest of the young generation.

This graduation project is part of the Archipelago project and is focused on the beneficiary: Kwadaso Agricultural College. The key players are visualized in figure 1.1. From the Archipelago project, Lindsey Schwidder, the project manager, will supervise this project. Lindsey Schwidder is a project manager for Water and the Innovation and Impact Centre at the TU Delft.

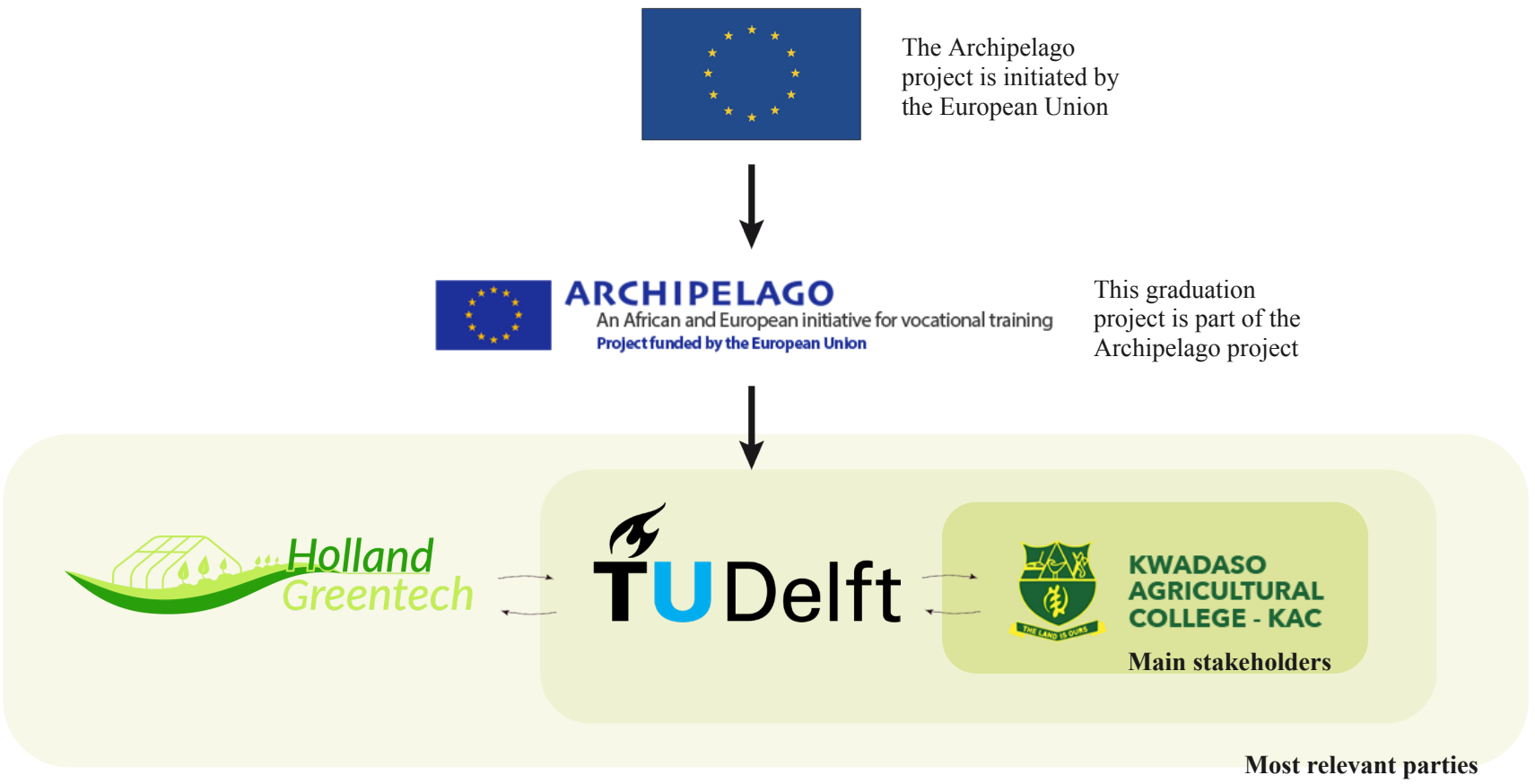


Fig.1.1 Overview of Stakeholders within the project





Archipelago classroom at KAC

### Partnerships within Archipelago

Within the Archipelago project, a partnership is established between the Kwadaso Agricultural College (KAC) in Kumasi, Ghana as well as the University of Technology in Delft, The Netherlands. The University of Technology Delft supports KAC by helping the students get acquainted with entrepreneurship within the business of farming. Delft Centre of Entrepreneurship takes a close look at the curriculum for the KAC students and assists in revising the different courses that are being taught together with several other organizations and institutions. Each 5 years, a revision of the curriculum takes place in order to make sure the courses are still in line with the knowledge that is vital for the modern farmers in today's Ghana.

Next to the educational partnership, another partnership has been established with the Dutch horticulture product and service organization Holland Greentech (HGT). HGT has ventures in Rwanda, Uganda, Zambia, Kenya, Burkina Faso and Ghana. HGT supports Ghanaian farmers by connecting them to high quality, Dutch importers; by offering farmers a wide range of products from seed to market; by offering business support and the necessary training in order to grow.

### The main stakeholder: Kwadaso Agricultural College

Kwadaso Agricultural College is located in Kumasi, Southern Ghana. It is the leading and oldest agricultural institution in Ghana, aiming at teaching its students practical and theoretical horticulture skills. The different departments that exist within KAC are as follows: the animal science department; the agribusiness, economics and extension department; the agricultural engineering department; the home science department and the non-traditional department. KAC aspires to be a center of excellence and they do this by providing two types of education: the regular curriculum

and the Archipelago curriculum. The regular curriculum is targeted at the regular batch of students who study at Kwadaso full-time. The Archipelago program is designed for professionals who are interested in working within the horticulture sector, often without prior experience in farming. The Archipelago curriculum can be seen as a dense version of the regular curriculum that aims at bridging the gap between entrepreneurship and farming.

### 1.2 Research Questions

In order to generate financial security for the farmers, a go-to-market strategy is crucial. The main research question is formulated as follows:

**How can a go-to-market strategy be improved for commercial smallholder farmers in Kumasi in order to elevate horticulture to a higher level nationally?**

In order to be able to get a good understanding of the problem, the following sub-questions will be answered:

- What are the current challenges that KAC faces?
- What are the challenges that commercial smallholder farmers in Kumasi face?
- Which farmers should be targeted with this research?
- What does the current diet look like in Ghana?
- Who are the key players within a go-to-market strategy?



### 1.3 The design challenge

For many farmers in Ghana, the primary focus has traditionally been on cultivating and harvesting crops, with little attention given to the crucial aspect of successful produce sales. However, selling their produce effectively is vital for farmers to achieve financial security. Currently, the majority of farmers in Ghana follow a similar approach of selling their produce through local markets, leveraging the central role of market women and market queens to handle the sales process. This relieves the farmers of direct responsibility and allows them more time for other tasks.

In contrast, the farmers targeted in this research show higher quality produce compared to the average farmer. This is due to factors such as the origin of the seeds and the use of good and sustainable farming practices. These farmers, who are often consumers of Holland Greentech products and alumni of either Archipelago or Kwadaso Agricultural College, have access to high-quality seeds that yield better crops with improved nutritional value. Additionally, Holland Greentech provides them with services such as soil analysis, integrated pest control, and irrigation solutions. The educational background gained through Kwadaso Agricultural College has further equipped these farmers with theoretical knowledge and practical skills in crop cultivation.

To ensure the financial stability and well-deserved recognition for these farmers, a design intervention within the current value chain is necessary. This intervention should aim to not only create more awareness among their produce, it should also make the field of farming emergent. The end goal of the design intervention should be to elevate the national level of horticulture. By implementing strategic changes and

improvements in the value chain, the aim is to enhance the overall quality, productivity, and success of the horticulture sector at a national level. This means creating an environment that supports the growth and development of farmers and their produce. Ultimately, the design intervention seeks to *elevate the status and impact of horticulture in the country, benefiting both farmers and consumers alike*.

In summary, selling produce effectively is an essential component for farmers to achieve financial stability. By targeting farmers with higher quality produce and implementing a design intervention within the value chain, the aim is to provide fair prices and enhance customers' understanding and appreciation of the source of their vegetables.



Creative session held at KAC



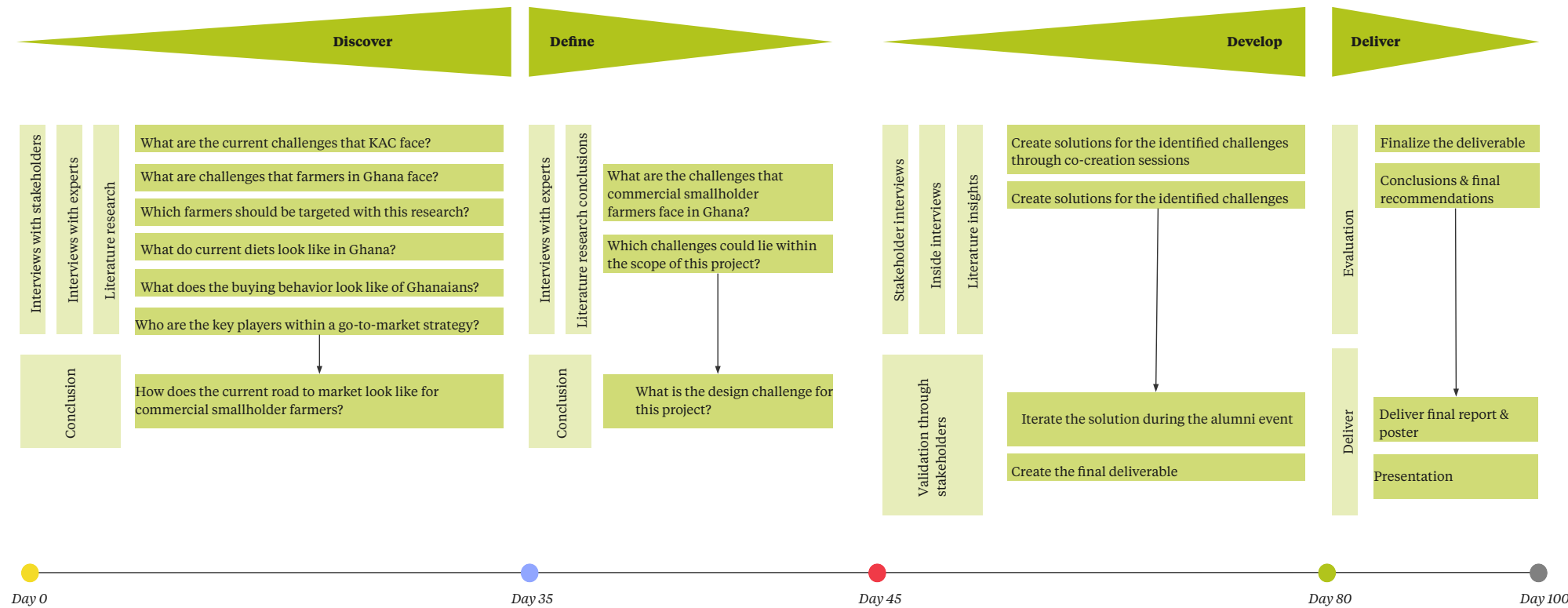


Fig.1.2 Overview of Creative Process

## 1.4 Structuring the design process

The main goal of the project is identified as follows:

### Design a go-to-market strategy for commercial smallholder farmers in the Kumasi region, Ghana

#### Method

Figure 1.2 provides an overview of the complete approach of this graduation thesis. The project consists of four main phases: the initial research phase, the scoping phase, design phase and the evaluation phase. The research methods for each phase of the project are explained in this section. Overall, the project is executed by making use of the co-evolution of the problem and the solution method, due to the nature of the project being wicked and complex. During the individual phases, the Jan Buijs method is used, to structure the process in a simple and easy way, allowing for quick references on the planning.

#### Phase 1: Discover, the initial research phase

To get a deeper understanding of the context, both from the side of the commercial smallholder farmers as well as from the consumer side, in-depth desk research has been conducted. This desk research consists of a literature review as well as several interviews with leading organizations within the field of improved nutrition as well as horticulture in Ghana.

#### Phase 2: Define, the scoping phase

In this phase, conclusions will be drawn from the first phase and a few options for design challenges will be drawn.

The final design challenge will be validated with experts and insiders within the field of horticulture in Ghana. These experts are Holland Greentech, Kwadaso Agricultural College, local farmers as well as the leading farmer associations within the Ashanti region.

#### Phase 3: Develop, the design phase

The goal of the development phase is to co-create a solution for commercial smallholder farmers. The co-creation sessions will be done using the Delfi method, to quickly get perspectives of all farmers on the table, as well as different creative facilitation methods, to get the farmers out of their comfort zone to grasp their unique and creative ideas. Both semi-urban commercial smallholders as well as urban commercial smallholders are invited to these sessions. During the second half of this phase, the strategy will be reviewed. This will be done by having it reviewed by farmer organizations as well as experts within food and nutrition. The KAC students will also be involved within this process to also get their opinion and perspective on parts of the strategy.

#### Phase 4: Deliver, the evaluation phase

During the last phase, the final deliverable will be evaluated and final conclusions and recommendations will be drawn. The roadmap will be finalized and completed.



# Take Aways Chapter 1

1. The Archipelago project, funded by the Netherlands Embassy, aims to improve horticulture in Ghana to increase employment opportunities for Ghanaian youth and achieve goals related to Dutch businesses, Ghanaian economy, climate change, nutrition, and food security.

2. Kwadaso Agricultural College (KAC) is the main stakeholder and partner in the project, offering regular and Archipelago curriculum to teach practical and theoretical horticulture skills. KAC aims to be a center of excellence and bridge the gap between entrepreneurship and farming.

3. Financial security for farmers is crucial, and a go-to-market strategy is necessary to ensure fair prices and create awareness about the high-quality produce from targeted farmers. The design intervention aims to enhance the overall quality, productivity, and success of the horticulture sector in Ghana.

4. The research methodology consists of four main phases: initial research, scoping, design, and evaluation. Desk research, literature review, and interviews with leading organizations are conducted to understand the context. Co-creation sessions, validation with experts and farmers, and involvement of KAC students are part of the design process.

5. The final deliverable will include conclusions, recommendations, and a finalized roadmap for the project.

The next chapter will provide an overview of the literature research and it will present several challenges and opportunities for commercial smallholder farmers.



# 02

## Understanding the context

*This chapter aims to provide an overview of the context of commercial smallholder farmers in Kumasi, Ashanti region, Ghana. The insights are derived from desk research and interviews with individuals working in the field. Firstly, the context will be elaborated upon, describing the characteristics of farming in Kumasi. Secondly, commercial smallholder farmers will be defined and further explored, highlighting the distinctions between semi-urban and urban farmers. Thirdly, the existing farmer organizations will be explained, focusing on their activities, structure, and role in supporting commercial smallholders. Lastly, the current value chain will be examined, drawing conclusions on drivers for change and potential opportunities. By analyzing these aspects, a comprehensive understanding of the context and dynamics surrounding commercial smallholder farmers in Kumasi can be obtained, laying the foundation for the go-to-market strategy and interventions to improve their livelihoods and sustainability.*





## 2.1 Farming in Ghana

An overview will be presented regarding the crops that grow in Ghana, as well as challenges that farmers face in different geographical areas of Ghana. This section is based on literature review as well as interviews with big organizations active in the horticulture field within the context of Ghana.

### Different farming zones in Ghana

The horticulture in Ghana is highly dependent on the six ecological zones that exist there. The zones can be identified as follows: 1) the Sudan Savannah, 2) the Guinea Savannah, 3) the forest Savannah transition, 4) the semi-deciduous rainforest, 5) the high rainforest and the 6) coastal Savannah (Issaka et al., 2017). The ecological zones also decide the amount of annual rainfall and humidity and thus it decides the type of crop that can grow in each zone (PhD student, 2023: Appendix 1.2).

In the Northern part of Ghana, crops like millet and sorghum are often cultivated. In the Southern part, mostly cassava and plantain are cultivated. There are a few crops that grow in multiple ecological zones and they are as follows: yams, maize, beans, cocoyam and sweet potatoes (Arhin, 2023: Appendix 1.8).

### Farming in Kumasi

Due to the ecological zones and the location of cities, the ease of farming and selling produce differs greatly per region. It is vital to understand the differences between Northern and Southern Ghana in order to make a grounded decision on which farmers and which consumers to target.

The infrastructure is relatively bad in the Northern part of Ghana: It is a lot more underdeveloped compared to the Southern part (IFPRI, 2007). The farming itself is easy as the ecological zone is defined as the Guinea Savannah, a hot yet dry climate. This essentially means that it is easy for farmers to grow their crops, but it is hard to actually sell them as their farms tend to be less accessible (Van der Straaten, 2023: Appendix 1.1).

Compared to the North, the infrastructure in the Southern part of Ghana is quite developed, as the 'Golden triangle' is located in the South. The Golden triangle is the triangle formed by the three major cities within Ghana: Cape Coast, Kumasi and Accra. The farming itself is quite hard as the climate is hot and very humid and there are lots of diseases in crops when farming them there. It is mostly a rainforest zone, while the North can be defined more as a Savannah zone (Van der Straaten, 2023: Appendix 1.1). Farming in Kumasi can thus be specified as relatively difficult farming, but with an appropriate infrastructure to sell.



Interview with two farmers in Kumasi





*A commercial smallholder farmer showing his farming tools*

## 2.2 Understanding commercial smallholder farmers

An overview will be given of the challenges and drives for change of commercial smallholder farmers in Ghana. To illustrate the differences between farmers, an analysis is presented on rural and urban smallholders.

### 2.2.1 How can we define commercial smallholders?

Commercial smallholders can be defined as farmers who own land less than 1 acre up to 10 acres (Martey et al., 2012). They are defined as commercial farmers as they are able to not only invest in their farms but also in their non-farming activities, such as their families or communities (Adzawla et al., 2022). This means that these farmers supply to not only their own family, but also to other customers. Usually, these farmers are located near roads or in cities (Nutrition Comp., 2023: Appendix 1.3; Producer, 2023: Appendix 1.9). About 47% of Ghanaian people are employed as farmers, ranging from smallholder farmers to industrial farmers. About 70% of these farmers identify as commercial smallholder farmers (Alidu et al., 2022). Other farmers within Ghana can be identified as industrial farmers, sub-commercial smallholder farmers, medium farmholders and big farmholders (Syngenta, 2009).

The project client has outlined the research context, which revolves around the farmer associations in Kumasi, focusing on

vegetable farmers. A key partner within this project is Holland Greentech. Holland Greentech provides mostly vegetable seeds to their customers, with a focus on tomatoes, hot peppers, cucumbers, bell peppers and lettuce. This means that their customers can also be identified mostly as vegetable farmers. Most of the farmers that have been interviewed grow about 3 to 4 different crops, depending also on their land size.

According to the farmers that have been interviewed, the primary focus of the farmers is farming, which is a full-time occupation, with only a break for church service on Monday mornings. Depending on the farm's size and success, additional workers are hired to share the workload, typically around two to three individuals. In addition to farming, the farmers allocate some time to marketing activities, such as seeking new customers and maintaining existing customer relationships. Relationship maintenance involves direct communication with customers to provide updates on crop progress and anticipated availability. New customers are often acquired through referrals or in-person visits.



### 2.2.2 Difference between rural farmers and urban farmers

The differences between rural commercial smallholder farmers and urban commercial smallholder farmers are relatively large and necessary to be identified to compare the two. Understanding the differences will aid in getting a well-rounded view of horticulture in Ghana. These differences are grounded in interviews conducted with a horticulture organization, a social consultancy and a nutrition based consultancy who all operate in Ghana.

#### Rural farmers

Rural farmers usually farm full-time, which means that their income is also highly dependent on their crop yield (Anobil, 2023: Appendix 1.4). The farmers also likely own the land that they have and the few that do rent the land, rent it on a yearly basis. Land size varies between 1 up to 10 acres, depending on how well off a farmer is or on the land that has been inherited. The farm land does tend to be rather far away from their homes, making it necessary for rural farmers to commute a lot during their working days (Anobil, 2023: Appendix 1.4). Due to their location being further away from the urban areas, market women generally do not come by these farmers to gather vegetables for the local market, but transport is arranged via middle-men: transporters or truck-owners (Kwabena, 2023: Appendix 1.7). The farmers need to take care of the containers or sacks in which the crops are loaded onto the trucks.

Rural smallholders face several challenges. First of all, due to their location they are further away from the urban consumers and they are less connected with them (Anobil, 2023: Appendix 1.4). This also makes it more difficult for them to connect with other farmers, producers and aggregators which is vital for smallholders (Agribusiness Advisor, 2023: Appendix 1.5). Secondly, because of the necessary transport by trucks, the perishability of vegetables needs to be considered (Anobil, 2023: Appendix 1.4; Van der Straaten, 2023: Appendix 1.1). Cultivating crops that are less prone to spoiling is vital in case sufficient income needs to be ensured. Thirdly, being located in rural, more far off places, less other employment opportunities are available nearby (Nutrition Comp., 2023: Appendix 1.3). This might not seem like an important challenge as most rural farmers farm full-time, however, in most cases multiple individuals are involved on the farm. These are often family members or partners. The second generation of families is less likely to be willing to support the farm knee deep (Nutrition Comp., 2023: Appendix 1.3). It is necessary for these farmers to create other employment opportunities within the business of a farm to keep the second generation motivated, excited and committed.



#### Urban farmers

The land they own is often less than 1 acre, generally speaking about 200 square meters, according to Holland Greentech. The land is almost always rented, on a monthly basis (Anobil, 2023: Appendix 1.4). Some farmers can also be identified as squatters. The land usually is relatively close to the farmers, making it an easy commute. Market women have easy access to these farmers and gather the fresh produce directly from the farmers, without any middlemen. The road to market is also relatively short, making perishability less of a barrier compared to rural farmers.

**“The market women come to the farm and they buy directly from the farm. We follow the system and the market women decide the price, but it is a negotiation.”**

Farmer in Kumasi, 2023

When comparing the urban farmers with the rural farmers, the following challenges have been identified. First of all, the farmers farm on such small-scale land, that the income is highly dependent on the type of crop they cultivate (Consultancy firm, 2023: Appendix 1.6). Second of all, the financial insecurity of urban farmers increases as the land they farm on usually is under development. Renting the land monthly makes it easy for developers to send farmers away once the land is needed for other purposes (Anobil, 2023: Appendix 1.4).

#### The targeted farmers

Research will mostly be conducted with the urban and semi-urban farmers who farm within the Ashanti region. These farmers are easily accessible, they farm relatively close by Kwadaso Agricultural College and the big farmer associations of Kumasi are also located within the urban areas of the city, making it an attractive and feasible group to conduct research with.







Focus group research with a farmer organization in Kumasi

### 2.2.3 Farmer Associations

There are three different farmer associations within Kumasi (Anobil, 2023), they are the following:

1. The Peace and Love Vegetable Association
2. The Quality Vegetable Association
3. The Kentikrono Vegetable Association

The farmer associations will be described by insights found from interviews with commercial smallholder farmers who operate in Kumasi.

Farmer associations are groups of farmers who farm relatively close together. In order to join an association, a contract needs to be signed. This contract is an agreement between the farmer and the association about the contribution that needs to be paid. This is a set amount and all farmers within the organization need to pay this in order to stay a member. The contribution could differ between different organizations, but generally speaking it is a rather low amount. The contribution is meant for organizing events like workshops and training for the members. The money that is left within the bank account is used to run the organization, reserved for things like vehicle maintenance and food and refreshments for the guest speakers that are invited for the training. Apart from these overhead costs, some money is saved in order to finance bigger, joint purchases with.

About 6 to 7 times a year, a workshop or training will be organized aiming at improving the farmers' knowledge and practical skills around farming. These workshops are given by experts within the field or horticulture. Sometimes external companies give these workshops and sometimes fellow farmers give them. Topics such as irrigation, greenhouses and good farming practices are discussed.

**“The benefits.. it’s the knowledge. Most of the time, people come to teach us how to maintain this. From the next week, harvesting, workers, health. We have learnt a lot. Packaging also. Now what I am expecting from the association is the market size, it is a big challenge.”**

Farmer in Kumasi, 2023

Figure 2.1 illustrates the organizational structure of the farmer associations. Each farming association is led by a chairperson who oversees various committees within the association. The chairperson also acts as a liaison between the association and individual farmers, informing them about the readiness of their vegetables. The two main committees within the association are the finance committee and the marketing committee. The finance committee handles the association's financial matters, including managing the bank account and ensuring timely payment of dues by all farmers. The marketing committee is responsible for customer management, particularly when the association intends to sell crops collectively. They actively seek out potential customers by making visits and establishing relationships.

In the farming associations, the chair possesses knowledge about the various crops being cultivated by the members. This allows for a diverse range of vegetables to be grown, as the chair is aware of which crops are already being cultivated and which ones are not. Additionally, the chair serves as an extra pair of eyes, notifying the farmers when their vegetables are ready for harvest, providing an extra level of supervision and support.



The associations work very well and are a way of looking after each other and helping other farmers around out. Largely, these associations work based on trust. Trust that each of the members pay their dues and trust that the knowledge and contacts that are being shared within the association are used for a greater good. Even though the basis of these groups can be seen as the contract, Ghana is a country that can be identified as a relationship-based country, rather than a task-based country (Meyer, 2016). This means that relationships form the foundation of trust rather than work-related activities and the same is true for written contracts. Contracts are seen more as guidelines than as literal agreements. Unfortunately, this does sometimes lead to some challenges and difficulties as accountability can be questioned. This especially poses a problem when dues are not paid in time. If this is the case, the farmer will not be thrown out of the association directly, but will have several chances to still pay the dues. If multiple farmers experience problems with paying in time, this has negative consequences for the financial status of the association. Nevertheless, due to the established trust among members, they are generally inclined to avoid causing significant problems for their fellow members, and many issues tend to resolve themselves naturally.

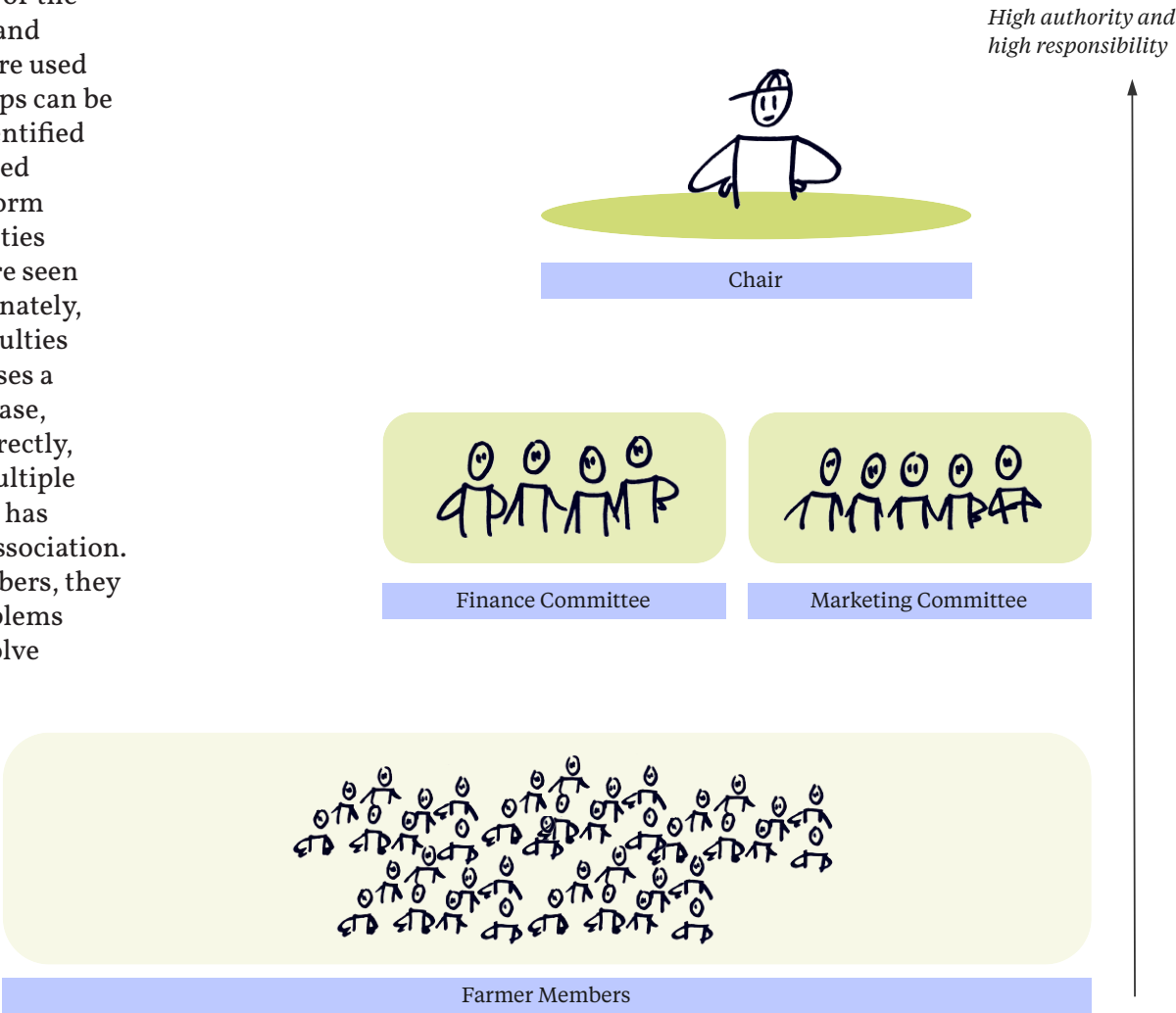


Fig. 2.1: The structure of a farmer organization

### 2.3 The main challenges and drivers for change

#### Challenges faced by Commercial smallholders

According to the different interviews that are conducted with leading companies within the field of horticulture, operating in Ghana, the main challenges that are faced by the commercial smallholder farmers can be identified as follows:

First of all, one major challenge that commercial smallholders face is the amount of land they own (Consultancy firm, 2023: Appendix 1.6). Having access to only 1 up to 10 acres means a lot of these farmers struggle to grow enough crops to generate the necessary income for their families. Furthermore, the smaller land size restricts the scale of farming operations and it limits the variety of crops that can be cultivated, reducing the overall yield and potential revenue. With limited land, farmers may not have the opportunity to diversify their crops or engage in large-scale production, which can be more financially rewarding.

Secondly, next to access to land, access to finance also presents itself as a big challenge (Consultancy firm, 2023: Appendix 1.6). Loans are often not granted by banks, markets that function poorly or unfairly and thus make it harder for smallholders to generate sufficient income and access to better techniques or equipment is only granted to those who can afford them (Hystra, 2015).

**“We don’t get support from the banks so, because our produce, the banks and the financial institutions think that it is highly perishable. So, if you go for a loan, it is very difficult to get the loan. They [other farmers] have been asking and trying that a lot. So, I**

**have been financing my farm with my own personal income that I get from the farm.”**

Lead farmer in Kumasi, 2023

Thirdly, smallholders rarely have competitive advantage towards industrial or big farmholders, as they often lack the knowledge on branding and advertisement of their fresh produce (Branding Wstrategist, 2023: Appendix 1.10), which is crucial for new players who enter the market (Strategist, 2023: Appendix 1.11). The restricted manpower also makes it difficult to allocate time and resources to these activities, compared to big farmholders who usually have the financial means and manpower available to invest in such activities.

Lastly, what will only pose itself as a bigger problem to farmers is climate change. The weather becomes increasingly unpredictable, making it hard for farmers to rely on their current practices (PhD Student, 2023: Appendix 1.2). Smallholder farmers are the most fragile as one bad harvest can mean that all that they own is wiped out (Hystra, 2015).

**“It happened to me that I had a year of bad harvest Weather, climate change, it was too hot. The temperature was around 40 plus. We couldn’t grow, everything bent.”**

Farmer in Kumasi, 2023



### Drivers for chage

Relating to the literature research as well as the interviews with experts, there are a few things identified as essential in order to make smallholders thrive, they are identified as follows:

First of all, offering guidance and training in marketing the cultivated produce (Syngenta, 2019). By offering support and education on marketing strategies, farmers can learn how to promote their produce, identify target markets, and effectively communicate the value of their products to potential customers. This can include teaching them about market research, branding, packaging, and pricing techniques that can help them attract buyers and increase their sales.

Secondly, enabling access to finance for farmers in order to help them invest in their farms, their families and their communities (Consultancy firm, 2023: Appendix 1.6). Access to credit can grant smallholders access to new and modern technologies that are more efficient and produce higher yields. Financial inclusion is proven to be a driver for productivity among smallholder farmers (Peprah et al., 2020). However, with access to credit, farmers can secure funds to purchase high-quality seeds, fertilizers, machinery, and irrigation systems. By leveraging credit, smallholders can upgrade their farming techniques and adopt more efficient and productive methods.

Lastly, training is vital in order to gain understanding on how to use these new technologies effectively and efficiently (Syngenta, 2019; Van der Straaten, 2023: Appendix 1.1). In essence, a holistic solution is crucial to maximize impact and adoption. A solution needs to come with a fitting financing plan as well as the necessary training (Hystra, 2015). If this solution leads to an increase in productivity, access to markets need to be maximized and opportunities to grow farms need to be identified if this leads to an increase in income (Hystra, 2015).



*Crops from a Lead farmer in Kumasi*





An enormous amount of processed foods in a supermarket in Kumasi

## 2.4 Understanding the consumer

Ghana prides itself for the diversity of the dishes that are served in this country. From the starchy staples to the variety in crops from North to South, from the tropical rainforest, to the coastal Savannah region. The Ghanaian consumer is presented in this section aiming at creating a better understanding regarding their dietary preferences, their dietary challenges and their buying behavior.

### 2.4.1 Dietary preferences of Ghanaian consumers

#### The Ghanaian diet

When looking at the diet of Ghanaians, most of their diets consist of starchy staples like cassava, maize, cocoyam, sweet potatoes and yams (Aberman et al., 2022). In the North, about 77% of daily calorie intake consists of these starchy staples (Aberman et al., 2022). In the South, this is about 64%. Higher nutrient foods are eaten in small proportions and this is also one of the reasons why a lot of Ghanaians cope with micronutrient deficiencies (Aberman et al., 2022). Even though Ghanaian diets sometimes lack in variety due to availability, affordability and accessibility, Ghanaian people do prioritize eating different meals every day. “We don’t eat a single food for a long time to avoid losing appetite for it; there are times I prepare banku and other times I pound fufu and other times I cook rice (Aberman et al., 2022).” Female Respondent, Central (south). The food items found to be aspirational are illustrated in figure 2.2. By consuming these types of foods, Ghanaians generally are aiming to move to a higher social class or reach a higher level of success. Appendix 2 presents the daily diets of Ghanaians in terms of their breakfast, lunch and dinner.



Fig. 2.2: Most and least mentioned aspirational foods by Ghanaians

#### Processed foods are upcoming

As the population is growing in Ghana, with an enormous increase within the middle class population, the demand for healthy food is increasing. This demographic change is interestingly influencing the daily diets of Ghanaians as the preference for processed foods is upcoming (Ministerie van Landbouw, 2021). This change is mostly present for the urban consumer, as not only their food preferences are changing, but local producers are also struggling to meet the demand of the urban consumer (Aberman et al., 2022). The rise of obesity as well as other nutrition-related non communicable diseases is alarming and an effort should be made to deliver healthy foods that are less processed and more fresh (Mockshell et al., 2022).

#### Micronutrient deficiencies

Micronutrient deficiencies are caused by the intrinsic nutritional value of a specific type of food as well as the amount consumed of this specific food (Aberman et al., 2022). More than half of the Ghanaian people cope with micronutrient deficiencies (Unicef, 2017). The most common micronutrient deficiencies are: Vitamin A, Vitamin B12, Vitamin C, Vitamin E and iron.



There are four key factors as to why these micronutrient deficiencies continue to exist. First of all, crops are mostly grown for home consumption in rural areas and not so much for sale (Aberman et al., 2022). This makes it often difficult to find a wide variety of crops on the market. Secondly, there are several challenges in terms of transport and thus accessibility of crops and vegetables (Chamberlin, 2012). Thirdly, Due to a seasonal availability, the offer can be relatively similar for each individual season (Monterrosa et al., 2022). Also, some produce is limited to a few months a year (Aberman et al., 2022). Lastly, as food prices continue to skyrocket, it is expected that the number of micronutrient deficiencies is only going to increase (Aberman et al., 2022).

The presence of micronutrient deficiencies presents a significant opportunity for commercial smallholders to address through their produce. By implementing appropriate marketing strategies and elevating the national horticulture sector, commercial smallholders can create incentives for customers to embrace a healthier and more diverse diet.

### Cultural traditions

When reviewing cultural traditions that are present in Ghanaian households, it is found that during times of food insecurity, intra-household food allocation is less favorable to women, who compromise on quantity and diversity of food to ensure sufficient meals for their husbands and children (Dujin & Zakaria, 2015).

The reason for doing so is largely based on love for the children. However, another reason is also that children tend to cope less well with hunger than adults (Dujin & Zakaria, 2015). They can fall ill more easily and cry when they're hungry. They also have a hard time falling asleep when they don't have enough to eat (Aberman et al., 2022).

In some households, it is not the children who go first, but the husbands. They will be served animal-based proteins first as a sign of respect (Aberman et al., 2022).

**“We will share the food small-small but if it is still not enough, we give all the food to the children and then we-the adults-will just get some bread and eat... Because when a child doesn't eat she will cry and worry you and she will not even be able to sleep but being an adult if you don't eat you can still sleep.”**

(Aberman et al., 2022)

Male respondent, Ashanti (South)

In few Ghanaian households, the women are actively involved in decision making regarding nutrition and the nutritional status of both the women as well as the children has been found to be better compared to the households in which women do not participate in nutrition-based decisions (Dujin & Zakaria, 2015). The men are usually the ones who decide what to eat for dinner, the women will do the groceries and prepare the meals, but including the women within the decision-making process will be beneficial for the entire household (Arhin, 2023: Appendix 1.8). Who really is in charge per household depends highly on family traditions, age and also location, rural or urban. Figure 2.3 displays the family hierarchy in Ghanaian households and a difference is made between urban and rural households. Within real households, the father is the main decision maker, followed by the mother, the eldest son, the grandparents and lastly, the children (Strategist, 2023: Appendix 1.11). In many urban households, the father and the mother together are the main decision makers (Strategist, 2023: Appendix 1.11).



Home cooked banku: a staple in the Ghanaian cuisine





Packaged herbs advertised with “Proudly Produce of Ghana”

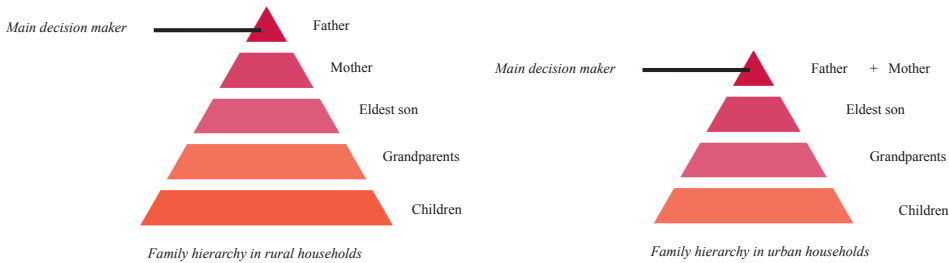


Fig. 2.3 Hierarchy in Ghanaian households: rural versus urban

2.4.2 Buying behavior of Ghanaian consumers

Values that influence buying behavior

There are certain food attributes that influence the buying behavior of Ghanaian consumers. The five variables that have the biggest impact on buying behavior are as follows: weight of the produce, the perceived health benefit of the produce, the perceived safety of the produce, the affordability and the country of origin (Opoku & Akorli, 2009). The country of origin is very important to Ghanaians. Country of origin is even found to be more important than the price of a product (Opoku & Akorli, 2009). The country of origin is of high importance to Ghanaians as they prefer to buy foreign brands when it comes to food items. According to Opoku and Akorli (2009), ‘Made in Ghana’ was the least preferred label to Ghanaians. The five mentioned attributes have a positive effect on buying behavior if the produce is perceived to be scoring positive on the variables (Antwi & Matsui, 2018). These values should be taken into account when designing a go-to-market strategy that should influence the Ghanaian consumer into buying a new product.

Home grown or bought fresh produce?

Not all of the fresh produce in Ghana is being bought from local markets, supermarkets or online stores. Both the rural as well as the urban households grow some types of crop at home (Aberman et al., 2022). The crops that are not being grown at home will be bought elsewhere. The local marketplace is the most common place to buy fresh produce from (University of Ghana et al., 2016). Reasons for this are availability, proximity and affordability of fresh produce. Oftentimes, the variety is also biggest in local markets compared to supermarkets or online marketplaces (University of Ghana et al., 2016). The difference between the percentage of fresh produce that is home grown and the percentage that is bought elsewhere is shown in figure 2.4.

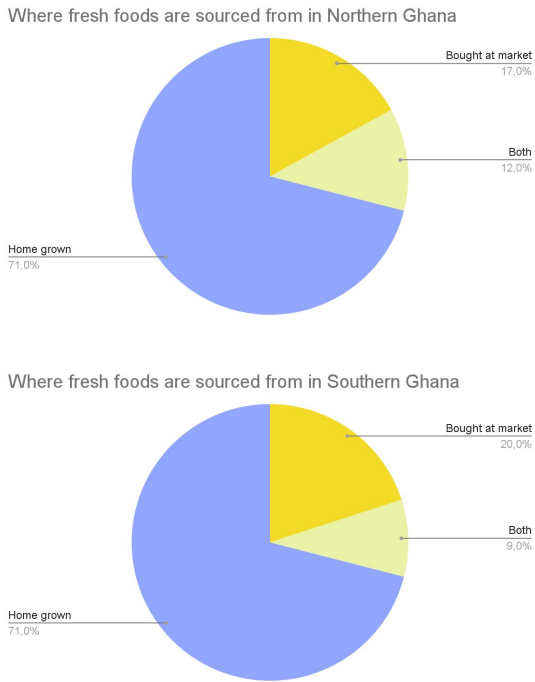


Fig. 2.4 percentage of homw grown versus bought producein Ghana



Households will consider selling their produce if they grow more than is being consumed (Aberman et al., 2022). However, having a fridge or having access to cooling facilities plays a role as those who do tend to be more likely to also sell their produce (Aberman et al., 2022).

**“Often we sell what we have more of; other times, we look at how much of the crop we need ourselves and then sell some of it.”**

(Aberman et al., 2022)

Female respondent, Ashanti (South)

According to Ghana Statistical Service (2017), around 29.9% own or operate a farm in the rural Ashanti area and about 20.4% in the urban Ashanti area, where Kumasi is located, of over 1.6 million households. Compared to the other areas in Ghana the percentage of people owning or operating a farm is lowest. It is to be expected that a relatively high percentage of fresh produce is bought at the market compared to the home grown produce (Ghana Statistical Service, 2017).

#### **Time pacing of buying fresh produce**

According to Aberman et al. (2022), the time that fresh produce is being bought depends highly on the location of the consumer. There is a difference between the urban and the rural consumer. The urban consumer is most likely to buy fresh produce right after the harvest time. Due to a high volume of fresh produce, prices tend to be low and fresh and healthy produce becomes more affordable. Contradictory, the rural consumer is most likely to buy their fresh produce right before the harvest. The

rural consumer grows more of the consumed fresh produce at home and has high chances of running out of stored produce right before harvest time. The difference is important to note when it comes to the time pacing of a go-to-market strategy.

#### **2.4.3 Conclusion**

In conclusion, when farmers consider selling their produce to consumers, it is important to consider several factors. Firstly, dietary preferences indicate that vegetables and fruits are often consumed in small portions, although there has been an increase in demand after the COVID-19 pandemic as consumers prioritize healthier diets. Micronutrient deficiencies highlight the necessity of incorporating nutritious vegetables into meals. However, the reality is that vegetables are still often seen as a side dish rather than a main component of meals. To tap into the desire for responsible and healthy eating, farmers can utilize appropriate marketing techniques to make vegetables more aspirational. These strategies should consider the decision-makers in households and target the times when customers actively seek fresh vegetables. By aligning marketing efforts with these factors, farmers can effectively promote the consumption of their healthy vegetables and cater to the increasing demand for nutritious options.

Overall, by understanding consumer preferences, addressing dietary needs, and implementing targeted marketing strategies, farmers can successfully encourage greater consumption of vegetables and contribute to a healthier and more responsible food culture.



A Ghanaian garden overflowing with later vegetables for home consumption



Take Aways Chapter 2

- 1. The horticulture in Ghana is influenced by the six ecological zones, which determine the type of crops that can be grown in each zone based on annual rainfall and humidity.
- 2. Farming in the Northern part is easier due to the favorable climate, but the underdeveloped infrastructure makes it challenging to sell produce. In contrast, the Southern part has better infrastructure but faces difficulties due to the hot and humid climate and crop diseases.
- 3. Commercial smallholder farmers, owning land less than 1 acre up to 10 acres, play a significant role in Ghana’s agriculture sector. They invest in their farms and supply to their families as well as other customers.
- 4. Rural commercial smallholder farmers face challenges such as limited access to urban consumers and difficulties in connecting with other farmers and aggregators. They also deal with perishability concerns and the need to create additional employment opportunities for the second generation.
- 5. Urban commercial smallholder farmers farm on smaller plots of land, often rented on a monthly basis. They face income dependency on specific crops and the insecurity of land tenure due to ongoing development.
- 6 Farmer associations, such as the Peace and Love Vegetable Association, Quality Vegetable Association, and Kentikrono Vegetable Association, play a significant role in organizing workshops, training, and collective marketing activities for farmers in Kumasi.

- 7. Challenges faced by commercial smallholders include limited land size, lack of access to finance, limited knowledge in branding and advertisement, and vulnerability to climate change.
- 8. To help smallholders thrive, access to finance, knowledge sharing on branding and marketing, and adaptation to climate change are essential.

The next chapter will present the setup for the field research.





# 03 Field Approach

*This chapter provides an overview of the approach used in the field research conducted in Kumasi, Ghana. It begins by discussing the qualitative research setup, including the interview guides, data collection methods, and the researcher's position within the field. Next, it outlines the data analysis and synthesis process, highlighting the various phases involved in coding the data. The chapter aims to demonstrate how the connection between the initial literature research, expert interviews, and the real-world context is made.*



### 3.1 Qualitative research

This section provides a description of the set-up of the qualitative research. It covers various aspects, including the research setup itself, the interview guides used, the methods employed for data collection, the position of the researcher within the study, and the approach to data analysis and synthesis.

#### 3.1.1 Qualitative research setup

The unit of analysis is spread over four different stakeholders within the current and aspired go-to-market strategy for Ghanaian smallholder farmers in and around Kumasi, following the coded transcripts. The interviewees have been selected using the stratified random sampling method, due to the high number of farmers in Ghana who all have different levels of education, practical and theoretical knowledge. The four different groups of stakeholders who have been targeted are as follows. First of all, 7 different farmers within Kumasi have been interviewed. The farmers who were targeted for this research were farmers who are either Holland Greentech customers or farmers who are alumni of Kwadaso Agricultural College or the Archipelago program, offered by KAC. Next to these individual semi-structured interviews, one other focus group was conducted with 9 farmers of which 4 were actively involved in the conversation. An interpreter was also present as the farmers in this focus group only spoke Twi, thus a translator was vital. Next to the farmers, 3 staff members from KAC have been interviewed in order to understand what the current curriculum entails; in what way the students are educated; and what the future plans of the college look like and in what way alumni

are involved within the curriculum. For these interviews, staff members were elected who were lecturers and who involved agribusiness in one way in their educational program. Thirdly, three different supermarket chains have been interviewed. The three major supermarket chains were targeted for this part in order to understand several aspects of going to market with the supermarkets, such as packaging, advertisement and transport. Within the supermarkets, the managers were targeted as they are in charge of supplies. Lastly, the hotels and restaurants were targeted. Five different locations have been visited, ranging from medium to high priced. The managers of these business establishments were interviewed regarding supply, transport and their future vision. All of the interviews have been conducted in the workspace of the interviewee, meaning either at the supermarket, at the hotel restaurant, at KAC or at the farm. During each of these interviews, a Holland Greentech employee assisted to find the location and supported when a language barrier existed between the interviewee and the interviewer. This employee also knew the farmers, either from previous farm visits or from previous phone calls. The employee was not familiar with the other interviewees from the 3 stakeholder categories. Next to the Holland Greentech employee, another Delft University of Technology master student joined the individual sessions to also conduct research with the interviewees.



The interview setup: Interview with a commercial smallholder farmer



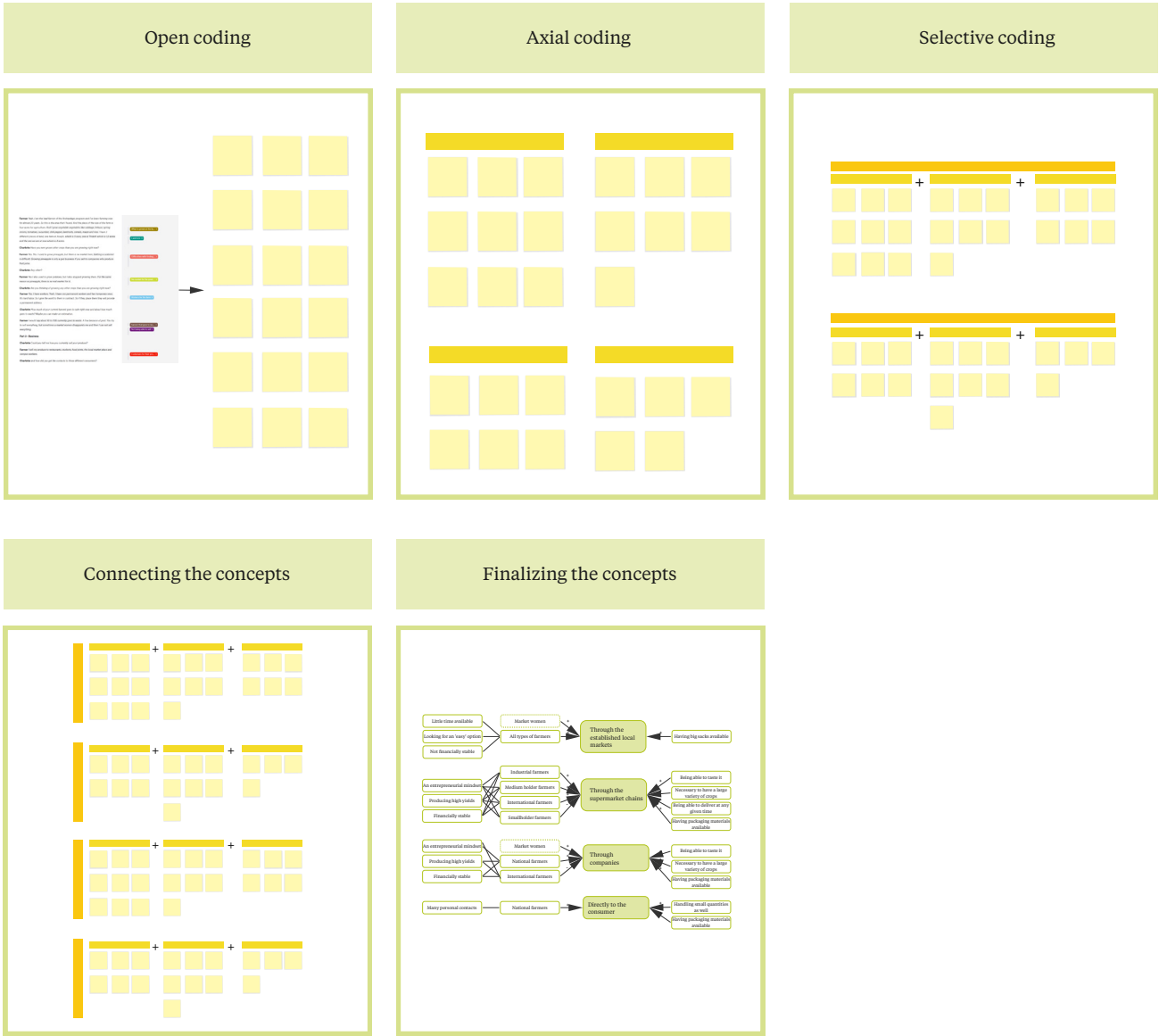


Fig. 3.1: Visualized overview of different coding steps

3.1.2. Interview Guides

The interviews have been conducted with the aid of semi-structured interview guides. The interview guides can be found in appendix 3. The questions were focused on getting a deep understanding of the process of getting your produce to market, the challenges that arise and the opportunities that can be created in order to have both farmers and customers benefit from design interventions. For each of the different groups of stakeholders, a different interview guide has been created. Each interview guide consists of several categories with sub-questions. Throughout the research, several questions that seemed relevant were added to the guide and several irrelevant questions have been left out.

3.1.3 Data collection

In order to fully understand the opportunities for a go-to-market strategy, both literature research and interviews with the aforementioned stakeholders are conducted. All the interviews have been recorded and meticulously transcribed. The transcripts are transcribed using the verbatim transcription method, which should minimize bias and aims at showing the context in as much detail as possible. This is especially useful as the context is unknown to the interviewer and it aids in comprehending it. The transcripts can be found in appendix 3. Next to the recording, notes have been taken during each interview by not only the interviewer, but also by the accompanying Master student from the Delft University of Technology. Moreover, several pictures have been taken before, during and after each interview in order to capture what words can not.

3.1.4 The position of the interviewer in the field

The interviewer did not have a prior relationship with any of the consulted interviewees. The farmers have been contacted by Holland Greentech, the Kwadaso Agricultural staff members have been contacted by the head of department, the hotels and restaurants were paid a random visit and the same is true about the supermarket chains.

3.2 Data Analysis and Synthesis

In order to best compare and analyze the conducted interviews, the Grounded Theory Method (GTM) is used. The direction and the contents of the go-to-market strategy are being built upon the interviews and the literature research. In order to minimize bias, increase validity and enable transparency of the data, qualitative coding will be done, found in appendix 4. The method that will be used is inductive coding, or ground up coding, which aids in exploring and coming up with new ideas and concepts. Qualitative coding will be done in five rounds, also visualized in figure 3.1:

1. Open coding: each transcript will be coded meticulously.
2. Axial coding: the qualitative codes that are derived from the first round will be divided into categories and subcodes
3. Selective coding: the categories that have been made in the previous will be further divided into several concepts.
4. Connecting the concepts: the concepts that have been drafted will be connected with each other in order to reveal patterns,
5. Finalizing the patterns: during the last phase, the patterns will be used in order to create the final narrative.

This is not a linear process, each phase will be revisited several times throughout the process, in order to ensure maximum impact.



Take Aways Chapter 3

1. Research focuses on Ghanaian smallholder farmers and involves four stakeholder groups: farmers, KAC staff, supermarket chains, and hotels/restaurants. Stratified sampling used for diverse interviewee selection.

2. Semi-structured interview guides tailored to each stakeholder group.

3. Data collected through recordings, verbatim transcriptions, notes, and pictures.

4. Grounded Theory Method (GTM) used for iterative qualitative coding in five rounds.

The five steps of the coding rounds are as follows:

- 1. Open coding: Meticulously coding each transcript.
- 2. Axial coding: Dividing qualitative codes from the first round into categories and subcodes.
- 3. Selective coding: Further dividing the categories into several concepts.
- 4. Connecting the concepts: Linking the drafted concepts together to reveal patterns.
- 5. Finalizing the patterns: Using the patterns to create the final narrative.

The next chapter will present the results of the qualitative research.



# 04

## Research Results

*This chapter provides an overview of the four different roads to market that have been identified through the coding of the interview transcripts. Each of these roads to market will be described in detail to enhance understanding of the challenges and opportunities associated with them. Quotes from the interviews will be included to illustrate these roads to market more effectively. Additionally, pictures from the field research will be included to provide visual context and aid in understanding the various market channels that are being targeted. The main objective of this chapter is to present the key findings from the field research.*





4.1 Understanding the current different roads to market for commercial smallholders

This section explains the opportunities that the different farmers have regarding selling their produce, derived from the different interviews and the literature research. Four different roads to market will be explained as well as the individual challenges that arise. The four roads to market have been deducted from the connected concepts from the transcripts with the commercial smallholder farmers, the KAC staff members, the supermarket chains as well as the companies. The categories are grouped together based on the type of information they provide and together they form the concepts that are seen as the different roads to market. After the four roads to markets are introduced, they will be individually discussed. What is important is that export is excluded from the roads to market as this is not in line with the requirements that were given by the client and produce for export is generally done by farmers who only farm for export and not for local consumption, thus the targeted farmers would not fit.

4.1.1 The four roads to market

The connected concepts seek to understand the challenges and difficulties faced by farmers to sell their produce in different ways. Next to highlighting the challenges, the goal of these four concepts is to easily compare them with each other and to make a grounded decision on which strategy to dive in deeper and explore together with several farmers and alumni during the creative sessions and the alumni event. the four different concepts are visualized in figure 4.1.

The first strategy is the one where the farmers sell through the

established local markets. This is not only the most common strategy, it is also the most accessible and available strategy to the farmers. Incentives to sell through the local market are not having much time available; looking for a relatively easy and accessible option and not being completely financially stable. The ones who make mostly use of this strategy are the market women as well as all types of farmers. What needs to be noted here is that the market women work together with the farmers, this means that the market women will only serve as a middlemen and will not be the ones who are actually growing and harvesting the crops. In order to be able to sell through the local market, the farmer needs to have either sacks or wooden crates available.

The second strategy is to sell through the big supermarket chains that exist within Ghana. An incentive for this strategy is an entrepreneurial mindset that is obtained by the farmers; being able to produce high yields; and being financially stable. For this strategy, mostly industrial farmers would be suitable as well as medium holder farmers and international farmers. The smallholder farmers are often not the ones who work together with the supermarket due to the fact that they are often not financially stable. The necessary resources are identified as follows: the supermarket needs to be able to taste the produce before a partnership is formed; a large variety of crops is necessary; being able to deliver crops at any given time is key and lastly, having packaging materials for the produce is a must as the responsibility for packaging lies with the farmer.

Thirdly, the farmers could sell through companies. Companies can be identified as hotels, restaurants or offices. The incentives for selling through companies are similar to the ones for supermarkets, namely the entrepreneurial mindset, being able to produce high yield and being financially stable. Ghanaian farmers often work quite well with companies, in comparison to

international farmers who simply lack the contacts and costs increase greatly when transport costs are added. Market women also work with the companies, but again do not cultivate their own crops, they simply sell what they buy from the farmers. The necessary resources for this road to market are that the companies need to be able to taste the produce before they want to buy; that the farmer needs to grow a large variety of crops and that packaging material needs to be available. Again, the responsibility lies with the farmer.

The fourth and last strategy is to sell directly to consumers. This strategy is, just like selling through the established local markets, a relatively easy way to sell. The incentive for this strategy is to have a lot of personal contacts who are interested in buying from you. These personal contacts can be defined as friends and family members. Most Ghanaian farmers do sell to a few of their friends or family members. Packaging materials should be available for these sales, though they are not always a must. The farmer does need to be able to handle small quantities instead of just relatively bigger quantities.

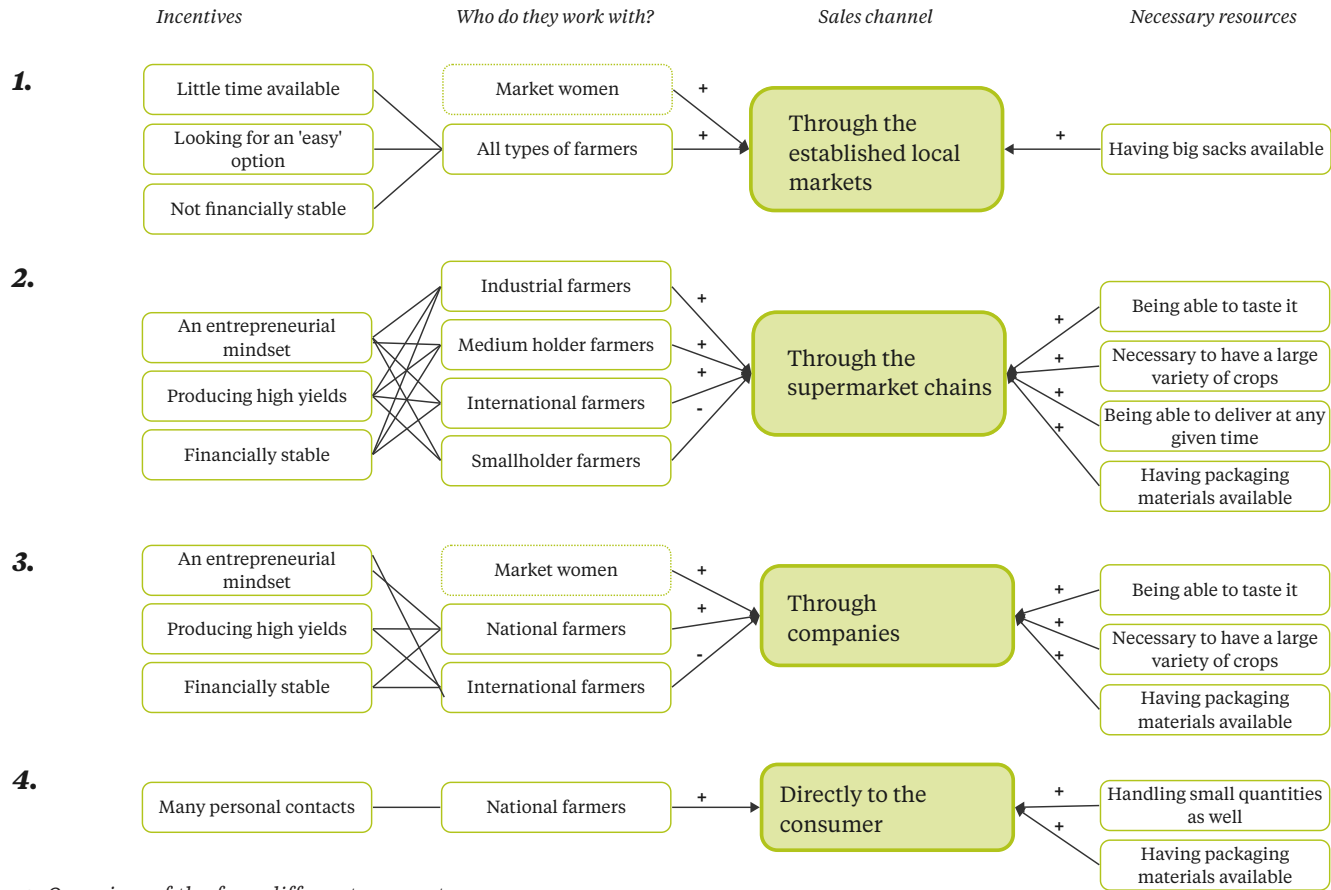


Fig. 4.1: Overview of the four different concepts



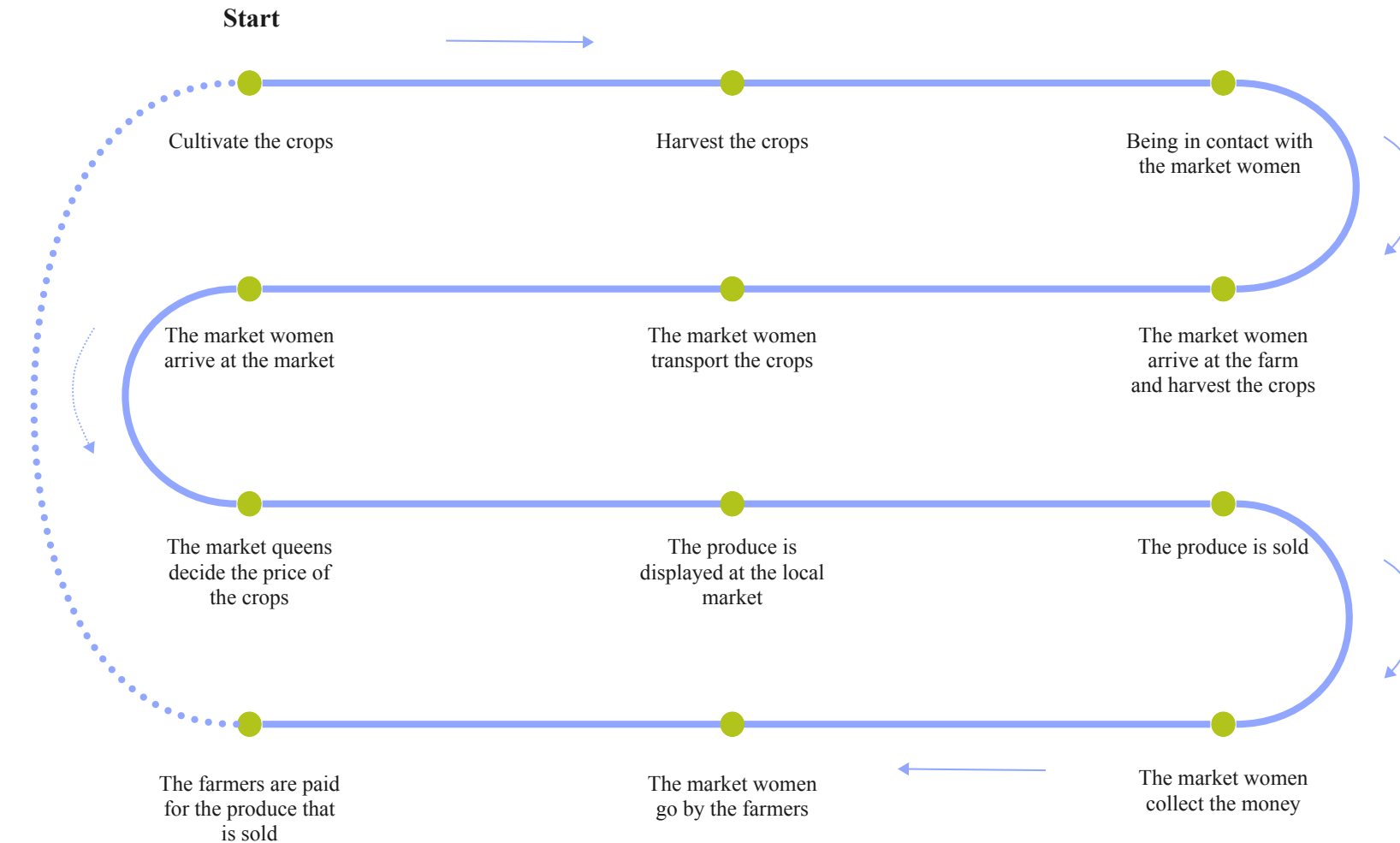


Fig. 4.2: Value chain of vegetable selling through local markets

## 4.2 Discussing the individual roads to market

This section goes into further detail regarding the four aforementioned strategies of selling your produce. Each strategy will be discussed in order to make a grounded decision on which strategy to obtain. Insights from the data are also used to understand the categories thoroughly.

### 4.2.1 Selling through the established local markets

The first strategy is to sell your produce through the established local markets, visualized in figure 4.2. According to Wageningen UR (2016), about 70% of the produced fresh vegetables are being sold at the established local markets, which is most of the trade. The local fresh markets are the easiest way for farmers to sell their vegetables to. The farmers will seek contact with market women. Usually, contacts are shared between farmers and new farmers are relatively easily connected with market women in their neighborhood. The market women simply contact the farmers and they come by the farms themselves to pick up the vegetables that they ordered. Depending on the agreements that have been made, the produce is either harvested by the farmer prior to the market woman visit, or by the market woman when the farm is visited. There is always a risk that the market woman does not show up or is too late, leaving the produce to perish, therefore it might be advisable for the farmer to have the market woman harvest the produce. On the other hand, harvesting also takes time thus market women are not always willing to do this themselves.

After the crops are harvested and put in sacks, the market

woman and the farmer negotiate about the price and usually, they come to a compromise. The produce is being sold in credit. The market woman will transport them to the local market. When they arrive at the local market, the market queen decides the price of the produce. The produce is in turn sold by the market stall holders. When the produce is sold, the market women will get the money for the produce and will return to the farm to pay the amount of produce that is sold.

There are several challenges that farmers face when this strategy is used. First of all, the farmers in general are not a fan of the credit system, as investments need to be made by the farmers. Most farmers are not financially secure, thus the credit system brings extra risk and stress to these farmers. Moreover, the farmers only get paid once the produce is sold. During the dry season they are almost assured of an income, but during the rainy season, when produce is in overload, they risk not being able to sell everything they offer to the market woman. Furthermore, the market women do not always obey the agreements in the contract and oftentimes show up late to the farm or do not show up at all. Most commercial smallholders do not possess any storage or cooling space which leaves the produce to rot.

Also, when the farmers sell through the local market, their produce is not branded. The produce will be sold in big baskets which means that the consumer has no idea where the produce comes from and the farmer has no chance of advertising their farm as well as their products.

Lastly, the local markets do not always adhere to the hygienic





A crowded market in Kumasi



Some markets also sell dry goods



4.2.2 Selling through the supermarket chains

The second strategy is to sell through the major supermarket chains that exist in Ghana, visualized in figure 4.3. Where most of the local people visit the local markets for their vegetable groceries, only few locals actually visit the supermarket chains for vegetables. Especially in Kumasi, one farmer (2023) mentioned the following regarding whether this farmer would like to sell to supermarkets:

*“We are preparing to visit the Shoprite and Melcom. We are registered, we have the green label, we have all these things. We almost have everything so we will prepare and visit them. Last time they went, I was not there, they said people in Kumasi like buying fruit on the market. the most of the vegetables they put in the supermarket, it will spoil, the market is not big.”*

The supermarkets mostly cater to the MoP or the ToP Ghanaians as well as the expats and international people living in Ghana. Unlike the local markets, it is a lot more difficult to actually sell to the supermarkets. A contract is necessary and unlike the contract that is drawn between the market women and the farmers, this contract has rules and regulations regarding the weight of the produce, the price and the frequency of the delivery. One other big difference is that the farmers will be paid monthly, rather than on credit. This ensures financial security, but this also means that the pressure is higher on farmers to deliver the requested produce. In future times, when climate change will pose an even greater challenge, this will make it increasingly difficult to grow the crops at the given times. The

contacts with the supermarket are made when the farmer visits the supermarket. The supermarkets rarely go actively looking for new suppliers, they rather have the farmers coming by to showcase their farm and their produce. This could take up a lot of time and as farmers need to work full-time, this is often a hurdle for them.

The challenges that arise when the farmer wants to sell to supermarkets are as follows. First of all, it is very difficult to start selling to the supermarkets. Most supermarket chains only work with few local farmers and the center of trade is located in Accra, not in Kumasi. This means that most produce will be bought from farmers who operate around Accra. Furthermore, the farmer needs to be able to transport the produce themselves as this is the responsibility of the farmer. The supermarkets never pick up the produce from the farmer. The same is true regarding packaging. The supermarkets only sell fruits and vegetables that are already packaged, with an exemption from grapes as these come in large quantities. Another big challenge is that the farmers need to deliver weekly, even when the harvest is bad. This puts extra pressure on the farmers, especially during a year of a shorter period or an earlier or belated period of the rainy season. Lastly, what is probably the biggest challenge, is that supermarkets prefer to work with farmers who farm a large variety of crops. They want to refrain from having to contact many different farmers to be able to supply their stores with all the necessary produce. Supplying to a supermarket would then ask for the farmers to either have a big farming area or to sell together with other farmers to ensure a large variety and increase the chance to deliver on the requested days and time.

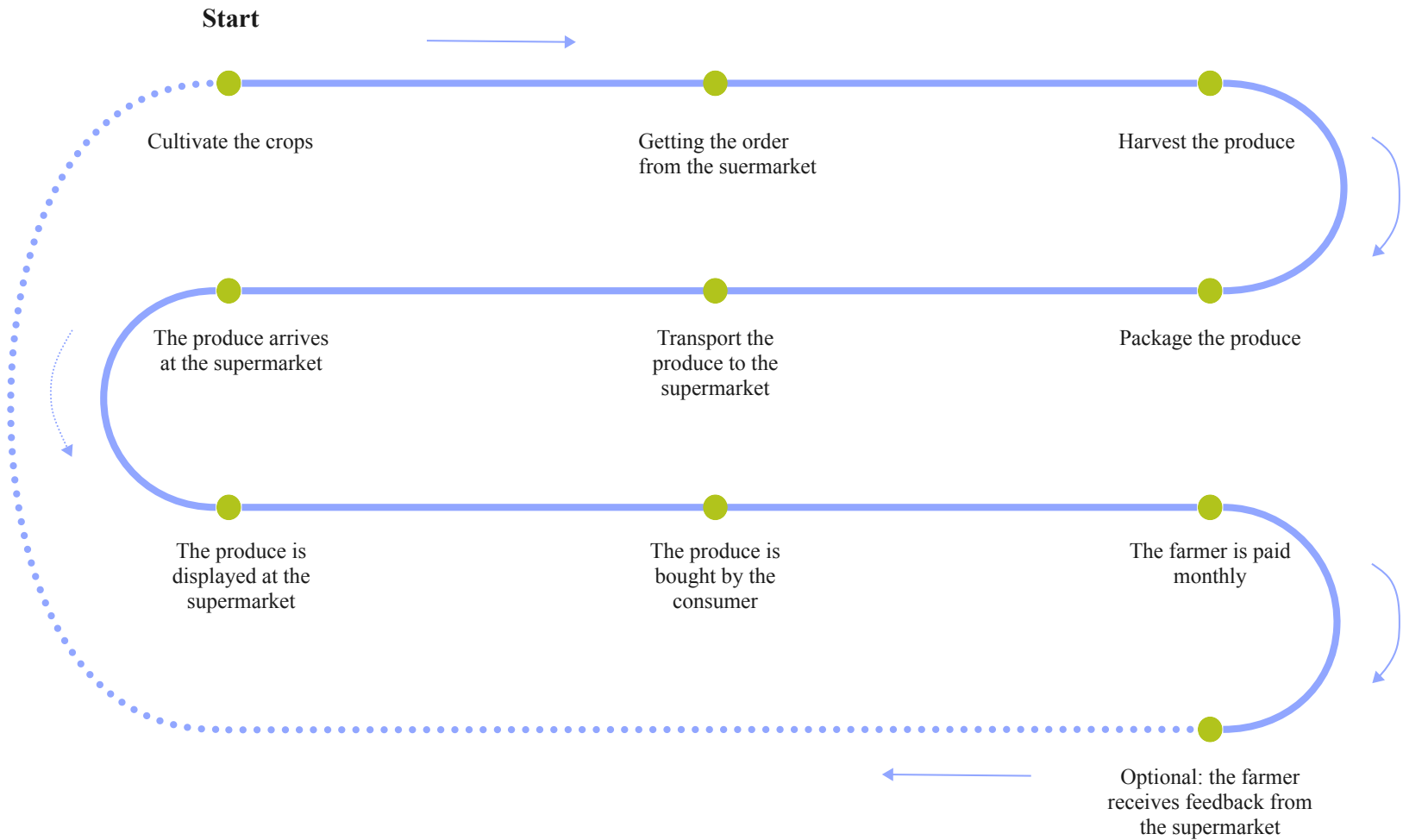


Fig. 4.3: Value chain of vegetable selling through supermarkets





Cleaning and packing vegetables for a supermarket



A supermarket chain advertising with local products



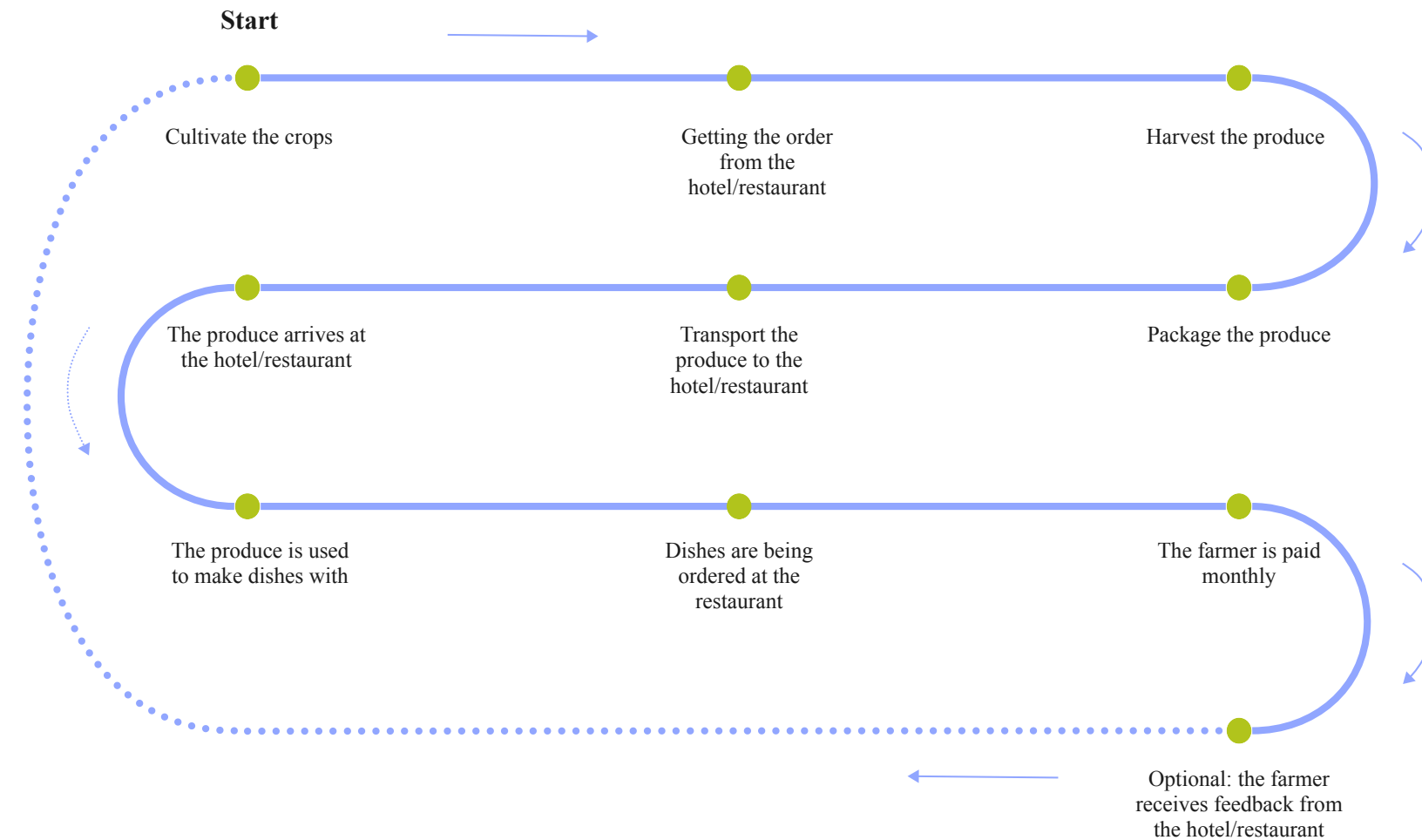


Fig. 4.3: Value chain of vegetable selling through hotels or restaurants

### 4.2.3 Selling through hotels and restaurants

The third strategy revolves around selling your produce to companies, hotels and restaurants to be precise, visualized in figure 4.4. As the hospitality industry is rapidly growing in Ghana and an increasing number of both tourists, interns and expats visit the Ghanaian cities like Kumasi, the number of accommodations is growing immensely Group (Ministry of Tourism, Arts and Culture, 2022). There is a great demand for accommodations that suit not only the needs and demands of the incoming internationals and the Ghanaians who are defined as MoP or ToP, but that also feel like authentic experiences (Oxford Business Group, 2018). Due to this rapidly growing demand for hotels and restaurants, the demand for produce is also growing (Mordor Intelligence, 2022). The target audience for the restaurants and the hotels that have been interviewed are MoP and ToP Ghanaians as well as international visitors. The restaurants and hotels that have been visited are medium to high priced with prices ranging from 100 to 500 cedis a night and 20 to 100 cedis a dish.

If farmers are looking for hotels and restaurants to work with, they first need to contact the locations. Just like the supermarkets, hotels and restaurants rarely go out to connect with farmers around and they expect the farmers to come to them. In rare occasions when they do visit farms, it is because a mutual contact recommended the farmer, thus, word of mouth advertising is important.

Not only do the restaurants work with farmers directly, they also work together with the market women who, again, serve as middlemen. Some restaurants prefer working with the market women:

**“What we do, the chef goes to the market and they get all the produce and they bring it back to the hotel. (...) it is convenient”**

Medium priced hotel in Kumasi, 2023

while others long to work together with the farmers directly

**“We are always looking for better and more efficient ways of doing business, so any opportunity, we are open”**

Medium priced hotel in Kumasi, 2023

Hotels and restaurants often also require a signed contract if a farmer wants to work together. The produce is used for the dishes that are present on the menu and oftentimes the menu changes several times a year. This means that the farmer will not supply the same vegetables all year round to these locations. However, as many of the targeted farmers practice crop rotation, rarely it happens that the same vegetables grow all year round. Of course, there are some staple ingredients within the Ghanaian kitchen that will be demanded yearly, like tomatoes and onions.

The main challenges that arise are as follows. First of all, one major challenge is actually getting in contact with these locations. The restaurants and hotels might be further away from the farms, which makes it a hurdle for farmers to go out and go by the different hospitality places. Secondly, just like the case with the supermarkets, the farmers are responsible for the transport of the produce. Packaging is not necessary the same way as with supermarkets. Another challenge is that restaurants and hotels prefer to work with farmers who have large varieties of crops and who are able to deliver at any given time. One hotel manager mentioned (2023):

**“Yeah, most of the time they [the farmers] give us everything we need, sometimes also we don’t get it at all... All that we need.. they say, we’re sorry we don’t have this package. Then you need to contact someone else.”**





A proud restaurant owner shows a fresh watermelon



A high-priced restaurant in central Kumasi, serving Ghanaian and continental foods



4.2.4. Selling directly to consumers

The fourth and last way of selling your produce is directly to the consumer, visualized in figure 4.5. Logistically, this can be seen as an easy option, as the customers are usually family members or friends of the farmer. This makes it easy to contact them and make agreements together. Almost every farmer sells their produce to at least a few family members and friends. If a farmer wants to sell directly to a consumer, either the farmer is contacted by the consumer or the farmer reaches out to the consumer. Many farmers have whatsapp groups with their consumers in which they can easily advertise their produce. Pictures and descriptions will be sent in this group as well as when it is time to harvest. In this way, farmers can easily stay in touch with their customers,

There are two ways in which these sales take place. Firstly, the consumer can come by the farm in person to discuss and negotiate the price. With this way, transportation is not necessary from the farmer's side. Secondly, the farmer could get phone calls from the customer making a request. Farmers could then transport the produce to the customers directly, rather than having them visit the farm. When this happens, it depends on the resources of the farmer whether the farmer will transport it themselves, or whether the farmer will ask someone else to transport it.

One challenge that arises is the one of trust. When a customer makes a request, the farmer should and will trust that the customer will show up to the farm to pick up the produce and pay for it. As the customers are most of the time friends or family members, a relationship is already established and thus, the customer will be less likely to not show up or to not pay. In the case that this does happen, a feud could start. Secondly, if the customer asks for a home delivery and the farmer is not in possession of a car or a delivery van, there are additional costs for a delivery person. It also requires extra time from the farmer to set this up or to go by themselves.

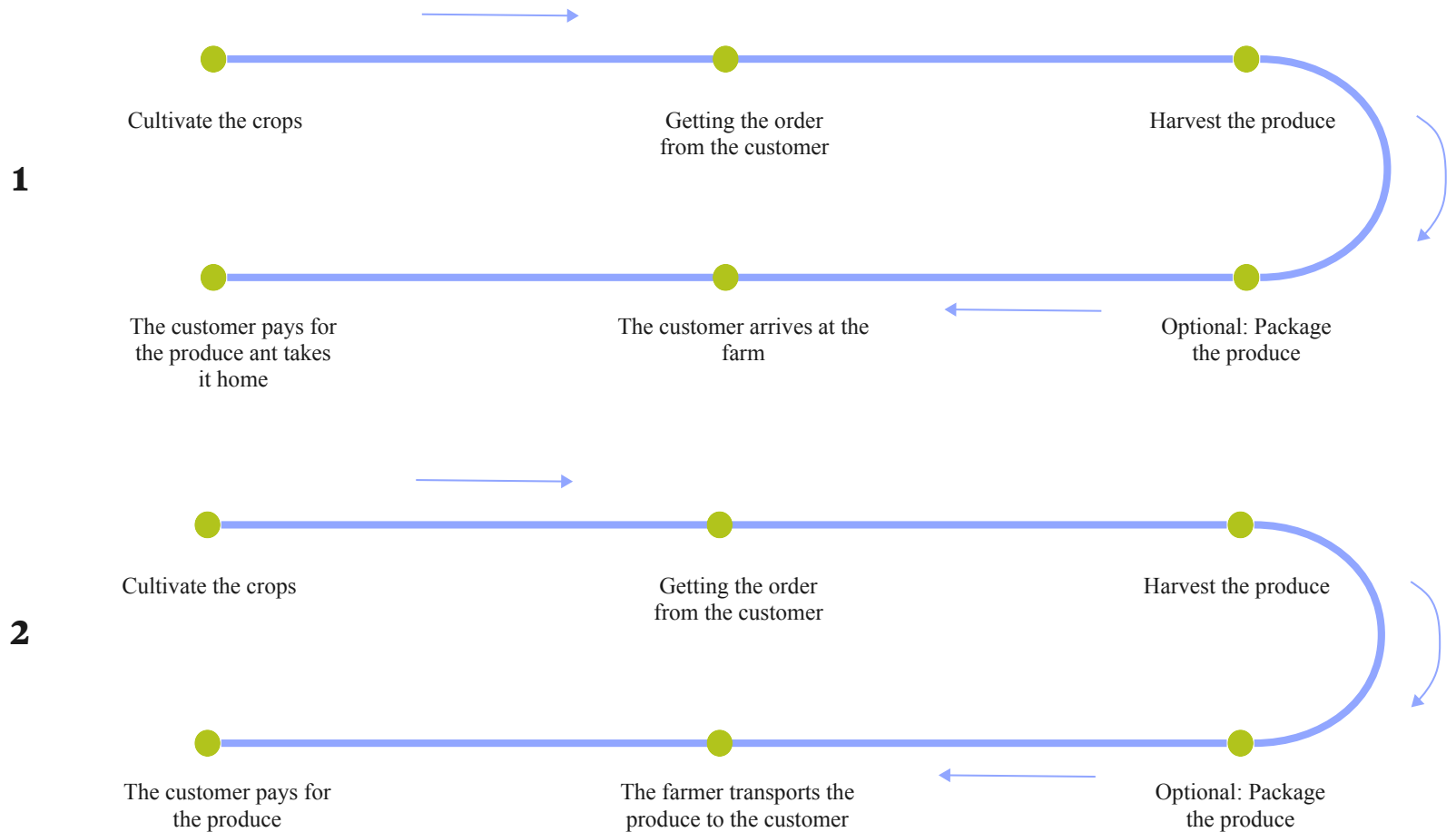


Fig. 4.5: Value chain of vegetable selling through consumers directly





A household in semi-urban Kumasi

### 4.3 Conclusion

The chosen go-to-market direction for the farmer organizations is to focus on supplying vegetables to restaurants and hotels. This decision is based on several factors that make it a feasible, viable, and desirable strategy. The reasons for selecting this road-to-market are as follows:

**1. Market Demand:** Restaurants and hotels have a consistent and steady demand for fresh produce, making them an attractive customer base for the farmer organizations. The growing tourism industry and the increasing number of local and international visitors to Ghana create a favorable market opportunity for supplying vegetables to restaurants and hotels. Working with restaurants and hotels also allows the farmer organizations to collaborate with multiple customers within a single channel.

**2. Product Variety:** Restaurants and hotels typically require a diverse range of vegetables to meet their culinary needs and provide menu variety to their customers. By collaborating with the farmer organizations, restaurants can access a wide selection of locally grown, high-quality vegetables, which can address their challenge of sourcing a large variety of produce.

**3. Relationship Building:** Engaging with restaurants and hotels directly enables the farmer organizations to establish personal relationships and develop a network of customers. This can lead to stronger partnerships, increased customer loyalty, and potential long-term collaborations.

**4. Branding and Market Positioning:** Supplying vegetables to restaurants and hotels offers an opportunity for the farmer organizations to enhance their market positioning and their brand image. By consistently delivering high-quality produce and building a reputation for reliability, the farmer organizations can differentiate themselves in the market and attract more customers.

By strategically focusing on supplying vegetables to restaurants and hotels, the farmer organizations can tap into a growing market, establish strong relationships with customers and ultimately achieve sustainable growth in the horticulture sector.



## Take Aways Chapter 4

1. The chapter discusses four different roads to market for selling produce: local markets, supermarket chains, hotels/restaurants, and direct sales to consumers.

- a. Selling through established local markets is the most common and accessible strategy for farmers. Market women serve as middlemen, and farmers need sacks or wooden crates for selling.
- b. Selling through supermarket chains is more challenging and requires contracts, regular deliveries, and packaging. Supermarkets prefer working with farmers who grow a large variety of crops.
- c. Selling to hotels and restaurants requires farmers to contact these establishments directly, and word-of-mouth recommendations are important. Contracts are often needed, and the produce is used for menu dishes.
- d. Selling directly to consumers is relatively easy, as it involves personal contacts such as friends and family members. Farmers may use WhatsApp groups to stay in touch with customers.

2. Each strategy has its challenges, including financial risks in the credit system of local markets, difficulties in starting to sell to supermarkets, transportation responsibilities, and the need to have a large variety of crops for supermarkets and hotels/restaurants.

3. By strategically focusing on supplying vegetables to restaurants and hotels, the farmer organizations can tap into a growing market, establish strong relationships with customers and ultimately achieve sustainable growth in the horticulture sector.





# 05

## Co-creating the solution

*This chapter provides an overview of the co-creation sessions conducted with the target market of hotels and restaurants. It delves into the setup of these creative sessions and presents the results derived from them. A comprehensive analysis and discussion of the findings will be provided, leading to a concluding remark. Finally, the chapter concludes by highlighting the selected design direction based on the insights gained from the co-creation sessions.*



5.1 The design process

The design approach is followed up by the field research. The design approach consists of four individual phases, visualized in figure 5.1: 1) the co-creation session with farmers, 2) the strategy creation, 3) the strategy validation with experts and 4) the finalizing of the roadmap.

The first phase of the process involves co-creation sessions where commercial smallholder farmers from Kumasi actively participate in designing the most desirable road to market. This collaborative approach ensures the inclusion of diverse perspectives and insights from the farmers themselves. The second phase entails the creation of the overall strategy, incorporating inputs from various sources such as literature research, expert interviews, categorized data from coded transcripts, and the outcomes of the creative sessions. Each step of the roadmap is carefully designed based on these inputs. Following the development of the strategy, a feedback session is conducted with farmers who have been involved in the process. This session aims to identify any remaining difficulties or financial concerns within the strategy and explore potential solutions. Additionally, further feedback is obtained by horticulture experts and Archipelago alumni during the “Market Access Day” event held at KAC. The strategy is also shared with students, who are invited to tackle a specific challenge in collaboration with the facilitator.

Finally, the strategy is refined, taking into account all the preceding steps and emphasizing the detailed implementation steps as well as the overall design.

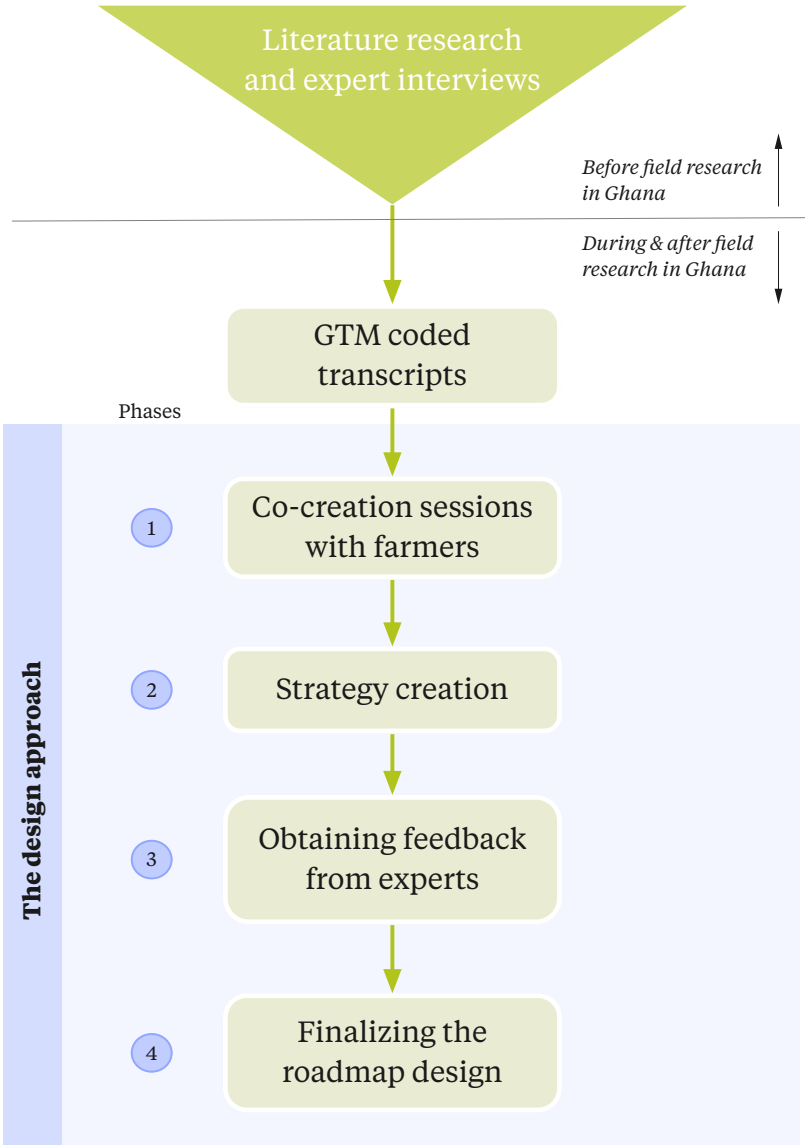


Fig. 5.1: Visualized approach of the design phase



The first step of the design approach: co-creations with farmers



5.2 The creative sessions

Co-creating the solution through the creative sessions offers several advantages, including higher buy-in from local farmers (Lam et al. 2018), increased likelihood of developing a strategy that is desirable, viable, and feasible, and greater chances of project continuity beyond the thesis (Liedtka, 2018).

Two creative sessions are planned, with four and five participants respectively, held at the Kwadaso Agricultural College Campus. The invited farmers are educated individuals engaged in farming activities within the Ashanti region and are customers of Holland Greentech. The primary objective of these sessions is to gain insights into the challenges and difficulties farmers face when selling their produce to companies. The majority of the sessions is dedicated to collaborative solution development, specifically focused on devising a business-to-business (B2B) strategy. The purpose of conducting these sessions is to gain a deeper understanding of the problem and create a solution that is not only viable and feasible but also desirable. In order for the solution to be effective, the farmers must be motivated and enthusiastic about it. Involving them in the decision-making process and fostering a sense of ownership towards the final idea is key to achieving this level of engagement (Lam et al. 2018).

5.2.1 The session plan

Part 1: The icebreaker

At the start of the session, a round of introductions is conducted to familiarize all participants with each other's identities. Additionally, a brief overview is provided to clarify the purpose of the session, emphasizing its role within the collaborative project in partnership with Kwadaso Agricultural College. To facilitate a comfortable and conducive environment for creativity, an icebreaker activity is employed. The icebreaker involves assigning

participants a specific color and body part, prompting them to engage in a friendly competition to touch the designated color with the corresponding body part. This activity aims to stimulate participant interaction and initiate the creative process.

Part 2: The explanation

In addition to the initial introduction, further clarification is provided to the participants regarding the purpose of the session. The significance of the session within the broader context of the Archipelago project, as well as its inclusion as part of the thesis, is highlighted. It is emphasized that the session aims to leverage the valuable expertise of the participants themselves, who are recognized as the experts in their field. Their insights and perspectives are deemed essential in the creation of a successful and desirable strategy.

Part 3: Briefing about the problem

This segment of the session is dedicated to gaining a deeper understanding of the specific challenges that were the focus of the day. The identified challenge is articulated as follows:

“Farmers in Kumasi face difficulties in establishing collaborations with new companies.”

Part 4: Purge on the Problem as Given

During this part, the participants have to make use of the method of brainwriting. The participants sit around a big table and have a stack of post-its on which they have to write their initial ideas, feelings and thoughts regarding the prompt.

Part 5: Discussion

After the purge, the participants have the chance to look at the different ideas and thoughts that are written down. The participants have the chance to discuss the things that were written and discuss whether the problem as given needs to be changed.

Next to this, challenges that are faced while selling your produce to restaurants are discussed.

Part 6: Purge on the Problem as Perceived

After the problem statement is slightly altered in order to fit well with the farmers’ perception, the second brainstorm session can start. This time participants are supposed to speak out loud, hitchhike on each other’s ideas and freewheel. The participants are also remembered to postpone judgment.

Part 7: Clustering

After the second brainstorm session comes to an end, the participants move to the whiteboard where they have to make clusters of all the different post-its. Each cluster also needs to be named. At least 5 different clusters need to be made in order to motivate the participants to look for differences between the ideas.

Part 8: Hits and Dots

After the clusters are made, the participants are each handed 4 hits-stickers and 4 dots-stickers. The hits represent the ideas that are original, authentic and make them enthusiastic, the dots represent ideas that are feasible and desirable. This part serves as an easy way to understand the farmers' opinion on which ideas caught their attention, without taking too much time.

Part 9: Poster creation

After the choice for the hits and dots is briefly explained, the participants are divided into two separate groups. Within their group, they need to pick one idea from the ideas that have either hits or dots, or both. A poster needs to be created from this idea that explained:

- 1. The problem
- 2. The solution
- 3. Its unique selling point

The posters also need to have a visual element. Each group then has about 3 minutes to pitch their poster and strategy idea.

Part 10: The reflection

After the pitching round, a reflection session takes place. The participants reflected on the ideas that were presented during the pitching round as well as the outcome of the session in general. Moreover, the initial problem that was posed was being discussed again.

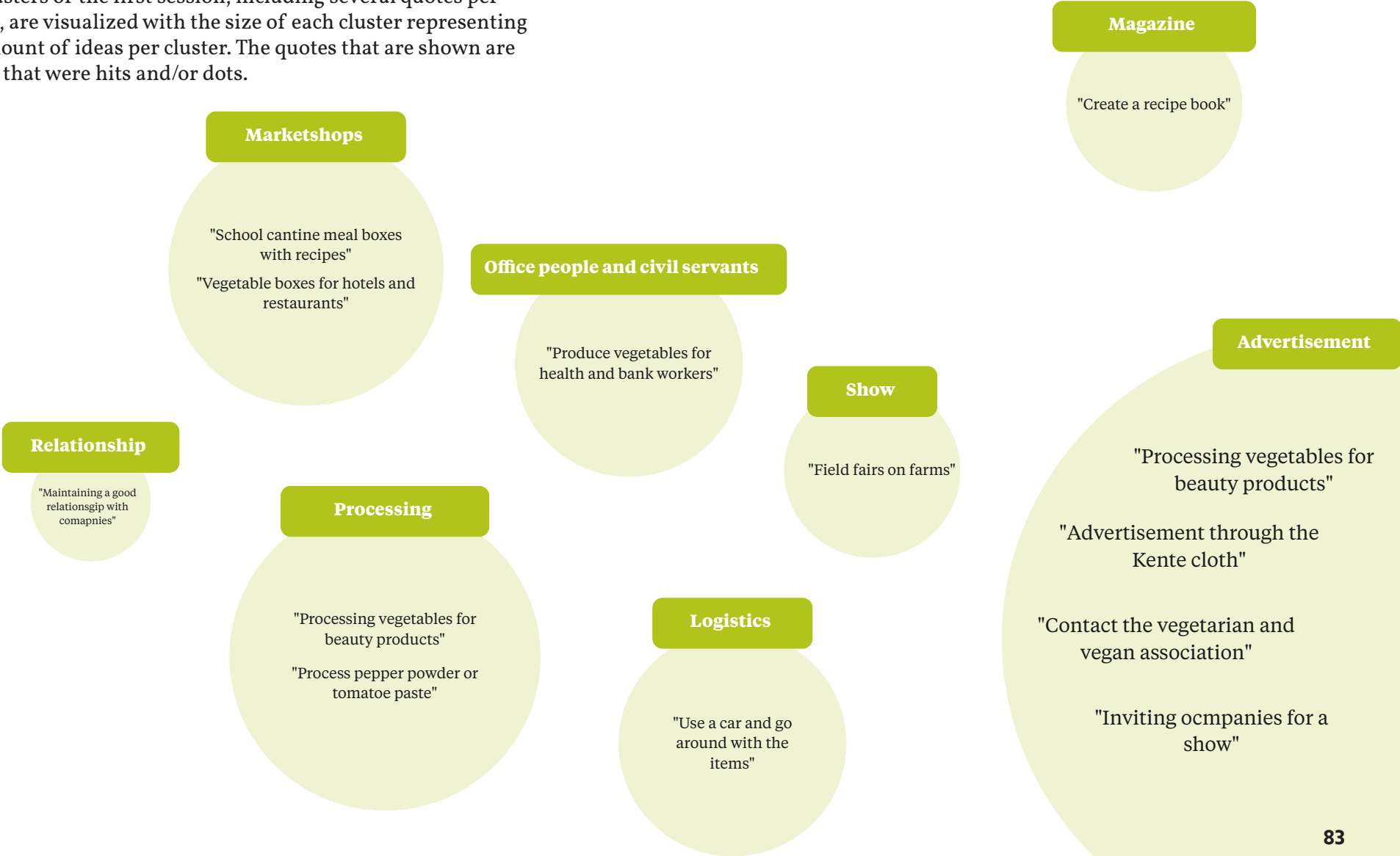




The creative sessions, held at KAC

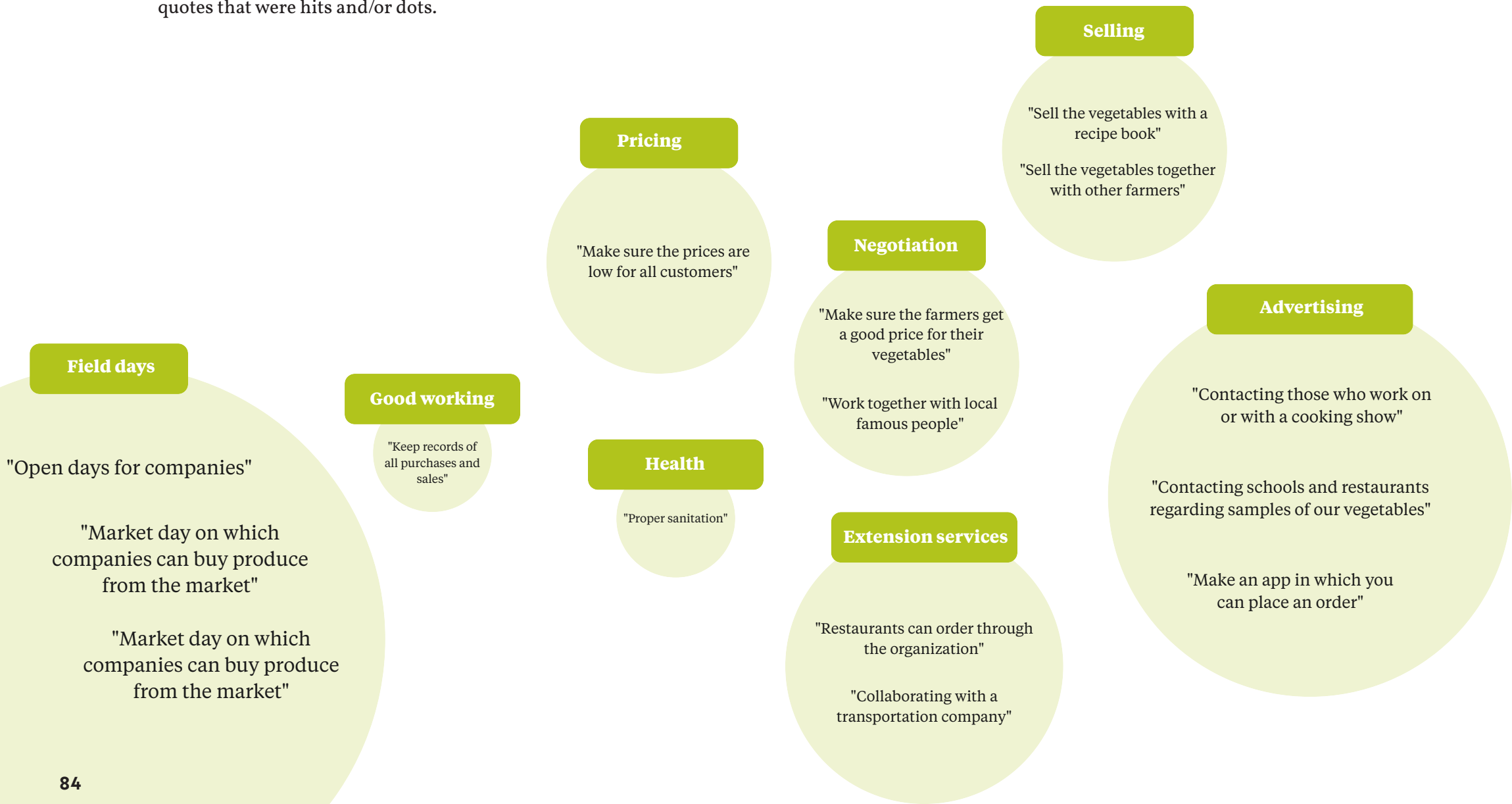
### 5.2.2 The creative sessions: Results

During the session, clusters have been made regarding the topic “How can farmers sell their produce with companies”. The clusters of the first session, including several quotes per cluster, are visualized with the size of each cluster representing the amount of ideas per cluster. The quotes that are shown are quotes that were hits and/or dots.





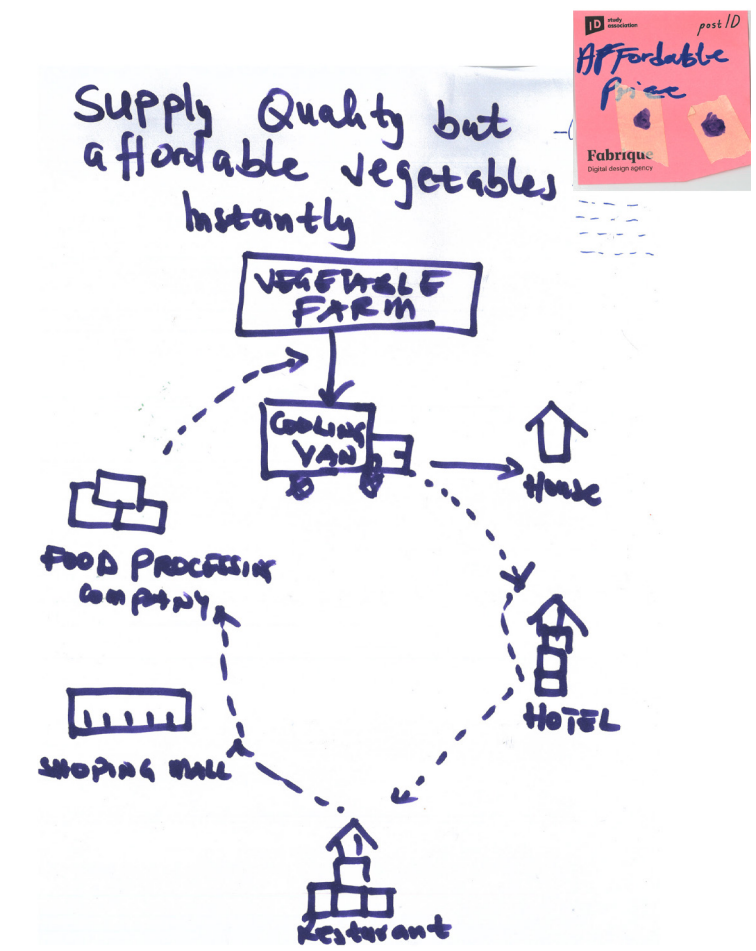
The clusters of the second session, including several quotes per cluster, are visualized with the size of each cluster representing the amount of ideas per cluster. The quotes that are shown are quotes that were hits and/or dots.



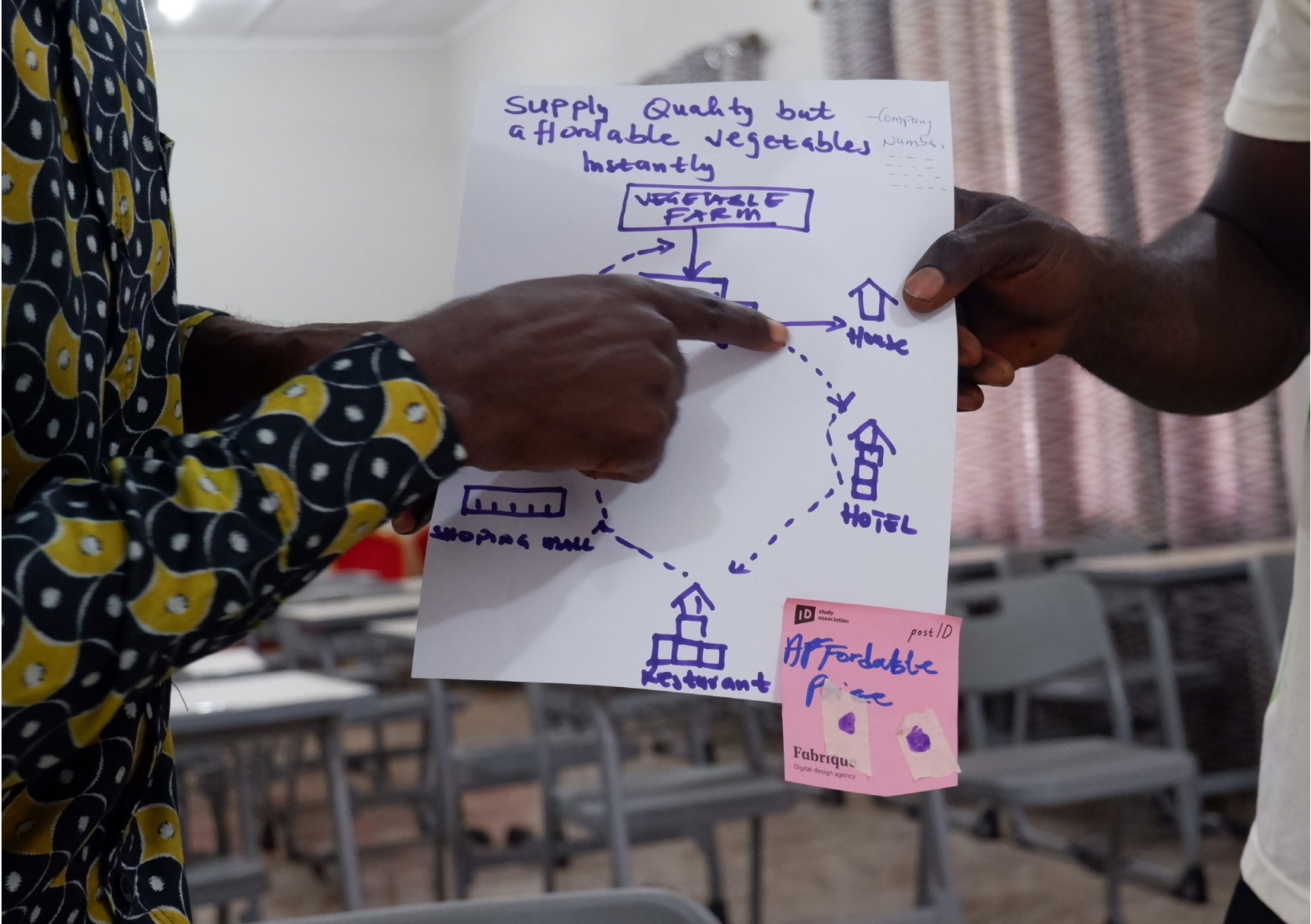
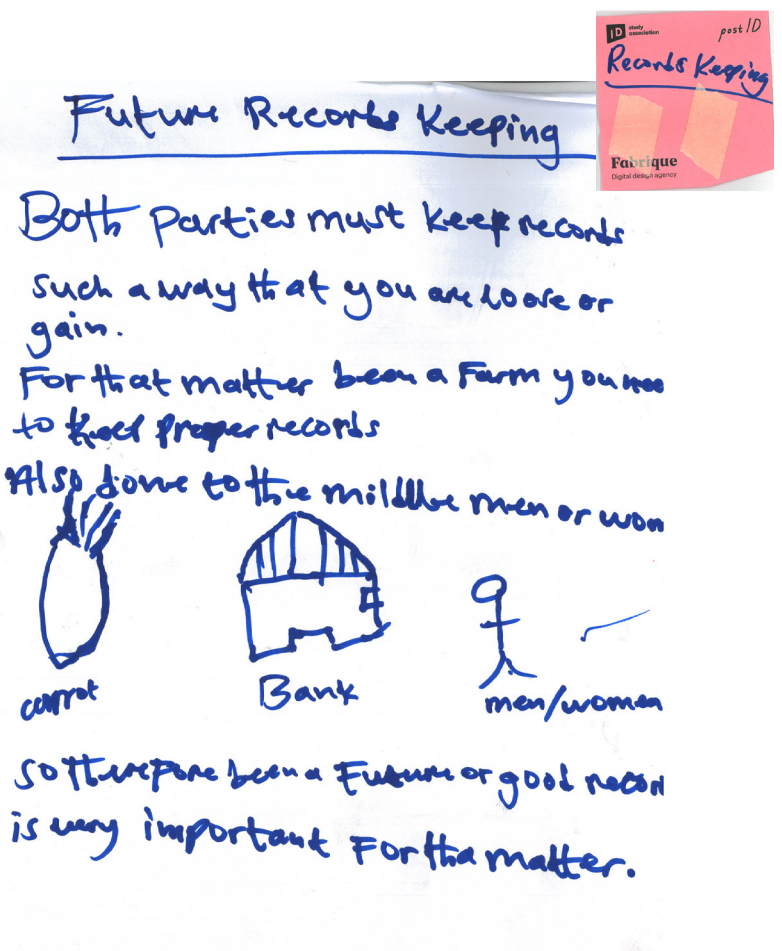
Clustering the individual ideas during the creative session



After the clusters have been made, the participants have been asked to make a poster in groups of the ideas they viewed as most valuable and interesting, they are presented in figure 5.2.



The poster on the right shows the renewed value chain for the restaurants and hotels. A cooled van is used to transport the vegetables from the farm to all the different establishments. On the right, future records keeping is explained and its significance for an improved workflow.



Two farmers presenting their poster during the creative session

Fig. 5.2: Two of the posters made during the creative session



5.2.3. Creative sessions: discussion and validation

The creative sessions have helped to give an overview of the different solutions that are feasible and desirable for the farmers when it comes to a go-to-market strategy. There are a few aspects that have been mentioned most during both of the sessions. Each aspect is validated by a few quotes from the first set of interviews with the farmers. The five aspects are as follows:

1. Advertising

This was an integral and unexpected part of both of the sessions. Different ways of marketing have been mentioned by all of the participants, which is rather surprising as only few advertising efforts are actually made by farmers or farmer organizations to further promote and sell their produce. However, reasoning lies with the lack of financial means available and experience or knowledge necessary, not with motivation. Traditional modes of advertising have been mentioned, such as advertising by TV, radio or social media, but nonetheless, unique ideas were also shared such as advertising through a cooking show, using the traditional kente cloth and inviting companies over for an open day. It is clear that, even though marketing seems to not be a top priority, it is perceived as key by most farmers. One farmer (2023) mentioned during the one on one interviews to be interested in marketing through several channels:

“Radio and television advertisements, that one. (...) because what I know is that people listen to radio much and also television and the next one is social media. Social.. I am planning on doing these three eh marketing and advertisements.”

This farmer mentioned that other farmers also use these modes of advertising:

“I have only some farmers who have been advertising their farm on the radio. Especially poultry farmers and eh.. one or two vegetable farmers that I know have been doing their radio announcements. So, that’s why I also go and do my advertisement. Because in Ghana, people listen to radio more.”

Besides radio and television, some farmers are also looking into selling and promoting their produce online, just like this lead farmer from Kumasi (2023),

“Online is something that I wish I could do but I have not seen it yet. That you go there, you place your order. (...) But I have not started yet, it is something that I would like to start doing.”

However, these new endeavors also come with difficulties and the necessary new skills, this farmer mentions:

“You have to know the technical skills. I can’t do it on my own, I need somebody who can help me writing the scripts” (Lead farmer in Kumasi, 2023)

2. Being able to taste the product

This was mentioned throughout both sessions, but categorized in ways like ‘Field days’ and ‘Advertising’. This category is less surprising, as this was also mentioned several times during the first round of interviews. Farmers throughout different organizations seem to agree on the importance of being able to

see and taste the product, before it can be sold. This is especially true for company sales.

Being able to taste the product has also been mentioned as important by several farmers during the first round of interviews. One farmer mentioned (2023)

“You have go around with the product to go and try. It takes time.”

Another farmer mentioned (2023)

“Sometimes we take a sample [of the vegetables] and we give it to them [the restaurants] to try and we will market it.”

However, even though tasting the produce seems to be important, one farmer found a way to work around this by using a survey:

“I sent a questionnaire to them [the restaurants], what kind of vegetables do you need, how often do you need it? how many kilos? Or quantities? And they fill it out and now we send it.. through the questionnaire I started to supply them” (Farmer in Kumasi, 2023)

Being able to taste it also seems unnecessary when the customer is already familiar with a farmer, just like how this farmer experienced working together with a big supermarket chain after initial contact was already made years earlier:

“A while ago I went to the [supermarket chain] to show them the poultry that I farm. Unfortunately, they were not interested in getting that. I guess they kept my contact

because a couple of years later they contacted me regarding supplying them vegetables” (Lead farmer in Kumasi, 2023)

3. Good prices

Good pricing of produce is essential if sales want to be ensured. Good and fair prices are of course for both the farmers as well as the customer. The farmers (2023) have mentioned “Make sure the prices are low enough for all customers”. Besides this, they also referred to the negotiation between the buyer and the farmer “Make sure the farmers get a good price for their vegetables.” These statements seem contradictory and a good balance should be found between the price the end consumer needs to pay for the fresh produce and the price the farmer receives for the hard labor.

Good prices also come with the right payment method. Market women currently mostly make use of the credit payment system. One farmer (2023) mentioned the following regarding this system:

“They [market women] harvest it and then transport it to the local market. When they come, we discuss the price with them. (...) After they sell it then they bring the money to us. If they couldn’t sell it, it would affect the farmer. If they couldn’t sell it, then you don’t get all of the money for the produce.”

If the produce is not sold in time, perishability comes to play, “We do not have storage facilities so whatever we harvest should be sold right away. If it is not sold, it perishes.. it goes bad.. Then we lose our harvest and we can throw it away. We lose our money.. see, it is challenging.



**Especially during the rainy season, the farmers will have postharvest losses”**  
in Kumasi, 2023

Farmer 3 focus group

4. Collaborations

Collaborating with either other farmers or external parties has been mentioned during both sessions. Some of the ideas include: “Collaborating with a transportation company” and “Sell the vegetables together with other farmers”. Currently, informal collaborations between farmers and external companies or other individuals already exist. Some farmers work together with some drivers and some farmers also grow produce together or source produce from others if a buyer wants a certain amount of tomatoes and the farmer is not able to deliver.

Some of the farmers have also mentioned these partnerships or collaborations during the first interview round. This farmer has stated that the farmers within the association already sometimes sell their produce together:

**“We come together and we will sell our produce together. Recently, (...) we have been taking our produce to the market or other people to come and buy from the market over there”**  
Farmer in Kumasi, 2023

Not only is selling done together, advertising can also be done for multiple farmers, like this farmer mentions:

**“I marketed for the association, not my own. Because all members have the same practices”**  
Farmer in Kumasi, 2023

Sharing knowledge is also commonly done within farming

organizations:

**“Yes we share knowledge, I like sharing what I’ve gotten from my experience with others, because you can not feed the whole market alone so, others must got advantage of what you have heard and help the association and add to the quality of the produce. I like to share what I have learnt with other people”**  
Farmer in Kumasi, 2023

5. Informing the consumer

Informing the consumer can be done by “Sell the vegetables with a recipe book”, “make an app in which you can place orders” and “invite companies for a show”. Oftentimes, the farmers mentioned the necessity to inform the consumer when it involved relatively new or unknown produce. The Ghanaian kitchen consists of many staple items and new items are rarely introduced.

Informing the customer seems to be important, especially when newer or lesser used vegetables are introduced.

**“We live in a country where people are not really enthused about vegetables. Yeah, we want heavy food. We eat banku, fufu. (...) Sometimes I post some vegetables, I look for benefits, why people must eat it, because some people only see it for the first time. It is quite a challenge. So if you can see, I have a lot more in terms of purpose”**  
Lead farmer in Kumasi, 2023

5.2.4. Creative sessions: Conclusion

The creative sessions conducted have provided valuable validation of previously identified information concerning go-to-market strategies with companies. Five key aspects have emerged as crucial for ensuring success, and it is recommended

that these aspects be incorporated into the overall strategy. Firstly, the strategy should include recommendations for an effective marketing strategy. It is important to consider that many commercial smallholders may not have strong financial security, therefore the strategy should minimize the need for significant investments. Secondly, allowing companies to sample the product is of great importance. This aspect can be integrated into the marketing strategy or as an integral part of the selling process, providing an opportunity for companies to experience the quality and taste of the produce. Thirdly, ensuring competitive pricing is vital. The use of contracts can help establish mutually beneficial pricing agreements, along with suitable methods of payment. Fourthly, fostering collaborations between farmers and external partners is crucial. By sharing resources and establishing financial security, such collaborations can significantly benefit the farmers’ endeavors. Lastly, it is important to inform consumers about the produce. This aspect can also be integrated into the marketing strategy, ensuring that consumers are well-informed and educated about the value and benefits of the products. While recommendations regarding the strategy can be provided, it should be noted that the development of a comprehensive marketing strategy falls beyond the scope of this project.

5.3 The chosen design direction

Taking the initial literature research, the one-on-one interviews as well as the focus group and the creative sessions into account, a decision can be made regarding the design direction. The Grounded theory Method used for the one-on-one interviews made clear that the most interesting road to market would be the one where the farmers would sell to companies. Companies in this case refer to hotel restaurants and normal restaurants. Incentives for farmers to sell through companies

would be to possess an entrepreneurial mindset and to produce high yields. The necessary resources are 1) being able to taste it, 2) having a large variety of crops available and 3) having packaging materials available. When these necessary resources are connected to the validated aspects that seem to be important from the creative sessions, valid combinations can be made that form the basis of the strategy, see figure 5.3. First of all, 1) Being able to taste it is also mentioned during the creative sessions and this can be incorporated with a marketing strategy. Secondly, 2) having a large variety of crops available can be done by collaborating with other farmers to ensure that when restaurants make an order, the farmers can provide all they need. Farmer organizations are vital to make this strategy succeed. Lastly, 3) packaging materials are important and these can serve as a way of advertising and a way of informing the consumer. Furthermore, by collaborating with other farmers within a farmer organization, good prices can be ensured for the packaging materials. The basis of the strategy should be that farmer organizations start selling their produce together, rather than each farmer for themselves. A marketing strategy is key for this direction and good farming practices should continue to be upheld.

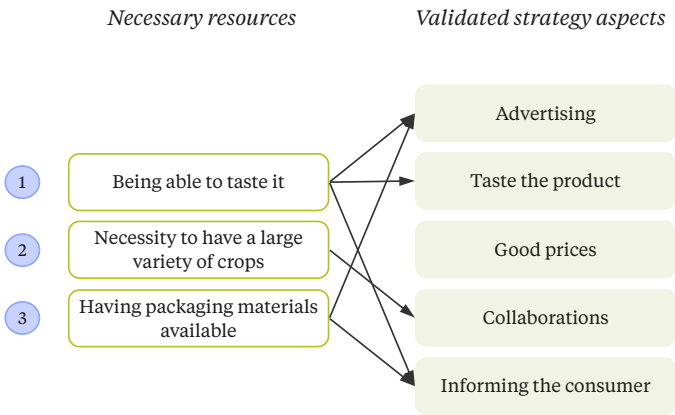


Fig. 5.3: Combinations of necessary resources and validated aspects



Take Aways Chapter 5

- I. The design approach consists of four phases:
- A co-creation session with farmers
  - The strategy creation
  - A strategy validation with experts
  - Finalizing the roadmap

The four phases are descibed below in further detail:

a. Co-creation sessions involve active participation of commercial smallholder farmers to design a desirable road-to-market strategy, ensuring diverse perspectives and insights from the farmers themselves.

b. The overall strategy is created based on inputs from literature research, expert interviews, coded transcripts, and outcomes of the creative sessions.

c. Feedback sessions are conducted with farmers and experts to identify difficulties or financial concerns and explore potential solutions.

d. The strategy is refined, emphasizing detailed implementation steps and overall design.

2. Key aspects identified during the creative sessions include advertising, being able to taste the product, good prices, collaborations, and informing the consumer.

Overall, the design process involves engaging farmers in co-creation sessions, developing a strategy based on inputs and feedback, and refining the strategy for effective implementation. The creative sessions play a vital role in generating valuable insights and ideas from farmers, leading to the creation of a

desirable and feasible road-to-market strategy.

The next chapter will present the strategy document, in which the strategy is described and presented in further detail.



# 06

## The strategy Document

*The strategy document comprehensively delineates three distinct horizons with actionable insights and examples to further inspire implementation. The core of the strategy document are the two different roadmaps that are firstly presented: the strategic roadmap and the tactical roadmap. These roadmaps have been carefully designed based on the insights derived from the design phase of the project, incorporating key findings from the literature review and field research. This document should serve as the most important deliverable and it concludes the most important insights from the literature and field research. This document is targeted at the key stakeholders.*







Two of the farmers that have been interviewed for the roadmap

## 6.1 introduction to the strategy document

The strategy document explains the previous presented roadmap and it elaborated on the three individual presented horizons. It explains the three horizons in detail, including the goals, the accompanying resources, both from the literature as well as from expert interviews, and the actions that need to be taken. Furthermore, the document outlines the key stakeholders and the actions that need to be taken per horizon, further enhancing the document's utility and effectiveness.

### 6.1.1 The purpose of the roadmap

This roadmap aims to achieve a future vision through a systematic and incremental approach. The document is mostly targeted at the key stakeholders that are involved within the roadmap. The purpose of the roadmap is to serve as a guideline for all the farmers who are involved within farmer organizations. The roadmap should visualize the steps that need to be taken in order for farmer organizations to create awareness among their brand. Furthermore, it instructs Kwadaso Agricultural College to ignite change within their current curriculum and to maximize involvement of alumni and experts within the field of horticulture.

### 6.1.2 How to read the roadmaps

The strategic roadmap provides a comprehensive and detailed overview of the various sequential actions and milestones, whereas the tactical roadmap presents a more concise and less intricate representation of the planned route.

The upper-left section of every page showcases the horizon. To enhance visual clarity and facilitate easy reference, each horizon is designated a distinct color, which is also employed consistently throughout the strategic and tactical roadmap to denote its respective horizon.

Each horizon is described in the following aspects:

The value proposition

A visual representation of each horizon

The two big themes within the roadmap

The farmer-level: mentioning actions that relate mostly to positioning and marketing activities

The industry-level: mentioning actions that relate mostly to making the field emergent

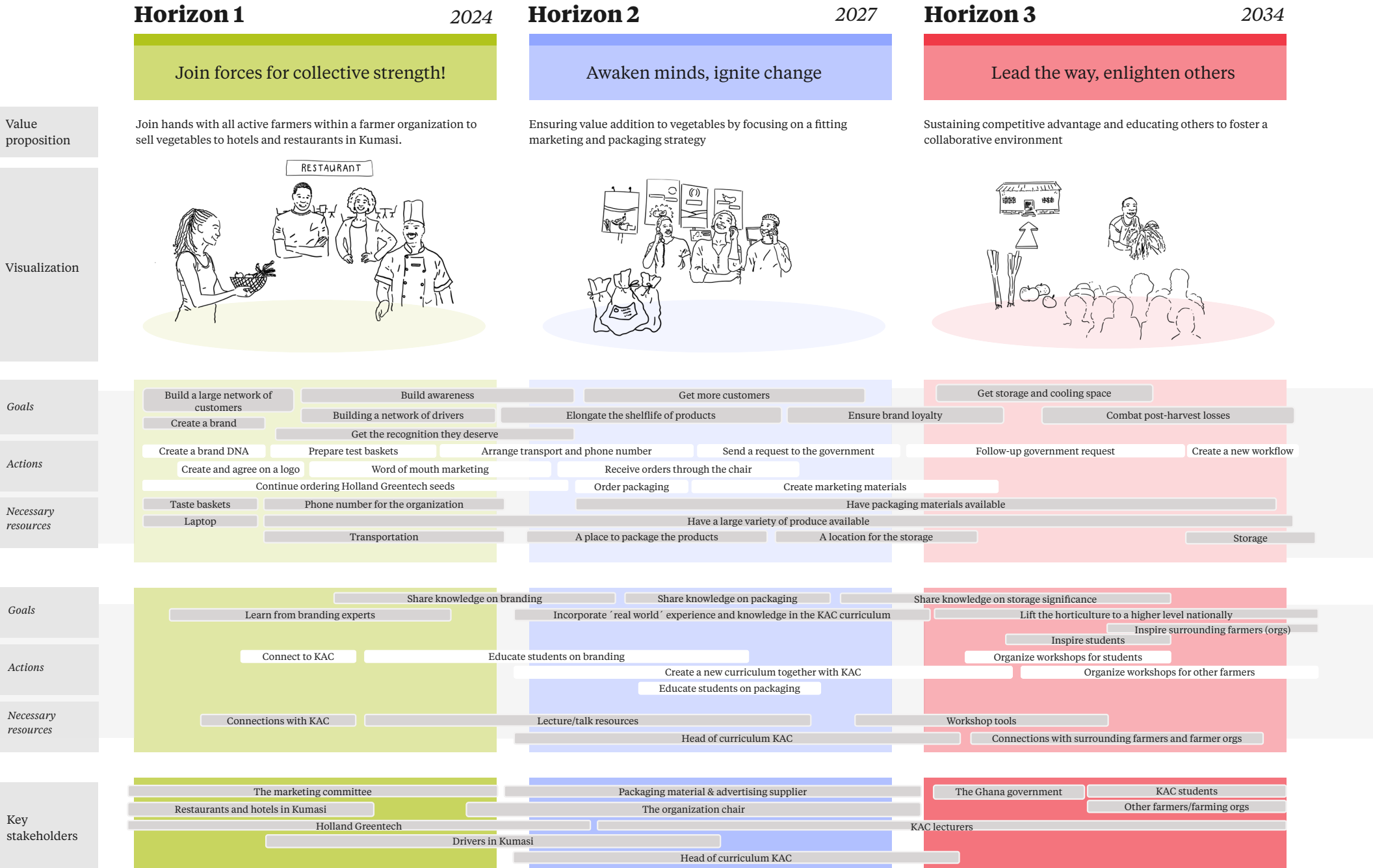
Each of the themes is specified by:

1. Goals
2. Actions
3. Necessary resources
4. The key stakeholders



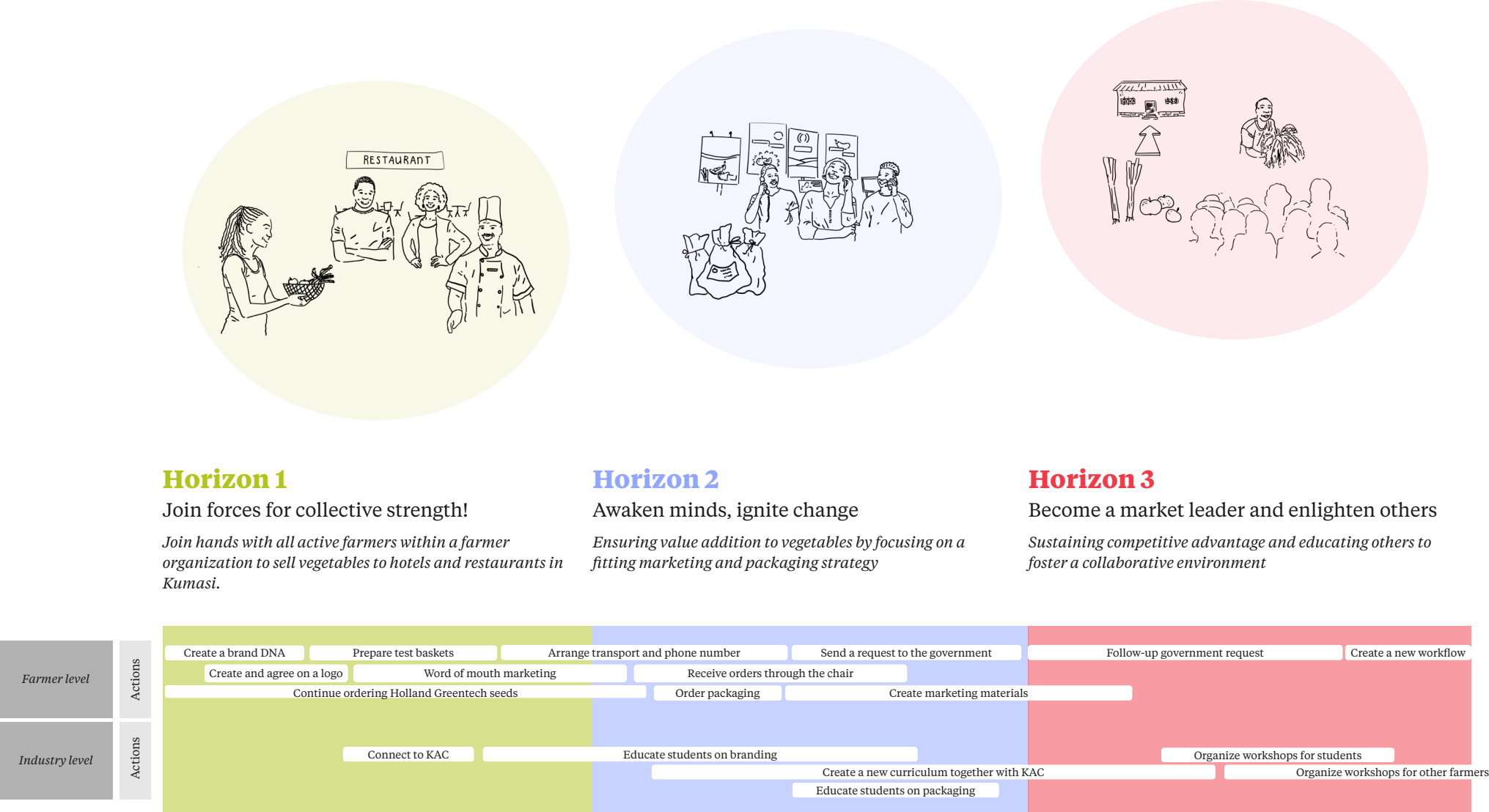
Roadmap towards improved horticulture in Ghana

Empowering smallholder farmers in Ghana by unlocking their joint potential



Roadmap towards improved horticulture in Ghana

Empowering smallholder farmers in Ghana by unlocking their joint potential

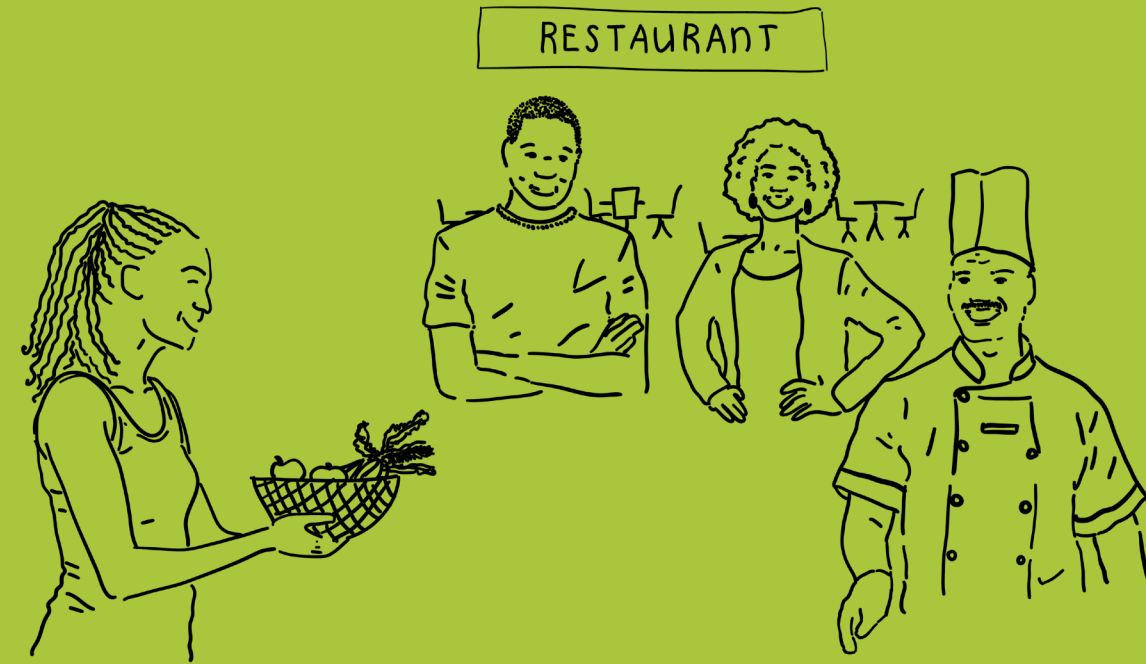




## 6.2 Horizon 1

The first horizon should foster motivation and cooperation among farmers within a farmer organization, encouraging them to unite and engage in collaborative efforts towards enhancing the efficacy and efficiency of their produce sales. By addressing a primary challenge faced by many restaurants and hotels when attempting to establish direct partnerships with farmers—namely, the limited availability of diverse produce—this first horizon seeks to enable farmers to establish a robust sales structure. Additionally, it serves as a catalyst for farmers to cultivate customer networks and engage in promotional

activities, thereby expanding their outreach and influence. On the farmer level, activities relate mostly to taking the first steps towards a brand identity and establishing their position within the market as local farmers who cultivate high quality crops with good seeds. On the industry level, first actions are taken to involve students and KAC on their journey of becoming a market leader. Farmers will connect to KAC to start developing a relationship that should foster further collaboration among important topics as brand positioning and marketing strategies.



### 6.2.1 Goals and actions

The following five actions should be taken during the first horizon. Each action is further explained in detail.

#### 1. Create a brand DNA and brand identity ~2 months

A brand DNA is vital in order to start creating awareness among the farmer organizations. The brand DNA consists of a message, an identity and a purpose, visualized in figure 6.1. The message should explain the customer more about your brand and what it is that you do. It should attract potential new customers, thus it should clearly state which problems the farmer associations are solving and in what way it can improve the current situation. Next, the identity should explain in what way the farmer associations differentiate themselves from other organizations. What makes this particular organization unique and why would their produce need to be bought rather than that of their competitors. Lastly, the purpose should explain the motives behind what the farmers are doing. Why they are selling their produce in a joint manner and why they want to focus on educating others as well, besides their regular farming practices.

Branding can be done in two ways: branding of all the vegetables together or making use of sub-brands. The branding strategy for the farmer organizations in Ghana primarily focuses on creating a unified brand identity for the association and their collective vegetables, rather than individual sub-brands for each vegetable. This approach is determined by the findings of field research conducted by the author, which highlight financial constraints and limited knowledge and experience in branding and marketing within the farmer associations.

By creating a cohesive brand identity, the farmer organizations can establish a sense of trust and credibility among their target audience, including restaurants, hotels, and customers. This collective branding approach allows for a unified message and

image to be communicated, reinforcing the value and quality of the vegetables produced by the association.

Given the limited financial resources and expertise available, creating separate sub-brands for each vegetable is not feasible or practical for the farmer organizations at this stage. However, as the associations grow and develop their branding capabilities, they should explore opportunities for more specialized branding initiatives in the future.

#### 2. Create a logo and agree on a logo ~1-2 months

The creation of a logo for the farmer organization is an important task, typically undertaken by the marketing committee. The development of a logo for the farmer organizations is essential to achieve multiple objectives, the following 5 objectives are explained below:

1. *Brand identity:* The logo acts as a visual symbol that represents the farmer organizations and their values. It helps create a distinct and recognizable identity in the market and distinguishes them from competitors who currently only rarely make use of logos or visual representations. A well-designed logo can convey the organization's mission of elevating horticulture to a higher national level; their use of high quality standards and seeds as well as their good farming. It fosters a positive perception among customers and it should give the customers a reason for buying their produce rather than those of the competitors.

2. *Awareness and recognition:* A visually appealing and memorable logo helps increase awareness of the farmer organizations among potential customers, stakeholders, and the general public. Through consistent branding and marketing efforts, the logo becomes associated with the organization's reputation, credibility, and the quality of its produce, giving the farmers the recognition they deserve.



3. *Differentiation*: The logo allows the farmer organizations to stand out in a crowded marketplace, which is necessary with 47% of all Ghanaians being a farmer (Alidu et al., 2022). It helps them differentiate themselves from other suppliers by showcasing their unique selling points, such as their commitment to sustainable farming practices, local sourcing, and premium quality seeds. The logo serves as a visual cue that attracts customers seeking specific attributes or values.

4. *Traceability and product information*: The logo can incorporate elements that facilitate traceability and provide essential product information. For example, it can include details such as the organization's name, location, or certification logos that demonstrate adherence to certain standards or organic farming practices. This helps customers easily identify the source of the produce and provides assurance regarding its quality and authenticity.

5. *Professionalism and credibility*: A well-designed logo gives the farmer organizations a professional and credible image. It conveys their commitment to professionalism, attention to detail, and a customer-centric approach. A visually appealing logo enhances the perception of the farmer organizations as trustworthy and reliable suppliers.

Overall, the logo plays a crucial role in establishing the visual identity of the farmer organizations, promoting brand awareness, and enhancing the traceability and credibility of their produce. It serves as a powerful tool for communicating their values, attracting customers, and building a strong market presence. A few steps need to be taken by the marketing committees that exist within the farmer organizations to create a logo:

1. *Conceptualization and design*: The marketing committee, in collaboration with relevant stakeholders, the active members and some loyal customers, develops the concept and design for the logo. This involves considering factors such as the organization's values, target audience, and desired brand image. The logo is an important part of the brand DNA of the farmer organizations, thus it is important that the logo is in line with the brand DNA

2. *Graphic design or outsourcing*: Depending on the expertise available within the organization, the marketing committee may design the logo themselves or decide to outsource the task to a professional graphic designer or a family member or friend who has experience with designing. Due to the financial status of many of these farmers and farmer associations as a whole, it is advised to not outsource this task, only if it can cheaply be done by acquaintances or family members.

3. *Feedback and revisions*: The marketing committee may present the logo design to the farmer organization's members for feedback and input. This ensures that the logo resonates with the collective vision and receives diverse perspectives. Revisions and adjustments may be made based on the feedback received.

For example, the Kuapa Kokoo organization (2023), the cacao farmer association, has the following logo and they use it to advertise their brand.



3. Prepare the baskets

~7 days

The marketing committee will prepare the baskets that are used during the restaurant and hotel visits. These baskets can include arranging an assortment of vegetables in an attractive and visually appealing manner, highlighting quality of the produce. Depending on the budget of the farmer association, a simple

Purpose

Local farmers marketing and selling their produce together to customers in order to increase availability for local customers and cultivate strong customer networks.

By sharing their knowledge and experiences with other farmers and agriculture students, the farmer organizations contribute to the overall development of the horticulture community and collectively work towards the improvement of the horticulture sector in Ghana.

Message

Improving local diets and developing the field of horticulture on a national level by increasing the local supply of high quality produce, cultivated with good and sustainable farming practices.

Identity

The farmer organizations differentiate themselves from other farmers due to their education and access to workshops and trainings, their good and sustainable farming practices and their use of high quality seeds and farming products.

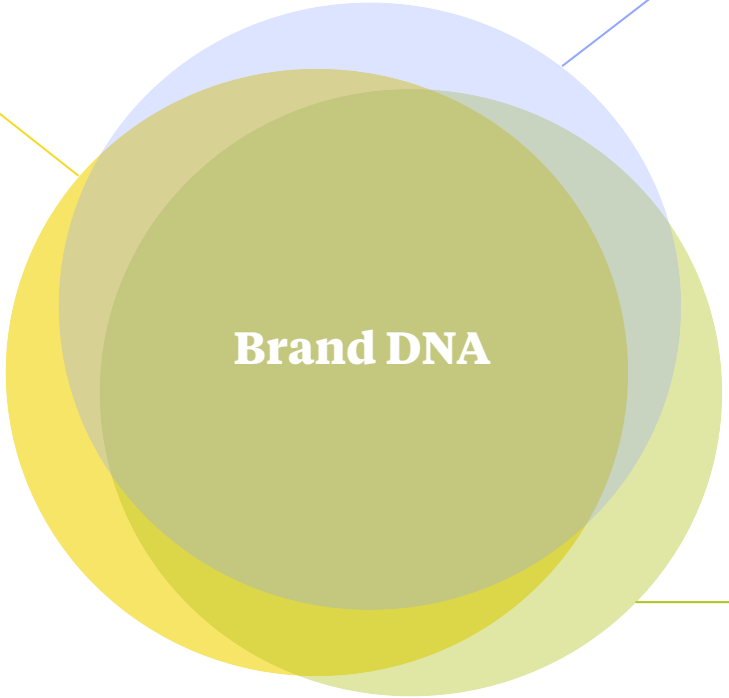


Fig. 6.1: Brand DNA example of a farmer organization in Kumasi





Sample basket with traditional kente cloth

woven basket can be used, or it can be lined with the traditional Kente cloth to link back to how local the produce is. the farmer organizations could even experiment with designing their own kente design and thus emphasizing their brand. However, designing your own kente cloth is a huge financial burden, thus this should only be pursued if financial means are available or a few years later as capabilities of the farmer association have grown.

#### 4. Word of mouth marketing ~2 months

In order to get new customers, the marketing committee has to visit several hotels and restaurants to which vegetables can be collectively supplied. The marketing committee plays a vital role in initiating the relationship-building process. To make the process go smoothly, the committee should follow a systematic approach. The steps involved in this process are as follows:

*1. Identifying target hotels and restaurants:* The marketing committee identifies hotels and restaurants that align with the farmer organizations' target market. These are typically restaurants that prioritize fresh, high-quality produce and that lie within the medium to high priced sections.

*2. Visiting potential customers:* Members of the marketing committee visit these restaurants to establish contact and initiate conversations. During these visits, they can introduce the farmer organizations, their products, and their commitment to providing fresh, locally sourced vegetables.

*3. Arranging taste tests:* To showcase the quality of their vegetables, the marketing committee arranges taste tests for the potential customers. This allows the restaurants' chefs or (purchasing) managers to sample the produce firsthand and assess its freshness, flavor, and overall suitability for their menus. The taste tests are an integral part of the company visits.

*4. Utilizing baskets for presentation:* The marketing committee utilizes baskets to present the vegetables during the taste tests.

*5. Building relationships and making sales:* Through these conversations, the committee provides information on the availability, ordering process and pricing of the vegetables. The ultimate goal is to secure orders and sign a contract.

#### 5. Arrange transport and telephone number ~14 days

The farmer organizations need to arrange the following two practicalities:

*1. Establishing a collective telephone number:* The farmer organization should acquire a dedicated telephone number that serves as a central point of contact for the organization. This number can be used for inquiries, orders, and general communication with customers and stakeholders. It is important to ensure that someone within the organization is responsible for managing and responding to calls received on this number.

*2. Transportation arrangement:* The farmer organization needs to arrange transportation to facilitate the movement of produce from the farmers' locations to the customers. This can involve various options, depending on the scale and specific requirements of the organization. Options may include shared transport, outsourced transport or their own transport if the organization possesses a van.



6.2.2 Key stakeholders and their roles

Marketing Committee

The role of the marketing committee is to be “*in charge of selling the produce and getting new customers*” (Farmer organization chair, 2023). The marketing team is involved in proactive engagement with prospective customers through personal visits or direct communication via phone calls. The committee plays a vital role in selling the produce and building brand awareness.

Who?

Each farmer organization consists of the regular farmer members, the finance committee as well as the marketing committee. The committee typically consists of approximately 10 members, although the actual number may vary based on the specific farming organization and its scale.

Tasks

- Compiling a roster of restaurants and hotels to target for outreach.
- Creating and designing the organization’s logo.
- Buying the baskets
- Assembling a collection of produce for conducting taste tests
- Crafting taste baskets to showcase the organization’s offerings
- Initiating contact with restaurants and hotels through phone calls.
- Visiting hotels and restaurants in person to present the organization’s products.
- Finalizing contractual agreements and securing signed contracts.
- Establishing and maintaining ongoing communication with customers.
- Sustaining regular contact and relationship management with the clientele.

Restaurants and hotels in Kumasi

The restaurants and hotels serve as the primary clientele for the farmer organizations, as they obtain the role of customers. During the initial horizon, their involvement is primarily passive as they are predominantly approached by the farmers rather than actively engaging in the process. The restaurants and hotels place orders with the farmers and maintain regular communication to ensure a consistent supply of produce.

Who?

The targeted restaurants and hotels fall within the medium to high price range, aligning with the emerging segment of accommodations and dining establishments witnessing an increase in tourism from both domestic affluent Ghanaians and international visitors. The individuals responsible for decision-making and procurement typically include the hotel manager, restaurant manager, or purchasing manager.

Tasks

- Signing a contract with farmer organizations to ensure supply
- Keeping in touch with the farmer organizations to understand when vegetables will be harvested
- Keeping in touch with farmer organizations to influence the type of crops that will be grown
- Making agreements on when the groceries should be ordered and when they should be delivered
- Giving a grocery list to the farmer organizations
- Spreading the word by recommending the farmer organization to others within the field of hospitality

Drivers in Kumasi

The drivers operating within Kumasi hold a crucial position within the overall strategy, ensuring the timely and efficient delivery of vegetables to multiple customers. It is noteworthy that the necessity for drivers arises when the farmer organization does not possess its own delivery van. The drivers can consist of acquaintances, friends, or family members who own a car, as well as external drivers recruited through recommendations. Typically, each farmer organization already has existing connections with drivers located in or around Kumasi.

Who?

If the farmer organization possesses a van of its own, the drivers can be specified as members of the farmer organization. However, in situations where the farmer organization does not have a van at its disposal, the drivers are typically individuals with personal connections to the organization, such as acquaintances, friends, or family members. Alternatively, recommended drivers from external sources may be sought to fulfill the transportation needs of the organization.

Tasks

- Making agreements on when the groceries should be collected and when they should be delivered
- Collecting and delivering the vegetables
- Ensuring the payment is made by the customer through Momo, mobile money.

Holland Greentech

Holland Greentech assumes a consistent role throughout the entire roadmap, serving as the supplier of high-quality seeds and providing guidance on soil management, irrigation practices, and technological advancements for the farms. In the context of the first horizon, their primary focus lies in ensuring the continued delivery of high-quality seeds to their customers. This facilitates the establishment of a strong foundation for the farmer organizations, enabling them to cultivate high-quality produce.

Who?

Specifically pertaining to the Kumasi office of Holland Greentech in Ghana, each farmer within the farmer organizations maintains communication with different staff members of the company. However, for general inquiries and broader matters, it is customary to liaise with the office manager. The office manager serves as a central point of contact, overseeing and coordinating interactions between the farmers and Holland Greentech, ensuring effective communication and addressing overall inquiries and concerns.

Tasks

- Keeping in contact with their current customers
- Delivering the seeds to the customers who make orders



## 6.3 Horizon 2

The second horizon of the roadmap centers around raising awareness among the farmer organizations. This objective is pursued through various advertising channels. A critical element within this horizon is the focus on packaging. Packaging holds significant importance for customers, as it guarantees an extended shelf life for the produce. Moreover, it contributes to the development of a robust brand identity and enhances traceability, enabling customers to easily identify the origin of the products they purchase. Packaging can also display storage instructions, thereby further extending the shelf life of the produce. Additionally, the logo and packaging

play a pivotal role in fostering brand loyalty among customers, establishing a lasting connection and affinity towards the farmer organizations.

On the farmer level, actions are taken to increase brand awareness and eventually have customers actively looking for the produce of the farmer organization, rather than just the other way around.

On the industry level, actions are taken to further involve the students to educate them on the various activities that have been pursued to create a strong brand and to design lasting marketing materials.



### 6.3.1 Goals and actions

The following sx actions should be taken during the second horizon. Each action is further explained in detail.

#### 1. Place and receive orders through the chair ~Weekly

During the first horizon, the farmer organization primarily relied on direct, in-person sales as their primary mode of marketing and engagement. Through their established network, word-of-mouth marketing played a significant role in attracting new hotels and restaurants to the farmer organization. This network effect, combined with the organization's telephone number and logo, contributed to the development of brand awareness and recognition.

As the organization gained visibility and credibility within the industry, it is expected that new potential customers would proactively reach out to the organization, next to the in-person visits. This can be facilitated through the established telephone number, which serves as a direct contact point for inquiries and orders. The logo, representing the organization's brand identity, also aids in reinforcing brand awareness and recognition among potential customers. When new orders are received, it is typically the responsibility of the chair of the farmer organization to oversee and manage these incoming requests.

#### 2. Connect to KAC ~3 days

In the second horizon, the focus is on educating KAC students about the significance of advertising and brand creation in the context of the farmer organizations as well as individual farmers. To facilitate this educational process, establishing a connection between the farmer organizations and KAC becomes crucial. Fortunately, many of the farmer organization members

in Kumasi are alumni of either Archipelago or KAC, which simplifies the process of reconnecting with the college. The existing alumni network provides a valuable resource for ensuring collaboration and knowledge-sharing between the farmer organizations and KAC. The farmer organizations can leverage this connection to reach out to KAC and establish partnerships, workshops, or talks aimed at educating the students about the importance of advertising and brand creation in the agricultural industry.

By leveraging the alumni network and coordinating with the appropriate departments or programs at KAC, the farmer organizations can arrange workshops and talks that align with the curriculum and the students' current knowledge base. This ensures that the educational content is relevant and enhances the students' understanding of the practical aspects of advertising, brand creation, and collaboration with farmers.

#### 3. Order packaging ~7 days

After successfully completing the first horizon, the farmer organizations should experience an improvement in their financial situation. This is primarily due to the acquisition of new customers, resulting in increased revenue streams. The influx of customers and the resulting boost in sales provide the organizations with a financial buffer, next to the already existing monthly financial contribution of the farmers.

With the financial buffer generated from increased sales and the regular member contributions, the farmer organizations should be able to allocate funds towards ordering packaging materials for their produce.

Based on the field research findings, there are various packaging practices observed in the market for vegetables in Ghana.



Supermarkets commonly package vegetables in transparent plastic bags with limited information displayed on the package. Some companies utilize plastic or cardboard containers, which are often wrapped in a plastic bag. In the local market, vegetables and fruits are often presented in plastic bowls or buckets, without individual packaging. Customers in the local market have the flexibility to select the desired amount of fruits or vegetables and place them in a labeled plastic bag.

When it comes to the purchase of vegetables by restaurants and hotels, they have the option to source them from supermarkets, the local market, or directly from the farmers themselves. Consequently, the packaging may vary depending on the supplier. Packaging plays a crucial role in enhancing the shelf life of the vegetables, improving their presentation, and aiding in brand recognition. Considering the local context and available resources, farmer organizations should explore packaging options that are practical, cost-effective, and aligned with their branding strategy. Here are the key elements that can be considered for packaging:

1. *Logo and name:* The packaging should prominently display the logo and name of the farmer organization. This helps in building brand recognition and creating a visual identity for the organization.
2. *Address:* Including the address of the farmer organization can provide transparency and enable customers to easily contact or locate the organization if needed.
3. *Type of produce:* Clearly indicating the type of produce on the packaging helps customers identify and differentiate the vegetables.
4. *Date of packaging:* Including the date of packaging helps

customers assess the freshness and shelf life of the vegetables.

5. *Quality labels:* If the farmer organization is part of quality labels like the Green Label Farmers, which some of the interviewed farmers in Kumasi are part of, it is beneficial to display these labels on the packaging. Quality labels provide assurance to customers about the adherence to certain standards and can help in building trust and credibility. The FDA approval is another quality label that is often seen in advertisements in Ghana, as found per the field research. It is supported by the European Union and it can be a valuable quality mark to consider for the packaging. It signifies compliance with regulatory standards and can further enhance the credibility of the farmer organization's produce.

6. *Nutritional Information:* Providing nutritional information on the packaging can be beneficial for health-conscious consumers who seek specific nutritional details about the vegetables they purchase.

The following two are optional, and perhaps less useful for the targeted hotels and restaurants. If in the future the clientele should be extended to customers directly they could add value. First of all, for less familiar or unique vegetables, including instructions on how to handle and store them can be helpful for customers. This information can provide guidance on maintaining the quality and freshness of the produce. Secondly, recipe ideas can be attached to the vegetables. This can inspire customers to try new recipes using the farmer organization's produce.

It is important for the farmer organization to conduct further research and consider the specific needs and preferences of their target customers when deciding which elements to include on the packaging. Additionally, compliance with local regulations

and packaging standards should be ensured to maintain product safety and legal requirements.

**4. Create marketing materials** ~14 days  
After the packaging materials have been bought and a new way of working is applied, it is high time to increase brand awareness by creating some low cost marketing materials. According to many of the farmers that have been interviewed during the first one-on-one interview round, radio emerges as the most preferred mode of marketing.

Radio advertising presents a cost-effective and widely accessible platform to reach a broad audience. It allows the farmer organizations to effectively convey their messages and promote their brand. By utilizing radio advertisements, the organizations can use the power of audio storytelling to engage listeners and create a lasting impact. When developing radio advertisements, it is essential to craft compelling narratives that highlight the unique selling points of the farmer organizations. These advertisements should emphasize the quality of the produce, the benefits of buying directly from the farmers, and the positive impact of supporting local horticulture. It is essential to regularly evaluate the impact of these marketing efforts and make adjustments as needed to optimize their effectiveness.

Besides radio advertising, the packaging itself can serve as a marketing tool by prominently displaying the organization's logo, name, and contact information. Additionally, if the organization has a delivery vehicle or van, applying decals or wraps featuring the logo and contact details can act as mobile advertising. Handouts and leaflets can be produced to provide detailed information about the organization's offerings and quality standards, which can be distributed at targeted locations of the restaurants and hotels. Collaborating with local TV shows focused on cooking, agriculture, or sustainable farming practices

can increase visibility and credibility. Billboard advertisements can also be considered in high-traffic areas to capture the attention of potential customers. Furthermore, partnerships with cooking shows and local influencers who promote healthy eating and sustainable farming can generate buzz and attract a wider audience. These collaborations may include product endorsements, recipe demonstrations, or joint marketing campaigns. Farmer organizations should conduct thorough research, analyze their target market, and assess the cost-effectiveness and potential impact of each marketing approach before implementation. By choosing the right combination of strategies, farmer organizations can effectively differentiate themselves and expand their customer base.

**5) Improve the KAC curriculum** ~1-2 sessions yearly  
Alumni, having worked in real-life agricultural settings, possess valuable insights and knowledge that can enhance the curriculum's relevance and applicability to the practical challenges faced by students in their future careers. By integrating alumni contributions, the curriculum can provide students with a deeper understanding of various aspects related to agriculture, including effective collaboration with fellow farmers and entrepreneurs, the development of a strong brand identity, and successful marketing strategies.

For instance, incorporating lessons on collaboration can help students understand the importance of forming partnerships and working together with other farmers or entrepreneurs to achieve common goals. This knowledge can equip students with valuable skills in building networks, fostering cooperation, and maximizing the collective impact of their agricultural practices. Similarly, integrating topics related to brand development and marketing strategies can enable students to grasp the significance of creating a strong brand identity and effectively



promoting their farm or organization. By examining real-life examples and case studies, students can gain insights into successful branding and marketing practices, which can enhance their ability to position their products effectively in the market and attract customers.

To facilitate the implementation of these additions to the curriculum, it is crucial to ensure that both students and lecturers are adequately trained in the relevant areas. The Archipelago program, with its focus on entrepreneurial development, can serve as a valuable resource in providing additional training and support to lecturers. By equipping lecturers with up-to-date knowledge and skills in branding, marketing, and collaboration, they can effectively guide and mentor students in these areas. Moreover, creating opportunities for cross-learning and knowledge exchange between alumni, industry experts, and KAC lecturers can further enrich the curriculum. By fostering a collaborative environment, where experiences and expertise are shared, both students and lecturers can benefit from a diverse range of perspectives and practical insights.

#### 6. Educate students on advertising ~1-2 sessions yearly

Towards the end of the second horizon, it is important to prioritize the transfer of knowledge from farmer organizations to students at Kwadaso Agricultural College (KAC), whether through the regular curriculum or the Archipelago curriculum. To facilitate this knowledge transfer, farmer organizations can arrange workshops, presentations, or interactive sessions at KAC. These educational activities should primarily focus on showcasing the real-world experiences and successful implementation of marketing techniques by the farmer organizations. By sharing practical insights and lessons learned, the organizations can provide students with valuable perspectives on the challenges and opportunities associated

with promoting vegetables.

The sessions related to advertising and branding should address the following key areas:

1. Exploring the various modes of marketing available and highlighting the financial considerations associated with each mode.
2. Discussing the advantages and disadvantages of different marketing approaches to provide students with a comprehensive understanding.
3. Sharing the experiences of the farmer organizations in implementing specific advertising and branding strategies, emphasizing practical examples and success stories.

By engaging with students and sharing their skills and experiences, farmer organizations contribute to the development of the next generation of agricultural professionals. This knowledge transfer enhances the students' understanding of practical marketing techniques, filling the existing gaps in the current curriculum at KAC.

Overall, the involvement of farmer organizations in educating KAC students fosters the exchange of knowledge, promotes the application of practical marketing skills, and empowers students to effectively contribute to the agricultural sector. It is a mutually beneficial collaboration that bridges the gap between theoretical education and real-world experiences.

#### 7. Educate students on packaging ~1-2 sessions yearly

In addition to educating the students on branding and advertising, it is important to provide them with insights into the importance of packaging and different packaging strategies. These sessions should occur after the farmers have experimented with packaging themselves, allowing them to share their experiences, challenges,



A supermarket selling ginger labelled by the farmers who grow them



and opportunities with the students.  
The sessions should focus on the following key areas:

1. Exploring different packaging materials available for vegetables and understanding how each material affects the appearance and presentation of the produce.
2. Guiding students in choosing the packaging material that aligns best with their marketing strategy, desired product aesthetics, and budgetary considerations.
3. Discussing the essential information to be displayed on produce packaging and exploring various methods of conveying this information effectively.
4. Assigning a creative packaging design project to the students, encouraging them to develop their own packaging concepts.

To enhance the hands-on and inspiring nature of the sessions, it is beneficial to provide examples of successful packaging strategies and engage students in practical exercises. These sessions can be conducted as standalone workshops or integrated into the existing curriculum. For example, within a course where students sell their vegetables through market women, packaging experiments can be incorporated to analyze the impact of different packaging on product perception and sales frequency.

Furthermore, packaging considerations can be integrated into the Archipelago curriculum, allowing students to develop packaging designs for their newly introduced products. By incorporating these sessions and projects, the students gain practical knowledge about the significance of packaging in agricultural marketing. They develop an understanding of how packaging materials and designs contribute to product differentiation, consumer perception, and overall sales performance. Additionally, these activities foster creativity,

critical thinking, and a deeper appreciation for the role of packaging in agricultural value chains.

Overall, integrating packaging-focused sessions within the curriculum provides students with valuable insights, hands-on experience, and an opportunity to explore innovative packaging solutions that enhance the marketability of agricultural products.

8. Send a request to the government ~4 months

The goal of the next horizon is to possess cooling and storage facilities as a farmer organization. Much of the produced vegetables are now only harvested when there is a customer for them, but it comes with additional challenges if a customer is late or doesn't show up. Storage and cooling facilities would improve the value chain and elongate the shelf life. However, such a facility is an enormous financial investment. According to one of the farmer organizations in Kumasi, the government would be willing to pay for such a facility and build it, but only if records can be shown of good performance. Therefore, at the conclusion of the first horizon, once the farmer organizations have expanded their customer network and used advertising materials to enhance their visibility, they can start the process of requesting government assistance for the construction of these facilities.

It is crucial to acknowledge that this process of securing government funding for storage and cooling facilities is time-consuming and requires careful preparation. The farmer organizations must gather evidence of their effective operations, including sales records, customer feedback, and the positive impact they have made on the local horticulture sector. This information will be key in presenting a compelling case to the government, highlighting the potential benefits of supporting the construction of these facilities.

6.3.2 Key stakeholders and their roles

Farmer Organization chair

The chair of the organization is the one who is in charge of the different committees. Additionally, the chair plays a crucial role in supervising vegetable production and ensuring timely harvests by providing reminders to the farmers. Moreover, the chair serves as the primary point of contact for new members and customers, acting as the representative and "face" of the organization

Who?

Each farmer organization has its own chair, thus, there are several chair within Kumasi. Typically, the chairperson is an experienced and knowledgeable elder farmer with expertise in horticulture and crop cultivation. They possess commendable managerial skills as well. The appointment of the chairperson is typically carried out by the members of the farmer organization, acknowledging their trust and respect for the individual's abilities and leadership qualities.

Tasks

- Guiding and overseeing the process of ordering packaging materials
- Ensuring the farmers understand the new process of packaging the vegetables

Restaurants and hotels in Kumasi

The role of the packaging supplier primarily entails the timely delivery of packaging materials to the farmers. The farmers initiate the ordering process by placing orders with the supplier, who takes responsibility for ensuring that the requested supplies are delivered punctually to the farmers. The packaging supplier's main objective is to facilitate the smooth provision of packaging materials, meeting the farmers' requirements and ensuring a reliable supply chain.

Who?

The packaging supplier can be a company, an individual involved in trading packaging materials, or even a store specializing in such supplies. In many cases, the packaging supplier maintains a personal connection with the farmers, as they can be acquaintances or family friends. This familiarity and personal relationship can contribute to smoother transactions and a more collaborative working dynamic between the farmer organizations and the packaging supplier

Tasks

- Getting the orders for the packaging materials
- Delivering the packaging materials to the farmer organizations
- Receiving the payments for the packaging materials from the finance committee



The following is a branding example, based on one of the farmer organizations of Kumasi. The purpose of this example is to inspire farmer organizations.

Branding example  
Peace and Love Vegetable Association, Kumasi

Values

- High quality seeds
- Good and sustainable farming practices
- Educated and trained farmers
- Working well together and often communicate
- Local vegetables

Color scheme and their meanings (KenteCloth, 2023)

- Green: Harvest and growth
- Blue: Peace, harmony and love
- Maroon: Mother earth
- Gold: Fertility
- White: Pureness

Examples of possible color schemes:



Logo Ideas



Inspiration: kente cloth



Branding example  
Peace and Love Vegetable Association, Kumasi

One important part of the proposed banding strategy, is using the logo to be displayed on the packaging of the vegetables. This branding example is presented to give the farmers an idea of the different aspects that can play a role when designing a logo, such as your values, the colors and their meaning and something from which inspiration can be drawn. This branding example is not grounded in literature or research, it rather serves as inspiration. This branding example is made for one of the farmer associations in Kumasi: The Peace and Love vegetable association. When traveling to Kumasi, the kente cloth,

a specific type of woven fabric in different colors and patterns, was found everywhere. On the left page, a few color scheme can be explored, driven from the popular kente. Each of the colors is believed to have its own meaning. The logo presents different types of information, from just the name of the brand, to a quality mark and a location. The pictures below show how these logos can be placed on the packaging of vegetables to create awareness. The farmers should conduct further research into the effectiveness of certain logos designs.





## 6.4 Horizon 3

The third and final horizon of the roadmap focuses on securing storage and cooling facilities that can be collectively utilized by the farmer associations. These facilities are typically provided by the government as a form of support, contingent upon the farmers' demonstrated progress and tangible achievements. The process of requesting and obtaining such storage and cooling spaces can be time-consuming.

In addition to the storage and cooling facilities, the third horizon encompasses the educational aspect, specifically targeting students studying at Kwadaso Agricultural College. The aim is to inspire and motivate these students by organizing workshops that highlight the significance of advertising, storage and cooling spaces, as well as the importance of collaborative efforts among farmers. Through these workshops, the students will gain valuable knowledge and insights into these key areas, fostering a culture of informed decision-making and effective agricultural practices.



### 6.4.1 Goals and actions

The following 5 actions should be taken during the third, and last, horizon. Each action is explained in detail.

#### 1. Following up on the government request ~1-5 years

During the third horizon, the farmer organizations must prioritize following up on their request to the government regarding the building of cooling and storage spaces. This entails actively engaging in a series of meetings and discussions to facilitate the progress of the request and ensure a smooth process. During these meetings, the farmer organizations should demonstrate their preparedness and commitment to the project.

Additionally, it is crucial for the farmer organizations to actively participate and address any questions or doubts raised by the government officials. This may involve providing further clarification on operational aspects, financial viability, and long-term sustainability plans for the proposed facilities. Open and transparent communication is key to building trust and creating a collaborative relationship between the farmer organizations and the government stakeholders.

It is important to recognize that the process of getting government approval and support will be time-consuming. Therefore, the farmer organizations should remain patient and proactive in their efforts, consistently following up on the request until a final decision is reached.

#### 2. Assisting in the building of the storage and cooling facilities

~1-5 years

Once the request for storage and cooling facilities is approved by

the government, the responsibility for building these facilities lies with the government. They will oversee the construction process.

However, it is crucial for the farmer organizations to actively collaborate with the government throughout the construction phase. They should maintain open lines of communication and provide any necessary support or information requested by the government authorities. This may include sharing further details, facilitating access to the construction area, or assisting with any paperwork or documentation.

Furthermore, the farmer organizations should monitor the progress of the construction closely. Regular site visits and coordination with the government officials responsible for the project can help ensure that construction is proceeding as planned. In case of any unforeseen challenges or delays, the farmer organizations should communicate these issues to the relevant government authorities and work collaboratively to find solutions.

#### 3. Creating a new workflow regarding the storage and cooling facilities

~2 months

Once the facilities have been built, the farmers need to create a new workflow regarding cooling and storing. The workflow could look as follows:

1. Harvesting and transportation: The farmers should schedule regular harvests and ensure the vegetables are transported from the farms to the storage and cooling facilities. This may involve assigning individual farmers or new committees responsible for transporting the produce using trucks or vans.



2. Cleaning and sorting: Once the vegetables are at the facilities, the farmers should allocate time and resources for thorough cleaning and sorting. This ensures that only high-quality vegetables are selected for packaging and distribution. New individuals can be employed or contracted to assist with these tasks, ensuring proper hygiene practices are followed throughout the process.
3. Packaging and labeling: After cleaning and sorting, the vegetables should be carefully packaged in suitable packaging materials. Proper labeling should also be done, including information such as the farm of origin, product variety, and any relevant certifications. This further aids in creating a strong brand.
4. Storage and cooling: The packaged vegetables should be stored in the designated storage areas within the facilities. The farmers should follow recommended storage practices, including appropriate temperature control and humidity levels, to extend the shelf life of the produce. Regular monitoring and maintenance of the storage conditions should be conducted to ensure optimal preservation.

#### 4. Educating other farmers and farmer organizations around

~2-4 sessions yearly

Towards the end of the third horizon, it is important for the farmer organizations to take on a role of leadership and start inspiring an entrepreneurial mindset among other farmers in the region, both within and outside of Kumasi.

One effective way to achieve this is by hosting workshops and inspirational talks to share knowledge, experiences, and best practices with fellow farmers. The farmer organizations can organize and facilitate these workshops on a regular basis, inviting farmers from nearby areas to participate and learn from their expertise. These workshops can cover various topics

related to farming techniques, sustainable practices, marketing strategies, and business development. The aim is to inspire and empower other farmers to improve their farming methods.

#### 5. Educating KAC students

~1-2 sessions yearly

In addition to engaging other farmers and farmer organizations, it is crucial for the farmer organizations to involve the students from Kwadaso Agricultural College once again during the third horizon. The students can gain practical insights that complement their theoretical learning, while the farmer organizations benefit from the fresh perspectives and enthusiasm of the next generation of agricultural professionals. Knowledge shared can include guidance on how to navigate the application process, the requirements to qualify for support, and the potential benefits that can be obtained. Such knowledge is valuable for students who aspire to become farmers or work in the agricultural sector, as it equips them with the necessary information to leverage available resources and opportunities. This collaboration strengthens the educational journey of the students and contributes to the development of a well-rounded understanding of the agricultural sector, including access to government support and the importance of modern storage and cooling facilities.



KAC students working on an assignment





A storage room gifted by the government, still in the process of finishing

6.3.2 Key stakeholders and their roles

The Ghana Government

In the third horizon, the Ghana government plays a crucial role in granting permission for the establishment of storage and cooling facilities. These facilities are essential for enhancing production and optimizing the value chain within the agricultural sector. Additionally, they contribute to the extension of the shelf life of vegetables, ensuring their quality and marketability. The farmers initiate the process by requesting these storage and cooling spaces from the Ghana government. The government then assesses these requests to determine their feasibility and alignment with relevant regulations and policies. Typically, the requests are channeled through the chairperson of the farming organization, who acts as the representative and main point of contact in communication with the government. The government’s assessment and subsequent approval of these requests are essential for the provision of suitable storage and cooling facilities to support the farmers’ operations.

Who?

The person who is in charge of granting the permission.

Tasks

- Receiving the requests from the farmer organizations
- Granting permission
- Giving the farmers feedback to their request
- Building the storage and cooling facilities

The KAC students

The role of the students in the third horizon is to get educated on the significance of advertising, storage and cooling spaces and collaborating together with other farmers. Through workshops and talks organized by members of the farmer organizations, the students are provided with valuable insights and information regarding these key areas. It is expected that the students actively participate in these educational sessions, engaging in discussions, asking questions, and absorbing the knowledge being shared. By actively participating and taking in the information presented, the students contribute to maximizing the impact of the workshops and talks. Their understanding and awareness of the importance of advertising, storage and cooling spaces, and collaboration will equip them to make informed decisions and contribute effectively to the agricultural sector in the future.

Who?

The KAC students who are either in the regular programme or the ones who participate in the Archipelago program.

Tasks

- Actively participate in the workshops and talks given by the visiting farmers who are members of the farming organization.



Take Aways Chapter 6

- 1. The strategy document provides detailed information on the three horizons, including goals, resources, and actions to be taken.
- 2. The roadmap aims to achieve a future vision through a systematic and incremental approach, targeting key stakeholders involved in farmer organizations. The roadmap serves as a guideline for farmers, highlighting the steps needed to create brand awareness and maximize involvement of experts and alumni in horticulture. The strategic roadmap provides a comprehensive overview of actions and milestones, while the tactical roadmap offers a concise representation of the planned route.
- 3. Each horizon is described by its value proposition, visual representation, two big themes (farmer-level and industry-level), goals, actions, necessary resources, and key stakeholders.
  - a. Horizon 1 focuses on motivating and uniting farmers within organizations, establishing a robust sales structure, and cultivating customer networks.
  - b. Horizon 2 aims to raise awareness among farmer organizations through advertising channels and emphasizes the importance of packaging for brand identity and traceability.
  - c. Horizon 3 focuses on securing storage and cooling facilities for collective use by farmer associations and involves educational workshops for students at Kwadaso Agricultural College.





# 07

## Obtaining feedback on the strategy

*After the strategy is drafted, it will be revised and validated during two individual validation sessions with farmers from different farmer organizations. Furthermore, during the Market Access Day which is organized at Kwadaso Agricultural College, the strategy is again challenged by several alumni and experts within the field of horticulture. One challenge found within the strategy is tested and solved by over 80 students in the form of an assignment.*



7.1 Obtaining feedback from farmer organizations

After the strategy was developed, two sessions were held with various farmer organizations to gather their input and feedback. The farmer organizations expressed a positive impression of the strategy, perceiving it as aligned with their own ambitions and addressing key challenges they currently encounter. Furthermore, the strategy’s focus on co-creation and incorporating their input further reinforced their sense of ownership and commitment to its implementation. Overall, the farmers viewed the strategy as a valuable tool to overcome existing obstacles and steer their organizations towards a more prosperous and sustainable future. One farmer shared:

“We are happy that you made something like this, it is very good for the farmers. You help us to push our findings.”

Another farmer pointed out the significance of the marketing strategy aspect within the roadmap by stating

“If I’m talking from my own personal examples.. what is lacking, it would be to go out, to create awareness and to get new customers.”

During these sessions, the participants actively discussed the strategy and identified potential challenges that might arise during its implementation. Despite the overall interest and alignment with their needs and resources, three common challenges were identified by both farmer organizations. These challenges include:

1. Expensive transportation

Transportation can come with increasing additional costs as more produce is being sold. Some farmer organizations have their own mode of transport and some are also looking into getting their own. For example, one farmer organization mentioned:

“Transportation costs a lot. Currently, we are thinking about getting a tricycle, but this only transports small quantities.”

Another farmer organization mentioned:

“We have a van now, but it is not refrigerated.”

2. Varying organizational structure

One of the key challenges identified by the farmer organizations is the variation in the structure of different organizations. While the visited farmer organizations in Kumasi share a similar developed structure, there may still be slight differences between them. The current strategy relies on the presence of a chairperson and dedicated committees for finance and marketing, comprising active members. However, if such a structure does not already exist within a farmer organization, additional time and effort would be required to establish it and foster effective collaboration. One farmer mentioned:

“The structure of the other organizations are not all the same... they can be a bit different from ours.”

As a result, the implementation of the first horizon would need to be postponed for a certain period of time. The timeline for this process would depend on the motivation and commitment of the farmers, ranging from a few months to several years.

3. Reluctance in contract signing

The strategy is developed around the idea that it would be beneficial to start selling to hotels and restaurants. However, such a sales strategy also needs a contract that is signed by both parties. One of the farmers mentioned:

“Some companies or customers refuse to sign a contract. We only have verbal contracts. This is difficult because we often sell on a credit basis. We use digital transfers and not momo [Mobile Money]. The customers.. they keep everything, then buy. Sometimes it takes 1 to 3 months before they pay. Some organizations facilitate this process because there is no contract.”

This issue becomes particularly relevant when farmers engage in collective selling of their produce. In order to mitigate conflicts and ensure a smooth operation, it is crucial to establish a robust financial structure that provides certainty regarding payments. Implementing a system of contracts would provide the necessary framework to clarify expectations and obligations, safeguarding the interests of all participating farmers and minimizing the potential for disputes.



## 7.2 The Access to Market Day

As part of the current curriculum and as a means of obtaining additional feedback, the Market Access day is organized at the Kwadaso Agricultural College. The goal of this day is to remind and inform the students about the importance of access to the market. Furthermore, the Market Access day should inspire and motivate the students to further develop their entrepreneurial mindset by getting motivated by former alumni. For the project, this day serves as a means of receiving feedback on the strategy. The go-to-market strategy will be validated by experts within the field of horticulture and alumni of the Archipelago program.

### 7.2.1 Programme

The program of this day looks like the following:

1. **An opening speech by the Head of Department of KAC.**  
The topic of the speech is 'Why is market access important?' This speech is meant to generally introduce the topic of the day.
2. **KAC alumnus speech.**  
The topic of the speech is *"What KAC doesn't teach you about selling your produce"*. During this speech, the speaker tapped into what the steps are of getting your produce sold at the supermarket chains, as this speaker is already doing that. Also, the speaker talks about how she got where she is now from the Archipelago program. This speech is meant to inform the students about the challenges faced as a young, entrepreneurial farmer and how to tackle them. The students were allowed to ask a few questions at the end.

3. **Young startup owner**  
This speaker talked about how the startup was built and the success story around it. The startup was founded by a KAC alumnus who graduated just a few years ago. The speech was also meant to inform the students about the challenges one can face while building your own company. The students were allowed to ask a few questions at the end.
4. **A panel discussion**  
During the panel discussion, several questions were asked to the panelists. The panel consisted of the invited speakers. the questions that were asked are as follows. First of all, *"What does the future of farming look like?"*. Secondly, *"How can you best market yourself?"*. Thirdly, *"What do you consider to be important tools to use as a farmer when selling your produce?"* After these initial questions, the students were invited to join in on the conversation and ask their questions as well.
5. **An assignment for the students**  
The students were divided into 10 groups of 8 students and they were assigned to discuss among their groups "how to create brand awareness around your farm in a unique way, in order for companies to find you".
6. **A closing speech by 2 KAC alumni.**  
The last speech was given by the winners of the last Archipelago batch. This duo talked about how they benefited from the Archipelago program and they gave the students a last bit of motivation to do well in their studies and to take initiative when it comes to market access and learning more about it.



A group of KAC students presenting their work during the Market Access Day



### 7.2.2 Market Access day Results

The Market Access day proved to be both engaging and insightful for the students, providing valuable perspectives for the project. The presence of various experts underscored the importance of developing a well-planned strategy for agricultural produce, emphasizing the need to identify suitable buyers and define the target market in advance. The experts also explored different aspects of a comprehensive marketing strategy. One of the experts mentioned:

**“Communication is important, you don’t just sell and take money, you build customer relationships.”**

Following the inspiring discussions, the students were tasked with brainstorming unique methods to create brand awareness for their farms, enabling companies to easily locate them. This assignment corresponds to the second horizon of the strategy, where farmer organizations are expected to proactively attract customers directly. However, the research conducted in the field revealed that many farmers and farmer organizations still heavily rely on potential customer visits, highlighting a significant challenge. Two of the posters are presented in figure 7.1.

One of the groups wrote down the following:

**“Effective marketing and branding can help differentiate your farm produce from competitors and create a strong emotional connection with customers”**

The outcomes of the assignment were intriguing. It was discovered that advertising and marketing are not yet integral parts of the KAC curriculum, resulting in most students

lacking prior experience in this domain. Despite this, the students presented various modes of marketing that emerged prominently in their responses. The following responses were mentioned by a couple of groups:

1. **Posters:** Many of the student groups talked about the importance of having posters that display what is being sold, the name of the farmer organization, contact information of the farmer organization such as an email address and a phone number; a marketing message and suitable picture.
2. **Packaging marketing:** The packaging of a product can be a good tool for marketing purposes and according to different student groups it should display similar information as stated in the previous point.
3. **Flyers:** Flyers can also aid in creating a marketing strategy with a lasting impact. One group mentioned the following: “Promotions and discounts through brochures and flyers”.

Besides the aforementioned three aspects of a marketing strategy, one other group also mentioned the importance of being able to try out a product, also found during the interviews. This group pointed out to have a stand in a crowded place where mostly customers that fit within the target group would come, where samples are distributed that come with a flyer that shows important information regarding the farmer organization as well as contact information.

The challenges that have been identified during the feedback sessions will be further elaborated on and tapped into in the Discussions chapter.

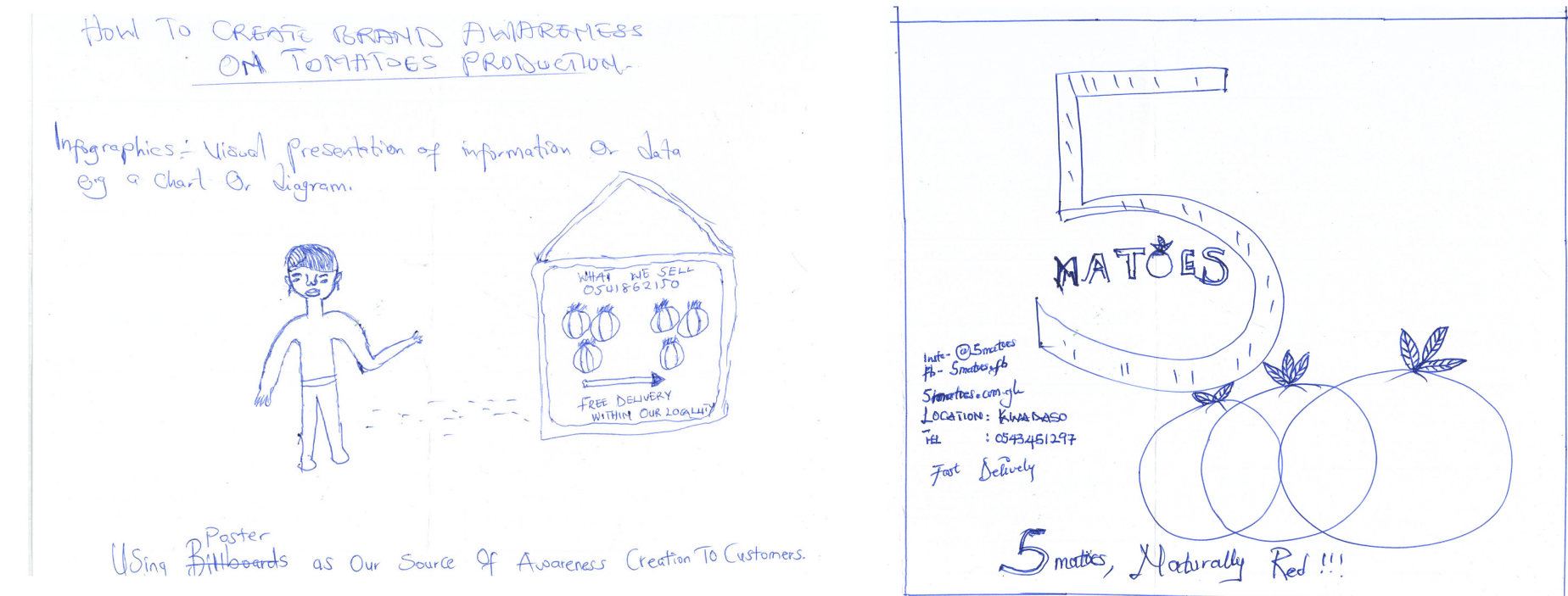


Fig. 7.1: Two advertisement posters designed by two different groups of students at KAC



## Take Aways Chapter 7

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1. Farmer organizations provided positive feedback on the strategy, perceiving it as aligned with their ambitions and addressing key challenges.

2. The strategy’s focus on co-creation and incorporating input from farmer organizations reinforced their sense of ownership and commitment.

3. Challenges identified include transportation costs, variation in organizational structure, and the need for contracts in collective selling.

4. The Access to Market Day at Kwadaso Agricultural College served as a platform to obtain additional feedback on the strategy. The program included speeches by the Head of Department, KAC alumni, a young startup owner, and a panel discussion. The Market Access day provided valuable perspectives on developing a well-planned strategy and emphasized the importance of communication and building customer relationships.

5. Students were assigned to discuss how to create brand awareness for their farms and were encouraged to take initiative in market access. Students presented various marketing methods, including posters, packaging marketing, flyers, and product sampling.

In the next chapter, the strategy will be discussed and recommendations will be given.



# 08

## Discussion & Recommendations

*This chapter will discuss the strategy that is presented in the previous chapter. It will emphasize the potential benefits and outcomes that can be achieved through its implementation. Additionally, the chapter will explore potential extensions of the strategy to other market segments, demonstrating its versatility and potential for wider application. Finally, the limitations of the research will be acknowledged, providing insights into areas for further investigation and improvement in future studies in the recommendations.*





## 8.1 Discussion

The results that have been presented in the strategy document will be discussed in this section. The research question that has been presented in the first chapter was the following: *“How can a go-to-market strategy be improved for commercial smallholder farmers in Kumasi in order to get horticulture to a higher level nationally?”* The answer to this question has been presented in both the strategic and the tactical roadmap and it is further described in the strategic document. Overall, the different actions that are further described in the roadmap tap into marketing effort, sales structure efforts, efforts to get new customers and efforts to make the field emergent and eventually tilt the horticulture to a higher national level.

### 8.1.1 The relevance of the results

The research findings underscore the need for farmers to transform their current operations to ensure future sustainability. These findings hold significant relevance, considering the prevailing challenges and financial difficulties experienced by many farmers. As one farmer stated,

*“The days of traditional farming are over!”*

This statement encompasses not only the need to modernize farming practices but also revamp the sales structure.

The relevance of the research findings extends beyond the farmers themselves; it also resonates with consumers. There is a growing interest among consumers in adopting healthier diets that incorporate nutritious vegetables. This interest has become particularly pronounced in the aftermath of the COVID-19 pandemic, as health and well-being have assumed greater priority among Ghanaians. Experts within the field have

identified this heightened focus on health as a crucial factor driving consumer demand for healthy vegetables.

### 8.1.2 The impact of the results

The research findings indicate promising opportunities for commercial smallholder farmers to expand their sales beyond the local market and direct customer interactions. While the prospects for growth and advancement in the horticulture sector are positive, it is important to acknowledge that several steps must be taken to achieve a higher level of success. This requires dedication, motivation, and a well-executed roadmap within a realistic timeframe.

Furthermore, the impact of the research extends beyond the farmers and farmer organizations themselves. It also benefits other stakeholders, such as the students from KAC, who gain valuable insights and knowledge from the research. Additionally, farmers and farmer organizations outside of Kumasi can leverage these findings to enhance their own practices and strategies, leading to collective progress in the horticulture industry. Overall, the research results highlight the potential for growth and improvement in the horticulture sector, emphasizing the need for concerted efforts and collaboration to realize these possibilities.

### 8.1.3 Application in other sectors

During my research, I have explored various sectors including restaurants, hotels, supermarkets, local markets, and direct customers. When expanding into different sectors, it is essential to recognize that alternative customer segments place a high value on quality and are willing to pay a fair price to attain it.

#### 1. Office workers

Upon reviewing the roadmap, I believe that targeting office workers would be a suitable addition. Although this customer segment was briefly mentioned during the creative sessions, no specific research has been conducted on the implications of farmers selling to office workers or company owners. Nonetheless, I believe that the process would be similar to engaging with restaurants. Building trust would remain a crucial factor in establishing relationships, and it could be fostered through word-of-mouth marketing and personal visits to different companies or offices.

Office workers often face time constraints that prevent them from visiting local markets or supermarkets. Therefore, it would make sense to offer them the convenience of ordering groceries directly through their office. Additionally, incorporating locally sourced vegetables and fruits into office lunches could be a viable option. This would not only support nearby farmers but also provide office workers with healthier food choices. By tapping into the office worker segment, farmers can expand their customer base and potentially foster sustainable partnerships with businesses. Further research and exploration of this sector would be beneficial to understand its feasibility and the specific needs and preferences of office workers.

#### 2. Airline services

In addition to office workers, another intriguing sector to consider would be airline companies. Airline companies have a fixed interest in providing excellent services and experiences to their passengers. By collaborating with local farmers, these companies could offer fresh, high-quality food options on their flights. This would not only enhance the overall dining experience for passengers but also align with the growing demand for sustainable and locally sourced products.

Moreover, partnering with airline companies presents an opportunity for farmers to showcase their products to a diverse and international audience. The unique selling point would be the freshness and authenticity of the produce, which could be emphasized through effective marketing strategies.

However, venturing into the airline industry requires careful consideration of logistical aspects, such as packaging, storage, and transportation, to ensure that the quality of the products is maintained throughout the supply chain. Building strong relationships with airline caterers and understanding their specific requirements and regulations would be vital in successfully entering this sector.

#### 3. Primary and secondary schools

Supplying fresh vegetables to schools and educational institutions in Ghana offers numerous benefits for farmers. By providing nutritious meals, farmers contribute to promoting healthy eating habits among students, reducing the risk of diet-related health issues, and combating malnutrition. Access to fresh vegetables enhances educational performance, improving cognitive abilities and concentration.

Moreover, supplying schools helps establish healthy habits early on, shaping students' food preferences and encouraging lifelong healthy eating practices. Collaborating with schools allows farmers to engage with the local community through nutrition education programs, workshops, and events, raising awareness about sustainable farming practices and the benefits of fresh produce.

Additionally, supplying schools expands farmers' market reach, providing a reliable customer base and potential opportunities for catering and farm-to-school initiatives. This approach also



has a positive social impact by strengthening the local food system, reducing environmental impact, and supporting the local economy. Overall, supplying fresh vegetables to schools benefits students' health and academic performance while creating new market opportunities for farmers and promoting sustainable agriculture and community engagement.

## 8.2 Design limitations

The research is limited in a few different ways and this section will go into the limitations in detail.

### 8.2.1 Time constraint

The research has been conducted and concluded within 100 days. Prior to starting the research, knowledge around farming and around Ghana has been very limited. The time spent in Ghana was only about a quarter of the given time for the project. This means that only a small window of time could have been dedicated to the field research. Despite prior recognition of these limitations and the need for adaptability to ensure project success, unforeseen circumstances posed additional challenges, such as delays in conducting farmer interviews.

Moreover, it is noteworthy that all interviews were conducted in the presence of another interviewer who was also engaged in research for a master's thesis project. As a result, careful planning was essential to ensure that both interview guides were covered within the allocated time frame and to avoid exceeding the availability of the interviewees.

### 8.2.2 Language Barrier

Fortunately, the language barrier posed only minor challenges since the majority of the farmers and experts involved in the research demonstrated a proficient command of the English

language. However, during the second round of creative sessions, two farmers encountered difficulties with English, necessitating the presence of a translator. It is important to acknowledge that relying on a translator in such sessions inevitably introduces the potential for information loss or incomplete translation. Despite the use of non-verbal cues and expressions, a different approach prioritizing visual language and cues, rather than written ideas, would have been essential to maximize the significance of these sessions, as was achieved in the initial session.

### 8.2.3 Research restricted to Kumasi

The field research for this study was primarily conducted in Kumasi, while visits were also made to the coastal area and Ghana's capital city, Accra. However, it is important to note that no interviews were conducted in these additional regions. The go-to-market strategy developed in this research specifically targets farmers operating within and around Kumasi. Nevertheless, it is crucial to acknowledge that the conditions and dynamics in various regions of Ghana can vary significantly, potentially presenting distinct challenges and opportunities.

The unique characteristics of the coastal area and Accra, both geographically and socioeconomically, may give rise to additional factors that could impact the implementation and effectiveness of the go-to-market strategy. Variances in market demands, consumer preferences, infrastructural support, and cultural contexts across different regions could necessitate tailored approaches or adaptations to ensure optimal outcomes for farmers. Future studies or initiatives could consider expanding the research scope to encompass these regions, allowing for a more comprehensive understanding of the diverse challenges and opportunities faced by farmers throughout the country.



Cape Coast: Another visited area, but no further research has been conducted here





Two roadside billboards advertising foods and haltheare. It is unknown how long these stay here.

#### 8.2.4 Complexity

The complexity of this project imposes certain limitations on the research process. One key aspect is the multitude of stakeholders involved in the current value chain of selling produce, with varying levels of accessibility. Engaging with and gathering insights from these stakeholders can be challenging due to logistical constraints and differing availability.

Moreover, the evolution of the research question and design brief throughout the project had a significant impact. The initial direction differed significantly from the final outcome. Balancing the need for flexibility and adaptation with the imperative of maintaining a clear research focus posed a challenge. While the project embraced a flexible mindset, the formulation of a specific research question at a later stage introduced complexities in effectively concluding the research within the allocated time.

#### 8.2.5 Financial constraints

Undoubtedly, the execution of this research imposed a significant financial burden. While initial funds were allocated by the client that covered most of the costs, additional funding had to be secured to fully finance the project. The process of raising these funds required a considerable amount of time and effort, which had to be carefully factored into the project planning.

The allocation and management of financial resources needed meticulous attention to ensure the project’s sustainability and successful completion. Acquiring additional funds not only entailed identifying potential sources but also engaging in promotional activities that were necessary to be granted the funds. These activities demanded a substantial investment of time, which had to be accounted for and integrated into the overall project timeline.

### 8.3 Recommendations

This section goes into the recommendations for further research into the topic of go-to-market strategies for commercial smallholder farmers.

#### 8.3.1 Type of farmers

This research primarily focuses on commercial smallholder farmers in urban and semi-urban areas. The choice of this target group proved advantageous as they were easily accessible within the given timeframe. Furthermore, existing connections between these farmers and relevant stakeholders facilitated field visits and interviews. However, it is important to acknowledge that there are many other types of farmers, particularly in rural areas outside of Kumasi, that were not the primary focus of this research. The perceptions and needs of these farmers may differ significantly from those of educated urban and semi-urban farmers. To ensure a successful implementation of the strategy beyond Kumasi, further research with farmers in other areas is crucial.

#### 8.3.2 Marketing modes and materials

The second and third horizons of this research project emphasize the development of a marketing strategy accompanied by appropriate marketing materials. Through the conducted interviews, it was evident that radio advertisements were widely employed and had a significant impact on the target audience. Additionally, billboard ads were also commonly utilized. However, further investigation is required to determine the specific messages that would be most effective to convey and the appropriate methods to employ in different geographical areas. To validate these findings and explore their practical applicability, conducting a proof of concept with farmer organizations in Kumasi is recommended. This proof of concept



would involve testing various marketing channels and assessing their influence on sales outcomes. Moreover, dedicated time should be allocated to experimenting with different designs and marketing messages to optimize their effectiveness.

### 8.3.3. Timely payments

During the feedback sessions with the farmer organizations, an important challenge that emerged was the reluctance of companies or potential buyers to sign contracts. In Ghana, transactions often rely on trust rather than formal agreements. This poses a significant concern for the farmer organizations in terms of ensuring timely and secure payments.

To address this challenge, further research is needed to explore alternative payment methods that can provide financial security for the farmer organizations. One potential solution is to shift away from a credit payment system and adopt a model where customers are charged immediately upon the delivery of the produce. This approach can help mitigate the risk of non-payment or delayed payments, providing the farmer organizations with a more reliable income stream.

Another way would be to establish a system of partial prepayment before delivery, ensuring that the farmer organizations receive a certain portion of the payment upfront.

Additionally, exploring the possibility of engaging trusted intermediaries or third-party organizations that can facilitate secure and timely transactions could be beneficial. Such intermediaries could act as a bridge between the farmer organizations and the buyers, ensuring fair payment terms and resolving any disputes that may arise.

Conducting further research and seeking input from experts in the field of financial transactions and contract management can provide valuable insights and help identify effective and culturally appropriate solutions to address this challenge.

### 8.3.4 Proof of concept

Just like a proof of concept would be beneficial in terms of the marketing strategy, the positioning strategy as well as the actual sales strategy should be tested in real life with the farmers. By implementing the designed strategy in collaboration with the farmers, it becomes possible to observe its impact and identify any challenges or opportunities that may arise in practice.

In addition to testing the strategy with farmers, it is also important to assess the receptiveness of different restaurants to the strategy. The research conducted so far has identified five restaurants, primarily in the low to middle price range, as potential beneficiaries of the strategy. However, further exploration is needed to understand how factors such as restaurant location, menu offerings, target clientele, and overall ambience can influence the adoption and success of the strategy in different restaurant settings.

Moreover, investigating transportation logistics and optimizing the presentation of the baskets can enhance the strategy's implementation. Researching the most efficient and cost-effective transportation methods to ensure timely delivery of the produce to the restaurants is crucial. Additionally, exploring ways to improve the presentation of the baskets, such as attractive packaging or labeling, can enhance their appeal and marketability to both restaurants and consumers.



*One of the hotels where interviews have been conducted*





The coastal area of Ghana: A completely different climate

8.3.5 Scaling up the research

Several factors should be considered if the strategy is to also work outside of Kumasi. This is especially important in the third horizon of the roadmap. The factors are as follows:

1. *Infrastructure and Technology Accessibility:* Availability and accessibility of infrastructure and technology may differ between regions. Assessing the technological capabilities, internet connectivity, and access to information and resources in each area will determine the feasibility of implementing certain digital or technological solutions as part of the strategy.
2. *Financial Security and Pricing:* Financial security and pricing dynamics may differ among regions. Farmers’ financial stability and the pricing of agricultural products can vary, which in turn affects their ability to invest in the proposed strategy. Conducting research to validate the statements made by supermarket managers and exploring the financial realities of farmers in different areas can provide insights into pricing dynamics and financial considerations.
3. *Perceptions and Receptiveness:* The perception and receptiveness of new or potential customers towards the strategy may vary based on their location. Factors such as cultural preferences, levels of education, and exposure to different marketing approaches can influence how farmers in different regions perceive and respond to the strategy. Tailoring marketing modes, materials, and communication strategies to suit the specific needs and preferences of different regions is crucial.
4. *Regional Produce Variations:* Different regions may have diverse agricultural landscapes, resulting in variations in the types and quantities of produce grown. Understanding these regional variations and aligning the strategy with

the specific characteristics of local produce can enhance its effectiveness. Strategies tailored to the abundance of certain crops or products can better address the local market demand and create value for farmers.

5. *Cultural and Social Context:* Each region may have its own cultural and social norms, which can influence consumer behavior and preferences. It is essential to understand these nuances to tailor the strategy accordingly. Factors such as language, traditions, dietary habits, and social structures should be considered when designing marketing messages and approaches.
6. *Partnerships and Stakeholder Engagement:* Building partnerships and engaging with relevant stakeholders beyond Kumasi is essential for the success of the strategy. Identify local organizations, farmer cooperatives, community groups, or government agencies that can support the implementation of the strategy and foster collaboration to achieve shared goals.

By considering and addressing these five factors, the strategy can be adapted to suit the unique contexts and needs of different regions, increasing its effectiveness and potential for successful implementation beyond the urban and semi-urban areas of Kumasi.

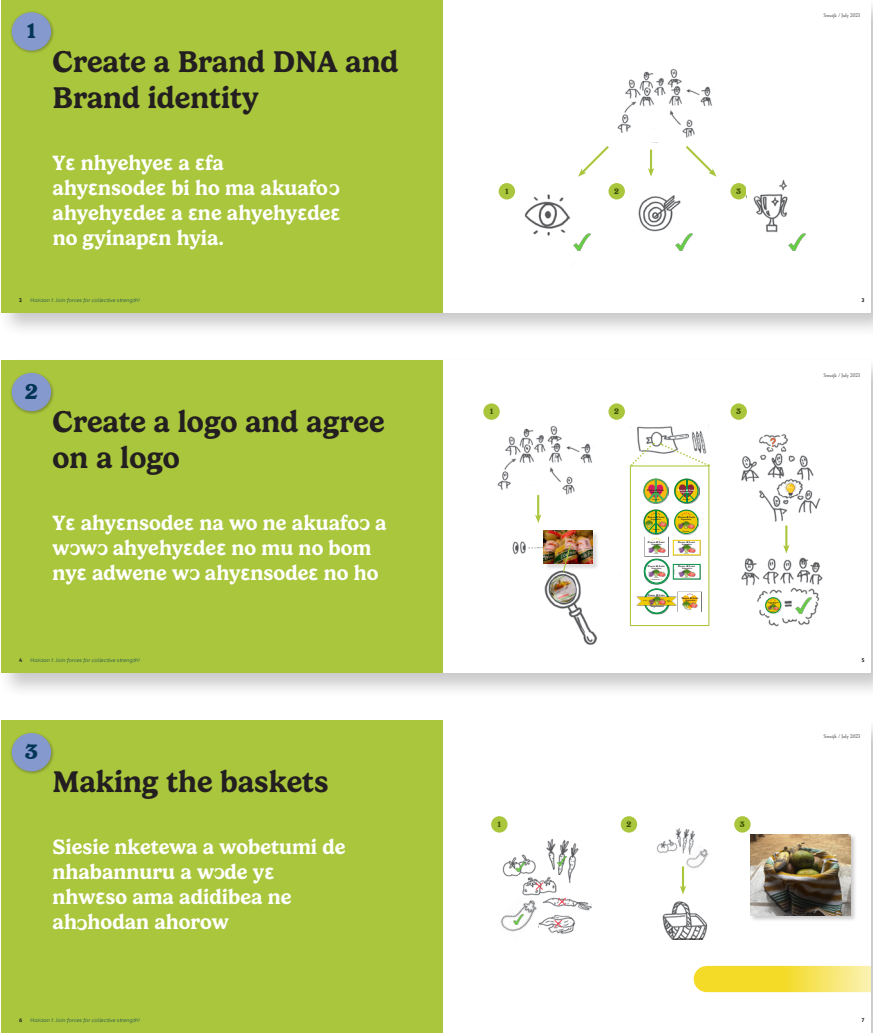


8.3.6 The communication of the strategy

It is crucial to consider effective communication strategies for farmers who may not have a strong command of the English language or have limited education. To ensure the inclusivity and accessibility of the strategy, further research should be conducted on how to effectively convey the information to these farmers.

One recommendation is to create a visual strategy that relies on visual aids, images, and graphics instead of relying solely on written content. This approach also offers the advantage of applicability in other countries where Holland Greentech operates, as visuals are universal and can transcend language differences. Additionally, exploring translation options for the strategy booklets into different languages or dialects can be considered. This approach can facilitate comprehension for farmers who are more comfortable with a specific language or dialect. However, it is important to recognize that translating the strategy into different languages still excludes farmers who cannot read. Furthermore, it is recommended to involve local community members or interpreters who can effectively communicate the strategy to farmers in their native language or dialect. Their assistance can help bridge the language gap and ensure that all farmers, regardless of their language abilities, can understand and benefit from the strategy. This fosters inclusivity and maximizes its impact across diverse linguistic and educational backgrounds.

An example of such a visual guide is given on the right, and can be found as a complete pdf, attached to this report. However, more research should be conducted into the effectiveness of this guide.



Take Aways Chapter 8

1. The research findings emphasize the need for farmers to transform their operations for long-term sustainability and address financial challenges.
2. The research results highlight the potential impact on various stakeholders, including students, farmers outside Kumasi, and the horticulture industry as a whole.
3. Recommendations for further research include exploring other customer segments like office workers, airline companies, and schools, and considering their specific needs and preferences.
4. Design limitations of the research include time constraints, language barriers, restricted research to Kumasi, project complexity, and financial constraints.
5. Recommendations for further research include studying different types of farmers, optimizing marketing modes and materials, addressing timely payment challenges, conducting proof of concepts, and scaling up the research beyond Kumasi by considering regional variations and cultural contexts.



# 09

## Personal Reflection

*After the strategy is drafted, it will be revised and validated during two individual validation sessions with farmers from different farmer organizations. Furthermore, during the Market Access Day which is organized at Kwadaso Agricultural College, the strategy is again challenged by several alumni and experts within the field of horticulture. One challenge found within the strategy is tested and solved by over 80 students in the form of an assignment.*



### 9.1 Personal reflection on process

This section described further in detail the personal reflection on the design process that was taken during the project. Thoughts will be described regarding the obtained knowledge, the methods that were used, the communication between the stakeholders as well as the supervisors and the overall project management.

#### 9.1.1 Knowledge obtained

The project began with a literature study to gain a comprehensive understanding of the topic and identify three relevant design challenges. Interviews with experts in the field were also conducted to gather firsthand insights. While the literature study provided valuable information, the initial design brief was broad and constantly evolving, which made it challenging to focus the research direction. Following the desk research phase, a field trip was planned. However, time constraints limited the depth of preparation. The field research experience proved to be crucial in gaining a deeper understanding of the topic, as theory and practice differed significantly. In hindsight, it would have been beneficial to spend a longer duration in the field to properly test findings and involve local farmers. Additionally, a proof of concept and experimentation with different marketing methods and materials could have been conducted given more time. If more time had been available, organizing a workshop on advertising in collaboration with a local marketing agency and experts in the field would have been advantageous. This would have provided the farmers with practical guidance and further enriched the marketing strategy. In conclusion, while the project faced time constraints and challenges in research focus, the field research proved invaluable

in enhancing understanding. Given more time, conducting a proof of concept and engaging in practical experimentation would have been valuable for testing and refining the marketing approach.

#### 9.1.2 Methods used

The primary method employed in this assignment is the double diamond method, which has proven to be highly valuable for organizing and structuring the research process. It provided a clear framework to navigate the complexity of the research and ensured alignment with the initial planning. The simplicity and effectiveness of this method facilitated a systematic approach to address the research objectives. In addition to the double diamond method, the grounded theory method was utilized to analyze the field interviews. This method allowed for a comprehensive examination of the interview data while minimizing bias and maximizing the meaningful insights gained. The concepts derived from the grounded theory analysis provided a comprehensive understanding of the various go-to-market strategies. However, it should be noted that the interviews had to be transcribed manually, as technological transcription tools were not available or did not work properly. This process consumed a significant amount of time and resources, emphasizing the importance of allocating sufficient time for transcription tasks in future research endeavors.

#### 9.1.3 Communication with stakeholders and supervisors

The communication between myself and the client has been highly productive. I have consistently received prompt support and valuable feedback whenever I needed guidance or simply

someone to discuss my research or personal matters with. This level of support was instrumental in my preparation for the field research trip to Ghana, and I continued to receive valuable feedback during my time there. Prior to the field research, I engaged in virtual meetings with key stakeholders, including KAC staff members and Holland Greentech employees. These interactions were essential in deepening my understanding of the subject matter before entering the field. In Ghana, I successfully facilitated communication and collaboration among the various stakeholders. The Market Access Day, in particular, served as a successful platform for stakeholders to reconnect and witness the tangible outcomes of the research. Overall, communication was relatively smooth throughout the project. However, it should be noted that due to time constraints, intensive involvement of key stakeholders was primarily possible during my time in Ghana. Therefore, careful planning was necessary to ensure productive interviews and sessions with all relevant stakeholders.

#### 9.1.4 Project Management

In terms of project management, overall, the planning phase was relatively straightforward. Although the initial project plan had to be adjusted early on due to the dynamic nature of the research, I was well-prepared for the need for flexibility and adaptability. Drawing from my previous experience in conducting research in diverse contexts, I understood the importance of an open mind and creative problem-solving. This prior experience not only guided me in selecting appropriate research methods and designing interview guides, but also facilitated logistical aspects such as vaccinations, securing funds, and packing for the trip. While there were a few moments of stress, project planning was generally manageable.

My proactive approach and active engagement with various stakeholders and subject matter experts, including those in horticulture, financial security, and nutrition, significantly facilitated the project. The involvement of these stakeholders, as well as the incorporation of activities like the Market Access Day, which extended beyond the initial project scope, generated enthusiasm and momentum. Regarding the feedback received, efforts were made to improve the overall strategy and report writing. The project strategy emphasized the active participation of farmers and included methods such as focus groups, individual interviews, and creative sessions, allowing for experimentation and room for potential setbacks.



## 9.2 Personal reflection on results

### 9.2.1 The assignment

Surprisingly enough, prior to starting with the research for my thesis, I said that I did not want to conduct any research on farmers or farming practices. My initial perception on doing research within this field was that it would not be challenging as the outcome of a certain strategy would already be clear far ahead from starting the project. This could not have been farther from the truth. The assignment posed itself as one of the biggest challenges I've faced so far in terms of projects during my academic career. The amount of stakeholders and uncertainties made the assignment truly complex. The brief of the project changed completely, from creating a strategy for Kwadaso Agricultural College to become a center of excellence to co-creating a strategy with commercial smallholders.

At the beginning of the project, I often found myself wondering when decisions should be made and if I should speed up the process or elongate the research phase. The possibilities and directions for this project were truly endless. The type of farmers that could be targeted ranged from sub-commercial smallholders to industrial farmers, from vegetable or fruit farmers to niche produce farmers, from rural remote farmers to urban farmers and from highly educated farmers to farmers without prior knowledge or experience. Even though important choices were necessary to make prior to the field research, the farmers could not be contacted before the trip due to their lack of communication tools and their expected low command of English.

I found the start very difficult and my planning changed almost daily. Next time, I would prefer to already start scoping the assignment earlier on as it would increase my confidence within the project and the research can be more focussed. A research

trip earlier on would also benefit the research as important information can be obtained in such a smaller window of time. In the process I took, I needed to conduct extensive literature research and the conclusions that were drawn then needed to be validated first by experts in the field.

Overall, I was very happy with the final design challenge that I needed to solve. It fits with my own interest in food and nutrition and my personal interest in making nutritious foods more accessible and available.

### 9.2.2 The results

Upon reviewing the project results and comparing them to my initial expectations, I can confidently state that I have exceeded my own goals. Drawing from my previous experiences working on projects for individuals in the Base of the Pyramid (BoP) segment in Bangladesh and Kenya, my personal objective for this project was to create something that would have a tangible impact at the local level, rather than merely existing in academic repositories for review.

Conducting creative sessions in a different cultural context proved to be both challenging and rewarding. While I had previously facilitated such sessions in the Netherlands, engaging participants from diverse cultural backgrounds brought unique considerations. During the sessions, it became apparent that the participants had a lower command of the English language than anticipated, necessitating the use of a translator.

I am particularly pleased with the level of detail provided in the strategy document, which offers a step-by-step approach that is accessible to farmers and other stakeholders involved. However, it would have been valuable to test the first step of the process with farmers and hotels, allowing for practical validation and refinement of the approach.

### 9.2.3 The impact

The impact of the strategy is not yet certain, but the fact that it was completely co-created with farmers makes me hopeful for the future. I have conducted several sessions with farmers to codesign this strategy. However, when looking back at my initial planning, I anticipated working together with hotels, restaurants and farmers side by side. Due to time constraints it was not possible, but it would have been beneficial.

Although the farmers displayed a positive reception towards the strategy and the ideas co-created with them, it remains uncertain to what extent the strategy will be implemented. Active support from various stakeholders will be crucial in driving its adoption and success. Fortunately, the stakeholders have shown a high level of receptiveness similar to the farmers, which is a promising sign.



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Thank you