

Case: Sustainable urban agriculture. The Marie Poussepin Sisters' Women Entrepreneurs Foundation¹

Caso: Agricultura urbana sostenible. Fundación Mujeres Empresarias: Marie Paussepin

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Classification: Empirical paper – case study

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Abstract

The following case introduces a real project with real problems for the development of a sustainable business model. Your role is to act as a consultant and make specific recommendations based on the information provided. Your job is to: 1) examine the various initiatives attempted by the Marie Poussepin Women Entrepreneurs Foundation, and 2) engage in strategic decision-making to develop recommendations for the foundation. The goal is to use the set of tools used over the semester to analyze the context and identify tactics to help the foundation in their goal of developing a sustainable initiatives business.

Keywords: Entrepreneurship, sustainable development, urban farming.

Resumen

Este caso presenta un proyecto real, con problemas reales para desarrollar un modelo de negocio sostenible. Su función es actuar como consultor y hacer recomendaciones específicas a partir de la información proporcionada. Su trabajo es: 1) examinar las diversas desarrolladas por la Fundación Mujeres Empresarias: Marie Poussepin; 2) participar en la toma de decisiones estratégicas para desarrollar recomendaciones para la Fundación. El objetivo es utilizar las diversas herramientas empleadas durante el semestre para analizar el contexto e identificar tácticas que ayuden a cumplir el objetivo de desarrollar un negocio sostenible.

Palabras clave: emprendimiento, desarrollo sostenible, agricultura urbana.

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¹ Teaching notes for this case are available upon request. Please contact the author.

■ Project background

The Marie Poussepin Sisters of the Epiphany (the Sisters) religious order was established in France in 1796. Its initial mission was to minister to the poor, and to focus on the education of girls and young women. As part of their mission, they have focused on using education to help poor women improve their incomes through the development of entrepreneurial skills. Early on, this involved helping them gain marketable skills like sewing, knitting, and weaving so that they could produce and sell their wares.

In the words of the Blessed Marie Poussepin:

I wish with all my heart, and I entreat those who will succeed me in the Government of this Community, to keep alive the zeal for the education of poor girls who might need it for their spiritual and temporal good, as well as the spirit of poverty and the love of work.

The foundation was established under the guidance of the Sisters as a nonprofit organization that seeks to generate income opportunities for poor women in the neighborhood of San Cristóbal del Sur (Bogotá, Colombia). Our corporate purpose is aimed at training women heads of household as urban agriculture and ecological art entrepreneurs.

Mission:

Form successful urban agriculture and ecological art entrepreneurs through the development of the capabilities and potential of women. Manage the enterprise as a tool to improve the quality of life of the women's families and social environment based on values of responsibility, honesty, and love of work, according to the service charism of Marie Poussepin.

Vision:

By 2020, the Marie Poussepin Women Entrepreneurs Foundation- Bogotá will be recognized as the first Business Network of Urban Agroecological Gardens with products and services that promote a deeper understanding

of nature, healthy eating, and wellness through entrepreneurship.

Values:

1. Love of work
2. Vocation of service
3. Responsibility
4. Honesty
5. Entrepreneurship and innovation

■ Project genesis

About ten years ago, under the guidance of Ruth Vargas, a professor at a local university, a project was started with the Sisters to help female heads of household within the neighborhood of San Cristóbal del Sur. The project's mission is to help train women as entrepreneurs within the urban agriculture sector. The project was formalized as a foundation called Fundación Mujeres Empresarias Marie Poussepin. The vision was to establish a network of urban gardens in Bogotá and throughout the country to provide organic food, with its attendant health benefits, to members and the broader community through the application of entrepreneurial skills.

According to interviews with Professor Ruth Vargas:

We decided to start planting and selling organic vegetables in 2008. That year we completed the ASSAIB project—the Sustainable Social Partnership for Harnessing Agro-Industrial Biodiversity—which aimed to produce phytotherapeutic plants (ivy, thistle, dandelion, passion-flower) for Phitother Laboratorios. However, given the low capacity of our established gardens, we were unable to meet the laboratory's monthly demand. Therefore, to take advantage of the existing assembly structure, the decision was taken to farm using organic practices because of the growing market demand for healthy food options. These policies were supported by local and city government.

In essence, the goal was to teach these women to “fish” themselves, rather than give them a fish. The project was very basic, but addressed many issues related to poverty such

as marginalization, chauvinism, and nutritional deficiency. According to the plan, the Sisters provided the funding for the initial dozen gardens. This allowed these families to grow the nutritious food that they could scarcely afford. They were also able to sell the surplus, allowing them to earn some much needed cash to help cover some basic living expenses. Additionally, the physical and mental health of the women would improve, as the project enabled them to better take care of themselves and their families.

The sisters provided an initial investment of \$3,000 USD (all monetary amounts have been converted to US dollars for easier understanding and calculation) to build 12 urban gardens. This would cover the cost of all of the raw materials (organic soil, netting, structural posts, seedlings, etc.) necessary to build a garden. There is

a waiting list of over 70 other women that would like to join this project within the San Cristóbal del Sur neighborhood in southern Bogotá.

The project was designed by the Sisters and the newly established foundation to be sustainable and self-funded. The sustainability model was premised on the retention of 30% of future revenue from agricultural production for reinvestment in the construction of additional urban gardens, as well as to cover the project's operational costs. The women would be able to keep 70% of the revenue to spend as they saw fit. The vision was for the project to grow from this initial investment to include hundreds of families in poor parts of the city.

There is significant demand on behalf of women to join the initiative; currently there are over 70 women who have indicated that



Photo of San Cristóbal del Sur.



Photo of Clark University students in an urban garden.



Nun Building a Garden



Typical Urban Garden

they would like to convert their backyards into an urban garden. Each garden typically costs \$250. This price includes organic soil and seedlings as well as the necessary netting and posts to enclose the garden to prevent animal contamination.

It was believed that the women needed to develop entrepreneurial skills to successfully maximize the potential of their urban gardens. As such, Ruth Vargas developed a series of workshops to teach basic agricultural techniques and business skills, such as accounting.

| Agricultural production in Bogotá

Bogotá is situated at 8,660 feet above sea level in the high plains at the center of the country. It has a crisp climate and consistent year-round temperatures. Rainfall is sufficient enough year-round and temperatures are ideal for Bogotá farmers to have four complete growing cycles a year.

| Iteration: pharmaceutical production

Dr. Ruth Vargas knew a senior manager at Amazonia Health LLC, a local pharmaceutical company that was importing vast quantities of ivy, thistle, dandelion, and passionflower for production purposes. These plants could be grown locally, but the company had been unable to find a suitable local supplier at the time. Ruth proposed attempting to grow the plants it needed among the 12 urban gardens. It appeared to be a win-win situation: the pharmaceutical company would participate in a local Corporate Social Responsibility (CSR) project, and the twelve urban gardens would have a market in need of their output.

The project began in 2008. However, there were problems from the get-go as these twelve urban gardens were unable to supply the company with the output it required. During interviews, it was never made clear how much land was required to produce the necessary quantity of plants. Ruth simply stated that output was too scarce for the project to continue. The pharmaceutical company stated that it remained open to buying from the foundation if it were able to supply the quantity of plants it needed.

| Iteration: supplying a grocery store

As a result of the failure of the first initiative, Ruth continued to seek out opportunities within her network to help it succeed. She was able to identify a new potential opportunity, this time through a contact at a local grocery store in northern Bogotá. After a series of discussions, the store agreed to carry a selection of herbs and vegetables from the gardens. For the grocery store, the appeal was that the produce was locally grown, organic, and had an element of CSR. The foundation established a brand called “De las huertas” (from the garden).

While selling at wholesale price was not ideal, there was a belief that the women entrepreneurs would make up in volume what they had lost in margin. For example, lettuce retails at \$0.78, while the wholesale price is \$0.68. However, the foundation found it difficult to supply the needed stock on a predictable schedule. After three months, the grocery store abandoned the initiative, citing inadequate deliveries. The grocery store remains open to renewing the relationship if the foundation is able to guarantee the delivery of produce.

| Iteration: direct sales

As this project faltered, Ruth began exploring alternatives to make the initiative sustainable. This initiative was called “De las huertas” (from the garden), and it focused on the growing interest in farm to table. She began asking people that she knew to buy the products. She stated:

The first customers were friends, acquaintances, and employees of companies where I made contact. The product was presented to the customers as a strategy of [accessing] organic produce and supporting the enterprises of poor women as a corporate social responsibility program.

The goal of shifting sales from the south to the north of the city was based on the belief that wealthier people in the north would be willing to pay a higher premium for organic food, especially for food that also had a CSR component. According to Ruth:

Sales in the area nearby the gardens also began at the end of 2012, since sales to other

customers were far from high, and much had been produced. Customers from the poorer areas of the city pay a lower price for produce. For this reason, and to help generate a better income opportunity, I decided to look in wealthier neighborhoods for customers willing to pay a fair price for our produce.



In an effort to foster additional sales channels in the north, Ruth used her network to find opportunities for the women entrepreneurs to set up in the lobbies of office towers. The project was presented as a CSR initiative that would allow the businesses to be a part of and support the project. Ruth has had some success with this initiative, with a small but growing number of repeat orders. The customers buy the produce and pay an additional delivery fee of \$1.71 (\$5,000 pesos). For Ruth, the most successful customers are companies. For this kind of group order, Ruth drops the delivery charge based on the assumption that she is increasing her total sales.

Additionally, the women entrepreneurs set up sales tables in one office building on a bi-weekly basis. The women entrepreneurs alternate this sales effort with three mobile efforts every two weeks. The women gather a selection of produce and take public transportation to the north. The commute time each way is about two hours. The sales outcomes of this initiative were never revealed to the researchers. Ultimately, this

initiative faltered and appears to have ended. We can only speculate as to the causes of the failure. It could have been from the lack of sales, an inability to get volunteers to consistently travel to sell, or other problems.

The produce delivery service is ongoing as Ruth continues to use her network to build the customer base. In an effort to more accurately predict production, the foundation has established a manual system of data collection on the produce available for sale.

The ordering process involves Omaira, one of the urban farmers, calling all the others to find out what produce is ready for picking. That information is relayed to Tami, a friend of Ruth, who compiles a list of available produce. Tami then calls each customer to see if they want any produce. The orders are entered into an Excel sheet, which Tami then compiles. Tami emails the list to Omaira, who then contacts the 11 other gardens to see who is able to deliver. Ruth operates a FIFO (First In, First Out) system, but has indicated that some of the gardeners complain that Omaira always receives the majority of orders while the others do not get their fair share. A review confirms that Omaira is indeed getting most of the orders. The file, "sales over the years," has a detailed list of sales which can be reviewed in the tab, "Control facturación." For example, on August 10, the foundation was able to sell \$22.51 (\$66,000 pesos) worth from among six people, all of whom worked in the sales office.

Ruth believes that the initiative is a good one, while Tami has agreed to continue calling the customers, even as she continues to look for more.

■ A pivot: on their own

As formal efforts continued to falter due to a lack of consistency, the women began to pursue divergent strategies.

The farmers diversified to grow a product mix that they felt was best suited for their land and personal needs. When examining the current production of the 12 gardens, one is able to identify a dramatic divergence in focus of production.

Some gardens continue to grow the herbs and vegetables found in the product list, while others have deviated dramatically.

From what I observed, neighborhood people go to the urban gardens to buy some of their produce. The women sell their produce within the community for 50-75% less than the retail price. For example, I observed a women sell a head of lettuce to a neighbor for \$0.17, which is 75% under retail price. I asked Ruth about what I had observed, and she indicated that the typical price is not so low; 50% off of retail price is more typical. By her calculation, the women sell a head of lettuce for \$0.34 (\$1,000 pesos), for which there is no requirement to give 30% to the foundation.

One woman is now growing mostly aromatic plants that are used locally in a hot beverage called “aromatica.” Conversing with her, she indicated that produce sales were steady, that she was very happy with her garden, and planned to continue with this line of plants. There appears to be growing interest in the aromatic product line. Of note, at the garden that Clark University set up in May 2016, the women spoke of their desire to use the garden to grow aromatic plants, not for sale, but rather for the establishment of a small stand to sell hot aromaticas in the neighborhood.

One woman had converted most of her garden to fruit production. In my conversation with local partners, they commented on the high value of the fruit that she was growing. She seemed to be doing well, and was happy with her decision to grow fruit instead of the prescribed product list.

The rest of the gardens appeared to be growing the items on the prescribed order form, but with varying degrees of specialization. I observed a garden growing mostly lettuce, while another one appeared to focus mostly on spinach. When reviewing the “comparative sales” tab of the “sales over the years” file, lettuce and spinach are noticeably the two most popular items. The typical seedling costs \$0.01 for lettuce or spinach, with lettuce retailing at \$0.78 and spinach at \$0.75.

■ Iteration: additional projects

Eco-art

The foundation also sells wall art installations (“muros”). An example can be found on the foundation’s website (<http://fundacionmujeresempresarias.org>). Customers are able to solicit from the foundation the construction of vertical organic gardens in their home or office. An engineer conducts a site visit and designs the unit that will be installed. The women entrepreneurs build the necessary components and buy the necessary plants. The unit is then installed. There have been few sales of these products, but they are very profitable when they occur. In 2013, a couple of wall art installations were sold with gross sales of \$939.13. These details can be found in the “comparative sales” tab of the “sales over the years” file. The project is still active, but Ruth has been unable to find additional clients.

Despite an initial positive response, insurance issues have limited the growth of this initiative. The government requires that commercial ventures only hire federally registered contractors, which these women entrepreneurs are not. The danger in registering federally for the women is that once a person is registered into the formal economic sector, they cannot return to their informal status. Their informal status entitles them to free medical coverage within the national health system. Once they formalize, they must find and pay for their own health insurance from a private provider. This presents significant issues for the eco-art venture.

Manual labor

The foundation provides day labor services to families and businesses that are interested in building their own urban garden. The women earn a per diem for their work. The work initially consists of constructing the garden, and then of tending to it. This project has run into the same challenges faced by the eco-art project.

Additionally, a number of individuals have been unwilling to hire the women entrepreneurs without insurance for fear of the liability resulting from an incident such as a slip or fall. As such, while this

initiative had some initial success, there remain many obstacles limiting its growth potential.

Eco-tourism

Ruth believes that she can capitalize on the growing interest in the farm to table movement by offering eco-tourism opportunities to people from northern Bogotá, as well as foreigners visiting Bogotá.

She states:

The decision was made to start agro urban tourism, which consists of bringing groups of people from the north [of Bogotá], explaining to them the goals of the project, and inviting them to buy vegetables directly from the garden. The tour would consist of visiting a few gardens, giving the tourists the opportunity to view production, and meeting the women entrepreneurs.

Ruth envisions bringing busloads of people to visit the different gardens, with the hope that the tourists will gain an appreciation for the value that urban agriculture has in helping these women improve their lives. The hope is that these tours will generate sales for the gardens, and potentially lead to eco-art installation opportunities or the manual labor of building these types of gardens for the tourists.

Centerpieces



The foundation has developed a successful initiative selling centerpieces, a project of Ruth's. Ruth had seen a similar project and thought it could be replicated at a good profit by the foundation. She was able to pre-sell 100 centerpieces to one of her professional contacts.

The 100 centerpieces were used for corporate gifts. Ruth initially set the retail price at \$25.54 (\$75,000 pesos), but the client found the price to be too high. They agreed on a final price of \$15.35 (\$35,000 pesos). One of the women who does not have a garden currently received an administration fee of \$0.68 (\$2,000 pesos) per item sold. See Appendix 1 for a detailed explanation of the costs associated with producing each item. After the conclusion of the sale, Ruth calculated the cost of the goods sold and found the unit price to be \$15.86. As a result, the new retail price is set at \$18.76 (\$45,000 pesos).

After the initial sale of 100 units to a corporate customer, some of the women have continued selling the centerpieces. The products are sold outside a local church after Sunday mass. However, a problem emerged when the carpenter, having seen for himself the final product, decided to make and sell the succulent centerpieces on his own, thus undermining the initial success. The women entrepreneurs are now competing with their own supplier, resulting in downward pressure on prices. They have switched suppliers, but the damage has been done as there are now others selling in the market. Regardless of the competition, sales have been strong, and there is an interest in expanding production and sales channels (perhaps in the north of the city).

Direct sales to restaurants

Ruth has begun testing direct sales to local restaurants in the north of the city. The goal is to supply local restaurants with organic produce. These restaurants are small, and have a degree of interest in organic food. This project is in its early stages, but Ruth has indicated there is one restaurant that is willing to buy 30 heads of lettuce a week. The current list price is \$0.78 per head, but the wholesale price would be reduced to \$0.61 per head with free delivery. The foundation has yet to make a delivery because they need to guarantee consistent production of the produce.

Leasing public land

The foundation is in negotiations with the National Police Department for the use of a

Appendix 1

The first row represents a small centerpiece that costs \$33,000 and retails at \$35,000.

The second row represents a large centerpiece that costs \$46,500 and retails at \$55,000.

Wooden planter	Planting fee	Soil	Labels	Plants	Coordination fee	Sales commission	Transportation	Total cost
\$14,000	\$3000	\$1000	\$1000	\$6000	\$2000	\$3000	\$3000	\$33,000
\$17,000	\$8000	\$2500	\$1000	\$12,000	\$2000	\$3000	\$1000	\$46,500

nearby five-hectare plot of land. The idea is that access to this plot of land would allow additional women to join the foundation and contribute. Further, this land could be utilized as a central place to educate additional urban farmers. A group of women would work the land for six months, or two growing seasons, and learn about urban agriculture. The goal is that after an initial six months, these women would be able to take what they learned to start their own garden. The production would be focused on potatoes since it is a high demand crop, even though they cannot be grown in small backyard gardens.

Conclusion

This case has outlined some of the key project elements. The project has encountered significant challenges to growing and becoming sustainable, despite its genuine and active status.

Case Study Outline

Tasks: Submit both a paper and a 10-minute presentation.

The Paper: submit a 10-page position paper in APA format with a title page and abstract. *The abstract and title page do not count towards the page count.* Outline your strategy for the foundation moving forward. The key elements of the paper are outlined below.

Introduction:

Case: Research and find general information about the topic that I may have omitted. *For example, provide context for this case study.* In other words, collect data, both primary and secondary, that provides the reader with the necessary information to better understand the

macro-economic issues faced by the poor, and specifically by female entrepreneurs at the base of the pyramid in Bogotá. The following topics should be included:

- a. Poverty and poverty rates
- b. Inequality – Gini coefficient
- c. Gender

Literature review: The instructor will provide for your review two scholarly articles related to Sustainable Urban Agriculture. Find at least two additional sources that will help you explore issues of sustainability in the field of urban agriculture. This requires you to review academic research as well as consultancy reports related to this topic that will enable you to identify research themes.

- Summary research findings: this section requires you to pull what you have learned about the topic from the literature.

Discussion: Synthesize the literature and the case. The section should include the use of some business tools to map the problem.

Recommendation: This assignment is a position paper and, as such, requires you to make a recommendation about the best course of action for the foundation to become sustainable. Base your recommendations on ways that the foundation can become sustainable. The business tools provide a lens to help you explain your recommendations.

You should use at least two of the tools that were used during the semester to build your case. Identify a strategic vision for the case. Outline key operations and tactics to achieve your vision for the case.

Conclusion: Complete your paper with a conclusion section.