

Assessing food security and diet diversity in Nariño, Colombia



Andreane Bellon de Chassy
2016 McBurney Fellow
McGill Institute for Health and Social Policy

Project Overview

Student name: Andreane Bellon de Chassy
 Department: Agriculture and Environmental Sciences
 Organization: *Proyecto Papas Mas Nutritivas* Universidad Nacional de Bogota & McGill University
 Location: Pasto, Nariño, Colombia
 Mentor: Patrick Cortbaoui
 Fellowship Duration: May 4th to July 22nd, 2016



About the McBurney Fellowship Program

Through McGill's Institute for Health and Social Policy, the McBurney Fellowship Program supports students in international service programs related to health and social policy in Latin America. McBurney Fellows serve abroad in organizations working to meet the basic needs of local populations. One key aspect of this fellowship is its mandate to make a significant contribution to improving the health and social conditions of poor and marginalized populations through the delivery of concrete and measurable interventions. Students and their mentors identify issues, make connections with local organizations, and develop a strategy for the fellowship. The views expressed in this document are the opinions of the fellow, and do not necessarily reflect the opinions of the IHSP.

Contents

Project Overview	1
About the McBurney Fellowship Program	1
Contents	1
Fellowship Overview	2
Objectives	2
Background/Context	3
Activities	3
Challenges and Successes.....	4
Questions Raised	5
Training and Mentoring.....	5
What did you learn?	6
Community Implications and Further Work.....	6
Program Evaluation	7

May 4th – July 22nd, 2016

Assessing food security and diet diversity in Nariño, Colombia

Fellowship Overview

McGill's Institute of Global Food Security launched the S.A.N-Nariño (Seguridad Alimentaria y Nutricional) Project in 2012, which aims at *Improving Potato Production for Increased Food Security of Indigenous Communities in Colombia*. Potato is a staple food in Colombia and is frequently incorporated into each meal, three times a day. As such, McGill University and the National University of Bogota have worked to develop a certain potato cultivar with higher yield and better nutritional qualities to primarily improve indigenous communities' nutritional habits, to empower women and to develop participative research on good agricultural and postharvest practices. Since November of last year, the project is now in its second phase of *Expanding adoption of nutritious, disease-resistant potatoes in Colombia*. The goal is for these new varieties of potatoes to be produced locally and to reach sales on a national level. The second phase has multiple themes such as Family Roles and Gender, Seed Production, Education: Training Schools for Family Agriculture, Food Security and Nutrition, all of which are addressed during monthly workshops among the different groups implicated in the project.

My work fell within the food security and nutrition component, whereby I coordinated with the participative members and facilitators to carry out informal interviews on the subject of "huertas caseras" or family horticulture gardens, and scheduling visits to the home gardens.

Objectives

Potatoes are one of the main Colombian staple foods. Indigenous and "campesinos" or farmer/peasant populations have diets that are primarily based in starch and protein, with few vegetables and fruits. Among these lower income and poor native populations, food insecurity is more prominent and the diet is poorly diversified. Women play a significant role in food security of their communities, as many are responsible for the food preparation, planning, purchasing, and cooking. It is important to note, however, that a woman's decision-making relies on their husband's input, where the degree of freedom may depend on their relationship with the man of the household. As such, the main concern is to ensure food diversity in native communities of the department of Nariño, Colombia and to improve the nutritional content of their diets.

The objective of my study was to conduct informal interviews on the ownership of horticulture garden and ask specific details accordingly based on if the answer was affirmative or negative. The second objective was to conduct visits to as many home gardens as possible based on participant's accordance, to make a visual comparison with what was shared orally during the interview.

May 4th – July 22nd, 2016

Background/Context

The five municipalities in which the project *Papas Mas Nutritivas* is entrenched are made up of indigenous and peasant communities. The people live in remote areas and most are dependent on raising animals - primarily cows, chickens, hamsters, pigs, and rabbits – as well as cultivating potatoes and horticulture crops for family sustenance. Family income and land tenancy is limited for many of these large families. The *Papas Mas Nutritivas project* collaboration with the FAO (Food Administration Organization) have taken the responsibility to facilitate educational Training Schools for Family Agriculture workshops to evoke the importance of having home vegetable gardens and provide the support and materials necessary. Horticulture gardens are a means to secure nutritional diet quality and diversity by having available, fresh crops for consumption. The ownership of home gardens not only can help improve economic stability among families, but also helps address the issues of gender and reinforces the roles of women as central axes to the improvement of food security in the household.

Activities

During the planned monthly sessions of Training Schools for Family Agriculture in five municipalities of Nariño (Tuquerres, Pasto, Guachucal, Cumbal, and Carlosama), I interviewed each of the participants present - ranging from 15-25 people– based on a semi-structured interview. Because I was there for three months, with the first set of sessions in May, I was helping in the logistics of the sessions, such as setting up, handing materials, organizing the groups, preparing and serving food. All in all I was getting an idea of the layout of the workshop, the peoples' attitudes and behavior during the meetings to know how to approach them during the interviews. During the two following months of the sessions, I took the opportunity to interview and schedule garden visits. In accordance with McGill's ethics review regulations, prior to beginning each interview, verbal consent from the interviewee was first ensured. General personal/identity information was annotated like full name, gender, age, marital status and neighborhood. The first question asked was if the person had a home garden. A slightly different set of questions was asked in each case whether the answer was affirmative or negative.

In the affirmative case, the following set of questions were asked:

- 1) Was the garden established based on personal economic resources? Or were resources provided from another source: municipal, governmental or non-governmental initiative?
- 2) Why do you have a home garden?
- 3) Who primarily tends the garden and how frequently (how many times a week/month)?
- 4) What is the approximate area of the garden?
- 5) Which crops do you have presently planted in the garden?
- 6) Which crops have you recently harvested or you will be transplanting?
- 7) Why is important for you to have a horticulture home garden?
- 8) What is a vegetable, fruit, or crop you wish you could have within your garden?
- 9) What were or are the barriers preventing you from having your "dream crop"?

In the negative case, the following set of questions were asked:

- 1) Why or for which motives you do not have a horticulture garden?
- 2) Do you have land space that could be available for a home garden? If so, approximately what is its area?
- 3) If you could have a home garden what are the crops you would sow?
- 4) In your opinion, why is it important to have a home garden?

The goal behind noting specifically which vegetables are present is a way of measuring the diversity of the garden. For example, if the person grows medicinal plants, cabbage, spinach,



onions, beans, and potatoes it may suggest that the person has to supplement their kitchen by purchasing other varieties of vegetables in the market, or is incorporating a limited amount of vegetables in their diet.

After having interviewed the

different groups within the municipalities, during the next set of sessions, I asked which participants were willing to demonstrate their home gardens in order to get a visual perspective of what was present and how the garden was structured.

All data was then classified into excel worksheets and organized into graphics for visual representation. It was then shared with the lead researcher of the *Papas Mas Nutritivas* project and the other members of the team within Pasto, Nariño.

Challenges and Successes

I carried out 163 interviews throughout the five different municipalities of Nariño and visited 28 different home gardens. I was facilitating each interview while the other members of the team were presenting.

There was one group out of the ten groups we worked with that I was unable to interview because of time constraints. For this one group, for two of the sessions two hours were lost because the group had to work the land, so insufficient time was left for me to talk to everyone. Furthermore, I had to help in the logistics of the presentations for it to run smoothly considering the shorter time frame.

With regards to the garden visits, for logistical reasons I had to group the visits within agglomerated neighborhoods of the participating groups. This means that there were a few of the participating groups for which I was not able to visit any of the gardens. I would have liked to visit a few gardens from each of the nine groups I interviewed, but the transport distance to these remote neighborhoods as well as the availability of the people rendered it more difficult than I had thought to accomplish a more diverse sample of the home gardens. Some people indicated that they do not have a home garden because they believe either that their plot of land was insufficient to be planted with crops or that it was perhaps shameful to have a home garden, so they never attempted it. I would have liked to have visited the houses that did not have the home gardens to get an idea of the space constraints preventing them from having one, as well as to see the available land they had mentioned during the interview.

Questions Raised

I had many questions regarding the work I was doing, such as to what extent was this information going to be useful for the Nariño team? I was especially concerned with the feeling I had that I was 'taking' information from the interviewees and myself was not 'giving back' directly to them. Indirectly the participant would receive a response and support on behalf of the team, as the information I was seeking will be used by the team workers to 1) strategize on how to deal with the most frequently reoccurring responses to the questions asked during the interview (for example: means to provide the dream crop or strategize around the problem of space constraint...) and 2) on how to ensure a diverse, nutritionally complete diet for these families.

At the start of the fellowship, the process was slow and a bit frustrating when trying to establish which exact tasks I was going to carry out. When I arrived in Pasto, I was expecting to have a clear-cut layout of the work I was going to accomplish throughout my stay, however it turned out they did not yet have a concrete idea of what I could or be in charge of. On the positive side, this gave me the freedom to construct something that I was truly interested in doing while taking into account my own abilities and knowledge. The lack of structure at first was a bit off-setting, and made me question if they really needed an intern. However I realized that what would get the wheels turning wasn't hoping the team would come up with a specific task for me, but rather constructing a specific objective with their input and suggestions that would best contribute to the food security component of the *Papas Mas Nutritivas* project.

Training and Mentoring

Prior to my interviews I did not receive training on how to interview. The team helped in choosing which questions I should focus on asking. Luckily in a past internship in Panama I had done some semi-structured informal interviews going from neighbor to neighbor in a small town, thus I had a small idea of what to expect and which attitude/formality to adopt. Minimal material was needed to carry out the interviews and as for the garden visits, I was lucky to make a friend who knew the neighbors and the area and could bring me on the back of their motorcycle!

What did you learn?

During the first Family Agriculture School Workshops I felt uneasy because I sensed that I stood out significantly. After having assisted a few, I became more familiar with my surroundings and knew what to expect. I began to communicate and interact more with the participants and actually ended up spending a weekend with one of the participant's families learning how to feed all of the animals and milk the cows! What I learned is that it takes patience to push past your comfort zone, adapt and fit the mold. People are timid, especially those from indigenous descent, so it takes time for them to earn your trust and develop a relationship.

Something I would do differently next time is to better plan ahead the tasks I wanted to take on, so I could have started more quickly on the work I did and perhaps have gotten even further in my fellowship objectives, for example visiting a greater number of gardens across the different communities.

Community Implications and Further Work

In the short-term, the importance of self-sustenance toward contributing to household food security was re-enforced through our work. Also, throughout the interviews, the participants increased their awareness about adopting better food habits. Furthermore, those that do not have a home garden were exposed to the idea that growing one's own vegetables, roots, and fruit crops can help reduce expenses, and increase savings in the long run, which can then be redirected toward other necessities (health, education, housing...).

The team also benefited from my investigation, particularly with the question asked about the desired crop, to see what the most frequent answer was and how they might be able to address that necessity. Many expressed the desire for: strawberries, blackberries, tomatoes, quinoa, carrots and cabbage. Also the interview was important for knowing the reasons that prevented these people from having their dream crop for which the most recurrent answered included: insufficient financial capacity and lack of time and/or knowledge of how to correctly sow the crop. Additionally, seeing the size and the composition of each garden helps to measure the diversity and to which extent the garden contributes toward household meal-making. In the long-term, there is potential for dealing with certain issues like that of space, where the team can work on introducing and adopting urban horticulture techniques to optimize space, minimize inputs, and improve crop production.

Not only did the team benefit from my work, but the municipal government did as well, as there is a lot of work being done by the FAO on the subject of horticulture gardens as a key to alleviating food insecurity and smallholder farmer poverty. Considering the *Papas Mas Nutritivas* team works closely with the FAO, the information I retrieved can be shared in order to coordinate with the FAO on how to provide the resources necessary to the communities.

Ideally, the next step would be to expand the construction of home gardens throughout the other 64 municipalities within Nariño. Policy action could be taken within each municipality below the department of Nariño as a whole, in order to increase budget and dedicate investments toward sustainable farming techniques for smallholder and indigenous farmers.



Program Evaluation

During my fellowship I was always curious about what a typical day was like for the farmers. Throughout my interviews, but also by being present during the Family Agriculture Schooling programs, the participants opened up more to me and were able to share stories that were incredible. Even though I was lost deep in the middle of farmlands, I am very lucky that I was able to discover the countryside of Colombia and truly see first-hand the importance of food production and food security within lower income families of this region. To these families their cows and crops are their means of survival, a purpose to one's daily life, and a common shared lifestyle and main subject of conversation that builds relationship among the neighborhoods.

I advise future fellows to have patience when participating in a project. To go past one's comfort zone and to be outgoing, it will ease interactions and truly construct relations. Lastly, to be observant and curious because it will only lead you to learning more and more on any range of subjects!

As previously mentioned I was participating in the second phase of McGill's S.A.N- Nariño project, "*Expansion of nutrition, disease-resistant potatoes in Colombia*". The Colombian team was extremely warm and welcoming, and for any student who wishes to become part of the project, the next step will focus more on the commercialization aspect of the potato varieties and working to find smallholder farmers who can adopt and produce this nutritious food staple of Colombia. To prepare for the fellowship the student should get in contact with the different team members, and organize Skype sessions to get an update on how the project is situated and advancing. They can also feel free to contact me for any questions or concerns, I will gladly help!

Work Cited

International Development Research Center – IDRC – (2014). *Improving potato production for increased food security of indigenous communities in Colombia* [PDF document]. Retrieved from <https://www.idrc.ca/sites/default/files/sp/Documents%20EN/106926-Colombia.pdf>

International Development Research Center – IDRC – (2015). *Expanding adoption of nutritious, disease-resistant potatoes in Colombia* [PDF document]. Retrieved from <https://www.mcgill.ca/nutrition/files/nutrition/108125-potatoes-colombia.pdf>

Universidad Nacional de Colombia. *Seguridad Alimentaria Nutricional S.A.N. Nariño* (2014). <http://www.seguridadalimentarianarino.unal.edu.co/?q=en/who-we-are>