

Extending Community Integration in the Long-Term Mine Impact Monitoring Assessment in San Jose Del General, Panama



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Project Overview

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Location: Panama
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**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.

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EXTENDING COMMUNITY INTEGRATION IN THE LONG-TERM MINE IMPACT MONITORING ASSESSMENT IN SAN JOSE DEL GENERAL, PANAMA

Project Overview

Participating in the 2015 IHSP McBurney Fellowship was a small, yet integral piece of the 30-year, Long-Term Mine Monitoring Project (LTMM). This umbrella project runs under the auspice of UNESCO and Panama's *Foro de Sostenibilidad*, with lead actors coming from McGill University. The project in general aims to monitor the social and environmental impact of two mines in the San Jose Del General Region. In doing so the project wishes to build local communities' capacity to monitor the impact of mines and ability to use this information as a base of conversation with stakeholders. Our summer fellowship fell right after the 1st official McGill and community-run monitoring event that was conducted in April 2015. Therefore a large part of the fellowship was giving back the results to the communities and obtaining feedback on the monitoring process. Our activities also concentrated on capacity building by working with individuals in the communities to build a base for them to attain the technical and conceptual skills needed to conduct monitoring.

In our work in San Jose del General, Panama, the families of the communities share their ecological environment with two open-pit mining operations run by Canadian-owned companies. The mines are Petaquilla Gold (600 ha) of Petaquilla Minerals and Cobre Panama (13,600 ha) of First Quantum Minerals. Thus far in the history of the companies' operations, community members have played a minor role in major decisions and have not been adequately informed about the details of open-pit mining and its possible socio-economic or ecological consequences.

Community-based monitoring (CBM) may indeed be a perfect match for the community-based long-term mining impact assessment of San Jose del General, as not only are the methods of CBM largely pioneered in environmental monitoring for indicators (such as participatory ornithology) but also in popular epidemiological studies in health. For a detailed description of CBM, see Box 1 below. Due to the potential biophysical impacts of the mines surrounding San Jose del General, and the partially epidemiological (narrative and frequency observation) and environmental (indicator-based) monitoring strategies employed in the assessment, CBM is well

suited to increase the ability of community members to understand and respond to the changes in their environment with the presence of these mining operations.

Box 1 Community-based monitoring

Community-based monitoring (CBM) is a strategy for data collection and information generation which is growing in popularity worldwide. Some of the most commonly cited reasons for its uptake are differences in power and ability between actors such as local-level farmers and fishers and national governments or corporations. A community-based program (CBP) adds value to health and environmental research for both researchers and communities alike through the creation of bridges between scientists and communities through the use of shared knowledge and valuable experiences;¹ the development of culturally appropriate measurement instruments which may lead to the increased efficacy and efficiency of projects;² an increase in methods and definitions used to identify problems;³ the establishment of mutual trust which can enhance the quantity and quality of data collected as well as the research experience of all participants;⁴ and what Viswanathan *et al.* (2004) dub the "ultimate benefits:" a deeper understanding of a community's unique circumstances and with this, a more accurate framework for testing and adapting best practices to a community's needs.⁵ This lends itself to the claim that the participatory processes and aspects involved in CBM (also known as participatory or community-based research or citizen science, among other titles) can increase the decision-making abilities of all those involved in a situation or project, including researchers, policy makers, and communities alike.⁶ This is to say, the integration of a community into a long-term research program can add multi-dimensional richness to a project. Through an adaptive and iterative process of co-learning and experimentation, this approach can also serve to enhance information and strengthen partnerships amongst stakeholders and institutions themselves. Where there are extreme difference in the ability of these actors to participate in the decision-making activities of countries, some can be unduly excluded and suffer from their own silence. In these cases, CBM may act as a tool for empowerment and justice in the lives of smaller-scale actors. Community-based monitoring offers locals the ability to collect, analyze, store, and share their own data on issues that impact their own lives.

¹ M. Viswanathan, A Ammerman, E Eng, G Garlehner, KN Lohr, D Griffith, S Rhodes, C Samuel-Hodge, S Maty, L Lux, L Webb, SF Sutton, T Swinson, A Jackman, and L Whitener, "Community-Based Participatory Research: Assessing the Evidence: Summary," *Agency for Healthcare Research and Quality, Evidence Report Summaries* (2004): 10.

² Viswanathan, "Community-Based Participatory Research," 15.

³ P. Brown, "Popular Epidemiology and Toxic Waste Contamination: Lay and Professional Ways of Knowing," *Journal of Health and Social Behavior* 33 (1992): 273.

⁴ Viswanathan, "Community-Based Participatory Research," 10; C. Quinn, and J. Pouliot, "Long-term Monitoring Impact Assessment of Mining Activity in Panama," *McGill University* (2014):18.

⁵ Viswanathan, "Community-Based Participatory Research," 1

⁶ M. Estrella and J. Gaventa, "Who counts reality?: Participatory Monitoring and Evaluation: A Literature Review," *Brighton: Institute of Development Studies* (1998): 5.

Objectives

The main tasks that we set out to accomplish this summer were:

- Disseminating results of the first year of mine monitoring to communities where the monitoring was done;
- Having meetings with representatives and individuals from communities where we either conducted the monitoring or where we wish to conduct monitoring in the future;
- Giving presentations to communities, explaining the open-pit mining technique and its potential environmental and social impacts, as well, explaining our proposed process for monitoring and the technicalities involved
- Forming a community group, with about 1-2 representatives from each of the 8 communities where monitoring takes place in order to have them continue the project (monitoring and sharing information) on the ground, while also liaising with us
- Establishing an agenda for the year to come with the community group.

In addition, gaining feedback on our first official year of monitoring was an essential part of our work. For this, we conducted interactive presentations on McGill's methods and results, which were delivered in key communities of the area. As well, we had the goal of solidifying our relations with community members to create a local committee that might continue activities in our absence. In this we succeeded by organizing a group of at least two representatives from each of the eight communities of the region into a committee, which can act autonomously to run meetings; inform other stakeholders about monitoring, the results, and mining in general; and receive funding, among other functions. With the help of this group, a local representative, and input taken from various conversations, we also took steps toward creating and finding a mutually agreed space where hard copies of this information could be stored, namely the local government center, *la junta comunal*, and potentially the student center.

In all that we did, we also sought to demonstrate our commitment to the assessment and to the communities. Because we seek to work in a partnership with these people for at least 30 more years, it is critical that we get to know them and the area and that we develop the bonds of trust which are indispensable for this type of collaboration.

In addition, our responsibility to the long-term assessment as a whole was to continue strengthening the base of resources so that they will be available to future members of our team. Therefore, upon our return to Canada we worked on a key element of the project: the Field Guide. This will be a short book with all the necessary and basic information regarding the project, including maps, yearly chronicles, a guide of relevant actors, and a collection of key terms (in Spanish and English). It is our hope that this guide will reduce the time lag in the continuation of this long-term project and facilitate information transfer. Going forward, it should be edited each year accordingly.

The long-term goals for the 30-year monitoring assessment include:

- [1] The collection of data for and by community members of their biophysical environment and the changes over that period in order to assess the impact of mining activity in the area and,
- [2] The assistance of locally-based efforts to come together in a safe space for dialogue with representatives of the local mining operations as well as with representatives of their government so that these stakeholders can more effectively participate in decision making.

To accomplish these goals will require building capacity and relationships with the community through knowledge, equipment, and connections over the next three decades. As well, trial and error will always be a part of our process. Facilitating conversation between key actors is essential in order to give locals a more direct and 'fair' input into the development process. This may take the form of lobbying to local, provincial or national governmental, corporate, or other representatives, starting education and awareness campaigns, or simply organizing a committee for pollution or toxification control. Community-based monitoring and community-based knowledge generation and ownership are especially relevant in San Jose del General as the majority of locals do not tend to speak publicly unless they feel themselves knowledgeable. As locals learn more about what is happening in their environment and what is driving the changes, and how all of this impacts them in the short and long term, they are better able to take action. Without a certain base of information about mining and its impacts, or general environmental science education, the community may continue to watch in silence as their ores are harvested, ecosystems disrupted, and families displaced.



Background/Context

Open-pit mining can have serious negative socio-ecological impacts. From the contamination of water bodies, to diverting agricultural water for mining processes, to reduced employment for locals at the end of the mine's life (or even once the construction is complete), to a change in the local economy from a previously subsistence/food crop-based system to a cash-based economy, the range and scope of potential change and impact is unpredictable.⁷

Add to these possible outcomes the unique geographic location of San Jose del General. As one of the wettest places in Panama, containing 3 watersheds and with an approximate 8-month wet season, the potential impacts of mining might be alarming and more difficult to control. The communities, made up primarily of *campesino* (pastoral) and *Ngöbe-Bugle* (Indigenous) populations, have historically been marginalized in the 'modern' development processes of the country. In the absence of strict regulations, Petaquilla Gold has now been abandoned for about two years, leaving hundreds of workers without their final payments and abandoning machinery, tailings ponds and other chemical hazards around one river of the water system, Rio Turbe, which flows downstream into the communities below. This situation has now become the liability of the local communities and the Panamanian government. Beside the Petaquilla gold mine, Cobre Panama, the country's largest mine to date is still in its construction phase due to difficulties with the local climate, and is now scheduled to begin extraction in 2017.

Challenges and Success

The task of community-based monitoring is complicated in this particular location for a few reasons. The first is a lack of ancestral and thus cultural connection to the land and resources of the area, due to the rather recent history of settlement (approximately 30 years). The area is therefore populated for the most part by newcomers without any longstanding connection to their environment. As well, the majority of these people are what is known as *campesinos*, meaning they work in a variety of economic tasks, mainly for subsistence purposes. Given this, they are quite flexible in terms of employment and movement, ostensibly diluting their will to fight for the right to remain where they are and in their current state. A third complicating factor is the lack of cell phone and Internet service in the area, which exacerbates communication problems within and outside of the communities. This in turn makes organizing people and events doubly complex. Finally, as mentioned before, the climate of the region is a serious obstacle. San Jose del General is located in the foothills of the cordillera, one of the wettest zones in the country. Due to this, movement from place to place is made much more difficult, and organization and communication as well are increasingly complicated.

⁷ M. Monjezi and K. Sharihar, "Environmental impact assessment of open pit mining in Iran". *Environmental Geology* 58 (2009): 205-216.

Description of expected versus actual outcomes: What did you accomplish? Were you able to accomplish everything you set out to do? Why or why not?

In order to further integrate the community of San Jose del General into the long-term mine impact monitoring assessment headed by McGill, our work was focused on relaying information about:

- [1] the monitoring activities conducted earlier this year in April;
- [2] the future of the long-term assessment and the community's role in it;
- [3] general information about the process of open-pit mining; and
- [4] the environmental and health impacts/dangers of mining activities.

Even though all of these tasks were completed, the hardest of tasks lies ahead. As we aim to be fully community-based—*i.e.*, having the community take a leading role in all aspects of monitoring, communicating, and organizing—we are now in the period of strategizing and attempting to appeal to community members' everyday lives and ensure that our intentions are aligned with the communities' wants, needs, and understandings. Thus, though we may be able to make some checks on our list, the most essential piece of desired outcomes (a community-driven initiative) is something we are only just getting a real taste of.



Questions raised: What ‘worked’ during your fellowship? What didn’t? Why? Did your fellowship raise any questions?

Two approaches helped us meet our goals. First, throughout our time we tried to work ‘with’ the community rather ‘for’ it. Second, with every passing day of us being there, we tried to be more sensitive to the knowledge and culture of the communities we were working with (*i.e.*, to their ways and interests). For instance, the quality of water was important to almost everyone, hence while disseminating and discussing results, we made sure the communities’ anecdotal evidence about their rivers were discussed parallel to the physical parameter data taken to assess water quality. We had realized that locals were only comfortable discussing topics they were knowledgeable of. Therefore to engage people in conversation on a topic most important to them, it was wise to incorporate their own perceptions alongside the scientific data, to nurture a participatory and more informed discussion. This allowed us to connect more effectively, rather than having an insurmountable wall between us as ‘gringos’ and them as locals. Not to be understated is also the importance of being flexible and adaptable; our ability to be accommodating to the needs of the audience we were working with and the region we were dealing with allowed us to be successful.

On the other hand, what didn’t work was a complete ‘go with the flow’ attitude. In such a project that is both community-based and long-term, planning is the base for effective execution. Getting sidetracked by issues that pop up in the communities and struggling to prioritize to our planned objectives was a balance we found hard to strike at times. What will truly be key to overcoming this is more experience working within these specific communities on these topics over the years and ideally, working together to establish a long-term agenda and set of goals to guide all of us down the road.

Training and Mentoring

Our direct involvement in this project is owed to Dr. Daviken Studnicki-Gizbert. Currently, his involvement in the McGill Research Group Investigating Canadian Mining in Latin America (MICLA), has lead him to spend a great deal of time researching the circumstances and details around the Canadian-owned and operated mines in Latin America, such as Cobre Panama and Petaquilla Gold. Also a professor in McGill’s Panama Field Study Semester (PFSS) program, Daviken was in a perfect position to form the physical and ideological structure for this project in part with PFSS director and UNESCO Sustainability Chair, Catherine Potvin. Potvin’s Chair began heading sustainability dialogues and initiatives in Panama in 2012, and under this mandate, the long-term mine monitoring (LTMM) assessment was born. The assessment initially drew on personnel and other resources mainly from PFSS (students, professors, organizational connections, etc.) but will in time become more community-based and driven.

We had a bit of a unique situation going into this fellowship, given that both of us participated in the PFSS semester directly beforehand. This gave us recent experience working in Panama, as well as an introduction to the country’s culture, society, and environment, and to our mentor Daviken through class time as well as internships. Samantha was the intern under Daviken

working on the LTMM assessment throughout PFSS in the four months leading up to our fellowship. This gave her the ability to help us navigate the ideological and circumstantial challenges that we at times faced. Through our experience of mining week (April 2015) during PFSS we saw hands on how to do monitoring with and within these communities, and gained a taste of how to do community work in general.

In terms of resources, we did feel well equipped given this is the first year. However, going forward, there is a need for a budget and logistics planning as well as more interaction between Daviken and our McGill-based connects and those we have in Panama. This is important in setting and getting the appropriate equipment and procedures needed to conduct the monitoring frequently, thoroughly and in a community-friendly manner.

What did you learn?

Doing this fellowship has been a huge impetus for growth for both of us. We have become more organized, realistic, analytical, critical, and creative. We have learned how to set standards and goals for ourselves, and we have learned how to work with many different types of 'others'-- authority figures, local children and shop owners, researchers, bird species and more.

Our greatest takeaways can be summed up as follows:

- **Plan effectively but conservatively**, so you actually get things done well. We were eager to please everyone and hated saying no, but soon realized we couldn't do it all. By abiding by this rule, we were able to commit to a few key tasks and do a good job at them.
- **Cultural sensitivity is key**. Where we worked, we were told explicitly only in our last two weeks that locals typically only speak if they feel they 'know' about the topic. This may have explained our difficulty in getting participation in meetings and reconfirms the necessity of raising the base of knowledge on the subject of mining in the community as an antecedent to all else. Especially when community-based work is being done, understanding the unspoken ways of the people is essential to being able to work well together.
- On a similar note, we found that **careful communication increases success**. Through our work, we learned how to say what needs to be said (and nothing more), how to pick up on silent communication (Panamanians often speak more with their faces and hands than anything else), and how to tune in to the nuances in meanings of words and contexts. We gained the ability to differentiate and pay attention to both implicit and explicit communication.
- **Success can come from being proactive**. We realized the importance in doing the small things like keeping a promise to meet people, even if only just to drop off small pieces of information. Especially when you have to travel great distances, they appreciate it, and it is a great way to show your commitment.

- **Be knowledgeable about the issues at hand.** Daviken had told us at the beginning of the fellowship that information would be our greatest asset. By comprehending the problems and topics, we were in the position to share that knowledge in a respectful and useful manner. You are always more welcome to speak when you have something to add to the conversation.

A separate point that must be made is a lesson we're still letting sink in, and that is **how to understand value**. In many cases, researchers and the community may not share interests and goals. This may be a fundamental mismatch of objective and location. It's essential for us to understand why these communities would like to monitor their environmental and socio-economic status. What value do they have in being part of this monitoring project? Is it to conserve their environment because they understand its worth, or is there some other basis? And while trying to understand that, it is important to do the same for ourselves, in order to ensure the objectives and values are the same for both parties.

Would you do anything differently next time?

- Work on Spanish (or whatever relevant language) both before and in the field. Watch novellas, read books, listen to music, have conversations; try to use it everyday. If you can't communicate, you can't understand or relate to the people you're working with.
- Connect to local stakeholders. For our work, Panamanian actors are essential. They bring in greater local/national involvement and extend the benefits of our work more deeply and effectively into Panamanian society. For instance, collaboration with universities can engage Panamanian students on various aspects of the project, and thus ensure a greater presence of this work in the communities and a greater possibility for spillover benefits.
- Spend more time in each community rather than spending a huge amount just in one area. Making connections beyond Coclesito is a particular necessity given how dispersed communities are and the social dynamics in Coclesito itself. This would allow us to strengthen the base of the project in each community piece by piece instead of trying to do everything at once.

Community Implications and Further Work

What was your contribution to the delivery of health and/or social services for poor or marginalized groups? Short and long-term (potential) impact. Who benefitted? How?

At this stage we are targeting health and social services through the collection of monitoring data on three variables spanning the socio-ecological spectrum:

- Water quality
- Land-use change
- Socio-economic status

Water monitoring involves taking physical parameters such as dissolved oxygen, pH, conductivity, temperature and turbidity, as well as collecting insects to use as biological indicators of the water's health. This is done in an effort to assess the water quality/contamination of rivers; a commodity used for drinking, cleaning and fishing, amongst others. Potential contamination from mining includes discharge of heavy metals and suspended solids, which can negatively impact normal body functions in humans, especially in the long-run. The long-term nature of the project allows one to see changes in this over time. At this stage, community members are involved in the actual collection and identification of macroinvertebrates as biological indicators and in reading and taking the physical parameter tests alongside members of the McGill team.



The land-use change monitoring involves approximately 3 dimensions, including taking photos of strategically chosen sites; conducting surveys to assess the physical nature of rivers, such as their form and bedrock composition, and interviews with *finca* (farm) owners. This is done in order to understand what the state of the land is presently in order to compare it over time. Key questions include what are farmers growing, how are they growing it, what is the course of a particular river, what does a particular site look like today, and how might the landscape change over time. Due to open pit mining, previously unexposed geological material are released into the environment, which include compounds of sulfur. Hence acidification of soil and air is very common, which is potentially harmful to the health of not only the ecosystem but humans as well. In this part of monitoring, locals were essential in picking locations to photograph, in directing the McGill team on where to do surveys and helping to navigate the countryside.

Lastly, the socio-economic survey consists of a detailed household survey that aims to determine the standard of living of the communities involved in monitoring. It is important to note what the standard of living of communities is, and to track this alongside the working of the mine. For this, locals helped us edit the survey questions and language used to make surveys more palatable and understandable. All in all, these areas and methods allow us to assess the social and ecological health of the communities and how the operations of the mine might impact the communities.

The involvement of locals in the process of monitoring itself is key to increasing the level of local knowledge about their biophysical environment, such that they can become more attuned to it in scientific and 'credible' terms in the eyes of governments and corporations. What is next is having locals conduct the monitoring completely on their own, from the processes of planning to collection to analysis, to storage. From here, natural curiosity and interest in mining and the health of their socio-ecological environment may increase, and with it, ownership of their environment and resources, and confidence in talking about related issues may grow.

Long term, the emphasis is on the cumulative effects of learning within the community. As in most cases in the literature around community-based monitoring and participatory action research, we expect that as community members become more familiar with the processes of monitoring, learn to master basic scientific knowledge, and familiarize themselves with other facets of the project (such as successful communication and organization tactics), the spillover benefits into the local community (San Jose del General) and then outwards (to Donoso, to Colon, and Panama as a whole), can be limitless.

As of yet the benefits of the project are concentrated in the small group of local people (~18 total). These were people who were either:

- Most active in monitoring events because of their interest
- Leaders of the community, who take interest in the community's well-being and are for the most part involved in other committees (*e.g., comité de agua, comité de salud, comité de los padres*), or
- Local governmental representatives whose role and motivation might make them want to secure a better future for their people.

How might your fellowship make a difference for the people you worked with? Why would someone in the community you visited care about your work?

The value of our work in the community really lies in the knowledge coming from monitoring. For the first time, locals are being included in all the processes of monitoring (gathering, analyzing and understanding data). This means that for the first time, local voices can speak up confidently in conversations with decision-makers; locals are now gaining the ability to understand topics they are assumed to be ignorant of. For example, it's easy for locals to say their water is contaminated, as they know how it is 'supposed to be.' But understanding the details of topics such as contamination due to agriculture, transportation and/ or mining, makes their knowledge more in depth and clear, so when they engage in conversation with stakeholders like the government, they know exactly what they are talking about. This gives them more credibility. In time, locals will hopefully be able to drive if not strongly influence public policy decisions relating to their own experience of development, for example whether a mine will be granted a concession in their area or if they will receive electricity or how to improve water quality.

What is more, community members might (and seem to) appreciate that we seek to break the barrier between subject and researcher. That's the essence of community-based/ participatory action research, where the subject and researcher aren't separate, rather one functional unit. Our data is not for us, this project is not for us, nor will it merely be done by us. It is for them, and will be done by them. This is a project about the community and its needs, and that is a value we are committed to showing.

Why would someone outside the community care?

To begin with, one of the greatest values of this project is the data obtained via monitoring. For people outside the community, be it researchers, mining corporations, governments, or normal everyday people, the monitoring done provides evidence and knowledge on how open-pit mining might impact the environment and societies nearby. In this way, this project seeks to augment communities' capacities to register impact and intervene positively. Given that this situation of socio-ecological impact is not unique, it is our hope that this project could also serve as a prototype throughout Panama and Latin America, such that other communities facing important social and ecological impacts of resource extraction might look to see what succeeds and fails here to model their own response to development. The dimension of community involvement in the monitoring process as well is a contribution to the growing field of community-based research.

As well, this project is important for Canadians and other citizens of so-called first world countries, given that these are often the origins of the transnational mining companies in (and possibly exploiting) areas such as Latin America. Given the grey spaces that govern the operation of these extractive processes, the inability to guarantee accountability from these corporations ultimately boils down to citizens from their home countries. After all, at the core of every company and government are merely people. To demand any sort of change or responsibility from corporations, people from these countries must also be informed and aware of their actions such that they can organize and take constructive efforts. This project speaks to the struggle of navigating the grey area of international accountability.

Program Evaluation

How did this fellowship further your academic or career goals?

This fellowship has done a lot in terms of furthering our academic and career goals. To begin with, it helped put various theories and protocols that we learned in class into action. Concepts learnt in courses such as Environmental Management, amongst others, about conducting multi-disciplinary assessment survey, really came to life here. The experience of working in an interdisciplinary, long-term project was invaluable. Through this we learned the importance of having an intellectual and conceptual balance of different domains of learning and perspective in order to better account for a whole. Munib's science-based background, knowledge, and interest complemented the social science base that Samantha has interest and experience in. Both learnt a lot from each other's ways of working, as the multi-disciplinary nature of the project allowed key skills of each fellow to shine.

Additionally, the amount of time we spent talking to stakeholders and trying to understand their relationships gave us a taste of what it is to navigate the very real side of politics and how to partake in future stakeholder/interest-sensitive work in the future.

Furthermore, we were provided with a chance of working on a one of a kind, long-term community-based mine impact monitoring assessment. Each step for this project is a success, because what comes out of each is information that, if not valuable for this project, will surely be useful for other projects or development activities down the line. This project can hence serve as a reference point. Maybe this project will fall short of intervening in substantive ways in dialogue with government or the mining company or mitigating negative impacts of the mine or allowing the communities to gain a louder voice in regards to development issues, but already the local communities have become engaged and implicated in thought and discussion around mining. Certainly the lessons that will be taken from this work may be a base upon which future projects can find sustenance.

What did you value most about the fellowship?

The experience of working and immersing ourselves in totally different cultures is something we will cherish. The amount one learns from being exposed to different thought processes, different perspectives and different lifestyles, can spur individual growth in remarkable ways. Working with communities at a grass-root level with real life issues that matter to them was insightful, and we learned a great deal about the everyday lives of others and the complexities that every person faces. Another important lesson was realizing that every person is just a person, from the people on the streets in Coclesito to intimidating town leaders, to the minister of natural resources. When you can look at everyone under this umbrella, they become more approachable and tangible. Finally, going forward, we can now say that constantly being confused and challenged is healthy.

How useful was it to interact with other fellows?

It was actually quite beneficial to have interactions with other fellows. Apart from being excited to see what each of our fellow McBurney awardees were up to, every interaction gave us a unique perspective of how students like ourselves were dealing with their own issues. Furthermore, it was encouraging to read their opinions about their struggles and successes, because we could relate to them and gain motivation from them to continue our work through all that was thrown at us.

What would the student need to do to prepare for a similar fellowship?

The two things we can't emphasize enough for fellows in our own project and others is to a) learn the language and b) do background research on your country, community, and topic! These can't be overdone.