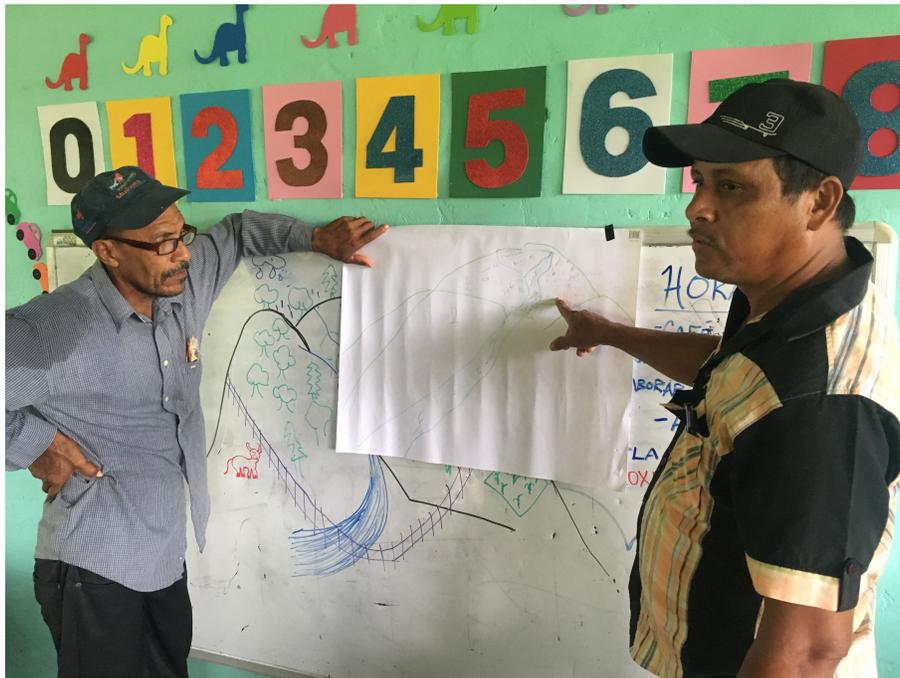




La Colonia Water Committee Seminar 17 & 18 March 2018



La Colonia, Darién
Republica de Panamá

Submitted by Clay Mosolino WASH G79

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Background

La Colonia is located in the Darien province of Panama. It is a community of about 250, established in the 1950's by Chiricano farmers looking for cheap land and fertile soil. To this day it continues to be a community that relies on subsistence agriculture, as well as a growing cattle industry to keep its economy going.

La Colonia shares an aqueduct with 4 other major communities: Sambú, Bayamon, Daypuru, and Rio de Jesus. The aqueduct was built in the 1990s to supply water from a cleaner source than the nearby quebradas, rivers, and wells. Water comes from a stream source in the Cordillera Cerro Sapo in a heavily forested watershed that lies within the Comarca Embera-Wounaan, Parque Nacional Darien, and Tierra Nacional. All of the communities except Rio de Jesus have water committees, and have had them since the aqueduct was built

The system is now over 20 years old, and although a series of upgrades have helped improve the system, there are always repairs needed. The most common occurrences are broken tubes due to branches and trees that fall down in storms; tubes coming unglued after so many years; and the toma clogging with sand, gravel, and leaves.

The water committees of these communities are left to deal with the repairs, and have operators with excellent knowledge of the system and a good understanding of how to repair damaged tubes. However, these repairs are very expensive - a 20 foot 6" diameter tube of the caliber needed costs over \$70, for example. There are also improvements the communities would like to make but don't have the funding or technical support to see them happen.

In October 2016, La Colonia's community members held elections for a new water committee, and recently renewed its personería jurídica, a powerful tool that allows community organizations to solicit government agencies and NGOs for technical support, projects, and materials. It also allows the organization access to a bank account that is necessary to receive outside funding.

The new water committee has several experienced members, some of whom have served on the water committee before, or have worked on other committees. The committee members expressed they wanted to build on their leadership, administration, and technical skills to be able to perform their roles better, and solicit help from agencies and NGOs to improve the aqueduct.

The other existing committees in Sambu, Daypuru, and Bayamon also meet with La Colonia's to make decisions on aqueduct management, repairs, and improvements. Those committees expressed interest in capacity building as well. The Peace Corps volunteer working in La Colonia then began organizing a water committee seminar for these water committees. The weekend of 17-18 March was picked for the seminar with all of La Colonia's committee invited, and four members from each of the other water committee invited. The MINSA technician of the region, and medical staff from the Centro de Salud in Sambu were invited as well.

Funding the Water Committee Seminar

A PCPP grant in the amount of \$283.80 was approved in order to host a water committee seminar. La Colonia's water committee contributed a quarter of this total by purchasing some of the food and supplying the cooking labor. The committee was also willing to host the other water committees for free, and the director of the local primary school allowed us to use one of the classrooms for the 2-day seminar.

Additionally, the Peace Corps Panama Friends organization granted \$100.00 that helped cover the cost of printing the workbooks needed for the participants to use. The rest was raised thanks to the support of the friends and family of the Peace Corps volunteer in La Colonia.

Implementation

The two-day seminar was held in La Colonia, Darién. It is a central location for all the committees attending and is easy to get to during the month of March. 5 Peace Corps Volunteers, including a WASH program coordinator, came to help conduct the seminar.

Each day had approximately 6 hours of sessions with a 1-hour lunch break, and the chance for snack breaks. Each participant received a workbook to use as a Peace Corps volunteer led a workshop on the following topics with the help of the other volunteers.

- Financial planning
- Roles of the water committee
- How water is contaminated
- How to treat water
- Monitoring funds
- Working with institutions
- Watersheds

At the beginning of each day a pretest was given that had questions based on the workshops that would be covered that day. At the end of the day a post test with the same questions was completed to see if the participants could improve their scores by recalling the new information they had learned from the workshops. Below are the questions asked for each session, and the pre/post test results.

Session	Pre and Post Test Questions
Planificar los Fondos	Que es la diferencia entre corto plazo y largo plazo?
	Porque es importante tener un registro de todos los fondos de la Directiva de Agua?
	Cómo puede saber cual es la cuota mensual correcta?
Roles de la Directiva y los Beneficiarios	Porque es importante saber su rol en la directiva?
	Que hace el/la Fiscal?
	Nombrar un rol de los beneficiarios
Cómo se Contamina el Agua	Nombre dos cosas que contaminan el agua
	Por donde pueden entrar contaminantes al sistema de agua?
	Quien es responsable por mantener el agua limpio?
Purificar el Agua en la Casa	Nombre dos maneras para purificar el agua
	Cuántas gotas de cloro se necesitan para purificar un cubo de agua?
	Como uno pueden matar 100% de los microbios?
Monitorear el Dinero	Quien debe saber la cantidad de plata que hay en la caja de la directiva?
	Nombre dos herramientas para monitorear el dinero
	En que se debe guardar el dinero de la directiva?
Colaborar con Instituciones	Nombrar dos instituciones
	Cómo se debe llegar en una reunión con una agencia?
	Que tiene que traer a un reunión con una agencia?
La Microcuenca	De donde viene nuestro agua?
	Nombre dos partes de una microcuenca
	Como podemos proteger una microcuenca?

Pre and Post Test Results						
Workshop	# of participants who completed pre and post test	# of perfect post test scores	# of participants whose scores improved	# of participants whose scores did not improve	# of participants with perfect pre and post test scores	# of participants who improved to have a perfect post test score
Planificar los Fondos	8	7/8 (87.5%)	6 (75.0%)	0	2 (25.0%)	5 (62.5%)
Roles de la Directiva	10	9/10 (90.0%)	3 (30.0%)	1 (10.0%)	6 (60.0%)	3 (30.0%)
Cómo se Contamina el Agua	9	9/9 (100%)	1 (11.1%)	0	8 (88.9%)	1 (11.1%)
Purificar el Agua en la Casa	9	5/9 (55.5%)	8 (88.9%)	1 (11.1%)	0	5 (55.5%)
Monitorear el Dinero	11	7/11 (63.6%)	5 (45.4%)	3 (27.3%)	3 (27.3%)	4 (36.4%)
Colaborar con Instituciones	11	9/11 (81.2%)	6 (54.5%)	0	5 (45.4%)	4 (36.4%)
La Microcuenca	9	9/9 (100%)	4 (44.4%)	0	5 (55.5%)	4 (44.4%)

Below is a schedule of how the water committee seminar was conducted and what happened in each workshop.

Water Committee Seminar Schedule			
Saturday, 17 March 2018		Sunday, 18 March 2018	
9:00AM	Pre-test	9:00AM	Pre-test
9:30AM	Planificar los Fondos (Financial Planning): Every water committee went over their costs, and calculated their expected incomes from water fees to see their financial situation in the short and long term. They also discussed what are appropriate uses of funds, and strategies to get water users to pay their monthly fees. (8/11 participants completed pre and post test)	9:30AM	Monitorear el Dinero (Monitoring Funds): Everyone went over how to keep track of expenditures and income in a register, and how to write receipts. (11/11 participants completed pre and post test)
1:00PM	Lunch	12:30PM	Colaborar con Instituciones (Collaborating with Institutions): Participants identified different government agencies present in the area they could work with or ask for help. They also went over how to schedule appointments and meet with those agencies by each participating in a socio drama simulating scheduling an appointment and meeting with an agency representative. (11/11 participants completed pre and post test)
2:00PM	Roles de la Directiva (Roles of the Water Committee): The workshop covered the roles of the 6 members of the water committee, and also the role of the water users. The responsibilities were laid out as well as desirable characteristics to have in each role. (10/11 participants completed pre and post test)	1:30PM	Lunch
3:00PM	Como se Contamina el Agua (How water is contaminated): The different ways in which contaminants can enter the water system and affect water users was gone over. The drive home message was that many contaminants are introduced in the home if users aren't careful, and that water users are responsible for managing their water within their homes. Ways to eliminate household contaminants were identified by the participants. (9/11 participants completed pre and post test)	2:30PM	La Microcuenca (The Watershed): Participants went over identifying a watershed and its parts. Divided into two groups, the participants demonstrated their knowledge of ideal and damaged watersheds. They also identified how to improve a damaged watershed. (9/9 participants completed pre and post test)
3:30PM	Purificar el Agua (Water Treatment): The participants were divided into five groups to each present and demonstrate a different way in which water can be treated to improve quality. Each group went over the pros and cons of their method. The session ended with participants identifying a method that worked best for them, what barriers keep them from implementing that method, and what they can do to eliminate those barriers and incorporate the method into their lives. (9/11 participants completed pre and post test)	3:30PM	Proximos Pasos (Next Steps): The water committees of La Colonia and Bayamon were the only committees remaining at this point. Each committee broke off and discussed their next steps after the seminar. They are in different states of development and have their own concerns and plans within their respective communities. This session helped each water committee define its next steps to put into action what they had learned from the workshops.
4:30PM	Post-test	4:30PM	Post-test

Objectives and Outcomes

Below are the objectives of the water committee seminar based on the WASH framework with the outcomes measured, as well as comments on the outcomes.

Objectives	Indicators	Outcomes	Comments
<p>Objective 1: Legalize and strengthen rural water committees to better manage water and sanitation resources within their communities.</p>	<p># of individuals trained on organizational skills. Attendance at the seminar will be taken, and a pre and post test will be taken by the participants to assess if the key information of the seminar was retained. The seminar includes workshops to improve performance in different water committee roles, and developing skills to work with agencies.</p>	<p>Roles de la Directiva (Roles of the Water Committee): 9/10 of participants who took a pre and post test achieved perfect scores on the post test, with 3 of those 9 improving from a pre test score less than perfect.</p> <p>Colaborar con Instituciones (Collaborating with Institutions): 9/11 of participants who completed a pre and post test achieved perfect scores on the post test, with 4 of those 9 improving from a pre test score less than perfect</p>	<p>Each water committee is interested in receiving outside help through NGOs and institutions. It's to see that much of the information from these workshops was retained. Already La Colonia is reaching out to NGOs working in the area to see about a project to improve the aqueduct and watershed. Given the results of the pre and post tests, and the fact that the water committees are already reaching out to institutions, this objective seems to be met.</p>
<p>Objective 2: Build the capacity of community groups and households to build, repair, and maintain locally appropriate water and sanitation systems.</p>	<p># of community diagnostics conducted that assess baseline water and sanitation access and behaviors. (HE-045) Attendance at the seminar will be taken, and a pre and post test will be taken by the participants to assess if the key information of the seminar was retained. Two workshops in the seminar will focus on financial planning and money monitoring which will help the water committees plan for future repairs and improvements to their water system.</p>	<p>Planificar los Fondos (Financial Planning): 7/8 of participants who completed a pre and post test achieved perfect scores on the post test, with 5 of those 7 improving from a pre test score less than perfect.</p> <p>Monitorear el Dinero (Monitoring Funds): 7/11 of participants who took a pre and post test achieved perfect scores on the post test, with 4 of those 7 improving from a pre test score less than perfect</p>	<p>All water committees expressed they wanted more help to be able to manage their funds and monitor their money. These workshops were the most difficult to do, but also the most revealing. They showed how much each water committee spends and how much they should be taking in from water fees. The reality is that many people don't pay their fees, and an estimate of how much actually is earned per month revealed that there is a big deficit. This leaves the water committees with not enough funds to plan for future repairs or improvements. Thankfully the water committees now know they need to get water users to pay and talked about strategies to get them to do this. This second objective is met by the committees realizing the need to get water users to pay and by gaining the ability to calculate costs and income.</p>
<p>Objective 3: Empower and motivate individuals (especially women and youth) to adopt healthy water, sanitation, and hygiene practices and behaviors.</p>	<p># of individuals trained on proper water, sanitation, and hygiene practices. Attendance at the seminar will be taken, and a pre and post test will be taken by the participants to assess if the key information of the seminar was retained. Workshops on water contamination, water treatment, and watershed protection will address this objective.</p>	<p>Como se Contamina el Agua (How water is contaminated): 9/9 of participants who completed a pre and post test achieved perfect scores on the post test, with 1 of those 9 improving from a pre test score less than perfect.</p> <p>Purificar el Agua (Water Treatment): 5/9 of participants who completed a pre and post test improved to have a perfect score on the post test.</p> <p>La Microcuenca (The Watershed): 9/9 of participants who completed a pre and post test achieved perfect scores on the post test, with 4 of those 9 improving from a pre test score less than perfect</p>	<p>All participants understood the importance of protecting the watershed, and how contaminants can enter the system - especially inside the home. Practices to reduce the introduction of contaminants were discussed, and 5 ways to treat water to make it cleaner were practiced. This third objective was met, but reinforcement of different water treatment methods within each community is important for this outcome to mean more.</p>

Conclusion

The water committee seminar was a success. All of the objectives were reached, and there was measurable improvement in the knowledge attained by the participants.

However, this water committee seminar is a first step in order for it to be more sustainable. It will be important to make sure that the water committees follow through on their next steps. There were a lot of revelations on how much income each water committee should have at the end of each month when all water users pay their dues, but in reality there is a large deficit. Going over the calculated incomes and expenditures of each water committee with them and figuring out what things they can do to encourage community members to pay their dues will be essential.

Another thing that must be reinforced are water treatment methods. Five different water treatment methods were gone over, and all participants discussed how they can incorporate them into their lives, and how they can help their communities to implement them. Encouraging the participants to actually share those methods with their communities will help improve the water quality and the health of community members.

Lessons Learned

The pre and post test questions created for the water committee seminar were very useful to measure understanding attained. It worked best for Peace Corps volunteers to individually go over the questions with each participant and write down their responses, or note if they answered the question correctly or not. This ensured that participants were more likely to answer all the questions. However, it was time consuming, and the volunteers may have introduced some bias. A multiple choice test would be a quicker less biased way to get the participants to answer the questions.

Photos



Participants and PCVs working on balancing the books in the financial planning workshop.



Participants and PCV Clay Mosolino going over where different contaminants enter the water system.



Participants from Bayamon and PCV Nick Paiva going over how to treat water by boiling it.



Participants and Micah Koller describing and drawing an ideal watershed to present to the group



Participants demonstrating how to meet with a government agency.



Participants determining ideal candidates for the different positions on the water committee.