Questionnaire Results for Rotary Global Grant

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Updated by Pam Gilbert, April 20, 2013

Interviewers: Universitarios: Enma Sacatoro and Huishca; Volunteers: Jill Sare & Charlie Rowley, CELM: Pam Gilbert & Alex Saldaña; Kichwa speaker: Paulino Sacatoro; Rotarians from Latacunga Club, Ecuador: Guillermo Mancheno (Pres.), Miquel Sansur, Santiago Sansur, Javier P Herrera (sp?) and Fernando.
*Date of Interviews: April 2013 *Results compiled from first 48 heads of household interviewed*;*

This represents 42% of members of the MP-QT Potable System and 32% of members of the QT Irrigation System.

- Where do you live? 24 from Malingua Pamba (**MP**) & Pucará ; 27 from Quinta Tunguiche (**QT**); and 2 from Guantugloma (none of whom are either on the potable nor irrigation systems.)

- How many people live in each house?

# living in household	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL:
quantity of such households	0	5	6	3	6	2	5	9	7	3	0	2	48 households
Percentage	0%	10%	13%	6%	13%	4%	10%	19%	15%	6%	0%	4%	

- Approximately 10 handicapped total in the 100 or so families living in the area.
- In 7 households, one or more members study in Latacunga (2 hours away) and come back to the village for only a few days each week.
- In 12 households someone leaves to work outside the village for periods of 2 weeks to 4 months at a time.

POTABLE WATER SYSTEM QUESTIONS:

- Forty-six of the 48 interviewed have access to a potable water system.

Responses using Potable System User Number. See Google Map with user no. Not scanned.
Some users responded to more than one category.
Note: A user number is assigned chronologically when joining system.
Note: Not everyone correctly remembers their user number;
we have a master list to double check if necessary

Water is not readily available:	**Malingua/Pucará**	**Quinta Tunguiche**	**YanaYacu**
once/week	27, 28, 42, 44, 47, 51, 57, 94	56, 60, 64, 65, 66	
twice/month	53, 69	63	
once/month	15, 18, 24, 100	25, 39, 77, 89, 109	84 & 85 (far from system)
during dry season	9, 53, 100	54, 62, 70, 72, 105	
50% of the time			end house on line (85?)
slow flow	18		

- Reasons given for why users think they are without water at times: not enough rain, someone turned off the taps above, lack of tank maintenance, pipes are damaged, tank or pipe blocked with trash or leaves, landslide caused blockage or interruption, the last line installed draws flow from above so no users below get water until the Pilapuchín/Cuadrapamba tanks are full.

- Suggestions for improving the system: look for more water sources, build more tanks, build a tank higher up, bigger pipes, fence the source higher and wider, better erosion control, don't cut native plants, plant more trees and bushes, users need to take better care of the system and clean tanks regularly, buy replacement parts.
- All users say they are up to date in payment of their monthly and annual potable water system dues. (From reviewing the treasurer's reports, they are 90-95% up-to-date.)
- The #1 most important use of water was for the kitchen, bathing and washing clothes were #2 & #3.
- Overall there has been much less illness than in previous years…mostly just occasional colds now.
- The Health Center in Isinliví (3 hr hike, 40 min drive) is where most everyone goes when ill. In Guantualó (1 ½ hr hike, 20 min drive) there is a smaller, less well-equipped 'Campesino' Health Center. Those who live in Guantugloma sometimes go up to the larger town of Guangaje (2 hrs hike, 25 min drive). Serious illness must be treated in Latacunga (2 hour drive).
- The main crops (in order of importance) are: potatoes, corn, fava beans, lupine beans, red frejol beans, leeks, barley, quinoa, wheat, lentils, peas, pumpkin/squash. Some types of potatoes commonly grown are: papa chola, 'camote' purple potato, oca, melloco, mashua, and taso.
- Villagers mentioned the following vegetables and fruits that they buy at the market (funds permitting and when in season): carrots, peppers, red onion, garlic, green beans, tomatoes, tree tomatoes, bananas (finger bananas, red bananas, green plantains, ripe maduro plantains), oranges, mandarin oranges, limes, apples, pears, grapes, melon, papaya, pineapple, mango, strawberries.

IRRIGATION QUESTIONS:

- The dry months (when irrigation is most needed) are May through October…some years as early as April and until November.
- Of the 13 irrigation system users interviewed, all indicated that they occasional have breaks in service Weekly – 2 users, Every two weeks – 5 users, Monthly – 5 users, Trimestrally – 1 user.
- Some of the reasons given for why they believe they lose irrigation water: broken pipes (2 comments), not enough rain (2 pp), river overflows from too much rain (2 pp), sediment blocking valves (4 pp)
- ALL irrigation users affirm enthusiastically that their crop yield has improved in recent years, meaning that their families are eating better and they are able to sell more of their harvest at market. Whereas before many could grow barely enough to feed their families, now they produce at least 30% more overall, generating much needed income. Specific examples of improved crop yield: Corn has bigger ears & larger kernels - up to 6x more yield. Potato yields are double to triple what they were before irrigation. Over ¾ of the irrigation users interviewed indicated that their harvest of fava beans and lupine beans has more than doubled, and frejol beans yielded 4x as much. One farmer boasted that he harvested 60 to 80 sambo squash and pumpkins last year, and he now has beautiful broccoli. Peas were not grown before but now they are thriving.
- All irrigation users responded that they are up to date on their monthly fees. A few commented that they have not yet paid their $3 annual capital fund payment for 2013. (Note: After big meeting on 4/14/13, I received the updated Treasurer's Book which shows 90-95% are now paid up. psg)
- Only two users admitted to using potable water for irrigation purposes – one said she takes buckets from the washing stone to water her kitchen garden nearby and the other had a broken irrigation line and risked losing all her crops. All seem to understand clearly that potable water is NOT to be used for irrigation. Only one user said he needed to use irrigation water for human consumption when he'd been several days without potable service.

- Those who do not have access to an irrigation system replied overwhelmingly that, given the opportunity, they would gladly pay monthly and annual fees to be included on an irrigation line.
- They all have interest in learning about “drip irrigation”.

MONTHLY INCOME

In 2012 the government raised the monthly ‘BONO’ Welfare Payment to $50. Most households in Malingua have one or two members who qualify as BONO recipients so the average family income was $50-$100 for those who only farm and sell very little at market.

Back in 2003, the bono (monthly welfare payment) was $15.
In 2010 or 2011, the bono was $35.
As of 2013, the bono is $50.
FYI: Monthly minimum wage: $318.

less than or equal to $50	$50-100	> $100
18	24	6
38%	50%	13%

CLIMATE CHANGE

The rainiest month is December, but Jan/Feb/March may also be rainy – seems to be less reliable in recent years.

INFORMATION ABOUT CROPS

- The main crops that are sold at market are lupine beans (chochos). Some families who benefit from irrigation now have two potato harvests per year and therefore have enough to sell at market. Irrigation users also have ‘sambo’ squash to sell and sometimes enough fava beans, red beans, lentils, quinoa and corn to sell some after family consumption. Melloco potatoes bring a good price so are often sold rather than consumed.
- More than 90% of the interviewees said that they use their own seeds or exchange with family members for better quality seeds. Only two responded that they sometimes have to buy seeds for major crops. For family vegetable gardens they sometimes buy seeds.
- More than half responded that they use chemical fertilizer (30-10-30) only occasionally (2-3x per year) but more often use organic fertilizer (guinea pig (cuy), sheep, and chicken droppings). Only 4 said that they use exclusively organic by products and only 2 exclusively use chemicals.
- In 2010 over 30 women were invited to participate in an organic gardening workshop. Those interviewed who had started family gardens were excited about their results, saying that they could now offer their families more variety and better nutrition without spending more at the market. They grow beets, lettuce, cabbage, swiss chard, spinach, parsley, cilantro, radishes, turnips, carrots, broccoli, onions, alfalfa & chilcuo (a grass for feeding their rabbits and guinea pigs).
- All indicated that would like to attend further workshops, learn more about saving & collecting seeds, as well as receive more information about nutrition.

EROSION CONTROL

- Everyone responded that they think that Erosion Control is very important. Most all participated in planting mingas (community work groups) and all said they would help organize future mingas to continue the erosion control project.

EFFICIENT WOOD COOKSTOVES

- About 80% of those interviewed indicated that they use both wood and gas for cooking. They tend to cook with gas in the morning (faster) and use wood for the midday and evening meals (warms the house more, food tastes better over wood fire, cooks larger quantities better). There are 2 families who use only wood and 6 who cook exclusively with gas stoves.
- Almost all showed interest in a project to construct efficient wood cookstoves, indicating that they would be willing to contribute $30 towards materials and happy to help build the stove. A few felt that they couldn't come up with $30 dollars to spend on the project.

INDIVIDUAL COMPOSTING TOILETS

- Of the 48 families interviewed, only 3 indicated that they did not have toilet facilities. One household has a composting toilet (built several months ago) and the rest have toilets that use water. Of those 31 flush toilets, 10 function only with a bucket flush.
- All but a few had positive responses to the idea of building a family composting toilet. They understood that they would be required to take a course to learn how to maintain the composting system and eventually harvest and use the human compost.

FAMILY GREENHOUSE

All are enthusiastic about the possibility of having a family greenhouse and learning about how to maintain it and what they can grow there. A few were concerned that they might have to come up with $30 at the same time as the cookstove project, but were reassured that they would not be asked for both payments at the same time. Only 2 indicated that they did not feel they had the funds for it. If they had a greenhouse, some of the crops they would like to try to grow include: tomatoes, peppers, chilis, garlic, cucumbers, carrots, cabbage, lettuce, tree tomato, strawberries, citrus and other fruits.