REFERENCES


APPENDICES

APPENDIX 1: Results of Workshop with End Users in the First Study Location

Appendix 1: Sources of Information- End Users in One Neighborhood Group

<table>
<thead>
<tr>
<th>Information source</th>
<th>Which one</th>
<th>When</th>
<th>What I like about it</th>
<th>What I do not like about it</th>
<th>Trust-worthiness of information (scale of 1-5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV</td>
<td>America</td>
<td>9-11 pm daily</td>
<td>Cultural information</td>
<td>Violence Terror</td>
<td>4- News</td>
</tr>
<tr>
<td></td>
<td>ATV</td>
<td>1-9 Saturday</td>
<td></td>
<td></td>
<td>3- Reports</td>
</tr>
<tr>
<td></td>
<td>Red Global</td>
<td>9-10 Sunday</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Panamericana</td>
<td>1 soap operas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TV Cable</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radio</td>
<td>RPP</td>
<td>All day</td>
<td></td>
<td></td>
<td>3- News</td>
</tr>
<tr>
<td></td>
<td>Inovidable</td>
<td>All day</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Radio Mar</td>
<td>All day</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Radio Huara</td>
<td>Mid-day</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Radio Paraiso</td>
<td>Morning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Radio Paraiso</td>
<td>Mid-day</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Radio Paraiso</td>
<td>Mid-day</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Radio Universal</td>
<td>Mid-day</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newspaper</td>
<td>La Razon</td>
<td>Daily</td>
<td></td>
<td></td>
<td>3-4 News</td>
</tr>
<tr>
<td></td>
<td>El Correo</td>
<td>Monthly</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>El Popular</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>El Comercio</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Opinion</td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Asi</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Ecos</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Caras y Caretas</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inter-personal</td>
<td>Home</td>
<td>Everyday continuously</td>
<td></td>
<td></td>
<td>3-4 Depending on who it is</td>
</tr>
<tr>
<td></td>
<td>Work</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Friends</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neighbors</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brochures</td>
<td>Companies</td>
<td>Monthly</td>
<td></td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>Institutions</td>
<td>Periodically</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Schools</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: 1= not trustworthy, 5= very trustworthy
APPENDIX 2: Results of Workshops with Teachers in the First Study Location

Appendix 2a: Teachers Use of WUSC’s Educational Materials in Schools

<table>
<thead>
<tr>
<th>Category</th>
<th>Response</th>
</tr>
</thead>
</table>
| Level Teaching                                | 1. Secondary teacher  
2. Primary teacher  
3. Primary teacher  
4. Director of school                         |
| Where is information stored?                  | 1. In folder in briefcase  
2. Classroom library  
3. Folders, library, on wall in classroom  
4. Educational folder in office               |
| How many times have you looked at it?         | 1. Four  
2. Two  
3. Three  
4. When we needed to                          |
| Who have you shared it with, what format?     | 1. Family, friends, students other teachers, verbally, photocopies  
2. Students, parents through a traveling backpack  
3. Parents, family, friends, verbally  
4. All of the teachers in the school, at the monthly meeting with parents |
| How do you know if the students learned from it? | 1. Asking students questions, educational material was placed around sinks and behavior was observed  
2. Anecdotes from students, observation of behavior  
3. Observation of students’ behavior  
4. Observation of students’ behavior           |
| What impact do you think it has had on students’ behavior (scale of 1-5)? | 1. Two  
2. Five, I use a public ☺ and ☻ chart to give kids feedback  
3. Three, lots of impact with kids, less with family  
4. Four                                         |
### Appendix 2b: Teachers Feedback on Social Team's Presentation

<table>
<thead>
<tr>
<th>Theme</th>
<th>Responses</th>
</tr>
</thead>
</table>
| I liked     | 1. The materials employed, the data, concrete information  
2. The presentation, the use of materials, the way each person presented on a different theme  
3. The format of the exposition, the themes covered, the woman who introduced each speaker  
4. Learning how to use and conserve water, knowing that the water we have is “hard”  
5. The campaign to educate the public about how not to waste water, the whole talk was clear and the presenters explained the problems of water scarcity in a simple way |
| I learned   | 1. About the reservoirs and tubes  
2. The importance of water, the crisis that we will have in a few years because of the lack of water, that saving water also means saving money  
3. How to change my habits, that water leaks in the home cause higher water bills, the importance of water meters to help us stop wasting water  
4. The UN says every person has the right to 50 liters of water per day, that Peru is among the top 20 countries with aquifer reserves  
5. We should not leave the taps on when we are brushing our teeth, shaving, washing our hands, etc, that water is a scarce resource and it should be used wisely |
| I would change | 1. –  
2. Use more images in the power point slides  
3. More depth in the part about the chemistry, the topic on global availability of water was skipped  
4. –  
5. – |
| I did not understand | 1. If there is a reservoir in my neighborhood, why do not we have water?  
2. –  
3. –  
4. The desalinization process, how to turn salt water into potable water  
5. – |
APPENDIX 3: Results of Workshop on Decision Making Processes in First Study Location

**Appendix 3a: Decision Making Processes - Water Company Managers - Group F**

<table>
<thead>
<tr>
<th>Decision</th>
<th>Who made it and how it was made</th>
</tr>
</thead>
</table>
| Electrification of the well pump | A- The public and the authorities were informed of the decision  
The public is not interested in reducing production costs. |
| Installation of household water meters | A- Decision initially made by Commercial manager  
The users did not agree with the decision  
D- WUSC, managers & population  
Because of the results of the first experience |
| Continuing to work with WUSC | D- The company and representatives of WUSC  
Because we share the same interests |
| Installing a condenser bank | A- Operational manager & Head of Planning  
Because it did not affect anyone else |
| Improved collection of money from water users | A- Commercialization manager  
To increase the liquidity of the company |

**Appendix 3b: Decision Making Processes - Water Company Managers - Group G**

<table>
<thead>
<tr>
<th>Decision</th>
<th>Who made it and how it was made</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switching to SICI software system</td>
<td>C- Board of directors made the decision based on information given by the managers and team leaders</td>
</tr>
<tr>
<td>Renewal of contact to work with WUSC</td>
<td>C- Board of directors and managers made decision. Team leaders gave information</td>
</tr>
<tr>
<td>Installation of water meters in 35% of city</td>
<td>A- Board of directors made the decision. Managers and team leaders were consulted.</td>
</tr>
<tr>
<td>Carrying out large infrastructure projects</td>
<td>C- Board of directors and managers made the decision. Team leaders provided information.</td>
</tr>
</tbody>
</table>
| Treatment of waste water              | A- Board of directors  
The decision has been made, the project is in progress. |
APPENDIX 4: Results of Workshop on Perceived Changes in the First Study Location

Appendix 4a: Perceived Changes- Water Company Managers, WUSC Team Members and Counterparts- Group K

<table>
<thead>
<tr>
<th>Changes</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>In individuals</td>
<td>More integration between of the water company and the WUSC teams (change happened because there was economic support to do so)</td>
</tr>
<tr>
<td>In teams or work areas</td>
<td>Our work together is better planned and coordinated (change happened because there was economic support to do so, and the situation had changed)</td>
</tr>
<tr>
<td>In the company in general</td>
<td>Improved public image, increased investments in improvements (change happened because there was economic support to do so)</td>
</tr>
<tr>
<td>In procedures</td>
<td>Talking with the population before beginning work in an area, distribution of educational brochures</td>
</tr>
<tr>
<td>In attitudes</td>
<td>Users now identify more with their water company</td>
</tr>
<tr>
<td>In relationships</td>
<td>More interaction with the schools, neighborhood groups, and users in general</td>
</tr>
<tr>
<td>In activities</td>
<td>Educational talks in schools, contact with users, use of educational materials, dividing city into sectors (change happened because what we did before did not work, and to improve our relationships)</td>
</tr>
<tr>
<td>In strategies</td>
<td>Home plumbing repairs, talks with schools and neighborhood groups, radio and TV publicity, contests and parade for InterAmerican Water Day (change happened because we had new information that we did not have before, and we reflected on our past experiences)</td>
</tr>
<tr>
<td>In objectives and goals</td>
<td>Improving quality of service provided, 85% approval rating by population, increase in number of hours of service offered, decrease in number of customer complaints (change happened because it was beneficial for the company to change)</td>
</tr>
</tbody>
</table>

Appendix 4b: Reflections on Most Important Change- Water Company Managers, WUSC Team Members and Counterparts- Group K

<table>
<thead>
<tr>
<th>Reflections on...</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most important change: Improving the quality of service offered</td>
<td>Dividing the city into sectors, changing the pump system to increase water production, inventory of users and water connections, installation of water meters, equalizing water pressure in the system, offering home plumbing repairs, monitoring progress</td>
</tr>
<tr>
<td>Lessons</td>
<td>Difficult problems can be resolved through team work, problems can be solved by investing money wisely, well-trained people achieve good results, coordinating work with the public helps work progress well in the field, solving problems requires technical, financial and social resources, every city has different experiences with water and sanitation</td>
</tr>
<tr>
<td>For the future</td>
<td>Keep working on the lessons learned from working with WUSC, monitor the programs that have been developed</td>
</tr>
</tbody>
</table>

APPENDICES 175
Appendix 4c: Perceived Changes- Water Company Managers, WUSC Team Members and Counterparts- Group L

<table>
<thead>
<tr>
<th>Changes</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overhaul of system in nearby satellite town and first sector of city</td>
<td>Changes were made to benefit the company, to improve the company, the situation had changed, and there was economic support to do so.</td>
</tr>
<tr>
<td>Client satisfaction</td>
<td>Changes were made to benefit the company, to improve the company, to imitate others with good systems, and to improve relationships with the users</td>
</tr>
<tr>
<td>More importance placed on strategies to save water</td>
<td>Changes were made because of the presence of WUSC, to improve the company, and based on past experience</td>
</tr>
<tr>
<td>Educating public about the importance of water</td>
<td>Changes were made because of the presence of WUSC, to improve the company, and based on past experience</td>
</tr>
</tbody>
</table>

Appendix 4d: Reflections on Most Important Change- Water Company Managers, WUSC Team Members and Counterparts- Group L

<table>
<thead>
<tr>
<th>Reflections on...</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most important change</td>
<td>Overhaul of system in nearby satellite town and first sector of city</td>
</tr>
<tr>
<td>Lessons for the water company</td>
<td>We should focus on optimizing the operating of the system so that we save water and give other sectors better water pressure, hours of service and water quality</td>
</tr>
<tr>
<td>Lessons for WUSC</td>
<td>Support for the operation of systems should be given priority</td>
</tr>
<tr>
<td>Recommendations for the future</td>
<td>Give more support to user education activities, take preventative measures during the installation of new pump systems</td>
</tr>
</tbody>
</table>

Appendix 4e: Perceived Changes- Water Company Managers, WUSC Team Members and Counterparts- Group M

<table>
<thead>
<tr>
<th>Changes</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational changes in the potable water system</td>
<td>Projects and work plans are now based on sectors of the city, professional growth of team members, team work, improvement of the quality of service of one sector of the city (12,000 people) and 100% of one satellite town (Changes were made to benefit the company, to improve the company, because of the presence of WUSC, changes in the situation, and there was economic support to do so)</td>
</tr>
<tr>
<td>Improvements in the public image of the water company</td>
<td>Communication from the company to the users about the services that are offered, implementation of programs to reduce non-payment (Changes were made to benefit the company, to improve the company, changes in the situation, and there was economic support to do so)</td>
</tr>
<tr>
<td>Personal changes in the freedom to made decisions and confidence</td>
<td>Changes made to improve working relationships, reflecting on past experience, and to improve the company</td>
</tr>
</tbody>
</table>
### Appendix 4f: Reflections on Most Important Change- Water Company Managers, WUSC Team Members and Counterparts- Group M

<table>
<thead>
<tr>
<th>Reflections on...</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most important change: Improvements in the public image of the water company</td>
<td>Better service: more hours, increased water pressure, improved water quality. Relations with users: talks in schools, information given to users, home plumbing repairs, events and activities</td>
</tr>
<tr>
<td>Lessons for the water company and recommendations for the future</td>
<td>Plan work in stages as part of a larger integrated vision, involve all of the necessary areas in each project, the projects that are being developed should include social education components, and evaluate project results.</td>
</tr>
</tbody>
</table>
APPENDIX 5: Results of Workshop with Directors of Urban Water Users Association in Second Study Location

Appendix 5: Time Line of the Creation of the Urban Water Users Association

<table>
<thead>
<tr>
<th>Key Events</th>
<th>Key Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifying the water problems and educating neighborhood groups</td>
<td>Lack of interest and low attendance at public meetings, some neighborhoods did not participate at all</td>
</tr>
<tr>
<td>Open dialogue between WUSC, users, municipality</td>
<td>Gossip: people were afraid the rates would go up too much, and the service would be privatized</td>
</tr>
<tr>
<td>Neighborhood leaders went to visit water systems in other cities</td>
<td>The bylaws were opposed by some people who use an excessive amount of water</td>
</tr>
<tr>
<td>Election of Urban Water Association Directors</td>
<td>Lack of resources to complete legal registration process</td>
</tr>
<tr>
<td>Consultation, writing and public approval of bylaws</td>
<td>People have not paid what they pledged at the fundraising event</td>
</tr>
<tr>
<td>Legal registration of association, recognition by SUNAT</td>
<td>Lack of resources to set up office</td>
</tr>
<tr>
<td>Support of WUSC in training the directors</td>
<td>The municipality has yet to transfer authority to the association</td>
</tr>
<tr>
<td>Public fundraising activities, donations</td>
<td>Association directors have not followed up on letters to institutions that were sent asking for their support</td>
</tr>
<tr>
<td>One school in town now has water 24 hours a day</td>
<td>There has been no improvement in the water service yet</td>
</tr>
<tr>
<td>Public competition to create the association’s logo</td>
<td>Little commitment on the part of the directors to attend association meetings and arrive on-time</td>
</tr>
<tr>
<td>Infrastructure improvement projects in 3 neighborhoods with municipal and user participation</td>
<td></td>
</tr>
<tr>
<td>Regular cleaning of the potable water storage tanks</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX 6: Research Introduction and Information Sheet (English Version)

Case Study of Communication for Social Change:
WUSC's Capacity Strengthening Project in Water and Sanitation

Between June and September 2005, WUSC will be participating in a study called “Case Study of Communication for Social Change: WUSC's Capacity Strengthening Project in Water and Sanitation.” The research will be conducted in the spirit of learning from and improving the experience of participants in WUSC’s programs.

The research will take place in two locations in Peru in order to document and analyze WUSC’s training programs as a case study of Communication for Social Change (CFSC). CFSC looks at the use of communication methods and media for capacity building, policy dissemination, and adult education. Specifically, this research will describe the communication and collaboration between WUSC and municipal governments, water companies, water user groups and end users that have been used to increase people’s ability to plan, carry out, and manage water and sanitation services.

You may be asked to volunteer to participate in this study. If you choose to participate, you might be asked to do the following things:

**Logistics**- provide feedback to the researcher on the design, methodology and logistics of this study.

**Interview**- individually speak with the researcher about your understanding of water and sanitation before, during and after participation in the project.

**Focus groups**- attend focus groups or workshops with other people to talk about:

- How have relationships related to water and sanitation been built?
- How have decisions been made?
- What has been the flow and content of information exchange between different individuals and groups?
- What have been the perceived effects of WUSC’s project in general and their educational campaigns in particular?
- What changes in individual and organizational capacity do you believe have occurred?

There will be an opportunity to provide feedback to the researcher on the research process and to talk about what the researcher learned from the research. A complete copy of the final case study will be provided to WUSC.

**About the Researcher**

April Pojman is an MSc student at the University of Guelph in Canada, this research is part of her thesis work. Before beginning her studies, she spent over three years working with coffee farmers, cooperatives and roasters. She also taught environmental science to children for a year.

April has worked, studied and traveled in Bolivia, Ecuador, Nicaragua and Mexico and is looking forward to spending time in Peru and seeing the Andes again.
APPENDIX 7: Guiding Questions Explored in Semi-Structured Interviews

What is your organization’s relationship with other water and sanitation stakeholders? How have those relationships been built?

What activities have been done with whom?

How was it decided what would be done? (both internal to organization and external)

How are responsibilities divided up? (selection of participants, budget, construction, operation maintenance, repairs, training, rules & regulations, fees)

Where do the resources for your work come from? Do funders help to define areas of focus?

How often do you communicate with each of the other groups? Who does it and in what form?

What type of information do you give to each of these groups? What do they do with this information?

What type of information do they give to you? What do you do with this information?

What have they learned from you? What have they done with this knowledge?

What have you learned from them? What have you done with this knowledge?

What changes have you seen since WUSC first started working there? (In general and changes in each actor group)

Are organizations or people working together differently? How?

Have you seen changes in organization’s roles, tasks or leadership responsibilities? Like what?

Have there been any changes in the attitudes that people have?

Are there any changes in the way people manage problems or handle conflict? What systems are in place to resolve conflict?

Have there been any changes in the way each group sees or interacts with the others?

How are people within each group learning from the others?

Are people doing other new things without the support or guidance of WUSC?

How do you get feedback about the work that your organization is doing? Who do you get it from? What do you do with it? Do you give feedback to others?

What educational campaigns have taken place?

What has been the message of them, who was the target audience, how was the campaign distributed, what were people intended to do?

How do you think that people understood them?

Do you think that they have contributed to any changes? Why or why not?