

CHAPTER SIX- Analysis, Conclusions and Recommendations

Introduction

Publicly owned companies like the water company described here, and institutions such as MINSA and municipalities, face challenges on all fronts from a shortage of resources and public support to limited knowledge and ability to carry out their work. Development organizations like WUSC can play a crucial role in supporting them to meet and overcome these challenges by providing expertise, training, and concrete working examples of how public services can be managed in a responsible, transparent manner that earns the trust and support of the public.

However, since international cooperation is limited by donor funds, goals and time scales, from the very beginning capacity development projects must begin to train local counterparts and transfer responsibility over to them so they will carry out the work on a long term basis.

What are some of the lessons from WUSC's Peru project that can help us reflect on the roles that communication and capacity development play in this process? And how can they be used as strategically and effectively as possible? This chapter describes how the principles outlined in the conceptual approach in Chapter Four can be compared with the findings in Chapter Five to suggest how capacity development and Communication for Social Change strategies can be applied to support public water management in Peru.

Analysis: Communication for Social Change

As described in Chapter Three, WUSC has implemented many of the principles of Communication for Social Change in both of the case study locations (see Table 2.1).

Through the use of brochures, face to face meetings with neighborhood groups, educational

sessions with school teachers, coordination with health workers, radio programs, participatory workshops, hands-on demonstrations of hand washing and chlorination techniques, and public celebrations of InterAmerican Water Day, they have succeeded in introducing the ideas of collective action for water management and conservation to the general public. As mentioned in Chapter Two, communication strategies that over a long period of time employ a variety of media for mutual reinforcement tend to contribute community dialogue, debate and ultimately to change.

As noted in Chapters Three and Five, the Institutional Image office in the first study site and the municipality in the second study site did not employ communication strategies that allowed for public dialogue and feedback. They instead reacted to the public mood portrayed in the press, on the radio or in person through complaints, to limit damage to the company's or mayor's public image.

When WUSC initially begins to work in a new location they conduct diagnostics, which gauge the public's level of knowledge about their water system and their rights and responsibilities as water users, their level of satisfaction with the service, their willingness to pay, and their main complaints about the service. This information becomes the basis for WUSC's communication with the water users. In the case study communities, WUSC team members listened first to what people were saying and found that they wanted improved water service and to learn how to contribute to that goal. The teams then designed communication campaigns around their findings to reinforce some ideas that were helpful and to introduce others. In both case studies, different media were used for different functions of communication (see Table 6.1). This methodology appears to have been successful as often times, as is the case with the neighborhood groups and the rural water

associations, people were convinced to change their beliefs and behaviors in a surprisingly short time.

Table 6.1 Media Used by WUSC Teams for Different Communication Functions

| Communication Function | Media |
|---------------------------------------|---|
| 1 Reinforce group identity | Interpersonal, official documents, radio, brochures |
| 2 Establish rules, norms, policies | Interpersonal, official documents, brochures, radio |
| 3 Share information, knowledge | Interpersonal, official documents, brochures, radio, TV |
| 4 Get feedback, learn | Interpersonal |
| 5 Influence others or control self | Interpersonal, brochures, official documents, radio, TV |
| 6 Gain advantages over others | Interpersonal |
| 7 Exchange ideas, explore diversity | Interpersonal |
| 8 Share talents, enjoy life | Interpersonal |
| 9 Transmit time-sensitive information | Interpersonal, radio |

The teams' messages about water management were largely accepted in spite of initial resistance and mistrust on the part of the public toward their local officials and as a consequence towards WUSC's work as well. This acceptance was due to WUSC's long-term engagement with their partners, the use of multiple media, the face-to-face dialogue, and the use of Quechua in the second study location. Over time, the teams were able to create solid relationships in the communities where they work based on the values selected by the WUSC teams (see Tables 5.2 and 5.8). In the interviews with water company managers, local authorities and WUSC team members, they all commented on the trust that had grown between them (see Chapter Five for quotes).

While WUSC clearly undertakes a variety of communication activities, many of which are quite effective, they have no overall communication strategy. A communication strategy is based on research, development of clear communication objectives, identification of audience groups, carefully designed messages and choice of media, and finally, monitoring and feedback (Fraser & Villet 1994). In the case study locations, the diagnostics that took place at the beginning of the project did not ask people what communication media they

preferred, when and how they used different media, their level of trust in different spokespeople and media, nor did they identify the different stakeholders who would need to be reached with targeted messages in order to foster the changes that WUSC was seeking.

Because of the lack of an overall communication strategy, some groups have been left out which may make the continuation of the project, beyond WUSC's funding period, challenging for the counterparts who are expected to maintain the initiatives. In particular, the water company managers and board of directors, the mayor and city council members, and future mayoral candidates were not included as audiences for targeted communication efforts. These efforts would have promoted the attitudes and knowledge necessary for continued learning and capacity development for effective water management. This is particularly important given the quotes and workshop results in Chapter Five from the first study site that highlight the role of the project manager in overseeing the two WUSC teams, and the board of directors of the water company in making the majority of decisions. In both locations, one of the largest barriers to the project was the political influence of the town's mayor and the disruptions caused by each new mayoral election.

Keeping current and future decision makers apprised of the projects achievements and needs can help them develop a sense of ownership and protection over it that may help shield it from arbitrary political decision-making. In the case of the first study site, WUSC staff provided water company managers and board members with technical reports and presentations on their plans and progress. In the second location, the previous municipal representative had been very involved with the WUSC teams. However, oral reports had only recently been initiated with the current municipal representative. Site visits, videos, photographs, and radio documentaries could have helped decision makers visualize otherwise

dry reports (Fraser & Villet 1994). In neither case was the current mayor nor the future mayoral candidates targeted directly in WUSC's communication efforts.

The learning by doing approach employed in the project meant that WUSC's counterparts participated in the majority of their activities. However, because of the limited knowledge, experience, and personal agency of many counterparts, they often played only support roles (the main exception to this is the Engineering Team counterparts in the first location). While they learned new skills, in many cases they did not learn the underlying reasons behind them. This seems to point to the fact that WUSC views workplace learning more from a technical rather than social orientation (Easterby-Smith & Araujo 1999), which meant that some counterparts were not fully integrated into the teams (communities of practice) as equals. As a consequence, they experienced single-loop rather than double-loop learning as described in Chapter Two.

This situation was especially true in the design of communication activities in which workshop methodology and content was often planned by senior WUSC staff and brochures were created in Lima. Therefore, the local counterparts did not have the opportunity to contribute to their content or the process of their creation and while they were universally admired, they were viewed as WUSC's materials. A communication strategy would have included provisions for building skills among counterparts to write, field-test and produce professional communication materials for the public. They would have been more involved in the design of workshops, brochures, and radio programming and consequently, the counterparts would have developed feelings of ownership over the materials and the processes which would have helped them to continue with this communication work after WUSC's project ends.

This training would have been especially important for the Institutional Image Office and the Commercialization area in the first study site, as they have the most direct contact with the public. Even after having worked with WUSC for several years, one group in the workshop on decision making (see Table 5.5) identified that a decision had been taken and the public had been informed about it later, “because there is no way to communicate with the clients to make decisions together.” In the second study site, this training would have been carried out with MINSA, the teachers, and representatives from the municipality.

Analysis: Capacity Development and Learning

Chapter Two outlines four areas of capacity including organizational performance, internal capacity, and favorable internal and external operating environments. Municipally owned companies need capacities in all of these areas in order to fulfill their functions. Internally, organizations need to define their sphere of action and long-term strategies to provide support to those that most need it based upon systems for diagnostics, monitoring and evaluation. Effective municipal companies require a clear sense of their own rights and responsibilities as well as those of the other stakeholders involved. They need transparent policies and procedures that are applied uniformly in all cases. Additionally, they should be accountable to the general public as well as a regulating body. Overall, these companies need leadership that enables and builds these capacities and supports sound management practices in general (Gubbels & Koss 2000).

The findings in Chapter Five describe how in the two case study sites, hiring decisions, planning and budgeting, allocation of resources to different activities and communication with the general public are based on partisan politics rather than social or technical criteria.

This type of decision making has led to the massive budget deficits faced by almost all of the municipal water companies in Peru. The lack of the soft capacities outlined above has led many people working in the water sector to believe that concessions to private companies for certain parts of the service or larger-scale privatization is the answer to municipal water problems. Many people view private management of municipal services as more technical (as opposed to political), professional, and efficient. However, members of the public seem not to be in favor of these arrangements because of fear that their rates would increase. This fear was behind much of the resistance to change that WUSC addressed in their public educational campaigns.

As described in Chapter Two, capacity development can be viewed as a means to strengthen the ability of an organization to carry out activities; as a process to enable the organization to reflect and adapt in response to change; and as an end it strengthens an organization's ability to survive into the future. WUSC has most contributed to the building of organizational capacity as a means by assisting the water companies, municipalities, and user associations to improve their use of resources, knowledge, and processes to carry out specific activities.

To a lesser extent WUSC has contributed to capacity development as an end through more effective processes and increased public support, although not to the point that the future of municipal water and sanitation services is assured. This capacity development has occurred because of the professionalism and experience of the WUSC staff and the degree to which they were able to transmit their experience to the counterparts. The counterparts learned new ways to manage the water system by observing the WUSC team making decisions based on diagnostics, social and technical criteria, and past experience rather than political expediency.

The area in which WUSC seemed to have little impact was on the development of capacity as a process to reflect, learn and adapt to change. As described in Chapter Two, this could be due in large part to the lack of the development of an information sharing culture within the water company (see Tables 2.5 and 5.14). Because of WUSC's policy not to get involved in partisan politics, they did not make their own political agenda explicit nor employ strategic communication or activities within the water company or municipality to explore, question or transform the political *status quo* within the organization or community as described by Coopey and Burgoyne (1999) in Chapter Two. While the WUSC teams tried to foster a teamwork approach based on the free sharing of information, they did not acknowledge the influence that the organizational hierarchy and political maneuverings were having on the ability of others to share or use information they had gained.

When describing the decision making process used in the first study site, managers most frequently identified decisions as having been made by one person or group who later informed other people who were affected by it (Type A decision making). Even in cases where the managers identified that the decision had been taken in a more participatory manner, such as when they worked with WUSC to install the water meters in one sector of the city, it had not been done in consultation with the public who was ultimately affected by the decision (see Appendix 3). This points to the fact that the water company managers still did not have the mechanisms to examine their decision making processes, to solicit feedback from the population, nor did they have a solid understanding or desire to implement more participatory decision making.

In the first study site during the workshop that identified changes, the reasons most frequently cited as having caused a change were because there had been economic support to

do so from WUSC, and to benefit or improve the water company (see Appendix 4). Reasons that involved reflecting on or learning from past experience were rarely listed, which indicates that the water company managers have not yet learned to do this as part of their decision making process.

Everyone agreed that WUSC had originally been invited to work with the municipalities in order to provide extra financing for infrastructure projects. At the time of the research, however, many water company managers and local authorities had, encouragingly, begun to realize that technical and social issues could not be separated. In the interviews, many counterparts echoed the principles of socio-technical systems: that in work environments where the main work consists of the interaction between equipment and people, such as the management of a water system, the social and technical components are interrelated and cannot be managed separately (Trist 1981).

WUSC's learning by doing approach is invaluable as Trist (1981; 48) points out, "new patterns [of thought and behavior] can only be discovered by the individual and group members when they undergo an experience through which they themselves can establish the validity of the patterns." WUSC team members do teach by example especially with the direct counterparts that make up their teams. The capacity development work with the schools in the first location, and rural water users associations in the second, were particularly positive. In both cases the counterparts took ownership of the new information, were able to integrate it into their practices, and achieved noticeable changes in their communities.

On-going close contact seems (as described by Freire in Chapter Two) to have been particularly important to the progress that was made. In both cases where project team members were located at a distance, the communication and collaboration was not very fluid. In the first case study site, the Social Team was located at a distance from the main water company location and seemed to have limited impact on it, while in the second study site the head of the Sanitary Training Team was not physically present, which seemed to obstruct the communication with the other teams. These findings confirm the principles of situated learning theory outlined in Chapter Two, in which people learn through their membership in a community of practice. The development of good working relationships based on trust (and the other qualities described in Tables 5.2 and 5.8) within a community of practice allows information to be shared and knowledge to be passed on.

While WUSC carries out many capacity development activities, revolving around their learning by doing approach, they have no overall capacity development strategy. This approach appears to have resulted in many counterparts who know how to do more explicit hard capacity or physical tasks but who have not gained the tacit or soft capacity knowledge that the WUSC professionals learned through their years of professional experience. Fraser and Greenhalgh (2001) highlight how traditional education focuses on improving knowledge, skills and attitudes (competence) but not for increased ability to adapt to change, generate new knowledge and improve performance (capability). Capability is enhanced through feedback and a focus on learning processes over prescriptive content. The competence approach is limiting since water counterparts learn how to carry out the work but there is little focus on training them how plan for it, and make strategic decisions about what should

be done with whom and when. This has resulted in a limited transfer of WUSC management practices to the water company and the municipality.

Overall, WUSC has not explicitly focused on and therefore has had relatively little effect on the municipalities' or water companies' organizational culture, leadership and management styles, incentives and rewards systems, or organizational structure (see Horton *et al* 2003; Tables 2.5 and 5.14). The employees in the water systems still primarily view their organizations as political arenas and structures, while WUSC views the water company and municipalities as structures and human resources. All parties could benefit from an increased view of water provision as systems (see Table 2.4). WUSC's work was limited by the fact that they do not work at the level of the external environment that provides the administrative and legal system, national and local policies and political systems, and the overall social and cultural milieu within which the municipalities operate.

Water company managers and municipal authorities observed the WUSC teams and admired their way of working, especially their professionalism, responsibility, and teamwork.

However, the explicit trainings that WUSC provided were in more tangible areas, and the intangible values were supposed to be conveyed tacitly through working together. In the interviews with WUSC team members, water company managers and municipal authorities, they asserted that these values were not being learned and embedded in individual or collective mental models as much as each side would have liked. Further evidence of this observation is provided in Table 5.6, where some water company managers demonstrate that they do not fully understand the meaning of teamwork. The managers had not learned to reflect on the gap between their theory in use and their actions as described in Chapter Two.

One of the reasons for this unexplored potential in soft capacity areas is that WUSC's Peru project does not have goals directly relating to communication, learning or capacity development nor methods to monitor or evaluate these aspects of the project. The technical focus of the project is reflected in the indicators that the project used to monitor and evaluate the work of the Social Team in the first study site, which include the average amount billed per connection, the number of months of late payments, monthly profit of the water company, the number of schools participating in the training programs, the number of teachers trained, the number of students trained, and percentage of water users satisfied with the service.

Another explanation for the limited transfer of soft capacities is that the WUSC teams did not help the capacity that they transferred to move to other areas within the organization. As described in Chapter Two, learning may have been taking place in individual counterparts but was not being transferred and codified across the whole organization. This could in part be due to the limited personal agency of the counterparts within their organization, such as the head of the Social Team in the first study site. As Trist (1981) points out, work teams that are trying to implement change and fail, most frequently do so because of a lack of support from the wider organization.

Furthermore, WUSC was not working to build the capacity of some of their natural counterparts. For example, in the first case study location the other water company departments in direct contact with the public are the Institutional Image Office and the Commercial Office, yet the Social Team did not work closely with them. Both departments employed a style of communicating and interacting with the public (for example, by posting rules in the customer waiting area or by requesting the population to provide manual labor)

that was based on the communication functions of transmitting information and persuasion. These one-sided communication activities served to keep community ownership and participation in the management of their community's water service at the lowest levels by simply contributing manual labor and monthly fees with no decision making power (see Table 2.3).

Personnel from the Institutional Image Office did not accompany the Social Team to speak with water users and schools, nor did they design communication materials together such as the video that was in production during the research period. WUSC teams did not work with the General Manager or Board of Directors to modify the job description or focus of the Institutional Image Office so that it encompassed two-way communication with the water users. The Institutional Image Office was to again be the main point of contact with the public at the end of WUSC's contract and that their staff was not trained or interested in performing anything other than their traditional public relations work which focuses on the communication functions of sharing information and influencing others.

In the case of the Commercial Office, the expertise of the Social Team was not used to its full benefit either. For example, they did not accompany each other into the field to jointly speak with users nor did members of the Commercial Team undergo training with the Social Team to learn how they were communicating with the public. The communication that the Commercialization office initiated with the users was not a dialogue, but rather involved water users visiting their office to file complaints. The planned communication that the Commercial Office provided for the users consisted of posting information on a board in the customer waiting area again to share information and to influence behavior. This contrasted

to the neighborhood meetings, door to door visits, brochures and educational talks in the schools and other public events that the Social Team carried out.

In the second case study location MINSA workers and the schools were natural partners. In the case of MINSA, the Sanitary Training Team worked primarily with the volunteer health promoters in the communities rather than the health posts or the head of the Environmental Health Unit. The Engineering Team did provide a series of four workshops in 2004 on chlorination and disinfection of rural water systems to MINSA staff, but this effort did not lead to consistent on-going collaboration. The work with the schools took place primarily in the rural areas, with very little training of teachers in the urban area. Both institutions suffered from considerable resource shortages and would have greatly benefited from increased training and collaboration with the WUSC teams, which over the long-term would have helped them to become more suitable partners for the project.

Leeuwis (2004) highlights the fact that many public extension projects in developing countries are facing similar problems as those expressed by the MINSA employees in the second study site. They are chronically under-funded and are trying to reach too many people with too few resources so that trying to build personal relationships with their entire target audience is nearly impossible.

In these cases, concentrating on training of trainers to reach others in their communities might be a better use of resources than attempting to visit distant communities in person. Additionally, the use of public media such as radio can help to increase public dialogue about health topics and to reach people in remote areas. Not only could MINSA have been invited to coordinate and co-communicate with WUSC radio programs in order to connect with end

users that are currently out of reach due to resource limitations, but WUSC could direct radio programs towards strengthening the capacities of local MINSA staff as well.

Conclusions

The purpose of this research was to document and analyze the experience of WUSC's capacity development training programs for water and sanitation as a case study of Communication for Social Change. Conclusions from each of the three research objectives are highlighted below.

Objective 1: To describe the communication and collaboration between and among WUSC and municipal governments, water companies, water user groups, and end users that have been used to strengthen the capacity to plan, carry out and administer water and sanitation services.

In Chapters Three and Five, I described the communication and collaboration between WUSC and the other stakeholders. These processes have taken place as part of a long-term engagement that involves the use of many different media from workshops to face-to-face conversations, brochures, presentations, posters, radio shows, and TV spots.

In their communication, the WUSC teams most often communicate to share information and knowledge. They place less emphasis on other communication functions that are important for Communication for Social Change such as exchanging ideas, reinforcing group identity, getting feedback to learn and sharing talents. Additionally, WUSC does not have an overall communications strategy, which means they have no way of monitoring which messages and media have been most effective for different stakeholders. The lack of a strategy has also resulted in the exclusion of some important audiences such as decision makers from learning

about the gains and challenges experienced by the project and municipal water management in general.

Overall this research has contributed new communication functions to the existing ones that had already been documented in Table 2.2. These functions can add new dimensions to the planning, practice and monitoring of capacity development projects for water and sanitation. Additionally, it has confirmed the importance of two-way communication, trust and a ‘toolkit’ approach using multiple media with an emphasis on interpersonal communication.

Objective 2: To identify perceived changes in individual and organizational capacity since participation in the project began.

Perceived changes about capacity are documented in Chapters Three and Five. WUSC employs a learning by doing approach that places teams of professionals inside water companies or municipalities to work directly with counterparts on a daily basis. This methodology has especially contributed to changes in the public’s perceptions about their own rights, responsibilities and roles within water management and conservation. However, because WUSC has no overall strategy or indicators for measuring capacity development processes, more intangible tacit knowledge in areas, such as how to work effectively in a team, have been slow to transfer and to spread beyond direct counterpart team members.

This research has confirmed the ideas of soft and hard capacities as a useful way of conceptualizing capacity development efforts. It also pointed to the importance for capacity development efforts to focus on all four capacity areas including the external operating environment for best effect.

Objective 3: To identify the principles of Communication for Social Change that may be applicable in the design of other water and sanitation projects in Peru.

The principles of Communication for Social Change include the ones that WUSC is using already as well additional ones they have not considered. The project teams engage in long-term interventions that begin with a diagnostics phase to listen to the views of their target audiences before they design any workshops or other communication or capacity development materials. In their work, WUSC tends to focus on interpersonal communication through close physical proximity supplemented with additional media such as brochures, posters and radio programming.

Other principles of Communication for Social Change that could be given greater emphasis in WUSC's project include the planned use of communication functions that help to build trust and two-way communication; the development of learning objectives for increased monitoring and evaluation of the impacts of communication and capacity development efforts, and an increased production of messages around water and sanitation issues by the target audiences themselves to help people to become agents of their own change. All of these ideas confirm those presented by proponents of communication for development, empowerment and participation in Chapter Two.

Recommendations

Based on the literature review, findings and analysis presented in this thesis, I offer the following recommendations to policy makers, WUSC (and by extension other similar capacity development projects for water and sanitation in Peru) and future researchers.

For Policy Makers: Support the development of a healthy local-level public sector that can responsibly and reliably manage water and sanitation services. This can be done through the institution of a legal and regulatory model to limit the interference of partisan politics in the management of municipal services, through promoting and learning from successful municipal models that are currently in place, and through increased capacity and coordination between all stakeholders. Increased municipal capacities could help make more efficient use of government resources such as those distributed through FONCOMUN, provide more consistent quality of services for Peruvian communities, maintain national sovereignty over natural resources, and decrease opportunities for conflict between community members and private foreign companies.

A national framework for successful water and sanitation services could be based on that described for Peruvian municipal banks in Chapter Three. It could involve measures such as limiting the number of municipal representatives who can serve on the board of directors to a minority, establishing an external oversight committee un-affiliated with the municipality that could, for example, be in charge of hiring decisions, implementing procedures for increased transparency and accountability to the public in planning, budgeting and resources allocation processes and/or providing incentives for improved performance of municipal water companies.

For WUSC: Continue to embed professional teams within counterpart organizations for long periods of time, conduct community diagnostics and use a variety of media to reach out to the public. Make strategic communication planning including the use of communication objectives, audience analysis, media selection and monitoring and feedback part of this process.

Prepare communication and capacity development strategies based on a thorough analysis of all stakeholders and their capacities (see for example Horton *et al.* 2003). Use this information to develop learning objectives for each key stakeholder that can be monitored and used for feedback. This approach will serve to make these soft capacity activities more tangible, help demonstrate progress to infrastructure-oriented municipalities and increase decision makers' understanding of the project goals.

Develop a monitoring and evaluation system from the beginning of each project based on a gradual lifting of protective conditions and an exit strategy that will leave local counterparts and organizations with the ability to continue the work (see Leeuwis 2004). Design indicators and monitoring questions that will allow for the evaluation of learning and social change (see for example Parks *et al.* 2005).

Concentrate on increasing the capacities of the local counterparts to plan for and carry out work by themselves with minimal supervision early on in the project.

Plan for the close physical proximity of all teams and counterparts to facilitate frequent communication, coordination and the development of trust.

Increase the capacity of counterparts that have limited resources and agency. For example by involving MINSA and the schools in the radio programming and also providing programming designed to increase their capacities.

Demonstrate and communicate to decision makers why it is important to take people into account in infrastructure projects and teach them to conduct social and technical diagnostics and subsequently, long-term planning based on the data.

Strategically use communication to foster a policy environment that supports more professional social and technical rather than political management of water services.

For Further Research: Assess the long-term impacts of WUSC's project after they have left Peru, particularly on municipal capacity and changes in the communities.

Conduct additional social science research exploring the intersection between social and technical factors in other WUSC projects and/ or in other municipal water and sanitation projects.

Design and conduct trainings in capacity development and Communication for Social Change for WUSC headquarters and field staff based on the expertise that the Capacity Development and Extension Program at the University of Guelph has in this area.