

Communication, water, and sanitation in Latin America

The contribution of communication for development in water resource management
and service implementation projects



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WSP Mission

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Foreword

In recent years, there has been a growing recognition that the success of water, sanitation, and infrastructure projects depends to a large extent upon using Communication for Development (CfD) as a facilitating tool in bringing about change processes. CfD refers to the social process of dialog, negotiation, and consensus building through the use of a variety of methods and mass and interpersonal means of communication, as well as others, traditional and alternative. CfD seeks to foster social, political, and institutional changes at different levels by building trust between governments and citizens, promoting a two-way communication, exchanging knowledge and skills and achieving political incidence with a view to seeking development initiatives that may be sustainable and consistent with reality.

The experience of the last decade has proved that the best technically designed infrastructure projects can fail or have weak results if decision makers and the civil society are not duly consulted, informed and mobilized. Within the context of the reform and decentralization processes undertaken by many Latin American countries and the challenge of achieving the Millennium Development Goals, the role of CfD has become vital as a generator of consensus and alliances among all the actors involved in the provision of water and sanitation services.

Following on from this, and in agreement with the role of the Water and Sanitation Program (WSP), administered by the World Bank, to promote knowledge management in the sector, and also offer technical assistance in social and communication issues, WSP for Latin America and the Caribbean (WSP-LAC) addresses this report to sector authorities, project managers, and professionals working in the sector. The objective is to share main findings of a study on CfD in the water and sanitation sector in the region. Based on the systematization of experiences, the report seeks to document the added value of CfD in the implementation of water and sanitation projects. Through case studies, evidence is given of the important role CfD plays in initiatives aimed at changing behavior, implementing sector reforms, encouraging the participation of civil society, improving aspects of governance, and implementing infrastructure and water and sanitation systems.

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I. Introduction

At the beginning of the XXI century, nearly 2.6 billion people in the world (2 out of every 5) lack adequate sanitation and 1 billion do not have access to drinking water, conditions particularly prevalent in developing countries. International cooperation agencies and dozens of governments have termed this issue a priority due to the negative impact it has on a worldwide level, especially on the health of vulnerable groups, namely, nearly 2 million children who die each year due to the lack of a glass of clean water and a toilet¹.

Besides overcoming the challenges in terms of infrastructure and the investments required for improving water and sanitation coverage and services, this reality makes it necessary to explore participation mechanisms that may facilitate the involvement of the different social actors in the provision of services. In this regard, the adequate implementation of communication processes can facilitate a more active and committed participation of relevant actors in the supply of basic water and sanitation services.

Communication for Development (CfD) plays an important role in the design, implementation, monitoring, and evaluation of water and sanitation programs, especially regarding the creation of a favorable environment for political and public dialog, consultation and participation of different stakeholders, consensus building, knowledge management and dissemination, encouraging changes in attitude and behavior among key target groups, and for the strengthening of governance processes in the sector.

The interest in the role played by CfD in the water and sanitation sector is increasingly entwined with the processes of reform, above all with regard to stimulating public debate and consultations with the different groups of actors, as well as strengthening community participation processes in order to achieve behavior changes aimed at improving the quality of life of the people and guaranteeing the sustainability of the initiatives. Although significant steps have been taken in Latin America to ensure the participation and inclusion of civil society in the decision-making processes in the sector, it is still necessary to explore the strategic role played by communication in improving governance through the promotion and facilitation of dialog between governments and citizens and the building of relations based on transparency, trust, and credibility.

This report summarizes the results of a study on the role played by CfD in water and sanitation projects and programs in Latin America based on a review of 39 case studies and on documented experiences in this field². The specific objectives were as follows:

- 1) Distil the lessons learned and identify factors of success, limiting factors and weaknesses, and
- 2) Provide data and evidence of the added value and relevance of communication for development in the water and sanitation sector.

Methodology of the study

The 39 cases correspond to different types of intervention and levels: local community, national, institutional and regional levels, 72% of which are from Latin America. The cases pertaining to other regions were included due to their relevance to the study. The analysis drew on several variables derived from theoretical elements of CfD as a means of understanding how such variables are reflected in the practice of CfD in programs, projects, and experiences in water and sanitation. For the purposes of this

¹ PNUD. 2006. Report on Human Development 2006. Beyond scarcity: Power, poverty, and the global water crisis.

² See Appendix: List of analyzed cases.

publication, the report centered on only three study categories regarded as critical to the strengthening of CfD in the water and sanitation sector:

- Types of intervention and communication strategies employed.
- Experiences based on the achievement of results and measurable goals, with an emphasis on monitoring and evaluation processes.
- The added value of CfD in sector interventions.

The analysis of the cases was carried out in two stages:

Stages	Activities
Stage One	<ul style="list-style-type: none"> • Review of over 100 bibliographic items which deal with case studies, experiences, theories, proposals, and lessons learned regarding CfD related to water and sanitation programs and projects which led to the selection of 39 cases.
Stage Two	<ul style="list-style-type: none"> • Use of a checklist to determine whether the selected cases fulfilled the following criteria: <ol style="list-style-type: none"> a. Cases which explicitly refer to the role of CfD in the water and sanitation sector; b. Cases which do not explicitly refer to the role of CfD, but which incorporate descriptions or analyses of communication strategies. • Codification of cases according to an analysis matrix which contains the categories derived from the theoretical referents of CfD.

The following tables contain the distribution of the selected cases for the study by region and by type of intervention: initiatives aimed at achieving behavior change, participatory communication at the community level, with a focus on strengthening local capacities and those required to support sector reforms, bearing in mind that one way or another the building of infrastructure is always included to a greater or lesser extent in some cases. Likewise, the list of cases, projects, and documents reviewed is included at the end of the report. However, it is worthwhile mentioning that, in some cases, some of the fields of the analysis matrix were inapplicable owing to the diversity encountered in the structure of the reports, articles, and documents reviewed.

Table 1. Distribution of cases according to origin

Region	Number of Cases	Percentage of Cases
Latin America	28	72%
Other regions	9	23%
Global ³	2	5%

Table 2. Distribution of cases by type of intervention

Region	Number of Cases	Percentage of Cases
Sector Reform	7	17%
Behavioral change	13	34%
Community and participatory communication	19	49%

³ This refers to projects and documents focused on trends and reflections of a global character or in more than one region.

2. Communication, water, and sanitation in Latin America

2.1. The evolution of communication for development in Latin America

In Latin America, the communication, water, and sanitation trilogy is complex due to it being a cross-cutting issue for all government administrations. Experience has confirmed the thorniness of the issue inasmuch as it has become politicized owing to the limited capability of the State to regulate the use of the resource and to enforce the law, a state of affairs aggravated by widespread institutional disarticulation. In many cases, the administrative systems are very fragmented, displaying significant management gaps and vulnerability to the politicization of technical activities⁴. From this standpoint, the communication problem would focus on how to contribute to generate behavior changes that will lead to the efficient management of water and sanitation, at the level of both the government and the civil society. It may be added that behavioral changes ought to bring about greater participation in managing the resources from both parties.

The need for administrative institutionalization in the management of water and sanitation cannot be denied. However, for others, the importance of political factors and the generation of consensus in connection with the issue take precedence.

This is the view which has prevailed in Uruguay, for example, where over 60% of the voters during the

2004 presidential election also cast a “yes” vote for a constitutional reform preventing future privatization of water. Likewise, in a study in Mexico, water and sanitation are regarded as a fundamental part of the democratic game, since as an alternative to privatizing trends it proposes a model of local and participatory management in which the communities, in coordination with the relevant public sector authorities, design and implement policies related to the protection, conservation, and equitable and sustainable use of the resource⁵; in the World Water Forum, held in Mexico in 2006, together with the need to increase the quality of the technical management of water, the need to strengthen local management was emphasized acknowledging the political nature of the issue.⁶

Although the issue of communication in water and sanitation is not explicitly mentioned in the Synthesis of the World Forum, a tangential reference is made in the chapter on empowerment⁷:

Empowerment of communities, user groups, local governments, and minority groups consists in providing them with the possibility of making decisions or participating in the decision-making process and the means to do so.

The strategic use of communication can contribute to the understanding of the political, social, and cultural environments in which development takes place. This contextual knowledge enables the identification of political and other non-financial risks, supports the ways in which societies interact, disclosing their perceptions, priorities, expectations, language codes, cultures, spaces, and modes of communication. Moreover, it allows for the analysis of development initiatives from the standpoint of those affected and assists those responsible for developing public policies

⁴ This is the focus of four studies on the subject in Chile, Ecuador, Peru, and Central America published by Ballesteros, M. et al., 2005. *Administración del agua en América Latina: Situación actual y perspectivas* (Water Management in Latin America: Current situation and perspectives). CEPAL, Santiago de Chile.

⁵ Ruiz Marrero, C. 2005. *La privatización del agua en América Latina*. IRC, Ciudad de México.

⁶ Comisión Nacional del Agua (National Water Committee). 2006. *Synthesis of the World Water Forum*. National Water Committee, Mexico, FD.

⁷ *Ibid.* p. 63

in their decision-making, from the very inception of the initiative, based on a clear understanding of the perspectives of the beneficiaries. This has a positive influence on project design and emphasizes the importance that should be attached to the processes of participation and consultation⁸.

In order for the experiences of water and sanitation from the perspective of CfD to be understood the background and the conceptual framework of CfD must be taken into account, especially regarding the context of development. The concept of *development* has changed gradually in the last fifty years from a view associated with “modernization” processes⁹ to a hybrid perspective which allows for the inclusion of approaches to decentralized territorial development and the outcome of strategic alliances between public and private actors, understanding development as a “multidimensional process which comprises the change of social structures, attitudes, institutions, the reduction of inequalities, and the eradication of poverty”¹⁰.

Criticisms of the modernist model led to reformulations of the one-way communicative approaches which remained anchored to perspectives of persuasion based on techniques stemming from the field of commercial marketing, giving rise to the development of several approaches such as:

- IEC (Information, Education, and Communication), characterized by the combination of educational and communicative strategies of massive and interpersonal nature, mainly used in the field of public health;
- The approach based on behavioral change, which is characterized by the use of theories from the field of social psychology and seeks to identify factors which determine individual behavior and to implement communication strategies that may foster the adoption of desired behaviors. This prescriptive approach has progressively included processes of



social participation and mobilization in order to bring about behavioral change on an individual and social level.

Participatory communication for development – also known as *alternative communication* – was an endogenous response to the modernist perspective and to the theories of behavioral change which prevailed in the practice of CfD in the early days. In this approach, the thinking of the Brazilian educator Paulo Freire and his emphasis on participation rather than on the results of educational processes are central. Participatory communication defines underdevelopment as a structural problem, the solution of which does not depend on individual behavioral changes but rather on deep changes in the economic, political, and social structures of Latin American societies: these must arise from endogenous participatory processes of dialog and public debate.

⁸ Obtained from Mitchell, P. and Chaman-Ruiz, K. 2007. Communication-based Assessment for Bank Operations. The World Bank, Washington, DC.

⁹ Escobar, A. 2001. La Invención del Tercer Mundo (The Invention of the Third World). Editorial Norma. Bogota.

¹⁰ Servaes, J. 1996. Communication for Development in a Global Perspective: The role of governmental and non-governmental agencies, Communications. Free translation by the authors of the research.

Origins of participatory communication

In Latin America, the inception of this model is ascribed to two experiences of autonomous popular communication arising from social processes¹¹. First, the experience of Radio Sutatenza in Colombia, which was created in the 60s to disseminate the Catholic doctrine but which later grew and became a system of radio-schools called *Acción Cultural Popular* (Popular Cultural Action) (Radio Sutatenza – ACPO), linked to local participation and mobilization processes in an effort to eradicate illiteracy. Second, the experience of the radios of the mines in Bolivia, which, after the nationalist revolution of 1952, became instruments of wide popular participation, where workers shared their daily experiences, discussed union issues, expressed their needs, and presented their demands to the government.

2.2. New trends of CfD in Latin America

Nevertheless, CfD has moved sometimes alternating between and sometime parallel to the two basic approaches mentioned in this document, i.e., the modernist or diffusion model, based on persuasion which aimed at bringing about behavioral change, and the participatory model, which places greater emphasis on social, political, and economic processes and structural changes. However, throughout the evolution of communication for development, it has

been found that those who downright rejected approaches based on the modernist perspective, particularly the behavioral change approach, came to acknowledge its usefulness in practical terms, while those who adhered to the reliability of results and behavioral change, came to find sense in the participatory model. Thus, the current trend seems to be that of convergence of both theories and models in order to bring about change at different levels: individual, social, and institutional, and also at the policy level.

The study carried out by Nancy Morris¹² confirms the trend toward a constant exchange of elements from both models. From the review of 35 CfD projects from different parts of the world, Morris concludes that, in most cases, elements from the modernist or diffusion model are used in projects of a participatory nature, and vice versa, suggesting that rather than diverging, these models tend to complement each other.

Currently, and according to the latest definitions of the concept of communication for development, there is a tendency toward integration which includes different approaches and elements¹³:

Communication for Development is a social process based on dialog using a broad range of tools and methods. It is also about seeking change at different levels which include listening, building trust, sharing knowledge and skills, developing policies, debating and learning in order to achieve sustained and meaningful changes. It is not about public relations or corporate communication.

A proposal stemming from the participatory approach which has gained currency due to its drawing on many elements pertaining to participatory communication, is communication for social change¹⁴. This proposal aims

¹¹ Gumucio-Dagron, A. 2001. Haciendo olas. Historias de comunicación participativa para el cambio social. (Making waves. Stories of participative communication for social change). Rockefeller Foundation & Plural Editores, La Paz, Bolivia.

¹² Morris, N. 2003. A comparative analysis of the diffusion and participatory models in development communication. *Communication Theory*.

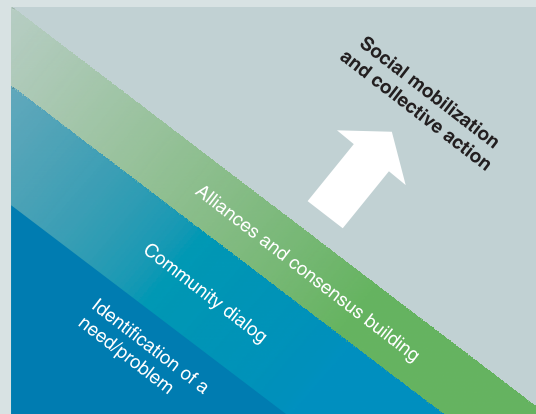
¹³ Quoted from the Rome Consensus, The Communication Initiative Network: <http://www.comminet.com/en/node/221734/print>

¹⁴ Figueroa, M.E., Kincaid, D.L., Rani, M. & Lewis, G. 2000. "Communication for social change: An integrated model for measuring the process and its outcomes". John Hopkins University's Center for Communication Programs for the Rockefeller Foundation, Working Papers Series, n. 1.

to facilitate processes where “dialog within the community” and “collective action” may work together to bring about social change to improve the well-being of the entire community.

A central element in participatory models is social mobilization, which coalesces the efforts of different inter-sectorial allies in order to achieve social recognition and, concurrently, to promote demands for development through participatory communication processes. The greater the interest of the participants, the more sustainable the social mobilization project will be. Consequently, the processes of participatory communication for development and social change must contain a clear component of social mobilization.

Graph 1: Construction of collective action for social change



3. Outcomes of the analysis

3.1. A unifying paradigm

In the last decade, researchers into communication for development have stated the need to unify these

paradigms instead of continuing with the divisions as had been done previously. They put forward arguments supporting the theoretical and practical convergence of the paradigm as summarized below¹⁵:

- **The need for political will.** The promoters and implementers of communication for development initiatives must understand that their results depend not only upon internal factors that affect communication but also upon the political will of the rulers and the degree of citizen empowerment.
- **The need for a cross-cutting approach and to incorporate communication at the start of the initiatives.** Communication for development must be regarded as a vital tool throughout the entire cycle of the project. Even before embarking on the design of an intervention, there needs to be an analysis that investigates the political risks, key actors, means of communication and where this takes place, as well as local capacities for implementing strategies and communication plans, identifying existing social networks and the participation of civil society. Posing questions about communication during the early stages of design may serve the purpose of anticipating future difficulties and facilitate the participation of the actors in the analysis of the situation and in the definition of objectives¹⁶.
- **The need for multiple approaches and theories.** It is more difficult to face the multiple development situations which require communication processes with only one approach. Therefore, it is necessary to combine theories and instruments which proved to be useful in the past.
- **The need to integrate top-down and bottom-up approaches.** Neither behavioral change nor social participation have proved to be self-sufficient regarding the planning of communication for development. Experience has shown that neither academic and elitist planning nor full and constant participation succeed on their own, but rather complement each other.
- **The need to integrate forms and means of multimedia and interpersonal communication.** Neither mass nor popular nor interpersonal communication can be neglected. Their use must be integrated and synergic.
- **The need to integrate the approaches of individual and social change.** The processes aimed at change on an individual level must be reinforced with efforts toward achieving collective action in order to achieve long term results. The social change approach is a good example of this type of integration.
- **The need to understand communications as an interdisciplinary contribution.** Communications should not be regarded as an end, but rather as means that facilitate the process of dialog, negotiation, and consensus in which multiple actors at different levels and from different disciplinary backgrounds are involved in the initiatives for development.
- **The need to establish indicators to measure the progress and impact of the communicational component on the initiatives.** To this end, it is crucial that formative research and a base line be secured prior to the design of any project and that they may identify and provide a diagnosis of the initial situation.

¹⁵ Extracted and expanded by the authors from Waisbord, S. 2003. "Family tree of theories, methodologies, and strategies in development communication." Rockefeller Foundation, <http://www.comminit.com/pdf/familytree.pdf>

¹⁶ Extracted from Mitchell, P. and Chaman-Ruiz, K. 2007

Social changes often require political, community, or individual changes, the achievement of which will depend to a large extent upon the activation of communication processes that operate at the necessary levels according



to each context, based on the logic of dialog, participation, and consensus building.

While the foregoing elements are not to be regarded as a theoretical framework, they do offer conceptual elements which guide the current analysis. Numerous texts have dealt extensively with the theoretical and conceptual aspects of CfD¹⁷.

¹⁷ See Hemer, O. & Tufte, T (Publishers) 2005. Media & Global Change: Rethinking communication for development. CLACSO, Buenos Aires, Argentina; Melkote, S. & Steeves, L. 2001. Communication for Development in the World. Theory and practice for empowerment, Sage: New Delhi, India, 2nd Edition; Mowlana, H. & Wilson, L. 1990. The passing of modernity: communication and the transformation of society. White Plains, NY: Longman.

3.2. Main findings

The main findings of the analysis, organized in accordance with the three aspects mentioned in the section on methodology are described below:

3.2.1. Types of intervention and communication strategies

Within the diversity of strategies related to communication and to the water and sanitation sector, the strategies of social mobilization and interpersonal

communication lead the interventions at community and local levels, while those strategies centered on mass media and advocacy seek to contribute with sector, national, and regional goals and political incidence. There is a tendency towards the convergence of the two models in so far as most projects partake of aspects of dissemination and participation.

From the case studies the following findings were identified:



- **The use of multiple participatory methods to achieve community mobilization** such as self-diagnosis, PRA (participatory rural appraisal) methods or of rapid diagnosis, planning and decision-making models, and environmental protection actions. The **Cotacachi** case, in **Ecuador**, illustrates different participatory experiences in community processes for water management, based on participatory approaches and the building of alliances to make decisions.
- **The use of multiple training methods aimed at capacity building** such as workshops, the use of audiovisual pedagogical systems, training of trainers/facilitators, demonstrative methods, the inclusion of education centers and the training of public officials. For instance, the work carried out by **FAO in Latin America** has emphasized the use of audiovisual pedagogy to train peasants and transmit information from the government to the community, from the community to the government, and from one community to another, thereby moving toward a perspective of social networks or a communications circuit.
- **The use of multiple forms of interpersonal communication** such as community theater, edutainment¹⁸ in group work, demonstrative sessions, and more traditional forms, such as orientation talks. A case in point is the conservation of the **Maya reserve in Guatemala**, a process in which community theater was used, together with a radio program, in a water management (acquisition and distribution) project at the local level.
- **Work at the advocacy level for political incidence** through the establishment of alliances, the involvement of stakeholders, the development of public incidence strategies, work with opinion leaders, the lobbying of authorities, and the search for consensus and the resolution of conflicts. In **Guanajuato, Mexico**, the report ***Towards a new water management practice: Experiences and proposals of Guanajuato State for a participatory and decentralized structure in services management*** describes how the process of decentralization made it possible to apply an integrated approach, build alliances, and work with different sectors in water management, from infrastructure to the promotion of a new water culture among the population.
- The use of strategies of social marketing through campaigns, merchandizing, branding, and actions involving mass media (radio, TV, press, and public campaigns), some of which are based on elements related to the behavioral change approach. By way of example, the campaign conducted by Population Services International and Procter & Gamble in **the Dominican Republic** provides PUR sachets (water purifiers) to make drinking water available for human consumption by employing communication strategies with the support of the mass media (spots on TV / radio, banners, and products with logos), the participation of volunteers from the Peace Corps and private distribution networks.
- Finally, the convergence of approaches is illustrated by the pilot project on changing management models of water and sanitation services in small towns in Peru (the Small Town Pilot Project-STPP) which incorporates elements from communication for social change and empowerment, using multiple strategies of mass, popular, and interpersonal communication derived from quick communication diagnosis based on participatory mechanisms such as the local communication and social mobilization committees and the establishment of alliances with local and national organizations.

¹⁸ Entertainment-education refers to the process of designing and implementing a media message to both entertain and educate, in order to increase the knowledge of a target group regarding an educational issue, create favorable attitudes, and change behavior in line with certain expectations (Extracted from Waisbord, 2003).

3.2.2. Experiences based on the achievement of results and goals

Many of the documents reviewed focus only on processes and methods but fail to mention both the individual and collective aspects of the change. In contrast, other interventions emphasize that the progress of the project needs permanent monitoring and evaluation in terms of reaching the planned objectives, apart from the processes involved.

- Most projects based on participatory (bottom-up) methods focus on the processes. However, within these cases, some strove to attain specific and measurable results. For example, to strengthen different aspects of community organization in order to have a bearing on policies of access to the resource in a river basin in **Cotacachi, Ecuador**.
- Interventions that make use of social marketing, mass media, and behavioral change methods tend to consider results with indicators and measurable goals. The number of users of a specific water treatment method in Latin America is a case in point, as was observed in the experience with Sodis (solar water disinfection) in **Bolivia** and **Honduras** and other countries of the region; or the percentage of the population exposed to a campaign which promotes practices of hygiene in the case of the experience of **Estrella Azul** in **Nicaragua** implemented by the John Hopkins Center for Communication Programs (JHU/CCP) and aimed at preventing diarrhea-type diseases in order to mitigate the impact of hurricane Mitch. This project used a base line which indicated, among other data, that the percentage of mothers who washed their hands at critical times was considerably low (45% before feeding their child; 50% before preparing food; 46% before eating).

The results show that the different indicators of the project experienced growth.

- The case of **Estrella Azul** shows that interventions in infrastructure and communication complement each other. The Environmental Health Project (EHP), responsible for the macro project, used multiple methods to improve the health of the families affected by the disaster. Making use of quantitative and qualitative indicators, the EHP declared that it had surpassed its original goals in terms of infrastructure (e.g., the installation of latrines)
- Regarding communications, a JHU/CCP achievement also entailed the families of the communities intervened taking in the key messages of the campaign. For instance, 90% of the beneficiaries reported using water suitable for human consumption; 93% of the beneficiaries reported using the latrines properly; 88% washed their hands before eating and after using the latrine; at the end of the project, only 13% of the families had children below five years of age afflicted with diarrhea. Regarding training, 83% of the residents of the target communities received training in water management, 90% in basic sanitation, and 88% in personal and environmental hygiene.
- The **Small Town Pilot Project** in **Peru** designed to improve water and sanitation services in small towns in Peru reported evidence at the political level and of decision-making at the local level. This was achieved through issuing municipal by-laws which describe the new framework of operation and the rules and regulations for the provision of services in small towns¹⁹, in the country and at the national level through the introduction of new legislation which acknowledges the specific needs of small towns. These achievements can be attributed to a community and social mobilization

¹⁹ According to Supreme Decree 016-2005-VIVIENDA, small towns or localities are those whose population ranges between 2,001 and 30,000 inhabitants.

process together with multiple interventions and communication strategies.

- Regarding interventions at the level of individual change, qualitative and quantitative methods are often employed, with measurements performed before, during, and after the interventions. **Estrella Azul in Nicaragua** made use of several M&E mechanisms. One of the interesting aspects in this case was the discrepancy observed between what had been reported in the surveys and what was actually done, which led to the reinforcement of actions to ensure that the reported practices were maintained.
- At the community level, an interesting example is the case of Proderith and “Communications in Integrated River Basin Management” in **Mexico**. Apart from qualitative results, such as the improvement in the quality of the relations between the community and the exogenous environmental projects, the intervention was measured employing indicators based on the number of meetings during the project, the number of participants, the proportion in terms of gender, the number of participatory projects executed, and the production of a radio program, as a means of evaluating the process, also known as implementation evaluation, in which there is a follow-up of activities in relation to the proposed objectives, which provides important information on the activities actually carried out and on events which could affect the results, beyond those to which communication presumably contributed, such as the reduction in the number of diseases and the transference of control from the irrigation districts to the local communities. The involvement of the community and the fact that they regarded themselves as protagonists of their own change emerged as key factors in achieving greater sustainability of the investments.



3.2.3. Added value of CfD

The analysis suggests a set of elements which lead to CfD having added value in the interventions carried

out in the water and sanitation sector and which must be taken into account by decision makers, politicians, and project managers. Some of the most relevant elements are described below:

Table 3: Added value of CfD and communication strategies employed

Added Value of CfD	Cases / Strategies and tools of CfD
<p>Contributes to the resolution of social problems associated to sector reform processes.</p>	<p>In the case of Guanajuato, Mexico related to decentralized and participatory management of water , several complex aspects converge, such as the relationship between neo-liberal policies, decentralization, privatization, participation and dissemination of public messages for the rational use of water, which have generated a strategy based on the use of mass media to promote a new water culture together with community mobilization actions aimed at finding agreed solutions for the management of the resource.</p>
<p>Strengthens the programs of rural development and training in water resource management.</p>	<p>The rural development and environmental project, in a native locality in Cotacachi, Ecuador, uses several forms of community communication and horizontal learning methods based on experience which have led to the adaptation and strengthening of traditional rural organizations, such as the Water Committees (Juntas de Agua), thereby achieving greater capability to convoke, organize, mobilize, build alliances, and empowerment before governmental and foreign institutions.</p>
<p>Allows for project replication at the national and regional levels and political incidence in national programs</p>	<p>The promotion of methods of solar disinfection (SODIS) in Bolivia, initially through the implementation of pilots at the local level, has achieved – after validating the effectiveness of the technological innovation in the improvement of public health – project replication at the national level through the ministries of health of Ecuador and Bolivia. Lobbying and advocacy strategies were necessary to achieve official recognition of this technology at different levels.</p>
<p>Improves governance aspects in infrastructure projects.</p>	<p>The hydroelectric project of Bumbuna, Sierra Leone, demonstrates the effective integration of strategic communication and the preparation of the project in a critical post-war reconstruction scenario. CfD facilitated consensus building in the distribution of the project benefits and enabled the participation of grass-roots organizations in the development of environment components and the social management of the project. The communication diagnosis during the design stage was an effective instrument for identifying, among different groups</p>



	<p>affected by the project, social conflicts that could have impeded project implementation or limited community participation in activities designed to increase local income and ensure the environmental sustainability of the project.</p>
<p>Contributes to the preservation of cultural and traditional features of the communities participating in the project (gender, cultural identity, traditional knowledge) which facilitate processes of dialog, involvement, and participation in the interventions.</p>	<p>The conservation of the Mayan biosphere reserve project in Guatemala incorporated ancestral technologies of Mayan origin through demonstrative sessions in order to ensure the participation of the community. Community theater was used in conjunction with a radio program. Likewise, training in practices of hygiene took into account the cultural aspects of the indigenous population.</p>
<p>Allows identification and analysis of key actors (through stakeholder analysis) with a view to securing the political will of leaders and authorities and achieving a more committed involvement on the part of the different groups of the population.</p>	<p>With regard to the case of the Small Town Pilot Project in Peru, the role of CfD consisted of mobilizing and empowering the community, reinforcing the relations among the different local actors, especially governments and communities, fostering individual behavioral change in order to promote collective action, and involve each social actor and sensitize him/her about his/her role and responsibility. Through the use of multiple interpersonal communication strategies, such as talks and workshops, mass communication, such as radio spots, public activities and contests, as well as the creation of mechanisms for participation such as neighborhood associations and the creation of local commissions and plans, consensus was reached toward a change in the management model, based on the inclusion of a third party, the specialized operator.</p>
<p>Serves as a crucial tool in facing the challenge of increasing access to basic water and sanitation services, since it generates an informed demand on the part of the population and fosters the construction of a citizenry aware of its rights and duties.</p>	<p>The case dealing with the urban supply of water to the metropolitan area of Mexico City during the 80s and 90s has proved that through an interdisciplinary approach and the use of communication strategies aimed at improving governance it was possible to respond effectively to a public protest against private hegemony, demanding the recognition of socio-economic inequalities among the population in order to achieve a more equitable distribution of water as a right.</p>

4. The contribution of CfD to the sector in Latin America

The background to the issue of communication and water management in Latin America is to be found within the framework of rural development, extension, and agrarian reform programs. Influenced by the alternative model which emerges in the region in the 60s, these programs become referents in the area of communication for water management, apart from other ideological paradigms which influenced on pedagogical methods, community mobilization trends, and processes of intercultural communication and training, such as the Audio-visual Pedagogy developed by FAO and national institutions.

Rural development programs emphasize on the sustainable and equitable use of the water resources, as well as the conservation of hydrographic zones. The need of building consensus and community participation for the management of water fostered a series of communication experiences related to decision-making, water rights, and governance. These programs implement different communication activities for strengthening spaces for decision and consensus, message adaptation, traditional methods and dynamics, and forging capacities and skills. Other projects strive to generate communication processes and political incidence from the local environment through community mobilization of social networks in order to improve the conditions of equitable access to the water resource and make these conditions sustainable in the long term.

At the national level, the processes of sector reform in the water and sanitation sector in the large urban areas or cities underscore the problem of access to and the coverage limitations of water and sanitation services in relation to the demand on the part of the population who live in poverty and mingle with a high degree of informality. Hence, the aim of communication lies in the development of base organization strategies in poor sectors to facilitate the equitable access to drinking water, as well as the use of mass

communication to promote responsible use of the water resource to allow for equitable distribution. Such is the picture of the current overall trend. The conclusions per type of intervention are the following:

4.1 Experiences focused on behavioral change

Communication programs and projects aimed at improving the quality of the water and sanitation services, whose purpose is to generate behavioral change are characterized by the use of strategic planning dynamics and the dissemination of innovations or social marketing. Although some display an inclination toward one approach and the use of multimedia communication and elements of community participation, they follow the basis stages of the process of strategic planning (formative research, validation of messages, involvement of social actors, implementation, monitoring, and evaluation). A great deal of the accumulated experience is documented in public health projects, which furnish evidence of the contribution of communication to the change of behaviors in health issues related to water and sanitation interventions.

Rural program for water supply, sanitation, and environmental health – Nicaragua.

Hurricane Mitch destroyed the water and sewerage systems of 800,000 people, creating the conditions for the propagation of diseases. The goal of the program was to improve the health of the families ravaged by the disaster by building services for 200,000 people including a communications component aimed at creating favorable conditions for the construction of the systems, empowering the community in an attempt to make the people own

the project and the promotion of adequate hygiene practices. The communication strategy was addressed at the personal, family, and community levels. Through workshops for local government officials, informative campaigns relative to the transmission of tropical diseases, health promotion with the participation of leaders and teachers in the communities, talks given to the members of the community, edutainment activities at the local level, demonstrations of healthy practices, personal house-to-house visits to reinforce the messages and encourage individuals and families to change their behaviors, and actions of community mobilization, the project achieved the envisioned goals. The evaluation of the program disclosed the fact that access to drinking water had increased by 10%, while 90% of families of target communities reported the use of water suitable for human consumption. Likewise, 93% of the beneficiaries reported using the latrines properly and 88% stated that they washed their hands before eating and after using the latrine. As a result, only 13% of families reported cases of children under five years of age afflicted by diarrhea at the end of the project. Permanent monitoring was critical for identifying progress, as well as critical aspects which at times warranted adjustments to the implementation plan. Documented lessons evidence that interpersonal communication was essential for customizing the message, as well as reducing and simplifying the messages. The role played by women in promoting health is attested by the fact that under their leadership the organization of the community is strengthened.

The Handwashing Initiative in Peru

The Handwashing Initiative in Peru is a public-private partnership comprised of 40 institutions joining efforts to promote this hygiene practice to reduce diarrhea in children under five years of age. The initiative concluded its first implementation phase at the beginning of 2007, consolidating a learning process related to communication oriented at behavioral change and the management of partnerships for sustainable change. The first phase was implemented in 14 regions in Peru and included public campaigns, promotional events, and over 270 training workshops for 8,600 health promoters and teachers, and agreements with public and private institutions, as well as the publication of municipal by-laws.

Additionally, preliminary results have been documented, such as a 33% increase in message recall in mothers, increases of 42% in mothers and 30% in children in the reception of information related to handwashing, as well as 90% of children sharing information with parents in their homes. Currently, the initiative is in its second implementation phase (2008-2010), which seeks to change the behavior of 1.3 million mothers in 23 regions of the country based on an impact evaluation approach.



4.2 Communication in support of sector reform processes

The processes of sector reform in Latin America reveal social problems caused by the transition from subsidized state-owned companies to private or mixed (public/private) ones. These social problems manifest themselves in social conflicts and demands caused by the exclusion of the poorest from basic and quality services, by the increase in the cost of the resource, and by the need for decentralized and participatory policies and responsibility on the part of the citizenry with regard to the sustainable use of the water resource.

However, project managers and technicians pay little attention to the role of CfD and there are few explicit references to it, even though in fact many processes include CfD. The indirect reference to civil protest, the mass media campaigns marshaled to promote the rational use of water, as well as some mechanisms for participatory dialog between the State, private

enterprises, and the citizenry, suggest there is scope for a more explicit, strict, and systematic application of CfD strategies which ought to strengthen these processes.

4.3 Communication to promote civil society participation and good governance

The need on the part of central and local governments to decentralize and optimize the equitable access to the resource converges with the demand of the populations to participate in the decision-making processes and types of management and use of the water resource. This is one of the areas that has generated the greatest number of strategies and interventions associated with communication in the region, especially in rural and native environments and in poor peri-urban areas.

Cases such as *Rural Development and Environment: Decision-making regarding water management in the indigenous communities of Cotacachi-Ecuador*

Toward a new water management practice: Experiences and proposals from the State of Guanajuato for a participatory and decentralized service management structure

The application of decentralization processes unleashes many complex social issues which must be tackled immediately. Regarding the case of Guanajuato, the government availed itself of the opportunity to generate actions aimed at empowering local communities, developing a method of water management in state organizations, and working toward the creation of a new water culture among all the actors involved, especially through the promotion of the efficient use of water. In the Guanajuato experience there is a convergence of communication methods and strategies, inasmuch as it carried out actions through the mass media (TV, radio, and Internet), talks and meetings with representatives of different sectors and stakeholders, and created technical councils on water with the participation of the citizens in order to contribute to the solution of water-related problems in their own regions. Likewise, the water culture campaign was designed to implement a school-level program using edutainment materials such as the Hydrokids Web Page, comics, interactive CDs, and so forth, as well as an accreditation program for promoters. The federal program “Agua Limpia” (“Clean Water”), sought to emphasize the importance of disinfecting water at a domestic level, as well as installing calcium hypochlorite equipment and water sterilizing plants and delivering house-to-house 30 thousand bottles with colloidal silver droppers. This is an interesting instance of the convergence of the participatory and social mobilization approaches, in a context of sector reform.

include different dynamics of community communication to generate participation capacities in the management of water for irrigation in native rural communities. The communication strategies were based on a participatory approach to decision-making, discourse analysis to adapt the messages to local reality, building of alliances and communications at the organizational and political levels. The adaptation and strengthening of traditional rural organizations, such as the water boards (“juntas de agua”) are presented as evidence of change, for having achieved greater capacity of engagement, mobilization, alliance forming, and empowerment relative to government and foreign institutions. However, in order to design more effective strategies it would have been necessary to have a communication component from the start including a diagnosis prior to the reform and identification of population and social dynamics.

In *Communication in Integrated River Basin Management* in **Mexico**, communication strategies to support the management of a river basin are included; problems caused by the reckless exploitation of the forests, the conversion of forest lands into farm land, pollution, loss of biodiversity and reduction in the quantity and quality of water produced social conflicts. On one hand, the creation of mechanisms for reflection and dialog brought about greater participation on the part of the population and built consensus with the State; on the other hand, mass media and interpersonal campaigns promoted a change of attitude and behavior and strengthened the establishment of alliances and synergies. Also, management that is oriented toward planned goals and results may either stunt or accelerate processes. Therefore, it is necessary to have a communications team at project management level, which would monitor progress in communicational terms. In this manner, it was recognized that mass campaigns do not necessarily change the views of opinion leaders and that a more systematic exposure to media, linked directly to opinion leaders, is necessary.

4.4 Communication and infrastructure

Infrastructure projects aimed at the construction of water and sanitation service systems, or large treatment plants, are more visible and generally require larger investment from governments at the central and local levels. The sectors involved in these processes have begun to acknowledge the importance of communication activities to promote dialog and consensus on the construction of such systems, determine conditions of use and costs, the maintenance of the installations, promote good practices, and secure the support and consent of the population affected by the implementation. The **Estrella Azul** case in **Nicaragua**, the analysis of the relation between governments and private suppliers from the perspective of dialog and communication, and the work carried out by the **Small Town Pilot Project in Peru**, which have already been discussed, are illustrative examples of the use of communication for development as an integrated management tool in infrastructure projects capable of modifying and adjusting the implementation objectives and goals in the short and medium term. To this end, it is essential that the communications component be incorporated early on during the design stage of the project. The hydroelectric infrastructure project of Bumbuna, Sierra Leone, stated that the costs of the communication components in large projects such as this one, may amount to US\$ 200,000, i.e., from one fourth to one third of the cost of the environmental impact assessment.



5. Lessons learned and future challenges

- **The added value of CfD:** The review of 39 cases has showed evidence of the added value of CfD in water and sanitation projects and programs due to its contribution to foreseeing social conflicts in reform processes which imply changes for the different groups affected by the projects, the key role it plays in rural development and community participation, and as a facilitating tool to replicate pilots at a national level through advocacy efforts with sector and political authorities, improve governance issues in water and sanitation infrastructure projects, and help increase coverage, in the sense that it generates a duly informed demand and citizens who are aware of their duties and rights.
- **The need for public awareness of the importance of CfD in the water and sanitation sector:** Although the study has disclosed the great theoretical and practical contribution of CfD in Latin America along forty years of experience, in the water and sanitation sector there still is a weak understanding of its definition and the need for its instrumental use from the beginning of any initiative and throughout the entire project cycle. The lack of acknowledgement of its added value or explicit mention highlights the necessity to generate inductive processes addressed at politicians and decision-makers, in both the government and certain international cooperation agencies. Actions aimed at influencing this important group are vital and require strategic actions to prove the impact of CfD on projects and its potential use. Guided visits to successful experiences, testimonies from beneficiaries of the water and sanitation initiatives, the application of new communication technologies to make data and relevant information about the contribution of CfD to water and sanitation projects accessible can make the difference.
- **Incentives to strengthen documentation of projects and M&E efforts:** The lack of explicit evidence of the contribution of CfD in many of the cases related to the water and sanitation sector is due to the scarcity of documentation on the processes of formative research carried out during project design and the monitoring and evaluation carried out during the implementation. This suggests that these formative research phases and follow-up and evaluation activities and methodologies need greater systematization, perhaps through incentives to promote this component in projects with a view to documenting the positive impact of communications as a strategic project management tool, including the costs of including it in the entire project cycle.
- **Data collection on required investments for communication components:** Similarly, greater documentary evidence of successful experiences and generation of knowledge involving CfD in the water and sanitation sector is vital so that the multiple experiences gained in the region, not necessarily defined as CfD, may be incorporated into the general body of knowledge on this subject, thus becoming available to future initiatives as contributions and lessons learned. On the other hand, research into financial matters and the comparison of projects with and without CfD components from the start of the intervention would be useful to determine in economic terms that CfD is a sound investment, since it contributes to the sustainability and success of the projects in the short, medium, and long term.
- **Reinforcing capacities and skills in CfD:** The capacities and skills in CfD need to be strengthened in a large number of networks specializing in environmental issues, water resource management and communication, including environmental journalists and those



devoted to social issues such as access to basic services, in order to create synergies and “new adepts to innovation” who may be able to convey the public value of CfD in the sector with a view to putting it on the public agenda and ensuring its inclusion in public policies.

- **The need for cross-cutting communications during the entire project cycle:** Water and sanitation services benefit and affect people’s lives; thus, it is essential that initiatives have a communications team that may work side by side with project management and implementers. An

interdisciplinary approach to work is beneficial; however, it is also important to include communications professionals to devise strategies, provide the necessary instruments throughout the entire project cycle, conduct and supervise preliminary studies on political and social risks, map key actors and identify their perceptions, attitudes, and views, participate in decision making regarding the management of the projects, and finally, secure mechanisms of internal communication that may ensure effective coordination and consistent implementation.



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Appendix

List of case studies

1. AguaConsult. Nicaragua – Hurricane Mitch Case Study.
2. Balit, S. & FAO. Communication for development in LA: a regional experience.
3. Balit, S. & FAO. Listening to Farmers: Communication for participation and change in Latin America.
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