ANALYSIS OF WATER DECENTRALIZATION IN EL SALVADOR. COMMUNITY SUSTAINABILITY MODEL OF RURAL POTABLE WATER SYSTEMS: EL CERRITO-EL SALVADOR CASE 131.

Summary

Tools:

B1.6 Civil society institutions and community-based organizations.
B1.7 Local Authorities
C4.3 Trainers Training.
C4.4 Communication with interested actors

Key words:
Community Organization and Management, Environmental Education, Management Capabilities, Community Potable Water Supply Services, Community manpower for potable water service supply

Contact
This case was prepared by Selma García (selma@care.org.sv).

Brief description of the case:

El Cerrito Canton community is made up by more than 400 families. For more than 40 years, this community tried to obtain access to potable water through several governmental and nongovernmental organizations. In this long and difficult process, the community got organized in a Community Development Association, ADESCO, and succeeded with the execution of other farming and credit projects; and in the year 2000, they finally succeeded in the execution of a potable water project through CARE-Project AGUA. The persistence of this community, how they used the social capital to improve their living standards, and how they currently manage their potable water system deserves high praise. It is worth mentioning that within the user charges they are paying for the "water environmental service" in addition to paying for the operation and maintenance costs of the system. Part of that payment is intended for water resource conservation and catchment. Finally, this case is a sustainable community management model within the context of the national discussion on decentralization and private sector participation in potable water service supply and sanitation that is currently taking place in the country.

Lessons learned:

The key for poor communities to have water access and management is their capacity to get organized, their tenacity, clarity of objectives, attitude and the community leaders' willingness to be of service, human capital building, and better use of the social capital. The rural potable water systems can be managed by community organizations in a sustainable way but it is necessary to link these efforts at national level in order that such local managing entities are recognized and obtain legal status based on equity to have access to and use the water efficiently.

Importance of the case for IWRM:

The model described in this paper illustrates how the economic, social and environmental management of water for human consumption can be addressed. It has changed people's attitudes and has made them aware of the fact that the water is a valuable environmental service that must be taken care of for the future generations.

The case

1 Background & Problems

General characterization

El Salvador is a country that has 6.5 million inhabitants. During the last decades it has endured natural disasters such as earthquakes (1986, 2001) and hurricanes (Mitch, 1998) and went through more than 12 years of war that slowed down local development at national level (1980-1991). 41.2% of the Salvadoran population lives in rural areas and the potable water access coverage in rural areas is only 26.17%.

The water resource faces problems in terms of quality and quantity (90% of the rivers of El Salvador are contaminated. (FUSADES, 2001). This situation is further complicated by legislation that grants attributes and faculties to several institutions thus creating role conflicts among them. The need to establish a Water Resources Comprehensive Management becomes more evident with the presence of conflicts among the different user groups of such a resource. For example, the Lempa River Basin, the biggest of the country, is used for energy generation, potable water, irrigation, and fishing.

There are more than 315 rural potable water systems; some of them are financed and executed by the Central Government of El Salvador (with funds from the Inter American Development Bank, and others by the international cooperation through financing granted by the U.S. Agency for International Development (US AID) and the European Union, among others. Until 1995, the potable water management and supply in the rural sector was performed by the Ministry of Health through the National Rural Basic Sanitation Program, PLANSABAR. Its operation was centralized, received excessive assistance and had little community involvement (Water and Sanitation Network and Local Development Network, 2001).

In January 1996, the former PLANSABAR rural systems were transferred to be rehabilitated and comanaged by the National Aqueduct and Sewer System Administration, ANDA, in order to build a different management model focused on sustainability with the existence of more self-management and community participation opportunities, and the ANDA Rural Management System was created. Concomitantly with the rehabilitation of the systems, the creation of water boards was promoted (most of them have legal status granted by the municipality) and the aqueduct decentralization process started, taking steps to obtain legal status and providing technical assistance and support in terms of resources management.

Previous situation

El Cerrito canton is located in the municipality of Usulutan, within the Department of Usulutan. It has an approximate population of 420 families and lacks surface sources or rivers for the supply of water.
The community got organized since the 50s in an informal way; they were driven by their need to repair the access road to the city of Usulutan. This form of "organization" remained until the 70s when a Board of Directors was elected. The community identified and prioritized 4 problems: potable water, road repairing, electric energy, and school building improvement. In 1974, they contacted PLANSABAR to follow procedures for their potable water project, held several meetings with the mayor and traveled several times to the capital city, San Salvador, without any success.

In 1978 they were offered the installation of one single tap in the community school and the community got enthusiastic, but in that year the armed conflict started[1] and therefore it was not possible to implement the project. During the war, meetings were forbidden by the government and the Board of Directors hardly development any activity for 14 years. Besides, many people of this community emigrated. With the signing of the Peace Accords, the organization was reactivated and in 1993 the La Paz '93 Community Development Association was created in honor of the peace accords and one year after ADESCO was organized. The Ministry of the Interior granted legal status to such association.

In 1995, ADESCO followed procedures through the Sixth Infantry Brigade with the cooperation of Fuertes Caminos (the U.S. military) for the perforation of a well. No technical feasibility studies were conducted then and it was not possible to obtain water for a community well.

Reasons for the action

In 1999, through a Participatory Rural Diagnosis workshop with a Gender Approach that was held in El Cerrito Canton, the community expressed their lack of access to potable water: the population of 420 families lacked such service and they had to travel to the Juana River in Usulután or to the ANDA wells of Usulután to obtain water. It took 5 hours traveling by cart and sometimes they had to travel twice a day. The people who had to buy water paid up to $1.15 per barrel; an average family of 6 members with cattle used 4 barrels a day (that is, $4.60 per day). Families with an average of six members without cattle used an average of 2 barrels a day ($2.30); the poorest families survived only with 3 jugs a day, each costing $0.12, which represented a cost of $0.36 per day, but what did a family of an average of 6 people do with 3 jugs of water a day? How were their health, basic sanitation and productivity conditions? How could they have access to the markets if the access roads were in bad condition and the people themselves had to move the products because there was no access for vehicles?

This local problem was presented within the context of a dispersed and contradicting legal framework that requires a new and clear legislation to regulate the use of all the water along with a new institutional framework that contributes to protect the consumer, promote the productive efficiency of the operators, in compliance with the sanitary and environmental norms.

The sector's structure is characterized as a centralized public monopoly with a growing informal sector without any regulation, several independent programs which are not well coordinated, with external financing. In addition to the aforementioned problems, the country lacks the regulations and the instruments to regulate the potable water supply.

There are five main actors that currently operate water supply and sewage disposal systems: 1. The National Aqueduct and Sewer System Administration- ANDA. 2. Small municipalities that operate their own systems (72 municipalities). 3. Private companies (self-supply) with small systems supplying groups of houses. 4. Water Boards in the Rural Systems. 5. Some Nongovernmental Organizations operating small systems in the rural area. The last three systems are deemed private since they do not belong to the public sector and operate under their own regulations.

Within the national Water Resource legislation framework, the Draft for the Potable Water and Sanitation Subsector Framework, Chapter X – Rural Potable Water and Sanitation Systems, it is recognized that community organizations "could execute the construction, operation and maintenance of the potable water and sewer systems in the rural areas under their responsibility (article 71), but articles 74 and 75 state that the provisions of this law will be applicable to the rural systems, except for "those special norms that the regulations may establish" and that the user charges of the rural systems will be in conformity with the user charges Law for public services rendered under "special conditions". But this would require a study of the rural environment of the country, clear and organized regulations, a specific financial context for the subsector, the definition of user charges to be applied with community participation, and subsidies for the subsector.

Based on the results obtained in the Diagnosis on the situation of Water and Sanitation in El Salvador (RASES 2001), conducted in 1,526 cantons (out of 2,319 that represent the national total), it is important to

note that 66% of the rural systems are being managed by the communities, 1% by nongovernmental organizations; 28% by the National Aqueduct and Sewer System Administration, ANDA; and 5% by the Municipality. Therefore, it is important to have sustainable replicable rural system management models, not only from the economic point of view but also from the social and environmental point of view.

2 Description of the actions taken

Evolution of the decisions since the beginning of the Plan

The community followed procedures after the participatory Rural Diagnosis with Project AGUA was concluded and executed the potable water project through CARE's Water Access, Management and Efficient Use project executed in partnership with the Foundation for Municipal Development –FUNDAMUNI. The community received training; 48 work groups of 10 people each were organized. Each one was committed to work one day a week, providing 18% of the total cost of the project.

An important factor was the decision of the leaders not to participate actively in any political party but to listen to all political parties willing to talk with the community in order to avoid that the potable water project became politicized and guarantee somehow that the political party that will be in power will support that management and/or financing of the potable water project through the Mayor's Office. It is also important to mention the decision to take advantage of the opportunities and tools available through the municipality to provide support and obtain legal status and become a Community Development Association (ADESCO).

The community selected seven farmers as experimental producers who were trained in the preparation of farm plans, soil and water conservation practices, agro-forestry systems, water sources protection, and basin management. They set up demonstrative farms and each organized his own group of selected producers making a total of 127 neighbor male and female producers. Each neighbor producer implemented in his/her own farm parcels with soil and water conservation works and practices in order to contribute to improve the water resource management in his/her community. They planted 16,000 fast-growing fruit and forest trees such as *eucalyptus camandulensis* and *gliricidia sepium*; they cultivated in level curves; set up 3,500 meters of plant dams with fence pine, brizantha, vetiver pasture, among others, and built slope channels to improve water infiltration to ground aquifers.

They got organized around the Potable Water project and elected the board of directors of the Community Potable Water System Managing Association of El Cerrito Canton –ACASAPEC, and submitted the by-laws of this association for the approval of the Municipal Council. Additionally, user charges blocks were set up based on the economic capacity of the families, the projection of how much water the population needs in order to calculate the pumping hours (in case it is a pumping system) through which the operating and maintenance costs are covered, with a percentage for the Payment of Environmental Services, and a percentage for savings. The charges agreed upon that are currently in effect are $6.86 (representing approximately 12% of their monthly income); 4.73%, that is $0.32 of that amount, is intended for the financing of soil and water conservation actions, sewage management as well as environmental education actions that will contribute to guarantee the environmental sustainability of their potable water project.

Upon completion of the physical infrastructure of the system, micrometers were installed in order to establish fair charges, that is, payment according to consumption.

On its part, the Mayor's Office of Usulután provided different types of support to the El Cerrito Community: when the El Cerrito Community was granted assistance for the potable water project through CARE-

Project AGUA, the municipality contributed with $24,000.00 (representing approximately 8% of the total cost of the project). These funds were used to finance the three-phase line for the electric installation of the pump since the project consisted of a well and electric pumps. Additionally, 80% of the population benefited from house electric energy service. Finally, the Mayor's Office granted legal status to the El Cerrito Canton Community Potable Water Managing System Association -ACASAPEC.

The Central Government in line with the State Modernization has started the water sector reform process, putting in place decentralization processes that have promoted various management systems that give incentives to the population. Among them are the Municipal Decentralized Enterprise, Joint-Ventures-SEM, Rural Water Boards (El Cerrito community has become an example of this model), Management by non-profit organizations (NGOs), Management by Private Enterprises, and Direct System Management by the Municipalities.

Parallel to this process, the community had been receiving support since the 70s by the National Agriculture and Livestock and Forestry Center –CENTA, an institution of the Ministry of Agriculture and Livestock, which in addition to providing technical assistance in agriculture and livestock also started the male and female leader formation process and worked with them in taking the necessary steps for the implementation of projects and the establishment of links between the leaders and other institutions, programs and projects. The community through its leaders decided to identify the problems and establish priorities, followed the necessary steps to obtain assistance through governmental and nongovernmental institutions, persisted and did not give up in spite of the fact that their plans could not become a reality for many years.

Actions executed by CARE: In 1996, CARE through its project Credit for Sustainable Agriculture and the work carried out by CENTA with El Cerrito community's ADESCO, started actions in such canton granting a revolving fund of $5,714.00 in the first year, ending with a total of $24,343.00.

In 1999 the project Water Access, Management and Efficient –AGUA was started in the 18 priority municipalities of US AID, among which is Usulután; it was executed by the CARE Consortium in partnership with three local NGOs. The Project has 5 components: a) Local Development; b) Basin and Agro-Forestry Management; c) Infrastructure; d) Environmental Education; e) Water Resource Management -Incidence.

With regard to the topic Payment for Environmental Services: CARE starts the work in two pilot projects, Los Conacastes and Cara Sucia, with the recognition of Payment for Environmental Services -PSA through a percentage of the potable water system user charges; Project AGUA takes up and replicates these experiences in other systems, including El Cerrito.

Technical, economic and social feasibility studies were conducted within the infrastructure component. The bylaws and internal regulations of the El Cerrito Canton Potable Water System Managing Association -ACASAPEC were prepared jointly with CARE-FUNDAMUNI's technical assistance, and the construction of the system was co-financed with a contribution of 70% of the total cost.

Involved Actors and Key Implementation Factors

El Cerrito Community: The community has played a leading role. The organization, planning, training, leadership development, management capacity, willingness to succeed, persistence and clarity of objectives were essential for the implementation of the project. Additionally, the added value of the recognition of the

environmental service of the water, including the payment for this service in the user charges, were also a key to the process.

CARE: Played the role of an institution that promoted and worked with the local development process with an emphasis on water resource access and conservation, taking into account the economic, social and environmental dimension of this resource.

Central Government: It promoted and boosted the decentralization and privatization processes in several sectors (telephony and electric energy already in place), water resources (under privatization process through the new Water Law), and reforms to the health sector, which have provoked various reactions from the civil population.

Usulután Municipality – Local Government: In this process, the significant contributions of the municipality have been granting legal status to the local rural potable water systems managing entities and providing support through counterparts to co-finance the potable water project.

The Local Development Network and the Water and Sanitation Network started a Program for the Support and Promotion of the Water Resources Sector Reform with the following objectives: awareness and increase in knowledge of strategic topics, participation capacity of the civil society in the debate and formulation of the legislation of the sector by the political, social and economic actors of the country; achieving a reform that guarantees resource management sustainability that implies a broad consultation process and an institutional response capacity of the national and local instances or those to be created by the sectoral reform, which implies training and formation efforts at all levels.

The National Association for Water Defense, Development and Distribution at Rural Level -ANDAR, which represents 149 rural potable water systems nationwide, some former PLANSABAR, others executed by CARE (such as El Cerrito case), and the European Union, among others, have worked to make communities become responsible for the water supply through the implementation of a system administration and management. Once these rural systems were organized, they visited the Consumer Defense Committee to report an increase in the cost of electric energy in 1997. As a result, they obtained a decree through which the Central Government granted a subsidy in 1998, which expired in the year 2000. Again, another decree granting a subsidy was approved dated October 11, 2000, which expired in December 2002. These two decrees were an achievement resulting from the communities getting organized for the defense of their common rights.

Payment System for Environmental Services: In 1999, it started a process to make the Salvadoran society recognize and become aware of the environmental services topic, making them recognize that the water environmental service is one of the most sensitive services in El Salvador in view of its fundamental role for life and the importance of its value, efficient use and recognition for those who help to preserve or increase it. Within this context, the Payment System for Environmental Services and the institutions that make it up have carried out Forums, Workshops, Work Meetings at regional, national and international level, in order to communicate their knowledge and pilot experiences in the country. Among these experiences, the Payment for Environmental Services have been implemented through the rural potable water systems developed by CARE jointly with the communities, among which is El Cerrito.

3. Results

The objective of increasing the access to potable water in terms of quality and quantity in rural communities was accomplished by obtaining a decentralized rural potable water system for 351 families (2,106 people), as a local experience in the solution of conflicts related with water access and resources channeling. These results were achieved through the formation of strengthened and legitimized local organizations implementing a micro basin management as recognition to the environmental service of the water and as a product of an environmental education process at all levels. It was possible to establish sustainable rural potable water management and administration system models with a comprehensive vision of the resource (economic, social and environmental vision).

El Cerrito community improved its quality of life by having access to potable water, electric energy, improving their access roads, and improving the health and education of their children.

In the incidence processes, it was possible to link the local actors, social sectors and different water users in debate and incidence processes including proposals for the legal framework of the water sector at national level.

Problems during the process

Problems faced by the Community. During the implementation of the Rural Potable Water System project of El Cerrito Community, several problems were faced, including noncompliance of some families with the number of work shifts that had been assigned as counterpart. This problem was solved through the social controllership of the community. Another problem was the resistance of the families who were profiting from the sale of water; also, the need to follow procedures and obtain approval for the electric energy project in order that the water system could work since it was activated by pumps. During the execution of the project, the earthquakes of January 13 and February 13, 2001, worsened the living conditions of the community and delayed the execution.

Problems faced by CARE. The problem detected in the technical assistance was the time of the social facilitator to provide support to the process. In the area of incidence even with a significant representation of the various political (deputies, mayors, etc.) and economic sectors, as of this date it has not been possible to obtain the formal recognition and inclusion of the contributions made in the different forums and debates to the Water Law Draft and Potable Water and Sanitation Subsector Draft. Notwithstanding the above, the Water and Sanitation Network and the Local Development Network have continued promoting the awareness and analysis of the water resource situation through public events, and the preparation and dissemination of relevant documents, among other activities.

The agendas and priorities of the municipality changed as a result of the emergency that resulted from the earthquakes, which consequently delayed the delivery of the counterpart for the project.

The Central Government has been unable to approve a General Water Law that will be used as the framework for the comprehensive management of the water resource.

Impacts

During the implementation of the Potable Water System in El Cerrito Community, the human and social capital that improved the quality of life of its inhabitants was developed; the reduction of expenses in concept of water in the family budget was significant, from $10.80 a month that poor families spent to buy 3 jugs a day, the present minimum monthly charges for consumption are $6.86 (representing 13% of their monthly income).

In addition to being a management and administration model of a rural potable water system, this system is also a model of environmental services payment mechanism, recognition of the environmental service of the water through a percentage of the user charges system that is $0.32 per month (4.73% of the total charges).

Added to the above, the time dedicated to farming and other productive and paid tasks has increased and therefore the community income has increased. Besides, girls and boys who worked fetching water for their families have more time available now which can be used to have access to education. The access road of El Cerrito to Usulután has improved, which has resulted in market improvements and production volume increase. *"The life itself of the community has changed, now our sons and daughters go to school by bus because the road has been improved; they bathe and wear clean clothes because we have water now"* (José Vargas, El Cerrito Community).

It is important to highlight that through the public debate about the water topic with a more in-depth discussion by the key actors at local, regional and national level (several GOs, NGOs, US AID, Inter American Bank for Development, Local Organizations of the various parties interested in the water) and the incidence processes, it has been possible to link the local actors, social sectors and various water users in the debate and incidence processes, including proposals for the legal framework of the water sector at national level.

4. Lessons Learned and Replicability

Potential

The community organization has proven to be a powerful essential point from which many actions for local development can be launched. The formation of male and female leaders capable of managing the system and obtaining new and various resources for their community increases and makes more effective citizen participation, environmental co-responsibility and the comprehensive management of the water recourse.

Starting the micro basin management as an integral part of the execution of rural potable water systems, where the basin is recognized as the planning unit and the farms of each male and female producer as management units, and recognizing that the conservation works and practices contribute to having water in terms of quality and quantity, builds a new approach to potable water access "beyond house connection and/or construction of community water reservoirs", promoting the sustainable management of the water resource including the environmental dimension.

The fact that the Payment for Environmental Services (PSA) is included in the water user charges and that this fund is reinvested in the management of the basin where the water is taken from, and that there is no dependency from external projects or funds is a sustainability indicator; and it can be returned at national level within the various systems of PSA mechanisms to be implemented as pilot projects within the context

of the Payment for Environmental Services Project of the Ministry of Environmental and Natural Resources financed by the World Bank.

Limitations and challenges

Decentralization is associated with the transfer of responsibilities and resources. In the case of El Salvador, in the water resources sector and particularly the potable water and sanitation subsector in the rural area, the State has transferred responsibilities but not all the necessary resources. In fact, it was already mentioned that the potable water coverage for the rural area is only 27% and the communities are working with the international cooperation in order that the families of the rural area have access to water in the necessary quantity and quality. The above shows that there is a lot of dependency from the external cooperation to make the initial investment for the systems; the challenge will be that the Central Government provides the initial technical and financial support and that the communities receive training, get organized and obtain legal status and agree to manage and keep the system in a sustainable way recognizing the environmental value of the water and paying for this service.

In order to achieve their goal, it is necessary that the civil society through their first and second level organizations carry out an incidence work in order to obtain access to potable access with equity. The communities must get organized, be trained and manage their potable water systems in a sustainable way.

Replicability

This rural potable water system management and administration model based on local participation can become a Replicable Model since it is aimed at the Sustainable Development of the Water Resource, is focused on the comprehensive management of the resource, and it has been already developed and tested in other communities.

At the same time a citizen participation model in incidence processes was obtain, in this case for the water resources sector, but it could be replicable in other sectors where the communities could get organized and propose solutions with regard to health, education, among other topics.

This rural potable water system management and administration model based on local participation could be replicable but certain basic conditions are necessary in order to be able to operate in a sustainable way:

- Management of resources for the initial investment, since the technical portfolio preparation costs (to determine the economic, social and environmental feasibility), materials and equipment for the construction of the systems are high, and although the communities can co-finance and contribute economically, the percentage of their contribution is insufficient to cover 100% of the investment. In the case of El Salvador, funds could be obtained from the Municipality, the Central Government through the Social Investment Fund for Local Development (FISDL), funds from the trusteeship set up with the sale of ANTEL (National Telecommunications Administration), funds from the international cooperation, among others.

- High degree of community participation and steps taken by the community at high level.

- Set up of strong community leadership.

- Existence of a mechanism that will grant legal status to the Water Managing Boards in the rural area.

- Links of the communities with the local governments in order that they become facilitators and collaborators in the management or internal and external resources.

- Systematization of El Cerrito experience as a replicable model adjusted to the reality.

5. References and interviewed individuals

References

Artiga-Raúl, Almendarez-Rolando. 2001 Synthesis of Guidelines and Inputs to the Water Resources Policy and Legislation in El Salvador. Water and Sanitation Network – Local Development Network, December 2001.

CARE EL Salvador. Annual Report - 2002 El Salvador

Lima, Mario. "Social Capital where Success Originates ". (Based on a document by Amy Dalton, Michigan State University). CARE El Salvador, 2002.

Potable Water Introduction Project in El Cerrito Community, Department of Usulután. CARE EL Salvador. DASAGUA Unit.

Water and Sanitation Network of El Salvador- Local Development Network. Description of Decentralization Pilot Projects in Potable Water and Sanitation Systems. El Salvador, 2001.

Water and Sanitation Network of El Salvador. "Diagnosis on the Water and Sanitation Situation in El Salvador". 2001. US AID El Salvador, September 2001.

Organizations and Individuals

Roney Gutiérrez. Project Manager AGUA-CARE El Salvador. rgutierrez@care.org.sv
José Vargas. ACASAPEC Treasurer, El Cerrito Canton Usulután 00 (503) 710-3836
Alvaro Sánchez. Technical Assistance Facilitator for the Administrative Area PROSAGUAS-PROSPERAR- CARE El Salvador asanchez@care.org.sv
Raúl Artiga. Project AGUA-CARE EL Salvador Incidence Assistant Manager. rartiga@care.org.sv
Julio Menjívar Chacón. ANDAR President.. 00 (503) 226-8456 y 226-3805
Ricardo Mancía. PROSPERAR CARE El Salvador Project Manager. rmancia@care.org.sv