

Community Management of Water Supply Services: the Changing Circumstances and Needs of Institutional Support

Situations and reflections based on Colombian
experiences

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Table of contents

1.	Introduction	1
2.	Community Management and its needs of support	3
2.1	The diversity in the Colombian rural areas	4
2.2	Main problems	5
3.	The rural sector in the context of decentralization	16
3.1	Support from the National Level	16
3.2	The crisis at departmental level	20
3.3	Support from the local government	22
3.4	Support from International Cooperation and Trade Unions	23
4.	Alternative Models of Support for the Rural Area	23
4.1	The Case of the Community Water Supply Systems of Medellín	23
4.2	The Colombian Association of Water Supply and Sanitation Service Organisations (<i>AQUACOL</i>).	27
5.	Final Reflections and Recommendations	28

1. Introduction

Over the last 30 years responsibility for the water supply and environmental sanitation sector in Colombia¹ has moved from the Ministry of Health to the Ministry of Economic Development, and is currently under the Ministry of Environment, Housing and Territorial Development. These changes at the policymaking level have been accompanied by the emergence of regulatory and supervisory agencies, such as the Regulatory Commission of Water (*Comisión Reguladora de Agua, or CRA*) and the Superintendent of Public Services (*Superintendencia de Servicios Públicos*), which were created in 1994 by Law 142. This Law officially regulated the sector and ratified decisions taken under the process of decentralization carried out since 1987, in which the responsibility to deliver public services was handed over to local governments.

Under this broad framework the option of Community Management endures as an alternative for supplying water services; within this option the organized community constitutes an administrative entity, which is autonomous in its decision-making and enjoys legal recognition. Generally speaking, those who belong to the management board are not remunerated and contract staff to carry out operations and maintenance tasks; depending on the complexity of the system and on the economic capacity of the community, staff may also be hired for administrative tasks. This alternative was established in Colombia, as well as in many other Latin American countries since the end of the 1960's, and was ratified by the Constitution of 1991. Currently, 90.5% of organisations which provide water supply services in rural areas in Colombia are community managed: Administrative Committees, Communal Action Committees, Users Associations and, in some cases, cooperative entities.

The communities that have taken responsibility of delivering water and sanitation services are very diverse in terms of size of population served and the quality of the service delivered, but all of them show a commitment that has been maintained over the years and for many of them the motivation is one of pride. However, the main weakness of these kinds of organisations is in the lack of support provided by government at local, departmental and national levels. Moreover it is the rural areas, where 30% of the country's population resides, which bear the greatest burden of the armed conflict that the country is going through. This has caused enormous difficulties in the development of projects in these areas due to the displacement of the population and in some cases the death of community leaders who have valuable knowledge about the management of water and sanitation systems.

On the other hand it has become ever more difficult to obtain resources from international organisations for community managed water supply services. In Colombia the efforts of

¹ Colombia has a population of approximately 44 million, around 12 million of which live in rural areas; there are 1,100 municipalities of which about 86% have less than 30,000 inhabitants.

international organisations have focused on working towards peace and conflict resolution. Few of these organisations have understood that investment in the water and sanitation sector can promote the peace process, conflict resolution and actions in other fields of local development, since projects with participatory approaches strengthen different local skills and abilities (organisational, communication, networking etc.).

This document seeks to characterise the challenges confronted by community management of water supply systems, as well as the insitutional solutions that exist for the sector. Moreover, the needs for support are highlighted as recognised by communities grouped into Associations. In the preparation of this document, work has been mainly focused on carrying out interviews with officials of different institutions and community leaders. Furthermore, it is based on information produced on the basis of an inventory and pre-diagnostic carried out under the framework of the *Rural Water Supply Porgramme for the Department of Valle del Cauca (PAAR)*, in which 90 projects in rural areas of *Valle del Cauca*, serve 206 communities and 126,543 inhabitants.

It is rather important to consider that due to the large size of the rural areas in Colombia it is impossible to give examples of every region of the country. However, care has been taken to include information about areas where the most vulnerable populations live, such as indigenous and Afro-Colombians groups, which in comparison to other regions of the country, face greater constraints in terms of support.

Finally, it is important to highlight that the elaboration of this document has greatly benefited from the support of many people, among them: Alberto Segura, Diana Mosquera, Adalí Santiago Carmona, Alcira Manrique, Dubán Obando, Alvaro Campy, Francisco Burbano, Juan Manuel Ochoa, Pedro Pablo Amaya, Myriam Osorio, Flor Ederly Granada, Trinidad Hincapié, Antonio Grajales, Gloria Hernández, Arlex Saavedra, María Zamora, Reynel Hidrobo, Edelberto Arias, Luís Velasco, Nelly Guapacha, Jesús Anibal Valencia, Adriana Zamora, Sandra Patricia Bastidas, Alberto Benavides, Luis Alfonso Hurtado and many officials of municipalities, institutions and communities of Valle del Cauca² who took part in a short survey about support needs and the participants of various community workshops whose names would make this list endless, but without whose cooperation this document would not be possible to write. To all of them our most sincere gratitude.

2 This department makes up 10% of the Colombian population.

2. Community Management and its needs of support

The responsibility of local governments for water supply within its territory presents many challenges, especially for small municipalities. In the Atlantic, it is reported that the Mayors have not been interested in investing in the rural areas of their municipalities. But at the same time, as the Mayor of Marinilla, in the department of Antioquia (with a total of 35,000 inhabitants in urban and rural areas), expresses:” the decentralization process has handed over responsibilities (education, health, water and sanitation) to us the local governments, but not the resources. Local governments by themselves are not capable of serving water and sanitation needs of urban and rural areas, I believe that in Colombia there is not enough budget. The local council will always fail to reach the norms because they do not give us the resources. Marinilla has 30 neighbourhoods and we have water supply coverage of 97% in rural areas and 100% in urban areas”.

Nevertheless, the Mayor acknowledges the situation in rural areas “we have to be honest, and it should not be attributed either to the Mayor as part of his management nor to previous mayors. In rural areas it is management by the communities. In Marinilla we have 9 rural water supply systems built by the community’s initiative, together with the support of municipal and departmental authorities, though these are managed by the communities themselves by a committee chosen in an assembly. These administrators do not get any type of salary, nor fees, and they only have a secretary and plumber and they offer services efficiently. They buy materials to build intake structures, de-silting and storage tanks, and also process the access rights for the routing of piped networks. The community pays tariffs for the service, which is enough to cover operational expenses, however, when the system is seriously damaged or part of the network has to be replaced they do not have enough resources and they must approach the government”.

In many cases the type of support for community management offered by local governments depends more on political factors than on the existence of an investment plan for the rural areas. A consultant that works in rural areas comments, “according to my experience I have found that rural communities benefit a lot from their leaders’ political position on local councils. Moreover, if the Mayors come from rural areas, they will favour these areas through the implementation of certain programmes. For example in el Chocó, in the municipality of Docordó, the Mayor comes from a rural community named Togoromá, so one can note that in the government plan for basic sanitation, this locality was much more developed during his administration than could have been the case before”

Another official comments that there are exceptional cases in which Mayors are concerned about rural areas, as it is the case of the coastal municipality of San Juan in el Chocó, where: *“the Major has devoted a great deal of effort toward the functioning of systems of small rural communities, because he feels a great affinity with rural areas from which he got numerous votes”*.

With the disappearance of central organisations dealing with supporting rural communities as a result of the decentralization process, responsibility for this area was left in the hands of mayors whose support depends more on political ups and downs than on a strategy to serve these zones. At the present time this situation is getting worse, with the disappearance of the Group of Small Municipalities and Rural Zones, which belonged to the *Directorate of Water Supply and Basic Environmental Sanitation* from the Ministry of Environment, Housing and Territorial Development at the beginning of 2004.

2.1 The diversity in the Colombian rural areas

The socio-economic situation, cultural and ethnic background, educational levels, configuration of settlements, geography and topography, as well as the access to the means of communication varies greatly among rural areas in Colombia, and these differences affect the quality of community management.

In just one Department, the *Valle del Cauca*, among the 90 water supply projects visited by Cinara in the second half of 2003, only 29.7% served concentrated village settlements, with the rest serving dispersed or semi-dispersed communities. Seventy-one percent of communities were located on slopes or in mountainous areas with cart tracks in very poor repair, which serve to maintain the isolated condition of the communities, making them unaware of current sector arrangements.

At present the socio-economic situation among the population varies greatly from one region to another, according to the views expressed by a Unicef Water Official, who remarks: "There are municipalities in el Chocó where not even one peso moves (there is not any economic transaction), where there are no resources, people simply live by bartering. People fish and exchange those fish for salt, rice and other food. Thus, over there changing a note of fifty thousands pesos (around twenty US dollars) is a very hard business because people do not have resources. All the resources are concentrated in the hands of two or three and the economy functions around these people, it's very sad. In municipalities like Bojayá you find people who do not have a peso, so how can you sustain a water supply system in a municipality like this where the economy of the people is one of subsistence?, where people catch two or three fish, two are exchanged for a pound of rice and the other one is eaten with the rice".

This disadvantaged situation contrasts sharply with regions where the population enjoys better standards of living such as the coffee-producing areas of the country, or communities benefiting from petroleum or other minerals, or rural areas with strong presence of people from the cities: "in the rural area of Dagua (Valle del Cauca) there are a lot of people with economic resources who own farms in the area. These are better educated people who are not permanent users since they live in Cali (the capital of the department), but they involve

themselves in the management of the water supply system, staking out organisational structures that are closer to the established norm. In these water supply systems there is a better level of management, they know how to do accounting and therefore the use of programmes such as Integrin becomes easier³. Moreover, the resources of the water supply system deriving from tariffs are enough to pay for skilled staff which allows for better financial management”.

The majority of communities are found in between these two extreme situations and they are able to manage their systems, assuming the operation and maintenance costs, but have great limitations due to the lack of continuous institutional support. Furthermore, according to a consultant, it is necessary “to recognize that the rural zone is a zone of violence, where it is not possible to work with the same approach that is used in a relatively calm urban area. Over there, there are some interlocutors that are different and we do not yet know how to communicate with them. This is the first problem to be solved, otherwise much of the investments which are made in the rural zones run the risk of being lost”.

2.2 Main problems

According to the Rural Sanitation Inventory⁴ (*Inventario Sanitario Rural*) this area records water supply coverage of 56.3% and 33.9% of basic sanitation. However, the coverage for treated water supply reaches just 11.8%. According to the data of the National Department of Planning (*Departamento Nacional de Planeación*) the situation of rural areas in Colombia has improved in terms of coverage during the decentralization period, with the National Census of 1993 recording that the rate in rural areas was 41.3% for water supply and 14.6% for sewerage.

Nevertheless, the increase in coverage is not reflected in support for management in rural areas. When the National Institute of Health (*Instituto Nacional de Salud*) finished the rural water supply programme, it did not consider structuring a programme of support to the thousands of water supply systems created under that programme.

The national institutions created by the decentralization process such as the Regulatory Commission and the Superintendent of Public Services have never been able to develop good coordination with the Directorate of Water Supply and Basic Sanitation; therefore, the majority of efforts in terms of training have been concentrated in the latter.

3 Integrin is financial and commercial software developed by the Ministry of Development for small firms providing public services, such as water utilities.

4 This inventory was directed by the Ministry of Development and carried out between 2000 and 2002, registering information from 12,813 localities.

Despite the fact that community management model has widely demonstrated its suitability for managing water supply systems, it cannot be denied that establishing clear mechanisms for the provision of institutional support is an urgent need. For example in *Valle del Cauca*, based on an investigation into the support needs in ten communities, the majority stated their desire to collaborate for:

- Repairing components of the system or increase its capacity (networks, plain sedimentation, storage tanks, piping, etc.)
- Building water treatment plants
- Reforestation of the watersheds
- Training to strengthen administration
- Management of the productive use of water (vegetable gardens, field irrigation, pig sties etc.) for which water from the system is used.

Perhaps one of the main problems to confront the rural sector is its invisibility, even in the programmes of local government. From this stems the fundamental role played by the development of leadership within these communities. One of the interviewees commented: “when the mayors are in the electoral process they put together their government plans, visit many rural areas, it is the period in which they get closer to the communities. As soon as they take power they go with their work teams, canvass the concerns of people, include them in the government programmes, but afterwards the pressure put on them by communities determines the execution of these government plans. In this way, the more leaders there are in rural areas, the greater the possibilities to get solutions from local governments. Communities that do not have strong leaders with a presence in the municipal headquarters almost never obtain anything, or achieve very little. Rural communities benefit a lot from the political positioning of their leaders on the municipal council, or even if the Mayors are elected from certain rural areas, they are then favoured by his or her programmes. The development of a rural area is influenced to a great extent by the political position of its leaders on the municipal council”.

This situation is confirmed by Unicef’s Water Official who states that: “When communities learn to manage they are able to get more resources, since they learn how to negotiate with the Mayors and this can be seen in Nariño, and in the rural areas of Cumbal, for example, where for more than five years the system has continued to work efficiently, with its 500 families, because they learnt how to manage it, and now whenever a Mayor arrives they are able to negotiate with him for resources, make investments and they have achieved a lot. They do not need a great deal of resources but what they have needed that have been able to get hold of”

Another situation that illustrates this trend is an indigenous community of El Chocó, where “they themselves have the capacity to put together projects and look for advice from different government institutions, even at a central level. But why does this happen? Because the majority of the population is young and has gone through a process of training and

education, including a few who have reached university level; there they have a community leader studying business management at the University of San Buenaventura, but this has been a process of the community itself which has been dedicated to grooming leaders and it is one of the communities with the greatest success in the municipality”

Although there may be different ways of grouping the numerous problems that confront community management in rural areas, this research has decided to differentiate three aspects: administrative management, technical management and environmental management, since it is considered that these fields address the majority of functions performed under the community management model.

2.2.1 Administrative management

Organisational Structures and their Legalization

The administrative body is of great importance for the efficient functioning of water supply projects. Legislation has anticipated the establishment of Users Associations, Cooperatives or Administrative Boards. However, those communities that have been removed from any institutional contact, are not aware of the changes in norms and so continue to elect three people (president, treasurer and secretary), in order to maintain the system, who normally do not know anything about the technology in use, nor its operation and maintenance. According to the view expressed by an official: “many members of the Juntas (administrative bodies), have inherited their posts from previous Juntas, but they are not aware of the statutes of the organisation or do not know how to organise themselves and very often they have difficulties in determining the advantages and disadvantages of organising themselves in an Association of Users or in an Administrative Board. In many organisations the president of the board of directors has all the responsibility. So, many of its members are not familiar with their functions, and do not commit themselves to fulfil them”

“Generally, these water supply projects do not have contracts with uniform conditions with the users, there are just verbal contracts. When staff is hired they get a bonus, or in other words, the labour code is not followed in these aspects and sometimes remuneration is given to the members of the Junta, when it should not be like this!”

The great majority of rural water supply systems are not registered with the Regulatory Commission (Comisión Reguladora), nor send any information to the Superintendent of Public Services (Superintendencia de Servicios Públicos); many of them are unaware of the existence of these organisations and only the more advanced ones process their legal status (personería jurídica). On the other hand, according to what an officer comments, it is the case that: “the people are scared of getting themselves legalised because it may be costly in the end. They think that to comply with resolution 151 and to send tariffs to the Commission may cause them problems, because if the tariffs are too low they will be rejected. The Superintendent is aware that when the municipalities are called, they are apprehensive to attend because they know that it is to get a sanction. Moreover, people hide information from

the Superintendent, and the “small systems” say “me, what, go and register with the Superintendent? Why? in order to get charged and sanctioned?”

Very often in the water supply systems they do not understand how to complete the formats properly and the system administrators fill out information only in order to “comply”. The result is that officials from the regulatory and control organisations are satisfied, but the communities continue with their problems and the macro-level information is ruined. This is a serious problem because decisions are made at national level based on the processed data provided by the communities.

Thus, some communities complain because upon sending a query to the Regulatory Commission they receive in response a copy of the law, which does not resolve their concerns, given that members of the communities generally say that they have difficulties in interpreting these laws. Additionally, the training in management culture⁵ mainly reaches the small municipalities and so very few districts and neighbourhoods (in Colombia districts and neighbourhoods are political-administrative sub-divisions of municipalities) have been able to get involved in this type of training, due to the fact that very often the negotiations to carry out the workshops “are made by the Ministry with the large municipalities that have the resources to pay them for transportation and so many small municipalities, which have many needs, are left out and are not able to access this type of service or the training”.

Gender Equality within Community Organisations

The issue of gender is not included in the national policy of the sector and is rarely promoted in the implementation of projects; very often the community organisations do not have a gender balance and many fewer women hold managerial posts. This situation is worse in indigenous communities, although currently UNICEF reports some improvements regarding this matter: “Indigenous communities have differentiated working roles between man and women, and have always thought that the tasks related to the water supply system belong to the men and that women should not get involved in these areas. Now examples have been achieved in five indigenous communities where the men have accepted women’s participation in the Board, including in a few Boards where women have become presidents. In the area of Cumbal, in Nariño, women’s groups have been accepted after a lot of effort and work with the men. We carried out a very interesting exercise with the indigenous community of Los Pastos where, in a workshop of fifty men and fifty women, we started to evaluate all the problems that the women had with the men and those that the men had with the women. The whole problem of abuse of women by men then emerged, especially when they drank alcohol. This permitted that from this year, after this work, they held a meeting of the town council and established norms such as when an indigenous man abuses or hits his woman he will be punished by the council. This is to say that they are already starting to

5 Ministry of Development’s programme to strengthen the management of small firms providing public services.

eliminate of the issue of domestic violence toward women, which was considered as something normal before; the participation of women in meetings about the water supply system and the search for solutions for the problems of sanitation within the household has initiated this process”

On the other hand, despite the fact that men and women in rural areas have constraints regarding their knowledge in the areas of administration and accounting, women’s lack of self-confidence for taking on these themes is a greater barrier. Managing accounts, the participatory development of projects, managing legislation and conflict resolution are some of the areas in which women demand greater support.

In relation to technical aspects the institutions, above all, have promoted the training of men, and in the few cases where women have knowledge in this field, they feel intimidated to express their capacity in order to avoid conflict with their partners. The wife of a plant operator sent the following letter to a member of staff of Cinara: “As you already know, I contribute willingly with the plant over here. But the result is that my husband feels badly and we have even argued about my collaboration. Thus, I kindly request that when you call here at the plant, please talk to him first about what he requires: to host visits, to make a demonstration, I will, as you know kindly help out. He is a person who I believe thinks that I am taking over his importance as operator of the plant ... of which he is very proud. I appreciate you taking into account my comment”

In spite of this situation, it is also possible to note in many communities, especially in the afro-Colombian communities, that it is the women who have taken leadership positions in community matters. Having worked with men in some workshops it has been detected that many boys during their childhood were affected by two affirmations “men do not cry” and “you are completely useless”⁶. This helped to form a shield over sensitive matters and to generate a compulsion for working toward being useful for something (insensitive activism), which pushes them away from any activities which are not productive in nature and which make it difficult to redefine roles.

This situation means that in some areas of the country, such as the Pacific Coast “it is the women’s groups that are the ones that give greatest support to the execution of collective water and sanitation projects” and in many instances these groups assume leadership of these projects. A consultant refers that: “in a municipality of Southern Cauca, I had the opportunity to participate in a project on basic sanitation that was led by women heads of households. It is an organisation that has been functioning for a long time, it is permanent and received funding from those people that administered and executed the project themselves and the organisation which funded the project was pleased with their work”

6 Report about the Gender Workshop with men, community leader by the psychologist Juan Diego Jaramillo.

Conflict Management

Communities have to deal with conflict management of different types on a daily basis and in some cases, as a leader was saying *"here we see a dispute and we clear off"*, with the result that the conflict is prolonged unnecessarily due to the lack of local capacity to prevent conflicts and resolve them.

The ownership of physical infrastructure is an issue that generates disputes most of all between the communities and municipalities. This is because community organisations are not able to obtain loans, since they lack a guarantee, which they could have if they held the ownership documents. Moreover, the granting of access to land is an issue which constantly causes the loss of investments, due to the fact that there is local resistance between communities to cede this right.

In some regions of the country where lack of water resources are beginning to be noticed: "the concession to use water is the most conflictive issue because there are threats between communities, even death threats, in not giving up their water resources. Communities consider that when a source is under its jurisdiction that the water belongs to them and they do not want to give up the rights for its use to others". "Also there is a lot of jealousy among the communities when they have to share a spring; in these cases it is very difficult to manage distribution. There are projects where there is only one storage tank that supplies three or four rural communities and there is usually conflict when the time comes to build the treatment plant; there are one or a few communities that are not in agreement with the management that has been provided for the system and they want to make a separate project".

An issue that continues to generate a lot of problems for system administrators is the payment of tariffs: "There are many families that keep complaining because they do not have money to pay, at times fees or monthly tariff that are minimal and it generates internal problems for the administration".

Establishment of Tariffs

The National Department of Planning of Colombia has established that to determine the socio-economic strata upon which the charge of tariffs for public services is based, the indicator to be used is the external appearance of the house. This generates many problems in urban as well as in rural areas, being critical in the latter where the physical appearance of houses is not a good indicator of the level of income. This situation has generated the view that the methodology established by the law was conceived when bearing in mind large firms located in cities which "is very far removed from the reality of rural communities, from the simplicity of their productive processes, from their academic qualifications and from the low economic levels that they have".

Some officials of CRA declare that the Commission is aware of the problem and that they are working to adapt the methodology a bit better to the rural zones. Linked to the issue of tariffs is the problem of arrears, or debt, which many communities have got into, sometimes this may be caused by the clash between the community and the Board, and other times by the lack of knowledge about the functioning of the system or undervaluation (while people pay for energy without any problem, people are slow to pay for water supply, or do not pay at all), although there are also many cases of inability to pay.

Based on the interventions of almost all of those interviewed it is clear that: “the tariffs that apply to these water supply systems only cover the cost of operation, maintenance and management of the system, but not for investment as it is supposed to be in the tariff structure, created under pressure from international financing organisations. Moreover, it is important to bear in mind that the capacity of people to pay also would not cover higher tariffs”

Similarly, in areas where water is used for different purposes such as in the coffee growing areas, there are placed “as basic consumption very high parameters, 50 cubic meters, with tariffs of two thousand pesos per month (*US\$0.70*)”, which results in a large gap between consumption and income received from tariffs.

Management of Accounting and Finance Information

Rural communities practically never draw up budgets; they cover their basic expenses and if there is some surplus they save it. An employee comments that: “for rural communities the issue of financing is a very complicated matter; generally in the imagination of the communities a good financial report is presented when they show the notebook with three columns: income, outgoings and balance. Nevertheless, when concepts are discussed such as single account planning, assets, liabilities, physical ownership or financial state, general balance, loss balance and earnings, then you start to see the absolute ignorance of the people”.

The software programme called Integrin designed by the Ministry of Development, is a tool which is being used by many small municipalities, but rural communities have difficulties in applying it. This is manifested in a refrain made up in one of the training sessions held in 2002 in Popayán where some of the participants coined the expression “*bring your firm to Integrin and it will collapse*”.

Accessing Economic Resources

In agreement with the mayor of Marinilla (Antioquia), other interviewees’ reaffirmed the inability of rural communities to assume the costs of system expansion on their own: “if there is not a subsidy, it is not possible for the rural communities to make the investments that need to be made four or five years after the systems are built”.

A consultant commented that: "The possibility that a small municipality has to share its resources among all the different communities in the rural area is very limited; resources are given to projects of limited impact, even when they may be projects of great social benefit, they cannot be expensive projects. In the field of large projects, institutions at central or international level seek to implement regional projects in rural areas, due to the fact that rural areas tend to be dispersed means that the projects are very expensive. To invest in rural areas is much more complicated than investing in urban centres, where generally the municipality co-finances; in rural areas, the community is asked to co-finance or the local government of the party assigned to that community, though it is usually very small. So, small co- financing does not leverage (funding) for large projects and in this way here there is another difficulty".

The current tariff system sets out that commercial, industrialist and residential users in the strata V and VI contribute toward the subsidies that are given to the strata I, II and III. These should be placed in a Solidarity and Income Redistribution Fund (Fondo de Solidaridad y Redistribución de Ingresos- FSR), which receives resources via the subsidies given by the state, the department and municipalities. In order to finance either investment in infrastructure or the Solidarity Fund, local governments count on the arrangements established by the law 715 of 2001. This law establishes the obligation of investing a percentage of the resources from the national transfers in the water and sanitation sector. The main problem is that small rural villages reach a maximum level of stratum III and the local government generally invests the income from transfers in the urban centre of the municipality, based on the fact that the law allows for a change of destination when 75% of the population has been served. In order to do this, mayors take an average population on the basis of the sum of the urban and rural populations, which hides the situation in rural areas.

On the other hand, there is a lack of knowledge about the resources that can be used to improve the conditions of the sector. A consultant said "The Plan of Basic Attention (El Plan de Atención Básica, PAB) of each municipality whose elaboration is obligatory and has fixed resources, presents a very important potential in this country for financing educational programmes in rural areas, due to the fact that resources are always available, but are very poorly used or people simply do not know how to use them in education programmes". In many cases the resources of PAB are only used for vector control campaigns which attacks the symptoms but not the causes of the problem.

Very often, in the municipal sphere the units that have the responsibility to support communities in formulating water and sanitation projects are Planning Units and the Farming Technical Assistance Units (Unidades de Asistencia Técnica Agropecuaria or UMATAS). However, according to the explanation of a consultant: "the solutions given by the officials from Planning are very limited, because the majority of the employees in Planning are basically fire-fighters, who are putting out fires all the time. I do not know a Planning civil servant who has the time to sit down with the community in order to design a

project, it isn't that they cannot do it, they don't have time, they don't have the chance to do it"

2.2.2 Technological management

The rural communities generally have old systems that leave many areas without water supply, and continuity levels are very low. But if an external consultant does not appear to support the Planning office to specify a project, this will not progress, although there may be political will; this is a reality that happens a lot". Similarly, the design of infrastructure is generally in the hands of external consultants: "the consultant ends up doing the job that the Planning Office is unable to do. The work demanded by the elaboration, preparation and formulation of a project is not stipulated in the working routine of this type of civil servant".

The external consultant very often does not have time to develop a diagnostic study of the locality and generally his/her work is not participatory, with the result that a good deal of the technological solutions that are brought to rural communities end up creating problems. For example an official comments: "in Sipi (a community of el Chocó) that used to have water of excellent quality which gushed from a rock, they applied treatment with chlorine and this was so badly dosed that the people's clothes were damaged"

Communities located on hillsides are confronted with numerous problems of continuity of service and quantity of water due to the bad design of the distribution networks. A neighbour of a community in the north of El Valle said "here there is not a water supply system (aqueduct); here there is an air supply system (aireaducto)". Moreover, there is also great difficulty in looking after pumped systems because of the high costs of the energy, as well as maintaining disinfection; in the latter case this is mainly due to the difficulties in obtaining inputs and the correct management of dosage.

Operation and Maintenance of the Technology

In carrying out evaluations of management: "it is considered good to give training courses in plant operation and plumbing; it is difficult to manage plants with chemicals and also multiple stage filtration plants where nobody knows the technology. This way whether the technology is very complicated or very easy to handle people will be afraid because they are not familiar with it and so they request training"

Water Quality

Despite the fact that many communities need support in order to have good quality water, in the great majority of cases this deficit has not been identified with sufficient force. An official at national level comments that the Mayors have not taken on their mandate of supplying water of good quality seriously because: "everybody goes out to protest when there has been a tariff increase, but it looks as though no one considers the quality of water in this country. How many protests about the quality of water have taken place in this country? I have not seen even the first one. There are isolated actions such as where a person makes

a complaint about the quality of water, so that the mayor diverts the issue towards the building of a treatment tank, it was done and the dispute was over. But when have we seen people come out on the street complaining with pots and pans about the quality of water? And how many people die in this country daily due to the quality of water?"

To the extent that water has become to be seen as an economic good and it's management has passed out of the Health Ministry, the teaching-learning processes have been lost in the work with communities that illustrate the strong links with conserving health, good quality of water and the proper management of excreta and sewage.

2.2.3 Environmental management

In this field it is necessary to highlight two key aspects for the sustainability of the water resource: the management and conservation of the water sources and the recognition of the multiple uses of water in rural areas.

Management and Conservation of Water Sources

In 70% of the projects visited under the execution of PAAR, the condition of the micro-watershed is deficient due to the fact that the sources present sanitary risks (high and medium) caused by deforestation, cattle-raising and mining activities, and the fumigation of crops. The intervention of non-governmental organisations with an ecological profile was identified in the micro-watersheds that are in a good state.

In some cases the technical staffs that make decisions about the project ignore the demand for water needed for conservation of the ecosystems. This attitude has occurred in communities, which start demanding all of the water for consumption and forgetting about the environmental needs. This is the case in *Ricaute, Valle del Cauca*, where at the start-up phase of the project the community was demanding a greater volume of water, which left very little in the spring.

In fact, the agrarian reform which is underway in Colombia, together with the intensification of rural violence has resulted in the strengthening of unproductive large-scale estates. This is another of the big problems which confronts the conservation of the sources. Despite the fact that municipal governments may emphasize the protection of sources; few results are achieved: "above all now that there are so many people buying land, wanting to have cattle, and who do not concern themselves about protecting sources. Given that these people have a lot of money and the power to intimidate, it is almost impossible to make the request that certain areas cannot be used for grazing because of the need to protect the watershed. This happens a lot in the north of el Valle, in the area of Dovia, Versalles where there are large landowners who have bought large plots of land. It is a very understated conflict, it is a conflict which is not shouted about, but it is handled very carefully due to the fear that people have of the large landowners of the region, although it affects communities a lot that are supplied by springs in these areas."

Multiple Usages of Water

In agricultural zones there are a lot of conflicts due to the multiple uses of water: “many communities appropriate water resources and start to over-exploit them, generating shortages of the resource. When various communities take water from the same place for different uses, especially when those sources are not adequately assessed, it usually creates conflict, because instead of building a regional or sub-regional system, or a system which distributes water for all from one point, everybody goes to the same site and it is possible to find places with five or six intakes to supply five or six communities. So, in summer time, when there is a shortage of water, those who do the maintenance from one community close down or block the supply of the other (community). In Nariño a programme has just finished working with the community, because there were six small communities which were using the same source but in an independent way. What was done was to suggest the possibility that one water supply system be made that would distribute water to everyone, but the people did not believe that this could be done technically, so each one fought to have an independent and autonomous water supply system. This has promoted an economy of scale for them which is very important, creating the possibility that all of them may have water at the same time and they have changed their position”.

3. The rural sector in the context of decentralization

Currently the water and sanitation sector in Colombia is organised as followed:

National Level	
<i>Entity</i>	<i>Function</i>
National Department of Planning (<i>Departamento Nacional de Planeación</i>)	Elaboration of national development plan
Ministry of Environment, Housing and Territorial Development (<i>Ministerio de Ambiente, Vivienda y Desarrollo Territorial</i>)	Sectoral planning, information systems Coordination of sector policies
Directorate of Water Supply, Basic Sanitation and Environment (<i>Dirección de Agua Potable Saneamiento Básico y Ambiental</i>)	Technical standards and technological development Technical assistance and training Business development
Regulatory Commission of Water Supply and Environmental Sanitation (<i>Comisión de Regulación de Agua Potable y Saneamiento Ambiental</i>)	Promotion of competency Regulation of monopolies Establishment of tariff structures and subsidies Definition of efficiency criteria
Superintendent of Household Public Services (<i>Superintendencia de Servicios Públicos Domiciliarios</i>)	Monitoring and control of the sector Promotion of community checking through the Committees of Development and Social Control Establishing a standardized accounting system Evaluating the financial, technical and administrative management of the service providers
Health Ministry	Monitoring and control over water quality
Findeter	Offering financial support to the sector
Departmental Level	
Departments	Technical assistance, training and support to regional organisations.
Municipal Level	
Municipalities	Financing building works, granting of subsidies to the strata I, II, and III.

3.1 Support from the National Level

The General Directorate of Water and Basic Sanitation, (La Dirección General de Agua Potable y Saneamiento Básico, DGAPSB) of the Ministry of Development, that today is part

of the Ministry of Environment, Housing and Territorial Development, has since the year 2000 lead a programme of business culture in rural areas, through the group of small municipalities (localities with a population less than 30.000 inhabitants). This programme seeks to strengthen the administrative capacity of the water and sanitation service providers in these areas. Up until October 2003 the programme had served 943 municipalities, of which 50 have reached an excellent level of management.

However, it is important to keep in mind that these localities basically refer to urban zones of the municipalities, and therefore the participation of the entities supplying districts and neighbourhoods (where the community management models that is the focus of this study are located) is very low. Because the programme counts on limited human and economic resources (out of the seven professional staff only three go to the field), most of the time the training sessions take place in the capitals of the departments where the population is concentrated.

3.1.1 The business culture programme

The Business Culture Programme came about as an initiative from the area of small municipalities dating from 1996 – 97, when it was called rural basic sanitation. In 1999 its strategy, target population and issues that were going to be part of the training were defined and a few workshops were carried out. Initially the programme had a supply approach; the Ministry took the programme and promoted it among regional and local level entities.

Characteristics of the Programme

- The supplying company can access the programme, attending training workshops about business management, in which a self-analysis of management is made and commitments to guarantee efficient management.
- The supplying company receives all support instruments that are required from the DGAPSB.
- Every three months, the supplying company must send evidence of fulfilment of the commitments reached during that period to the DGAPSB with which they then up-date the qualification of the firm.
- In addition to the management commitments, the company must report on the development of service indicators.

At the start 93 management aspects are evaluated, and the Integrin software training begins only when this analysis reaches 400 points,. In mid-2003, out of the municipalities served by the programme, at this time 600, only about 20 reached more than 800 qualification points.

The Programme has developed the following training courses:

- Business management (including the calculation of tariffs)
- Uncounted for water
- Training in the use of Integrin software

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- Formation of multipliers (training of trainers) in educational sessions
 - Educational sessions about water and sanitation.

In addition to the Programme the following publications have been produced:

- Business management manual
- Costs and tariffs manual
- Uncounted water manual
- Pipe distribution registry manual
- Users registry manual
- Financial and business software – Integrin
- Software for uncounted water
- Water and Sanitation fliers for the educational sessions.

An official comments "The Programme started out because it was an obvious need, especially for the issue of training and clear evidence of this is based on the evaluations made during the the training workshops, when more than 90% of the participants asked for an increase in the length of the workshops". And s/he considers that they have already achieved the goal of generating "a type of feedback with the municipalities, so that they are constantly calling to ask us about things. What we do here is to go and find by which means (a computer or fax) that we can send them the information".

The Programme has been successful in localities where it has counted on:

- The interest of the mayor in developing the process
- Administrators who are in stable in their posts and who like the programme
- An insistence by the mayor that the administrators carry out the programme with high goals.

Programme Support Needs

During the year 2002 the Programme could be developed thanks to the support of the European Union, because this organisation guided the issue of work in public services towards a business management approach. Work was developed in more than 15 departments, with the input of assistants from the Higher School of Public Administration of Colombia and it had a wide coverage in the regions of Cundinamarca, Risaralda and Atlántico.

In spite of the good performance of this Programme, threats persist of its closure because of budgetary problems. Different alternatives are being considered in order to guarantee its continuity, such as creating ties with universities through the participation of students in their last year, or the participation of students in the last year of high school making social service work on the Programme a requirement. Whichever of these alternatives are chosen, it is important to be monitor the coverage of rural areas in municipalities. It would also be important to evaluate the materials produced by the programme that are given as solutions

to the needs of communities with the greatest problems in the field of management, and whether or not complementary materials are required.

Furthermore, according to members of staff, the ministry needs to consolidate the process: "of what is required for the establishment of a system of follow up of the programme. We are just two employees in charge of providing follow-up to 600 or 700 municipalities. We have to beg for a telephone connection and paper to send our quarterly communications. So we have proposed a mechanism which is to contract interns who could visit the municipalities and attend personally to the needs that we have built up".

3.1.2 Sanitary Rural Inventory, as a Support Tool to Management of the Rural Sector

One instrument that can help the Mayors have a clearer idea about the rural water and sanitation situation is the national sanitary inventory, advanced by the Ministry of Development and finalised in 2002, although it has not yet been published. Despite the fact that this information could become an important instrument for decision-making on the part of Mayors, the lack of resources for its publication may result in the fact that it will be outdated before it reaches its intended audience.

Officials have high expectations regarding the possible impact that may result in having the Inventory: "The inventory will allow each Mayor to have a panorama of his/her rural area. The current problem is to put together the strategy to hand in and present officially in every department of the state in every municipality. What is important is to be able to reach the position where the Mayor takes interest in knowing about his/her municipality and is able to use the information as a planning instrument and thinks about investment alternatives. In many rural areas a small investment is enough to improve a system, though the Mayor does not know this. Sometimes, with investments of just 10, 15, 20 millions, which are very easy to make, it is possible to make systems work".

3.1.3 Proposal of a public policy for the rural sector

The country lacks a policy for rural water supply and basic sanitation, and from this stems the importance in having a guiding framework in which support mechanisms are clearly defined. Currently, there is a version of the document that is being discussed prior to its approval. In the formulation process of the current policy the following support functions are being considered:

- The Ministry of Environment, Housing and Territorial Development, in coordination with the Regulatory Commission should process a "specific resolution for the rural sector, in relation to the aspects stipulated by law 142" and should coordinate actions of the entity in charge of developing the common economic programme contemplated by the National Development Plan to provide assistance to the rural water supply systems in issues relating to building works, supplies, training and technical assistance.

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- Promote continued training activities, which the Ministry has been carrying out, as well as to encourage the Business Management Programme, the programme of community micro-enterprise to serve communities with a population between 5,000 and 12,000 inhabitants, and to promote the constitution of Associations, in order to serve systems in communities with less than 5,000 inhabitants.
 - Propose that the General Directorate of Water Supply and Basic Sanitation establishes a reference site with specialised information in matters such as community participation and appropriate technology.
 - Revive the role of the National Service for Learning (Servicio Nacional de Aprendizaje or SENA, which is in charge of the technology training of the country), in order to develop training programmes about management issues, in coordination with the Departments and municipalities.
 - Propose the revival of an active role for the Departmental Units of Water (Unidades Departamentales de Agua) and Departmental Directorates of Health (Direcciones Departamentales de Salud) to work in coordination with the Directorate of Water to establish advisory programmes for the creation of “community water and sanitation companies” in rural areas.
 - Suggest that technical assistance be provided by the Autonomous Regional Corporations (Corporaciones Autonomas Regionales), which should include support for the formulation of projects and to promote their participation on Watershed Councils (Consejos de Cuenca). The Corporations should also take on the advisory role in the generation of community savings, which can allow for the constitution of Social Capitalisation Funds.
 - Suggest the formation of Rural Water Supply Units (Unidades de Acueductos Rurales) at municipal level in order to channel support earmarked for this area.

Promote the creation of Associations of Community Organisations (*Asociaciones de Organizaciones Comunitarias*) at departmental level for contracting specialised services.

3.2 The crisis at departmental level

The process of decentralisation has resulted in weakening of the sector at departmental level, according to the comments of an official: "When Insfopal was finished in 1987, the Sectorial Adjustment Plan was created to manage the credit that came into the country. Generally, personnel were hired that had previously worked in the former Institute for Promoting Municipalities (Instituto de Fomento Municipal, Insfopa) and who had a lot of experience and with the support of the United Nations through the National Fund for Development, (Fonade) a consultant team was established that was distributed by regions throughout the country. The programme began with at least one consultant in every department who knew the zone. Each department placed a group of professionals as counterparts, so that they were trained by the consultants and remained in the region. This

programme ended and in 2003 only four consultants were still carrying out this type of work in two departments of the country”.

The Departments of Cundinamarca, Antioquia and Atlántico maintain a strong capacity in the water and sanitation sector. In 2002, in Atlántico the government invested \$2,500 million (US\$ 929,628)⁷ in 18 rural water supply systems with the support of national resources. But generally speaking in the country the departmental water units have disappeared with the decentralisation process. The only ones that survive are the Water Unit of Bolívar and Huila, because the latter is a mixed economy company, which has been transformed into a consultancy business that maintains itself with its own income. A member of the Ministry staff says that: "The Ministry has been trying to revive the issue of why we definitely need people in the department to work in the sector and to see if this issue can be integrated with policies at national level in some way, but the governors are continuously putting pressure to make cutbacks, and this is a very vulnerable sector"

Moreover, it is also important to highlight the case of *Valle del Cauca* where during 2003 the government launched a programme of water supply for the rural zone, PAAR, oriented toward the development and execution of sustainable water supply systems. This was aimed at strengthening the service providers, promoting models of cooperation between the public entities with responsibility in the sector in order to maximize resources and to obtain improved results. The programme aims to intervene in 90 localities and it has already started actions in 12.

In some departments such as *Cauca and Nariño*, the Departmental Health Units continue to take advantage of the work of the sanitation technicians in order to promote their work in the rural areas. But this is still very much at the start-up phase, because there is neither the availability of resources nor the means of transportation and moreover it is limited to technical assistance, but with very little investment.

“Nariño is also very concerned as a department to show its presence in municipalities with a few training events, but as always the main problem is how to create a fund from the national level that is able to support the departments and municipalities so that they can move about and help communities in the execution of these programmes. The main problem is the fiscal deficit of this country and the lack of adequate resources to make this work”.

This absence of an intermediary level, between the central governmental and the municipalities has meant that support has been concentrated in the Ministry: "It's that the credibility of the Departments has declined, so that the municipalities prefer to go over them. Generally the Major and his/her employees say: "Me, why am I going to go to the

⁷ The average exchange rate used was 2700 pesos for one US dollar.

departmental government if they will not give me anything, I prefer to go to Bogotá as I will find some answers from there, I will bring back something, they tell me something and I get something done over there”

3.3 Support from the local government

As mentioned previously, the local governments provide limited support and in many cases do not do anything for rural areas. According to the Water Official of UNICEF, it happens that: “very often the Mayors do not know how many districts they are in charge of, how many small communities or what is going on with them because they do not have time to go and visit them, due to the long distances or because of the public order situation”.

When local government supports the rural settlements, usually they take on only a few zones, the coverage is limited through the supply of resources, whether these are materials, plant, or the means of transport for construction of works or financial **resources for execution**, to pay staff, generally for plumbers, protection works or reforestation of micro-watersheds feeding the systems, advice in the formulation of projects and in some cases for training.

In turn the local government confronts a lot of difficulties in carrying out its work; in a sample of 21 municipalities out of 42 in el Valle de Cauca it was found that local government demands include:

- Professional technical guidance to improve the management of water supply systems
- Support to train rural communities and the boards, which administer their water supply systems
- Economic resources to invest in rural areas, they specially ask for co-financing of projects
- Support for the elaboration of projects
- Guidance for the elaboration of pre-investment studies

In large cities, such as *Cali* and *Medellín*, the idea that local public service companies should serve the rural areas has been promoted, but is having mixed results. There are limitations, such as in the example of *Cali*, which has just 2 employees to attend to 100 neighbourhoods and a successful case of support, such as in *Medellín* and its Public Companies whose model is presented later on in this document. In *Risaralda*, the company *Aguas y Aguas de Pereira* is trying to cover a rural area of the municipality, and has made investments in purification systems, but the communities have not been consulted about the technology promoted by the company and therefore there is some resistance on the part of communities because they do not want to lose their autonomy.

3.4 Support from International Cooperation and Trade Unions

Support from the International Cooperation is limited. The government of the Netherlands implemented large programmes of rural water supply during the 1980s, which disappeared in the 1990s. Currently, as part of the actions of *Plan Colombia*, The United States Agency for International Development (USAID) through the Association for Rural Development (ARD), is promoting the strengthening of local democracy, which has included the support of local governments located in areas of armed conflict. Its activities have included aspects such as training for improving the management of public service providers, and support to the improvement of water and sanitation infrastructure. Similarly, The German Cooperation Agency (GTZ) has developed activities in water and sanitation, especially within the project of Integrated Development of *Alto Patía* and *La Bota Caucana* and is carrying out some actions with the water sector under its programme of Strengthening Decentralisation and Local Development.

Despite the fact that in Colombia, in contrast with other Latin American countries, NGO participation in the water and sanitation sector is not very strong, it is worth highlighting the investments of Plan International in rural water supply. In terms of the agrarian trade unions, the National Federation of Coffee Producers, through its Departmental Committees, is the organisation with a long tradition in the execution of water and sanitation projects in rural areas of the country. The Committee of Coffee Producers has gradually been handing over systems to the communities, has been legalising the service suppliers and providing materials, so that the communities do not start out from nothing. Moreover, they offer guidance about the connection of new users.

In addition, the Colombian Petroleum Company, ECOPETROL, through its programmes located in the areas where oil pipelines pass, invests mostly in the building of infrastructure and supports the Ministry of Development in the production of educational material for rural water supply systems.

4. Alternative Models of Support for the Rural Area

4.1 The Case of the Community Water Supply Systems of Medellín

Medellín has a population of 2.000.000 and is one of the four most important cities of Colombia. Public services of water, energy and telephone are supplied to the metropolitan area by The Public Company of Medellín (*Empresas Públicas de Medellín* or EPM). In 1992, out of the 46 neighbourhoods, which make up the rural area of *Medellín*, the few that had water systems only supplied untreated water and there were only a few that had customised sanitation solutions. In order to resolve attention to this area, the EPM, created the Programme of Water Supply and Sanitation for Districts and Neighbourhoods.

At the beginning the programme had three sociologists, one social worker, two journalists and one sanitation technician. Eleven years afterwards these staff are still linked with EPM but they must undertake other tasks and are in charge of the rural water supply systems when required. Currently, EPM has a group named "Consolidation", which offers advice to the systems and carries out social management and has two fulltime administrators.

At the creation of the neighbourhood programme in EPM it was appointed to the Housing Department (*Departamento de Habilitación de Viviendas*). The company used to estimate the costs of the programme in each community and contacted the village leaders, so that they could have links with the whole community through them. The cost of the Programme was presented to the users and they were asked to sign up and accept. Generally they started in communities where 50% of the users decided to be involved, in some localities acceptance levels reached as high as 80%. The process of collecting signatures to provide the proof of community consent to start the project was delayed due to instances, such as those where women would say "*without the authorization of my husband I cannot give you a final answer now*", so that they had to return to that household some other time when the husband was there.

Not all neighbourhoods became involved with the Programme, because they did not want to take on the costs involved, so initially it was suggested that the municipality would contribute 50% and the community the other 50%, but after socio-economic research was carried out, it was concluded that the community was unable to make this level of contribution. Therefore, EPM assumed 25% of the building costs, as well as the costs of the technical studies, 50% of the building costs were covered by the municipality and the remaining 25% by the community, through a loan given by EPM which must be paid off over 10 years with a 1% interest rate. In 1994, when law 142 was issued prohibiting subsidies, the local government had to take on 75% and the community 25%. Usually, these new systems have used new sources of water supply, so that users were able to meet their needs for irrigation and watering of animals from the sources which they had been using previously.

Presently the systems serve five districts and 34 neighbourhoods. Fifteen multisectorial water supply systems have been built, serving 32,820 inhabitants, and have treatment plants that use different technology types (multiple stage filtration, fast filtration, compact plants). The number of neighbourhoods served by each system varies, for example: *Santa Elena* serves eight, *Acuarela* six, *Arco Iris* four and *La Iguana* two, although all of them are systems with less than 2,400 users. The process of working with the community lasts around 19 months, during which time training is provided to the community regarding the norms arising from the decentralization process and the Constitution of 91 concerning the importance of water as a vital element and water-borne diseases.

In order to constitute the community enterprise responsible for service provision, the legal entity of Users Corporation was initially adopted, which was implemented in the first few water supply systems built by the Programme. Subsequently, in accordance with the

suggestion of the Superintendent of Public Services, Users Associations have been constituted in order to bring them in line with the current legal norms. From its beginning the Programme included advisory services for the formulation of statutes and obtaining legal status (*personería jurídica*). Similarly, support was given for the structuring of commercial management (establishing tariffs, billing, fee collection etc.).

The general assembly (of the community) is the maximum authority and the administrative committee is elected in these sessions, which are made up of people who are not remunerated for their work. Out of the 15 administrative committees just three have a woman as the president. Nevertheless in *Acuarelas*, where the management board has been made up of a majority of women for years, it is noted that the administration has been very successful in taking forward the system, because women have a lot of drive, they care for their system and have been free of any type political intrigue and community conflict.

Usually, the water supply systems pay a public accountant to provide follow-up to accounting matters. Moreover, various systems have administrators who are responsible for managing the operators and the secretary (if the system has one). Only three water supply systems are managed by women. In the cases of small water supply systems that do not require a full-time administrator, just one administrator will serve four, three or two systems. It is common that the administrator, who is in most cases a person from the community, earns more than two minimum salaries, is a high school graduate and has additional training in environmental, forestry or administrative matters.

An internship course of four or five days in EPM was carried out in order to train the operators. In administration aspects they were assisted by SENA. All the systems have their own computer bought with their income, and they also have an office where they attend to the users, in some cases they have managed to buy the building that serves as the office.

At the beginning, the statutes contemplated the participation of an official of EPM in the water supply system management board, in the role of reviewer-advisor to take part in the oversight board (*Junta de Vigilancia*), but as a result of a warning from the Superintendent that the law prohibits the involvement of large companies in the running of small ones, the company (EPM) provides support to them via advisors.

EPM carries out chemical and bacteriological analysis of the water provided by the systems based on samples collected by the community. Periodically, training sessions have been given together with the Ministry of Development under its Business Culture Programme; in 2002, four of the water supply systems were in the country's top ten as past of Business Management Culture contest carried out by the Ministry (they were in second, third, fifth and sixth place)

The members of the community administrative bodies greatly appreciate the advice of EPM, considering that "it contributes to the sustainability of the water supply system because it is

always possible to get advice on legal, administrative or operational matters". Moreover, for the four systems that use pumps the support is very important in repairs and the sale of water by blocks, that is the model created by EPM to reduce energy costs of these systems, or in other words instead of charging for the energy consumed, the company charges for the volume of water used.

Despite the fact that some systems such as *Acuarela* have been able to make large investments (\$38 million pesos) to make changes of pressure regulators, most of the time financial support from the local government is required for expansion and replacement of the water supply systems.

At the end of 2002 the municipality of *Medellín* created a division office for water and sanitation appointed by the Secretary of Social Development, to which resources have been provided to manage the sector. Therefore, EPM is expecting that at any moment this division will take over the responsibility of supporting these water supply systems, but up until now they have only made investments to expand some rural systems.

Whilst the new situation is being defined, EPM is carrying on with providing support with the presence of a member of the staff in the regular and extra-ordinary community assemblies as stipulated in the statutes and manages, together with SENA or other entities, the training of members of the administration committees or the board of directors.

A continuous follow up in the development of the Integrin programme is also carried out, providing guidance in the installation, management, maintenance and updating of the programme. The updates from the Ministry are distributed continually and help is provided if there are any difficulties.

They have also accompanied the communities in the formation of "Association of Water Supply and Basic Sanitation of the Smaller Municipalities and Rural Zones of *Antioquia*", which has been an initiative of the 16 neighbourhoods systems of Medellín, but which has been augmented by other municipalities and registering the presence of 50 water supply systems in the founding assembly which took place in 2003. This association was founded mainly for the benefits that could be brought by the integration of smaller systems with the management of resources of other entities of the municipalities, to achieve gains, for example in buying materials, in order to consolidate more business-like companies.

Support Needs

At the end of 2002, working along with the public companies, an inventory of support needs was produced, which yielded the following results:

- Most advice is requested in the area of administration as there are still difficulties in managing the computer software programme, Integrin.

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- Updating of the regulations, because at times many regulations are issued both by the Ministry and the CRA, and it is very important to update the administrators and directors. The same applies to labour reform.
 - Follow-up to the selection process for new administrative and operative staff.
 - Attending to complaints and queries when management difficulties for system administrators are presented.
 - In the technical and operational fields they request guidance, particularly when new connexions are installed and problems with water pressure are encountered, as well as ambiguity about the technical possibilities of supplying water to a household or the need to make diversions; and also in the case of major damage and repairs and complex matters of system operation in general. It is important to note that in the RAS, Reglamento Nacional de Acueducto y Alcantarillado the complexity of systems is related to the size of the population, and therefore these types of systems are not considered.
 - Elaboration of tariff structures and an adjustment plan for 2005 for the systems which have not yet implemented the methodology required by law.
 - Elaboration and maintenance of watershed protection management programmes.

4.2 The Colombian Association of Water Supply and Sanitation Service Organisations (*AQUACOL*). An Option for Support Built on a Community Basis

At the end of 2000 an initiative emerged in some of the communities where the Cinara Institute of the University of Valle had been working, with the idea to group together in an association, which was called the Colombian Association of Water Supply and Sanitation Service Organisations (La Asociación Colombiana de Organizaciones Prestadoras de Servicios de Agua y Saneamiento or *AQUACOL*), into which other communities quickly became integrated. Currently it brings together 28 community organisations, which provide water supply services to more than 100 communities located in the departments of El Valle, Cauca y Risaralda, it is supported by the contributions of its member organisations and receives advice from Cinara when needed. One of its leaders says that: "Aquacol has emerged as a priority, since neither the state, nor many of the communities were concerned about the situation of their organisations"

There are different levels of development in the administrative capacity among the members of Aquacol, and they are determined to take advantage of this situation. They also seek to promote economies of scale in purchasing materials and to strengthen their establishment in such as way as to influence the formulation of national policy that better responds to the needs of rural communities.

During its first year *AQUACOL* focused on raising mutual awareness and introducing the organisations and leaders belonging to the Association to each other and in the participatory development of the Association's mission, vision, values and statutes, as well as processing

its legal status. In the second year a programme of mutual support began through community exchange visits that allowed for a collaboration in the strengthening of the weaker members. In its third year, it is committed to create Community Resource Centres (*Centros de Recursos Comunitarios*) in order to allow for the strengthening of local community capacity and to provide more methodical advice to members. The project will begin working on five priority areas: administrative and financial management, **underground GROUND** water, conservation of micro-watersheds, efficient use of water, management of excreta, grey water and hygiene education.

Needs of support according to the management committee of AQUACOL

- Access to economic resources for training and to carry out building works.
- Training for:
 - Interacting better with institutions and to be more knowledgeable about issues that they manage in the communities.
 - Resource and project management and the promotion of institutional intervention.
 - Carry out checks on the building works and projects executed in the communities.
 - Promoting community participation.
- Institutional follow up to the activities carried out in the communities, because often they do specific tasks, but then do not come back to observe what is going on.
- Support materials for community learning (handbooks, leaflets, videos)
- Access to information.

5. Final Reflections and Recommendations

This document has presented a broad panorama of the precarious situation of the majority of rural communities. They value their water supply systems, very highly and put a lot of effort in order to maintain them, but given the conditions of the sector organisation, the possibilities for support are very limited, above all with the disappearance of the Group of Small Municipalities and Rural Areas in the Ministry of Environment Housing and Territorial Development.

The intention of the proposal of public policy to articulate a system of support for the rural sector is a significant effort. However, given the limited level of coordination that exists between governmental entities, such an initiative may remain only on paper if institutional reforms are not affected which will allow for a change to the current situation. Moreover, it is well-known that the policy does not have a gender approach that allows for the creation of conditions of equity between men and women in the management of systems. Based on the analysis of problems, it is evident that the projects are fundamentally attending to the practical needs of women and an effort should be made to adopt the strategies and work on the issue of rebuilding male identities in such a way that men can transform their roles and

accept the participation of women in areas that traditionally have been considered under their domain, such as the case of technology.

Undoubtedly, in spite of years of the decentralization process in Colombia, municipalities have not yet achieved their goal in terms of fulfilling the role of being responsible for the supply of drinking water. The strengthening of local government and creative research about the ways in which attention can be given to requests from rural areas is an element that requires the attention of sector organisations.

A good part of these communities are dispersed in nature and therefore have not organised their demands, nor know who to present them to. The emergence of organisations such as AQUACOL, the association that works in the Atlantic Department or the one recently created in *Antioquia*, indicates that a way forward is being opened up by the communities themselves to channel their needs, and is an initiative that deserves to be supported.

Nevertheless, it is clear that there exists the need to: strengthen the specialized support for rural communities and to channel local knowledge that exists within them. The formation of professional-level resources centres that take on as part of their responsibilities support to rural communities may be an adequate answer for the first need, whilst the establishment of community resource centres is an incentive that may help in some measure to preserve and enhance community knowledge and facilitate interchange between communities and the learning based on experiences. Similarly, it can facilitate the work of specialised institutional support and make it more effective.

However, it is clear that at least in the first five years the performance of these kind of centres will require a basic annual contribution from the municipal budget in order to guarantee the process of continuous vocational and specialised training. Similarly, clear links will need to be established with technology level training programmes, which are preparing the personnel needed for many of the systems to function adequately.

The task of strengthening the rural sector can also be taken as recognition that the faculties of engineering are not preparing personnel that are capable to work in the rural zones and that the works that are being executed in this zone threaten the efficacy of the solutions as well as their sustainability. The absence of an analysis of sanitary risks and about the socio-economic conditions of communities is leading to technological decisions that communities are neither able to operate, maintain nor sustain.

Finally, it is necessary to highlight that the emphasis placed at international level regarding the processes of privatisation that have been transmitted to national governments has contributed to the further relegation of the rural sector, since this area does not present attractive conditions for the new national companies, and much less so for multinationals that have made a clean sweep of the markets of the big capital cities of countries in the South.