

COMMUNITY MANAGEMENT OF RURAL WATER SUPPLIES SYSTEM FOR SUSTAINABILITY OF THE SERVICE

Mohamed I. A. Amer

* Lecturer, Construction Engineering, Management and Utilities Dept.,
Faculty of Engineering, Zagazig University
Also, Water and Sanitation Advisor in Plan International Egypt

Abstract

Water sector is considered one of the most vital sectors in any country because of its significance and necessity to the whole society. It is considered to be the basis for any reconstruction and economic developments. The tremendous effort and investment carried out by the Egyptian Government does hardly keep up with the increase in population. Community management has become the major approach for implementing water supply systems in rural areas worldwide. It was an answer to the large-scale breakdown of water supply systems in the 1970s and 1980s. It can be summarized, as achieving sustainability by preparing rural communities to manage their water supply systems themselves once it will be implemented. This paper presents the key elements and ingredients for developing the community management of rural water supplies model.

Introduction

Water sector is considered one of the most vital sectors in any country because of its significance and necessity to the whole society. It is considered the basis for any reconstruction and economic development. The tremendous effort and investment carried out by the Egyptian Government does hardly keep up with the increase in population.

Community management of water supplies systems has become the major approach for implementing water supply systems in rural areas worldwide. It was an answer to the large-scale break down of water supply systems in the 1970s and 1980s. Since then it has been applied worldwide in different forms and using different methods. It can be summarized as achieving sustainability by preparing rural communities to manage their water supplies themselves once the implementing agency/government has pulled out [1]. It entails:

- Participatory processes to create a sense of ownership for the water supply system;
- Tailoring service levels to the demand of community people;
- Building the capacities of community people to operate, maintain and manage their systems themselves.

It puts the main responsibilities of sustainable water supply squarely with communities.

Egypt is divided administratively into 26 governorates, 178 districts and 4,520 local villages' units containing over 26,000 satellite villages, 213 Marakez and 1,260 Local Village Units (LVU), of which approximately 200 are urban areas [2]. The 26 governorates include four Urban governorates (Cairo, Alexandria, Port Said, and Suez), and 22 Rural governorates (others).

The total population is presented in Table (1) with the forecast for the year 2020. This reflects the need for the water and wastewater systems over these years [2]. From Table (1), it can be seen that the population will be more than doubled within the coming years. It is most probably impossible to meet the full needs of such population of basic services. Hence the optimum planning of such limited resources are most essential if the same level of services today is to be kept and no further decline is to happen. Then community management of water supplies systems approach should be highlighted as leading approach for implementing rural water supply projects, in term will satisfy the sustainability of the services.

Table (1): Population Growth Forecast

Population	1986	1990	2000	2010	2020
Urban	9,696,776	10,787,210	14,080,354	18,378,836	23,989,569
Slums	11,476,660	12,767,248	16,664,862	21,752,349	28,392,956
Rural	27,031,613	30,071,406	39,251,673	51,234,512	66,875.500
Total	48,205,049	53,625,864	69,996,889	91,365,698	119,258,020

The tremendous effort and investment carried out by the Egyptian Government do hardly keep up with the increase in population. Table (2) shows this point [3].

Table (2): Comparison of 1976 and 1986 Situations

	1976	1986
Rural Population	20.6 million	27.0 million
% Connected	5%	29%
Population Connected	1.0 million	7.8 million (6.8 million additional service)
% Unconnected	95%	71%
Population Unconnected	19.6 million	19.2 million (The same)

This means that with all the efforts spent, the number of un-served population remains the same. The real improvement is not effective and the social justice of service providing is not seen.

There are many government agencies that receive capital allocations through the Five-Year Plan for water and wastewater systems improvements. These agencies are [4]:

- Ministry of Housing, Utilities and Urban Settlements (MOHUUS).
- Ministry of Local Development (MLD)
- Prime Minister's Office

There are certainly other agencies with major or minor roles in developing water and wastewater systems. Water Companies is only for Damietta, Behera and Fayoum Governorates. The Newly Established General Public Economic Agencies were created by Presidential Decree No. 281 of 1995 [5]. MLD through local governments is responsible for operation and maintenance [6, 7].

Under the Law of Local Administration 43 (1979), as amended by Law 50(1981), Law 145(1988), Law 9 (1989), and others, all of the following organizations have some responsibility for planning and approving water and wastewater capital projects [8,9]:

- Supreme Committee for Regional Planning.
- Regional Planning Authority.
- Governorate Popular Council.
- Governorate Executive Council.
- Governors.
- Housing and Utilities Directorate.
- Governorate Planning Department.
- Markz Popular Council.
- City or Town Popular Council.
- District or Neighborhood Popular Council.
- Village Popular Council.

Out of all these agencies there is no roll of the community, which is the main recipient of the services.

Objectives of the Paper

Presents the key elements and ingredients for developing the community management of rural water supplies model. Highlight the implement of community management of rural water supplies as means for the sustainability of the services.

Community Management

World wide community management has become the leading approach for implementing rural water supply projects. A wide range of different methods and techniques to implement community managed water supply projects are used. They all aim at strengthening the capacities and willingness of community people to take on the ownership and responsibility of managing their water supply systems after the implementing agency/government has left the community [10].

The interest for community management did not come out of the blue. In the 70s and 80s it started in response to the large-scale breakdown of rural water supply systems. Governments were not able to maintain the systems they had constructed. It was realized that the community had to be involved to make the systems more sustainable after handing over.

First community people were involved by having them provide labor and

resources in the construction of systems. But soon community involvement was broadened to community participation aiming at stimulating the responsibility and willingness of community people to operate and maintain their systems. The final step was to aim for community management, including all that is needed for a community to keep their water systems operational after handing over. Community management is the most elaborate form of putting community people in the driving seat [1].

Key Elements and Ingredients

Key elements and ingredients for developing the community management of rural water supplies model addressed as factors that help communities to manage their water supplies system effectively and sustainability. These key elements are policies, legislation, ownership, technology, financial issues, preparation of the community, institutional linkages, and support structure [1].

Policies

It is not just policies that must be in place, but especially mechanism for their enforcement. Policies must also be in harmony and not contradict each other. The national policies and legislation are needed to legitimize participatory approaches.

Legislation

Laws must be introduced or modified to transfer state ownership of assets to communities and create a legal framework for community management.

Ownership

Communities should own their systems as early as possible and not after handing over. They must be enabled to move from a situation where government or donors did everything for them to a situation where they take up ownership. The lack of a sense or feeling of ownership causes problems with community management. Sometimes there are not only problems with 'sense of ownership' but also with real, legal ownership.

Ownership must be clear because no one will pay for a service if they think someone else will benefit or might hijack it. The lack of a clear legal framework, which allows transfer of assets and responsibility for assets, is a problem in community management.

In Egypt despite symbolic acts to donate projects to communities, assets are in fact property of the government. New legislation is needed to grant legal status to community bodies to manage their own systems. Nonetheless, the ownership of the systems remains with the local government.

Technology

Lack of spare parts for the technology constructed, faults in the design, poor construction quality, inappropriate location, lack of technical knowledge, overly complex technology, and technology that communities can not pay for all of that is

considered issue needed to be addressed.

Mechanism must be in place to choose appropriate technology: technology that communities can manage, own, maintain and sustain. The choice for a technology that is simple and cheap and can be produced and maintained locally is the main key for sustainability of the services.

Financial Issues

Financial problems in communities: lack of book keeping, lack of accountability and lack of transparency, lack of financial skills, simple lack of money, and enforcement of payments are types of issues that needed to be addressed. Communities' lack of access to cash seems to be one of the key obstacles to increased sustainability.

In some rural area of Egypt, the beneficiaries paid monthly small fixed amount of money for obtaining the service e (3L.E in Giza rural area). If the monthly payment increased to become 10L.E, 3L.E for the government local unit and 7L.E kept in separate bank account to be used for operation and maintenance then that can help in sustainability of services.

Preparation of the Community

It is often stated that communities are not prepared well enough. Participatory methods are not used; donors force their water systems to communities without consultation and participation.

The heart of community management lies in the development of community capacities. People must be prepared properly to undertake the tasks required of them, success will then breed confidence, yet unrealistic expectations will lead to loss of confidence and failure. Supporting people to successfully undertake tasks for themselves leads to the growth of confidence and capacity. The external support was gradually withdrawn over the life of the project, leaving in place a stable management structure.

Imbalance in the water committees is a problem: children and women should be involved right from the start. Conflicts that arise between community groups and the difficulty communities have to overcome these conflicts.

Institutional linkages

Linking communities with other agencies and government departments is defined as being crucial for sustainable management. The concrete linkages required between communities and intermediate level agencies are the municipality is responsible for ensuring that all citizens have access to water and local government has a statutory duty to ensure water provision.

Support Structure

Governments:

The government (local, regional and central) must change its role to support an environment in which community management can be successful. Government is responsible for creating the right infrastructure and working practices. Governments have to recognize the importance of community participation and adept legislation that support it. Creating the enabling environment for community management will need to be done in parallel with ongoing efforts to put infrastructure on the ground.

Communities can do a great deal, but without outside support most community-managed systems will at some point in time break down. It does mean is that in addition to the high percentage of management effort provided by the community, there is a crucial low percentage that must come from outside for troubleshooting, backstopping, facilitating and enabling.

Local government should monitor and supervise operation and maintenance of systems that are owned by the communities.

Community technology, management structures and financial systems should be fully in line with local government capacity, structures and administration systems.

Donors:

The donor money is mostly tied to the country of origin instead of purchasing locally manufactured goods. In that way aid money destroys local capacity and encourages dependency. Donors should not concentrate on construction only but should use parts of their funds to support the development of enabling environments to help communities manage their systems. Donors should spend funds on capacity building and support services. An implementing agency can not do much, if the institutional framework, the enabling environment is not present.

Finally, the importance for any community management model to be successfully is to separate between the function of control and the function of day-to-day management. Water committees often do not make that distinction, which will sooner or later cause conflicts especially around the control of funds and tariffs.

Policies and legislation is needed to provide opportunities for communities to play a role in water supply provision. Although the municipalities are responsible for water services, community development association can act as water service providers.

Conclusion

In conclusion it was previously stated that the paper and the international and national experiences indicated that community involvement in managing the water projects is the key and perhaps the most important key towards its success and

sustainability.

The paper presents the key elements and ingredients towards the achieving of the sustainability for such models. If a model for the community management of water system is to be constructed it should include all the fore-presented elements to be sustainable.

In many experiences the omitting of these elements resulted in neither the expending of financial resources without community satisfaction nor acceptance of the projects, without sustainability of the services. Such wasted financial spending in a world with shrinking financial capabilities will not be able to afford the repeating of such investments. Hence it should avoid repeating its mistakes.

The community management of water supplies systems approach should be highlighted as leading approach for implementing rural water supply projects, which in term will satisfy the sustainability of the services to the entire of the community. Capacity building of the community to manage water system in rural area is important and still needed more investment from the government and donors.

References

- 1- e-Mail conference 3June-12July 2002, organized by IRC International Water and Sanitation Center, WSSCC (Water Supply and Sanitation Collaborative Council), WaterAid, Plan, SKAT (Swiss Centre for Development Cooperation in Technology and Management) and WEDC (Water, Engineering and Development Centre). Facilitated by Patrick Moriarty and Ton Schouten.
- 2- MOLA and ORDEV with cooperation of UNCIEF (1996). "Progress Towards the Goals". Cairo.
- 3- USAID (1988). "Guidelines for Implementation of Village Water and Wastewater Systems in Egypt". Washington, D. C.
- 4- Water and Wastewater Institutional Support Project (WWISP) (1990). "Investment Strategies CG-5". Final Report, USAID, Cairo, May.
- 5- Arab Republic of Egypt (1995). "Establishing the Economic Public Organization for Potable Water and Wastewater in Some Governorates". Presidential Decree No. 281/1995, Public Organization for Ameria Printing, Cairo.
- 6- Arab Republic of Egypt (1975). "Local Government in the Arab Republic of Egypt, Law No. 52 of 1975". Public Organization for Ameria Printing, Cairo.
- 7- Arab Republic of Egypt (1981). "Law of Local Government". Law No. 50 of 1981, Public Organization for Ameria Printing, Cairo.
- 8- Arab Republic of Egypt (1979). "Local Government Law and Its Executive Regulations". General Secretariat for Local Government, Public Organization for Ameria Printing, Cairo.
- 9- Arab Republic of Egypt (1979). "Presidential Decree Approving Law No. 43 of 1979: Issuing the Law of Local Government". Public Organization for Ameria Printing, Cairo.
- 10- From System to Service – Scaling up Community Management Report of the conference 12-13 December 2001, The Hague, The Netherlands