

This item was submitted to Loughborough's Institutional Repository (https://dspace.lboro.ac.uk/) by the author and is made available under the following Creative Commons Licence conditions.



Attribution-NonCommercial-NoDerivs 2.5

You are free:

• to copy, distribute, display, and perform the work

Under the following conditions:



Attribution. You must attribute the work in the manner specified by the author or licensor.



Noncommercial. You may not use this work for commercial purposes.



No Derivative Works. You may not alter, transform, or build upon this work.

- For any reuse or distribution, you must make clear to others the license terms of
- Any of these conditions can be waived if you get permission from the copyright holder.

Your fair use and other rights are in no way affected by the above.

This is a human-readable summary of the Legal Code (the full license).

Disclaimer 🗖

For the full text of this licence, please go to: http://creativecommons.org/licenses/by-nc-nd/2.5/ Can the boundaries of community management be extended beyond rural areas? Lessons from Ghana

> By Steve R. Doe¹ M. Sohail Khan²

Abstract

Community management, a central part of community development, has gained wide acceptance among service intermediaries such as governmental agencies, NGOs and donor organizations mainly as a result of the failure of the top-down approach to development. Policy instruments therefore aim at a bottom-up approach in basic service delivery such as water supply and sanitation. Operationally, the extent to which community management can be inserted into development strategies has remained elusive giving rise to instances where it has produced mixed results. Vast documentation exists, though, on the success of community management in rural settings. Can the boundaries of community management be extended from rural areas to larger communities? Case studies from the water sector in Ghana support a paradigm shift for community development in larger communities? The results and the implications for community development are discussed.

Keywords: Community, management, small towns, water supply, policy, participation, ownership, development, empowerment, Third World.

Doctoral Researcher, Loughborough University, UK / 477D Spring Street, Naugatuck, CT 06770, USA (steve_doe@hotmail.com)
 Professor and Research Manager, WEDC, Loughborough University, LE 11 3TU, UK (M.Sohail@lboro.ac.uk)

Introduction

The provision of basic services to developing countries has become an important area of concern and research since the development agenda has refocused on the urban milieu. Consequently, there is significant international interest in the provision and management of affordable potable water supply and sanitation to developing countries. Despite all the efforts by governments and donor organisations, the global challenge is still enormous since over 1 billion people of the world's 6 billion still lack access to safe drinking water (WHO, 2000). It is estimated that 2.2 million people in developing countries die every year from diseases due to lack of access to safe drinking water, inadequate sanitation and poor hygiene. Rapid urbanisation coupled with rapid urban growth has placed extreme strain on governments in their efforts to provide basic services such as water supply and sanitation. This in turn has led to widespread environmental problems and raised the incidence of morbidity and mortality amongst the poor and vulnerable urban communities. Adequate management of water supplies is therefore important to health, community development and the sustainability of communities.

Water and sanitation received unprecedented global attention when the period 1981-1990 was declared the International Drinking Water and Sanitation Decade (IDWSD) as a result of the United Nations Water Conference that took place in Mar del Plata in 1977. The objective of the decade was 'universal water supply and sanitation for all by 1990'. Since then the emphasis in water supply to developing countries has shifted to decentralised, community-oriented, bottom-up approach mainly as a result of the failure

of the earlier centralised or top-down planning approach adopted by most governments (Laryea, 1994). The IDWSD was further backed at the Earth Summits in 1992 and 2002 where world leaders committed themselves to a comprehensive programme to bring water and sanitation services to hundreds of millions of people who lacked access by adopting Agenda 21. A guiding principle of Agenda 21 is: community management of services backed by measures to strengthen local institutions in implementing and sustaining water and sanitation programmes' (Evans and Appleton, 1993). This is because it is believed that only when communities are involved in decision-making will there be equitable supply of services which, derives from community empowerment (Laverack, 2001; Shortall and Shucksmith; 2001; Wegelin-Schuringa, 1998; Rifkin, 1990). Vast documentation exists on the success of community management in rural areas. However, global population trends depict rapid urbanisation and formation of larger communities. The United Nations (1999) observed that whereas in 1950, 30% of the world's population lived in urban areas, by 2000 the proportion of urban dwellers had risen to 47% and it is expected to reach 60% by 2030. What are the implications of this trend for community management? There is a knowledge gap on the boundaries or the extent to which community management could be applied to development programmes, especially in larger communities. Can the success of community management in rural areas be replicated in larger communities? The lack of knowledge to answer these questions is costly as service intermediaries continue to promote community management as an all encompassing solution to both rural and larger communities with dire consequences (Briscoe and de Ferranti, 1988; Kleemeier, 1995).

The purpose of this paper is to critically examine community management of water supplies in developing countries by the application of a model we developed and to assess its suitability for larger communities. The research for the paper draws on a review of relevant literature and concept-mapping using an analysis of case studies from Ghana by the authors. The case studies comprise a study of four communities of varying population; two rural and two small towns which have been practising community management for at least two years. The water supply systems were donor-funded so the communities have received similar training from service intermediaries.

The research methodology which forms part of one of the authors' doctoral thesis is summarised in Table 1.

Research strategy	Target	Quantity	
Semi-structured	Government / policy makers	10	
interviews	in the water sector		
Household survey	Household heads	344	
Focus group	Water and sanitation 4		
discussions	committees (watsan)		
Survey	Local private companies in	20	
	the water sector		
Observation	Water supply systems	4	
Documents reviewed		245	

Table 1: Summary of information available in research database.

The household survey can be further broken down according to the case towns as presented in Table 2.

Town	Region	Population (2002)	Number of households	No. of Household Surveys Administered (*)
Bekwai	Ashanti Region	28,000	1217	108 (9)
Savelugu	Northern	25,000	1786	120 (7)

	Region			
Tsrukpe-Tota	Volta	2,840	284	56 (20)
(rural)	Region			
Awudome-	Volta	1,700	189	60 (32)
Avenui (rural)	Region			
Total			3476	344 (10)

Table 2: Break down of household surveys in case towns.

Linkage between community development and community management

Community is a word with many meanings and uses. It is customary to view community as a place in which people live (such as a village or city), or as a population group with similar characteristics (such as rural villagers or older people), or as a concern people share in common (such as religious freedom, status or women). It is also viewed in reference to social relations characterised by personal intimacy, emotional depth, social cohesion, and continuity in time (Nisbet, 1969). Checkoway (1995) however, defines a community as a unit of solution in society and is a process through which people take initiative and act collectively. These definitions share the commonality of being about a group of people, with common interests who are capable of taking collective decision and action for their common good. According to Laverack (2001) the organizational aspects may act as a proxy measure for the social aspects of community empowerment. For instance, the existence of functional leadership supported by established organizational structures with the participation of community members who have demonstrated the ability to mobilize resources would indicate a community which already has strong social support elements for community empowerment.

^{*}Percentages of households surveyed are given in brackets.

The vehicle through which the collective action is exercised for the common good is community management. The standpoint of authors is pragmatic; conventional modes of infrastructure provision have failed countless millions of urban dwellers and community management offers the potential alternative solution (Cotton and Tayler, 1994). Wood (1994) defines community management as management through democratically elected representatives of the community. Wegelin-Schuringa (1998) considers community management as a form of community participation whilst McCommon et al. (1993) distinguished community management from community participation by stating that community management is taken to mean that the beneficiaries of the service have responsibility, authority and control over the development of such services, sustainability being the point of emphasis. All the authors have used different terminology in defining community management but conceptually they are describing the same thing: A bottom-up development approach where the community members have a say in their own development; and the community assumes control; managerial, operational and maintenance responsibility of the development scheme in question through their elected representatives for community development through empowerment.

This leads to the definition of community development. What is community development? In 1955, the United Nations (UN) defined community development, which was then the widely accepted expression of community participation as a 'process designed to create conditions of economic and social progress for the whole community with it's active participation' (Moser, 1989). The problem identified with this definition

by Abbot (1996) was that the extent to which participation can be inserted into development strategies depended on what is meant by the term and it is apparent that no clear consensus exists. Nevertheless, community development has been useful for implementing many development projects for the good of the target communities under community management. Community development is therefore operationalised through community management. The major reason for advocating community management is that the people that the projects are for should have a major say in how the scheme is constructed and managed (McCommon et. al., 1990; Wood, 1994; Mayo and Craig, 1995). The theory behind community management as such aims to empower and equip communities to own and control their own system.

Community water management in small towns in Ghana

In assessing the effectiveness of community management in larger communities, we used rural towns as the control and small towns as the experiment. Small towns are larger than rural communities but smaller than typical urban cities making them the best group of communities to use for the research.

What are small towns?

Hardoy and Satterthwaite (1986) defined rural and urban areas as those with population less than and more than 5000 respectively. They however admit to the unsatisfactory nature of such an arbitrary cut off. According to varying ecological setting and economy, different criteria are considered in identifying small towns globally but population size

seems to be the dominant criterion. Singh and Singh (1979) state that in USA, Belgium and India, settlements having inhabitants less than 10000, 30000 and 20000 respectively are referred to as small towns. This definition is at variance with the current development definition. We adopt the definition by some 350 (we were among them) water and sanitation professionals the world over during an Internet-based conference held in March 2000 (WEDC, 2000) defined small towns as:

Settlements that are sufficiently large and dense to benefit from the economies of scale offered by piped systems, but too small and dispersed to be efficiently managed by a conventional urban water utility. They require formal management arrangements, a legal basis for ownership and management, and the ability to expand to meet the growing demand for water. Small towns usually have populations between 5,000 and 50,000.

Evolution of small town water projects in Ghana

The evolution of community-managed small town water supply started in the 1990s (Gariba, 1999; Parry, 1996). The adoption of community ownership and management approach (COM) in Ghana for instance, saw the rehabilitation of 31 existing small town water supply systems operated by the public utility Ghana Water and Sewerage Corporation (GWSC) and management transferred to the communities. In support of the Ghana National Water and Sanitation Program (NWSP), the World Bank has financed the construction of 17 new piped water supply systems for community management and co-financed with the Canadian agency CIDA the rehabilitation of 20 existing systems in the northern region of Ghana under the Community Water and Sanitation Project

(CWSP). The current water utility, Ghana Water Company has also handed over 150 small town water supplies to the communities. Furthermore, other donors such as the German Technical Cooperation (GTZ), the European Union and Danida the Danish development agency are currently supporting the development of small town water supply systems in several regions of Ghana. This trend is not limited to Ghana alone. Parallel donor supported small towns water supply projects have surfaced in other developing countries such as India, Philippines, Uganda, Kenya, Mali, South Africa and Mozambique to name just a few. Community management is the rule in these projects.

The objectives of the Small Towns Water Supply projects are to assist small towns to obtain basic water supply services (protected year round supply of 20 liters per capita per day, preferably within 250 to 500m of households and serving no more than 300 persons per outlet (CWSA, 1990), while encouraging higher service levels for those that can afford it, to increase their capacity to maintain the water systems, to promote better health through improved personal hygiene and to ensure that the gender issue is addressed in such a way that both sexes are involved as decision makers and managers.

The institutional responsibilities can be divided into two broad categories: (1) District Assemblies (DA) and the town administrations would be responsible for mobilisation and long term support, and (2) Water and Sanitation Development Boards and WATSAN committees will be responsible for planning, operation and maintenance management with technical support. The government plays the role of facilitator.

A model for successful community management

Community management is not bad in itself but overextension into areas where it should not be can produce undesirable and often costly results. A paradigm for guiding the implementation of community management will therefore go a long way in helping our understanding of the factors that contribute to successful community management and thereby avoid costly decisions.

We have identified from the research (both literature and our case study) that successful community management cases have the following in common:

- 1. The communities are usually rural with small population and rudimentary occupation such as farming and/ or fishing
- 2. Communities participate in the decision making, planning and the service establishment
- There is a strong presence of social pressures (community cohesion) which is expressed in ownership of the service

From the foregoing, a model for successful community management can be specified as depicted in Figure 1 below.

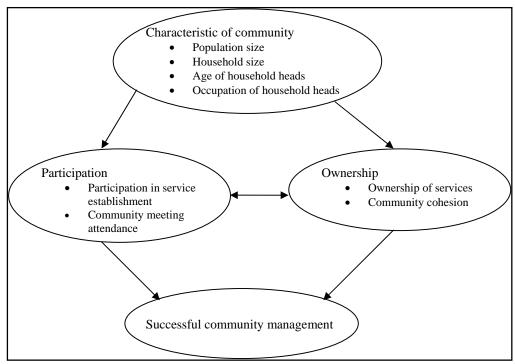


Figure 1: Components of successful community management.

Before implementing community management in communities that are not typically rural, it is pertinent to ask if the components for successful community management shown in Figure 1 can be identified.

Community characteristic, an independent variable, is an important aspect about which little is known. However, this research shows that it is important in the context of community management and development.

Participation and ownership are known to contribute to sustainability of services but the linkage between the two is poorly understood. Participation and ownership are dependent on the community characteristic. There is also some interrelation between participation and ownership. Participation generates ownership and ownership ensures participation. The model is applied to the case study in Ghana as follow.

Characteristics of community

The important community characteristics of interest to community management which were isolated by our research are:

- Population size
- Household size
- Age of household heads
- Occupation of household heads

Each of these and how they tie into successful community management are discussed below.

The case study in Ghana attempts to shed more light on some of the grey areas particularly how community size can be factored into the policies guiding community management.

The data reveals the following:

- The characteristics of small towns such as average household size, mean ages of household heads and the predominant occupation are significantly different from those of rural areas.
 - Household sizes are larger in small towns since several families live in compound houses giving rise to lack of cohesiveness within households.

- The mean age of household heads in rural communities is higher depicting more maturity and responsibility towards civic duties.
- The predominant occupation of small towns is trading which unlike farming leaves less time for communal development.
- Rural towns systems are better managed technically and financially than small towns under community management

Box 1 a case study from Guatemala supports our findings and depicts that community size does matter in the success of community water management.

Box 1: Community Associations prompt faster replication of 'people's water'.

From it's small beginnings 20 years earlier, the national NGO *Agua del Pueblo* has become a thriving model of how application of community management principles can lead to, in turn, successful projects, increased community self-sufficiency, widespread replication and a growing self esteem and job satisfaction for agency staff. Since being officially ratified by the Guatemalan Government in 1981, Agua del Pueblo has supported development of 125 water systems, benefiting more than 90,000 people in 150 rural communities. The associations themselves are able to initiate new projects and build the capacity of communities to manage them.

Source: Adapted from Evans and Appleton (1993).

The Guatemalan case above shows an average size of the communities to be 600 people which is rural.

Furthermore the case study from the Philippines in Box 2 highlights supports our findings.

Box 2: The DONA FLÁVIA Experience – a model community managed water project

Water supply and sanitation is a priority need of Barangay Doña Flavia, the most populated barangay of the municipality of San Luis in Agusan del Sur, in the Philippines. A total of 2,687 people or 429 households benefitted from increased access to safe water

supply. The province is mostly rural and the economy is based on agriculture and forestry-based activities. The community water association, Doña Flavia Water Supply and Sanitation Association which was formed during the project period, is ultimately responsible for control and management of the water supplies.

The trained municipal team, together with the PCWS-ITNF staff oversaw the process of building the community organization, taking into close consideration the empowerment of the disadvantaged groups in the communities such as women. The process included the development of knowledge, attitudes and skills of the chosen leaders so that they will have the confidence to take a lead role in ensuring the sustainable, efficient and effective operation of the water systems. This resulted in the formation of the Doña Flavia Water Supply and Sanitation Association. In fact, during the turn-over, the Dona Flavia Association would not accept the responsibility without the recognition of ownership.

Participation in decision-making between the support groups (NGOs, municipal and provincial government) and primary stakeholders (user groups), and a continual process of shared decision-making at all stages of the project cycle, is crucial. It helped develop the community's sense of responsibility for and control over the local operation, maintenance and management of the water or sanitation system.

Source: Philippine Centre for Water and Sanitation/International Training Network Foundation, Manila, Philippines, October 2001 (PCWS-ITN, 2001).

The case study in Philippines also shows that the rural nature of the communities has a positive link with the success of community management.

What then is so special about the rural nature of the communities where community management succeeds? The case study in Ghana contrasted two rural communities with two small towns in order to answer this question. What the two groups have in common is that they have all been practising community management for more than 2 years with the help of service intermediaries. The status and performance of the water supply systems in the towns and how they have been run over the past 2 years under community management provides an indication of how well community management has performed in these towns. The water supply systems in the 4 towns were compared by observing the current state of the source works, the pump house and the distribution system. The rural

towns (Avenui and Tota) were found to be in better condition than the small towns of Bekwai and Savelugu which were bigger. Furthermore, using profit margin as a proxy for managerial efficiency showed that the smaller communities were better managed than the larger communities under community management. What differences in characteristics exist between the two groups of communities?

The distribution of household sizes shows that, household sizes i.e. the number of people living in a particular house, is smaller in the rural towns of Avenui and Tota than the small towns of Savelugu and Bekwai. For instance the average household sizes of Avenui and Tota are 9 and 10 people, respectively compared to 14 and 23 for Savelugu and Bekwai, respectively. A chi-square test shows that the differences between the two groups are significant. Households in rural towns consist of single-families whilst those in the small towns consist of 2 or more families living in one compound house. Households in rural towns are therefore more homogenous and this fosters cohesion which is translated into participation at the community level which supports community management and development. This is absent in larger communities.

The mean ages for the rural towns of Avenui and Tota are 51 and 55 years, respectively. These are statistically significantly greater than the mean ages in Savelugu and Bekwai, the small towns of 43 and 45, respectively. The community members in the small towns (Bekwai and Savelugu) can therefore be said to be relatively younger. This can be explained by the fact that due to rural-urban migration, the younger people move to the cities and the transition towns such as small towns leaving the older people in the rural

towns. The mature care more for communal development whilst the younger people in the small towns are more interested in personal development. The result is that community management is made successful in the rural areas because it depends on communal work and commitment.

Respondents in case study towns fell into two main categories of workers, namely, farmers and traders. Avenui and Tota have farmers predominating all other professions (53 and 71 per cents, respectively). Savelugu has farmers and traders dominating with 47 and 33 per cents, respectively. The respondents in Bekwai are predominantly traders (56% of all workers). Other professions even though covered such as teaching and office jobs are not distinguishing characteristics as to whether a town is rural or a small town. This is because one can expect to find them in relatively insignificant amounts in all communities in Ghana. However, trading and farming by their dominance are distinguishing characteristic of the settlement type. The proportion of farmers in the town decreases as the town size increases. It can also be seen that the proportion of traders increases as the town size increases. It can be concluded that the younger people in small towns engage in occupation such as trading with its higher commercial realization compared to the older people in the rural communities who engage predominantly in farming. Furthermore, farming communities have communal days (taboo days) set aside for communal work such water supply projects. Rural communities therefore have more time and are more organized for community development which translate into participation and ownership and ultimately lead to successful community management.

Participation in the decision making, planning and the service establishment

The terms 'participation' or 'participatory development' are sometimes ambiguously used. They are used to describe quite different forms and intensities of involvement – from asking the target group to participate in certain activities with their labour, time and money; to informing the target group of decisions made by outsiders on their situation; to extracting information from them without giving them a say in decision – making; to finally basically leaving everything to the target group with a minimum of external involvement apart from maybe the provision of funds. The definition can take on radically different forms, on a continuum from spontaneous to coerced, or from active to passive (Khan and Stewart, 1994).

The Danish Development Agency has an apt definition:

Participation is a process, through which stakeholders influence and share control over project initiatives and the decisions and resources, which affect them (Danced, 1998).

Aryeetey (1996) is of the opinion that in the discussion of the concept of participation, it is often a question of attitude towards the stakeholders and the tasks to be carried out than a question of tools and techniques. It must however be noted that both attitude and tools are needed in a participatory process. Many of the issues that complicate the practice of community participation can be linked to a certain degree of ambiguity in the conception and expectations held by development workers as well as the communities involved.

Typically there are many pressures that influence the way in which participatory approaches should be approached. It is often not clear whether moral, theoretical or practical concerns should be the main driving force behind the practice of community participation.

When participation was mentioned in the 1970s in relation to water supply, it was in response to the errors found in previous development assistance projects. The old strategies (top-down) failed because they never included participation (Knudsen and Tidemand, 1989; Bossuyt and Laporte, 1995). Furthermore, economic growth had made poor people poorer, and thus participation was the means to change this development (Lund, 1997). Participation must however not be employed for its sake. It must have as its end goal empowerment because as Laverack (2001) puts it "empowerment has the objective to bring about social and political change" but participation alone in itself may not.

In Figure 1 and the case study described in Box 2, it is clear that one of the underlying factors that contribute to the success of community management is participation by the locals or the communities in the development projects themselves. Participation in the service establishment and attendance at meetings are used as proxies in the Ghana case study to determine the level of participation of the target group. The underlying premise is that for community management to work, the target group or community must be involved in the planning, decision-making and contribution of money/labour. If nothing at all, this process serves the useful purpose of bringing the people together to think about

their own development. A Chi-square test showed that, the proportion of community members participating in decision making and planning for the small towns (Avenui and Bekwai) shows a significant difference at a confidence interval of 95%.

Furthermore, in order for community management to be sustainable after the projects that established them have ceased, community members must take an active part in issues concerning the water supply (Rifkin, 1990). The most obvious proxy to use is attendance at water supply meetings where issues related to operation and maintenance are discussed and appropriate actions taken. The results of a Chi-square test performed on both control towns rural towns (Avenui and Tota) compared to the small towns of Bekwai and Savelugu show significant differences between rural and small towns. A positive relationship can therefore be said to exist between the success of community management and participation by the target group.

Strong sense of ownership and presence of social pressures

Many authors have blamed the failure of community management to deliver on a lack of feeling of ownership on the part of the community (Cotton and Tayler, 1994; Knudsen and Tidemand, 1989; Bossuyt and Laporte, 1995; Niedrum, 1994). What is ownership and to what extent does a sense of ownership influence the success of community management?

Management institutions (e.g. community management) are property rights regimes which exist within a particular social context, reflecting the different understandings of human resource interrellationships, different cognitive realities of different social groups (Usher 1983; MacPherson 1989; Bromley 1991). It has been said that 'the difference between Indians and Europeans was not that one had property and the other had none; rather that, it was that they loved property differently (Cronon, 1983). However differences in values and understandings, the way property is 'loved' and used are found within and between other social groups as well (Ebbin, 1998). An example is perhaps how people in a typical rural area in Sub-Saharan Africa regard property such as their water supply system. This is recognized by service intermediaries, therefore, ownership has come to form a central aspect of community management implementation. Amosa (1995) and Bennet et. al., (1996) therefore stress that ownership in very important to sustainability within the context of community management.

In the case study in Ghana, respondents were asked who they think owned the water supply systems in their respective towns. Chi-square tests showed no differences between the responses from the two rural towns. However differences are statistically significant between rural and small towns. Psychological sense of ownership is therefore higher in the rural towns showing a positive relationship between sense of ownership and the success of community management.

Conclusion - Implications for community development

The aim of the paper is to investigate if the boundaries of community management can be extended beyond rural communities to larger communities such as small towns.

Consequently, we have proposed a planning model for successful community management and established that community characteristic is important for the success of community management and that the probability of success decreases with increase in the size of the community. Whilst this research has not made any attempt to determine the population cut off point for the practice of community management, it can be concluded that the boundaries of community management becomes overtly problematic as one seeks to extend the boundary from rural to larger communities of population in the tens of thousands without first changing the underlying characteristics of the communities.

However this is a difficult task as pointed out by Mazmanian and Sabatier (1983) who believe that the probability of implementation failure increases with the amount of behavioural modification required to achieve statutory objectives and that this amount is a function of both number of people in the target group and the degree of change required of them.

The implications of these findings for community development are manifested in several ways:

The significant differences between the demographic and socio-economic
characteristics of small towns and rural towns implies that community
management for larger communities especially with population in the tens of
thousands should not be the rule but the exception in mapping community
development strategies.

- Governments must clarify the roles of various actors and investigate other options
 of community development as priority areas for larger communities.
- Studying the characteristics of the target population should form a vital part of any policy formation and implementation for service delivery and empowerment.
- The interfaces at which different stakeholders physically interact are critical to
 promoting wider participation for community development. Studies that identify
 the constraints to establishing and maintaining the user-implementer relations will
 provide valuable lessons.

Acknowledgement

Funds for the fieldwork were made available under a DFID Kar project for which we are grateful.

References

- Abbott, John, 1996: Sharing the city: Community participation in urban management, London: Earthscan.
- Amosa, E.P., 1995: Motivation and mobilisation for sustainability,
 Sustainability of water and sanitation systems, Proceedings 21st WEDC
 Conference, Kampala, Uganda, 1994, pp. 38-39
- 3. Aryeetey, E. B., 1996: Transfer of ownership in participatory community development: working out the strategies in Ghana, DPPC New Series Discussion Papers: no. 68. University of Bradford Series.

- Bennett, L.; M. Goldberg, M & P. Hunte, P,: 1996 Ownership and
 Sustainability: Lessons on Group-based Financial Services from South
 Asia. Journal of International Development: Policy, Economics and
 International Relat: 8: 2, pp.271-288.
- Boadu, F.O., 1994: Policy on private water sales in rural Ghana, Journal
 of Water Resources Planning and Management [J. WATER RESOUR.
 PLANN. MANAGE.], vol. 120, no. 6, pp. 944-961.
- Bossuyt; J & Laporte, G., 1995: Combining Ownership and Accountability in Technical Cooperation, International Journal Of Technical Cooperation: 1:1, pp.107-116.
- 7. Briscoe, John and Ferranti, David (1988) *Water for rural communities:*Helping people help themselves. Washington, DC: World Bank.
- 8. Bromley, Daniel, 1991. Environment and Economy Property Rights and Public Policy, Basil and Blackwell Ltd, p247.
- 9. Checkoway, B, 1995: *Six strategies of Community Change*, Community Development Journal, 1995, 30, 1, January, 2-20.
- Cotton, A. P. and Tayler, W. K., 1994: Community management of urban infrastructure in developing countries, Proceedings of the Institution of Civil Engineers, Municipal Engineer, v 103, 4, (Dec 1994), p 215-224
- Cronon William, 1983. Changes in the land: Indians, Colonists and the Ecology of New England. Hill and Wang.

- 12. CWSA (1990) Policies And Guidelines For The Small Town Water Supply

 Component of the CWSP of the Ghana Water and Sewerage Corporation,

 Community Water and Sanitation Agency (CWSA), Ghana.
- 13. Danced, 1998: Participation in Environmental Assistance; A reference Note, Preliminary Version, Danced, Danish Ministry of Foreign Affairs, Denmark.
- 14. Drucker P F, 1969: The Age of Discontinuity (New York: Harper & Row).
- 15. Ebbin, S, 1998: Emerging Cooperative Institutions for Fisheries
 Management Equity and Empowerment of indidenous peoples of
 Washington and Alaska, A Doctoral Dissertation, Yale University
 Graduate School, USA.
- 16. Evans, P and Appleton, B.,(eds), 1993: Community management today: the role of communities in the management of improved water supply systems, The Hague, Netherlands:IRC International Water and Sanitation Centre.
- 17. Gariba, Sulley (1999): Small Town Water Supply in Ghana Insights and Challenges, The World Bank: Washington, D.C.
- 18. Hardoy, J.E. and Satterthwaite, D.,1986: Small and intermediate urban centres: their role in regional and national development in the Third World, London: Hodder and Stoughton in association with the International Institute for Environment and Development.

- 19. Khan, N & Stewart, E, 1994: *Institution building and development in women's organizations: participation*, ownership and autonomy. Journal Of Social Studies: 63, pp.53-82
- 20. Kleemeier Lizz, 1995: From Supply-driven to Demand-driven of Rural Drinking Water-A Tanzanian case study of the arguments of a transition, Center for Development Research Working Paper, Denmark.
- 21. Knudsen, H and Tidemand, P., 1989: *Debatten om folkelig deltagelse. Den nye verden* 22:3. Copenhagen.
- 22. Laryea, N.O., 1994: Challenges and prospects of community management in Ghana, Affordable Water Supply and Sanitation. Proceedings 20th WEDC Conference, Colombo, Sri Lanka, 1994, pp. 44-45.
- 23. Laverack, Glen, 2001: An Identification and Interpretation of the organizational aspects of community empowerment, Community Development Journal, Vol. 36, No. 2, April 2001, pp134-145.
- 24. Lund, S., 1997: Participation? A question of praxis. A Ph.D dissertation.
 Institute of Geography and Development Studies. Roskilde University,
 Denmark.
- MacPherson, CB. 1989: *The Meaning of Property* in 'Property' CB MacPherson (ed.) University of Toronto Press 1-13.
- 26. Mayo, Marjorie and Craig, Gary, (eds) 1995: Community Empowerment, London: Zed Books.
- 27. Mazmanian, DA and Sabatier PA, 1983: Implementation and Public Policy, Glenview, II./London: Scott, Foresman and Company.

- 28. McCommon, Carolyn, Warner, Dennis and Yohalem, David, 1990: Community management of rural water supply and sanitation services ,Washington, D.C.:The International Bank for Reconstruction and Development/The World Bank.
- 29. Moser, C.O.N, 1989: Community participation in urban projects in the third world, Progress in Planning vol 32, part 2, p81.
- 30. Niedrum, S., 1994: *Community management lessons from Rwanda*,
 Affordable Water Supply and Sanitation. Proceedings 20th WEDC
 Conference, Colombo, Sri Lanka, 1994, pp. 52-54
- 31. Nisbet, R., 1969: *The Quest for Community*, New York: Oxford University Press.
- 32. Parry, John, 1996: *Community management of small town water supplies*,
 Reaching the Unreached: Challenges for the 21st Century, Proceedings
 22nd WEDC Conference, New Delhi, India, 1996, pp. 103-105
- 33. PCWS-ITN, 2001: The DONA FLÁVIA Experience- A case study on a community managed water project, Philippine Centre for Water and Sanitation/International Training Network Foundation, Manila, Philippines, October 2001
- 34. Rifkin, S.B, 1990: Community participation in childhood health/family planning programmes, World Health Organisation, Geneva, Switzerland.
- 35. Shortall, S and Schucksmith, M, 2001: Rural development in practice;
 Issues arising in Scotland and Northern Ireland, Community Development
 Journal, Vol. 36, No. 2, April 2001, pp122-133.

- 36. Simpsons J.A and Weiner, S.C., 1989: The Oxford English Dictionary, 2nd edition, vol. XI, Oxford: Clerendon Press.
- 37. Singh, R.L. and Sing, R.P.B., (eds) 1979: Place of small towns in India (Conference) 1977,: Proceedings of the Seminar, National Geographical Society of India.
- 38. United Nations, 2001: *Population, Environment and Development,*Department of Economic and Social Affairs, Population Division. New York: United Nations.
- 39. Usser, Peter. 1983. Property Rights: The Basis of Wildlife Management in 'National and regional Interest in the North, Third national Workshop on People, Resources, and the Environment North of 60 degrees, Canadian Arctic Resources, Committee, p389 –415.
- 40. WEDC, 2000: *Internet Conference on Small Towns*, WEDC, Loughborough University, UK.
- 41. Wegelin-Schuringa, Madeleen (1998) *Community Management Models* for Small Scale Water Supply Systems (Paper for discussion in workshop on Public-private partnerships in service provision for community managed water supply schemes held in Kakamega, Kenya 7-10 December 1998) IRC International Water and Sanitation Centre, Netherlands.
- 42. Wood, M., 1994: Community management of rural water supplies, Waterlines, vol. 12, no. 3, pp. 6-9, 1994