

# Local financing mechanisms for water supply

Background report for WELL Briefing Note 16  
by Maxwell Agbenorheri and Catarina Fonesca (WELL  
planned work)

**WELL**  
RESOURCE CENTRE  
NETWORK FOR  
WATER, SANITATION AND  
ENVIRONMENTAL HEALTH

Water, Engineering and Development Centre  
Loughborough University  
Leicestershire  
LE11 3TU UK  
WELL@lboro.ac.uk

London School of Hygiene & Tropical Medicine  
Keppel Street  
London  
WC1E 7HT  
WELL@lshtm.ac.uk

IRC International Water and Sanitation Centre  
P.O. Box 2869  
2601 CW  
Delft  
The Netherlands  
WELL@irc.nl

[www.lboro.ac.uk/WELL](http://www.lboro.ac.uk/WELL)

© WEDC/LSHTM/IRC, 2005

Agbenorheri, M. and Fonesca, C. (2005) *Local financing mechanisms for water supply and sanitation investments*

WELL.

Contents amendment record

This report has been issued and amended as follows:

Revision	Description	Date	Signed
1	Final draft	Date	QA name

Designed and produced at [WEDC/LSHTM/IRC](#)

Task Management by [Julie Fisher](#)

Quality Assurance by Andy Cotton

**Table of contents**

- Table of contents ..... i
- List of tables..... i
- List of figures ..... i
- 1. Purpose of the paper ..... 1**
- 2. Local financing mechanisms for water and sanitation in Ghana..... 2**
  - 2.1 Mobilisation of funds under the national strategy ..... 2
  - 2.2 Microfinance in Ghana ..... 2
  - 2.3 Informal financing mechanisms to install and repair rural water systems in the Upper East Region of Ghana..... 3
  - 2.4 Pooled resources and revolving funds for water and sanitation: an example from Ghana5
  - 2.5 Summary of credit, organisational and operational features of the AWSDBs and the Susu groups..... 7
  - 2.6 Main constraints ..... 8
  - 2.7 Future Opportunities..... 9
- 3. Other examples of local financing mechanisms for water and sanitation..... 10**
  - 3.1 Stimulating investors through a Rural Infrastructure Fund in peri-urban Cambodia ..... 10
  - 3.2 Graduated taxes for water supply in rural Uganda ..... 10
  - 3.3 NGO as intermediary between poor households and water company in peri-urban Cote d'Ivoire ..... 11
  - 3.4 Self help groups as rural bankers in Kerala, India ..... 12
- 4. Key elements for an enabling environment to increase flows of local finance..... 13**
- 5. Key findings ..... 14**
- 6. References..... 15**

**List of tables**

- Table 1. Fund mobilization by Susu scheme ..... 4
- Table 2. Levels of Reserve Fund and Interest Rates..... 5
- Table 3. Credit characteristics ..... 7
- Table 4. Organisational and operational features ..... 7

**List of figures**

- Figure 1. Ability of community to fund O&M through loans granted the women ..... 4

Figure 2. Amounts of loans to Boards.(Interbank official exchange rate of the local currency  
¢(cedi) to the dollar was ¢9000 to 1\$ in June 2004) .....6

Figure 3. Financial structure of the MIREP project, put in place by GRET ..... 10

## 1. Purpose of the paper

This paper supports the delivery of pro-poor water and sanitation interventions through viable, innovative financing mechanisms and strategies to promote these at regional and local level. Many of the increasingly popular micro-finance products are targeted towards income-generating activities rather than water and sanitation which is usually not perceived to be sufficiently attractive by micro finance organisations. However, there are a growing number of experiences with different financing mechanisms that can contribute to a sustainable and pro-poor water and sanitation service delivery. Micro-credit, schemes that provide small loans or grants based on revolving funds and social and development funds are all more widely available to local stakeholders.

It is recognized that an increase in local investments or revenues will only happen within an appropriate “enabling environment”. Incentives and a regulatory framework are needed for innovative financing mechanisms to flourish. The capacities of implementing and management agencies are then crucial for enforcing regulatory mechanisms and promoting leverage of finance with different stakeholders.

For water and sanitation activities, there is much anecdotal evidence of local finance mechanisms promoted by NGOs and micro credit organizations and, more rarely through local government bodies. The purpose of this paper is to contribute to a knowledge base of financing mechanisms for water and sanitation with a detailed example from Ghana and with shorter examples from Kerala (India), Côte d’Ivoire, Uganda and Cambodia<sup>1</sup>. These examples illustrate diverse local financing mechanisms for both rural and peri-urban areas.

In this paper we have tried to contribute to the following questions:

- *Which financing mechanisms at local level contribute to scaling-up coverage and maintenance of domestic water and sanitation services to the poorest?*
- *What are the key elements of an enabling environment to increase flows of locally managed finance?*

---

<sup>1</sup> These experiences have been shared during a workshop organised by Crepa (Burkina Faso), NGO Forum for Drinking Water Supply and Sanitation (Bangladesh) and IRC (the Netherlands) at the WEDC Conference in Vientiane, Laos in 2004, with the support of the WELL Programme.

## **2. Local financing mechanisms for water and sanitation in Ghana**

### **2.1 Mobilisation of funds under the national strategy**

Prior to the 1990s, the water and sanitation sector in Ghana was under public sector management. Under the stress of both a rapid increase in population growth rate and declining economic performance, infrastructure provision had lagged behind demand. Responding to the deterioration in the sector's performance, government implemented a series of reform measures. These combined decentralization with a deregulation of operations. Key elements in the reform process included organizational restructuring, more private sector involvement and promoting community management. Current developments in the water and sanitation sector in Ghana are still being driven by this new policy orientation.

The implementation of the new sector strategy, under which communities now shoulder the full cost of operation and maintenance, has generated problems in places where the poorest and the most vulnerable are unable to pay water charges. Government's intervention has been necessary in poor communities with cases of guinea worm and burullu ulcer. Similarly, some District Authorities have had to subsidise a proportion of the community's contribution when confronted with the inability of communities to mobilize the funds. Situations such as these reflect the fact that the national strategy lacks a pro-poor focus.

The blanket approach to raise funds reflects short-term problem solving approaches, which are inadequate to meet the financial requirements of expanding water and sanitation to the unserved population in Ghana and for improving the efficiency and effectiveness of existing infrastructure through replacements and repairs. In addition, the initial enthusiasm generated by community management for O&M activities wanes with the passage of time. The greatest challenge is how to increase the level of investments at the community level and how to sustain the level of financing on a continuous basis. It was for these reasons and others including uncertainties about the level of financial flows from the domestic public budget, international sources and private sector that Winpenny (2003) suggested the use of locally managed financing systems such as micro finance. It is also important to note the global interest microfinance has generated and its supposed potential in enabling the majority of the poor to move out of poverty on a permanent basis.

### **2.2 Microfinance in Ghana**

Microfinance is the application of innovative methodologies (Byam, quoted in Steel and Andah, 2003) that provide access to lump sums and/or for saving small amounts of money by beneficiaries who are excluded from formal sector financial institutions because of their low asset level, subsistence-level activities and the high costs involved in lending. Key characteristics of microfinance institutions are that they are local level operations that rely upon social and 'solidarity' economy principles in order to enhance the mobilization of financial resources. The operating environments of microfinance institutions match with low-income economic activities and service providers in the rural or urban communities where opportunities for generating high incomes are minimal.

Overall, the microfinance sector in Ghana is relatively undeveloped. Microfinance has only been utilized informally in the country though may still be more important than formal finance (Aryeetey and Gockel, 1991). Recently, economic reform and financial liberalization policies implemented to stabilize the economy and achieve growth have led to series of dynamic developments in the sector. The adoption of legislation and a flexible regulatory approach (Gallardo, 2002) in tandem with the development of the market, have opened up possibilities for new types of institutions. Unlike other countries, Ghana's microfinance sector has a tiered regulatory structure yielding a wide range of institutions and products with the potential for substantial outreach to the poor.

There is a general lack of information on microfinance involvement in water and sanitation in the country. This is not surprising as microfinance activities are in their early stages. The two main models of microfinance involvement in the provision of water and sanitation in Ghana have centered around the pooled resources/revolving funds of the Association of Water Boards and the community rotating savings and credit associations (ROSCAS) in the north of the country, locally known as Susu groups.

### **2.3 Informal financing mechanisms to install and repair rural water systems in the Upper East Region of Ghana<sup>2</sup>**

The women of Zorkor- Kanga in the deprived Bongo district of the Upper East Region of Ghana have successfully developed a Susu scheme, an indigenous financial model to pool resources to establish and maintain their water systems.

The Susu methodology is noted for its outstanding efficiency, a feature that (Seibel, 2000) states may be beyond the possibilities of even the most advanced modern bank. The traditional methodology, which has several variants in other African and Asian countries, consists of the collection of agreed (fixed) sums of money from a number of people at regular intervals. These are then paid out as a loan for one person at a time, repeating the procedure over time until each member is served. The evolution of the concept has seen formal Micro Finance Institutions (MFI) crafting various adaptations to this methodology to satisfy the different socio- economic features of their clients in the delivery of services (CHORD, 2000).

The microfinance (Susu) scheme, is being used for maintaining and operating the water handpumps in the area, involving about 140 homes with a population of 400 women. The microfinance scheme started with the women initially mobilizing funds by from the revenues of selling water. This fund was augmented by other sources of income generated from undertaking other productive ventures.

Mobilization of funds started in 1999 with the payment of ₵2000 by landlords ₵1000 by the women. The level of contributions payable per landlord was increased to ₵4000 and ₵2000 per woman in the year 2000 and since then to ₵8000 and ₵4000 per landlord and woman respectively. Substantial incomes derived from productive ventures such as land preparation, planting, harvesting, housing construction and monthly dues were used to build the fund.

With this arrangement, beneficiary groups have joint collateral responsibility to pay back the loan with the interest at the end of the agreed period. Thus to qualify for the loan, one has to belong to both to the community and also participate actively in other group income earning activity. Flexible arrangements, which tie repayments to harvest periods, are instituted to ensure that very poor members in the community are able to fulfil their debt obligations over time through payments in instalments. Interests charged on the loans constitute profits earned from the credit scheme. The plough back of these profits into the Susu fund, the water levies and other income sources, sustains the scheme which in turn assists the community in the operations and management of water facilities.

When delays in the payment of water levies threaten the accumulation of funds, severe measures are taken using collectors at the various section of the community to collect monies from defaulters at the service points. These measures are considered severe as refusal to honour debt

---

<sup>2</sup> This example will be published in the Waterlines edition of October 2005 which focus on "Financing Water", so I wonder if we put it here in full or we mention in the Briefing Note that the article has been published in Waterlines?

obligations implies inability to enjoy water services provided by the community. Table 1 illustrates the volume of funds mobilized since 2000, which has been increasing over the years.

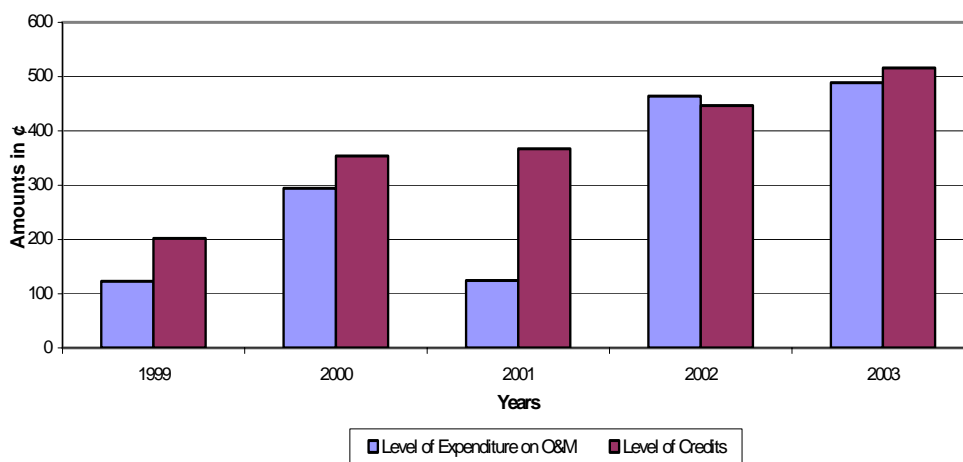
**Table 1. Fund mobilization by Susu scheme**

	2000	2001	2002	2003	2004*
<b>Susu Fund (¢)</b>	324,750	647,750	490,623	910,620	1,016,600

\*Amount collected till June

The amounts used for O&M and the amount of loans granted to the women have been rising since the scheme started. Figure 1 shows increasing levels of O&M as loans extended to the women also went up. O&M costs have tended to rise with increasing inflationary trends. Costs of operations and maintenance include prices of spare parts and travel costs to procure mechanics in the city. Prices of spares and travel costs respond significantly to inflationary rates. In the year 2000, the rate of inflation, which was as high as 45%, was drastically reduced to 21% in 2001. This reduction may have had very favourable impact on the prices of spares as they could be obtained at relatively low prices. Again, low inflationary rates meant that the increases in transport fares were minimal. As a result, O&M is bound to be quite moderate. Inflation was on the rise in 2002, causing O&M costs to outstrip loans granted.

**Figure 1. Ability of community to fund O&M through loans granted the women**



The amount of ¢1,016,000 mobilized by mid 2004 is equivalent to US\$112. Though this figure appears quite insignificant, it represents huge savings by a community which is one of the poorest in the country. 40% of the country’s population lives on under US\$1 a day. Mobilization of such amounts has helped the community to keep its water systems running through all year round. The maximum and minimum loan sizes are ¢25,000 and ¢15,000 respectively. The interest rate charged is ¢1000 irrespective of loan size borrowed. This practice is to entice more women to borrow higher amounts to undertake productive ventures. Another crucial factor in fixing a low interest rate is the serious incidence of poverty in the area. High interest rates charges on loans are likely to push people further into poverty in case of default. 100% loan repayments are recorded with each loan cycle to date.



## 2.4 Pooled resources and revolving funds for water and sanitation: an example from Ghana

The Association of Water and Sanitation Development Boards (AWSDBs) was established in 1995 during a CIDA-funded rehabilitation project for 14 priority communities. The AWSDB is located in Tamale, the Capital of the Northern Region and a central convergence point for the three northern regions of the country. These three administrative regions are relatively poor according to national statistics.

To collect the minimum 6 months dollar deposit requirement for O&M, which represents 5% of capital costs demanded by the CIDA project, the 14 communities formed a private association with a dollar account, into which payments were made till the required amounts were collected and transferred to the watsan sector agency (CWSA). Accumulation of funds grew with the second project phase during which 22 more communities in the three northern regions joined. The fund assisted the communities to pay the share of capital cost up front required by the project.

A key strategy used by the AWSDBs for the mobilization of deposits was the establishment of a reserve fund. The main purpose of the reserve fund was to build a large capital base for member boards in each district for their watsan activities. Build up of funds were to be realized through investment of accumulated capital in the reserves in short-term liquidity deposits that yielded high returns. Short-term investment instruments (treasury bills) contributed significantly to large accumulation of reserves as interest rates were high for several years. Table 2 illustrates the level of interest rates and funds mobilized each year for the past seven years. This is in view of the huge financial outlays required in water and sanitation either for rehabilitation and/or expansion of coverage. The minimum amount that member board can invest is **¢100,000** in the form of purchases of unit trusts. The annual subscription fees is **¢20,000**.

**Table 2. Levels of Reserve Fund and Interest Rates**

	1998	1999	2000	2001	2002	2003	2004*
Reserve Fund (¢ millions)	765.1	940.5	678.1	759.6	810	812	800
Av. Interest Rate (%)	21	36	39	36	24	28	16.5

\* Figures as of March

Through the reserve fund, the AWSDBs have become a depository of the surplus funds of member boards. In addition to the purchase of shares, member boards make annual contributions into the reserve account. Other sources of funds for the reserve fund are donations received from individuals and external support agencies. A disbursement and investment committee made up of 5 representatives of the member boards assisted by an investment advisor and chaired by the Executive Secretary of the Association has the responsibility to manage the reserve fund. The overall operations of the AWSDBs are managed by a 18 member Council elected from the member boards to serve for every two years.

Credit provision to the member water boards started in 2001 and so far monies have been disbursed to 20 water boards for major replacement works and to facilitate the 5% community contribution to those communities that could not pay it. No interest rates were charged on loans granted boards until 1994. To cope with rising costs of administration of the AWSDBs, it was agreed at general meeting to charge rates comparable to ones on the financial market.

The processes used in delivering credit comprise a mixture of formal and informal methodologies. Formal pre-screening techniques employed by the umbrella association require member boards to have their application routed through and approved by the governmental District Assembly, which as the supervisory body in each district, is in the position to know the financial situation and needs of the board. Another requirement for the loan application is that the District Assembly issues a guarantee that formally gives its obligation to settle the board’s indebtedness in case of default of loan repayments. The various amounts of loans granted by the Association since 2001 are shown in figure 2.

**Figure 2. Amounts of loans to Boards.(Interbank official exchange rate of the local currency ¢(cedi) to the dollar was ¢9000 to 1\$ in June 2004)**

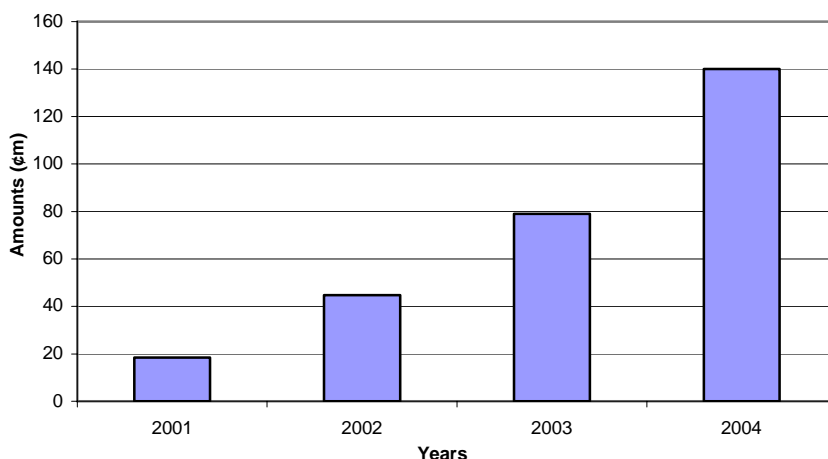


Figure 2 shows an increasing trend in the amounts of monies granted each year as loans to client member boards for major repairs, expansion and payment of community contributions. Additionally, the AWSDBs has granted loans to several boards of ¢50m (6.000\$) for purchases of chemicals for treatment of water. Loan sizes have varied from a low level of ¢2m (220\$) to an amount as high as ¢50m (6.000\$). Amounts accessed have been influenced partly by the value of shares purchased by the respective board, the extent of rehabilitation and expansion to be undertaken and also in part by funds available to the board at a particular time. The average loan size is ¢14m (1.555\$).

As noted above, the loans contracted by the water boards are guaranteed by the district authority under whose jurisdiction the board operates. This is to ensure that in the case of default, the Assembly takes up the debt. To ensure that the Association operates profitably, it began this year to charge commercial rates on loans contracted by member boards. Additional measure includes steps to levy the same rate of interest on all other (previous) unpaid loans by the end of June. So far, the rate at which loans have been recovered is low (32%). This issue affects both the level of the reserve fund instituted as means of raising funds from the formal financial institutions and the potential of the AWSDBs to earn income to support its operations. Continuous withdrawal of funds by the water boards is causing a fall in the level of the reserves available for investment purposes and for meeting the operational expenses of the Association. A related impact is that, with low investment levels arising from falling reserve levels, returns from investments also affect the capital base of the Association and its ability to support member boards.

## 2.5 Summary of credit, organisational and operational features of the AWSDBs and the Susu groups

Tables 3 and 4 show the credit, organizational and operational features of the AWSDBs and the Susu groups.

**Table 3. Credit characteristics**

	<b>AWSDBs</b>	<b>Susu Groups</b>
Income source		
Loan use	Major rehabilitation & expansion of water systems	Economic activities: craft industry and agriculture Contributions to O&M of rural water systems
Maximum loan	Depends on share value	¢25,000 (3.000\$)
Interest rate	Market rate	Minimal flat rate
Repayment	32%	100%

**Table 4. Organisational and operational features**

	<b>AWSDBs</b>	<b>Susu Groups</b>
Organisational characteristics	Credit union	Roscas
Clientele/ target group	Water & sanitation board	Pump community
Financing	Members savings	Water revenue & incomes
Product features	Medium size loan & savings product	Small size loan
Conditions for membership	Member of savings & credit association	Member of pump community & economic group
<b>Business Strategy</b>	<b>Group review</b>	<b>Group review</b>
<b>Guarantees (collateral)</b>	<b>District Authority</b>	<b>Solidarity</b>

Some key factors that seem to promote the success of the local financing mechanisms include:

- AWSDBs were donor initiated;
- The strong involvement and participation of members in decision making of both the umbrella AWSDBs and Susu groups which have ensured continuous provision of microfinance services by enabling the AWSDBs/Susu to understand and respond to client needs and aspirations;
- The narrow (single) and specialized products and service offered, which facilitate efficient and low cost operations through reduction in transaction costs;
- Few, simplified procedures and routines;
- Flexible payment systems that encourage high repayments rate in the Susu groups;
- Timely repayment of tariffs and loans by women who are strongly involved in watsan activities;

- Professional expertise in microfinance on the AWSDBs;
- High mobilization of funds by both mechanisms;
- Flexible legal and regulatory regime has fostered the growth of informal financial institutions.

## **2.6 Main constraints**

### ***Slow pace of adaptation***

From an institutional development perspective, the greatest challenge to the AWSDBs has been the ability to adapt quickly and innovate to the many changes taking place with the decentralization processes. For instance, the move away from the traditional social welfare credit union approach and the drive towards financial self-sustainability began only seriously this year, with the introduction of new institutional policies such as beginning to charge interest rates and setting time limits for repayment of loans granted to member boards.

### ***Slow recovery of loans***

So far the rate at which loans have been recovered is slow. This issue is affecting both the level of the reserve fund instituted as means of raising funds from the formal financial institutions and the potential of the AWSDBs to earn income to support its operations.

### ***Lack of Autonomy***

Progress towards accumulation of financial resources by the small town water and sanitation boards and hence the deposit mobilization by AWSDBs could be considerably enhanced with payment of water tariffs by public sector institutions in the districts. These institutions owe significant sums of debt. This difficulty of the water boards reflects the lack of autonomy in the operations of water authorities. Such a situation creates the opportunity for unnecessary political interference with threats of removal from office of those perceived as too independent. Lack of autonomy can be related to the legal ownership of the boards. Under the current structure, the boards are owned by the District Authorities and members are chosen from the communities.

### ***Low planning and management skills***

Other constraints, which indirectly hamper the effectiveness of the AWSDBs include inadequate planning and management skills. Low competency in setting tariffs to cover capital and replacement costs, connection and reconnection fees and penalties for non-payment of bills are causing low revenue collection. This situation is compounded by technical inefficiencies in operations, which result in unsatisfactory delivery of services to customers and unaccountable losses as a consequence of water losses and non metered water outlets. On account of dissatisfaction with services, customers lose the incentive to fulfil the debt obligations to the boards.

### ***Macroeconomic instability***

High inflation, rapid depreciation of the exchange rates and declining rates on earnings from investment instruments such as treasury bills following difficulties in the macroeconomic environment, have contributed to the rising costs of operations of both the boards and the AWSDBs and declining earnings.

### ***Rising levels of poverty***

Capacity of consumers to meet the high costs of water services has been affected by increasing levels of poverty especially in the rural regions where income generation opportunities are few and the major means of sustenance is subsistence crop farming. This set of economic problems is also hindering the transformation of indigenous financial systems such as the Susu scheme being

operated by the pump community in Zorkor- Kanga into a medium scale viable microfinance institution.

## **2.7 Future Opportunities**

### ***Rapid development of microfinance***

The pace of development of the microfinance sector in Ghana is rapidly growing with many new institutions emerging to serve the needs of an increasing number of people with a range of client-responsive products. These developments have been fostered by an enabling policy environment resulting from economic reforms, liberalization of the financial sector and flexible regulatory regime adopted by the Bank of Ghana which have encouraged a number of informal and semi – formal financial institutions as the AWSDBs to operate.

### ***Capacity Building***

The microfinance development programme adopted by government aimed at enhancing the capacity of microfinance institutions has the potential of building the AWSDBs and Susu groups into strong financial institutions. Other non- governmental organizations such as the District Capacity Building Project (DISCAP) have recognized the immense potential of the AWSDBs and have expressed interest in offering technical and logistical assistance to strengthen them.

### ***Potential for scaling up***

With the on-going reforms in the water sector, many water systems are coming under the small town water systems concept in both the southern and northern parts of the country. Considerable scope is offered by these changes for other water and sanitation development boards to join in the effort to boost funds mobilization across the length and breadth of the country through the AWSDBs.

### ***Linkages between AWSDBs and Susu groups***

The AWSDBs and Susu models provide a framework for developing important financial linkages. Funds raised in the communities by Susu groups such the one in Zorkor – Kanga can be channelled to the AWSDBs to serve as a savings collateral for loans. Through these collaborative and integration efforts, the AWSDBs can expand to become the major financial organization responsible for the provision of funds for the development of the water sector in the small towns and communities.

### ***NGOs and micro finance mechanisms***

There is wide scope for promoting the spread of indigenous financial systems in many communities by NGOs to serve as the basis for linking up with the AWSDBs. In many places in the northern parts of the country (eg. Lawra district) the Zorkor- Kanga model is being used.

### ***Local government reforms***

Efforts at deepening local government reforms will introduce a new set of dynamics which will produce political and socio-economic structures that deliver development benefits and can be held accountable.

### ***Leverage of resources***

A well-developed and financially sound AWSDBs operating on sustainable principles can serve as a viable vehicle to leverage additional resources from within and outside the country for the water sector.

### 3. Other examples of local financing mechanisms for water and sanitation

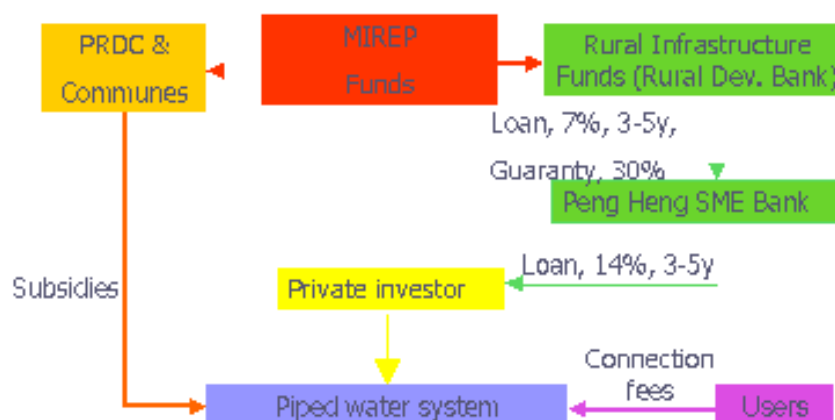
#### 3.1 Stimulating investors through a Rural Infrastructure Fund in peri-urban Cambodia<sup>3</sup>

An international NGO (GRET) has put in place a Rural Infrastructure Fund (RIF) in a public development bank illustrated by figure 3. The objective of this fund is twofold:

- To provide medium-term (3-5 years) loans to local commercial banks who wish to finance investors involved in financing piped water systems (in Cambodia, credit is provided on a short term basis only);
- To provide a guarantee (30%) on loans for those commercial banks in case of default of the investor. Due to this guarantee, the commercial bank can ask less collateral and accept lower credit rate to the concerned investors.

The program run by this INGO consists in support rural private sector to invest and build piped-water-systems with technical and financial assistance. The investor connects the people with water-meters and collects the bills every month. The INGO has helped the installation of 10 systems which rate of coverage reach more than 85% in certain areas.

**Figure 3. Financial structure of the MIREP project, put in place by GRET**



#### 3.2 Graduated taxes for water supply in rural Uganda<sup>4</sup>

To improve users cash contributions to the implementation of rural water supply schemes, the District Local Governments (of Mbarara and Bushenyi) in the South Western part of Uganda devised an innovative method of financing their schemes using a user fee payable during the normal local tax collection. In Uganda, every person above the age of 18 has to pay a 'Graduated Tax' once a year. This tax is dependent on one's income and wealth. The extra amount to be paid for water development is agreed upon by the sub-county local government council, which then passes a resolution that each tax payer in the sub-county pays e.g. an extra Ugshs. 1000 (US\$ 0.60) over and above a graduated tax of e.g. Ugshs. 20,000 (US\$12,-), for the maintenance of the water scheme. People in the area decide who can and who cannot pay the tax. Usually the

<sup>3</sup> Example provided by Mr. Jean Pierre Mahe, from GRET, [jpmahe@online.com.kh](mailto:jpmahe@online.com.kh)

<sup>4</sup> Example provided by Mr. Gilbert Kimanzi, from the Directorate of Water Development, [gjkimanzi@yahoo.com](mailto:gjkimanzi@yahoo.com)

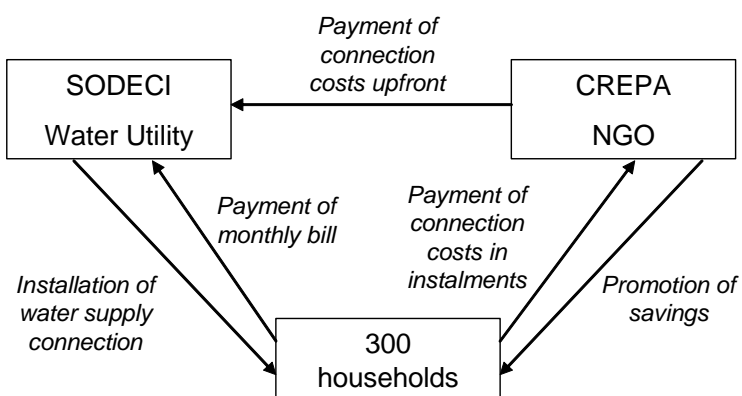
people exempted from this tax are the poorest of the poor, the disabled and widows. The extra 'water funds' are then separated from the general graduated tax fund and deposited on the water scheme account (managed by a committee elected by the beneficiary community from users of the water scheme).

Because of the already established legal administrative structure for collection of graduated tax and apprehending defaulters, there is no need for setting up a parallel structure. The funds are collected centrally at the sub-county office, which makes reconciliations easy. The sub-county authorities have adequate security to keep the funds temporarily in an office vault and are facilitated to transport the money to the nearest bank. The taxes collected and expenditures at the sub-county are audited by accountants from the district headquarters, so possibilities for the misuse of funds are minimised.

This method however, has the disadvantage that it cannot be applied in areas where graduated tax collection returns are poor. The method is also susceptible to political pronouncements during election period (once every 5 years), when politicians discourage, and in some cases abolish local tax collection in a bid to gain votes from the local population.

### 3.3 NGO as intermediary between poor households and water company in peri-urban Cote d'Ivoire<sup>5</sup>

To allow poor people to be connected to the water supply system, an NGO (CREPA Cote d'Ivoire) plays an intermediary role between the water company and the households. The NGO pays the connection costs of 20.000 FCFA (US\$36) directly to the utility as shown in figure 4 . By promoting savings using the money that was previously paid to informal water providers, the households pay the monthly bills and the connection cost is paid back to CREPA. This system has also reinforced the saving capacity of women, allowing them to start income generation activities. Furthermore previously illegal water vendors were trained to do the bill collection, in order to give them an alternative source of income. Their salary is also paid with the collected money from the households. Awareness raising for prevention of water wastage and participatory monitoring of the consumption by children was another important element of the strategy.



<sup>5</sup> Example provided by Mr. Evariste Kouassi, from CREPA Burkina Faso, eltos24@hotmail.com

### **3.4 Self help groups as rural bankers in Kerala, India<sup>6</sup>**

Some 60.000 Self Help Groups (consisting of women) have been set-up under a government programme in Kerala. The programme has started 8 years ago. For the construction of a new water supply system, the Self Help Groups will have to raise about 25% of the costs, the rest is a grant from government. Furthermore the poorest contribute by providing labour. For starting the Self Help Groups a “champion” is needed, usually is someone who is respected in the neighbourhood.

The Self Help Groups generally set tariffs which they collect from the users. Water tariffs are related to the amount consumed. The revenues are used for financing O&M. The government finances the capacity building for this program. Most Self Help Groups have set-up micro credit programs. There are enabling laws for them to loan great amounts of money without collateral. The interest rate on the micro credit is about 12%. Often credits are used for income generation activities (enterprises etc.) and savings are used for health related expenses (like water and sanitation). The repayment rate is 95%.

---

<sup>6</sup> Example provided by Mr. James Varghese from SEUF, [seufhq@sify.com](mailto:seufhq@sify.com)



#### **4. Key elements for an enabling environment to increase flows of local finance**

From the different examples and discussions held at the WEDC 2004 workshop, there are a few factors which seem to contribute to encourage the emergence of local financing mechanisms for maintenance and expansion of drinking water and sanitation services to the poorest.

At policy level, political support and a legal framework are required for increase private sector investments and for micro finance institutions to develop. In many low income African countries there is already an institutional and legal framework for micro finance although often not properly enforced (CREPA, 2003). At all levels, the perceived transparency of the financing processes and the people who are managing the funds is key to its sustainability.

Micro finance organisations have capacities and experience in managing credit, but many have limited capacities for targeting the poorest, developing specific products for the poor, awareness raising activities for the target groups and for monitoring impact (Daley-Harris, 2002). On the other hand, institutions in the water sector such as the NGOs and Resource Centres are not experts in credit provision, but are able to provide important inputs to support an increase and access to local finance. A few examples include: the mobilisation of start-up funds for water and sanitation credit schemes, bringing in technical support for feasibility studies, train staff in participatory tools and help monitoring and improve processes and results.

At the intermediate level, decentralisation is perceived as the most crucial element of an enabling environment, because it allows the identification of priorities at local (district – sub district – village) level within the planning process. Decentralization of fiscal revenues and allowing the decentralised government to raise/keep local taxes, accompanied by capacity building is one of the most important factors to leverage local finance with other financing mechanisms.

At community level, awareness raising in savings and management of funds is relatively simple and highly effective. The recognition of social capital makes local financing mechanisms sustainable through mutual trust and social pressure. INGOs, NGOs and local champions, make often the bridge between micro finance organisations/water utilities and the poorest clients.

## 5. Key findings

- There are a growing number of experiences with financing mechanisms that contribute to sustained service delivery with a focus on equity (poverty and gender). Most of these mechanisms have been implemented in multi-village level or community level, but there are not many recorded experiences at district level, which leads us to conclude that the potential of going to scale is not yet realised.
- In the water and sanitation sector, it seems that it is mostly NGOs that facilitate the local finance mechanisms or play the role of intermediaries between micro finance organisations and the poorest clients. There are fewer examples where local governments play that role.
- Some of the examples have demonstrated that sustainability of services requires that financial allocations need to be linked with empowerment and people's involvement.
- Although the institutional framework for microfinance interventions in the water sector is at the early stages of development in many countries, appreciable results have been realized. Institutional strengthening of the microfinance structures is crucial to build and consolidate the gains made. Complemented by improvements in the legal, financial and business environment, microfinance can be developed to enhance the flow of funding to the sector to leverage existing funding sources.

## 6. References

- Aryeetey, E and F, Gockel, 1991, "Mobilizing Domestic Resources for Capital Formation in Ghana: The role of Informal Financial Sector." AERC Research Paper no 3. African Economic Research Consortium.
- CHORD. 2000. Inventory of Ghanaian Microfinance Best Practices. Accra: Report for Ministry of Finance. Non- Banking Financial Institutions Project.
- CREPA. 2003. *La micro finance et le secteur de l'eau et de l'assainissement en Afrique*. Based on the research reports from Benin, Congo, Cote d'Ivoire, Guinea, Mali, Senegal, Togo and Burkina Faso. CREPA, Ouagadougou
- Daley-Harris, S. 2002. *Pathways Out of Poverty: Innovations in Microfinance for the Poorest Families*. Bloomfield. CT Kumarian Press.
- Gallardo, J. 2002, "A framework for regulating Microfinance Institutions: The Experience in Ghana and the Philippines." Washington, D.C: The World Bank, Policy Research Working Paper No. 2755
- Seibel, H.D. 2000. *Informal Finance: Origins, Evolutionary Trends and Donor Options*. IFAD Rural Finance Working Paper Series, No.A3 1999 (Revised 2000).
- Steel, W and Andah, D. 2003. *Rural and Micro Finance Regulation In Ghana: Implications for Development and Performance of the Industry*. African Region Working Paper Series No.49
- Winpenny, J. 2003. *Financing Water for All: Report of the World Panel on Financing Water Infrastructure*. World Water Council / Global Water Partnership / Third World Water Forum.