

FINAL REPORT

Program Identification Documentation

**SANASA
Community-Based
Infrastructure Program**

Prepared for
SANASA Federation
Colombo, Sri Lanka

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Executive Summary

This report describes a new community-based infrastructure program (the Program) to be implemented by the SANASA Movement. The Program's objectives are twofold: (i) to develop systems and procedures within the SANASA Movement for the community-based identification, planning, design, implementation, and operation and maintenance (O&M) of a range of cost-effective, affordable, and sustainable infrastructure projects, such as water supply, sanitation, drainage, solid waste, roads, and irrigation, and (ii) to implement community-based projects through SANASA's primary societies in peri-urban and small rural towns throughout the island.

1 Program Description

The Program covers the implementation of water supply and sanitation, roads, drainage, irrigation, and rural electrification projects. Projects will be determined according to community demand, which will be influenced by those services that already exist, the priorities of the communities, and any other programs that are ongoing or planned for the area.

Projects initially will concentrate on the sectors where (i) SANASA has technical and social development skills, such as water and sanitation, and (ii) where ownership and technical issues are expected to be simple and straightforward, such as rainwater harvesting, spring catchment (where ownership and access is not shared), latrines, improved drainage, and sewerage.

The Program will be implemented through the SANASA Movement, a nationwide organization of cooperative societies serving credit and rural development needs. The SANASA Federation of Thrift and Credit Cooperatives Societies will be the executing agency, and the Primary, Thrift and Credit Cooperative Societies (PTCCSs), the SANASA Development Bank Limited (SDBL), and the SANASA insurance agency will be the implementing agencies. District Union of Thrift and Credit Cooperative Societies (DTCCSs) will assist in the coordination and promotion of the Program. Liaison will take place with concerned government agencies at all levels.

The Program is designed on the basis of full cost recovery of direct capital costs, plus those for (O&M). The full capital costs of development will comprise both direct and indirect costs. Primary society members will be expected to pay for the capital cost in full. A maximum of 80 percent of the cost will be provided in the form of loans from the PTCCSs. The balance, equivalent to at least 20 percent of estimated capital development costs, will be contributed from the members' own resources. This can be in the form of cash or in-kind payments, such as labor, and/or donations of land and materials.

O&M costs will be recovered through the levy of regular monthly charges for the use of the facilities or access to the service. These charges will be based on the direct costs for O&M plus an allowance made for depreciation or the replacement of assets at the end of their useful life.

The development loan from the SDBL to the participating PTCCSs will carry an interest rate of about 15 percent per annum and will be for a period of up to a maximum of five years. Loan repayments will be computed on the basis of a declining balance method that follows the annuity principal used for conventional housing loans.

Individual loans from the PTCCSs to its members will carry an interest rate of about 19 percent per annum and will be for a maximum of up to five years

2 Creation of a SANASA Community-Based Infrastructure Unit

It is proposed to set up a new technical unit (the Unit) in the SANASA Federation's head office with prime responsibility for developing the Program. The new Unit will benefit from and build on more than 20 years of SANASA lending for housing and micro-enterprise development, as well as the institution's recent experience as a Partner Organization (PO) in the World Bank-supported Community Water Supply and Sanitation Program (CWSSP)

The Unit will initially have responsibility for four main areas (i) program development, (ii) program management, (iii) skills and technology transfer, and (iv) monitoring and evaluation

The Unit envisages employing three professionals — a Program Manager/Engineer, a Financial Manager, and a Community Liaison Officer. The Unit's staff size can be increased over time depending on the future scale of the Program and on the ability to tap human resources at the district union and primary society levels

3 Outline Procedures for the Identification and Selection of Pilot Projects

The Program is designed to be demand led with initiatives coming from the members of the community. The following steps are proposed for the identification and selection of pilot projects

- pre-identify community group,
- meet initially with community,
- establish linkages with government agencies,
- carry out rapid needs assessments (social, financial, technical, and environmental),
- prepare project options,
- present, discuss, and evaluate project options and costs with community,
- select and endorse preferred option,
- sign memorandum of understanding (MOU), and
- submit documents and loan approval of project to the SDBL

4 Detailed Design and Implementation of Pilot Projects

Following agreement on the preferred project, detailed design commences, which entails the following steps

- carrying out required site surveys and mapping,
- preparing detailed designs and costing of the project,
- carrying out final evaluation of designs and costs,

- notifying the SDBL of community's approval of detailed design and costs,
- obtaining final community approval and signing intra-community agreement,
- executing project, including procurement, contracting, supervision, and O&M, and
- finalizing loan agreements between the SDBL and the PTCCSs and between the PTCCSs and its members

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Program Identification Document: SANASA Community-Based Infrastructure Program

1 Introduction

1 1 Background

PADCO, Inc has been contracted by USAID/Sri Lanka to work with local institutions in strengthening their capacity to identify and develop environmental infrastructure projects suitable for private sector participation. Appropriate projects would be developed in the areas of water supply and distribution, wastewater treatment and disposal, and solid waste management. This capacity building exercise is being carried out under USAID/Sri Lanka's Promotion of Private Infrastructure (PPI) activity.

1 2 Organization of Report

This report is divided into five sections, which are supported by six appendices.

Following the introductory section, the second section defines and describes a new community-based infrastructure program (the Program) to be implemented by the SANASA Movement. The third section proposes the creation of a Community-Based Infrastructure Development Unit to implement the proposed new program. The fourth section outlines procedures for the identification and selection of a pilot project to test the main elements of the new SANASA program. Finally, the fifth section presents the steps for detailed design and implementation of the pilot project.

The six appendices comprise the following:

- An Overview of the SANASA Development Bank Limited
- Further Project Details
- PTCCS — Statement of Personal Economic Information
- Model Memoranda of Understanding for Typical Community-Based Water Supply and Sanitation Projects
- SDBL Loan Application Form
- Loan Agreement between PTCCS and Individual Members
- Loan Agreement between SDBL and PTCCS

2 Program Definition and Description

2 1 Overview

2 1 1 SANASA Movement

The SANASA Movement, established in 1906, is composed of a network of Primary Thrift and Credit Cooperative Societies (PTCCSs), which by the end of 1997 numbered 8,424, with more than 780,000 members nationwide. Some 420,800, or more than half of the membership, is female, and roughly 20 percent of the primary societies are in urban areas. The Thrift and Credit Cooperative System (TCCS) is organized on a three-tier basis composed of a federation,

33 district- or secondary-level unions, and more than 8,400 primary societies. For the year 1996, the TCCS extended more than Rs 219 million (about US\$4 million) on loans for new housing construction, home improvements and extensions, purchase of land, and water and electricity service. In 1996, loans to the housing sector counted for more than 11 percent of SANASA's total lending, which amounted to Rs 1,913 million.

Many of SANASA's members reside in peri-urban and rural areas. Those households that live outside the immediate town center of Sri Lanka's urban areas often lack access to environmental infrastructure, such as water, wastewater disposal, and solid waste collection. Cognizant of this situation, the SANASA Movement's five-year, medium-term business plan focuses its attention on financing micro-enterprises and on projects with a peri-urban/rural orientation. Housing and its related services are expected to form a significant segment of this lending activity.

To support this objective, SANASA has entered into negotiations for funding under the Asian Development Bank's (ADB) proposed Urban Development and Low-Income Housing (UDLIH) project. It is expected that this project will provide SANASA with US\$5 million over the next five years for purposes that vary from new construction and land purchase to housing repairs and extensions, sanitation, and the extension of water and electricity services.

To increase and stabilize its sources of funding, the SANASA Federation established the SANASA Development Bank Limited (SDBL), which was registered as a Licensed Specialized bank on 21 August 1997. The SDBL is authorized to accept deposits and to provide advances and other forms of credit facilities similar to those extended by other development banks. As a specialized bank licensed by the Central Bank, the SDBL can also borrow funds from international institutions through the Central Bank.

A detailed description of the SDBL and its operations and organization is presented in Appendix 1.

2.1.2 Community-Based Water and Sanitation Programs

The ongoing World Bank-funded Community Water Supply and Sanitation Project (CWSSP) is the model employed by SANASA for the design of its own community-based infrastructure program. The CWSSP is an innovative project that aims at establishing alternative systems of water supply and sanitation delivery in rural Sri Lanka. This project is based on the needs and aspirations of rural households through community-initiated projects and supported by a variety of local government, nongovernmental, and private organizations. The CWSSP started in early 1993 and has now completed more than five years of operation.

The CWSSP is located within the Ministry of Housing and Urban Development. The project area covers the three districts of Badulla, Matara, and Ratnapura. CWSSP regional directorates located in the three districts are responsible for project management, with support from partner organizations (POs) and community-based organizations (CBOs) in implementing projects. Discussions are under way between the World Bank and the government regarding the expansion of this program into other districts.

The CWSSP has three main components (i) community water supply and sanitation, (ii) school water supply and sanitation, and (iii) small-town water supply and sanitation. To the end of 1997, almost 1,000 community projects have been launched and over 58,000 latrines have been completed or are under construction.

The ADB is also interested in supporting this program. The National Water Supply and Drainage Board (NWSDB) is preparing to launch a similar ADB-financed scheme in six districts — Kagalle, Kalutara, Monaregala, Puttalam, Anuradhapura, and Hambantota.

The SANASA district unions in Badulla, Matara, and Ratnapura are key CWSSP partner organizations. In the Matara district alone, 37 community-based projects have been completed or are under construction. The program described in the following sections builds on the CWSSP and the ADB-funded water supply and sanitation programs, as well as on SANASA's own lending window for housing, to include a broader range of infrastructure projects and increased cost recovery.

2.2 Program Objectives

The Program objectives are twofold: (i) to develop systems and procedures within the SANASA Movement for the community-based identification, planning, design, implementation, and operation and maintenance (O&M) of a range of cost-effective, affordable, and sustainable infrastructure projects, such as water supply, sanitation, drainage, solid waste, roads, and irrigation, and (ii) to implement community-based projects through SANASA's primary societies in peri-urban and small rural towns throughout the island.

2.3 Demand for Program

The consultants are not aware of any recent surveys that measure peri-urban or rural household demand or willingness to pay for different types of community-based infrastructure. Experience, however, with the preparation and implementation of the CWSSP indicates that well-designed water and sanitation projects, with ongoing input from the community, have a good track record of recovering a percentage of costs.

Surveys carried out in 1992 by the World Bank during the preparation of the CWSSP showed that a high percentage (83 percent) of households wanted an improved water supply. More than 60 percent of the households surveyed also stated their willingness to contribute toward the capital cost and operation and maintenance of such schemes. This figure compared favorably at the time to the less than 10 percent of rural households that were paying for water.

On the basis of these surveys and evolving government policy, agreement was reached with the World Bank that the community's capital contribution in cash and in kind under the CWSSP would cover not less than 20 percent of the direct capital costs of water schemes. The communities also agreed to pay tariffs and charges sufficient to cover normal O&M costs and debt service where applicable and assume responsibility for O&M on completion of the scheme. Households were also expected to finance 100 percent of the cost of installing a latrine or upgrading an existing one. Revolving loan funds within primary societies have been set up to finance the construction or improvement of latrines.

Initial estimates were that community contributions in cash and in kind would finance about 7.7 percent (US\$2.5 million) of total CWSSP costs. In fact, as the CWSSP draws to a close, community contributions have been much greater than expected. The originally estimated community contribution has increased from 7.7 percent to 23.8 percent. While this can be attributed to various factors, it clearly demonstrates the interest and commitment of the community in the program. Furthermore, the program was originally designed to carry out water schemes in 850 Grama Niladhari Divisions. Demand from the communities themselves, however, has resulted in the initiation of 126 additional schemes outside of the original targets agreed with the World Bank.

Extrapolating from these figures to presume a demand for different types of community-based infrastructure projects, with increased cost recovery and a willingness to assume short-term indebtedness, must be done with caution. At a minimum, however, the World Bank CWSSP has shown a high demand for community-based water and sanitation schemes. Willingness to pay and cost recovery among rural communities have also been significantly higher than originally designed.

2.4 Program Description

2.4.1 Geographic Location

SANASA is active all over Sri Lanka, in both rural and urban communities. However, it is expected that a number of criteria will determine where the community-based infrastructure program may start. These are in locations where

- there is a strong demand for services (on a full cost-recovery basis),
- the primary societies are active and well established,
- SANASA already has experience of developing infrastructure projects and can easily provide the community inputs and technical support necessary for the successful development and implementation of the project,
- continuing support for O&M (consolidation) can easily be provided,
- the SDBL has already established itself, and
- there is a favorable institutional and political environment.

SANASA's experience of developing water and sanitation projects has been primarily in the central southern districts of Matara, Ratnapura, and Badulla, as a PO under the CWSSP. It is known that the demand for projects in these districts remains high, although the willingness of communities to pay a greater share of project costs, rather than receive a 80 percent grant under the CWSSP, is untested. SANASA has staff experienced in social development, in technical development, and in the supervision of projects in these areas. SANASA is currently expecting to use these staff to implement its own program when the CWSSP ends later this year.¹

¹ However, it is understood that the CWSSP may be extended to a second phase with projects in another six districts. SANASA is almost certain to be involved in this program as well.

Discussions with the line agencies responsible for water and sewerage in Colombo indicate that similar community-based projects should also be possible in peri-urban areas. However, projects of this nature are likely to be the first where full cost recovery is attempted.

2.4.2 Types of Project

The types of project to be implemented will cover water supply and sanitation, roads, drainage, irrigation, and possibly rural electrification. They will be determined according to community demand, which will be influenced by those services that already exist, the priorities of the communities, and any other programs that are ongoing or planned for the area.

It is probable that projects may comprise a number of activities from different sectors and/or sector technologies, according to the demands of the communities and the most affordable and technically feasible options available. Examples are water supply and sewerage, gravity water supply, and rainwater harvesting. Provided there are sufficient resources and skills available to cope with the range of projects, there is no reason why this should not happen.

Water supply schemes may include

- gravity schemes, based on water from spring capture or surface water sources, delivered to standposts, yard taps, or house connections according to yield and demand,
- hand-dug wells, on an individual or shared basis (e.g., 4-8 households),
- tubewells fitted with handpumps for, for example, 10-25 households,
- rainwater harvesting, on an individual or community basis (where catching water from community buildings),
- pumped schemes from low-level springs, surface water sources, and tubewells, for instance, and
- direct connections and extensions to existing piped water systems, especially in urban and peri-urban areas.

Sanitation and drainage schemes may include

- constructing new latrines, for example, VIP or pour-flush type to pits, septic tanks, or sewerage to existing mains sewerage, on-site disposal systems, or local water courses,
- construction of sullage (gray) water disposal systems, including grease traps and soakaways or drainage fields, sewerage to existing systems or to septic tanks, and community treatment ponds,
- improving existing latrines and waste disposal systems,
- surface water drains and sewers, to existing sewers, and to surface water courses (via settlement ponds), and
- solid waste management schemes.

Other schemes may include

- development of new roads, especially asphalt paved access and internal roads in housing schemes,

- maintenance and improvement of existing roads, including culverts and river crossings, surface water drainage, widening, realignment, and resurfacing,
- development of local water sources to allow irrigation of agriculture (according to local water sources) and development of improved irrigation systems, including subsurface piped systems,
- electrification — the extension of existing low-voltage mains and alternative sources, including micro-hydro and solar power,
- street lighting, and
- construction of community buildings

Priority Projects and Sectors

Improved water supply is known to be a priority in many rural areas, with gravity schemes and dug-wells being the most popular technologies. Rainwater harvesting is also used, although it is widely believed that it is not a good source of drinking water.

Improved sanitation is slightly less popular than water supply. At present, this comprises almost exclusively latrine construction. This is because disposal of sullage water has yet to become a problem, despite increased quantities of water being available in most communities. The lower demand for latrines is probably due to the fact that some households already have latrines that they consider satisfactory, the relatively high cost and standards of construction of latrines under the CWSSP, and/or the low priority of improved sanitation among some community members. It is expected that the proposed SANASA program will continue to focus primarily on the types of water and sanitation schemes implemented under the CWSSP. SANASA will have the option of suggesting alternative technical solutions when it advises community groups and primary societies of the services it can offer.

Further project types and technical details, including design guidelines, project experience to date, and policies are attached as Appendix 2.

Project Composition and Development

Projects, initially, should concentrate on the sectors where (i) SANASA has technical and social development skills, such as water and sanitation, and (ii) where ownership and technical issues are expected to be simple and straightforward, such as rainwater harvesting, spring catchment (where ownership and access is not shared), latrines, improved drainage, and sewerage.

Ownership of the new service, O&M responsibilities, charges, rights of access, and capacity of existing services (including the adequate water pressure and sufficient sewer sizes) should be clarified and formally agreed with the responsible line agencies before projects commence. This may include liaison with local government departments and the possible legal registration of the project. Precedents should be sought wherever possible, in particular National Housing Development Authority (NHDA) schemes, the Clean Settlements Project (CSP), and the work of the CWSSP.

These activities will be particularly important where the project will be a connection of or an extension to an existing service, such as a water main. It is recommended, however, that these projects not be attempted until the experience, skills, and procedures required for satisfactory implementation have developed to a point where attention may be directed to complex ownership issues without adversely affecting progress.

2.4.3 Project Costs

It is possible to provide only indicative costs at this juncture in program development. Actual costs are likely to vary considerably from place to place. Current data suggest average and maximum household costs on the order of those presented in Table 2.1.

Table 2.1
Indicative Community-Based Infrastructure Project Costs

Type of Project	Cost per household (Rs)*	
	Average	Maximum
Water Supply		
Gravity water supply		
Total	6 300	7 200
External costs	4 200	4 800
Internal costs	2 100	2 600
Hand-dug well		
Total	5 200	7 500
External costs	3 700	6 088
Internal costs	1 500	2 800
Rainwater tank (5m ³ brick below ground)		
Total	10 000	10 500
External costs	6 500	7 000
Internal costs	3 500	3 500
Rainwater tank (5m ³ , ferro-cement above ground)		
Total	12 500	
External costs	8 500	-
Internal costs	4 000	-
Rainwater tank (10m ³ ferro-cement above ground)		
Total	15 500	-
External costs	10 500	-
Internal costs	5 000	-
Tubewell (including a feasibility study and hand pump)		
Total	6 000	9 500
External costs	5 500	9 000
Internal costs	500	500
Urban/peri-urban water supply		
Connected to local mains		
Total	4 000	5 000
Household connection fee	4 000	-
To standposts connected to local mains		
Total	2 500	4 000

Type of Project	Cost per household (Rs)*	
	Average	Maximum
Sanitation		
Latrine		
Total	5 000	7 000
External costs	3 000	3 000
Internal costs	2 000	4 000
Urban/peri-urban sewerage to disposal off site		
Total	8 000	10 500
Household connection fee	25 000	
Urban/peri-urban sewerage disposal on site		
Total	11 000	13 500
Urban/peri urban surface water and sullage drains to disposal off site		
Total	10 000	13 000
Urban/peri urban solid waste infrastructure		
Total	500	1 500
Urban/peri-urban access and internal roads		
Total	4 500	6 500
Road Culverts		
Pipe culvert	-	
Box culvert	-	
Electricity		
Mains electricity		
Extension to grid (per km)		
Single phase	-	
Three phase	-	
Household connection	12 500	-
Internal wiring	10 000	20 000
Street lighting		
Total	3 100	3,500
Solar power		
Total (4/5 lights)	28 000	-
* External costs comprise all construction materials transport salaries for skilled workers tools etc Internal costs include unskilled labor provided or paid for by the community and local materials e g sand stone These are usually given in kind in rural locations It is expected that communities will generally prefer to give cash in urban and peri-urban areas Total costs represent direct in cash and in kind but do not include overheads		
<i>Source of price data</i>		
Water and sanitation	CWSSP Sarvodaya CSP NHDA and NWSDB	
Roads	CSP and Local Authority	
Culverts and bridges	Sarvodaya and CSP	
Electricity and street lighting	Ceylon Electricity Board CSP and Sarvodaya	

In addition to the direct project costs shown in Table 2 1, it is envisaged that each project would also include design and supervision costs and office and staff overheads The total of these costs is typically 25 percent to 50 percent, depending on the nature of the project and office workload For example, the World Bank's CSP allows 30 percent of the capital cost for community devel-

opment and training and a further 25 percent of the total for overheads, including consultancy services, for a total of 55 percent

The nongovernmental organization (NGO) Sarvodaya quotes its overhead costs, including staff salaries, social insurance, offices, and transport, as 50 percent of external costs. This comprises technical services at the district level at 25 percent of external costs, technical services at the head office at 15 percent of external costs, and general costs at the head office at 10 percent of external costs.

The CWSSP allows 25 percent to cover the administrative costs for POs, as well as having its own overheads at district level and head office.

These figures show that overheads can become a large component of the total project costs unless staffing is optimized at all levels according to workloads.

2.5 Organizational Structure

The Program will be implemented through the SANASA Movement, a nationwide organization of cooperative societies providing the credit and rural development needs of the poor. Cooperative activity basically rests on the successful mobilization of people to work together as one entity. Broad-based participation is the key. The SANASA Movement is ideally placed to implement the Program.

The SANASA Federation of Thrift and Credit Cooperative Societies will be the executing agency, and the PTCCSs, the SDBL, and the SANASA insurance agency will be the implementing agencies. District Unions of Thrift and Credit Cooperative Societies (DTCCSs) will assist in the coordination and promotion of the Program. Liaison will take place with concerned government agencies at all levels. Figure 2.1 summarizes the relationships among the participating agencies. An outline of the roles and responsibilities of each agency in the Program is presented below.

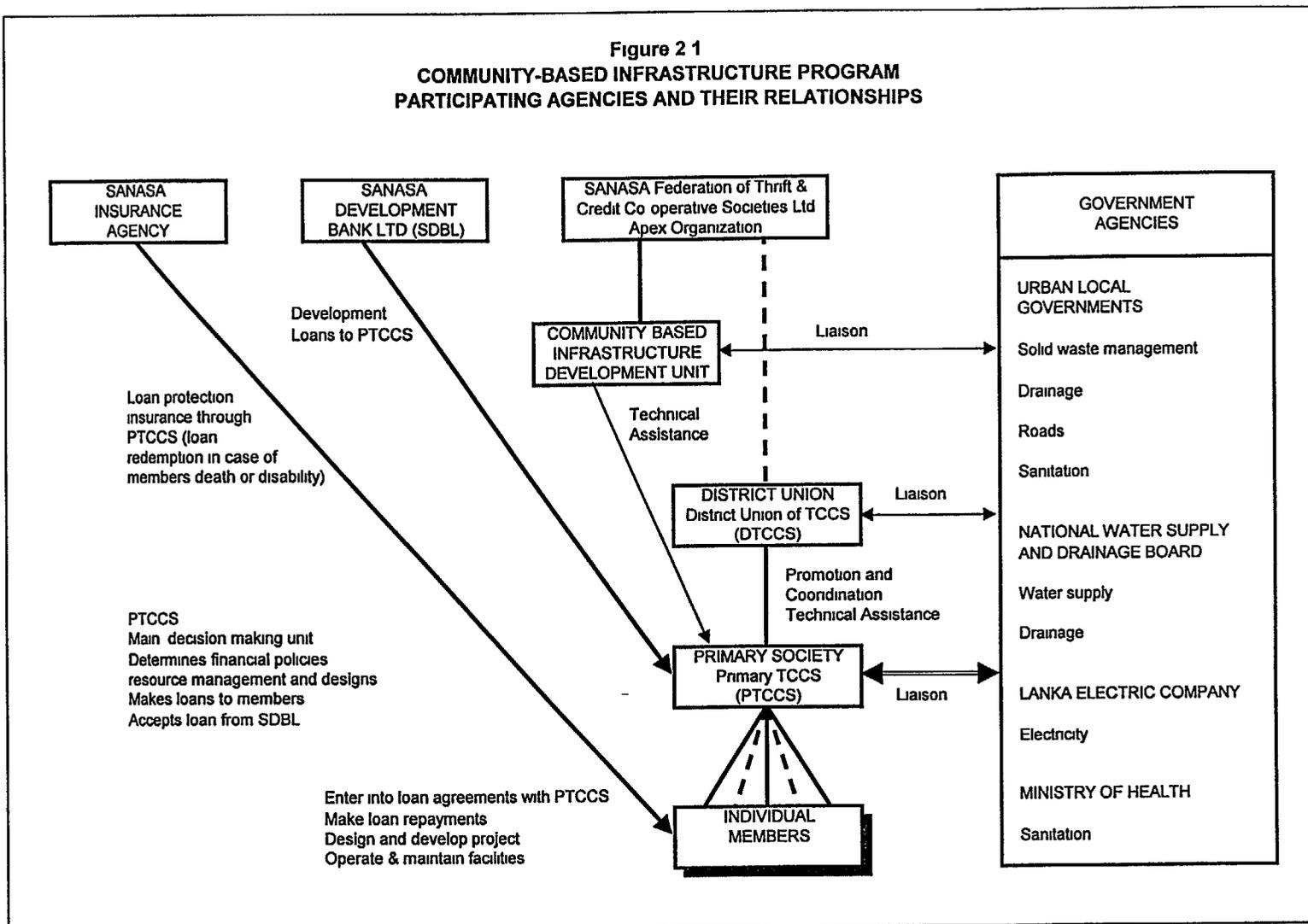
2.5.1 The SANASA Federation

The SANASA Federation of Thrift and Credit Cooperative Societies will (i) establish the objectives for the Program, (ii) prepare a marketing strategy that satisfies national demand and is targeted at low-income groups in peri-urban and urban areas, (iii) actively promote and inform communities about the Program, and (iv) provide direct assistance in the implementation of the Program through a Community-Based Infrastructure Development Unit working closely with the district unions. (See Section 3 for a description of this unit.)

2.5.2 SANASA Development Bank Limited

SANASA Development Bank Limited, a public limited company registered as a Licensed Specialized Bank, will provide development finance for the Program. This will be in the form of medium-term loans to eligible PTCCSs under the normal terms and conditions of SDBL lending programs. The SDBL will accept loan applications, evaluate the requests, approve and enter into loan agreements with participating PTCCSs, disburse funds to the PTCCSs, and collect loan repayments.

**Figure 2 1
COMMUNITY-BASED INFRASTRUCTURE PROGRAM
PARTICIPATING AGENCIES AND THEIR RELATIONSHIPS**



2/3

2 5 3 District Unions of Thrift and Credit Cooperative Societies

The DTCCSs will assist in promoting the Program and coordinating its implementation. They, through their technical staffs, will be actively involved in providing technical assistance to participating PTCCSs under the direction of and in association with the Community-Based Infrastructure Development Unit of the Federation.

2 5 4 Primary Thrift and Credit Cooperative Societies

The PTCCSs are the cornerstone of the Program. Their members are to be the prime beneficiaries. A PTCCS will undertake four basic functions: (i) organizing the community, (ii) developing projects through their members, who will be responsible for the implementation of infrastructure development and/or its improvement, (iii) financing projects with funds borrowed from the SDBL and on-lent to its membership, paying for work accomplished, and collecting loan repayments, and (iv) operating and maintaining the infrastructure facilities developed.

More specifically, the PTCCSs' responsibilities include, among others, organizing their membership to participate in the Program, receiving and managing funds from the SDBL, entering into contracts with the membership or local companies for the construction of infrastructure, borrowing and repaying money from the SDBL, entering into loan agreements with members participating in the Program, operating and maintaining the infrastructure developed, and collecting loan repayments from member-borrowers.

2 5 5 SANASA Insurance Agency

The insurance arm of the Movement is registered as an NGO under the Cooperative Societies Act. It is not officially registered as an insurance company, but it is understood that this is under processing by the authorities. The insurance arm operates as an agent for the National Insurance Corporation Limited. SANASA insurance agency will approve and issue loan protection policies² for members of the PTCCSs borrowing under the Program. In accordance with standard SANASA practice, the insurance policies will be reinsured with the National Insurance Corporation Limited.

2 5 6 Government Agencies

Although the Program is to be designed and executed as a private sector activity, it will be implemented within the framework of national, provincial, and local governance. Constant interaction between the participants and government agencies will be encouraged so as to avoid misunderstandings and problems over the ownership of assets. Program coverage envisages community-based schemes for water supply, sanitation, local drainage and road improvements, electrification, and perhaps irrigation.

² Loan protection policies cover loan redemption in case of a member's death or disability. Premiums are charged at the rate of Rs 0.65 for every thousand rupees or part thereof borrowed per month. SANASA reinsures with the National Insurance Company Limited at the rate of Rs 0.45 for every thousand rupees or part thereof borrowed per month.

The urban institutional framework is dominated by two ministries at national level, the Ministry of Housing and Urban Development (MHUD) and the Ministry of Provincial Councils and Local Government (MPCLG). Responsibility for infrastructure delivery lies with the Urban Local Authorities (ULAs) or central or provincial government line agencies. Overall responsibilities as they affect the Program are shown in Table 2.2

Table 2.2
Government Agencies Involved in Local Infrastructure Provision

Sector	Agency
<i>Water supply and distribution</i>	
Water supply headworks and trunk mains	National Water Supply and Drainage Board and some large Urban Local Authorities
Water distribution and tariff collection	National Water Supply and Drainage Board and Urban Local Authorities
<i>Waste management</i>	
Sanitation	Urban Local Authorities and the Ministry of Health
Sewerage and treatment	National Water Supply and Drainage Board
<i>Other infrastructure</i>	
Stormwater drainage	Urban Local Authorities and National Water Supply and Drainage Board
Low-voltage power transmission, distribution, and tariff collection*	Lanka Electric Company
Access and side roads (C, D, and E class)	Urban Local Authorities
* Ceylon Electricity Board is responsible for electricity generation and high-voltage transmission	

The NWSDB and 51 urban local authorities (councils) (12 municipal councils and 39 urban councils) are prime providers of services covered by the Program. The NWSDB is responsible for planning, development, operation, and maintenance of urban water supply and sanitation and rural piped water supply. Where urban local authorities buy water in bulk from the NWSDB, they are responsible for distribution, operation, maintenance, billing, and collection. In rural areas, key agencies are the NWSDB for water, the Ministry of Health for sanitation, and 257 local governments (Pradeshiya Sabha), which are predominantly rural in character.

2.6 Financial Arrangements

The proposed financing arrangements for the Program are outlined in this section. Principles of cost recovery, the flow of funds, loan terms and conditions, and the nature of financial reporting are discussed below.

While this section offers guidelines for the Program, they are not to be treated as definitive statements or general rules. To be successful, the Program must be community-led and fit firmly within the tried and tested practices of the SANASA Movement, where major decisions are made at the PTCCSs level by the membership. This principle must be adhered to in this Program and the approaches suggested here are likely to vary somewhat between societies.

2.6.1 Cost Recovery and Capital Contributions

The Program is designed on the basis of full recovery of direct capital costs, plus those for O&M.

The full capital costs of development will comprise both direct and indirect costs. These are likely to cover (i) land and land acquisition where necessary, (ii) physical and topographical surveys, (iii) civil works, including labor and materials, (iv) any plant and equipment required, (v) design and supervision associated with the project, (vi) project management and technical assistance, and (vii) capitalized interest during construction.

Members will be expected to pay for the capital costs in full. A maximum of 80 percent of the costs will be provided in the form of loans from the PTCCSs. The balance, equivalent to at least 20 percent of estimated capital development costs, will be contributed from members' own resources. This can be in the form of cash or in-kind payments, such as labor and/or donations of land and materials.

O&M costs will be recovered through the levy of regular monthly charges for the use of the facilities or access to the service. These charges will be based on the direct costs for O&M plus an allowance made for depreciation or the replacement of assets at the end of their useful lives.

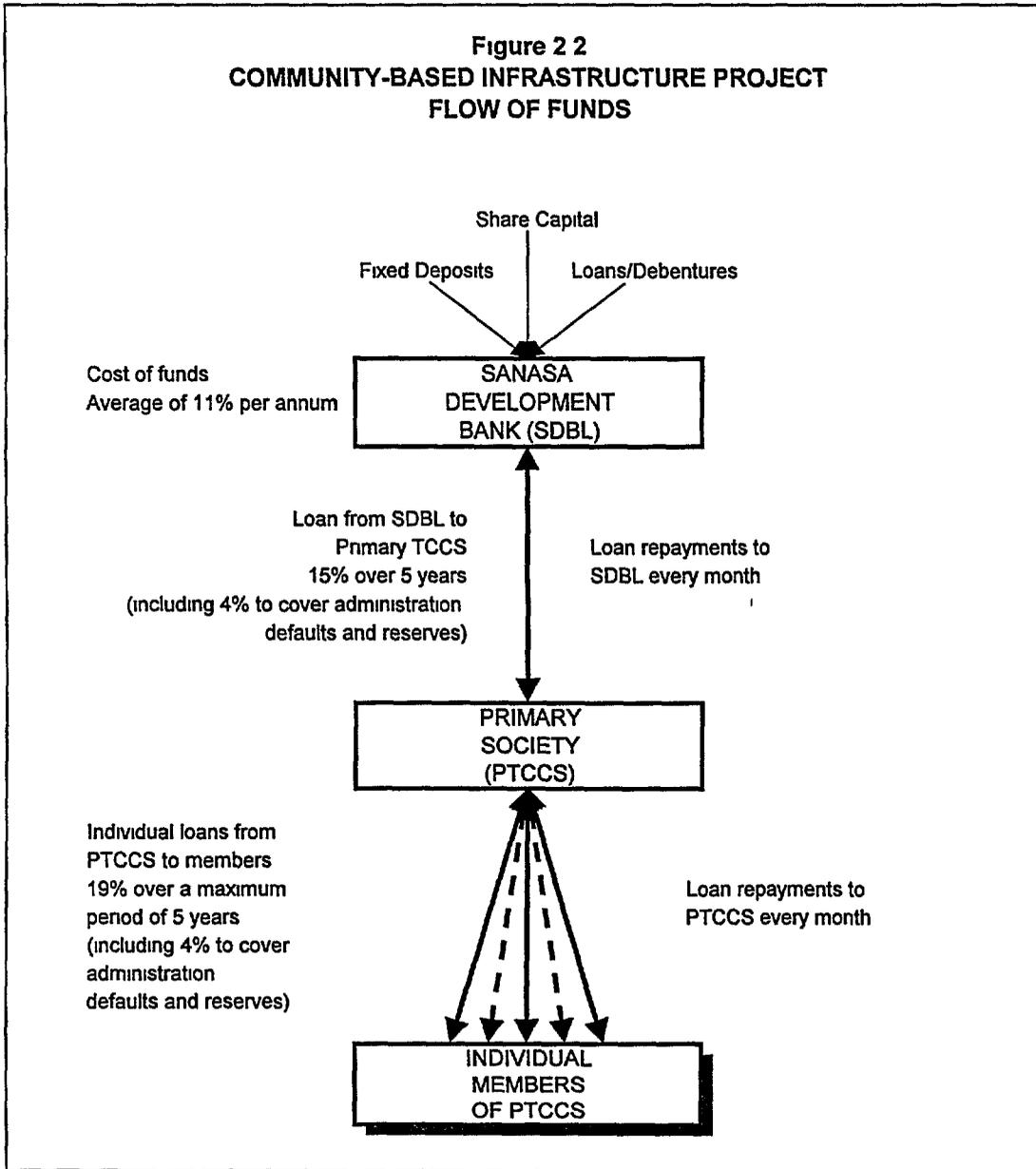
2.6.2 Flow of Funds

Funds will flow from the SDBL to the participating PTCCSs as loan finance. Loan releases will be made according to a disbursement schedule agreed between the SDBL and the PTCCSs at the outset of project implementation.

The PTCCSs will on-lend these loan proceeds to their members in accordance with terms and conditions of typical agreements entered into by these agencies. Member beneficiaries will repay the loans to the PTCCSs, who, in turn, will be fully responsible for the debt service of the SDBL loan.

Figure 2.2 displays the proposed system diagrammatically.

Figure 2 2
COMMUNITY-BASED INFRASTRUCTURE PROJECT
FLOW OF FUNDS



2 6 3 Loan Terms and Conditions

Loans to Primary Thrift and Credit Cooperative Societies

The development loan from the SDBL to the participating PTCCSs will carry an interest rate of about 15 percent³ per annum and will be for a period of up to a maximum of five years. Interest will accrue from day one, but, with agreement of the SDBL and the PTCCSs, interest incurred over the construction period can either be paid when due, paid in total upon completion of construction, or capitalized into the loan amount. The construction period should not exceed six months from the date of the release of the first installment. No loan commitment charges will be imposed under the Program.

Loan repayments will be computed on the basis of a declining balance method that follows the annuity principal used for conventional housing loans. Equal payments will be required and these will be due within five days of the end of every month. Penalty interest will be charged for late payments.

Creditworthiness of the PTCCSs will be assessed according to current practices of the SDBL. Those PTCCSs eligible for loans would have to satisfy the following criteria:

- The default rate of current loans of the PTCCS due from its members should not exceed 10 percent of the outstanding loans.
- The PTCCS must record and balance all accounts daily.
- There should be a separate loans committee.
- A Balance Sheet and Profit and Loss account for the last year should be available.
- The financial and credit management of the PTCCS must be acceptable to the Bank.
- Maximum borrowing limits for each PTCCS depend on the grade of the society and its capital funds.⁴ Grade I societies can borrow 20 times their capital funds, Grade II societies, 15 times, and Grade III societies 10 times.⁵

Loan security will consist primarily of the shares and deposits of the members and the land and property assets of the society.

³ This is an estimate based on the cost of funds to the SDBL at between 10 percent and 12 percent per annum plus a spread of 4 percent per annum to cover administration defaults and a contribution to reserves.

⁴ Capital funds refers to the paid-up share capital plus the balances of the savings accounts and deposits.

⁵ Societies are graded by the SANASA Federation on the basis of their operations. Grade I societies are those that are in practice, mini-banks: they have full-time and paid officers and staff, own their own offices, undertake daily book-keeping and balancing of accounts, and are open five days a week for business. Grade II societies are those that are operated by unpaid volunteers, rent their offices or use somebody's house for meetings, and are open for business fewer than five days a week. Grade III societies are those that in practice are simply savings clubs with monthly meetings and no formal business activities. Grade IV societies are those just starting or those being closed. The focus of lending is normally on Grade I and Grade II societies.

Loans to Members

Individual loans from a PTCCS to its members will carry an interest rate of 19 percent⁶ per annum and will be for a maximum period of up to five years. The loan period should match that of the loan from the SDBL. Repayments should be calculated on the basis of the annuity method where equal monthly payments are due. However, should a PTCCS wish to continue with its current simple interest approach, then this could be retained as an option⁷.

Security for loans will follow the normal procedures of the PTCCS that vary with the amount borrowed. Small loans⁸ will be unsecured in banking terms, while those for larger amounts will require collateral⁹. Basic loan security will be through a first charge on members' shares and deposits, and there will be a requirement for guarantees from two other members. For the larger loans, collateral will be required in the form of assets, including domestic appliances, land, or property. Nevertheless, it will be pressure from other members of the society that will encourage participants to repay loans regularly. The whole PTCCS is tainted if one member defaults.

The maximum loan amount for individual borrowers will be based on his or her own credit limit. This will be determined annually by the PTCCS based on a number of factors, including income, existing loans, repayment record, shares, savings, and deposits with the society. In common with normal practice, each member must submit at the beginning of every year an annual declaration that covers, among other things, income and expenditure, loans, dependents, and fixed assets. The format of this Statement of Personal Economic Information is attached as Appendix 3. Loan eligibility is established from an assessment of this data by the officers of the PTCCS.

Creditworthiness will be determined in relation to the amount of share capital, savings, and deposits of each member. Particular reference will be given to the frequency and amount of savings made to determine "surplus" income that could be available for loan repayments. Every member must regularly save some money with the PTCCS. Other criteria to be considered relate to how regular past debt service payments have been, what and how reliable are the guarantees for the loan offered, and how regular has the participation of the member been in the activities and meetings of the society. As a general guideline, a borrower should have at least 10 percent of the loan amount in capital funds with the PTCCS.

⁶ This assumes an annual spread of 4 percent to the PTCCS over the lending rate of 15 percent per annum for loans obtained from the SDBL.

⁷ Although it is normal for PTCCSs to compute repayments according to a simple interest formula, it is recommended for this Program that an annuity method be given preference. This ensures equal monthly payments over the life of the loan and reflects the longer-term nature of the borrowing. Simple interest-based schedules involve the borrower paying more in the first year than at any time in the repayment period. Although amounts decline in successive years, this may cause problems of affordability to some households and limit their participation in the Program.

⁸ "Small loans" are defined as those for amounts less than Rs 10,000. However, the limit could vary from society to society.

⁹ "Larger loans" are for amounts of between Rs 10,000 and Rs 30,000.

2 6 4 Insurance

It will be a requirement of the Program that all borrowers are adequately insured against death and disability. The SANASA insurance agency will accept payment for and provide such insurance as an agent on behalf of the National Insurance Corporation Limited. This will be charged at the rate of Rs 0.65 per month for every thousand rupees borrowed. Payments will be made to the agency by the membership through the PTCCS on a monthly basis or according to an agreed schedule with members.

2 6 5 Accounts and Audit

Each PTCCS should maintain separate project accounts and records of all costs and loans. Costs should be classified according to major categories, such as civil works, labor, materials, equipment, design, supervision, project management, and land acquisition, if applicable. Overhead costs of the society should also be apportioned. The cost of contributions in kind must be imputed and entered into the records.

SDBL loan disbursements and repayments would be recorded in a separate ledger. Separate accounts also would be set up for each individual loan from the PTCCS to its members under the Program.

It will be a requirement of the Program that the accounting records of all participating PTCCSs are audited annually.

2 7 Program Justification

2 7 1 Social Impacts

The components of the Program are formulated to provide access to a broad range of reliable and sustainable environmental infrastructure projects through a community-based development approach. The Program will improve the social, health, and environmental conditions in the targeted peri-urban and small rural towns throughout the island.

The greatest impacts of the Program will include, *inter alia*, improved access to adequate supplies of clean drinking water, controlled disposal of human and solid waste, and the proper channeling of potentially polluting stormwater and wastewater away from populated areas. These positive impacts will go a long way toward improving the quality of everyday life and of the health of the households living in the Program areas.

Social justification also includes time savings, leading to potential economic benefits through less time lost to illnesses, more time to engage in economic activities, and possibly more time for recreational activities. This contributes to an improved quality of life.

2 7 2 Environmental

Environmental justification for the project is expected to vary according to the location and sector of the subproject. Typically, water projects will ensure better use of the limited water resources available in many areas, leading to a more sustainable water environment. Where

improved irrigation practices are used, such as using subsurface pipes, further environmental benefits are realized

Improved sanitation, drainage, and solid waste management will result in reduced pollution in communities and a more healthy environment. There is perhaps a greater risk of water pollution if disposal systems do not isolate the waste from the water cycle — for instance, ensuring pit latrines are at least two meters above the groundwater table — or improve its quality. However, if treated water is returned to the water cycle, the environment will benefit.

Road improvements will reduce soil erosion, dust, and noise, and will provide more efficient use of fuels. Extending the low-voltage electricity network or introducing alternative energy systems will result in less use of fossil fuels and less pollution at the micro- and macro-levels. The extension of the electricity grid will lead to the more cost-effective use of existing generation capacity and distribution networks.

2.7.3 Affordability

The Program can be justified on the basis of (i) benefits accruing to low-income population in the form of improved water supply, sanitation, and other services, (ii) enabling communities to assume direct responsibility for the range, cost, and standards of infrastructure and services within their communities, and (iii) the enhanced sustainability of affordable infrastructure provision.

Because of the nature of assessing credit within the cooperative movement, as discussed in Section 2.6.3, conventional methods of determining loan amounts that are afforded by members can be used only with extreme caution. Nevertheless, relationships among income levels, percentages of income available for loan repayments, and affordable loan amounts can provide indicative first estimates. Likewise, relating loan amounts afforded to savings, deposits, and shares can provide a first approximation.

The monthly gross household income range of the target population for the Program is likely to be about Rs 1,500 to Rs 7,000. This suggests loan sizes from about Rs 5,800 to Rs 27,000 according to income,¹⁰ an average of about Rs 16,400 per household.

Figures from the SANASA Federation show that, at the end of 1997, total capital funds or savings balances (shares, savings accounts, and deposits) within the PTCCS movement amounted to Rs 3,895.1 million from 780,000 members within 8,400 PTCCSs. Average capital funds amounted to approximately Rs 462,400 per society and about Rs 5,000 per member. On the basis that a society can borrow up to 10 times its capital funds, the average affordable loan amount would be Rs 4.6 million for each society.¹¹ Since the average number of members per society is 93, the average affordable loan amount per member would be almost Rs 50,000.

¹⁰ Indicative calculation based on an annual interest rate of 19 percent, loan repayments over a five-year period, and 10 percent of income taken as being available for loan repayments.

¹¹ These computations are based on preliminary figures of the SANASA Federation for 1997. At the end of 1997, there were 8,424 PTCCSs with 780,346 members with total savings balances (shares plus deposits plus savings) of Rs 3,895,077,418.

Total loan amounts of between Rs 16,000 and Rs 50,000 would appear to be within the range of affordability of the target income group. However, it is likely that a number of members would have other loans outstanding. Hence, not all of the borrowing capacity would be available for the Program. Assuming that, at a maximum, 50 percent of the lower limit and 33 percent of the upper limit were available for the Program, then typical projects should be designed on the basis of average loans of between Rs 8,000 and Rs 17,000 per member.

3 Creation of a SANASA Community-Based Infrastructure Development Unit

It is proposed that a new technical unit in the SANASA Federation head office be set up. This office would have prime responsibility, at least initially, for developing the community-based infrastructure program. Figure 3.1 shows its location within the organizational structure of the SANASA Federation. Far from starting from zero, the new unit would benefit from and build on more than 20 years of SANASA lending for housing and micro-enterprise development, as well as the institution's recent experience as a PO in the World Bank-supported CWSSP. Given the SANASA Movement's existing capacity to implement similar programs, the proposed unit will initially be kept small and lean, with operational systems and procedures kept to a minimum. More administration can be added over time, as the unit's programmatic responsibilities and relationships vis-a-vis the district unions and the primary societies are more clearly defined. There is future scope for the addition of other programmatic initiatives to the unit's portfolio.

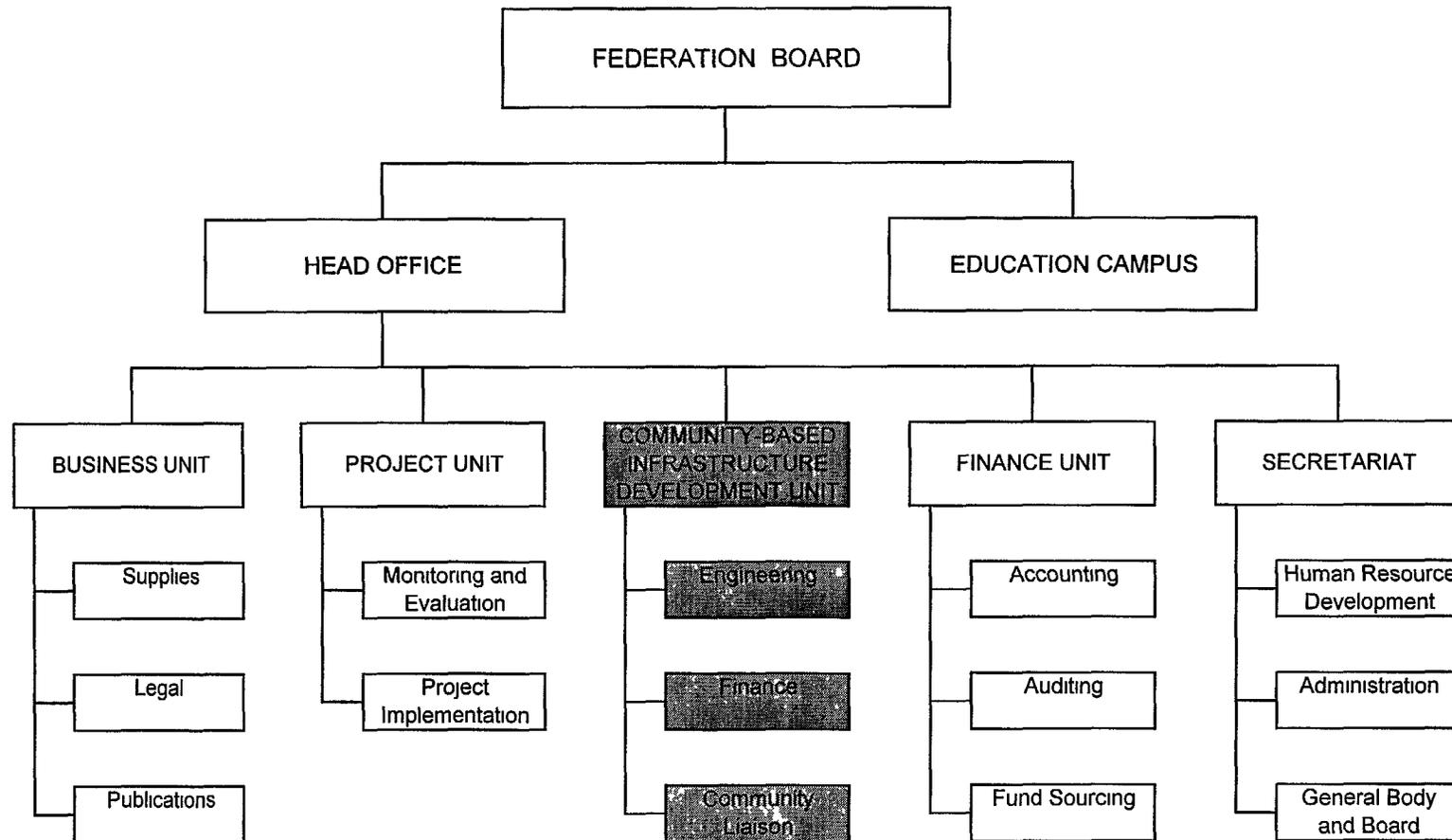
3.1 Objectives

The objective of setting up a Community-Based Infrastructure Development Unit (the Unit) is to provide the SANASA Movement, and particularly the SANASA Federation, with a broad range of technical expertise and skills to effectively design and oversee the management of a new community-based infrastructure program. The Unit will initially include three professionals with technical, financial, and community development education and experience. These professionals will take the lead in the Program's development, oversight of implementation, skills and technology transfer, and monitoring and evaluation. The Unit's staff will work closely with SANASA's district unions and primary societies on technical matters related to the Program.

3.2 The Unit's Scope of Services

The Unit will initially have responsibility for four main areas: (i) program development, (ii) program management, (iii) skills and technology transfer, and (iv) monitoring and evaluation. A brief description of each area follows.

Figure 3 1
 ORGANIZATIONAL STRUCTURE OF THE SANASA FEDERATION OF THRIFT & CREDIT COOPERATIVE SOCIETIES



Source SANASA Federation May 1998

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3 2 1 Program Development

The identification and contracting of staff for the Unit is already under way. In addition to completing this task, including the hiring of a Program Manager/Engineer, a Financial Manager, and a Community Development Officer, the Unit's other key initial activities are as follows:

- identify, establish, and equip an office for the Unit,
- develop and introduce, adapting existing systems where possible, simplified administrative and accounting procedures for the Program,
- establish a basic management information system (MIS),
- develop a first-year work program and budget, which establish key tasks, targets, and milestones to be achieved over the course of the year,
- prepare promotional materials and community group documentation for the Program,
- prepare and carry out orientation workshops within the SANASA Federation and the SDBL and between the Federation and initially interested district unions and local authorities linked to the identification of pilot projects,
- prepare/adapt required operation and procedural manuals and develop resource material (the Unit should use, to the extent possible, those materials already prepared by the CWSSP program, many required materials will only need to be collected and adapted, new materials should only be prepared where absolutely necessary), and
- identify, plan, and design a limited number of pilot subprojects with input from SANASA district unions and primary societies

3 2 2 Program Management and Implementation

Initially, and ultimately to the extent necessary, the new Unit will support the technical officers and the community facilitators of SANASA's district unions in the implementation of projects. Specific subtasks include:

- assisting district union technical staff with the resolution of particularly difficult technical, financial, and community development problems that arise during project implementation, and
- assisting in establishing maintenance systems and procedures to support community maintenance of completed project facilities

3 2 3 Skills and Technology Transfer, Workshops, and Seminars

The transfer of skills and technology and the dissemination of information on the Program to selected SANASA staff, participants from district unions and primary societies, and local authority officials is an important element of Program development and implementation. Training materials and institutional linkages developed for the CWSSP should be employed to the extent possible. The capacity and capabilities of SANASA's in-house Kagalle training college should be used and augmented with the expertise of other NGOs.¹² In addition to formal training, the staff of the technical Unit will be expected to consciously provide on-the-job training, par-

¹² For example Sarvodaya and Arthacharya

ticularly related to the technical staff of the participating district unions. Specific skills transfer and information dissemination activities will include

- seminars and workshops for relevant district union officials to inform and educate them on the objectives and options of the Program,
- workshops for selected local authority officials to brief them on the Program's objectives and options,
- training for Unit and district union technical staff on rapid needs assessments and project identification, and
- training on the technical aspects of project design and costing

3 2 4 Monitoring and Evaluation

Monitoring

The Unit will provide technical support to the participating district unions and primary societies in monitoring projects under implementation to minimize and/or correct problems. Areas where the district unions and the primary societies will likely require assistance include

- project financial administration, including budgeting and control of expenditures,
- appropriateness of subproject technical standards and quality of construction, and
- performance of district union and primary society staff in project implementation

Experience gained from project monitoring will be disseminated to participating district unions and periodically presented and discussed in seminars and workshops

Evaluation

SANASA will periodically evaluate the performance of the above elements of the proposed community-based infrastructure program. The first evaluation should be carried out at the end of the first year of the Program to assess the lessons learned from Program start-up activities, particularly regarding personnel performance and requirements, the establishment of working relationships and channels of communication with the district unions and primary societies, and the initial results of subproject identification and development

3 3 Staffing and Terms of Reference

The Unit initially envisages employing three professionals: a Program Manager/Engineer, a Financial Manager, and a Community Liaison Officer. The Unit's staff size could be increased over time, depending on the future scale of the Program and on the ability to tap human resources at the district union and primary society levels. The Terms of Reference for the Unit's three professionals are as follows

3 3 1 Program Manager/Engineer

The Program Manager/Engineer will preferably be a civil engineer, architect, or builder with at least five years of experience in community-based construction, infrastructure development, and appropriate technology. He/she should also have experience in program management,

preferably in the development sector, policy development and implementation, and working with government agencies and line departments

He/she will be responsible to the Board and the Head of the SANASA Federation for the development of the Unit and the daily management of its staff. He/she will develop the administrative structure of the unit, the social, technical, and financial procedures, information and control systems, and monitoring and evaluation procedures, assisted by the Financial Manager and the Community Liaison Officer. Specific tasks will include

- establishing program criteria and project sectors, determining work areas, and promoting the program,
- receiving and prioritizing project requests and planning work programs,
- in association with district-level personnel, where available
 - ▶ supervising and preparing feasibility studies, rapid appraisals, and site surveys,
 - ▶ preparing detailed designs and cost estimates and conducting project technical appraisals for the SDBL,
 - ▶ participating in meetings with community representatives and community consultations,
 - ▶ supervising project implementation and providing O&M training and support,
 - ▶ advising communities on procurement of materials, including local vs central, possible supplier discounts, etc , and
 - ▶ managing others carrying out these procedures,
- planning staff requirements of the unit and at the national and district levels, according to workload, location, and the financial resources of the Unit, preparing job descriptions, and recruiting, as agreed with the Head of the Federation and the Board,
- developing procedures for management of staff at district level, including the necessary reporting requirements,
- developing procedures for and conducting staff appraisals, and planning and commissioning technical and management training of staff,
- maintaining links with similar projects, organizations, and line agencies in the sector, in particular Sarvodaya, the CWSSP, the CSP, the NHDA, the NWSDB, and monitoring developments in the sector,
- monitoring revised standards, policies, and technologies in the sector and adopting, modifying, and implementing them as appropriate for the program, and recommending and developing policies, both internally and externally, as a result of project experiences, and
- reviewing the success of the Program and recommending and implementing any changes or modifications necessary to work areas, sectors, and procedures, in association with the staff of the Unit, the Head of the Federation, the Board, and the SDBL

3 3 2 Financial Manager

The Financial Manager will be a financial management specialist or a qualified accountant with at least five years of experience in urban infrastructure finance, including two years in an operating environment, preferably a banking or lending institution. Experience with community-based programs, organizations, and cooperative societies would be advantageous.

The Financial Manager will report to the Program Manager/Engineer who is the head of the Unit. He/she will be responsible for the financial management of the Program and will assist in formulating the administrative infrastructure, financial controls and procedures, and necessary MIS. Specific tasks will include

- providing inputs, covering financial and administrative aspects, into publicity campaigns and assisting with the preparation of promotional materials for the Program,
- conducting workshops and seminars to inform members and finance officers of the DTCCSs, the PTCCSs, and local governments on the financial objectives and arrangements for the Program,
- developing procedures for the financial management and administration of the Program at national and local levels,
- assisting the SDBL and the SANASA insurance agency in developing financial objectives, policies, and methodologies for the Program and its implementation,
- developing computer programs for the financial management of the Program, installing the systems at participating PTCCSs, and training officers and members in their operation,
- supervising and training members and officers of the DTCCSs and the PTCCSs in the financial appraisal of projects under the Program,
- working with members of the PTCCSs to establish equitable methods of cost recovery for the capital expenditures of the Program,
- assistance to members of the PTCCSs in establishing the monthly charges to recover the costs of O&M of the developed infrastructure,
- training and assisting officers of the PTCCSs to set up appropriate accounting systems for project costs, including direct and indirect capital expenditures, loan disbursements from the SDBL, O&M expenditures, loan accounts for individual members, and other financial transactions,
- assisting the Federation in undertaking post-evaluations of projects focusing on the financial and banking aspects, and
- any other tasks assigned by the Program Manager

3 3 3 Community Liaison Officer

The Community Liaison Officer will be a specialist with formal training in social work, community development, or a related field with at least five years of experience, two of which should be directly relevant to working with peri-urban and rural community groups on project development. Specific Program tasks will include

- taking a lead role in preparing promotional materials for the SANASA community-based infrastructure program,
- organizing seminars and workshops to disseminate the objectives and options of the Program to appropriate district unions, primary societies, and local authorities,
- carrying out initial screening of interested community groups/primary societies,

- meeting with prospective primary societies to explain the Program's objectives and options and to identify the community's needs, priorities, and willingness to contribute to project costs,
- incorporating an interested community group into an already existing primary society or organizing a new primary society,
- serving as liaison with interested community groups to organize rapid needs assessments and other technical surveys,
- working with interested community groups to discuss alternative project options and to obtain approval for the preferred option,
- working with selected community groups to plan project implementation, including agreement regarding voluntary/paid community contribution to project construction,
- organizing community groups to provide routine maintenance for completed projects, and
- taking the lead in organizing *ex post* evaluations of projects

3 3 4 Field Staff

It is expected that, in the long term, the Unit will recruit community development and technical staff at the district level for community mobilization and training and technical inputs for project design, implementation, and O&M. The job descriptions and required professional experience of these field staff should be comparable to the staff engaged for the CWSSP program. In addition, they should have a basic understanding and be able to undertake some of the basic work of their counterparts and the local technical officers community mobilization staff. This would include participating in community mobilization and community meetings, conducting basic site surveys, and supervising basic construction work and O&M activities.

Field staff will be required immediately for any projects that are more than two hours away from Colombo. Initially, they should be employed on a contract basis, according to the project workload. An alternative may be to use some CWSSP staff on a part-time basis, as agents of the Unit. In the longer term, it will be necessary to decide if the Unit should continue to contract staff, engage permanent employees, or retain a mixture of both.

The proposed expansion of the CWSSP and the commencement of the ADB water and sanitation program will exacerbate an already short supply of skilled and trained community facilitators and technical officers. Supply is short on account of better opportunities for promotion and higher salaries elsewhere. This will limit the numbers of staff who can be recruited to the Unit. SANASA must therefore seek to pay competitive rates for its staff at all levels.

3 4 Reporting Requirements

The Unit's Program Manager will prepare a concise quarterly report that describes progress for each Program component, identifies milestones and problems/issues encountered, and sets forth activities planned for the next three months.

3 5 Financing and Sustainability

3 5 1 Sources

Initial financing for the unit will be provided by SANASA out of its own resources, supplemented by grant assistance from USAID. However, in the longer term, its operations must be designed to recover costs in full to ensure sustainability of the Unit.

Given that the function of the Unit is to assist the PTCCSs and members finance, design, construct, operate, and maintain basic infrastructure within their settlements, the costs of the Unit are in fact technical assistance costs that could be recovered in one of two ways:

- as a management fee that is based on the direct costs of development or apportioned according to actual time spent, or
- through a mark-up on the lending rate from the SDBL to the PTCCSs

Since it is proposed that the Unit is located within the structure of the Federation rather than the SDBL, recovery through a mark-up on the lending rates is not practicable. A management charge would be the most appropriate method. Such a charge could be paid directly by the SDBL to the Federation and debited as a loan to the concerned PTCCS upon completion of the development phase of the project.

3 5 2 Basis of Recovery

Computing charges on a time basis would be the most equitable approach, but it would be difficult and costly to assess them precisely. Instead, a percentage charge related to the actual development cost of a project is more easily implemented. At the start of the Program, actual costs relative to output will be high. Funding will be provided mainly by a USAID grant, hence, full cost recovery of the expenses of the Unit is not necessary. For computational purposes, only the costs financed from SANASA resources (that is, those of the membership) should be recovered in the earlier years of the Program.

The amount to be recovered should be computed and divided among the likely number of participating PTCCSs. In the interim, a project management or technical assistance fee of about 20 percent of the cost of development is recommended. The total cost of the Unit is estimated to be about Rs 2.16 million for its first year of operations in 1998 prices.¹³ USAID is to finance Rs 0.72 million of this, with the balance of Rs 1.44 million financed from SANASA's own resources. To recover the costs of the Unit in full on the basis of a 20 percent project management fee would imply members undertaking development works equivalent to Rs 10.8 million in the first year of operations, implying the implementation of about four projects. If only the SANASA funded items are recovered, then projects that have total development costs of Rs 7.2 million would need to be implemented. The project management percentage factor could be reduced in later years as the Program expands. Nevertheless, the Federation must undertake

¹³ This is computed as follows: Monthly salaries for the three technical experts at Rs 30,000 per month for a total annual bill of Rs 1.08 million. On the assumption that office overheads and operating expenses are about the same as the salary bill, total costs for the first year of operation would be Rs 2.16 million.

an annual review of the cost and workload of the Unit and, if necessary, revise the percentage factor at the start of every year

In the longer term, the costs of the Unit to be recovered should relate to all costs, covering salaries, transport, materials, communications, transportation, imputed rent for the office space occupied, and depreciation on equipment used solely by the Unit. The Unit itself should be aware of the need to recover its costs, keep costs low, and constantly review the procedures for potential recovery. Where costs cannot be recovered on affordability grounds, grant assistance should be sought from bilateral funding agencies

4 Outline Procedures for Identification and Selection of a Pilot Project

4.1 Pre-Identification of Community Group

The Program is designed to be demand led, with initiatives coming from the members of the community. The SANASA Federation, with prepared promotional material, will widely publicize the Program through its Community-Based Infrastructure Development Unit. However, in line with the concept of the Program, the communities themselves will initiate participation. The Program will be open to all PTCCSs and to other community-based associations whose members express a willingness to join an existing SANASA registered society or set up a new one.

Interested PTCCSs will submit a preliminary noncommittal application to the Federation consisting of a written request for participation indicating that this has the full agreement of the membership.

The SANASA Federation will then proceed to set up an initial meeting with the community.

4.2 Initial Meeting with Community

At the initial meeting, the SANASA Federation will

- understand and explain the importance of the community mobilization process in the project and expected outputs,
- describe the initial activities to be carried out,
- establish a relationship with the community to gain the acceptance of members,
- explain the project to the community,
- outline the responsibilities of the community in the project cycle from feasibility and design to operations and maintenance,
- determine the past activities of the PTCCS, particularly in lending and development,
- ascertain the extent of membership, including the proportion of households in the project area who are members, and
- make preliminary assessments of the willingness and ability of the members to pay for the Program.

4 3 Linkages with Government

Before proceeding with project preparation, contact will be made with the concerned government agencies both at national and local levels. Contacts will be made with the local authority within which the proposed project is located and with the infrastructure agencies responsible for the sector within which improvements are to be made by the community. The purpose is (i) to ascertain if there are any projects planned for the area and whether or not they are likely to effect the proposed community-based project and (ii) to inform the concerned agencies about the objectives and potential scope of the proposed project.

Key issues of ownership of the project will be discussed and the content of any agreement that has to be entered into with the local government or national agency will be outlined and discussed.

4 4 Rapid Needs Assessment

4 4 1 Social

The proposed Community-Based Infrastructure Development Unit will prepare a household survey instrument, or modify an existing one in use by either SANASA or the CWSSP, to provide an accurate assessment of a prospective community's perception of problems related to infrastructure coverage and the willingness to pay for improvements.

The survey instrument should be straightforward and should include questions related to

- names of heads of households and household composition,
- type of employment of household members,
- daily/monthly income of household members,
- type, distance, payment, if any, and satisfaction with water source (protected and unprotected well, tubewell, spring, surface water source, other),
- type and condition of waste disposal facility (pit latrine, water seal pit latrine, ventilated improved pit, other),
- form of disposal of solid waste,
- occurrence of flooding in area, need for stormwater drainage facilities,
- condition and maintenance of roads and access to transport facilities,
- household willingness to pay for improved infrastructure delivery and how much, and
- other priority development needs

Other questions can be included on the survey instrument, but questions in general should be tailored to the types of projects to which the Program can respond.

4 4 2 Financial Aspects

The financial aspects involve estimating costs, imputing overheads and contingencies, pricing services and allocating costs among members, estimating likely contributions from members, and determining the affordability of loan financing sought. It also involves estimating O&M costs.

and making preliminary proposals for the amount and the recovery of these costs from the members

Capital Costs and Their Recovery

Total investment costs are estimated from the preliminary design work and the project scope. Land and associated land acquisition costs are estimated if purchase is required for the project. Base development costs are computed, covering both direct costs that involve cash outlays and imputed costs relating to members' contributions in kind, such as labor and materials. Design, supervision, and project management costs are added together with estimated contingencies. Inflation is added last to arrive at an estimate of the full development cost of the project in current prices.

Next, an agreement will be made regarding the principles of pricing and cost allocation. Alternative approaches and configurations should be discussed. A key issue is to establish whether or not costs will be allocated equally among members or determined on the basis of potential use or consumption, where this can be measured or based on other proxy indicators, such as plot size or family size. Alternatives should be presented to the community. The precise approach, however, will depend on the nature of the infrastructure being provided and full agreement of the concerned community.

From the total estimated cost of the project, the aggregate amount to be contributed directly by the members in cash or in kind (minimum of 20 percent) are subtracted, leaving the balance to be funded by a loan from the SDBL. The actual amount of contributions expected will be based on the agreement of the community or members. Amounts of more than 20 percent should be encouraged, but the ultimate decisions rests with the membership.

Individual member's creditworthiness is then assessed by the PTCCS on the basis of the annual declarations submitted by each member. Appendix 2 presents a typical format for the annual declaration.

O&M Costs and Their Recovery

O&M costs, including direct costs and the depreciation of any plant and equipment purchased, will be computed from the necessary requirements and current rates of provision. The principles of cost recovery will then be established and agreed with the community. This may be in the form of equal payments per household, charges based on measured consumption, or other proxy indicators for consumption or use, such as the area of a residential plot or family size. Community endorsement of the approach is required.

Affordability

Total monthly outlays of the members for the project that cover both the regular loan repayments and routine O&M charges will be computed. The total will indicate whether or not the scheme is affordable. As a general guideline, no more than 10 percent of household income should be required to cover the loan repayments and O&M costs. Where there are problems of affordability, decisions may be made to reduce the standards of provision to more affordable levels or to agree to some sharing mechanism among the membership.

Next, an assessment of the borrowing capacity of the PTCCS will be made. This will relate to the computed debt ceiling as outlined in Section 2.6.3 and reducing this by the total principal balances of all outstanding loans at the date of the first loan disbursement under the Program.

4.4.3 Technical Aspects

Following identification of community needs and priorities, there should be field surveys, data gathering, and liaison with the relevant line agencies that will allow this initial information to be translated into viable alternative projects. The data gathered will also be useful in addressing the community's social, financial, and environmental needs. Community representatives should assist in the work and also in liaison with line agencies not only to gather relevant local knowledge, but also to keep the agencies informed at all stages of the work and to seek their advice on various options.

The CWSSP manual, *Field Guidelines for Technical Officers, Project Development Phase*, identifies a number of procedures for the technical assessment of needs. While some of the activities recommended are fairly specific to the technologies promoted by the CWSSP, such as the development of gravity water supply and dug-well and sanitation projects, many of the others are applicable to a range of generic service delivery problems. The guide also has a number of pro-formas that may be used and developed for carrying out the field surveys and desk studies required.

The activities to be carried out should include

- identification of the areas, properties, and population to be served, and existing and expected levels of service and demand, e.g., water consumption, wastewater production, and space available for roads,
- a simple site survey to identify the options available to meet the required demands and to determine the suitability and capacity to meet them, including location, capacity and levels of existing sewers, water mains, and springs, it may also be necessary to briefly consider such issues as site access and locally available materials and their costs, since these may also affect technical feasibility, where it is intended to connect into a local service, it will be necessary to consult with the appropriate line agencies and local authorities,
- a simple topographic survey to determine the extent of the project, the nature of the site, e.g., flat or hilly, open or densely wooded, hard or soft ground, and the infrastructure requirements, e.g., on-site or off-site disposal, pipe lengths and sizes, and lengths and widths of roads, the data collected should be sufficient to permit preparation of the project outline(s) and cost estimate(s), and
- details of local land ownership, water rights and historic use, rights of access, growth of the community, land resources, and community skills

Where appropriate, local maps and records may also be studied and the advice of long-term residents and local leaders sought, especially when trying to assess the yield of a spring and the details of local ground conditions.

4 4 4 Environmental Aspects

As part of the technical survey of the area, data suitable for an assessment of the environmental conditions of the community should also be gathered. In particular, the data should be relevant to the potentially negative aspects that may prevail. The environmental assessment should identify the risks involved, including any quantification that may be relevant, and highlight any mitigating measures that may be adopted.

Issues to be considered should include

- general and nonsustainable use of water and water resources, e.g., drawing water from a spring in one catchment and disposing of it in another, creating surface water storage for irrigation, and reducing the level of the water table downstream affecting springs and wells,
- possible contamination of water sources, e.g., improper disposal of wastes and inadequate lining of wells in permeable ground,
- increased soil erosion and loss of water to local water resources or flooding, because of increased surface water runoff, e.g., construction of culverts and concentrating water in one area without controlling the discharge and loss of trees and groundcover due to clearance for roads, trenches, and power lines, and
- creation of conditions hazardous to public health and safety, both permanent and temporary, e.g., slippery ground due to inadequate disposal of water at water points and increasing vehicular traffic and speeds through the settlements

4 5 Presentation of Project Options

On the basis of the data collected from the surveys and community meetings, various options should be identified and the feasibility of each of them assessed. Outline schemes and costs should be prepared on the basis of those that are feasible. This may include the development of a number of different options within one scheme, according to local resources, demands and conditions, sustainability, and O&M requirements. An example would be water supply by well in some parts of a community and by tubewell elsewhere, or two connections to a local sewer, because of topography or sewer capacity. It may be necessary to include the preparation of a number of different schemes in order to let the community decide which one it prefers. An example would be on-site vs off-site disposal of sewage.

Feasibility should be determined on the basis of all the data gathered, not just the technical data. Also, where a number of different schemes are prepared, it will be necessary to detail the advantages and disadvantages of each, to enable the community to decide which one it prefers. This should be prepared in the form of graphical presentation materials, covering the technical, social, financial, environmental, institutional, and legal aspects. These materials should be supported by appropriate sketch plans and drawings showing the options available and their main components, which would include the road layout and tap stands, for instance.

Detailed design should not be undertaken at this stage. The information collected and the cost data available should be sufficient to indicate scheme costs within 10 percent to 15 percent. This requires the availability of cost data from previous projects, indexed according to price rises and

project location, i e , urban or rural Typical O&M costs for each option should also be provided

As with the rapid needs appraisal, the CWSSP literature has a number of tables and charts that will be of use in this process It is recommended that, wherever possible, community representatives should be involved in the planning process, to keep them informed of the decisions being made, to seek their advice on various matters, and to enable them to be a channel of communication between the Unit and the community Also, by their involvement at this stage of the process, consultations with the community to select the final project should be easier In this respect, it may be necessary to be aware of any vested interests that may be put forward during the surveys and consultations

4 6 Presentation, Discussion, and Evaluation of Project and Costs with Community

4 6 1 Technical Aspects

Following preparation of the outlines of feasible schemes, there should be a meeting with the community members to explain the results of the investigations and to present the options available There should be time to discuss the proposals and their costs, and sufficient time should be allowed for the documents to be studied and for questions to be asked It will be necessary to leave the documents with the community for a number of days A sufficient number of copies will be needed, in the local language, to provide one set per 50 households

According to the results of the meeting, any modifications or revisions proposed should be investigated, evaluated, and re-presented to the community In particular, agreement should be sought on

- the scope, composition, and general layout of the scheme,
- the levels of service that are acceptable,
- the technologies and components used,
- the method of implementation, such as using own resources, local community-based contractors or external contractors, and the nature of the community contribution, whether in cash or in kind, there may be a mix of approaches, according to the nature and different components of the project and local conditions,
- management, operation, and maintenance of the project on completion, and
- the linkages and agreements necessary with line agencies and local government

Where there are a large number of households involved, it may be necessary to hold a meeting with the community representatives first, and then allow them to hold preliminary talks with the people from their area Holding a community meeting of 100 or more people to discuss the details of a project, especially if there have been no preparatory meetings, will be very difficult Also, if questions and comments can be forwarded to the Unit after these meetings, it will be possible to address them during the main meeting

The CWSSP technical literature also contains guidance on this stage of the preparatory process

4 6 2 Financial Aspects

Development, O&M costs, principles of the pricing scheme proposed, and the necessary monthly payments should be presented to the members, opinions sought, and agreement obtained

In particular, agreement should be sought on

- total project development costs,
- the adopted method of capital cost recovery,
- the maximum loan amount to be secured by the PTCCS,
- the nature and amount of members' equity contributions in cash and in kind,
- estimated O&M costs,
- the method of recovering O&M costs, and
- cost-sharing principles among members to deal with the very poor

4 7 Selection and Endorsement of the Preferred Option

The community group will meet to select the preferred project option from among the alternatives presented, discussed, and evaluated. The community will endorse the preferred option and request that the SANASA technical unit (i) prepare a Memorandum of Understanding (MOU) that sets forth basic points of agreement among the local authority, SANASA, and the community group, and (ii) submit appropriate documents to the SDBL for funding of the selected project

4 8 Signing of the Memorandum of Understanding

Following the selection and endorsement by the community of the preferred project option, the SANASA Community-Based Infrastructure Development Unit will draft a MOU setting out the terms and conditions under which the project will be implemented. Following discussion and agreement among the parties, the MOU would be signed by SANASA, the community group/primary society, and the appropriate local authority. The key clauses set forth in the MOU are as follows

- the parties to the MOU and their representatives,
- the procedures for the holding of meetings, for the keeping of records, and for the reporting of complaints,
- the roles and responsibilities of the participating parties during project implementation,
- miscellaneous provisions dealing with, for example, user connections, water quantity, late connections, water consumption, etc., and
- responsibilities for operation, maintenance, and repairs

Information and materials, including plans, completion documents, participating party contact details, etc., would be presented in appendices

Appendix 4 presents model Memoranda of Understanding for typical community-based water supply and sanitation projects

4 9 Submission of Documents and Loan Approval of Project

After agreement within the community, a formal application for a loan from the SDBL should be made by the PTCCS. The application will be submitted to the nearest branch or agency with, if necessary, the assistance of the technical officers of the Community-Based Infrastructure Development Unit of the Federation.

The amount applied for would be that determined above and endorsed by the membership. It should be noted that this would be the maximum amount that the bank would disburse and the estimate must include adequate allowances for all contingencies. Should subsequent work indicate that the project will cost more, then additional contributions from the members would be required. Care must therefore be taken over the preparation of the cost estimates and the resulting amounts expected from each member.

A standard loan application form of the SDBL must be completed. A sample is contained in Appendix 5. This would be submitted to the bank along with

- official minutes of a general meeting of the membership held to authorize participation in the Program,
- a copy of the tripartite MOU,
- the name of the PTCCS and details of its registration status,
- a copy of the constitution of the PTCCS,
- names of the officers of the PTCCS,
- details of the bank accounts of the PTCCS,
- members' agreement duly signed by each intended beneficiary,
- a list of participating members,
- credit limits of each prospective borrower,
- draft loan agreements between the PTCCS and each prospective borrower according to the format shown as Appendix 6,
- audited financial statements for the past two years of the PTCCS,
- project plan and preliminary engineering drawings, and
- implementation schedule for the project.

The SDBL will appraise the loan application and recommend on the basis of an evaluation of data shown in the format of Figure A1.2 in Appendix 1.

The SDBL will approve a maximum amount for the loan. A disbursement schedule will be prepared by the bank, and this will match loan releases to specific stages of project implementation. The loan agreement is then entered into by the PTCCS with the SDBL. A sample agreement is attached as Appendix 7.

5 Detailed Design and Implementation of Pilot Project

5.1 Required Site Surveys and Mapping

Following agreement of the preferred project, detailed design commences. As part of this process, it will be necessary to prepare drawings sufficient to start the design, the final schemes will be detailed later. In urban and peri-urban areas, it may be possible to obtain site plans and other relevant drawings from the local authority or an appropriate line agency. In rural areas, a village plan may be available from the Grama Seva Nilhadari or the Divisional Secretary. Where they are available, the details should be checked on site, amendments made, and details added as required. This should include checking the position and levels of any existing services. Where no suitable drawings are available, a detailed site survey will be necessary.

The CWSSP literature provides advice on a number of ways in which to carry out topographic surveys, the features to observe, and the ways to record them. Important features to note are existing buildings, tracks and roads, rivers, streams, lakes, bridges and culverts, services, water sources, and disposal points. If appropriate, groundwater levels and local ground conditions should also be recorded.

The number of levels taken should be determined by the nature of the project and the topography. A flat site will probably only require levels around its edge and at the intersection of roads and tracks. A steeply sloping site may require sufficient levels to show contours, especially if roads or pipelines are to be installed. Levels are unlikely to be relevant for a plan showing a layout for solid waste collection points. In a water supply project, it would be helpful to record details of the possible positions of water tanks, taps, etc. A further survey will probably be necessary once the routes of the pipelines are determined, specific to the route(s) chosen.

Drawings should be prepared at appropriate scales to show the general site layout and important areas, features, and sections of work in greater detail. Any sections required should be prepared similarly. The differences between existing and new works should be clearly detailed. The drawings should be clearly titled, numbered, and cross-referenced. The north point should also be shown. It is also helpful if the plan is not "upside down" with respect to north. Where existing standard details are being used, site-specific data should be clearly shown and project numbers added.

It is recommended that, wherever possible, community members should help with the work onsite, not only to speed it up and control costs, but also to take advantage of local knowledge. Community facilitators may be able to assist as permitted by their workloads and experience. Training in these tasks would help increase the efficiency and general levels of skills within the Unit.

It will also be necessary to confirm the accuracy of the details obtained during the rapid needs assessment. Any information gaps noted should be investigated. Any changes should also be investigated and noted. This will include increases in population, changes in waste generation,

etc Community representatives should be invited to discuss the data already gathered, to identify any changes that may have occurred, and to assist in providing or collecting the relevant data

5.2 Detailed Design and Costing of the Project

Wherever possible, standard details, design recommendations, and procedures should be used. Those considered suitable comprise

- CWSSP technical literature, based on the Helvetas (Sri Lanka) manuals titled *Construction of Latrines*, *Construction of Hand-Dug Wells*, and *Design, Construction and Standardization of Gravity Water Supply Systems*,
- NHDA *Guidelines for Potable Water Supply, Waste Water and Storm Water Drainage, Domestic Sewage Disposal and Solid Waste Management of Designated Low Income Housing Projects in Sri Lanka* (subsequently referred to as the NHDA Guidelines), and
- CSP *Guidelines for the Planning, Design and Operation and Maintenance of Water Supply, Sullage and Rainwater Drainage, Domestic Sewage Disposal and Solid Waste Management for Urban Low Income Settlements*, and *Supplement for the Planning and Design Guidelines for Water Supply, Sewage Disposal, Solid Waste Management and Access Roads for Settlements under the Clean Settlements Project*

These guidelines have been used for the design and implementation of a number of infrastructure projects in low-income communities. A number of precedents and procedures that are also appropriate to the Program, including design procedures and standard details, have therefore been set. Because of this, it is recommended that these guidelines and details should be used wherever possible. Exceptions may include cases where project conditions make them inappropriate or where they have been superseded by other documents and recommendations. For further details, see Appendix 2. The NWSDB has a number of agreements prepared for use between itself and the developers of water supply and sanitation services. These are relevant to the provision and the operation and maintenance of services in Greater Colombo.

The design process should focus on cost-effective design within these criteria. This may include optimizing such features as (i) pipe gradients to avoid major excavation or the construction of break pressure tanks or additional manholes, (ii) avoiding the use of expensive materials and construction methods, and (iii) constructing one larger tank rather than two smaller ones. The use of standard construction methods may also allow pre-casting or the use of standard materials and components, rather than more expensive, nonstandard methods and materials.

Where possible, project design should use standard procedures and pro-formas, such as those used in the CWSSP documentation. The development of standard spreadsheets and other computer software will help in this respect, although it is essential that the designer should have a feel for the subject, understand the methods being used, and have a good idea of the results expected. While reference to previous schemes that have similar conditions and requirements will be helpful, the details or the results obtained should not be reproduced without a design check.

Drawings should be prepared for each section of the project as described in Section 5.1 above, showing plans and sections as required. New and existing works should be clearly shown, and the drawings must be clear and sufficiently simple for use on site by skilled workers who may have limited experience of reading and understanding drawings. Drawings are preferred over lengthy descriptions of works. Tables are also preferred where a number of standard features or processes have to be carried out.

The NWSDB will carry out a feasibility study for the design and location of tubewells as part of its drilling contract. A survey plan should be provided, showing the site layout and the preferred location of the wells.

Detailed design of mains electricity projects will be carried out by the Ceylon Electricity Board. Advice on alternative sources, such as micro-hydro and solar power, may be sought from Sarvodaya and the Intermediate Development Technology Group (ITDG). There are also a number of ITDG publications on the subject available through Lake House Bookshop, Colombo.

Following completion of the design and the drawings, a detailed Bill of Materials should be prepared. This should be used to prepare a detailed cost estimate for submission to the community, along with other design documents and a brief project report, for agreement and approval.

Liaison with the appropriate line agency and local authority should continue during the detailed design stage. Amendments should be made after agreement with the community representatives and, if essential, to the proper operation of the scheme in respect of any agreements and conditions the agency may demand. The Unit should note existing precedents and strive to have them acted on as appropriate by the community and/or the concerned agency. If required, the Unit should also assist the community in obtaining necessary official approvals.

5.3 Final Evaluation of Designs and Costs

Following completion of the detailed design and the costing of the project, there should be a final review of the design and costs. This should check the project against the original design criteria, budgeted cost estimate, and any modifications agreed to during the design process. If costs are found to be more than 10 percent greater than predicted on the original levels of service agreed to, there should be a review of the design to determine why these changes have arisen. Action should be taken as appropriate, which could include the redesign of sections of the project, the review of the service standards to bring the project within acceptable limits, or a reassessment of the affordable limits of the community.

If possible, this should be carried out with the assistance of community representatives. A regular review of the project against the original design criteria at appropriate stages during the detailed design process should help avoid any major problems at this stage of the project.

Revised project costs will be computed on the basis of the detailed design estimates. This will necessitate a review of the project financing arrangements and is likely to lead to a change in either the loan amount required or the contributions expected from the members. Affordability

of the project is then reevaluated, and the amounts to be paid by each member household are recalculated according to the revised loan amount

Should the revised project cost result in a higher loan estimate, members would be asked to make additional contributions or the project would have to be amended or redesigned so that costs could be reduced further

5 4 Notification of Detailed Design and Costs to the SDBL

Once the community has agreed to the detailed design and the revised cost estimates and hence the loan amount, revised costs and the detailed designs are submitted to the SDBL. This provides proof to the bank that there have been changes to neither the concept of the project nor its scope. A more accurate estimate of the likely loan amount can be recorded by the SDBL.

5 5 Final Community Approval and Signing of the Intra-Community Agreement

Following the final evaluation of technical designs and costs and the submission of the project to the SDBL for its final approval, the entire community/primary society will give its final endorsement to the project. Each member of the community or primary society will be asked to sign an agreement that specifies individual rights and responsibilities and ownership of the project's assets.

5 6 Procurement, Contracting, Supervision, and Operations and Maintenance

In most projects, the community will be responsible for procuring the materials required for the construction works and paying for transport, contractors, and any line agency charges due. In some cases, particularly a project in a remote location or where only small quantities of materials are required, the community may find itself paying more than necessary. In other cases, it may find that the contractor or the line agency has to obtain the materials itself. This is the case where road surfacing and electricity power lines are required.

Where the community is responsible for procurement, the Unit should investigate the possibility of obtaining greater discounts on materials, either by the community buying locally or at the district or regional level together with other projects or through SANASA. If any of these options is cheaper, the community should be advised of this possibility and asked if it wishes to take advantage of the offer. Before the SANASA option is offered, it will be necessary to determine whether the Unit has the capacity to handle purchasing and arranging the deliveries and at what cost the service may be offered to the community.

Also, with respect to procurement, it will be necessary for the officer responsible for technical supervision to advise on the quality of the materials to be used. Samples should be seen and approved. In case of possible disagreements later on in the project, samples should be kept for future reference. In rural areas, it is also likely that communities will be able to provide some materials and labor in kind. In urban and peri-urban areas, they may prefer to contribute cash.

Normally, engaging a local, small-scale contractor is cheaper than using a major contractor. The work is often better, too, and money is returned to the local economy. Wherever possible, the community should be encouraged to engage a local contractor, either by negotiation or by

competitive tender. The community should look for contractors who have proven experience in the work to be done. Where the scope of work is large, it may be possible to split it into packages.

A schedule for payments should also be agreed to with the contractor, preferably according to the work to be carried out. The technical officer should advise the community on the best approaches to adopt in each case, including agreeing to the proportion of the work done by the contractor and recommending the payment schedule.

Where the work is to be undertaken by a line agency at a later stage, for instance, a water system connected to the local mains, the agency is certain to have procedures and regulations regarding the hiring of approved contractors and procedures for supervising and testing. These requirements should be identified and agreed to before work commences. The community should monitor progress and maintain adequate records.

During the execution of the works, the community should be advised of the benefits of checking the quality of the work. Selected members should be given basic technical training to help them carry out this task effectively. Any problems with the work should be reported to the technical officer and the community representative. The contractor should take instructions only from designated community members and the technical officer. A set of drawings and contract documents, including any specifications being used, should be available on site. Where variations are necessary, they should be costed, agreed to, and recorded before the contractor carried them out. Each party should sign the variation order.

Where appropriate, simple measuring rods and other devices should be used. Work should be marked clearly to show appropriate dimensions, sizes, and use, such as trench depth and width, well diameter, and thickness of road base and wearing courses. Concrete and mortar proportions should be measured using gauging boxes of known volume. Water used should be measured to ensure the optimum water-cement ratio. Concrete and brickwork should be cured properly to ensure maximum strength. Reference should be made to the CWSSP document *Technical Training of Construction of Community-Based Rural Water Supply Systems*. Information should also be sought from other technical literature.

The technical officer should visit the site regularly and should keep a diary to detail what was observed and the actions taken, the progress of work, and the problems identified. There should be meetings with the contractor and the community to discuss the work at least once every two weeks. Records of all meetings and correspondence should be kept in a project file.

Once the project is complete, it will be necessary to prepare a project completion report, including the final project cost, and have the project signed off by the community. Where a line agency is taking over ownership of the works and/or assuming responsibility for O&M, it should also be involved in this sign-off process. Copies of all contract drawings and details should be left in the field for use later. Where relevant, contract drawings should be copied to the line agency. Contractors should be required to provide a period during which construction faults may

be corrected at no cost to the community. This is often one year. Where community-based contracts are used, six months may be more appropriate.

O&M starts immediately after completion and acceptance of the works. Where the community is to be responsible for O&M, it is advisable that the persons tasked to be responsible should have been involved in the construction phase. Where this is not possible, the technical officer should include a full tour of the site and a description of the design and layout as part of the training program. A set of appropriate tools should also be included as part of the project. Completion of the project should not be agreed to until the complete set of tools is procured and the training is complete. This may require some retention of part of the contractor's payments. SANASA should also agree to a program of post-completion support visits, every month during the first quarter and quarterly for the rest of the first year of operations. Subsequently, visits may be made annually.

The visits should be used to monitor project and O&M performance, determine the need for additional works, and gather evaluation data. The performance of any line agency responsible for O&M should be noted during these visits, as should the community's record in paying user charges. In the event of any problems, the community should be encouraged to contact the concerned agency to have it corrected. The Unit should also provide support necessary in the event of a poor response by the agency.

5.7 Finalization of Loan Agreements between the SDBL and the PTCCS and between the PTCCS and Its Members

After completion of construction, final project costs can be determined and the total amount of loan disbursements computed. The loan agreement between the SDBL and the PTCCS is amended to reflect the final loan amount (which should be less than or equal to the approved amount earlier) and the repayment schedule is recomputed. The amendment is signed by both parties.

Each individual member loan agreement can now be finalized with the precise amount determined and monthly repayments recomputed. Notification of the revised amounts would be given to each member in the form of an amendment to the loan agreement. This should be signed by each member.

Appendix 1

An Overview of the SANASA Development Bank Limited

1 Background

The SANASA Movement dates back to 1906 and is based on a model that incorporates self-help and community action. It has grown rapidly since 1978 from a collection of isolated village societies into a network of village based financial institutions. The movement now has two major divisions, the co-operative sector and subsidiary companies and organizations. There is also an education campus. Figure A1.1 shows the overall composition of the movement.

The SANASA Development Bank Limited (SDBL) is one of the subsidiary companies within the movement. It was incorporated as a public limited liability company on 6 August 1997 and was registered as a Licensed Specialized Bank on 21 August 1997 by the Central Bank of Sri Lanka. The SDBL commenced business on August 25, 1997 through its Colombo office.

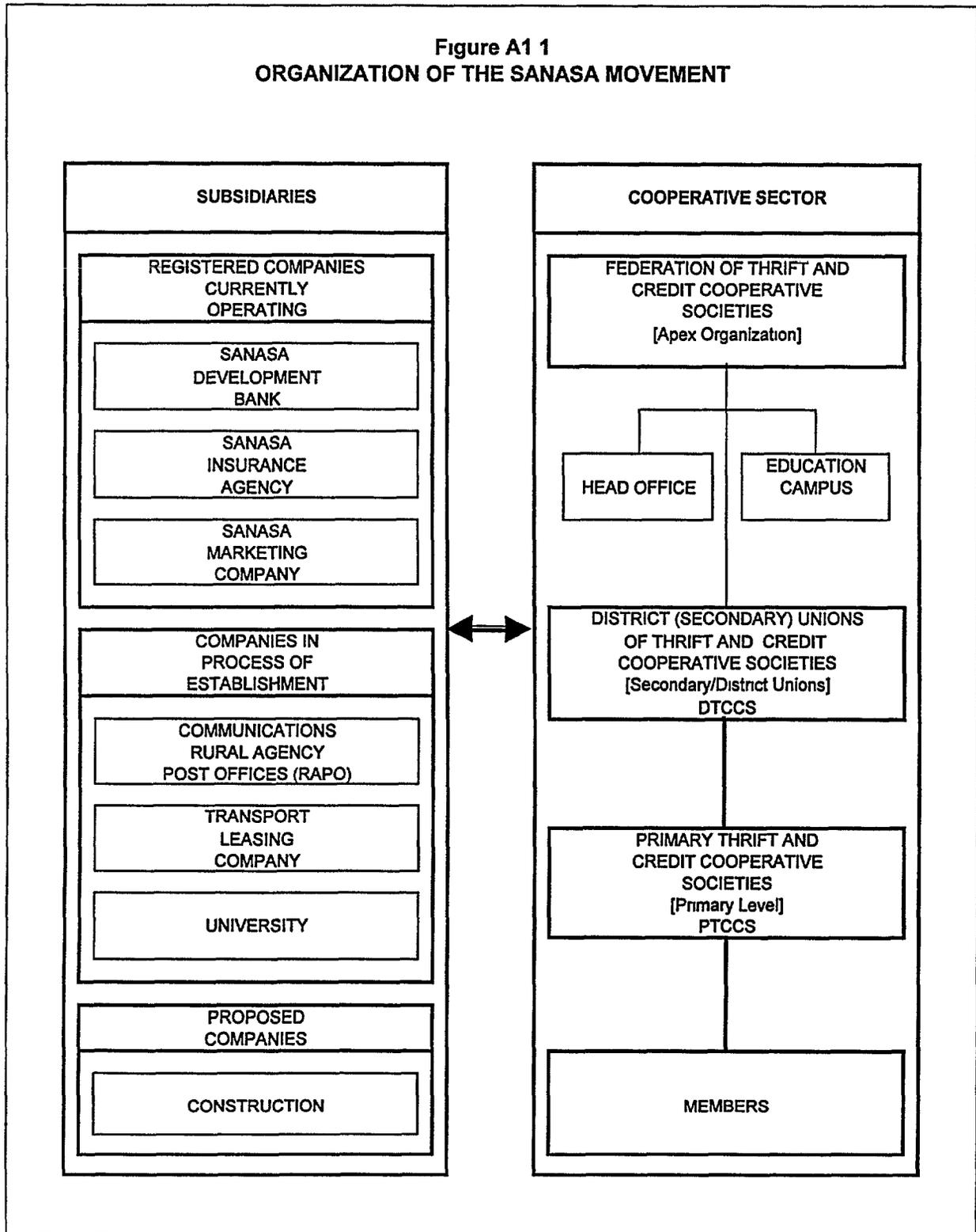
The SDBL originally planned to be a commercial bank, but regulations require that Rs 500 million is to be paid up to set up such a bank. SANASA, the sponsor of the bank, had insufficient funds to subscribe this amount. The authorized share capital of the SDBL is Rs 1,000 million divided into 9 million Ordinary Shares of Rs 100 each and 1 million Cumulative Preference Shares of Rs 100 each. SANASA has subscribed 100 percent of the initial capital of Rs 121 million.

The rationale for the SDBL was to streamline the provision of financial services to the low-income group including micro-entrepreneurs through cooperative and development-oriented approaches. The vision of the bank is "to raise the income and employment levels of the people with particular focus on poverty alleviation and social equity through development and cooperative oriented financial services."

Its mission is described as

"To establish a development bank equipped with the capacity to service as the apex credit institution of the Thrift and Credit Co-operative Movement with the objectives of (i) strengthening the SANASA Movement to become a substantial rural credit institution, and (ii) raising the income levels of the poor through sustainable approaches, and to provide a range of financial and complementary services, focusing special attention on (i) facilitating access to financial services and business advisory services for the poor, the small businessman and the micro entrepreneurs, and (ii) developing and extending the outreach of rural financial markets."

**Figure A1 1
ORGANIZATION OF THE SANASA MOVEMENT**



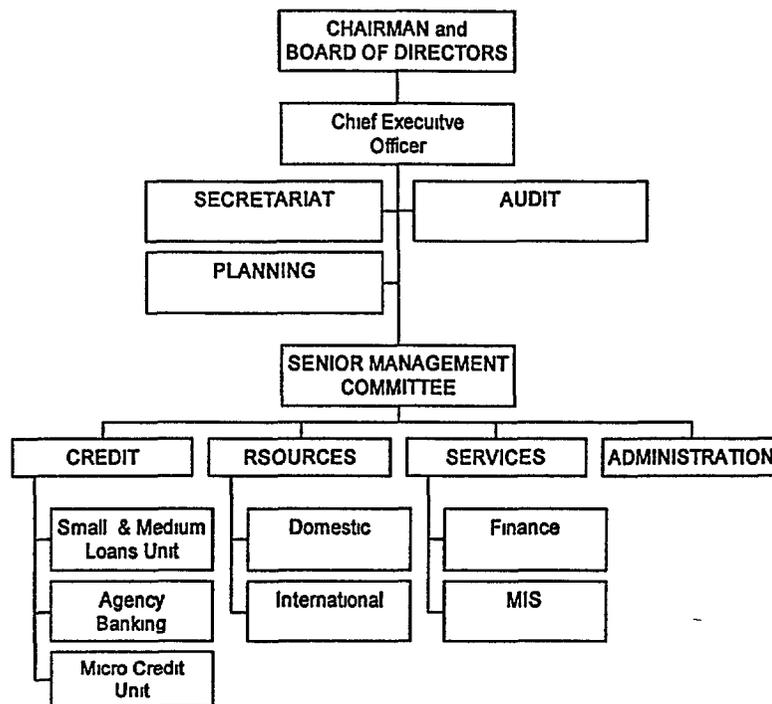
Essentially the bank is authorized to accept deposits (savings and fixed) other than current deposits and to provide loans and other forms of accommodation extended by development banks. Its Memorandum and Articles of Association are common to any development bank in Sri Lanka.

2 Organization and Management

The Chief Operating Officer of the bank is the Managing Director who is a member of and reports to a Board that currently comprises nine members including the Chairman who is also the President of the Federation of Thrift and Credit Cooperative Societies Ltd. The Board has representatives from the Federation, Thrift and Credit Cooperatives Unions Limited (District Unions), and the Thrift and Credit Societies (Primary Societies).

The organization chart for the bank is shown below in Figure A1 2.

**Figure A1 2
Organization Structure of SANASA Development Bank**



The bank functions through a central office and a branch network at the district level and has an agency arrangement with the District Unions and Primary Societies of the SANASA Movement. The SDBL has its head office in Colombo and four other branches at Kegalle, Embilipitiya, Battaramulla, and Horana. It plans to have 13 branches opened before the end of 1998. A listing of these is shown in Table A1 1.

Table A1 1
SANASA Development Bank
Existing and Proposed Branches

District	Location
<i>Headquarters</i>	
Colombo	Dharmapala Mawatha, Colombo 7
<i>Existing Branches</i>	
Colombo	Battaramulla
Kegalle	Kegalle
Ratnapura	Embilipitiya
Kalutara	Horana
<i>Proposed Branches (opening in 1998)</i>	
Colombo	Kotahena Kirupapone
Gampaha	Kiribathgoda
Kegalle	Mawanella
Kandy	Katugastota/Digana
Matara	Pitabeddara
Kaliyapitiya	Wariyapola
Galle	Galle Town
Matale	Dambulla

The operations of the bank will be undertaken through its branch network that will be supplemented by agency agreements with Primary Societies and District Unions of the SANASA Movement to function as subbranches. The approach has been approved by the Central Bank, and the target is to have 260 agencies in the network by the end of 1998 ¹

Branch managers have been delegated the authority to approve loans. Agencies initially are proposed as facilitators. For the first one to two years, the agencies will introduce customers to the bank, accept loan applications, monitor performance, collect payments, encourage contributions to share capital and deposits, and provide general publicity for the bank. Later, once capabilities are proven, the agents will be able to process loan applications, accept deposits, and assume typical functions of a subbranch of the bank.

¹ Figures for the end of 1997 indicate that there are 33 district (secondary) unions and 8 363 primary societies with 768,061 members

3 Financial Position

Total assets of the bank as at November 30, 1997 stood at Rs 371 million with investments in Treasury Bills, call deposits and others comprising the majority of Rs 339 million. Share capital was Rs 136 million and deposits stood at Rs 225 million. Table A1 2 summarizes the balance sheet.

Table A1 2
SANASA Development Bank Limited
Consolidated Balance Sheet
As at November 30, 1997

Account	Rs Millions
ASSETS	
Current Assets	4.7
Investment	339.4
• Treasury Bills	229.0
• Call Deposits	0.4
• Miscellaneous	110.0
Advances (Loans)	9.7
Other Assets	5.5
Preliminary Expenses	9.7
Fixed Assets	2.6
TOTAL ASSETS	371.6
LIABILITIES	
Deposits	225.0
• Savings	16.1
• Fixed	208.9
Other Liabilities	3.4
Other Creditors	7.6
TOTAL LIABILITIES	236.0
CAPITAL	
Share Capital	136.1
• Paid-up	121.8
• Pending	14.3
Retained Earnings	(0.5)
TOTAL CAPITAL	135.6
TOTAL LIABILITIES AND CAPITAL	371.6

Source: SANASA Development Bank unpublished figures, May 1998

4 Bank Operations

The bank plans to provide a range of financial services to its clients. These are (i) deposit facilities, (ii) business advisory services, and (iii) credit.

The attraction of deposits is a major funding source for the bank. The bank is authorized to accept deposits but not operate current accounts. A number of accounts are being offered including savings accounts and fixed deposit accounts. Interest rates paid on these deposits are variable ranging from 10 percent to 12 percent per annum according to the amount and duration of savings. At the end of November 1997, the balance of fixed deposits with the bank stood at almost Rs 209 million, while savings deposits were much less at Rs 16 million.

Business advisory activities of the bank focus on the needs of small entrepreneurs in the form of technical guidance for project preparation, preparation of business plans and other assistance required. Assistance to both societies and individual members is proposed.

The bank is allowed under its charter to provide loans and other investments normally extended by development banks. The bank has set targets for lending in its Medium-term Business Plan. Studies and surveys undertaken during the design stage of the bank confirmed that about 50 percent of credit needs in Sri Lanka are met through informal sources. Within this market, the bank is targeting a niche to cover the unmet demand for credit. Some Rs 409 million is the lending target for 1998 with a total outstanding loan balance of Rs 3,600 million at the end of the fifth year of operations. The plan envisages directing lending towards satisfying the objective of increasing income and employment of the poor. This will be achieved through providing loans and other assistance to small and micro enterprises engaged in agriculture, commerce and small business as well as for housing and basic infrastructure. A wide variety of loans are planned not only to Primary Societies and their members within the SANASA movement but also to others outside.

At April 2, 1998 the bank had lent about Rs 96.6 million to 1,073 borrowers. Of this Rs 52.6 million went to 780 individual members or non-members (average loan size Rs 67,400), and Rs 44.0 million to 293 Primary Societies (average loan size Rs 150,200) for relending to members.

Essentially the bank operates three major loan schemes at present:

- Short-term working capital financing for individual members through primary societies. Loans are for 3 to 4 months and are passed on by the bank to the societies at 21 percent annual interest. On-lending to individual members may be as high as 30 percent per annum (2.5 percent per month).
- Medium-term financing for periods of between one and five years through the primary societies with interest rates of between 18 and 19 percent per annum. The primary societies pass these on to members at rates of about 22 percent per annum.

- Direct loans to members where a primary society is unable to borrow These include housing loans with up to 10 years as the repayment period ²

Interest rates are variable and reviewed regularly On-lending rates depend on the cost of funds plus a spread to cover administration, defaults and the need to generate reserves Repayments are made on the reducing balance method with fixed monthly instalments Equity contributions are needed from borrowers, whether or not they are individuals or societies Amounts of up to 25 percent of a project cost are required but the actual amount depends upon repayment capacity of the borrower, risk and funds already available Sweat equity is allowed in lieu of cash

Credit appraisal follows normal procedures of the SANASA Movement where loans are made to and by district unions to primary societies and from primary societies to individual members

5 Loans to Primary Societies and District Unions

Appraisal of the requests for such loans is undertaken on the basis of an evaluation of the Society as a whole Data is requested for the current year and the last two years Information required is shown in the format outlined as Figure A1 3

Figure A1 3
Format for the Evaluation of the Financial Position of DTCCS and PTCCS
 As at _____

Name of Society Address Year of Registration Registration Number			
	Current Year, 1998	Last Year, 1997	1,996
1 General Information <ul style="list-style-type: none"> • Number of members • Percentage increase/decrease • Number of employees in the society • Position of Audit Committee (audit how often) • Position of Credit Committee (loans approval and follow up) • MCL of the society • Percentage increase/decrease • IMCL of the society • Last date of audit 			

² Housing loans could be extended for periods longer than 10 years if the bank could tap into a long term source of funds for this purpose

	Current Year, 1998	Last Year, 1997	1,996
2 Profitability <ul style="list-style-type: none"> • Income <ul style="list-style-type: none"> 1 Normal interest income 2 Subsidies 3 Other income • Expenditure <ul style="list-style-type: none"> 1 Staff expenditure 2 Interest expenses 3 All other expenses • Profit/Loss • Return on Equity • Increase/Decrease 			
3 Borrowings <ul style="list-style-type: none"> • From the Federation • From the District Union • From all other sources • Amounts in arrears or under dispute 			
4 Liquidity Position <ul style="list-style-type: none"> • Liquidity ratio • Cash in hand <ul style="list-style-type: none"> • Authorized • Actual 			
5 Funds Management <ul style="list-style-type: none"> • Total deposits • Increase/decrease • Compulsory savings • Normal members savings • Minor deposits • Non-member savings • Members Fixed Deposits • Non-members Fixed Deposits • Other deposits (specify) 			
6 Loans Outstanding (by purpose) <ul style="list-style-type: none"> • Housing • Consumption • Instant • Pawning • Others (specify) 			

	Current Year, 1998	Last Year, 1997	1,996
7 Term Categorization of Loans <ul style="list-style-type: none"> • Short-term loans <ul style="list-style-type: none"> • Number • Value • Medium-term loans <ul style="list-style-type: none"> • Number • Value • Long-term loans <ul style="list-style-type: none"> • Number • Value • Loans to deposit ratio • Overdue loans (over 3 months in arrears) • Ratio of overdue loans • Earning assets/total assets 			
8 Debt Equity Ratios <ul style="list-style-type: none"> • Equity capital/share capital • Percentage increase • External borrowings/total assets • Capital funds/total assets • External borrowings/owners capital 			

Source SANASA Development Bank Limited, May 1998

6 Loans to Individuals

Essentially the credit limit for individual borrowers from the bank or a society depends on the individual's credit limit. This is determined annually by the concerned primary society based on a number of factors including income, existing loans, repayment record, and shares in the society.

Each member of a primary society must submit at the beginning of every year an annual declaration of information that covers, amongst others, income and expenditure, loans, dependents, fixed assets, etc. Loan eligibility is determined from analysis of this data. Creditworthiness is determined from an assessment of the amount of savings and deposits each member of the household has made. Particular reference is given to the frequency and amount of savings to determine "surplus" income that could be available for loan repayments. Every member must regularly save some money with the Society. The rule is "no savings, no loan." Other criteria considered relate to how regular past debt service payments have been made, the nature and credibility of the guarantees to be provided for the loan, and the regularity of the applicant's participation in the activities and meetings of the society.

Typical lending rates of primary societies to their members range from 6 percent to 24 percent per annum according to loan purpose. As an example, Table A1.3 shows the typical interest

rates charged on outstanding loans by the Khagala Akurugoda Thrift and Credit Cooperative Society

Table A1 3
Typical Lending Rates of a PTCCS to Its Members

Purpose	Annual Interest Rate
Business/micro-enterprise	18%
Land purchase	18%
Emergency/distress loan	8%
Cottage industry	9%
General	18%
Housing	18%
Southern Development Program (ADB)	14%
On-lent funds from district union	22%
Special development loan	24%
Agriculture	18%
Cash advance	6%
Functions/weddings	9%
Health insurance/latrine construction	1%

Source Records of the Primary Society, May 1998

7 Security for Loans

For the loans from a primary society to members, small loans³ in general are unsecured in banking terms, while those for larger amounts require collateral⁴ Differences may vary between primary societies and district unions Basic security is through members' shares and deposits and a requirement for guarantees from two other members Generally most prospective borrowers must have at least 10 percent of the loan amount in capital funds with the primary society For the larger loans, collateral in form of land or property is required

Loans to district unions are secured by the fixed deposits of the borrowing primary society, by its shares in the district union, by individual members' collateral, and, if required, other property and land assets of the primary society Generally most prospective borrower societies must have at least 10 percent of the loan amount in capital funds with the district union and they must be regular savers with an accumulated balance of about 20 percent of the loan amount

Primary societies also secure insurance for loans through the SANASA system to cover individual members who take out loans This covers life and disability insurance for loan redemption Loan protection insurance costs 0.65 percent of the loan amount per month, while separate life insurance costs 0.025 percent of the insured amount Premiums are paid monthly

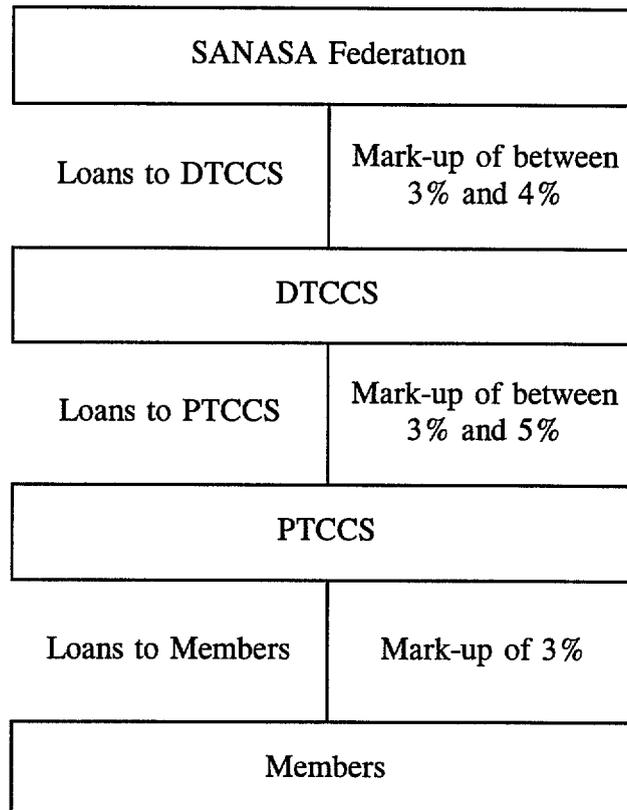
³ 'Small loans' are generally for amounts less than Rs. 5,000 but the limit varies from society to society

⁴ 'Larger loans' generally are for amounts of between Rs. 5,000 and Rs. 25,000

8 SANASA Movement Flow of Funds and Loan Mark-Ups

The basic cooperative lending system involves a flow of funds as shown in Figure A1 4 It is understood that the SDBL will follow a similar procedure but will lend directly to primary societies and individuals and not pass such funds through the district unions

Figure A1 4
Flow of Funds and Loan Mark-Ups
SANASA Financing Mechanism



The general principles of lending are that members borrow from their primary society Should the society not have sufficient funds, loans are batched and an application is made for credit from the concerned district union Should the union have insufficient funds, an application is made to the Federation for funds Nevertheless with the establishment of the SDBL the line of credit from the Federation is to be discontinued being replaced by that of the bank There will not be a requirement for a primary society to borrow from a district union A direct line of credit with the bank can be accessed

9 Financial Reports Produced by Societies

Primary societies keep a cash book and maintain a general ledger Quarterly reports of income and expenditure are produced on a cash basis Annual reports are prepared according to principles of accrual

District unions prepare monthly financial statements covering the balance sheet and an income and expenditure statement Annual accounts are prepared on an accrual basis, quarterly accounts on a cash basis

SS

Appendix 2

Further Project Details

During the study it was found that a number of government agencies have developed infrastructure projects in low-income communities using standards considered appropriate for use in these areas, even though they differ from the approved standards and have yet to be formally ratified. Similarly, a number of agreements and design and implementation procedures have been established that are relevant to low-income communities and the private sector. Notable projects in this respect are the World Bank Community and Water Supply and Sanitation Program (CWSSP) in the rural water supply and sanitation sector in small provincial towns and the National Housing Development Authority (NHDA) and the Clean Settlements Project (CSP) in the urban and peri-urban sector.

Precedents and procedures, including design procedures, suitable for replicating and developing in the SANASA initiative have been set, except in a few minor cases as indicated below.

1 Water Supply (rural areas)

CWSSP has promoted gravity water supply (GWS), dug wells, tube wells, rainwater harvesting (RWH), and pumped gravity schemes (drawing water from below the community, and pumping it to storage above the village, for distribution by gravity). In many cases, it has been necessary to use more than one technology to ensure adequate water supply. All of these are suitable for use by SANASA, although the operation and maintenance implications of pumped schemes should make them the last choice. Use of surface water was generally discounted because of the difficulty of treating it.

1.1 Gravity Water Supply

The most popular form of water supply has been GWS, even if the approach will not supply enough water for all of a community's needs. Groundwater is perceived as a wholesome water source, while having it supplied regularly, almost to the door, and at minimum personal effort, is a great advantage, even if there has to be major investment of time and money during the construction period. People also appear to be willing to continue to use traditional water sources for activities such as bathing, and laundry, although in some cases communities have introduced strict rules and sanctions to ensure that this is done.

Discussions with representatives of the CWSSP have highlighted a number of cases where inaccurate measurement of the water yield has led to difficulty meeting demand once a scheme has been commissioned. This is despite a general policy of installing standposts rather than yard taps because of low yields. Other problems have focused on difficulties of post-commissioning, e.g., poor operation and maintenance (O&M) and O&M training, poor design and technical skills in the partner organization (PO), lack of local support by the PO on completion, and weak community-based organizations (CBOs).

Since most SANASA projects will be based on existing primary societies, with a support system at district level, as well as centrally, it is expected that many of these problems can be avoided.

However, a 1994 evaluation of GWS projects implemented by the NGO Sarvodaya, over a 15-year period, has highlighted similar problems, indicating that they can also exist for locally based and technically experienced organizations. There is therefore a need to acknowledge that these problems may arise and take action to minimize the risk of them happening by training community caretakers, and providing simple manuals for their use for example.

1.2 Dug Wells

The second choice option for water supply is dug wells. Private wells already exist in many areas, and are usually well constructed. The technology has been developed and improved under CWSSP with up to four households being supplied by one well. Problems noted include (i) the lining of the top of the well not extending far enough below ground level to prevent surface water easily entering the well (2.4 meters), (ii) inadequate drainage arrangements at the well head (also risking contamination of the well), and (iii) the household on whose land the well is built subsequently claiming ownership and stopping other participating households using it. All these problems require community motivation, as well as technical support in the case of the first two. The latter problem suggests the need for an internal, community level agreement about ownership and rights of access, in addition to any external agreements that may exist. There are no reports of wells drying because they have not been dug far enough below the dry season water table.

1.3 Tubewells

Tubewells are used where the groundwater is expected to be more than 20 meters below ground level. This often occurs where villages are sited on small hills in a valley, and on valley edges. The wells are normally drilled into granite and usually about 50 meters deep. Depths of up to 80 meters are not unknown, either because of the local ground level, or the low number of fissures in the granite. The wells are unlined below the overburden, and are fitted with India Mark III handpumps. They generally serve up to 15 households, probably because of cost rather than yield.

There are occasional problems of iron in the water. These have been overcome by constructing small roughing filters at the well head. Also, while communities are able to carry out many of their own repairs and maintenance, they have to rely on the Pradeshiya Sabah and/or the local offices of NWSDB for spare parts and major maintenance. This can be a slow process.

Other problems noted include poor construction and drainage of the aprons at the well head. Also, where communities bathe and do their laundry at the well, they should be encouraged to build a laundry slab and a simple bathing shelter, both connected to a simple stone filled soakaway or drainage trench. Details of these disposal systems may be found in the *NHDA Guidelines for Potable Water Supply, Waste Water and Storm Water Drainage, Domestic Sewage Disposal and Solid Waste Management of Designated Low Income Housing Projects in Sri Lanka* (subsequently referred to as NHDA Guidelines).

1 4 Rainwater Harvesting

Although used quite widely in Sri Lanka for washing, RWH is usually the last water supply option to be considered. Communities strongly believe that rainwater is not suitable for drinking because of dust and other atmospheric pollution. There is also concern about taste, the length of time the water is stored and the darkness of the tank, instead of it being open to the light and sun. Public health inspectors recommend chlorination of drinking water. Communities have said that they would be happy if the water were filtered before use, even through a small sand filter. Ceramic filter candles are another option.

The water storage tanks are made of bricks when constructed below ground level, and ferrocement for those above ground level. The method used may depend upon topography as much as costs. On a steeply sloping site, water may be drawn from underground tanks by gravity, as with the above ground tanks, rather than using a small handpump developed by CWSSP. Communities seem to prefer this, even though it may be necessary to carry the water a little way. Tanks should always be covered, to prevent the entry of light and growth of algae. They should also be screened, to prevent mosquitoes breeding in them.

Sizing of the tank is usually based on household demand and the length of the dry season. This is a very rough method. However, CWSSP information for tank sizing based on mass curves is complicated, and also appears to be wrong, resulting in undersized tanks. Since costs do not increase in proportion to volume, it is more cost effective to build a large tank than a small one. It is therefore necessary to balance cost, and affordability, against water runoff and demand. A simple spreadsheet has been developed to take care of this. It requires the entry of rainfall data and water demand. A sample table is shown as Annex 1 to this Appendix.

A number of houses already have gutters. Therefore, as a supplementary system, even for gravity schemes, RWH is a viable option. Careful community mobilization and the introduction of simple filters may also result in its acceptance as a source of drinking water. Development of a simple, low-cost system to divert the first flush of water, which is often quite dirty, would also help.

1 5 Other Options

Pumped water systems are expensive to run and are also likely to be more difficult to maintain. They should therefore be the last choice option. Also, where groundwater is not readily available, the use of shallow wells dug alongside rivers and streams should be considered. In these cases, it is necessary to ensure that the well is lined at least to the water table and that only filtered water enters it, possibly by a sand and gravel filter plug in the base of the well and, where possible, to the liner, too. Other options to obtain filtered water can include intake galleries laid in the river bed, surrounded by sand and gravel, and connected to the well, or perforated pipes driven from the well horizontally into the aquifer (Ranney well).

2 Water Supply (urban and peri-urban areas)

On-site water sources are unlikely to be appropriate in the urban and peri-urban setting, especially where there is on-site sanitation. However, the NHDA, the CWSSP, and the CSP

have all included water supply projects which connect to existing urban systems. The NHDA projects have used the NHDA Guidelines referred to above, setting a precedent for design and construction standards for low-income communities. Also, CSP has succeeded in getting the NWSDB in Greater Colombo to reduce household connection and capital-recovery charges to Rs 4,000/- for households in low-income communities where NWSDB has not financed the work. This is instead of the normal charges of Rs 11,500/-. The NWSDB in Greater Colombo also has a model form of agreement defining ownership and O&M responsibilities for projects financed by the Urban Development Authority (UDA) and the NHDA. This may be a suitable basis for a similar agreement between the NWSDB and participating communities. It is not possible to determine if reduced charges and/or agreements are used in other urban areas.

3 Sanitation

3.1 Latrines and Foul Waste

Projects of the CWSSP, the NHDA, and the CSP have promoted a number of latrine types for on-site sanitation, ranging from simple pits through VIP type to pour flush with an offset pit or a septic tank and soakaway or drainage field. The most popular appears to be the offset pit pour flush type. The shelter generally comprises cement blocks in cement mortar and a reinforced concrete slab roof. This high standard shelter has made the latrine unaffordable for some households, whilst also setting a standard that is socially difficult to deviate from. There is therefore a need to review the "standard" shelter in order to minimize this problem in the future. Pit depths vary considerably, one seen was 7 meters deep, giving a design life of over 25 years.

In urban communities the same options exist, as well as sewerage discharging directly, or pumped, to sewer mains, or to a communal septic tank and soakaway. If a soakaway is not possible, the tank should discharge via a filter bed to a surface water course. Discharge to the sewers is preferred, but is not always feasible or affordable since low-income communities often live in low-lying areas. In Greater Colombo, the sewerage authority permits private schemes to connect to its sewers, and has agreements to cover O&M by the community or by itself. The charges are high relative to incomes, and comprise fixed charges per household plus the proportional O&M costs of the trunk sewers and any pumping required.

The NHDA Guidelines and the CSP have set some standards considered appropriate for low-income communities, including gradients designed to achieve self-cleansing velocity. Despite recent research into minimum velocities, sewer sizes and tractive forces,¹ the indications are that it will be difficult to change this approach, even in low lying areas, where connections to existing sewers might be possible if gradients could be less steep.

3.2 Sullage

In most rural communities the need for sullage disposal systems has not been considered. CWSSP reports no problems of sullage water disposal, despite the increased amount of water being used as a result of their water supply projects. Where population densities are low, direct

¹ *Low Cost Urban Sanitation*, Duncan Mara. John Wiley and Sons, Chichester, United Kingdom, 1996

disposal to the ground is likely to be satisfactory, at least in the short term. Disposal to kitchen gardens or stone-filled soakaways are other alternatives. Where there is communal use of water, e.g., laundry slabs, the provision of some disposal system is considered essential.

In the urban sector on-site disposal is likely to be more difficult. Where connection to sewerage mains is possible this option should be preferred, and sullage and foul water should be combined. Where there is on-site disposal of foul wastes, the NHDA Guidelines recommend a separate system for non-kitchen sullage. Disposal should preferably be by a soakage system. If this is not possible it should be via a filter bed to a local water course.

Where gradients are shallow, drains are recommended. This is despite problems with blockages by solid waste that often occur. Covering the drains may reduce these problems, although maintenance is not necessarily any easier than sewerage, especially where gross solids and sediment content is low.

4 Solid Waste

While solid waste can be a problem in rural areas, it is expected that there will be little demand for solid waste services. However, when considered in the context of health and environmental improvements it is important, especially for the control of rats and mosquitoes. Work should therefore concentrate on raising community awareness, training and advice about disposal, preferably by collecting and burying the waste in pits on a household basis, i.e., simple sanitary land-fill.

Demand for solid waste services should be greater in the urban and peri-urban sectors. Contact will be made with the municipal corporation responsible for collection and disposal, and agree what role should be played by them and the community, e.g., door-to-door collection, internal or external collection points, collection frequencies. Activities should focus on raising community awareness, training, and containerizing waste, provision of public bins on street corners, and possible separation into recyclable, organic and inert fractions at household level. Where waste has to be stored or transferred, public nuisance factors and handling should be considered, e.g., collection frequency, containerization, optimum container sizes, and storage above ground level.

The NHDA Guidelines and the CSP contain a number of recommendations for solid waste management in low-income communities. Incineration should be avoided unless no other option exists. Composting may be possible on a household level, provided that there is enough organic waste produced. Communal composting is only likely to be feasible in villages and low-density urban communities.

5 Roads

It has not been possible to assess what communities may wish to do in the development and improvement of roads. Currently many rural communities appear to regard road development and maintenance as the responsibility of local government. Few people have vehicles, relying primarily on public transport, which appears only to operate along the main roads, or vehicles

such as tractors and small pick-ups, which can cope reasonably well with poor roads. In most areas, there appears to be little need to move large quantities of materials quickly in or out. Poor and/or delayed access is therefore accepted, and major spending on roads is likely to be a low priority for most communities. Where work is required it is more likely to focus on building culverts, and possibly bridges.

There has been no investigation of the requirements for road development and improvement in the urban and peri-urban areas. In many cases, however, the position is likely to be similar to rural areas. In areas where communities do not have legal land tenure, it is expected that road development and improvement is unlikely to be a high priority. The NHDA Guidelines do not contain any advice about road construction. CSP recommends gravel roads. However, these may be difficult to maintain. A light asphalt road comprising a base course of broken granite (metal), 50-15mm size, say 100-150mm thick, and a 20-25mm asphalt wearing course, would be a suitable alternative.

Culverts generally comprise reinforced concrete pipes or culvert rings, which are widely available in a range of sizes, even in small rural towns. They should be backfilled either with local soil, or with mass concrete. The long-term performance of these units, and their strength, is not known. However, a mass concrete bed and surround will provide greater strength and durability, especially where tractors and lorries have access, e.g., to collect bricks and heavy agricultural produce. Where water flows and/or velocities will be high, revetments and aprons should be constructed, either of reinforced concrete, stone pitching or stone-filled wire baskets. The components should have downstands to prevent them being undermined by soil erosion.

Bridges are likely to comprise rubble masonry, or reinforced or mass concrete abutments, wing walls and revetments, and a steel beam and/or reinforced concrete deck, especially where they carry cars and heavy vehicles. Where they only carry pedestrians or small vehicles (motor rickshaws), the use of stone filled wire baskets for the abutments, wing walls and revetments, could be considered. They should all be designed for soil and axial loads according to local design codes, and include weep holes and gravel backfill, to minimize water pressures.

Sarvodaya has been involved in some work on roads. This has involved the construction of culverts, or small bridges, while the local government has the responsibility of developing the roads.

6 Electricity

Currently, about 45 percent of the country has access to electricity mains. The Ceylon Electricity Board (CEB) is responsible for electricity supply, including extending the distribution network. Individual and groups wishing to fund extensions themselves should apply to the Commercial Department at a CEB provincial level office, which will determine the feasibility of the scheme. This includes determining the additional load required, the need for 1 or 3 phase power, the existing capacity of the section, and carrying out an investigation of the economic rate of return that will be achieved. Currently this needs to be in the region of 8 percent to 10 percent. The CEB has also advised that if a new transformer is required, it will be too expensive to be funded.

privately, and that once a scheme is agreed, it is not possible to change it except as agreed by the community representatives and the CEB

If feasible, the CEB will carry out the work itself, and own and maintain the assets upon completion. The work must be prepaid in full at the time the scheme is agreed. Currently, the time required to complete the work is 6 to 12 months. In addition a householder has to pay house connection charges, which includes the costs of an electric meter, and for any domestic wiring required. The CEB recommends that householders should be given advice about the number of lights and power points they require, rather than rely on the advice of a local electrical contractor. Also, if there are plans to install any machinery which has a high power demand, such as a rice mill, it should be located as close as possible to the transformer/connection to the existing grid, where power losses will be least.

Currently the People's Bank is able to offer short-term loans to cover the cost of house connections. Interest is charged at an annual rate of 23 percent and the loans are repaid over 3 to 5 years. The cost of the connection is expected to increase from its current level of Rs 7,500 to Rs 12,000 shortly.

The NHDA has provided 1,000 domestic solar power units with the aid of external funds in the south east of the country, and 120 units for remote government institutions. The systems supply AC power, via inversion equipment. This allows the use of normal 220-240V AC appliances, rather than special DC equipment, but makes the systems themselves relatively sophisticated and expensive. There has not been a formal project evaluation undertaken, but there have been adverse comments regarding the affordability of the units. It is also known that systems have been overloaded and maintenance has not been easy, even in the government sector. It is reported that replacing fuses and other items has been difficult.

The NGO Sarvodaya is preparing to implement several micro-hydro projects. No details are available yet. It is the consultant's view that in most communities the need for improved water supply will be greater than the need for electricity, and that all but the remotest communities will be able to obtain a connection to the low-voltage grid more easily than to develop alternative systems. Exceptions may be where large quantities of available, and/or run-of-the-river systems may be developed.

Further details of existing solar systems, (costs, operation and maintenance, and local sustainability), planned micro-hydro projects, and the levels of service that communities will demand, should be determined prior to community discussions.

Annex 1

Rainwater Harvesting Determining optimum tank size

family size 5 daily demand 40 l/c d
 roof area 60 m² runoff coeff 0.8 tank size 15 m³
 probability Yr 1 1 Yr 2 0.8

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
average rainfall (mm)	163.4	111.0	114.7	206.8	105.2	28.9	74.1	90.1	121.3	237.7	253.6	269.0

Yr 1	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual totals	+/- ve
rainfall (mm)	163.4	111.0	114.7	206.8	105.2	28.9	74.1	90.1	121.3	237.7	253.6	269.0	1775.8 mm	
runoff (m ³)	7.84	5.33	5.51	9.93	5.05	1.39	3.56	4.32	5.82	11.41	12.17	12.91	85.24 m ³	
demand (m ³)	6.20	5.60	6.20	6.00	6.20	6.20	6.20	6.20	6.20	6.20	6.00	6.20	73.40 m ³	
mod Demand (m ³)	6.20	5.60	5.51	6.00	6.20	1.39	3.56	4.32	5.82	6.20	6.00	6.20	63.00 m ³	-10.4 m ³
av mod daily demand (l)	40.0	40.0	35.5	40.0	40.0	8.9	22.9	27.9	37.6	40.0	40.0	40.0		
balance (m ³)	1.64	-0.27	-0.69	3.93	-1.15	-4.81	-2.64	-1.88	-0.38	5.21	6.17	6.71		
storage (m ³)	1.64	1.37	0.68	4.60	3.45	0.00	0.00	0.00	0.00	5.21	11.38	15.00		

Yr 2	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual totals	+/- ve
rainfall (mm)	130.7	88.8	91.8	165.4	84.2	23.1	59.3	72.1	97.0	190.2	202.9	215.2	1420.64 mm	
runoff (m ³)	6.27	4.26	4.40	7.94	4.04	1.11	2.85	3.46	4.66	9.13	9.74	10.33	68.19 m ³	
demand (m ³)	6.20	5.60	6.20	6.00	6.20	6.00	6.20	6.20	6.00	6.20	6.00	6.20	73.00 m ³	
mod Demand (m ³)	6.20	5.60	6.20	6.00	6.20	6.00	6.20	3.46	4.66	6.20	6.00	6.20	68.92 m ³	-4.1 m ³
av mod daily demand (l)	40.0	36.1	40.0	38.7	40.0	38.7	40.0	22.3	30.1	40.0	38.7	40.0		
balance (m ³)	0.07	-1.34	-1.80	1.94	-2.16	-4.89	-3.35	-2.74	-1.34	2.93	3.74	4.13		
storage (m ³)	15.00	13.66	11.87	13.81	11.65	6.76	3.40	0.66	0.00	2.93	6.67	10.80		

- Notes
- 1 modified demand = quantity of water available during months when water available is less than monthly demand
 - 2 average modified daily demand = average per capita volume of water available during months when supply is less than demand
 - 3 By entering the relevant rainfall data, family size, per capita demand, roof size and then varying the tank size the optimum tank size may be determined
 - 4 By making the probability more or less than 1 is possible to assess the impact of more or less than average rainfall
 - 5 In the above example the tank has been commissioned in January Yr 1, during the early part of the year there is insufficient rain to provide enough water in the middle of the year. This problem is less in Yr 2 despite less than average rainfall because of the water stored during the end of Yr 1. If a 12m³ tank is used there is a 7.5m³ deficit in Yr 2 and the water available in July drops to 18 l/c d

Appendix 3
PTCCS — Statement of Personal Economic Information

9. Economic Plan of Member .

9.1 No. of shares taken Value Rs..

9.2 Value of deposits expected to be deposited Rs. Cts.

- * Savings Deposits
- * Fixed deposits
- * Trustee Child deposits.

9.3 Loan anticipated'

Purpose for which loan is required	Amount	Period expected	Expected repayment period

9.4 Particulars of Monthly Expenses.

- * Food and House Rent.
- * Clothing and Education
- * Other Expenses.
- * Savings.

10. Particulars of Economic and Cultural programs the Society could do and proposes to start -

- * Particulars of Schemes
- * Shramadana works.....
- * National Functions..
- * Economic Matters..
- * Educational Projects
- * Corporate Functions..

11. I hereby declare that all the foregoing particulars are true and correct and if the Committee or the General Meeting decides that the said particulars are false I hereby agree to accept any decision given by the society and I hereby admit that I am obliged to inform the society of any changes that may occur in these particulars.

Date -

Signature of Member.

Handwritten mark

Appendix 4
Model Memoranda of Understanding for
Typical Community-Based Water Supply and Sanitation Projects

SMALL TOWN WATER SUPPLY PROGRAMME (STWSP)
SYSTEM DEVELOPMENT FOR MANAGEMENT OF FACILITIES

Model A

Tripartite Agreement for Kuruwita Small Town Water Supply Scheme

Content

- A *Agreement No*
- B *Conditions of the Agreement*
- C *Roles and Responsibilities of the Maintenance Authority (CBO)*
- D *Roles and Responsibilities of the Monitoring Authority (PS)*
- E *Roles and Responsibilities of the Development Authority (NWSDB)*
- F *Annexures*
 - *Existing Assets*
 - *Proposed Developments*
 - *Cost Estimate of the Proposed Developments*
 - *Agreed Cadre*
 - *Proposed Tariffs*
 - *Financial Projections*

A Agreement No

B Conditions of the Agreement

1) This agreement was signed between the below mentioned parties on
of Nineteen Hundred and Ninety

- a) The first party being the "
", the Community Based Organisation of the
Kuruwita Small Town and registered under the Act No
bearing No and hereinafter referred to as "CBO"
- b) The second party being the "
Pradeshya Sabha"
and hereinafter referred to as "PS"
- c) The third party being the National Water Supply and Drainage Board and
hereinafter referred to as NWSDB

2) The definitions of the above three parties in relation to this agreement are ,

- CBO The party responsible for operation and maintenance of the
Kuruwita Small Town Water Supply Scheme
- PS The party responsible for monitoring of the Kuruwita
Small Town Water Supply Scheme
- NWSDB The party responsible for development of the Kuruwita
Small Town Water Supply Scheme

The three parties have agreed to carryout their duties and responsibilities
according to the roles stipulated in this agreement

- 3) Any Revisions/Changes to this agreement can be made in consultation with all the
above three parties under the Chairmanship of the Commissioner of Local
Government of the Southern Provincial Council and subsequently referred to Attorney
General
- 4) The Secretary to the Ministry of Local Government of the Southern Provincial Council
will be the "Arbitrator" in case of any disputes

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C *Roles & Responsibilities of CBO*

- 1) *To provide an uninterrupted drinking water supply to the users of Kuruwita Small Town according to the national standards*
- 2) *To identify the required O&M staff in consultation with PS and as advised by NWSDB and to recruit them to suit the agreed scheme of recruitment*
- 3) *To provide the necessary training to the selected O&M staff by informing the NWSDB/PS regarding the training needs*
- 4) *The proposed tariff for the Kuruwita Small Town will be proposed by the NWSDB and then agreed between CBO/PS/NWSDB. The tariff should recover the total O&M cost and include provision for replacement/rehabilitation of the system also. The tariff system thus proposed will be approved by the council of the PS*

The operational profit/loss made by the CBO must be identified and a programme cover losses or utilise profits effectively has to be agreed between all three parties

In the event the council of the PS refuses to accept the tariff agreed between the three parties the council must bear the deficit from the operation and furnish this to CBO to ensure a satisfactory operation

- 5) *The CBO will prepare and maintain a consumers register, including proper records of payments made and any issues arising in relation to the connection concerned*
- 6) *The CBO will draft a service charter in which the relationship between the CBO and the individual consumer is spelled out. Upon application for a house connection or standpost, the householder(s) will confirm their adherence to and agreement with the service charter by their signature*
- 7) *To liaise and co-ordinate with the Pradeshiya Sabha regarding the provision of individual service connections and extensions to the Kuruwita Water Supply Scheme. The technical guidance of the NWSDB will be obtained where necessary*
- 8) *To implement a monthly auditing programme to audit the CBO activities*
- 9) *The CBO to liaise and co-ordinate with the PS and NWSDB regarding the relevant issues*
- 10) *The constitution of the CBO should clearly indicate the roles of Pradeshiya Sabha and NWSDB*
- 11) *A yearly evaluation of the water supply programme should be undertaken by the CBO in consultation with PS, Divisional Secretary's Office and NWSDB*

12) *The Commissioner of Local Government of the Southern Provincial Council has the powers to audit the CBO and the CBO should provide assistance in such cases*

13) *To provide water supply facilities for emergencies, state function or a festival when requested by the PS or NWSDB for an agreed fee*

D Roles and Responsibilities of Pradeshiya Sabha

- 1) *To monitor the sustainability and the efficient operation of the water supply scheme*
- 2) *To monitor the sustainability of CBO (The working committee of CBO includes as members Divisional Secretary, Secretary to PS and TO of PS)*
- 3) *To monitor the individual service connection procedure*
- 4) *To monitor the quality and quantity and quantity of water produced*
- 5) *To assist the CBO in development and extension works and to involve the CBO for town planning exercises*
- 6) *To take over the responsibility of maintenance in the event the CBO fails to do so and after a decision taken by CBO total membership at an Annual General Meeting*
- 7) *The existing assets of Kuruwita Small Town Water Supply and the new facilities will be legally owned by the PS. However, decisions on disposal or renewal of facilities can only be taken by PS upon the recommendation of the CBO*
- 8) *The PS being the monitoring authority, should discuss issues with the other two parties before finalising*
- 9) *The PS should participate in the evaluation process, when requested by the CBO*
- 10) *Pursuant to clause 109(e) of the PS Act, Ps to handover the power to supply water to Kuruwita Small Town area to the CBO*

E Role and Responsibilities of NWSDB

- 1) *To assist and advise the development programme of the water supply system to suit the town developments after collecting data from the CBO and PS*
- 2) *To advise the CBO for tariff setting and to obtain finances to carryout development activities*
- 3) *To carryout effective post-evaluation on the water supply programme*

- 4) *To obtain the consensus and agreement from the user communities for developments through the CBO*
- 5) *The regional offices of the NWSDB both O&M division and Rural Water Supply Division will co-ordinate with the CBO and PS*
- 6) *The NWSDB has a duty to involve in the evaluation process*

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COMMUNITY SANITATION PROJECTS

Procedure for Investigation, Planning, and Design

- 1 Following receipt of a request from community members WASA shall conduct a feasibility study to determine scheme viability This shall include determination of community requirements via meetings and interviews, discussion of the obligations of the Community and WASA, as set out in the Community - WASA Agreement for Sanitation Services, and the ability of WASA to remove the expected quantity of waste water without affecting the service to adjacent communities, such that it becomes unsatisfactory

A rough cost estimate will also be prepared, covering a range of construction standards

- 2 Should the scheme prove feasible and the Community agree in principle to the terms and conditions set out in Community - WASA Agreement for Sanitation Services Community Representatives shall be appointed as per the Agreement Following their appointment WASA shall commence detailed design The design need not be to WASA standards, apart from the connection to the WASA owned sewer/drain The design and will be carried out in consultation with the Community Representatives, as far as is reasonable Where options exist the final standard to be adopted will be decided by the Community
- 3 On completion of the proposed design a detailed cost estimate will be prepared and the scheme presented to the Community If approved the Agreement will be signed and implementation commenced
- 4 It shall be noted that during implementation any WASA staff allocated to assist the Community in any way may also have other work responsibilities at the same time, e g assisting other sanitation projects being carried out in the same area The Community must therefore provide appropriate notice of proposed meetings and the need to attend site for the checking of works, etc This should preferably be a minimum of 24 hours

Failure to give sufficient notice may prevent the appropriate officer attending site and carrying out the duties required, and possibly causing inconvenience to the Community as a result The Community should record any time WASA staff fail to arrive on site when requested, provided proper notice was given, and complain formally if excessive

WASA connection charges and tariffs for Community-Based Sanitation Projects

- | | |
|---|------------------------------|
| A Domestic tariff | |
| Discharge to sewer or drain,
with or without WASA water connection | Rs 16/- per month |
| B Religious, charitable, Govt , educational institutions,
Govt hospital & domestic bulk water supply, connection size < 1" | Rs 45/- |
| C Commercial | Rs 4500/- per acre per annum |
| D Connection fee (less than 1" ferrule size) | |
| 1 Security fee | Rs 100/- |
| 2 Advance billing (=2 months tariff) | Rs 32/- |

3	Form fee	Rs 5/-
4	Departmental development charge	<u>Rs 70/-</u>
	Total connection fee	<u>Rs 207/-</u>
E	Regularization fee for existing (illegal) connection	<u>Rs 250/-</u>
	Total (including regularization fee)	<u>Rs 457/-</u>

**WATER AND SANITATION AGENCY
FAISALABAD**

**COMMUNITY - WASA AGREEMENT
FOR SANITATION SERVICES**

Community - WASA Agreement for Sanitation Services

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Community - WASA Agreement for Sanitation Services

A The Community and WASA

1 This agreement is between the community of _____¹, Faisalabad, (hereinafter referred to as 'the Community'), which is served by the tertiary sewer/drain² known as _____², hereinafter referred to as 'the pipe', and is the owner of it (see Appendix 1) and the Faisalabad Water and Sanitation Agency (hereinafter referred to as 'WASA')

It shall remain in place until such time as both parties mutually agree to its dissolution or amendment

¹ Enter details, in words, and initial ² Delete as appropriate and initial

- 2 In all contact with WASA the Community shall be represented a minimum of three and a maximum of five Community members nominated for the purpose by a simple majority of all the properties served by the pipe Each property shall be entitled to one vote only
- 3 A representative must be from one of the properties served by the pipe He/she may resign his/her post voluntarily He/she must also resign when
 - a) he/she leaves the Community,
 - b) his/her property is no longer served by the pipe, e g , by voluntary or compulsory disconnection from the pipe,
 - c) requested to do so by a simple majority of the Community
- 4 New representatives shall be nominated to replace resigning members as desired by the Community WASA shall be informed of all changes within two weeks of the change, including the names of resigning representatives and the names and addresses of all new ones
- 5 WASA shall be represented by the Deputy Director, Sewerage and Drainage (DD S&D) for the area, or any other appropriate officer designated by the Managing Director (MD), WASA, assisted by the Community Infrastructure Unit (CIU)

The Community shall be informed of any changes in the officer representing WASA
- 6 The Community Representatives shall be responsible for all community elements of the implementation and operation and maintenance of the pipe

B Meetings, Records and Complaints

- 1 During implementation of the works meetings between the Community, WASA and any Contractor for the works shall be held at least every two weeks

- 2 On completion of the works WASA and the Community Representatives shall agree a programme of meetings to enable monitoring, evaluation and support of the project For the first two years meetings shall be quarterly Subsequently they may be arranged annually Joint meetings may be arranged on an area basis at the request of WASA
- 3 Community Representatives shall record all meetings, financial matters and activities at community level The DD S&D shall keep records of all meetings and activities at WASA level Copies of all drawings, agreements and other relevant documents shall be held by both the Community and WASA Copies shall also be provided to CIU
- 4 All records shall be open records, and available for inspection by Community Representatives, individual consumers connected to the pipe, and WASA staff
- 5 In the event of difficulties or any complaint about the service provided by WASA, or any WASA staff, the Community Representatives, or any consumer, may report the matter to the local WASA Complaints Center This shall include repeated failure by WASA to attend site during implementation, provided proper notice was given on each occasion This shall be a minimum of 24 hours except in emergencies

The complainant shall be provided with a receipt recording the complaint

- 6 The Complaints Center shall arrange investigation of any complaints made The investigating officer will report on the matter to the Director of the relevant Directorate within two weeks The report shall include recommendations for any necessary action, and shall be copied to the DD S&D, CIU and the Community Representatives
- 7 CIU and the Community Representatives shall also be advised of any subsequent action taken The Community Representatives shall advise CIU if none is taken or the outcome is considered unsatisfactory, presenting a copy of the receipt

C Implementation

- 1 The Community shall be responsible for the cost of the sewer pipe/drain materials, manholes, fittings and chambers, road reinstatement, all service connections and payment of the appropriate WASA connection charges and tariffs It may employ a contractor for the purpose, or purchase the materials and carry out the works itself

WASA will be responsible for making the connection to the WASA sewer/drain using materials supplied by the Community, as advised by WASA

- 2 WASA will make available appropriate staff from the Construction and Sewerage & Drainage Directorates to assist the works They shall advise on proper construction of the pipe as requested, including service connections Their advice will not be mandatory except for the connection to the WASA sewer The CIU will also assist

- 3 The Community Representatives will be responsible for managing the community and/or any contractor it has engaged to carry out the works
- 4 WASA supervision will be provided free of charge for up to six/_____¹ weeks from commencement of construction work to its completion. Any work carried out after this period by staff of Sub-Engineer level or below shall be charged to the Community at 1/26 of the basic monthly salary per day or part of day worked. Time shall be allowed for any bad weather, unforeseen conditions encountered, or unreasonable delays by WASA.

The Revenue and Recovery Directorate will invoice the Community for any charges that may arise during the course of the works. Payment shall be made to the Revenue and Recovery Directorate. A receipt will be provided.

¹ Delete and enter details in words as required. Initial as agreed.

- 5 WASA staff will be available for advice during normal WASA hours. Any requirement for advice or assistance outside these hours shall only be as agreed with WASA staff of Assistant Director level or above. No WASA staff shall be entitled to any payment by the Community, or individual community members.
- 6 Work will be carried out only according to the approved design, unless modified by agreement between the Community and WASA.
- 7 Work on site shall commence only by mutual agreement of WASA and the Community Representatives, and will follow completion of the following formalities:
 - a) WASA connection procedures for all proposed service connections, and,
 - b) a contractor has been engaged, and a contract and programme agreed, or,
 - c) if the work is to be carried out by the Community itself, all materials have been made available by the Community, labor identified and a working programme agreed by WASA and the Community Representatives.
- 8 The completed works shall be tested by WASA within one week of completion. Any faults found shall be repaired by the Community or contractor, assisted by WASA, unless shown to be attributable to WASA. Any such faults will be made good by WASA.
- 9 On satisfactory completion of the test(s) the pipe shall be commissioned. Formal completion and commissioning documents shall be completed and signed, including a record of all approved service (legal) connections. (See Appendix 2.)

D Service Connections

- 1 Any person not wishing to connect his property to the pipe shall not be required to make any financial or material contribution to the scheme. However, his property shall not

be permitted to be connected to the pipe unless and until the following formalities are completed

- a) the proportionate cost of the scheme has been paid to the Community Representatives, and records made and receipts provided, and,
 - b) the appropriate WASA connection formalities have been completed
- 2 Any money paid to the Community representatives under D 1 above shall be distributed equally between those consumers who have contributed financially or materially to the installation of the pipe, or, if agreed by the Community, held in any community operation and maintenance account
 - 3 Any illegal service connections to the pipe shall be notified to the DD S&D They will be disconnected by WASA or the Community Representatives Alternatively the connection may be regularized by completing the formalities defined in D 1 above

E Operation, Maintenance, and Repairs

- 1 The Community will be responsible for the clearing of blockages and the repair of leaks and faults to the pipe, including costs, except where attributable to WASA The DD S&D shall be notified of any repairs that are necessary in order that WASA may be available to assist and test the work as required Blockages need not be reported

WASA may also issue a notice instructing the Community to undertake any works which it considers necessary and for which the Community is responsible

- 2 Each consumer will be responsible for the clearing of blockages and the repair of any leaks or faulty fittings within his property and on his service connection to the pipe
- 3 All clearing of blockages and repairs shall be attended to by the party responsible as soon as possible, preferably within one week of any report being received by WASA, and/or a notice being issued
- 4 If a Community repair is carried out within one week there will be no charge for any assistance and or testing by WASA Otherwise there shall be a nominal charge as in C 4 above It shall be paid as detailed in C 5
- 5 WASA will train the Community Representatives, or any other nominated person, in simple maintenance of the pipe and the repair and replacement of simple fittings, as requested by the Community Trained persons shall be the only persons permitted to carry out operations on the pipe
- 6 WASA will be responsible for the delivery of bills to individual consumers Each consumer will be responsible for paying his/her bill and notifying DD Revenue and Recovery of any errors or omissions associated with it

F Form of Agreement

The terms and conditions of this Agreement, concerning the construction and operation and maintenance of the sewer/drain¹, have been discussed, reviewed and agreed by both parties, this day _____²

Signed and witnessed

for WASA

for the Community

Schedules

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and Maintenance

¹ delete as appropriate and initial

² enter date (month in words), and initial

**Appendix 1
Plans**

Appendix 2
Completion Documents

Appendix 3
WASA Offices and Contact Details

**Appendix 4
Repair and
Operation and Maintenance
of
Community Owned Sanitation Services**

Repair and Operation and Maintenance of Community Owned Sanitation Services

- 1 The risk of blockages will be reduced by
 - a) regular maintenance of the pipe - keeping it clean allows the waste water to run faster, reducing the silting that naturally occurs,
 - b) controlling the materials disposed of in sinks, basins, baths and latrines, i e do not use the pipe for disposal of large or hard objects,
 - c) controlling solid waste in the street and in the home, i e place rubbish and waste in containers where they cannot find their way into the pipes,
 - d) controlling animal wastes, especially animal dung, in similar ways,
 - e) paving streets and courtyards to reduce the amount of dust in the Community, and sweeping it into solid waste containers rather than into drains, gullies or manholes,
 - f) preventing the entry of dust and large objects into the pipe ensuring that any drain covers and manhole covers remain in place and are repaired when broken,
 - g) preventing material removed from the pipe during cleaning being washed back into it by placing it in a container of some kind rather than letting it lie on the ground,
 - h) the use of a septic tank or interceptor between on the service connection, to prevent large objects, fecal material, silt and grease entering the pipe, interceptors may also be placed between the Community pipe and the WASA sewer, at the end of a drain before entry into a sewer, and between each section of a Community pipe to prevent upstream materials entering the downstream section(s)

It should also be noted that to be effective

- i) the outlet pipe should to be screened to prevent floating objects passing directly through the interceptor and into the service connection,
- ii) the interceptor should be about 2 feet (0 6 m) deep below the inlet pipe and have a minimum volume below the water line of about 10 cubic feet (0 3 cubic meters),
- iii) the interceptor must be emptied from time to time to ensure the wastewater passes through slowly enough to let the solid materials settle out

Note the settled material is hazardous to human health and must be removed and disposed of carefully, especially if connected to a latrine or animal compound

- i) repairing faults quickly, e g broken pipes and manholes, as water that leaks out can contribute to the long-term collapse of roads, buildings, leak back in, bringing in soil and silt, and cause pollution to water supplies where water pipes are broken
- 2 Operation and maintenance of the pipe shall comprise all activities associated with the management of discharges to it, its cleaning and repair in order that it remains in a condition as close as possible to its condition at the time of commissioning, and all financial and administrative matters associated with these activities
 - 3 Cleaning shall comprise removing all materials deposited in the pipe so that its bottom is clear of any obstruction to flow, and disposing of the material in a safe manner away from the human environment

- 4 Repair shall comprise any works required to make good damage or wear and tear to any part of the pipe so that it may be returned to, or be in a condition as close as possible to its condition at the time of commissioning

COMMUNITY WATER SUPPLY PROJECTS

Procedure for Investigation, Planning, and Design

- 1 Following receipt of a request from community members WASA shall conduct a feasibility study to determine the viability of the scheme This shall include determining the community's requirements via meetings and interviews, discussion of the obligations of the Community and WASA, as set out in the Community - WASA Agreement for Water Supply Services, and the ability of WASA to supply the required water quantity and pressure without affecting the supplies of adjacent communities, such that they become unsatisfactory

A rough cost estimate will also be prepared

- 2 Should the scheme prove feasible and the Community agree in principle to the terms and conditions set out in Community - WASA Agreement for Water Supply Services, Community Representatives shall be appointed, as per the Agreement Following their appointment WASA shall commence detailed design The design will be according to WASA standards, and will be carried out in consultation with the Community Representatives, as far as is reasonable
- 3 On completion of the proposed design a detailed cost estimate will be prepared and the scheme presented to the Community If approved the Agreement will be signed and implementation commenced
- 4 It shall be noted that during implementation any WASA staff allocated to assist the Community in any way may also have other work responsibilities at the same time, e g supervising other community water supply projects elsewhere The Community must therefore provide appropriate notice of proposed meetings and the need to attend site for the checking of works, etc This should preferably be a minimum of 24 hours

Failure to give sufficient notice may prevent the appropriate officer attending site and carrying out the duties required, and possibly causing inconvenience to the Community as a result The Community should record any time WASA staff fail to arrive on site when requested, provided proper notice was given, and complain formally if excessive

WASA connection charges and tariffs for Community-Based Water Supply Projects

A	Unmetered tariff	domestic and commercial	
	Ferrule size	1/4"	Rs 45/- per month
		3/8"	Rs 132/-
		1/2"	Rs 265/-
		3/4"	Rs 660/-
B	Metered tariff	domestic	Rs 20/- per 1000 gallons (imp)
		commercial	Rs 30/-per 1000 gallons (imp)
C	Connection fee (less than 1" ferrule size)		
	1	Security fee	Rs 300/-
	2	Advance billing (=2 months tariff)	Rs 90/-

3	Form fee	Rs 5/-
4	Departmental development charge	<u>Rs 150/-</u>
	Total connection fee	<u>Rs 545/-</u>
D	Regularization fee for existing (illegal) connection	<u>Rs 500/-</u>
	Total (including regularization fee)	<u>Rs 1045/-</u>

**WATER AND SANITATION AGENCY
FAISALABAD**

**COMMUNITY - WASA AGREEMENT
FOR WATER SUPPLY SERVICES**

Community - WASA Agreement for Water Supply Services
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Appendix 3	WASA Offices and Contact Details

Community - WASA Agreement for Water Supply Services

A The Community and WASA

- 1 This agreement is between the community of _____¹, Faisalabad, (hereinafter referred to as 'the Community'), which is served by the tertiary water pipe known as _____¹, hereinafter referred to as 'the pipe', and is the owner of it (see Appendix 1), and Faisalabad Water and Sanitation Agency, (hereinafter referred to as 'WASA')

It shall remain in place until such time as both parties mutually agree to its dissolution or amendment

¹ Enter details, in words, and initial as appropriate

- 2 In all contact with WASA the Community shall be represented a minimum of three and a maximum of five Community members nominated for the purpose by a simple majority of all the properties served by the pipe Each property shall be entitled to one vote only
- 3 A representative must be from one of the properties served by the pipe He/she may resign his/her post voluntarily He/she must also resign when
- he/she leaves the Community
 - his/her property is no longer served by the pipe, e g by voluntary or compulsory disconnection from the pipe,
 - requested to do so by a simple majority of the Community
- 4 New representatives shall be nominated as desired by the Community, to replace resigning members WASA shall be informed of all changes within two weeks of the change, including the names of resigning representatives and the names and addresses of all new ones
- 5 WASA shall be represented by the Deputy Director (DD) Water for the area, or any other appropriate officer designated by the Managing Director (MD), WASA, assisted by the Community Infrastructure Unit (CIU)

The Community shall be informed of any changes in the officer representing WASA

- 6 The Community Representatives shall be responsible for all community elements of the implementation and operation and maintenance of the pipe

B Meetings, Records, and Complaints

- 1 During implementation of the works meetings between the Community, WASA and any Contractor for the works shall be held at least every two weeks
- 2 On completion of the works WASA and the Community Representatives shall agree a programme of meetings to enable monitoring, evaluation and support of the project For

the first two years meetings shall be quarterly. Subsequently they may be arranged annually. Joint meetings may be arranged on an area basis at the request of WASA.

- 3 Community Representatives shall record all meetings, financial matters and activities at community level. The DD Water shall keep records of all meetings and activities at WASA level. Copies of all drawings, agreements and other relevant documents shall be held by both the Community and WASA. Copies shall also be provided to CIU.
- 4 All records shall be open records, and available for inspection by Community Representatives, individual consumers who are connected to the pipe, and WASA staff.
- 5 In the event of difficulties or any complaint about the service provided by WASA, or any WASA staff, the Community Representatives, or any consumer, may report the matter to the local WASA Complaints Center. This shall include repeated failure by WASA to attend site during implementation or for repairs, provided proper notice was given on each occasion. This shall be a minimum of 24 hours except in emergencies.

The complainant shall be provided with a receipt recording the complaint.

- 6 The Complaints Center shall arrange investigation of any complaints made. The investigating officer will report on the matter to the Director of the relevant Directorate within two weeks. The report shall include recommendations for any necessary action, and shall be copied to the DD Water, CIU and the Community Representatives.
- 7 CIU and the Community Representatives shall also be advised of any subsequent action taken. The Community Representatives shall advise CIU if none is taken or the outcome is considered unsatisfactory, presenting a copy of the receipt.

C Implementation

- 1 The Community shall be responsible for the cost of the pipe, fittings and chambers, road re-instatement, all consumer connections and payment of the appropriate WASA connection charges and tariffs. It may employ a contractor for the purpose, or purchase the materials and carry out the works itself.

WASA will be responsible for making the connection to the WASA main and installing fittings up to the Community sluice valve, using its own materials (see Appendix 1).

- 2 WASA will provide appropriate staff for technical supervision of the works from the Construction and Water Directorates. They shall use their best endeavors to ensure proper installation of all items, including consumer connections. No work shall be carried out without the approval of WASA staff. They may instruct any work carried out without their approval to be removed. The CIU will assist also.
- 3 The Community Representatives will be responsible for managing the community and/or any contractor it has engaged to carry out the works.



- 4 WASA supervision will be provided free of charge for up to six/_____¹ weeks from commencement of construction work to its completion. Any work carried out after this period by staff of Sub-Engineer level or below shall be charged to the Community at 1/26 of the basic monthly salary per day or part of day worked. Time shall be allowed for any bad weather, unforeseen conditions encountered, or unreasonable delays by WASA.

The Revenue and Recovery Directorate will invoice the Community for any charges that may arise during the course of the works (see C4). Payment shall be made to the Revenue and Recovery Directorate. A receipt will be provided.

¹ Delete and enter details in words if required. Initial as agreed.

- 5 WASA staff will be available for supervision during normal WASA hours. Any requirement for supervision outside these hours shall only be as agreed with WASA staff of Assistant Director level or above. No WASA staff shall be entitled to any payment by the Community, or individual community members.
- 6 Work will be carried out only according to the approved design, unless modified by agreement between the Community and WASA.
- 7 Work on site shall commence only by mutual agreement of WASA and the Community Representatives, and will follow completion of the following formalities:
- WASA connection procedures for all proposed consumer connections, and,
 - a contractor has been engaged, and a contract and programme agreed, or,
 - if the work is to be carried out by the Community itself, all materials have been made available by the Community, labor identified and a working programme agreed by WASA and the Representatives.
- 8 The completed works shall be tested by WASA within one week of completion. Any faults found shall be repaired by the Community or contractor, unless attributable to WASA, under the supervision of WASA. Any such faults will be made good by WASA staff.
- 9 On satisfactory completion of the test(s) the pipe shall be commissioned. Formal completion and commissioning documents shall be completed and signed, including a record of all approved (legal) consumer connections. A copy is attached (see Appendix 2).

D Consumer Connections and Water Quantity

- 1 Any person not wishing to connect his property to the pipe shall not be required to make any financial or material contribution to the scheme. However, his property shall not be permitted to be connected to the pipe unless and until the following formalities have been completed.

- a) the proportionate cost of the scheme has been paid to the Community Representatives, and records made and receipts provided, and,
 - b) the appropriate WASA connection formalities have been completed
- 2 Any money paid to the Community representatives under D 1 above shall be distributed equally between those consumers who have contributed financially or materially to the installation of the pipe, or, if agreed by the Community, held in any community operation and maintenance account
 - 3 Any illegal consumer connections to the pipe shall be notified to the DD Water They will be disconnected by WASA or the Community Representatives Alternatively the connection may be regularized by completing the formalities defined in D 1 above
 - 4 All consumer connections shall comply with the Instructions to Consumers attached to the WASA Application for Water/Sewerage Connection Installation of any device or any connection arrangement on the pipe or in any property which constitutes a risk to the quality or the pressure of the water in the pipe shall not be permitted
 - 5 For each non-metered consumer connection WASA will supply a target quantity of 100 gallons per connection per day Up to 150 gallons per connection per day may be supplied at no extra cost, as permitted by prevailing conditions These quantities may be revised as and when tariff rates are revised, in accordance with the new rates
 - 6 Metered consumer connections will not be limited in the maximum quantity of water supplied
 - 7 WASA reserves the right to install a bulk meter on the pipe from time to time, as indicated in Appendix 1 This is to monitor leakage and water use, to assess current consumption and for use in future planning
 - 8 In the event that water use is exceeding the quantities defined in D 5 WASA will advise the Community Representatives If excessive use continues WASA may request the Community to install individual meters, or restrict supplies to control excessive use
 - 9 The Community has advised WASA that its preferred course of action in the event of excessive average water consumption is (see D 5, D 8)
 - a) restrict supplies to control excessive use ¹
 - b) install individual meters ¹

¹ Delete and initial as appropriate

E Operation, Maintenance, and Repairs

- 1 The Community will be responsible for undertaking or arranging the repair of leaks and faults on the pipe, including costs, except where attributable to WASA/WASA staff The DD Water shall be notified of any repairs that are necessary in order that the work may

be supervised by WASA. WASA may also issue a notice instructing the Community to undertake any repairs considered necessary and for which it is responsible

- 2 Each consumer will be responsible for maintaining his connection to the pipe, including the repair of any leaks or faulty fittings within his property
- 3 All repairs shall be carried out as quickly as possible, and preferably within one week of a fault being reported to WASA and/or an instruction being issued
- 4 If a repair is carried out within one week there will be no charge for supervision and testing by WASA on completion of the work. Otherwise there shall be a nominal charge as in C 4 above. It shall be paid as detailed in C 4
- 5 Where the community is responsible for the repair WASA reserves the right to turn off or control the water supply until such time as the repair is completed if it is not completed within one week. WASA also reserves the right to turn off the supply at any time earlier if the leak is serious. The Community will receive written notice justifying this course of action
- 6 Where WASA is responsible for the repair some regulation of the supply shall be permitted to reduce losses. However, the water shall not be turned off at any time until repair work commences
- 7 WASA will train the Community Representatives, or any other nominated person, in simple maintenance of the supply, operation of sluice valves and the repair and replacement of simple fittings, as requested by the Community. Trained persons shall be the only persons permitted to carry out operations on the pipe and the sluice valves
- 8 WASA will be responsible for the delivery of bills to individual consumers. Each consumer will be responsible for paying his/her bill and notifying the DD Revenue and Recovery of any errors or omissions associated with it

F Form of Agreement

The terms and conditions of this Agreement, concerning the construction and operation and maintenance of the pipe, have been discussed, reviewed and agreed by both parties, this day

¹

Signed and witnessed
for WASA

for the Community

¹ Enter date (month in words), and initial

Schedules

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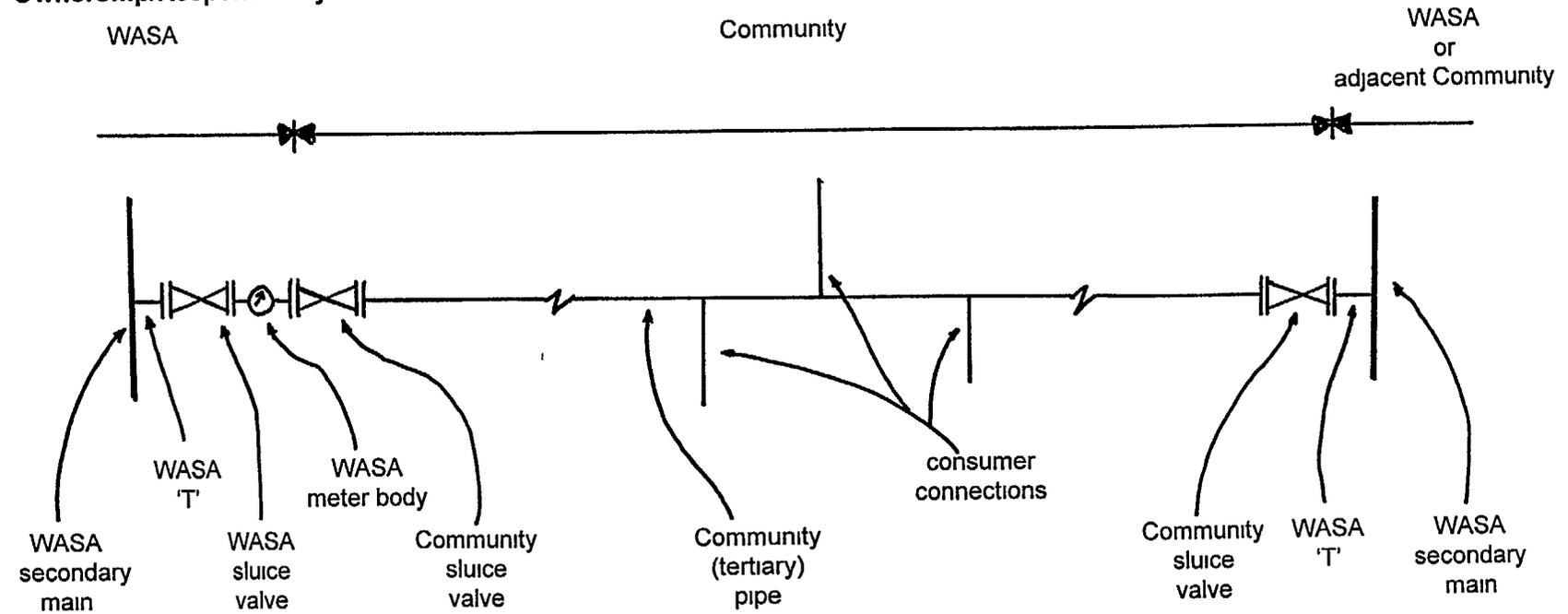
- A The Community and WASA
- B Meetings, Records and Complaints
- C Implementation
- D Consumer Connections and Water Quantity
- E Operation, Maintenance, and Repairs

- Appendix 1 Plans
- Appendix 2 Completion Documents
- Appendix 3 WASA Offices and Contact Details

**Appendix 1
Plans**

Sketch showing a typical layout of a community-level water main

Ownership/Responsibility



Fittings

these fittings may not be present in every scheme, where there is a connection/extension to another Community pipe a Community sluice valve will be fitted at the boundary between the two communities

Not to scale

3YWTRAG2 DOC

17/05/97

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Appendix 2
Completion Documents

Appendix 3
WASA Offices and Contact Details

Appendix 5
SDBL Loan Application Form

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THE THRIFT AND CO-OPERATIVE CREDIT SOCIETY LTD OF MATARA
DISTRICT.

No.6B, Akuressa Road, Nupe, Matara, Tele -041-22074

No

LOAN APPLICATION.

For Office Use.

Date of receipt of
Loan Application
Date applied on
Purpose

Registration No. of Loan Application

- 01. General informations about the Society.
- 01 1 Name of Society applying loan (in terms of the by law)
- 1.2 Address..
- 1.3 Registered No.... Date of Registration.
- 1.4 Membership No. of District Society
- 1.4.1 Date of obtaining Membership
- 1.5 Value of shares bought from SANASA District Society' Rs.....
- 1.6 No. of Members of the Society. ... Male Female.....

02. Particulars of Financial condition of Society.

- 2.1 Share Capital of Society
- 2.2 Deposits of Society

Deposit Catagory	A/C.No.	Balance
i. Savings Deposits
ii. Deposits
iii. Compulsory deposits
iv.
v.

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2.4 Monies deposited by the Society in external institutions

Deposit Category	Institution/Bank	A/C No.	Balance
1. Current A/cs	People's Bank	.. .. .	.....
2. Current A/Cs	Bank of Ceylon	.. .. .	.....
3. Fixed Deposits	..	.. . . .	.....
4. Savings deposits	.....	.. . . .	.....
5. ..	.....	.. . . .	.....
6. . . . .	.....	.....	.....

3. Particulars of loan transactions of the Society.

3.1 Loans given to members.

Loan Category	Value	Interest rate	No. of A/Cs	Outstanding loan balance	No. of Members in arrears of Loan
1. Ordinary Loan					
2. Development Loan					
3.					
4.					
5.					

3.2 Loans the Society has obtained from external Institutions

Institution	Loan obtained	Balance due	No. of overdue instalments
1. SANASA Society	-	-	-
2. National Housing Loan	-	-	-
3.			
4.			

3.3 External Loan Limits of the Society -

3.3.1 Date of approval of the External Loan Limit.....

4. Particulars of the Loan applied for.

4.1 Purpose for which loan is applied'

4.2 Amount applied in words

4.3.1 Total value of the Project for which loan is applied....

4.3.2 Financial contribution of the Society -

4.3.3 Financial contribution of the Member

.....

4.4 Method of repayment of the Loan.

.....

4.5 Date on which the Loan is expected.....

. . Co-operative Society Ltd Unltd,

Balance Sheet on

Liabilities						
Particulars	Rs.	Cts .	Rs.	Cts	Rs.	Cts
Internal Liabilities						
Membership shares						
Stationary accumulations						
Present Reservations						
other accumulations						
and surplus						
Others.						
Long term liabilities.						
Bank Loan						
Others						
Liquid liabilities.						
1. Membership Deposits						
2. Deposits other than memberships						
3. Bank Loans						
Corporate loans						
Creditors						
Co-operative Funds						
Housing loan Securities deposits						
Other liabilities.						

Annexure (01)

Co-operative Society Ltd, UnLtd.

Balance on

ASSETS.

Particulars	RS.	Cts	Rs	Cts	Rs.	Cts
Liquid Assets.						
Cash in hand						
(Statutory Maximum Rs.)						
SANASA Savings						
Rural Banks						
Members loans						
Members Housing Loans (Rs.....)						
Bank Security deposits						
Bank fixed deposit balance						
Others						
Investments						
Corporate shares						
Others						
Liquid Assets						
Original value of Equipment						
Reserve for depreciation						
Original value of land and Buildings.						
Reserve for depreciation.						
Others						
OTHER ASSETS.						

Balance Sheet extract is correct in terms of
the Audited report of this Society from . . . to

Date -

Seal of Society

Sec Treasurer/Manager

Examined by me.

. Asst Secretary of the Division

Signature of Asst Secretary.

Annexure (02)

.. .. Co-operative Society Ltd/Unltd,

Capital Account upto

Particulars	Rupees	Rs.	Cts	Particulars	Rupees.	Rs.	Cts
Shares	-----	-----	-----	Building	-----	-----	-----
Security Capital	-----	-----	-----	Equipment	-----	-----	-----
Profit	-----	-----	-----	Other Fixed Assets	-----	-----	-----
Accumulations and Surplus	-----	-----	-----	District Society Shares other Institutions s-hares	-----	-----	-----
Member deposits	-----	-----	-----	Members Housing Loans.	-----	-----	-----
Non Members Deposits	-----	-----	-----	Members loans	-----	-----	-----
Loan of SANASA Matara District	-----	-----	-----	Bank Savings	-----	-----	-----
Project Loans	-----	-----	-----	Cash in hand	-----	-----	-----
Co-operative Funds	-----	-----	-----				
Compulsory deposits	-----	-----	-----				
Security deposits	-----	-----	-----				
Rewards.	-----	-----	-----				

We hereby certify that the values given in the Capital A/c for are correct according to the General Ledger.

Hon President

Secretary/Treasurer/Manager

Date -

Seal of Society

I Checked. Asst Secretary of the Division

Signature of Asst Secretary

Extract of Committee Meeting Minutes of

Co-operative Society Ltd/Unltd,

which

Date on the Committee Meeting was held

Those who participated
in the Committee Meeting.

- 1. ----- 5. -----
- 2. ----- 6. -----
- 3. ----- 7. -----
- 4. -----

Committee Meeting Minutes No

Page No. of Committee Meeting Minutes...

It was decided to obtain loan of Rupees
 (Rs..) from the Matara District
 Thrift and Credit Co operative Society Ltd, on interest at the
 rate of per annum and to repay the said loan and
 interest

We hereby certify that the above extract is correct in terms
 of the Minutes appearing on page of the Committee
 Meeting Minutes Book.

.....

Hon President

.....

Hon Secretary

Seal.

..... Co-operative Society Ltd, Unltd,
 Report containing particulars of members who have applied for loans

Serial No.	Name and address of Member	Personal Loan Unit	Loans obtained from the Society		Amount of Loan Applied for	Required purpose	Contribution of Member	Month Income
			Amount obtained	Balance				

.....
 Hon President

.....
 Society Seal

.....
 Hon Secretary

Appendix 6
Loan Agreement between PTCCS and Individual Members

THRIFT AND CREDIT CO-OPERATIVE SOCIETY OF MATARA DISTRICT/

Pervious loan inquiry report.

1. Name of Society -----

2. Recommendation about the annexures annexed to the loan Application Form.

1. -----

2. -----

3. -----

4. -----

5. -----

3. Particulars about the Society.

3.1 Number of General Meetings held within 6 months of the date of tendering the loan application.

Date -

Number participated

1. -----

2. -----

3. -----

4. -----

5. -----

6. -----

3.2 Committee Meetings

Date -

Number participated

1. -----

2. -----

3. -----

4. -----

5. -----

6. -----

3.3 Internal Auditing Committee actions

3.4 Date of auditing the co-operative Society for the last time

3.4.1 Matters specifically stated in the said report -----

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4 Financial position of the Society

	<u>upto Date</u>	<u>upto date</u>
4.1 % of nett earnings for shares	-----	-----
4.2 Shares and deposits % of total Assets.	-----	-----
4.3 Members loan % of the total Assets.	-----	-----
4.4 Non member deposits and external loan % of total assets	-----	-----
4.5 % of Balance in hand and bank out of total assets	-----	-----
4.6 % of unpaid loans out of Total loans	-----	-----
4.7. Value of overdue loans	-----	-----
4.8. Balance in hand specified by the by law.	-----	-----

4.8.1 Particulars of cash in hand during past 6 months

Month	Value	Month	Value
--	--	--	--
--	--	--	--
--	--	--	--

5. Committee Meeting loan obtained from the Society

Names and addresses of Committee Members	Date of obtaining loan	Amount	Agreed period	Balance due	Balance terms	Over due loan
1.						
2.						
3.						
4.						
5.						
6.						
7.						

5.1. Members who have applied for loans

Name	Date of obtaining loan	Amount	Agreed period	Balance remaining	Balance terms	Over due loans	Approvable

6. Loans obtained from the Society

Loan Category	Date of obtaining loan	Amount of Loan	Agreed time	Loan Balance	unpaid terms	arrears

7. Recommendation about the necessity for which loan is applied.

8. Contributions.

1. Amount paid for the year Rs.....
2. No. of members of the Society for the said year
3. Amount paid for the year previous to the said year.....
4. No. of members relevant to (3)
5. No of members of the Society on

9. Particulars for programme of the Society for the last 6 months

General Meeting	Divisional Meeting	work Camps of the Commite	Training of the Officers	Work Camp of women	Youth Camps	Divisional Rally Committees	Financial Asstance

10. Recommendation.

Date -

Signature of Examiner.

SR

For Office use -

1. Date of receipt of previous inquiry report -

2. Recommendation -

Approved loan

Rate of Interest

Period of recovery

conditions of release

Date -

Finance Officer.

Recommendation of the Financial Committee.

Date of holding Financial Committee Meeting -

Rate of Interest - Approved loan;-----

Conditions - Recovery Period -

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"SANASA for all in 2000"

Sign on a
Rs.2/= stamp

Serial No -

INSTANT LOAN DEED.

I, of
whose signature appears below being the member bearing No.
of Thrift and credit Co-operative
Society Ltd/Unlimited having applied for and obtained in full
under the aforesaid Instant Loan Scheme the sum of Rupees. . . .
. (Rs.) of lawful
money of Sri Lanka subject to the rules and regulations of
the aforesaid Thrift and
Credit Co-operative Society Ltd/unlimited.

I hereby promise and bind myself to repay and discharge the
said sum with interest thereon at per cent from
today upto the date of repayment.

Method of receipt

Date Obtained	Amount	Signature of Debtor	Date repaid	Interest	Total	Signature of Office -r accep- -ted

We. and
~~and~~ the 2 of us who have signed below are jointly and severally
liable in terms of the Articles of the Society to duly pay and
discharge the aforesaid sum of money.

Witnesses -

Signature of Debtor

Guarantors 1.

1.

2.

2.

On the day of 199.
The sum stated in this deed having been paid in full the
deed was cancelled.

.
President. Secretary or Treasurer.

On the day of 199

INSTANT LOAN APPLICATION.

To the Secretary of
Thrift and Credit Co-operative Society Ltd, Unltd,

Sir,

I, being the member
bearing No, of the above society hereby apply for a
loan of Rupees.
at an interest subject to rules and regulations enacted
under Co-operative Societies Ordinance No.5 of 1972 and
those that would be enacted hereafter. The purpose for which
the loan is required and repayment.

I hereby undertake to obtain the aforesaid sum
or a sum less than that in an emergency and to repay same
with interest within one month.

Sureties 1...
2...

Date - Signature of Applicant

The moneys obtained within one year from today was
approved at the Committee Meeting held on to be paid with
interest at. per cent within one month.

.
President Hon. Secretary

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Appendix 7
Loan Agreement between SDBL and PTCCS

LOAN AGREEMENT.

IT is hereby agreed at _____ on this. .
... . . . the Co-operative Thrift and Credit Development
Bank Ltd, hereinafter referred to as the Bank when required,
registered under No. N (PBS) 712 under Section 126 of the
Companies Act No.17, having its Head Office at No.106, Dhar-
-mapala Mawatha, Colombo 07, of the ONE PART and . . .
. . . . hereinafter referred to as the society
when so required, having its office at
. registered under No
. on of the OTHER PART.

TERMS OF AGREEMENT.

1. The society shall repay the loan to the bank irrespective of whether the loan was duly recovered or not from the burrower. . Then the bank shall debit the relevant sum and interest to the relevant account.
2. The Signature of the debtor should be obtained on the loan application before an officer of the Society and the said officer shall sign in witness thereof.
3. ALL such security documents to which signatures are obtained shall be kept in safe custody of the society and shall be produced to the bank.
4. The bank shall take steps to release the moneys so released according to the requirements after obtaining securities.
5. The society shall permit the bank to inspect the account books of the society when required.

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6. The Society shall agree to act in terms of the constitution and regulations of the bank in respect of the loans obtained by the Society.

We, the Hon President/ Hon Vice President and the Secretaries as statutory Authorities on behalf of the society and Mr/Mrs.... and Mr./ Mrs. the statutory Authorities on behalf of the C. T. S. Development Bank Ltd; having been lawfully authorised , having duly read and understood this agreement and terms relating thereto, and having agreed to same placed our signatures and the Common Seal on this day of 199

On behalf of the Society.

.....
Hon President/Vice President

On behalf of the Bank
.....

.....
Hon Secretary

Seal

Date -

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