

CSFW

Community Self-Financing of Water and Sanitation Systems



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BACKGROUND OF CSFW

Approximately two-thirds of Indonesia's rural population--eighty seven million people--still do not have access to sufficient and reliable sources of domestic water or to proper sanitation facilities. The Government of Indonesia (GOI) and interested international aid donors simply do not have adequate resources to meet the tremendous need.

A recent World Bank paper (Churchill, et. al., 1987) suggests that the basic assumptions which have shaped water development programs may well hinder greater progress in meeting the objectives of the Water Decade. The Bank's paper cites experiences in several countries which "...reflected a turning away from a sector development philosophy that once appeared irrevocably linked to the notion that rural populations are incapable of taking a more central role themselves in improvement initiatives and are too poor to contribute to covering the costs."

The Bank's paper concludes: *"Without a high level of cost recovery it is unlikely that programs will be either financially or administratively replicable on the scale required to get the job done. The evidence suggests there is both a willingness and ability to pay for improved services in most rural areas."*

A fundamental change needs to occur in the manner in which the government and aid donors perceive local development. Communities must be actively encouraged and given the means to help themselves if clean water supply is to reach many more rural areas.

CARE Indonesia's ten year experience in partnership with GOI in the development of clean water supply has convinced it that the gap between available resources and water needs can be more rapidly addressed if communities

are entrusted to take responsibility for it themselves. Future efforts should take greater advantage of the potential that exists in rural communities to meet their water needs.

WHAT IS CSFW

CSFW is an abbreviation for **Community Self-Financing of Water and Sanitation Systems**. CARE is undertaking a five year (1988-1993) pilot project to demonstrate that rural communities are willing and able to develop and self-finance improved water and sanitation facilities. The CSFW Project is presently being implemented in the provinces of West Java, East Java and West Nusa Tenggara (NTB). If the project proves to be successful CARE will extend CSFW activities to other provinces.

Communities who participate in CSFW activities build their own water and sanitation systems with advisory and technical assistance from CARE. Communities take full responsibility in the following activities:

- Assessing the community's water needs.
- Surveying for adequate water source.
- Establishing a committee capable of organizing and undertaking all activities related to the project.
- Planning the project and designing the appropriate system to be constructed.
- Mobilizing resources and collecting materials.
- Constructing the system.
- Operating and managing the system.

In addition, the communities will provide health education to water user groups in aspects related to water and sanitation.

For more information on the CSFW Project contact CARE Indonesia, Jl. Bangka I/34, Kemang, South Jakarta. Ph: (021) 799-6479

WHO ARE THE BENEFICIARIES

The direct beneficiaries of CSFW will be the community members within the project sites. Women and children, who are the traditional carriers of water, will be the primary beneficiaries.

The indirect beneficiaries of the project will be the neighboring communities of the project sites. It has been repeatedly demonstrated over the past ten years that neighboring communities learn from the project sites and, at times, independently begin to organize themselves for installing their own water systems.

WHY CSFW

Much effort and resources have been provided to develop water and sanitation facilities for rural communities. There are still many people, however, who are not receiving reliable sources of water. Presently, only about 30% of the rural population have access to clean and reliable sources of potable water. Resources allocated for this purpose are far below satisfying the need. The present Five Year Development Plan of Indonesia (REPELITA, 1989-1994) has targeted only 1000 villages for the development of clean water. Even if funds are available, there is sufficient evidence to indicate that projects which provide everything to the target community have not proven to be effective.

A fundamental change, therefore is necessary where communities are encouraged to build and self-finance their own water and sanitation facilities. This increase in community participation is in line with President Soeharto's speech at the People's Representative Assembly (DPR) session when he stated that:

"Because of the limited funds that can be mobilized there is no other way but to use state funds mainly for sectors which stimulate and encourage self-help and public participation in all development sectors. The role of the Government is to provide guidance, support and encouragement for increased development potentials of the society; and not as the principal executor of development" (January 9, 1989).

IS CSFW POSSIBLE

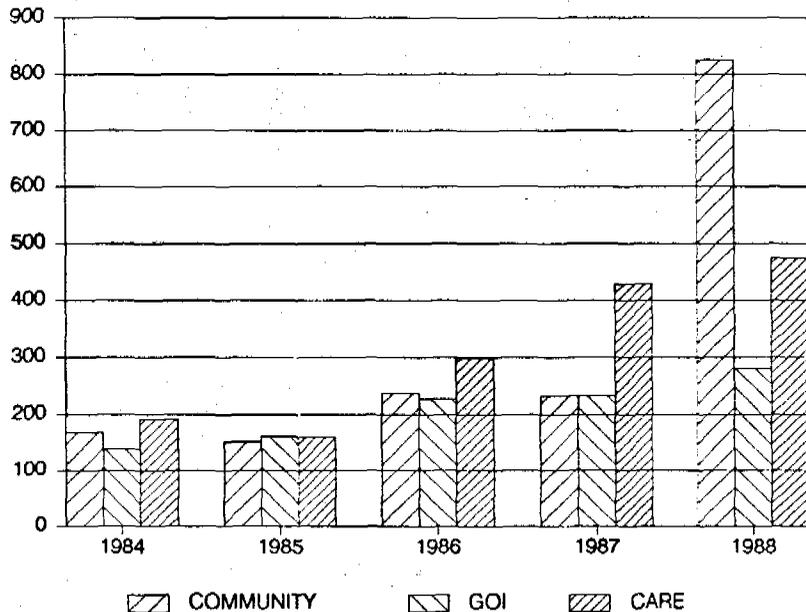
A feasibility study conducted in 1988 (Judd, et al, 1988) found that *"the concept of rural community self-financing for improved water and sanitation systems is highly feasible and desirable."* The major findings of the study include:

- Most of the rural communities surveyed have a great need for improved water systems and are willing to self-finance them.
- The desire for self-financing is greater in communities with many income-generating activities because people have less time to fetch water themselves.
- The concept of community self-financing is not new in rural areas; communities have long contributed for construction of village roads, mosques, schools and other buildings.
- Communities are willing to approach banks for loans (but need assistance for the initial visit).
- The loan repayment capability of most communities is good, particularly if the loan period is two years or longer.

Over the years in collaboration with the GOI and the community, CARE has seen the community's capability in cost sharing of projects increase year by year. The following graph illustrates the increasing participation of

WATER AND SANITATION PROJECT FUNDING

Care-Assisted Sites ('000,000 Rupiah)



communities in funding water and sanitation facilities development in CARE-assisted sites in the three provinces of West Java, East Java and West Nusa Tenggara (NTB).

WHO SUPPORTS CSFW

The main supporters of CSFW are the communities that need water and those who have it through their own self-financing activities. Communities that need clean water possess the initiative to help themselves. Communities who already have improved water and sanitation facilities through the CSFW approach are expected to share their knowledge and experience with other communities. With their experience and skill in implementing the development of

clean water and sanitation systems, Water Management Committees (BPAB, HIPAM or HIPAB) can help neighboring villages in implementing CSFW.

Besides the community, other groups which are expected to support CSFW are:

- Government, central and regional
- Credit institutions, e.g., banks and village cooperatives
- Private businesses
- Indonesian private voluntary organizations (IPVOs)

The credit institutions and private businesses can support the implementation of CSFW by providing loans and sponsorship. Material vendors can also be considered as a funding source if they are able to provide building materials like pipes and cement on a credit basis.

IPVOs can play an important role in supporting CSFW. These organizations can assist communities to be active partners in development. IPVOs can provide communities with social preparation assistance and technical training which includes physical construction and project management. In addition, there is also the possibility for them to assist communities in funding the project by managing a "revolving fund" should such a fund be established.

Funds for the CSFW pilot project are from the United States Government through a 100% monetization of PL480 Title II Wheat.

WHAT IS THE CSFW APPROACH

CSFW is designed as a community-led project. It is a developmental process which involves the following steps: determining the technical and economic feasibility of the project at a particular site; raising the consciousness of the community; developing the organizational capacity of the people; mobilizing resources; constructing the systems; and maintaining the installed systems. CSFW will adapt the flexible use of the phasing system currently in practice in several of CARE Indonesia's projects. The phases include:

- Identification Phase
- Social Preparation Phase
- Implementation Phase
- Operation and Maintenance Phase

The social preparation and the implementation phases usually overlap. The individual phases encompass several different steps as indicated below.

A. Identification Phase.

- Contact of local leaders at the village and local government levels to determine the need and capability of the community.

- Pre-project survey that includes technical and community socio-economic surveys.

B. Social Preparation Phase.

- Information sharing and motivation of community.
- Training in project management and organization; establishment of a water development committee (PPAB).
- Budget and system design preparation by community with CARE assistance.
- Baseline survey to determine the health and economic status of households.
- Resource mobilization, collection of locally available material such as stone, sand, bricks and bamboo and purchase of items like pipes and cement.
- Technical training for construction cadres by CARE.
- Health education for the health cadres on environmental sanitation and the prevention of water related diseases by CARE and government health officials.
- Health education for the water users by health cadres.
- Monitoring of the health cadre activities by CARE and government health officials.

C. Implementation Phase.

- Physical construction usually begins with the building of a spring catchment for gravity flow pipe system. This is followed by ditch digging, pipe laying and public bath and sanitation facilities construction. Other types of appropriate technology such as shallow/deep well pumps, hydraulic rams and rain water catchment tanks can also be used in certain areas.
- Establishment and training of a water management committee (BPAB).
- Development of rules, regulations and responsibilities of water users, including amount of water user fees, frequency of collection and its uses.

- Refresher training courses for health cadres by CARE and government health officials.
- Refresher training courses for water users by health cadres.

D. Operation and Maintenance Phase

- Management of installed systems which entails proper distribution of water, collection of user fees and proper maintenance.
- Post project surveys of the community and a sample of households to determine project impact, particularly behavior changes related to improved hygiene and sanitation practices.
- Evaluation of project to determine weaknesses in system management and ways to solve them.

Of the phases described above, the social preparation phase is the most important part of the CSFW approach. The success of the project depends on the full participation of the community as well as the amount of funds contributed during this phase.

RESOURCE MOBILIZATION

Communities have many different methods of mobilizing resources. Among them are some of the following ways:

- Collection of "zakat", an Islamic charitable collection, at every harvesting period.
- Collection of community contribution from the sale of agricultural products, such as rice, coffee, coconut, bananas, etc.
- Collection of stones, sand, bamboo and other locally available materials.

- Organize community production of bricks for spring catchment or reservoir.
- Sale of livestock.
- Organize community hunt and sale of wild animals, like wild boars.
- Organize fund-raising shows such as the traditional puppet show and showing of films.
- Sale of water to farmers for irrigation of vegetable gardens (this occurs only in the initial stages of construction before all the pipes are laid for distribution to the bathing and washing facilities).
- Purchase of materials from local suppliers on a credit basis.

There are also different channels for obtaining capital from outside the community. These sources are through the Government, private sponsors, vendors and credit institutions. The following graph illustrates the amount of monthly repayments households have to make if the community obtains a loan from a bank to build a gravity flow pipe water system. Data for the graph was obtained from 25 CARE-assisted water sites in the three provinces of West Java, East Java and Nusa Tenggara Barat. Loan repayments were calculated for loan periods of two, three and four years based on an interest rate of 1% fixed per month. For a two year loan, monthly repayments depending on the amount borrowed ranged from Rp. 2,000 to Rp. 8,600 per household. For three to four year loans, the monthly repayments were even lower.

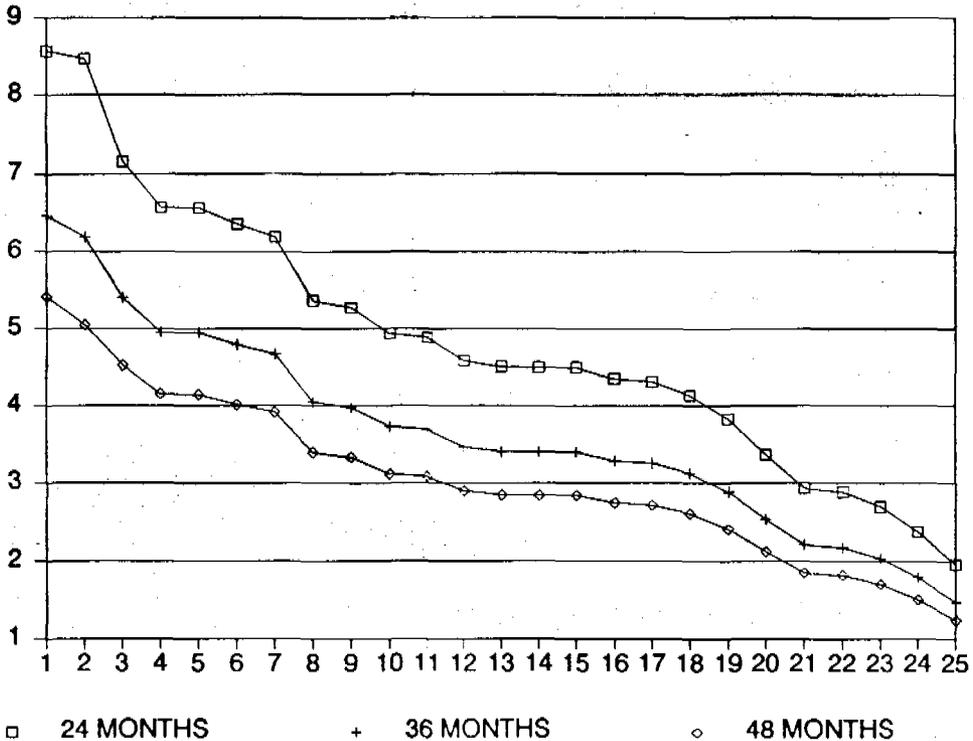
ROLE OF THE WATER DEVELOPMENT COMMITTEE

The Water Development Committee, or PPAB, as an organization with members trained in both technical and management capacity, has the following responsibilities:

MONTHLY LOAN REPAYMENT PER HOUSEHOLD

('000 Rupiah)

Interest Rate Of 1.0% Fixed Per Month



- Increase community initiative in developing improved water and sanitation facilities through CSFW.
- Increase the awareness of community for the need of clean water and improved sanitation.
- Plan and implement construction of the improved facilities.
- Generate maximum community inputs for the construction of water and sanitation systems.
- Seek alternatives for upfront capital such as bank loans or purchase of material on credit and to inform community members regarding the pros, cons and their obligations of using such credit.
- Increase the awareness and knowledge of the community regarding the prevention of diseases through the proper use of improved water supply.

ROLE OF THE WATER MANAGEMENT COMMITTEE

The main functions of the Water Management Committee, or BPAB, whose members have been trained in managing and implementing the CSFW project, are to:

- Increase community awareness in the proper use of the installed facilities so as to prevent breakdowns.
- Manage the collection and use of water user fees in the proper maintenance of the systems.
- Undertake expansion of the systems when needed and when resources are available.
- Upgrade community financial management skills to guarantee that long term loans are fully repaid and that repayments are made on time.

In addition, BPAB can assist other communities in developing their water and sanitation facilities through CSFW by sharing experiences and skills. A group of BPAB can form an association above the village level known as a Water Management Association (HIPAB or HIPAM) which can provide small loans and/or material to communities who wish to develop their water and sanitation systems. It can also play a very significant role as arbitrator should conflicts in water usage occur between villages.

ROLE OF THE GOVERNMENT

The support of the Government, both at the central and local levels, is important for the successful implementation and replication of CSFW. The Government can play an important role in the following ways:

- Inform communities that CSFW is in line with the Government's policy in development.
- Provide a new credit scheme for CSFW or add CSFW in the list of programs eligible for rural credit.
- Approve the BPAB as a legitimate village level organization managing water and sanitation facilities.
- Regulate the limited water sources in an area for the use of many communities.
- Monitor and supervise the activities of CSFW.
- Implement and adapt the CSFW approach for other areas.

ROLE OF CARE

CARE, as a development organization and a promoter of the CSFW concept, has a role in the following areas:

- Raise community awareness for the need of improved water and sanitation facilities.
- Develop a training packet for communities in order that they can develop water and sanitation facilities on their own.
- Provide training in managing and organizing the CSFW project including technical training in system construction.
- Assist communities interested in implementing CSFW to contact banks and other credit institutions for loans.
- Persuade banks and credit institutions to include the development of community water and sanitation systems as one of their credit priorities.
- Disseminate the CSFW concept and approach among circles influential in rural community development, e.g., Government agencies, IPVOs and other development groups.