

FIRST DRAFT

of

Project Concept Paper for Improved Access to WATSAN facilities

within the context of integrated water management

in the Chittagong Hill Tract Districts

**Compiled by IRC The Netherlands:
Cornélie van Waegeningh
Esther de Lange**

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List of Abbreviations

CHTD	Chittagong Hill Tracts Districts
CHTDB	Chittagong Hill Tracts Development Board
DPHE	Department of Public Health Engineering
GoB	Government of Bangladesh
HH	Household
IRC	IRC International Water and Sanitation Centre
LWTA	Low Water Table Area
MLGRDC	Ministry of Local Government, Rural Development and Cooperatives
O&M	Operation and Maintenance
PCP	Project Concept Paper
RNE	Royal Netherlands Embassy
SAE	Sub Assistant Engineer /DPHE
SDC	Swiss Development Co-operation
SWTA	Shallow Water Table Area
TOT	Training of Trainers
TW	Tube well
WATSAN	Water Supply and (environmental) Sanitation
Para, mouza thana	public administration units from household level up to village and cluster of villages levels.

1. Situation analysis

The three Chittagong Hill Tracts Districts (CHTD) of Bandarban, Khagrachhari and Rangamati, with an estimated (1995) combined total population of 1,074,455, are arguably some of the least developed areas of Bangladesh. The unstable security situation has largely contributed to the restricted and limited flow of external development assistance to the region. UNICEF has been the only external support agency in the area through its Hill Tracts Integrated Development project, designed to complement the Government of Bangladesh efforts towards improving social services. This assistance dates back to 1985.

While urban settlements in the Hill Tracts Districts are generally relatively less densely populated, the rural areas hold even thinner populations. In the more remote settlements, a cluster of 3 to 4 households easily constitute a village.

Water resources

A network of seasonal, intermittent and perennial streams fairly evenly cover all three districts. With a record average rainfall of 2,540 mm (per year?), the region is largely covered with dense mixed forests. Valleys with alluvial deposits within its hills support the cultivation of traditional paddy, cotton and a variety of vegetables. Tobacco cultivation is a more recent addition to the main agricultural products.

Water supply and sanitation

Like most other basic services, improved water supply and sanitation facilities are poor. The Department of Public Health Engineering (DPHE) as the provider of water supply systems has been applying the technologies from the plains. Those are the best appropriate in the settlements along the valleys. This has seemingly served well particularly in Khagrachhari where the water supply coverage is 85% (i.e., 55% tube wells, 4% taps, and 26% ring wells), but not so well in Rangamati and Bandarban (where the coverage is both at 45%).

Low cost technology options in the scattered settlements along the hills, the settlements in rocky areas, or those surrounded by the lake (Rangamati) have not yet been sufficiently looked into. The "hill paradigm" for technology development has largely been missing. The introduction of the expensive and heavy TH-10 rig is symptomatic of the "plains paradigm", since it can be used only in rocky areas along paved roads, and it can not reach the inaccessible areas where the problems are more acute. As a result, communities in these areas have been made to rely mostly on ring wells to serve domestic water needs. However, poor construction renders almost 50% of all wells drying during the peak dry season. Polluted surface water sources are often turned to as a substitute for domestic use.

Despite adverse conditions in the CHTD, access (what about use and maintenance?) to sanitary latrines is very encouraging. Coverage in Rangamati and Khagrachhari are at par with national averages (48% and 45% respectively). The status in Bandarban at 28% remains one of the lowest in the country. Although unsanitary, people do use some kind of hanging latrines. Open defecation is practiced only by 10 to 15% of the population.

Suggestions of IRC:

- The above text is based on a document that is produced by UNICEF Dhaka. Literature references (see Section 12) still have to be added (especially when it comes to figures).
- Keeping in mind the uniqueness of the region, additional information about the area should be included, such as:
 - * history
 - * socio-economic conditions
 - * cultural context
 - * water supply (what sources are used for what purpose and by whom)
 - * sanitation

- * Water resources availability and use (which source is used for what purpose by whom)

1.1 Problem analysis

This analysis of the current problems in the Hill Tracts Districts is focusing on one hand on the target group which this project addresses, and on the other hand on the problems as they have been identified by staff of DPHE, CHTDB and UNICEF in December 1997 during the participatory workshop in Chittagong. An ongoing baseline survey on the assessment of water supply and sanitation needs has provided for a lot of information on existing problems.

Suggestions of IRC:

- In this paragraph the results of the baseline survey can be highlighted. The results may be analyzed and discussed by the field workers who have collected the data.
- The survey may also be used to describe the target group more in-depth (probably other source documents also have to be used).
- The paragraph on the target group should be written at the lowest institutional level possible. The elements that are mentioned under this paragraph are meant as guidelines (given by the Dutch Government). This section should reflect the poorest section of the population.

1.1.1 Target group

All indicators should be addressed gender specific:

- * Nutrition, especially for children under 5
- * Health conditions
- * Living conditions (housing, WSS, energy resources, public services, transport, security)
- * Access to and control of natural resources (who uses what, impacts on sustainability)
- * Participation of target group in decision making on different levels
- * Knowledge and skills (access to education, drop-out rates, illiteracy, no. of students per teacher)
- * Paid employment (employment participation, -hidden/seasonal-unemployment, employment segregation, gender differences in payment, division productive and reproductive labour, labour conditions)
- * Access to and control of production means (such as land, water, credit, fish ponds, machines, assets, etc.)
- * Income (kind or cash, access to and control of money)

Suggestion of IRC:

- Concerning the target group, the baseline survey and possibly other source documents can be used to describe the following data as much as possible.

1.1.2 Reflection on the problem tree

In the participatory workshop that was organized in Chittagong in December 1997, problems related to water supply, sanitation and hygiene in the CHTD were identified and analyzed. The resulting problem tree, which is discussed in this section, can be found in Annex 1.

Although efforts have been made to supply the people of the Hill Tracts Districts with water supply and sanitation (WATSAN) facilities, it is recognized that coverage of these facilities is still not sufficient. Furthermore, recent data (*baseline survey, correct reference should be added, and maybe also other studies*) show that WATSAN facilities are poorly used.

Poor use is recognized to be caused by four main areas of problems, namely:

1. Local people lack the commitment and do not have enough reason to change their current practice.
2. Local people lack the ability to pay, neither are they willing to pay for the services.
3. Local committees face management problems.
4. Facilities are not properly operated and maintained.

1. Local people lack commitment and reason to change

A number of problems have been identified which explain why local people lack the commitment and do not have enough reason to change their current practice related to personal hygiene and the use of water and sanitation facilities.

- Up to date development activities in Bangladesh in general and in the CHTD in particular have been very much supply driven. Some of the reasons identified for this are the fact that it is very difficult to involve women and therefore to assess women's needs, which also negatively affects site selection. Furthermore, DPHE has always been very hardware oriented.
- Social mobilization activities have been insufficient because of the hardware orientation of DPHE, and because planning does not sufficiently include hiring other organizations to carry out software activities. This has led to poor community consultation and participation, and a lack of ownership of the community for the WATSAN facilities.
- The Union Parishad cannot articulate the needs and wishes of the community effectively, because they have capacity problems in terms of skills, staff and finances. Another reason is that in the Union Parishad political interests often prevail.
- Improper site selection and the fact that for local people it is difficult to relate health to hygiene practice, have contributed to their feeling of not having enough reason to change their practice.

2. Lack of ability and willingness to pay

The fact that local people are not able and/or not willing to pay for WATSAN facilities has been brought in relation with the following problems.

- People are not able to pay for WATSAN facilities because they are very poor and because the technology for the CHTD is relatively expensive due to the difficult geo-hydrological conditions.
- Their unwillingness to pay is on one hand influenced by the complexity of operating and maintaining the facility. Spare parts are costly and too far away. On the other hand the construction and therefore the functioning of the facility is poor, which negatively affects their willingness to pay.
- The fact that communities are not adequately consulted in the process negatively affects both their ability and willingness to pay for the services.

3. Local committees have management problems

The fact that local committees such as the WATSAN Committee at union level and the School Management Committee have management problems is caused by the lack of ownership and commitment of community people and local leaders, the lack of proper management skills within these committees, and the high number of members, specifically in the WATSAN Committee.

4. Operation and maintenance not functioning

Operation and maintenance problems are also directly related to the lack of ownership and commitment of the community, to a lack of commitment of the caretaker, and to the ineffectiveness of the training care takers receive. In addition, the costly spare parts and non-availability thereof play a role.

Finally, a number of more general problems that affect the development process in the CHTD were identified, both related to the process in general as well as to WATSAN activities.

- General problems in the area include political instability, bad communication, bureaucracy, lack of accountability, and poor education.
- Problems related to WATSAN activities relate to the difficulty to distinguish need from demand, chaotic communication, poor coordination, language problems, lack of funds, and the lack of recognition of social problems by donors such as IMF and WB.

Suggestions of IRC:

- It is advisable to check whether there are any additional problems that are not yet covered, such as:
 - * Problems felt/experienced at the very local level which are not yet taken into account
 - * water resources issues (both water quantity and quality), environmental issues
 - * geo-hydrological issues

2. Emerging issues (justification)

2.1 Poverty

The poverty situation in the Hill Tracts may justify donor contribution in water supply and sanitation up to all initial investment cost. It has to be examined whether the owners are sufficiently solvent to cater for replacement cost. Recurrent cost has to be borne either, or not on a cost sharing basis, by the owners.

IRC Suggestion:

- This section can be completed with data from the baseline survey.

2.2 Peace Accord

After twenty years of insurgency in the Hill Tracts, a Peace Accord for the area was signed on December 2, 1997. Although at present opposition parties are not yet in agreement with the accord signed and still create unrest in the area, this historic event will have a significant positive impact for the people of the Hill Tracts. At present thousands of refugees are returning from India and Myanmar to settle in their homeland. To stimulate development of the area, several donors have shown their interest to give their support, including the Dutch Government.

2.3 DPHE experience in the region

DPHE has a track record of more than 25 years of involvement in the CHTD, mainly in the construction of water supply facilities. Especially in the areas that are relatively easy to access, coverage of water supply and sanitation facilities is at present reasonably acceptable.

Suggestions of IRC:

- The following issues about DPHE's experience in the CHTD can be included:
 - * Types/names of projects that have been implemented in the area, and the organizations that have been involved in these projects
 - * Number of staff of DPHE and how many are working on which institutional levels.

2.4 CHTDB experience in the region

Suggestions of IRC:

- The following issues about the CHTDB's experience in the region can be addressed:
 - * History of UNICEF's involvement and experience in the region
 - * Number of staff involved in CHTD, and on which institutional levels they are working
 - * Inter-relations with other programs of the CHTDB in the region

2.5 UNICEF experience in the region

UNICEF's assistance to the Hill Tracts Districts has focused mainly on a set of services comprising of formal and non-formal education, safe drinking water, improved sanitation, nutrition, income generation and health services with direct impact on the lives of women and children. Activities have been implemented in collaboration with the Chittagong Hill Tracts Development Board (CHTDB). Over the years, significant amounts of resources have been spent on the program. Overall outputs have however not been corresponding, despite the limited scope of the program which had targeted only 90,000 people in 50 mouzas in all three districts.

Suggestions of IRC:

- The following issues about UNICEF's experience in the region can be addressed:
 - * Further history of UNICEF's involvement and experience in the region
 - * Evaluation results of UNICEF's program in CHTD
 - * Number of UNICEF staff involved in CHTD, and on which institutional levels they are working
 - * Inter-relations with other programs of UNICEF in the region, such as education, health, integrated community development project)

2.6 New government policy for WSS

In December 1997, the Government of Bangladesh (GoB) issued for the first time a (draft) National Drinking Water Supply and Sanitation Policy 1997. The objective of the Policy is provide a basic level of services in water supply and sanitation to all citizens by the year 2005. Specific objectives include increasing the present coverage of safe drinking water in rural areas by lowering the average number of users per tube well from 105 to 35, and increasing sanitation coverage in rural areas ensuring supply and sale of at least one water-sealed latrine or pit latrine to each household.

The policy for rural water supply specifies that:

- Communities shall be the focus of all activities, all other stakeholders will provide coordinated inputs under the lead of DPHE.
- Local government bodies up to thana level shall have a direct role in planning, implementation and maintenance.
- Water shall be provided based on user demand and cost sharing. By the year 2000 communities shall contribute at least 50% of hand tube wells in shallow water table areas, 25% for hand tube wells in low water table areas, 20% for deep hand tube wells and other technologies for difficult areas.
- Users shall be responsible for operation and maintenance and shall bear its total cost.
- Women shall be encouraged and supported to actively participate in decision making during all project phases.
- A range of technology options will be provided and promoted.
- Qualitative and quantitative monitoring, reporting, policy implementation, evaluation and revision shall be improved.

The policy for rural sanitation stipulates that:

- Communities shall be the focus of all activities, all other stakeholders shall provide inputs under the coordinating role of DPHE.
- Communities shall be responsible for operation and maintenance and shall bear its total cost.
- The user shall bear the total cost for the construction within reasonable time. However, in case of hard core poor, educational institutions, mosques or other places of worship the cost may be partially or fully subsidized.
- In public places a separate provision shall be made for women.
- Behavioral development and changes in user communities shall be brought about by social mobilization and hygiene education in alliance with the Ministry of Health, NGOs, CBOs and others.
- Women shall be encouraged and supported to actively participate in decision making during all project phases.
- A range of technology options shall be supported and promoted, including for waste disposal.
- Qualitative and quantitative monitoring, reporting, policy implementation, evaluation and revision shall be improved.

Institutional arrangements:

Capacity building of the sector will require actions related to human resource development, the definition and implementation of appropriate institutional arrangements, active involvement of user groups, and new roles for the Government, Local Government Bodies, the private sector and NGOs. The government will decentralize decision making and encourage training and resource planning through local level management.

The Local Government Division will be responsible for overall indicative planning, identification and incorporating activities for the agencies under it (e.g. DPHE, local government bodies), private sector, NGOs and various CBOs. Each stakeholder will be responsible for its activities. All stakeholders will be represented in a forum that will coordinate, monitor and evaluate activities, which will be hosted by the Local Government Division.

The private sector and NGOs will be encouraged in manufacturing and sale of WATSAN products. The price will be uniform in private and public sector, and the strategy of gradual withdrawal of subsidy and introduction of economic pricing shall be followed by the public and private sector and NGOs in a concerted manner.

Suggestions of IRC:

- This chapter on the new government policy of WSS can be finalized by DPHE, especially when it is approved and therefor no longer a draft.
- The following issues still should be finalized/addressed:
 - * The changing role of the government
 - * The changing local government structure in the CHTD (when new information is available)
 - * the involvement of the private constructors
 - * The role of NGOs

3. Goals, aims and objectives

The overall *project goal*:

To contribute to the improvement of health.

The overall **project aim**:

To reduce the incidence of water supply and sanitation related diseases.

Specific project objectives:

1. To increase the access to and use of water supply facilities, thereby guaranteeing a proper/equal distribution of facilities.
2. To increase the access to and use of sanitation facilities.
3. Improved hygienic practices.

Suggestion of IRC:

- The project objectives will have to be made "SMARTer"¹, as was also said during the workshop. Specification of the objectives should be done in accordance with the criteria set by the government, e.g. related to distance, number of households per water source, etc. When doing this, it is important to take into account that one has to be able to monitor the objectives. Therefore it is important to reach a clear and common understanding on terms like coverage, access, use, hygiene practices, etc.

4. Expected outputs

It is expected that the outputs that are expected will be along the following lines. Further details still have to be discussed, determined, quantified and qualified:

- coverage of water supply and sanitation
- improved use of WATSAN facilities
- improved operation and maintenance of WATSAN facilities
- improved hygiene practice (specific practices still to be identified)
- identified new roles of DPHE, the local government, private contractors, NGOs and other stakeholders that will be involved in the project.
- empowerment of community and local structures
- capacity building of DPHE and other organizations involved
- less water and sanitation related diseases, leading to improved health

5. Strategy

The new roles which the owners, the government and the private sector are expected to play in the field of water supply and sanitation (see Section 2.5), will have major implications as to how the project will address the specific problems as analyzed for the Chittagong Hill Tracts Districts.

The user will become the owner of the water and sanitation provision and therefore will determine whether or not and where facilities are constructed or rehabilitated. The owners have an important say in planning, will contribute to the implementation (in kind or cash), and will be fully responsible for operation and maintenance. The government will provide for the enabling environment and will play a crucial role in the allocation of water resources for drinking purposes, in assisting in planning from an engineering and geo-hydrological point of view, and in monitoring and quality control of materials and works. Private contractors will be responsible for the provision and construction work such as drilling, the ring wells and slabs at the request of the owner.

¹ SMART refers to making an objective Specific, Measurable, Achievable, Realistic and Time bound.

This new pattern of roles and responsibilities necessitates optimal coordination, collaboration, and communication among the different stakeholders.

To support these new roles, four strategic elements are distinguished. These comprise of:

- the need for **participation** of all stake holders,
- the need for addressing the **demands** of the consumers/owners,
- the importance for promoting a working environment in which dialogue and **learning** for all would be enhanced, and
- the need to strive for **sustainability** of the development intervention.

Consequently, the following inter-linked approaches are distinguished to be part of the overall strategy.

5.1 The participatory approach / participation by all

Many institutions and persons do play a role in the process of improving access to safe water supply and sanitation facilities in the three Chittagong Hill Tracts Districts. These institutions, organizations and persons are identified during the program formulation phase and subsequently reflected in a so-called institutionogram. This is attached in Annex 2.

Although the respective roles and interests of these actors in the development process do differ considerably, they all are identified as relevant stakeholders. A common element is that most of them are expected to fulfill certain tasks and take responsibilities in the project by contributing on the basis of their specific knowledge and experience, within the scope of the project objectives.

This project is therefore designed in such a way that recognition is given to the various roles and responsibilities of the stakeholders as well as to their organizational and personal capacity to fulfill the tasks expected from them and account for the final result.

As the project objectives are targeted at providing access to WATSAN facilities to the Hill Tracts communities, the men and women of these communities will be the focal point of the project, and their participation as owners in the whole process is of crucial importance.

5.2 The gender sensitive demand approach

During the project formulation phase it was recognized that a water and sanitation project will be successful only if real demands of the community are addressed. It is generally felt that there is a need for water and sanitation in the Hill Tracts. However, such need may not always lead to a (expressed) demand. At the same time an application (a demand) for a water and/or sanitation facility, which is mainly made by men, does not always reflect a priority need of the user (the woman).

It is observed that in the Hill Tracts men and women prioritize needs and demands for the facilities differently. This has led to a situation where the users (mostly women) are apparently not convinced that the provisions are a benefit worth making the organizational and managerial effort to sustain. Many installed tube wells are, according to the baseline survey, not properly used, managed and maintained.

Therefore the project will endeavor to give due regard to the involvement of the women, as key players in the sector, in the formulation of the demand for the facilities. This will enhance the sense of ownership, which in the longer term will contribute to the willingness to pay, and operation and maintenance of the provisions.

5.3 The learning principle in a flexible process approach

As explained, the project will support a participatory approach, giving room for inputs and involvement of the community and other actors. This implies that -within the frame of the project- a certain flexibility in the implementation has to be exercised in order to be able to accommodate these specific inputs which will only be voiced in the course of the time.

Such flexible process approach promotes a learning environment, where time is reserved for dialogue, new ideas will emerge, omissions be corrected and unintended adverse effects remedied.

Accepting such learning process requires simultaneously that monitoring becomes an important part of the project management at all levels, and project reviews between the major partners take place regularly.

5.4 Sustainability

The promotion of sustainability is increasingly gaining importance as spearhead for the water and sanitation sector. The following key components of sustainability can be distinguished ²:

- **Technical sustainability**, which refers to the technical side of the provisions, the design time, the engineering work, the technology offered and used for water and sanitation, appropriateness of technology, operation and maintenance, water quality and quantity.
- **Social sustainability** encompasses aspects such as community mobilization, community ownership, gender issues, hygiene education and practices,. Social sustainability refers to the benefits of WATSAN as perceived by the users, who should be convinced that the provisions are a benefit worth making the managerial and organizational efforts to sustain.
- **Financial and economic sustainability** includes issues such as the economic costs per capita, capital investment, running costs, cost recovery and financial arrangements for the owners, mobilizing the financial resources and not to forget enabling people to manage their own financial resources, financial management of the project.
- **Environmental sustainability** means that the technology does not negatively affect the water quantity and/or quality of a source. It also refers to source protection and primary environmental care.
- **Institutional sustainability** looks at the institutions³ and their role and function in the project. Some institutions (such as those which are culturally based) may play a passive role, whereas other institutions are expected to actively fulfill certain tasks and be accountable for it. The institutional framework of the project has to be well equipped to support and carry the development process.

6. Institutional analysis

To assess the impact of the institutional setting, a preliminary institutionogram has been made for the project, depicting the public and private sector institutions which are expected to play a role (see Annex 2). Additional institutions may have to be identified, especially among NGOs.

On the basis of this overview, the roles and responsibilities of all partners under this project need to be identified, and an assessment has to be made regarding whether -within the scope of the project- capacities require strengthening in terms of human resources development, internal external communication, reporting and monitoring, organizational

² Forward Looking Assessment of the Ministerial Conference on Drinking Water Supply and Sanitation, Noordwijk, The Netherlands, Ministry of Housing, Spatial Planning and Environment.(1996)

³ an institution is a broader concept than an organization; it may be private, public, visible or invisible.

procedures, management, internal accountability, coordination, and collaboration.

This among others refers to the owners (women and men) of the provisions, to teachers, students and other community members, DPHE, the CHTDB, the Local Government, the private sector, NGOs and local UNICEF-staff.

Suggestions of IRC:

- The precise roles, tasks and responsibilities of the stakeholders as depicted in the institutionogram need to be further identified in the light of what has been said in Sections 2.5 and 7. After that the assessment on the need for additional institutional support can be made.

7. Activities/interventions

On the basis of the problem analysis, the following activities of the project are tentatively identified.

7.1 Hygiene Behavior (social sustainability) ⁴

A. Stock taking of health situation in Hill Tracts

A.1 Identification of most important health risks and related behavior (e.g. KAP study or likewise)

A.2 Identification of areas of intervention for health improvement (determination of specific objectives)

A.3 Skills training for stock taking (this may include the engineering staff such as tube well mechanics)

7.2 Users ownership and management (social sustainability)

A. Development of the methodology

A.1 Development of a methodology to approach potential owners.

The following elements are considered to be of importance in this methodology:

- users (men and women) make their own decisions in the planning process, in implementation and operation and maintenance,
 - hygiene behavior to be included, as well as school sanitation (children as change agents) and house hold latrines,
 - users must have access to adequate information
 - women and men from un- and under-served areas are to be involved,
 - constraints for community participation have to be taken into account
 - a demand based approach has to be ensured throughout the process for the sake of community ownership.
- For further suggestions see Annex 3.

A.2 The party who is going to develop the methodology may need additional skill and training.

⁴ The ongoing survey by Shisha Angina may provide useful information, however, it is likely not sufficient to adequately cover this activity.

B. Social mobilization

B.1 The training of those who implement the above

B.2 The implementation of the methodology (by whom, by how many, when, where)

C. Monitoring

C.1 Development of monitoring system (What will be monitored, who will monitor, how will information be used, how much information to be collected, who will act).

C.2 capacity building in monitoring

7.3 Technology development and deliveries (technical sustainability)

A. Technology options for the Hills

A.1 Research/ development of technology options (for water and for sanitation), that are appropriate for the Chittagong Hill Tracts Districts, taking into account geo-hydrological conditions, cultural acceptance and users friendliness, financial capacity of the users and impact on the environment.

A.2 Establishment of a demonstration and information site, where prospective users/owners, can experiment and acquaint themselves with the technology options, and if need be will be trained in operation and maintenance.

B. Construction

B.1 Facilitation of physical construction: the following issues need to be addressed among others:

- geo-hydrological research,
- site selection in close consultation with the owners
- design of tender procedures,
- determining quality norms for materials and delivered product,
- quality monitoring,

B.2 Facilitation of tender process: the owners will be responsible for the selection and contracting of the private constructor and may need support to fulfill this task.

B.3 Provisions of services: preparation for construction and actual construction.

B.4 Provision of material and physical implements. The project will include a budget for capital investment for purchasing the materials etc.

C. operation and Maintenance

C.1 Operation and Maintenance: in principle responsibility of owner, for major repairs private contractor involvement. Community or local (ward) water and sanitation committee needs training and means to perform these tasks.

C.2 Spare part delivery : a system has to be developed for production and availability of spare parts. In principle this has to become a task of the private sector.

7.4 Financial arrangements (financial sustainability)

A. Cost sharing

A. Development cost sharing arrangement apt for hill Tracts.
taking into account among others:

- inequalities among users/owners in ability to pay (poverty targeting)
- possibility to contribute in kind or cash.

B. Financial management

B.1 procedures for accountability to be developed at all levels including all stakeholders

B.2 training in financial management and accountability at various levels

- bookkeeping
- running banking account
- financial reporting

C. Trust fund

C.1 Assessment of need and feasibility to establish a trust fund.
(including identification of possible investors)

7.5 Integrated water management at community level (environmental sustainability)

A. Water resources ⁵

A.1 Assessment of the available water resources, of ground- and surface water, both in terms of quantity and quality.

A.2 Identification of user groups and uses (which water source is used by whom and for what)

A.3 Guaranteeing allocation of water for drinking and other domestic uses.

A.2 Capacity building

to execute all those tasks, if within scope of this project

7.6 Primary Environmental Care (environmental sustainability)

A.1. Awareness raising at household level and at schools

A.2 Assisting people and schools to improve their local environment (to create save environment for children, men and women)

7.7 Institutional strengthening (institutional sustainability)

Based on the outcome of the institutional assessment as described under section 6, the activities will be specified.

These activities will refer (within the scope of this project) to the various levels of the institutionogram. The following issues, among others will be addressed: human resources development, internal external communication, reporting and monitoring, organizational procedures, management, internal accountability, coordination, and collaboration.

⁵ This applies especially to the local level, and may already be done under the responsibility of the Ministry of Water Resources.

8. Time table

The total project duration is estimated to be 5 years, starting full fledged in January 1999, when donor funding inshallah will be available.

The year 1998 shall be used to further prepare the project document, as much as possible in a participatory manner to promote a sense of ownership among those who are going to implement the activities. At the same time 1998 may be used to prepare the ground in terms of community involvement during the planning, implementation and maintenance of WATSAN facilities.

Pre-project activities started already in 1997 with the baseline survey, followed by the first participatory formulation workshop in December. Both activities are supported by UNICEF funds. However, it is expected that the UNICEF core funding will elapse in June 1998.

IRC suggestion:

- Only when all activities are well formulated, a more detailed time table can be made.

9. Monitoring

IRC Suggestions:

- Since monitoring will form a very important element of the project to enhance accountability and learning, a monitoring course at an early stage and preferably prior to the take off of this project, is highly desirable. Those who will participate in a monitoring course, preferably from various levels and organizations in the institutionogram, should be assigned with designing a monitoring system for the project. Such a course should address the formulation of indicators and the setting up of a monitoring systems at various levels, including the community level.

10. Project management

To be determined in close consultation with the Government of Bangladesh, UNICEF and the donor once the magnitude of the project is defined.

11. Proposed contractual relationship

To be addressed in the next formulation phase (depending on donor).

11.1 Budget and project means

To be addressed in the next phase on the basis of detailed activities.

For calculating the physical inputs, the cost price per unit needs to be known such as here under.

Technology Wise Cost of WATSAN facilities in Rangamati District

Sl No.	Name of technology	Appr. unit cost in Tk.
1	Ring well	60,000/-
2	Tara Deep Set (standardized)	20,000/-
3	Tara Deep Set (extractable mode)	35,000/-
4	Super Tara (standard mode)	22,000/-
5	Super Tara (extractable mode)	40,000/-
6	Shallow tube well with No. 6 hand pump	8,000/-
7	Infiltration Gallery	20,000/-

8	Rain water collection	15,000/-
9	Iron removal plant	20,000/-
10	Gravity-fed system/development of spring or stream/sand filter and chlorination of surface water	50,000/- to 200,000/- (depending on site and facilities)
11	Sanitary latrine (water seal, slab and 5 rings)	700/-
12	Sanitary latrine (dry system to be developed)	

11.2 Financing

To be addressed in the next phase, within the framework of the Master Plan of Operation between the Government of Bangladesh and UNICEF.

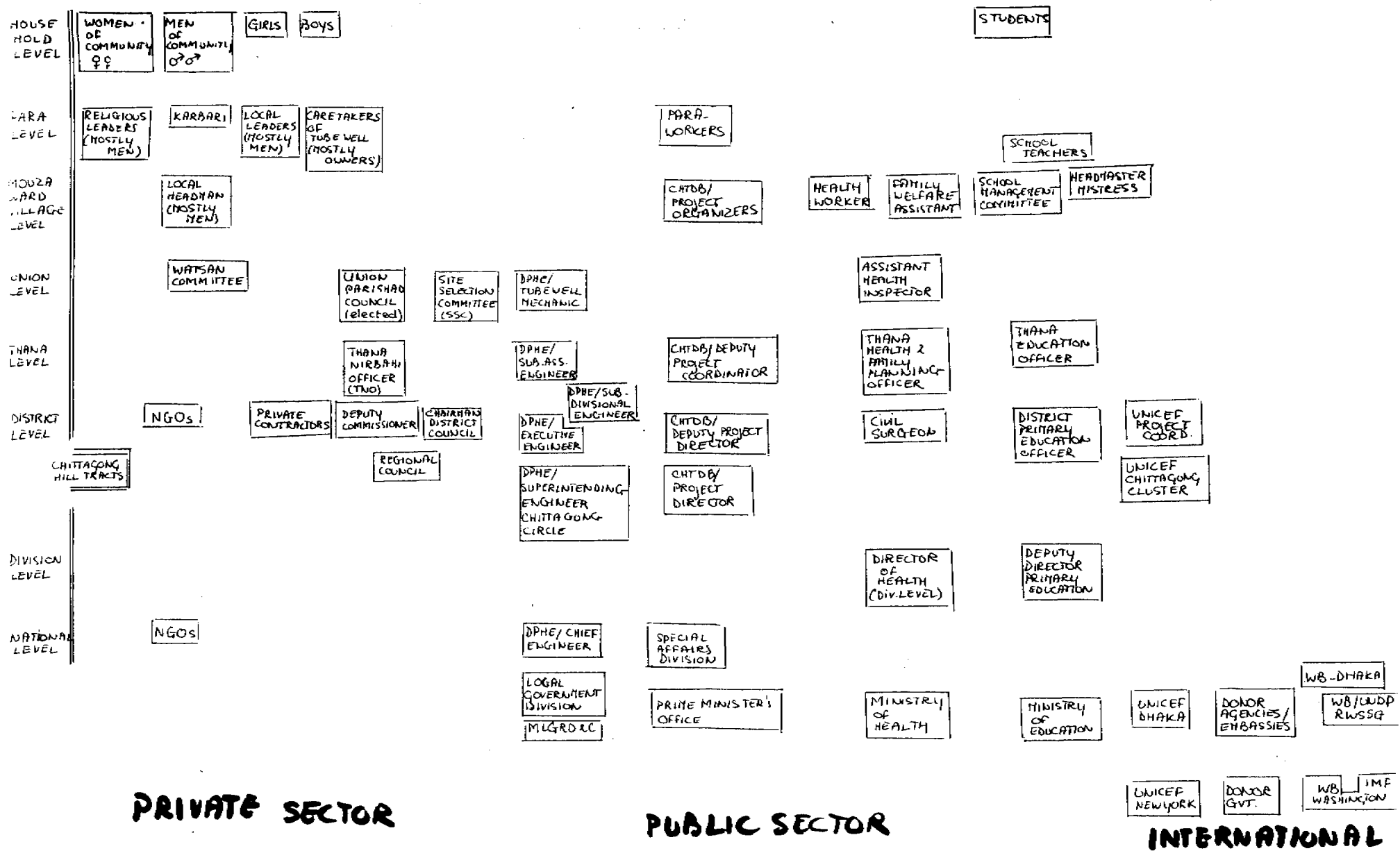
12. Literature consulted

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UNICEF, (1997). Preliminary Project Proposal for Accelerated Development of Watsan Facilities in Chittagong Hill Tracts Districts. Dhaka, Bangladesh.

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Annex II Institutionogram WATSAN partners in CHTD



PRIVATE SECTOR

PUBLIC SECTOR

INTERNATIONAL

Annex III Suggestions on how to work with an ownership approach

Keeping the ownership where it belongs

(based on discussions in the workshop)

Working with an ownership approach starts at the community level, since the community people are the future users and owners of water supply and sanitation facilities. In this process community workers are key persons. It is important that the community worker has some basic background information about the communities s/he will be working in, as well as regarding knowledge and skills that are related to her/his tasks. Proper training and orientation might be needed.

1. When the community worker is sufficiently familiar with the community and her/his assignment, s/he may want to organize a series of community meetings. At this stage it may be important to hold separate meetings with women and men, when the women are limited in expressing their ideas and wishes in the presence of men (which is almost always the case, even in Western countries).

It is very important that the various meetings are not held too closely after another, to give everybody the opportunity to let ideas and propositions sink in and be discussed in smaller groups within the community and household.

2. During the first community meeting the community members can identify together with the community worker the problems they face. These problems can be listed (either in writing or through pictures or symbols), and priorities are set. When the problems which are identified by the women and men are beyond the scope of the WSS project, a serious effort should be made to refer the community members to organizations or government channels which can assist in solving these problems. Some problems, e.g. the lack of schools that are easy accessible for children, may be taken up by UNICEF within the context of another project.
3. With the persons who have identified water and/or sanitation as a problem, another meeting can be organized, focusing on why water and/or sanitation is felt important. Water supply for agricultural activities or for watering their cattle can often not be accommodated by a domestic water supply facility.
4. With the people who have identified the need for water supply and/or sanitation facilities, another meeting or a series of meetings is organized to further discuss the implications of applying for and having a water supply and/or sanitation facility. Issues that should be discussed and clarified are among others:
 - what are the technology options feasible (geo-hydrological, environmental, technical and cultural conditions have to be met); a possibility is to visit a demonstration site to be able to see, try out and get informed about technology options on the spot.
 - what are the financial consequences and requirements
 - what are requirements in terms of operation and maintenance
 - how can communities apply for a facility
5. Those people who have discussed, understood and accepted the requirements and consequences of obtaining a water supply and/or sanitary facility will translate their need for water and/or sanitation into a demand. Their demand is based on commitment and is one of the indicators.

6. Another proof of commitment/ownership is to ensure the establishment of a local WATSAN Committee (this is a new body at Ward level) prior to the application procedure. These two activities can be done more or less simultaneously.
7. The community will set up a local WATSAN Committee (at ward, mouza or even para level, depending on the ideas of the communities themselves), if needed with the assistance of the CHTDB, DPHE, UNICEF or other project partners. The people that will be the members of the WATSAN committee have to be committed to the Committee's work, and they should be accountable for it. Probably a salary will enable making members accountable.

Striking a gender balance in the WATSAN Committee is very important to ensure that the wishes and demands of women and man are addressed. Since the women are the main users of water supply facilities, a slight majority of women in the Committee would be preferable. Even more it may be important to have a female member as chairperson.

A number of decisions on the WATSAN Committee will be made by the women and men of the community. For example, the treasurer of the local WATSAN Committee can be s/elected by the community members.

8. The application procedure as it will be developed by the project has to be discussed and finalized together with the local WATSAN Committee. This includes decisions on how to take into account inequalities in the ability to pay. Information about the application procedure and required forms are made available at community level.

— Suggestions for the application procedure:

- A group of 10 users from different households in a para may take the initiative to start the application procedure and is to be informed about the procedure by the paraworker or another member of the local WATSAN Committee. One person has to be chosen as caretaker/coordinator; this person should preferably be a woman.
 - The group of ten must all be willing to apply and pay for the facilities.
 - The women and men of the 10 households are well informed about the different technology options available (also taking into account geo-hydrological conditions), including capital cost, cost for operation and maintenance and replacement cost, requirements for operation and maintenance, and expected life span. Based on this and other required information, the future owners agree on the type of technology desired. This decision has to be agreed upon by both the women and men of the 10 households. This has to be ensured and accounted for to the local WATSAN Committee by the caretaker.
 - Jointly, together with an engineer, the owners of the different households decide on the site of the WATSAN facilities. Criteria for site selection are: the wishes of the actual users (women and girls), geo-hydrological conditions and technology option, and GoB policy.
 - The selected site is communicated to the local WATSAN Committee, with a copy to the Executive Engineer.
9. To make sure that community members who apply for a facility respond to a real demand and regard themselves as owners of the facilities, they have to start collecting and depositing money in a bank account as a contribution to the facility and/or to operation and maintenance. The level of contribution as well as ways of taking into account local inequality in the ability to pay can be decided by or in close cooperation with the local WATSAN Committee.

10. The owners are responsible for hiring a private constructor. In preparation of the actual construction the owners will be advised by the local WATSAN committee, to tender for the construction activities. Three quotations may be asked, from which the most attractive offer can be selected. If needed, the owners should be able to receive assistance in this process.
11. The input of the owners during the actual construction has to be defined. The possibility to contribute in either cash or kind is optional.
12. The owners are responsible for operation and maintenance. In case of major repairs, they may wish to hire a private constructor.