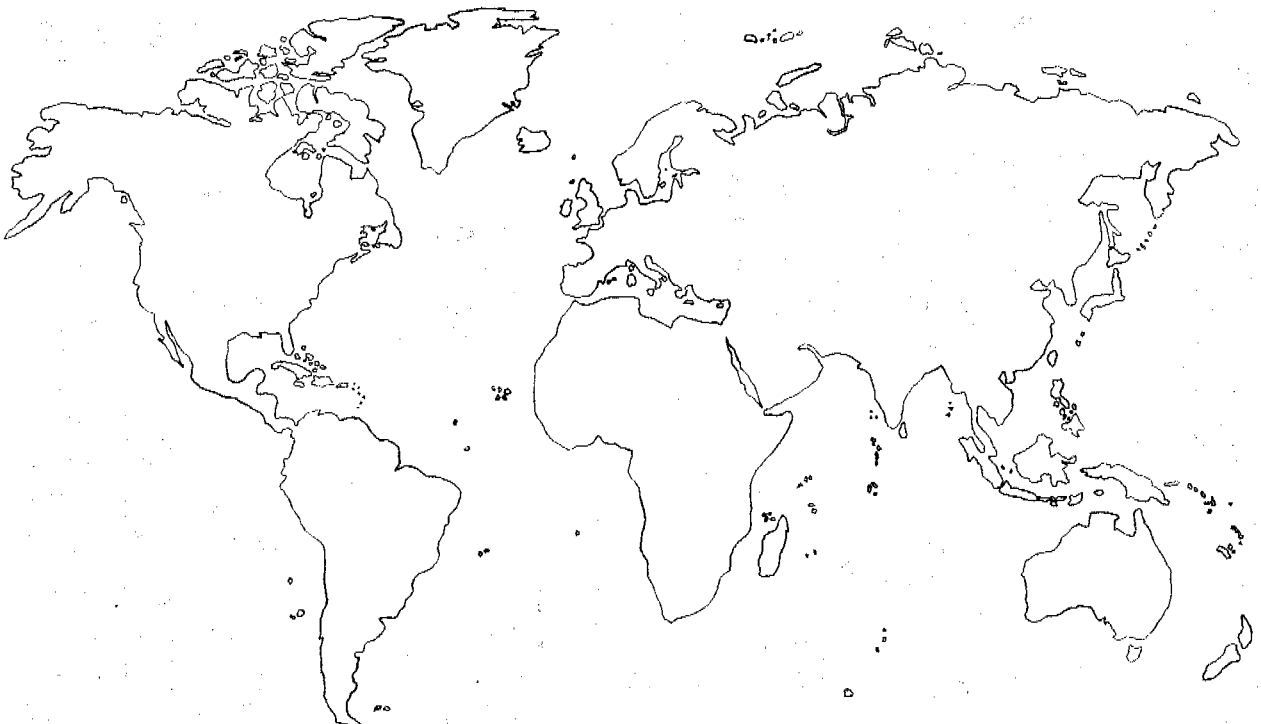
UNICEF Workshop on Environmental Sanitation and Hygiene



New York, 10-13 June 1998

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Workshop on Environmental Sanitation and Hygiene
New York, 10-13 June 1998

Logistics information Sheet for Workshop Participants

Before embarking...

Visas:
Please check the nearest US Embassy/consulate for visa requirements.

Once in New York:

Expect a delay of approximately one hour from the time of landing to the time you exit the airport.

[Please note that, unlike in most country offices, UNICEF NY does not provide transportation to and from the airport]

Transportation (yellow cab) fares:
From JFK Airport - $30 flat rate plus toll $3.50 and tip $4 or $5 dollars.
From LaGuardia - $16-$25 to midtown (approx.) plus toll and tip.
From Newark Airport - $30 - $43 (New Jersey taxi) plus toll and tip.

Safety tip:
Do not accept offers from anyone you have not agreed to meet. *On arrival, you should know which form of transportation you wish to use to get to your destination. Stick to your first choice. Persons offering a taxi ride or help with your luggage, though they may seem sincere, may be trouble.*

Hotels

Participants will be mainly staying at three nearby hotels (walking distance from 5 to 10 minutes):
Bedford Hotel - 118 East 40thStreet (at corner of 3rd Avenue) 6 short blocks away from UNICEF House; tel. (212) 697-4800; fax (212) 599 6014
Lexington Hotel - 511 Lexington Avenue (at corner of East 48th Street) 7 short blocks away from tel. (212) 755-4400; fax (212) 751 4091
Pickwick Arms Hotel, 230 E. 51st Street (between Second Avenue and Third Avenue), 9 short blocks away from UNICEF House; tel. (212) 355-0300; fax (212) 755-5029

Workshop Organization:

Schedule:

Meetings will begin promptly at 9:00 every day. Please refer to agenda for details.

Venue:

The workshop will be composed of plenary and working group sessions. These meetings will be held at UNICEF House, 3 United Nations Plaza (East 44th Street, close to corner with First Avenue), New York City.

The specific location of each session is as follows:

Wednesday, 10 June - Plenary Sessions:	*Labouisse Hall, UNICEF House (Floor B1)*
Thursday and Friday - Discussion Groups:	*Conference Rooms in UNICEF House assigned to each Working Group are indicated in a separate sheet.*
Saturday, 14 June - Plenary Session	*Labouisse Hall, UNICEF House (Floor B1)*

Staying Connected

Should your office need to contact you, they can do it through any of the following means:

During workshop hours (9-5pm):	*(212) 326-7542 (Labouisse Hall reception area)*
After 5:00 p.m. leave messages at:	*(212) 824-6669 Line for Luzma Montano - messages left in voice mail will be promptly delivered to you)*
By fax:	*(212) 824-6480/82 - Water, Environment and Sanitation Section fax numbers.*
By e-mail:	*wesinfo@unicef.org or lmontano@unicef.org Name of addressee to be put in "subject" section of e-mail.*

UNICEF House Facilities:

The UNICEF House Cafeteria opens at 8:30 am and closes at 4:00 p.m. It is located on the ground floor

The UNICEF library is located on the 12th Floor

New York City - Additional Miscellaneous Tips

Metropolitan public transportation.

Nearest uptown bus routes are located along 3rd; closest downtown bus routes are located along on 2nd Avenue

The closest subway station to UNICEF House is in Grand Central Terminal, at Lexington and 42nd Street.

Other tips:
***Bus** fare is $1.50 and can be paid by exact change, Metrocard or token.*
(NO bills or pennies.) Bus transfers are FREE and available upon request. They are used when taking more than one bus. All buses are wheelchair accessible.

***Subway fare is $1.50. To enter the subway system you must use a token or Metrocard. Each** subway station has a token booth from which you may purchase Metrocards or tokens. Note that they do not accept bills larger than $20.*

***Taxicabs** serve as a quick and easy means of transportation around Manhattan. Getting a cab is usually easy. This is called "Hailing" and is performed by raising your hand into the air above your head. A taxicab is available when the identification light is on.*

Only yellow medallion cabs are authorized to pick up "Hails." Avoid anything else.

Things you might like to know about NYC Street Nomenclature:

5th Avenue divides East and West sides

The East side comprises streets between 5th Avenue and 1st Avenue; the West side comprises streets between 5th Avenue and 12th Avenue)

Streets are numbered from South to North: e.g. UNICEF House is located at East 44th Street

Avenues are from East to West: e.g. The WES Section is located at 633 Third Avenue

SAFETY

When you visit New York City... just remember these simple tips for your safety.

In The City

Be street smart. Don't be a target. Don't display large amounts of cash or jewelry. Always secure your valuables.

Scams, street games and ticket scalpers:

The idea here is not to participate. Again, anyone offering to help may be trouble. Scams often play on a person's sense of decency. DO NOT HELP SOMEONE IF YOU ARE NOT SURE OF THEM. Remember, if you must help someone, get a police officer.

Street games such as three card monte...don't even think about it, you can't win.

Ticket Scalpers ... Don't ever buy tickets from anyone other than authorized personnel, i.e. Official Ticket booth or TKTS.

Unsafe Areas and Situations... Take precautions. Stay in populated areas. If someone is harassing, go somewhere populated and get a police officer. If you find yourself being mugged, give them what they want. DON"T BE A HERO.

911

For help in any real emergency, use this number to call for help.

Any telephone can be used.

No change (coins) required.

First time in New York City? Here is some information that just might come in handy.

Tips and Taxes in NYC

15-20% tipping is customary at restaurants, bars and for cab rides.

Hotel Tax Usually 13.25% plus $2 occupancy per room (Some hotels have higher tax rates...don't ask us why.)

Sales Tax 8.25%

Merchandise sold on the streets i.e. watches, bags, perfumes, etc.... are imitation goods!

***luzma'98**

Logistics Information for
Thematic and Non-Thematic Working Groups

Thematic Group	**Integrated Approach Group**	**School Sanitation & Hygiene Group**	**Urban Sanitation Group**	**Sanitation Promotion Group**
Non-Thematic Group	**Working Group I**	**Working Group II**	**Working Group III**	**Working Group IV**

Facilitator	Mr. John Austin	Ms. Borjana Bulajic	Mr. Jan Teun Visscher	Ms. Erma Manoncourt
WG Supporter	Ms. Maaike Jansen	Ms. Kerin Metell	Ms. Jing Jing Qian	Ms. Shauna Lee-Alaia

10 June

Venue	B1 Labouisse Hall	11th floor Conf. Room 1176	2nd floor Conf. Room 204	4th floor Conf. Room 476
Conf. Room Phone No.	Ext. 7542	Ext. 7925	Ext. 7615	Ext. 7131

11-13 June

Venue	B1 Labouisse Hall	12th floor West side Conf. Room	2nd floor Conf. Room 204	4th floor Conf. Room 476
Conf. Room Phone No.	Ext. 7542	Ext. 7764	Ext. 7615	Ext. 7131

NB:

1) WG Supporters will try their best to help solve any ad hoc problems that may arise during a working group session. They will provide assistance to WG facilitators and raporteurs (who will be elected by the groups), and collect all the presentations and other materials shared at the working group sessions for future reference.
2) To call from outside, you should dial 326 plus the extension given above.

UNICEF Workshop on Environmental Sanitation and Hygiene
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Thematic Working Groups: External Participants

		Sanitation Promotion	School Hygiene and Sanitation	Urban Sanitation	Integrated Approaches
John	Austin				Facilitator
Massee	Bateman				
Pat	Billig				
John	Borrazzo				
Robert	Boydell				
Borjana	Bulajic		Facilitator		
Sandy	Cairncross				
Guy	Carrier				
Mona	Gleditsch		Facilitator		
Jose	Hueb				
Peter	Lochery				
Isaac	Mbewe				
Letitia	Obeng				
Eddy	Perez			X	
Darren	Saywell				
Roland	Schertenleib				
Sue	Sherry				
Luis Carlos	Soarez				
Steve	Sugden				
Ineke	van Hooff		X		
Jan Teun	Visscher			Facilitator	
Ranjith	Wirasinha				
Albert	Wright				
Sam	Zaramba				

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Thematic Working Groups: UNICEF Participants

		Sanitation Promotion	School Hygiene and Sanitation	Urban Sanitation	Integrated Approaches
Mansoor	Ali				
Chander	Badloe				
Deepak	Bajracharya				
Lizette	Burgers				
Peter	Buckland				
Carel	De Rooy				
Anu	Dixit				
Brendan	Doyle				
Julian	Duarte				
Bill	Fellows				
Elaine	Furniss				
Gourisankar	Ghosh				
Colin	Glennie				
Orestes	Gonzalvez				
Reda	Haggag				
Vathinee	Jitjaturunt				
Urban	Jonsson				
Zaidi	Jurji				
Theresa	Kilbane				
Rudy	Kinppenberg				
Aaron	Lechtig				
T.V.	Luong				
Ahmed	Magan				
Hamidou Abdoulay	Maiga				
Erma	Manoncourt	Facilitator			
Ken	Maskall				
Y.D.	Mathur				
Omar	Mohammed				
Osvaldo	Monteiro				
Anna	Mooijman				
Fabio	Morais				
Ashok	Nigam				
Vincent	Orinda				
Richard	Prado				
Marty	Rajandran				
Bijaya	Rajbhandari				
Michel	Saint-Lot				
Marashetty	Seenappa				
Roger	Shrimpton				
Rupert	Talbot				
Henk	van Norden				
Phillip	Wan				
Sherill	Whittington				

WES in Schools: The Nigerian Experience

1. Introduction:

Experience has shown that inadequate access to safe and convenient means of excreta disposal and water supply is one of important contributing factors to low enrolment and attendance of school age children especially the girl child. The population of the primary school age children in Nigeria is around 19.5 million, of this number, only 15.7 million are enrolled, 8.7 million boys and 7.0 million girls respectively. In the project states, girls enrolment is much lower than the southern regions. The social upbringing and cultural restraints which predominates in the northern regions imbibes custom of privacy for the female and discourages sharing of toilet facilities by both sexes outside the household environment affects both enrolment and attendance of girls in school.

Similarly, inadequate potable water supply also has negative effects on the school age enrolment figure. In communities where there is no access to a safe source, productive time is lost by the children and women in fetching drinking water. This situation is particularly bad in most parts of the north east region where demand for water is very high as a result of the harsh arid conditions.

2. Problem Context:

Spot checks of the primary school environment in the north east region, showed that over 70%
lack access to safe sanitary excreta disposal and water supply facilities, very few schools had access to community open wells. The few schools that had some facilities, were found to be grossly inadequate and unsafe. In some of the schools only a pit latrine was being used by over 100 pupils-both boys and girls sharing same facility. As a result, the children use the open field for defecation or go to near by compounds (houses) in case of girls in search of privacy to ease themselves. Therefore it is a common experience to see exposed feaces around schools, making the environment unhygienic. This situation was often a good reason for parents to withdraw their girls from school in order to keep them away from exposure to unnecessary and unwholesome social risks.

Indiscriminate excreta disposal around the schools= playgrounds and surroundings constitute serious health hazards. The relationship of the visible environment and the unhygienic practices of food vendors around the schools whom the pupils patronise pose major health risks to the children.

The realisation of the important role WES facilities play in enhancing the educational

opportunity for children particularly girls, prompted the initiation of the WES in schools project. This is also in line with sectoral priorities of the new country programme of cooperation.

Against this background, the WES Programme in conjunction with Basic Education supported Adamawa, Bauchi and Taraba States to implement the WES in schools projects (hereinafter referred to as the project). The project which involves the provision of water supply and sanitary latrines in selected primary schools was launched in December, 1996 in the three States.

3. Project Objectives

- Reduce the incidence of unsafe excreta disposal and oral-faecal contamination among school children through the provision of toilets and potable water sources.
- Minimise sharing toilets between boys and girls thereby increasing the girls attendance in school
- Consolidate the gains of the project to promote intersectoral linkage among all programme components using water and sanitation as entry points
- Increase awareness about environmental sanitation and benefits of safe excreta disposal leading to transformation in behaviour of household

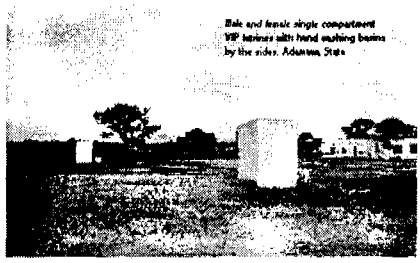
4. Implementation Strategy

Mobilisation and advocacy activities were carried out with the different State governments and their Education authorities on the importance of WES in schools and the learning environment for children. This was followed by discussions and agreement on the projects in each state.

The launching of the project was marked by the signing of an implementation document between the different State governments and UNICEF. The document, which stipulates the roles and responsibilities of all parties involved was signed by the respective Secretary to State Governments who are responsible for all programmes in the State and the Zonal Programme Officer on behalf of UNICEF.

Selection of 10 schools in each state, a total of 30 schools to be assisted was done by the State WES Agencies in consultation with the respective LGAs based on list provided by State Primary Education Boards (SPEB). In each of the States, the determining factor for final decision was the absolute need for these facilities in the respective schools.

Although substantial part of the budget was provided by UNICEF, the approach was quite participatory. The respective States, LGAs and Communities in various ways contributed in cash or kind towards the successful implementation of the project.



Field implementation of the various activities was guided by the memorandum of understanding prepared in respect of the project. In the document, the different roles and responsibilities including the schedule for financial transaction, monitoring and other conditions were spelt out.

5. Project Components

To ensure the desired health impact, the project was executed as a package comprising sanitation, water supply, nutrition, and hygiene education components with full participation of Schools= PTAs and communities.

The sanitation component involved the construction of a double compartment or two single compartment VIP latrines for boys and girls each in the respective schools. The dimensions and design criteria of the latrines was based on the type of terrain and other local conditions peculiar to the respective sites. In every case however, the pits were properly lined using blocks or stone masonry and concrete.

To ensure optimum use and benefit of the excreta disposal facilities put in place, each latrine has been provided with a hand washing basin to inculcate the habit of personal hygiene practice after using the toilet. The hand washing basin consists of a concrete stand about 2 ft wide and 3 ft high at the outer wall of a latrine. A basin-like depression was made on the upper part of the concrete in which water for hand washing is placed every morning or as the need arises.

With regards to water supply, a borewell was drilled in each of the schools and fitted with a suitable handpump according to total depth and static water level. The drilling methods used varied with the lithology intercepted at the different sites. The project also involved school gardening at every water point provided. The garden is sited at the end of the platform drain in such a way that waste water from the handpump is taken up by the plants. There are two methods adopted. The first type involves the digging of a soak away pit at the end of the drain and filled with stones. Fruit seedlings such as banana or paw paw are then planted

around the soak away pit. The other option is that of vegetable gardening around the end of a platform drain. A vigorous health and hygiene education is planned by each school to ensure proper use of facilities and behaviour change by pupils and their families.

During the period of 15 months 3 States in the Northeastern part of the country were able to target 30 large communities and were able to install 76 Ventilated Improved Pit latrines to serve a population of 30,000, at an average cost of $240/unit with 10% contribution from communities, 25 % from State Government and the balance from UNICEF. This has resulted in substantial interest and demand within communities, PTAs and the Local Government Authorities who have until now been sitting on the fence, without providing the necessary support.

On the water front, 29 boreholes with handpumps were installed at a unit cost of $ 1100/unit, in 29 primary schools while a few existing water facilities were rehabilitated serving a population of 47,000.

6. Community involvement, care and maintenance

At each stage of implementation the different communities including the PTAs were fully involved. In most cases community participation was in form of labour including fetching of water, stone chippings and sand for construction.

The responsibility for maintenance of facilities provided lies with the respective headmasters. The functions of cleaning the toilets and fetching water into the hand washing basins for instance are systematically done using a rooster for a group of pupils under the supervision of the school health teacher.

For the handpump maintenance, a teacher is selected for the role. An alternate caretaker is also selected from the surrounding community to assume responsibility when schools are not in session. All caretakers are trained by the LGA or central handpump maintenance team. A tool box is also assigned for a cluster of between 5 and 10 handpumps to ensure periodic maintenance. Repairs beyond the capability of the local caretakers are reported to the LGA maintenance teams.

7. Project Impact:

A formal evaluation on the project has not yet been done but from the State WES monitoring reports available, the impact of these facilities shows that there is significant environmental improvement of the schools. These are cleaner, more hygienic practices and less complaints of diarrhoea cases by pupils.

Additionally, the facilities put in place have provided the convenience and basic needs which were earlier lacking. The pupils do not have to spend productive time in search of good

drinking water. The girls in particular, do not have to go back home or other houses in search of privacy the toilet offers, since she finds it difficult to defecate in the open.

Although at inception the project was primarily targeted at enhancing the girl child education, the benefits derived are numerous. Not only are the school children and teachers enjoying the services but the surrounding communities as well. The latrines provided in these schools are actually promoting the use and owning of such facilities at the household level among the immediate communities.

8. Lessons learnt:

- Child friendly environmental sanitation and water facilities in village schools serves as models for community improvement. They also provide opportunity for PTAs/Communities to make inputs in activities involving the welfare of their children and improvement of the school environment and used the opportunity to create awareness and commitment to sanitation development by the communities and school authorities.

- The "WES in Schools" project provided an excellent opportunity for actualising the inter-sectoral linkage between programmes (WES, Education, Nutrition and Health).

- Community involvement in the "WES in school" project provided opportunity for mobilising them for household latrines and water security.

9. Constraint:

- Very large number of schools and pupils needing WES facilities. The facilities provided are over used due to large population per facility.

- Most schools are within or in close proximity to the communities who lack these facilities in their own homes and therefore use the latrines installed in schools.

- Lack of funds for rapid expansion of facilities to other schools in need.

- Lack of institutionalization of environmental sanitation and hygiene promotion in the school curriculum.

The way forward:

- Funding for KAP studies on Sanitation/hygiene education in schools to generate adequate data for advocacy, planning and development of learning materials related to hygiene education and practices.

- Funding (on a cost sharing basis) for rapid installation/expansion of WES facilities in schools is necessary.

- Establish Regional WES Resource Center for materials development, training and dissemination of information.

- Capacity building at National and regional level through exchange visits for "on the job" training/learning for different level of implementors.

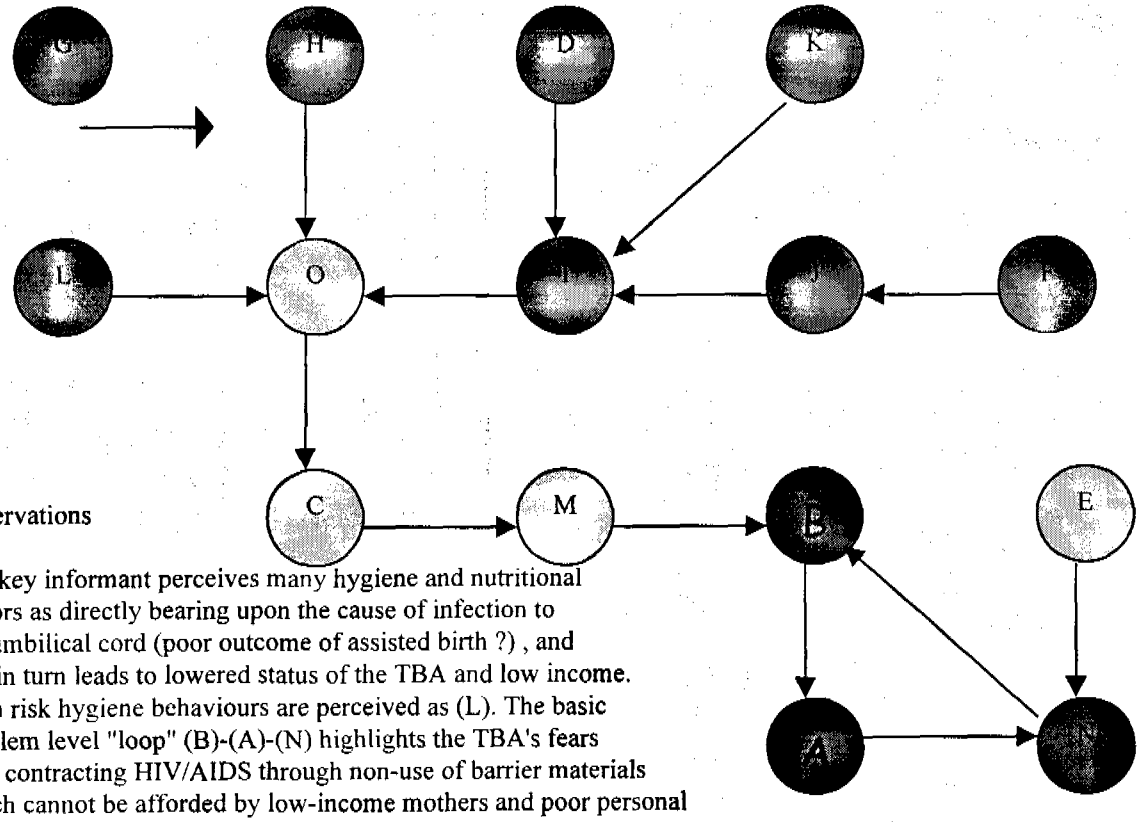
- Empowerment of community based entrepreneurship in Sanitation development through establishment of revolving funds.

- Funding Research and Development for wider and more affordable technological options.

Perception Map of Peri-Urban TBA

Factors influencing hygiene & health of mother & child during birth and post natal care period

Issue		***Leads to..***
A	*Lack of appropriate hygiene tools (gloves, sanitary towels)*	*N*
B	*Majority of mothers cannot afford to buy delivery materials*	*A*
C	*Negligible income from her work*	*M*
D	*Does not possess skills to make informed/timely referral*	*I*
E	*Poor personal hygiene of some mothers seeking assistance*	*N*
F	*Lack of enough water for delivery process*	*J*
G	*Mothers chewing earth/charcoal during pregnancy*	*H*
H	*Babies born with skin problems*	*O*
I	*Anaemia and other complications during delivery*	*O*
J	*Poor hygiene in home environment not suitable for delivery*	*I*
K	*Lack of suitable equipment (bed, buckets etc..) for delivery*	*I*
L	*Washing of new born immediately after birth*	*O*
M	*Poverty*	*B*
N	*Fear of infection (HIV/AIDS)*	*B*
O	*Infection of the umbilical cord*	*C*



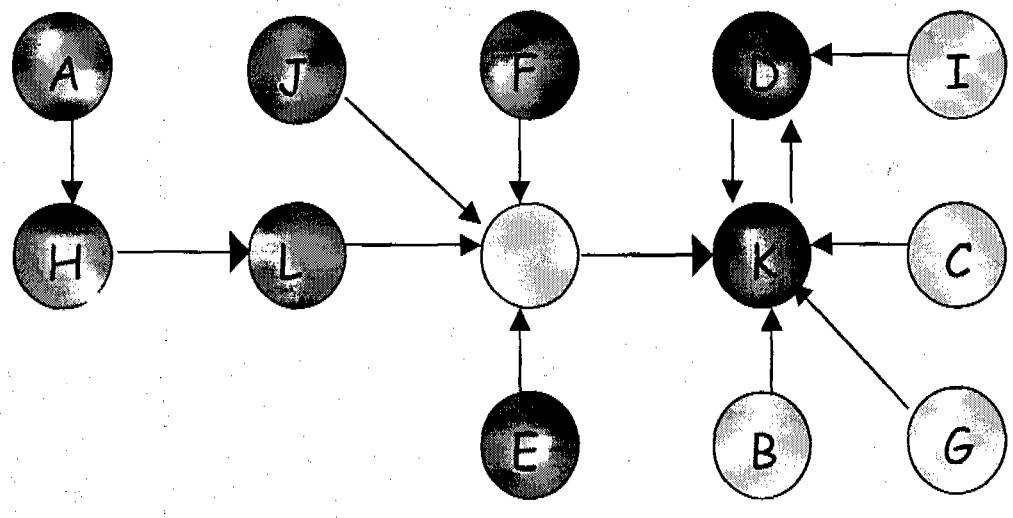
Observations

The key informant perceives many hygiene and nutritional factors as directly bearing upon the cause of infection to the umbilical cord (poor outcome of assisted birth ?) , and this in turn leads to lowered status of the TBA and low income. High risk hygiene behaviours are perceived as (L). The basic problem level "loop" (B)-(A)-(N) highlights the TBA's fears over contracting HIV/AIDS through non-use of barrier materials which cannot be afforded by low-income mothers and poor personal hygiene. Personal hygiene of mothers awaiting delivery is rated very highly as a preventive strategy.

Perception Map by 80 year old woman:

Factors influencing hygiene & health of mother & child during birth and post natal care period

Issue		*Leads to..*
A	*Not respecting elders*	*H*
B	*Absence of elderly women*	*K*
C	*Not abstaining from sexual relationship whilst nursing*	*K*
D	*Mistreatment of mother by husband*	*K*
E	*Non availability of suitable food for babies/child*	*M*
F	*Contamination of baby foods*	*M*
G	*Not enough activity during pregnancy*	*K*
H	*Mother not given practical MCH advice from elderly women*	*L*
I	*Husband not receiving enough MCH advice from elderly women (sisters)*	*D*
J	*Baby born outside marriage*	*M*
K	*Problems during delivery*	*D*
L	*Not supervising siblings who take care of baby/child*	*M*
M	*Problems in child growth*	*K*



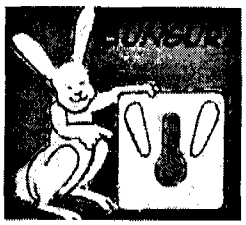
Note: *Green issues denote <u>perceived immediate</u> problem level.*
Yellow issues denote <u>perceived underlying</u> problem level.
Red issues denote <u>perceived basic</u> problem level.

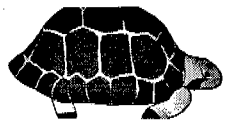
Observations:

This old woman perceives a number of issues at the immediate problem level which are associated with the break up of traditional family structures within the urban environment (lack of respect for elders, poor supervision of new-borns and infant children by care givers) - all of which are perceived as directly impacting upon the growth of the child (M). The basic perceived problem relates more to the protection of women from abuse/neglect by men (husbands) and suggests a strategy which would involve the older sisters of men as the promoters of improved behaviour change. Issues "<u>collecting</u>" many others and those <u>directly</u> impacting upon the next

problem level are generally judged to have higher priority rating in terms of strategy development (eg. Food hygiene & availability, F & E, advice to men from older sisters, B & I; physical and reproductive health status of pregnant women, G & C.

Hare & the Tortoise:
Sanitation & Hygiene Promotion in Tanzania





Project Profile:

Project Title:	*Sanitation & Hygiene Promotion*
Location:	*United Republic of Tanzania*
Social statistics:	*Population: 30 million approx.* *IMR:92/1000 live births* *U5MR : 145/1000 live births* *MMR: 400-700/100,000 live births* *Safe water access: 52 per cent* *Adequate sanitation access: 65 per cent* *GNP/cap: US$ 120 (1996)*
Date of implementation:	*January 1997 - December 2001 (CP cycle)*
Key stakeholders:	*Communities (school children, women, men, elders)* *District Health Management Team, School teachers* *Informal sector masons, TBA's. Traditional healers* *NGO's: EEPCO, WATERAID, OXFAM, MSF, IFRC* *Ministry of Health, UNICEF*
Programme Managers:	*Ken Maskall (Head of WES Unit, UNICEF DSM)* *Rebecca Budimu (P.O. WES, UNICEF DSM)* *Mary Swai, Ag. Head, Environmental* *Sanitation Unit, MoH* *Musa Mpinga, Chairman, EEPCO (NGO)*

Problem Context:

Tanzania's efforts to improve basic health, education and sanitary conditions among its rural population during the nineteen seventies and eighties have been widely acclaimed throughout Eastern and Southern Africa. By 1985, the country claimed to have achieved almost 80 per cent household latrine coverage, with safe water access lagging behind at 42 per cent. The national "Latrinisation" campaign was launched in 1977 with central government directives requiring all households to construct traditional latrines within new higher-populated collective "Ujamaa" villages. By the late nineteen eighties however, the villagisation experiment had failed and many communities had either returned to their dispersed traditional rural homelands or moved towards the growing urban areas of Dar es Salaam, and other municipalities. Traditional leadership and kinship structures were thereby weakened and the mechanisms, which had obliged households to build and use latrines, began to lose effect.

Economic and political reforms introduced by the government during the early nineties in its attempt to develop a market-based economy, have introduced a range of new constraints and opportunities for the promotion of hygiene, sanitation at community level. Subsidies for the construction of new sanitary facilities offered by the government and its collaborating partners have been largely withdrawn as tighter fiscal policies saw the erosion of public sector development spending. Health technicians and community mobilisation agents at ward and village levels were among the first casualties in the first civil service retrenchment rounds during 1993. Many of these retrenchees became self-employed in the informal sector, with some becoming front line workers for the growing number of indigenous community based non-governmental organisations.

A participatory KABP study initiated in 1995 by the Ministry of Health, confirmed fears of a disturbing trend. The study of more than 2,800 representative households in rural and peri-urban areas revealed an effective latrine use rate of 65 per cent, with 21 per cent being classified as adequate sanitary structures (see box for official definition of adequate sanitary facility). The study employed PHAST tools (particularly the Pocket Chart method) to assess hygiene behaviours associated with latrine use. Results indicated a significant number of regular latrine non-users (35 per cent of structures showed signs of imminent collapse).

Ministry of Health standards for Adequate Sanitary facility, 1996

Latrine must have a rigid, washable floor surface, odour/fly control device in place, rigid support structure and privacy enclosure, constructed not less

Children aged 7-14 years comprised 52 per cent of the regular latrine non-user group (school sanitation access was estimated at less than 22 per cent). Disposal of infant's faeces outside the latrine was common (49 per cent in rural areas) and regular handwashing after defecation was practised among only 39 per cent of respondents. More than

80 per cent of rural respondents did not wash hands with soap before food preparation and most people shared common water containers to wash hands before eating.

This study indicated several critical areas where hygiene and sanitary practices had a direct and significant impact on child and maternal health. These included hygiene practices during home births assisted by TBA's (between 60-80 per cent of all deliveries in Tanzania), during periods of home care for children between age 0-3 years and for people living at home with HIV/AIDS. A consultation group (the *Kibaha Group*), comprised of leading national and regional MCH, sanitation and health behaviour analysts, convened in April 1997 to map out a hygiene and sanitation transformation strategy which could significantly impact upon the leading causes of childhood and maternal morbidity and death.

The new Country Programme of co-operation 1997-2001, has defined ***sanitation*** in similar holistic terms to those expressed in the UNICEF/EHP Better Sanitation Programming handbook, 1997:

> *"A process whereby people demand, effect and sustain a hygienic and healthy environment for themselves by erecting barriers to prevent the transmission of disease agents."*

The Ministry of Health recognised that the promotion of hygiene and sanitary practices must be demand led, based on affordable and sustainable incremental steps achieved without financial subsidy. This was a time however for major reforms in the health, education, water and local government civil service sectors. Numerous meetings were being held to develop sector wide policies and a certain workshop fatigue began to set in.

Chiefly for this reason, the Ministry of Health encouraged UNICEF to kick-start the debate on sanitation by focusing on simple well-documented interventions, shared in order to stimulate the formation of an action-oriented network of independent artisans/promoters. Ministry of Health are providing quality control guidance and assisting with the formulation of best practice policy statements, which will be incorporated into sector wide policy documents through existing discussion fora. Chief among these will be the stakeholder forum established to prepare policies and best practice guidelines in advance of a WES sector-wide investment programme.

Concern with an acute trend of cholera transmission in the country has led to an intensification of effort in this field. During 1997 alone there were 42,000 notified cases recorded, with 6,200 deaths - 17 per cent among children under five). Epidemiological evidence suggests that poor hygiene related transmission routes are significant in high density populated rural towns, unplanned crossroad settlements and urban areas. Demand for improved facilities is therefore very high, as are the expectations for improvement of a number of critical hygiene behaviours, which contribute to increased transmission.

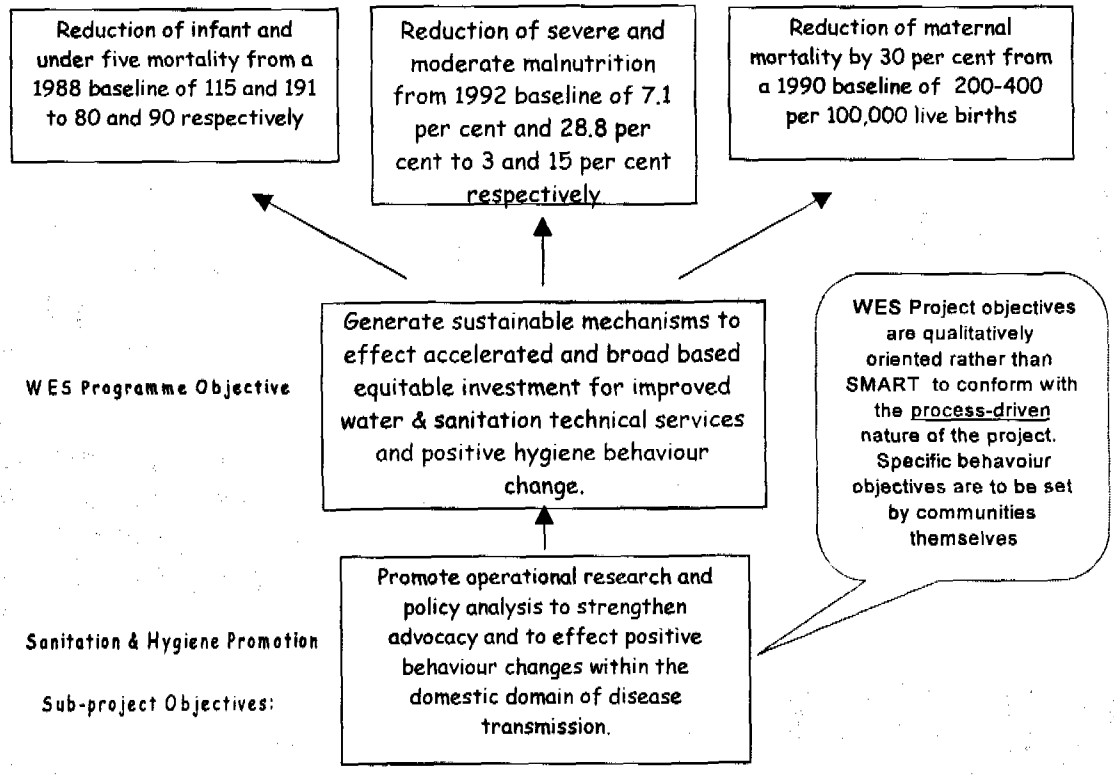
The efforts outlined in this project summary very much constitute "work-in-progress". The challenges ahead for UNICEF are many, not least in facilitating a well-informed, active network of public health professionals and the design of community based monitoring systems. Furthermore, serious efforts are being made to link nutrition, education and health counselling workers in promoting sanitation & hygiene behaviour analysis within the context of community level IMCI and Early Childhood development initiatives.

Objectives:

The objectives for the hygiene and sanitation promotion component of the country programme are presented within the overall hierarchy of programming objectives and other sector related project objectives impacting upon reduction of malnutrition, childhood and maternal disease morbidity/mortality. Goals for the sanitation and hygiene promotion sub-project have been set in qualitative terms deliberately, since no reasonable quantifiable targets for behaviour change could be justified at the beginning of the programme preparation exercise.

Specific behaviour change objectives will be set by communities themselves as part of the PHAST assessment. The tools developed by the project will become the monitoring instruments for community self-assessment, with overall progress being appraised by visiting district PHAST

Country Programme Objectives:



facilitators during the WES programme mid-term review exercise in mid-1999.

Strategies

Key strategies employed during the project include:

- Formation of small multi-disciplinary stakeholder teams to map out priority behaviour areas for address in a hygiene & sanitation promotion campaign.
- Develop participatory analytical processes for community action planning (priority setting, behaviour assessment, monitoring, communication and marketing strategy development).
- Build capacity for a deeper community level analysis of constraining and enabling factors related to critical hygiene and sanitation behaviours.
- Strengthen linkages between consumer demand, service providers, retailers and regulators in researching affordable, technically adequate, environmentally sound and sustainable technology components.
- Assess the efficacy of traditional health seeking behaviours and incorporate best practice guidance within a hygiene promotion campaign centred upon school based communities.
- Document and disseminate lessons learnt throughout the hygiene & sanitation strategy development process to inform policy making fora at all levels, particularly those concerned with developing practical guidance in support of IMCI and ECCD initiatives.

Target Groups:

Primary	Communities (school children, women, men, elders) Informal sector masons, TBA's. Traditional healers
Secondary	District Health Management Team, School Teachers

Activities

Baseline Sanitation & Hygiene behaviour assessment

UNICEF commissioned a baseline sanitation and hygiene KABP study with the Ministry of Health during preparations for the new Country Programme cycle in 1995. Results of this study were gazetted in 1996 (summarised under Problem Context) and provided a basis for discussions with a group of national and regional experts (the Kibaha Group). This group was convened to map out a hygiene and sanitation transformation strategy that could significantly impact upon the leading causes of childhood and maternal morbidity and death. The key strategic elements for the project outlined above were established by this group.

High-risk hygiene behaviour domains identified...

Particular attention was drawn to the need for a detailed assessment of factors which influence hygiene & sanitation practices within the following domains:

- Construction and use of domestic latrines.
- Births assisted by Traditional Birth Attendants in the home environment.
- Domestic and food hygiene practice among caregivers of children aged 0-3 years.
- Clinical care of Cholera patients within the community and referral health facilities.
- Care of patients living in the community with HIV/AIDS.

Development of hygiene and sanitation behaviour assessment tools

PHAST (Participatory Hygiene & Sanitation Transformation) methodologies have been extensively used and adapted in developing tools for hygiene behaviour assessment and monitoring. The *Sanitation Ladder*, *Pocket Chart*, *Story-with-a-gap* and *Three-pile-sorting* tools have been extensively used, with artists being hired at the training venue to film and sketch domestic environments, clothing traditions and utensils typical of the location. Communities are beginning to set targets for specific behaviour changes and will use the same to tools to monitor their own progress.

The UNICEF WES Unit has also developed a unique tool for visualising and analysing individually perceived causal relationships affecting physical and psychosocial health within a given domain. This ***Perception Mapping*** technique has proved extremely valuable in determining gender, nutrition, quality of care and protection related issues perceived by individuals from household to institutional levels. This method is particularly effective in illustrating the different priorities and associations perceived by mothers and by health promoters at various institutional levels on the same hygiene and sanitation related issues. School children have proven to be more

comfortable with this technique than adults during peri-urban assessments conducted in Dar es Salaam. Work in developing this tool continues within the context of pilots for community based IMCI initiatives in Tanzania. Examples of ***Perception Mapping*** used to determine factors influencing hygiene practice within home birthing domains is illustrated in Appendix 1-3).

Capacity Building for the analysis of hygiene and sanitation behaviours

A core group of six national trainers have so far trained a network of more than 60 district level facilitators, initially with the support of a specialised resource training group based at NETWAS Nairobi. Visual materials have been adapted from the core set of PHAST tools, which were originally developed to examine factors contributing to the transmission of diarrhoeal diseases. Selection criteria for PHAST promoters have prioritised those who are actively engaged in community health promotion through NGO's as well as MoH personnel. Training has also been conducted among health promoters working among Burundian and Congolese refugee communities in the west of Tanzania. PHAST tools are being incorporated into an integrated training package for all CSPD (area based) districts co-operating within the country programme. A directory of artists engaged in the materials development process has been maintained, some of whom are also working within a network supporting the region-wide SARA Communication initiative.

Marketing of *SUNGURA* sanitation components

The 1995 KABP study highlighted that the majority of domestic latrines failed to meet adequate sanitary standards established by the MoH. It was also noted that subsidised latrine promotion projects were proving to be un-sustainable and were achieving poor quality component production. The *Kibaha Group* recommended that a simple latrine improvement package be developed for promotion within the growing informal artisan sector and that a network of NGO's be involved in developing such a package.

In 1995, UNICEF began collaboration with a local NGO specialising in environmental sanitation services, EEPCO (Environmental Engineering & Pollution Control Organisation). The organisation had agreed to promote the **SanPlat** (**San**itary **Plat**form) system in Tanzania through links, facilitated by UNICEF, with the designer, Bjorn Brandberg. Training of artisans in the production of SanPlat's began throughout the community based CSPD and emergency refugee assistance programme in November 1995. Each course targeted 20 local private artisans, guiding optimal production of latrine slabs using all-in-one pvc moulds, advising on low cost support structures and financing mechanisms which would enable communities to purchase the products without subsidy.

By January 1998, more than 230 artisans had been trained throughout the country. Post-training course feedback sessions indicated that demand for SanPlat's remained low, despite the

Communication Planning Framework comprises:

- Problem analysis
- Target group behaviour analysis
- Participation analysis
- Communication strategy development (Partnership selection/Advocacy Plan)
- Message design & pre-testing
- Channel selection
- Materials development & pre-testing
- Mobilisation & Distribution planning

By January 1998, more than 230 artisans had been trained throughout the country. Post-training course feedback sessions indicated that demand for SanPlat's remained low, despite the quality and performance approval of many rural and peri-urban users. It was therefore decided that a Communication Planning and promotion campaign be initiated to enhance the visibility of the SanPlat and raise awareness of the affordability and versatility of these basic latrine components.

The Communication Plan included an analysis of behaviours among existing and potential users/promoters of the SanPlat latrine, audience participation analysis among primary and secondary target groups, message design, media identification and pre-testing. EEPCO undertook this exercise after training by UNICEF WES and Communication specialists in mid 1997. The participation analysis revealed that the promotional skills of the trained artisans proved to be one of the main factors limiting sales. Cost, surprisingly, was not a key factor as slabs were available from as little as TSh2,000 (about$3). People were confused by the SanPlat name and during subsequent message design and pre-testing sessions conducted among focus groups, it was concluded that the SanPlat must develop its own Tanzanian identity or brand name. After some deliberation on this issue, someone remarked on the shape of the drop hole and footplates being similar to the head of a rabbit or hare (Sungura in Swahili). Connotations of the hare in Tanzanian folklore are very positive: the hare is clean, honest and clever.

So, ***SUNGURA*** was chosen as the brand name after pre-testing. Promotional messages were designed to urge people to "get smart (like the hare) and buy a Sungura" ! Male buyers were targeted in the design of "point-of-sale" promotional materials (main domestic budget controllers) as were the "child friendly" characteristics of the footplate and popular concerns for the prevention of Cholera transmission through regular use of a latrine. The logo (see header) appears on all promotional materials. Posters, information flyers, flags, comic strips and stickers were chosen as the most effective materials (channels) to boost promotion and render production outlets more visible. Distribution of these materials to sales outlets and further training of artisans will continue during the remaining cycle of the country programme.

The impact of this promotion campaign on countrywide sales and latrine construction will be monitored through a postcard feedback system designed together with the Ministry of Health,

SUNGURA producers and users. Sales trends during pre-testing of promotional materials already show a positive increase. It is estimated that between 20,000 and 25,000 ***SUNGURA*** units were sold during 1997 alone, with the average sales outlet selling 12 per month (monthly max^{m} 132). Recent contacts have revealed that the wives and daughters of several trained artisans are taking on the production and sale of ***SUNGURA*** slabs. Further training courses for women only promoters are scheduled to begin by demand in Zanzibar during July 1998.

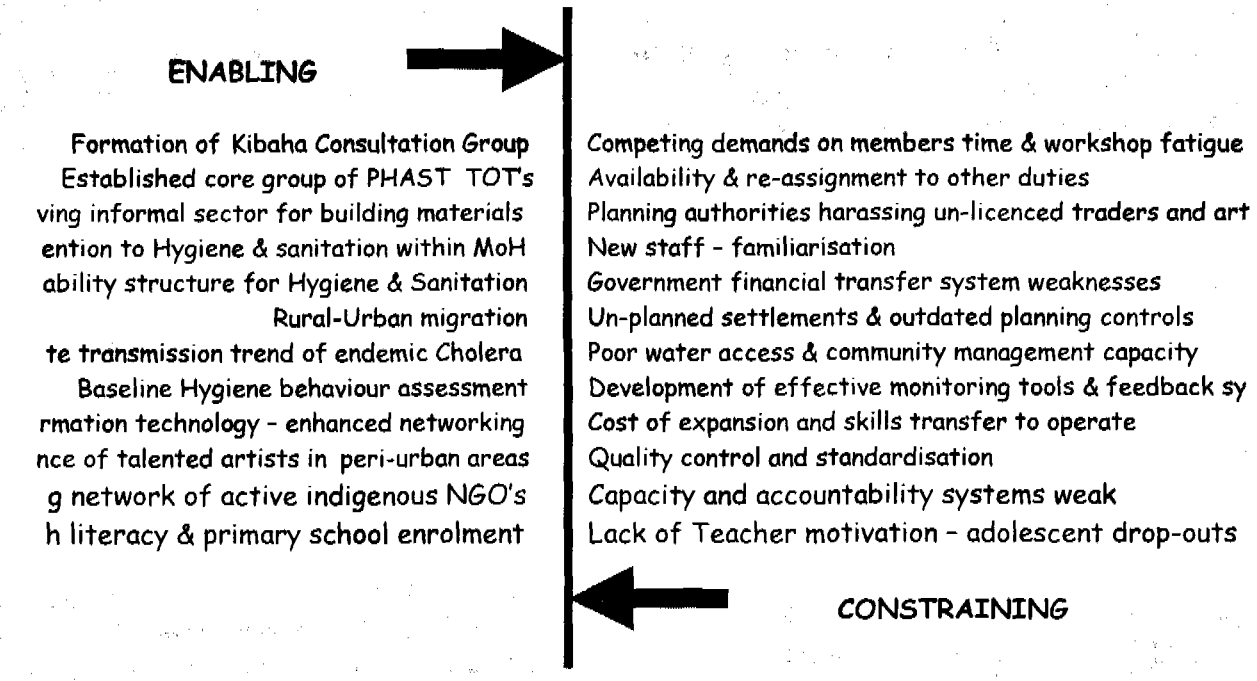
Traditional health seeking behaviours & natural product potential...

The KABP study gave early indication of the widespread practice among rural and urban residents in seeking traditional medicines for the treatment of illnesses commonly associated with poor hygiene (sepsis, diarrhoea, helminths etc..). Formative research conducted by private sector partners promoting natural products in Tanzania has indicated that knowledge of the medicinal properties of plants is very localised, though not always the exclusive preserve of traditional healers. Older women have played a traditional role in passing on such information, though such channels are now much weakened by the break up of family structures within rural and peri-urban communities.

Through Internet searches, UNICEF is compiling a database of indigenous and established exotic plant species in Tanzania which offer proven efficacy in the prevention and treatment of malaria (repellents, natural prophylactics), helminth infections, bacterial infections and water purification (natural flocculating and sterilising agents). The intention is to conduct participatory research in pilot communities targeted for IMCI assistance in order to assess the extent of current practice with traditional medicines. A communication package targeting primary schools will then be developed to reinforce and complement best practice with information on how to cultivate, harvest and utilise useful plant components for the treatment and prevention of common hygiene and sanitation related illnesses. This pilot will be introduced along the shores of Lake Tanganyika in efforts to enhance forestry, soil and lakeshore environmental conservation awareness among school children (through proposed collaboration with the Jane Goodall International NGO - TACARE and IRC).

Factors Enabling/Constraining progress

The following "force-field" diagram illustrates some of the key issues which are expressed in no particular order of importance:



Lessons learned and best practice

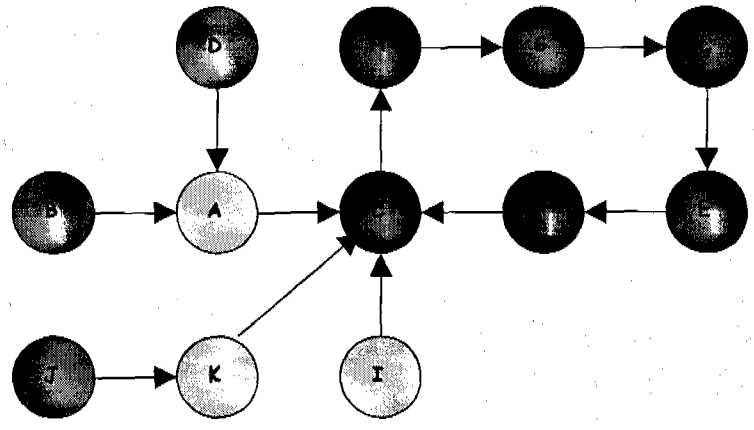
One of the key factors which has ensured steady progress in the project is that a significant commitment to the support of sanitation & hygiene activities was made during the country programme preparation phase and that adequate resources were earmarked for implementation. Furthermore, the PHAST and sanitation promotion initiatives were not seen as any radical departure from previous approaches supported by UNICEF, but rather a consolidation and continuation of earlier efforts to promote self-financing sanitation models and the development of participatory assessment capacities. We have also been fortunate enough to work with a consistent core team of health professionals at the senior level in order to develop the programme outline, build stakeholder consensus and prepare implementation. This has been remarkable given the record for short-notice rotation of key health personnel within government service. The growing number of national and international NGO's expressing demand for more capacity building in the sanitation and hygiene field has also helped to maintain progress momentum. The acute trend of cholera transmission in Tanzania over the past twelve months has also raised demand and introduced stricter regulatory controls for improved sanitation services.

Key challenges lie ahead however in maintaining a good degree of "quality control" over interventions, particularly in designing and minimising the cost of visual materials production for PHAST tools. Monitoring systems for informal sector partners present new challenges, especially since most artisans have no fixed postal address and this presents a "tracking" problem. There is also urgent need to work with the municipal planning authorities to formalise the licensing of businesses in the sanitation "marketplace". The Tanzanian version of the hare and tortoise folktale sees the tortoise crossing the finishing line together with the hare (after holding onto his tail!). Our challenge will be to forge such effective "teamwork" between the stakeholders in sanitation and hygiene promotion, and perhaps even more to hope that we can cross the line together in meeting mortality reduction goals !

Perception Map by 17 year old mother (became pregnant whilst in Class V, 1994)

Factors influencing hygiene & health of mother & child during birth and post natal care period

Issue		*Leads to..*
A.	**Fear of complicated delivery**	**C**
B.	*Dirty hospital environment*	*A*
C.	*Poor health of newborn and mother*	*H*
D.	*Physical and mental convulsions during delivery*	*A*
E.	*Having to depend on parents for daily needs*	*F*
F.	*Poor baby food – difficult to afford*	*C*
G.	*Feeling of shame and anger of parents*	*L*
H.	*Alienation by peers and the boyfriend (child's father)*	*G*
I.	*Lack of caretaker when mother must go out of home*	*C*
J.	*Lack of maternal/babycare knowledge/skills*	*K.*
K	*Frequent diseases for the baby eg. Malaria, diarrhoea, measles etc..*	*C*
L.	*Lack of further education/income to support baby*	*E*



UNICEF AND ENVIRONMENT SANITATION PROMOTION

The Right to Adequate Sanitation and Safe Drinking Water

State parties to recognize children's rights to the "highest attainable standard of health" through the provision of adequate nutritious foods and safe drinking water and adequate sanitation.

Article 24, the Convention on the Rights of the Child

Sanitation- A Major Global Challenge in the 21st Century

The global efforts in the field of water supply have increased throughout the International Drinking Water Supply and Sanitation Decade (IDWSSD) and the 1990s saw approximately 75 percent of the world population gain access to safe water supply. Sanitation coverage, however, has decreased continuously over the past two decades. The total population without access to sanitation increased from about 1.7 billion in 1980 to almost 3 billion in 1994 and is projected to reach 3.3 billion by the year 2000. Diarrhoeal diseases remain a major killer of children, resulting in 2.2 million children dying each year. In addition, a rapid deterioration of environmental sanitation in rural and urban areas contribute to millions more child deaths every year. Even more children are malnourished, physically stunted and/or mentally retarded, as a result of excreta-related diseases and intestinal helminth infections.

The most common failure of sanitation efforts in the past has been a narrow focus on latrine construction alone. It is now recognized that the process of behavioural change is of critical importance. Only behavioural change will create a real demand for sanitation services, which will in turn lead to improved health. Improved sanitation programmes now focus on techniques to promote behavioural change, such as targeted hygiene education.

Towards an Integrated Approach for Health and Nutrition through Better Environmental Sanitation and Hygiene

Research on poor chicken growth in dirty environments [1] illustrates a linkage between child growth and sanitation. Infectious illness which spreads more easily in unsanitary environments leads to poor dietary intake and poor use of nutrients ingested. This, in turn, leads to lower resistance to infection in a vicious "diet-infection" cycle. Children living in unsanitary

[1] The State of the World's Children, 1998

conditions may suffer from a fairly constant, low-level challenge to their immune systems that impairs their growth. Such chronic low-level stimulation of immune system associated with life in unsanitary environment may mean that nutrients go to support the body's immune response rather than towards growth.

The critical development of a child's brain and intellectual capacities begins prenatally and continues to be intense through the early years. The most rapid period of brain development takes place in the first 2 years. Malnutrition early in life is linked to deficits in children's intellectual development. The Early Childhood Care for Child Growth and Development (ECCD) programme is developed through a holistic approach to address child rights to survival, protection, care and optimal development, prenatally to age eight. The Integrated Management of Childhood Illness (IMCI) programme aims at strengthening household and community responses to deal with high infant mortality and morbidity due to diarrhoea, ARI, malaria and measles: all of which are usually complicated by malnutrition. The IMCI programme features deworming as an important element and adopts a synergistic and convergent approach at household and community levels for child health, nutrition, sanitation and hygiene interventions. Effective and integrated ECCD- IMCI interventions at the grassroots level will accelerate the behaviour change of individuals, households and communities for better health, nutrition and clean living environment.

Comparative Advantages of UNICEF

In some countries UNICEF is the only external agency providing substantial on-the-ground, long-term support for water and sanitation programmes in rural areas. The decentralised nature of UNICEF operations has allowed it to support innovative demonstration projects many of which have led to changes in national government policies and practices. UNICEF has accumulated a rich experience in social communication and social marketing, as well as technical expertise, in all the major regions of the world. The intersectoral approach in promoting the well-being of children and women has made it possible for UNICEF to raise policy and strategy issues at the highest levels of government while at the same time continuing to work directly with communities.

UNICEF WES Programme Strategies

The UNICEF strategy for Water Supply and Sanitation was approved by the Executive Board in 1995. The main focus areas of the strategy are:

* Environmental sanitation and hygiene
* Community based management of the water environment
* Empowerment and capacity building for monitoring, planning and implementation

The ten guiding principles in the strategy are: advocacy; basic services; community cost-sharing; community management of the water environment; gender equity; global, national and local

goals; intersectoral linkages; participatory approaches; and partnerships.

Working Together Towards a Common Goal

UNICEF recognises the importance of partnerships in the sector and continues to collaborate with other stakeholders including donors, other UN agencies, research and networking institutions, international and local NGOs and the private sector.

UNICEF has recently signed the following Memoranda of Understanding:

- WHO on joint strategy on water supply and sanitation under the joint Committee on Health policy (JCHP);
- UNEP on Child Health and Environment;
- The World Bank on water and environmental sanitation collaboration in Africa;
- World Wild Fund for Nature (WWF) on fresh water initiative; and
- HABITAT on urban sanitation.

For example, the WHO-UNICEF Joint Monitoring Programme is the recognised source of sectoral information for the UN system; the UNICEF-UNEP *Childhood Lead Poisoning* booklet is used as advocacy tool; the UNICEF-World Bank collaboration is to support the Sub-Saharan Africa countries to promote access to safe water, environmental sanitation and hygiene education; WWF-UNICEF joint effort on fresh water studies in India and now being planned in Africa; and HABITAT-UNICEF is jointly developing a handbook on low cost urban sanitation technologies for promotion of urban sanitation and has selected specific countries for collaboration.

UNICEF has close collaborative experiences with leading NGOs such as WaterAid and CARE. In the area of sanitation and hygiene promotion, UNICEF works closely with DFID/WELL, USAID/EHP, SIDA, CIDA, NORAD, Dutch Aid and other bilateral organisations. A series of tools for sanitation and hygiene has been produced in collaboration with these partners, the most notable being the Sanitation Handbook and the Hygiene Evaluation Procedures.

Global Environmental Sanitation Initiative (GESI)

The Collaborative Council of Water Supply and Sanitation, at its meeting in Manila in November 1997, unanimously endorsed the Global Environmental Sanitation Initiative (GESI) proposed by UNICEF. The participants, including donors, UN agencies, NGOs and over 80 developing country decision makers and professionals called for worldwide concerted efforts to promote

sanitation under GESI with an aim to promote sanitation and hygiene and to improve knowledge creation and dissemination..

To capitalize on this initiative, to find new approaches for the sector and to strengthen collaboration among agencies, several consultations on GESI have been held between UNICEF, WHO, the World Bank, USAID, IRC and WEDC.

The UNICEF workshop on environmental sanitation and hygiene is seen as an important step to further stimulate action around the GESI Initiative.

UNICEF 1998-2000 Programme Priorities

In order to accelerate progress towards the World Summit for Children goals, UNICEF has prioritised four, often cross-cutting, areas of "unfinished business":

1. Reducing young child mortality and morbidity and preventing child disability. Within the scope of this overall aim will fall actions to improve children's nutritional status; community and household sanitation and hygiene practices; and access to health care facilities and household-level care;

2. Reducing maternal morbidity and mortality, which will also help reduce child mortality, morbidity and disability;

3. Improving access to and quality of basic education; and

4. Reducing exploitation, abuse and harm of children.

The three emerging priority areas identified as important to achieving the World Summit for Children goals and also in shaping UNICEF's future work are:

1. Improving early childhood care for child growth and development;

2. Improving young people's health and development;

3. Improving the availability and use of data in critical areas.

Child-focused and cross-cutting approaches will be stressed and strengthened, particularly in the areas of health care access, immunisation, nutrition, hygiene and sanitation, and women's health and equality. The new integrated WES programme priorities withing this context are:

* Support integrated community based approaches to improve child health, nutrition, sanitation and hygiene in 27 countries which have both under 5 mortality rates and a

potential for rapid improvement and where integrated efforts are already initiated. The activities are: community-based health and nutrition; community and household actions on care of young children and early recognition of illness; mass de-worming and anemia prevention; improve sanitation and hygiene; hygiene preparation and storage of food; sanitary disposal of human excreta with particular attention to the faeces of infants and young children and the establishment of hygienic play areas for young children.

Focus countries: Tajikistan, Kazakstan, Cambodia, Angola, Kenya, Madagascar, Malawi, Mozambique, Namibia, Tanzania, Uganda, Zimbabwe, Egypt, Yemen, Bangladesh, Nepal, Bolivia, Haiti, Benin, Burkina Faso, Cameroon, Ghana, Guinea, Mali, Mauritania, Senegal and Togo.

* Improve environmental sanitation in urban areas of 8 countries with large urban populations through the integration with health and nutrition activities; capacity building on construction of sanitary facilities and communication skills.

  Focus countries: China, Philippines, Ethiopia, India, Pakistan, Brazil, Mexico and Nigeria.

* Support to improved access to safe water in 22 countries which have a potential for significantly improved coverage. The activities include: build capacity for operation and management through institutional reforms and training; set up monitoring system; assist government to develop policy; promote school sanitation and hygiene; integrate WES with nutrition, health and education programmes.

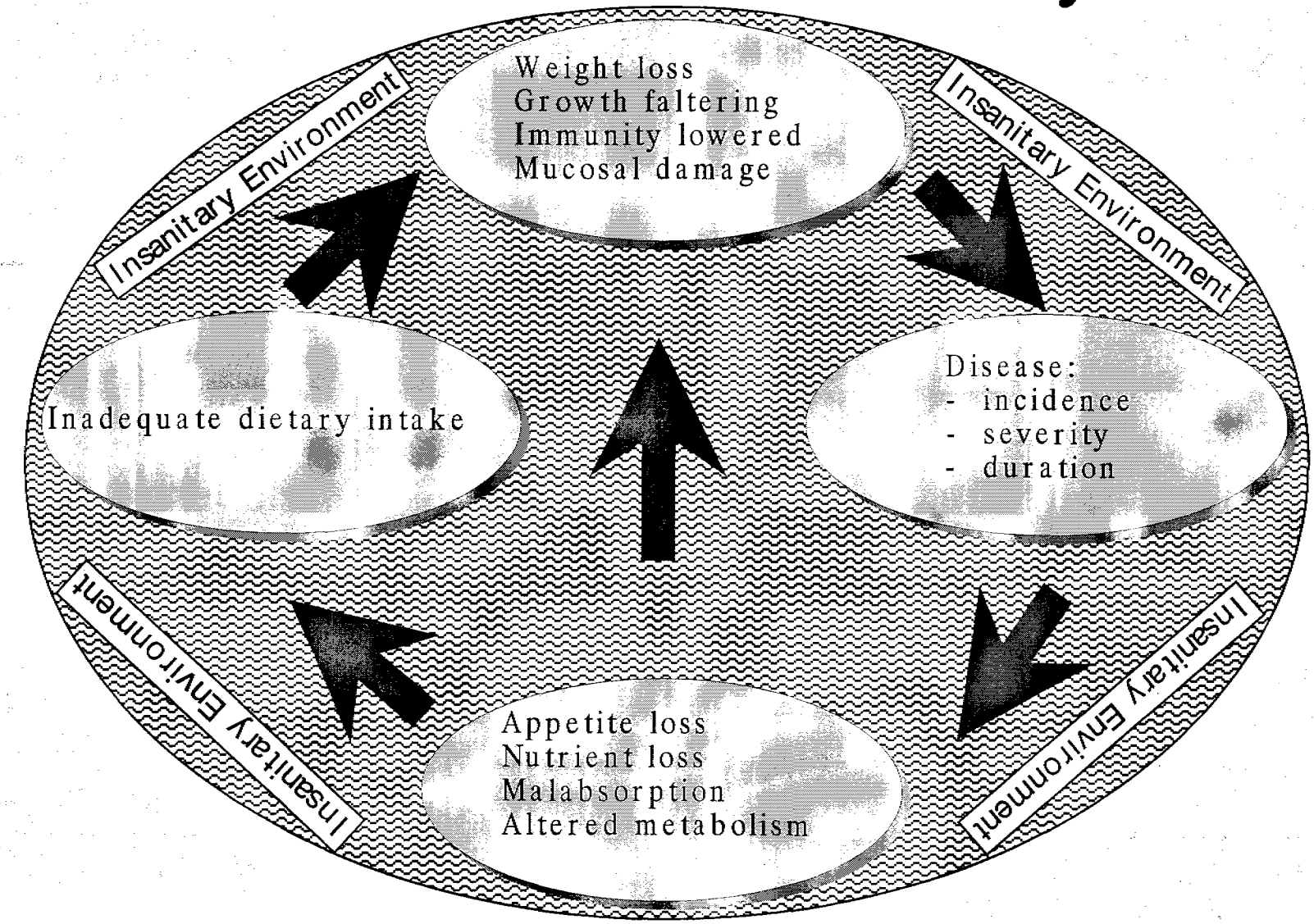
  Focus countries: Ethiopia, Madagascar, Uganda, Zambia, Zimbabwe, India, Sri Lanka, Bangladesh, China, Philippines, Guinea Bissau, Guinea Conakry, Nigeria, Liberia, Gambia, Mali, Chad, Bolivia, Guatemala, Honduras and Nicaragua.

* Support to Guinea worm eradication in 18 countries where this disease remains endemic. The activities include: support to epidemiological surveillance and early case containment; supply water filter and vector control; improve access to safe water in remaining endemic villages.

  Focus countries: Ethiopia, Kenya, Uganda, Sudan, Yemen, Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Ghana, Ivory Coast, Mali, Mauritania, Niger, Nigeria, Senegal and Togo.

The Environmental Sanitation workshop in June 1998 will be the foundation stone for an integrated approach towards the 1998-2000 goals and the outcome will be used as a tool to achieve the ultimate global objective of reduction of child mortality and mobility; better health and development and above all to promote the rights of the child.

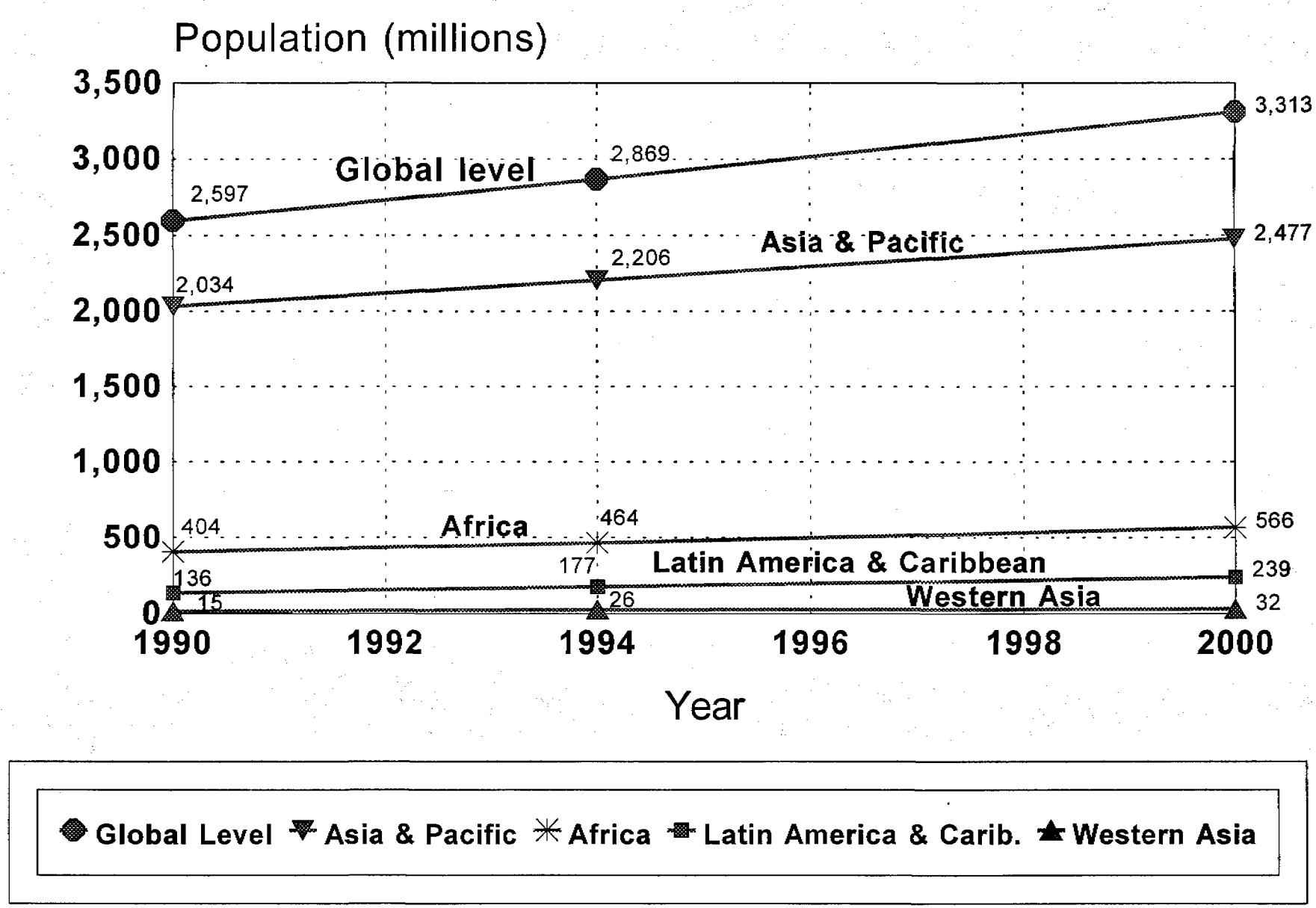
Malnutrition/Disease Cycle



Source: Andrew Tomkins and Fiona Watson, Malnutrition and Infection, ACC/SCN, Geneva, 1989

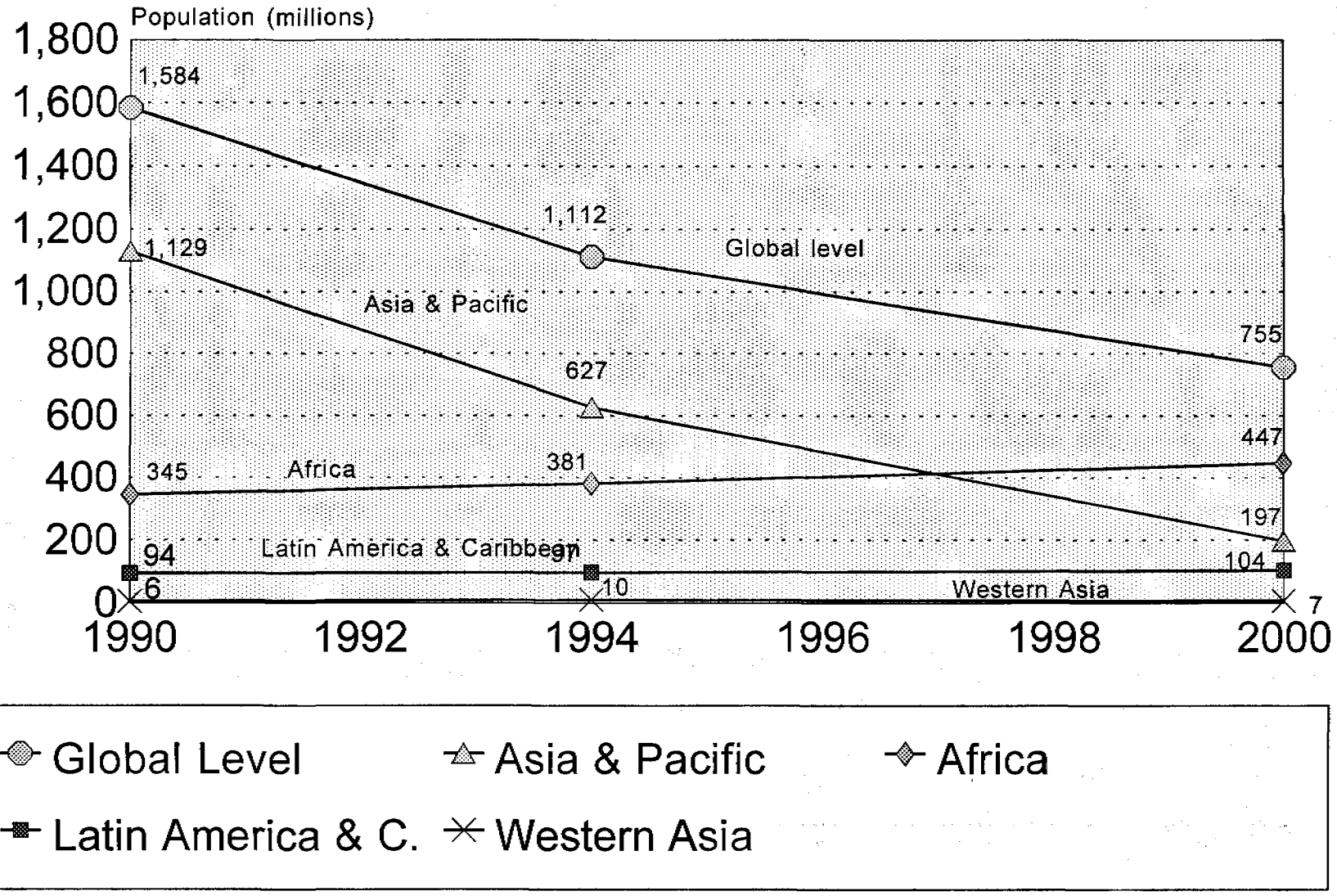
Population without Access to Sanitation by the Year 2000

If 1990-1994 Trend Remains Unchanged



Population without Access to Safe Water Supply by the Year 2000

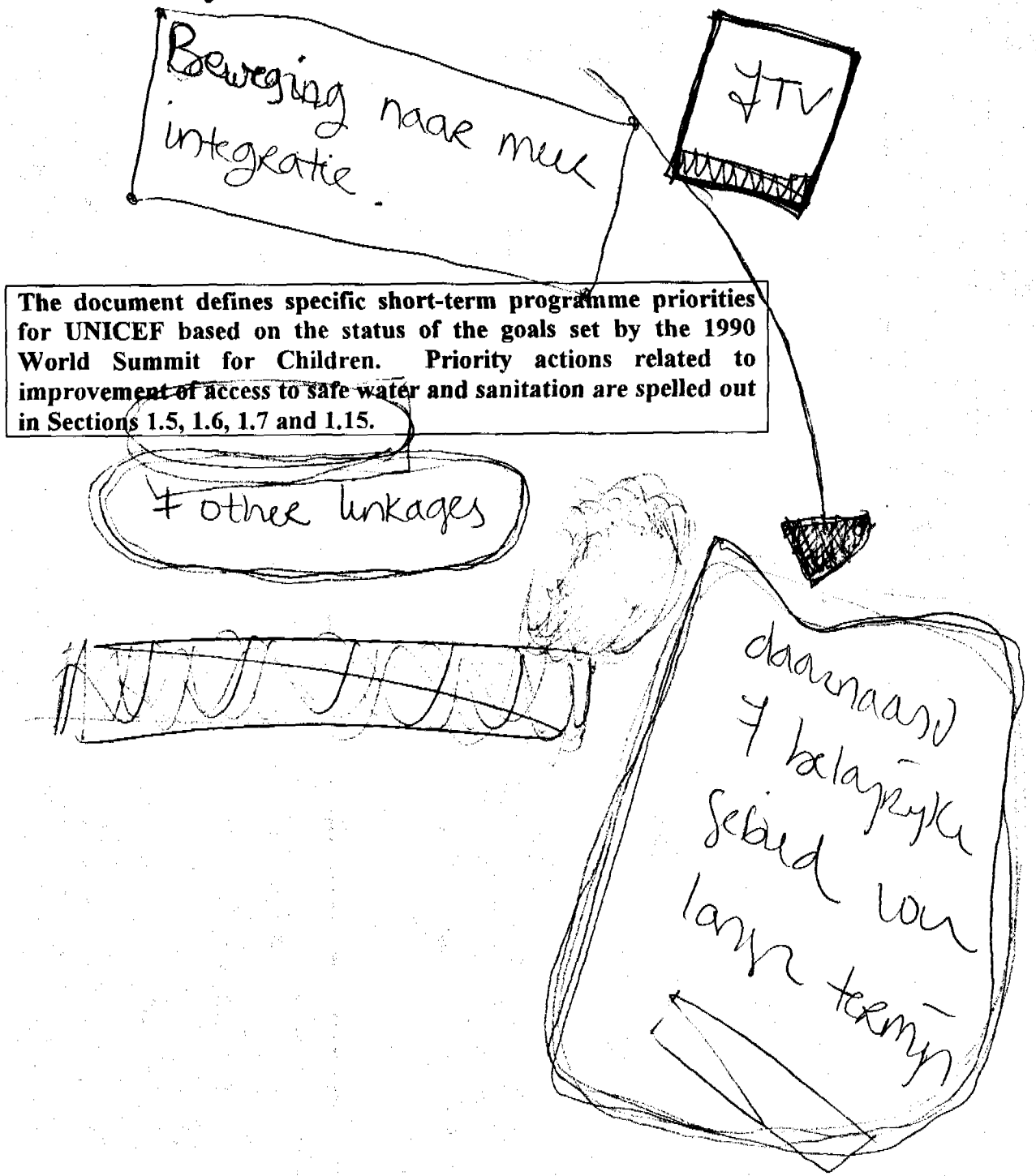
If 1990-1994 Trend Remains Unchanged



UNICEF Workshop on Environmental
Sanitation and Hygiene
10-13 June 1998, New York

For reference only
Not for quotation

PROGRAMME PRIORITIES FOR UNICEF
May 1998 to December 2000



The document defines specific short-term programme priorities for UNICEF based on the status of the goals set by the 1990 World Summit for Children. Priority actions related to improvement of access to safe water and sanitation are spelled out in Sections 1.5, 1.6, 1.7 and 1.15.

unicef
United Nations Children's Fund

CF/PD/PRO/98-003

DATE: 30 April 1998

Headquarters
Programme Instructions

FOR ACTION

To: Regional Directors and Deputy Regional Directors
Representatives and Assistant Representatives
Directors: Brussels, Copenhagen, Florence & Tokyo

From: Sadig Rasheed
Director
Programme Division

Subject: **1998-2000 Programme Priorities**

In her memorandum to staff of 19 February 1998 -- *Looking Ahead* -- the Executive Director referred to the discussions in the January 1998 GMT meeting on short-term priorities for UNICEF and the process that has been initiated to define the organization's mission in the 21st century. The GMT reviewed a set of recommended short-term programme priorities presented by the Programme Division and asked a small working group of staff from Supply Division, EPP and Programme Division to develop these proposals further, in consultation with country and regional offices.

The attached PRO is the result of this effort to define specific short-term programme priorities for UNICEF which the January GMT initiated, based on the status of WSC goals. In undertaking this exercise, the working group was also mindful of the evolving work on future priorities for UNICEF, as well as the work currently being done in preparing and finalizing the Medium Term Plan (MTP) for the September 1998 Executive Board.

This document is not intended to provide a comprehensive list of all areas of UNICEF programming in the next three years. What it does do is set out four areas of concentration relating to the unfinished business of the WSC goals. In addition, it highlights three areas of emerging priority, which we believe are important both for our long-term efforts to reach the goals, as well as for our future activities.

While we recognize that all countries have a well developed decade plan and are implementing those plans to achieve the goals, it was felt that there are specific countries where

/...

significant progress is both needed and possible. These countries have been identified through a process of consultation at the February session of the GMT, and with several country offices, Regional Offices and headquarters divisions. They are countries with: demonstrable government commitment to attaining the goals, an existing UNICEF programme with capacity for increased activity, and the resources -- potential or real -- to respond to the needs of children and achieve the remaining outstanding goals.

Consultations to date have confirmed that the priorities outlined are feasible for the countries identified in this PRO, although there may still be operational issues and specific country constraints that need to be resolved. Country Representatives are asked to bring such issues to the attention of the Director of the Programme Division and the concerned Regional Director by latest the end of May. The countries listed are requested to inform the Director of Programme Division and their respective Regional Directors by the end of August of the specific activities undertaken towards achievement of these priorities, and the outlook for the future. Programme Division will have the overall responsibility of monitoring and follow up in close consultation with each Regional Office.

It is widely felt that agreement on these priority activities in the next few years will greatly facilitate the mobilization of the additional funds and human resources needed and the dialogue with important partners in industrialized and developing countries.

I want to add that while this document is addressed specifically to those country offices identified in it, I commend this PRO and the priorities it sets out to the attention of all country offices. In this context, Regional Directors will have the effective responsibility of including other offices as deemed desirable in the accelerated activities.

Regional Directors are kindly requested to bring this document to the attention of all representatives at the forthcoming round of meetings of the Regional Management Teams, and the views of the RMTs on how best to operationalize these priorities are encouraged and greatly welcomed.

Best regards.

cc: NYMT
PDMT

PROGRAMME PRIORITIES FOR UNICEF
MAY 1998 TO DECEMBER 2000

Achieving the goals of the World Summit for Children is an essential step in implementing the Convention on the Rights of the Child (CRC) and the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW). As we approach the close of this decade, we must redouble our efforts to help those countries that are still lagging to make the extra effort needed to reach the agreed World Summit for Children (WSC) targets.

At the Global Management Team (GMT) meeting, 19 January 1997, we discussed both short and long-term objectives for UNICEF in the coming years and we agreed that as we define UNICEF's ~~mission~~ and priorities for the 21st century, we must also focus renewed efforts on the unfinished agenda of the WSC. We identified the following areas for immediate priority attention: reducing maternal mortality and infant and young child mortality in high MMR and U5 mortality countries, reinvigorating the attention paid to immunization and other preventive and promotional health and nutrition interventions such as hygiene, sanitation and micronutrient supplementation and improving the capacity of families to protect children's health and well-being; strengthening our emphasis on basic education; and programming for the special protection needs of children.

We also recognized three new priority areas based on important lessons learned since 1990 as vital both to the achievement of the WSC goals as well as for the organization's future work: attention to the needs and rights of adolescents; improved data collection and use; and the importance of an integrated approach to improving early childhood care and young child development.

Seven priority areas for the next three years

In order to make significant progress towards the WSC goals, intensified UNICEF support, therefore, will be provided in the following four, often cross-cutting, areas of unfinished business:

1. Reducing young child mortality and morbidity and preventing child disability. Within the scope of this overall aim will fall actions to improve children's nutritional status; community and household sanitation and hygiene practices; and access to health care facilities and household-level care;

2. Reducing maternal morbidity and mortality, which will also help reduce child mortality, morbidity and disability;

3. Improving access to and quality of basic education; and

4. Reducing exploitation, abuse and harm of children

The three emerging priority areas identified as important to achieving the WSC goals and also in shaping UNICEF's future work are:

1. Improving early childhood care for child growth and development
2. Improving young people's health and development
3. Improving the availability and use of data in critical areas

There are, obviously, many ways in which all these priority areas overlap, and UNICEF will use its strategic advantage, in being child focussed rather than sector focussed, to support actions which cross traditional 'sectors', for example an integrated approach to early childhood care for child growth and development and school based health and nutrition activities.

In health and nutrition, UNICEF's focus will be on support for early preventive and promotional actions wherever there is evidence of effectiveness and feasibility. UNICEF will also exploit its relative advantage in being able to work with a range of civil society organizations and, in many countries, with local government, to improve family and household practices which promote better child health and growth, and which ensure that all families appreciate the importance of preparation and planning for childbirth which is as safe as possible for both mother and infant. Immunization and micronutrient supplementation have already been shown to be highly effective and feasible to implement almost everywhere.

UNICEF will continue to develop and sustain programmes that maximize the benefits of young children's contacts with trained health workers during their first two years of life. During these contacts, immunizations and micronutrient supplements will be provided, together with advice and help on young child feeding and management of common illness such as diarrhoea and malaria. In areas where the health infrastructure is weak, particularly in Africa, UNICEF will continue to support the strengthening of the health system and the revitalization of health centres to provide a minimum of basic services.

Three groups of actions are outlined under the section on education, each with a proposed set of tasks. Two other areas address educational issues as well. These are the sections on "Early Childhood Care for Child Growth and Development" and on the "Reduction of exploitation, abuse and harm of children". With regard to the actions outlined under education, the sets of tasks are: (i) increased effort in 12 low enrolment countries in order to have a realistic set of targets, strategies, and timeline for achieving the WSC goal in education, (ii) continued priority to girls' education, particularly at primary level but at other levels as well where appropriate, and (iii) improving the learning environment.

Criteria for countries

In consultation with many country offices, regional offices and headquarters divisions, this document identifies specific countries where particular efforts will be made to implement the priority actions outlined above. These countries were selected on the following bases:

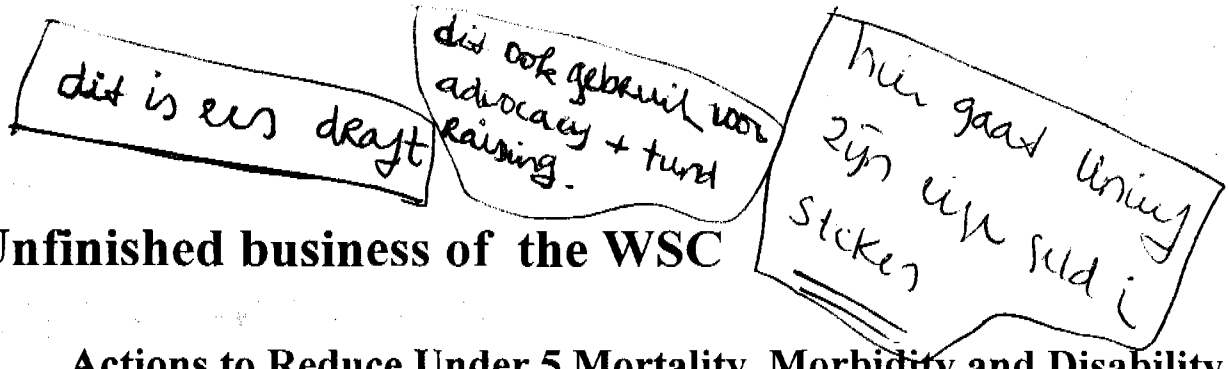
(i) clear and demonstrable government commitment;
ii) an existing UNICEF programme with the capacity for increased and focused activities;
iii) the resources, potential or real, to support efforts to reach still outstanding goals.

We recognize that these efforts will require significant human and financial resources, including general resources, special purpose contributions, staff time and supplies. However, we believe that the conditions exist for acceleration and we will work closely and actively with you to mobilize the resources and renewed political commitment needed to realize these goals.

As you will see, the list of priority actions that follows is not an exhaustive one, as it is recognized that UNICEF, in addition to making specific contributions to achieving the WSC goals, will also be developing over the next two to three years programming areas that link with the UNICEF agenda beyond the year 2000. While effective programme approaches in some of the new priority areas -- including Early Childhood Care for Child Growth and Development and adolescent health -- are increasingly clear, more needs to be done to refine the indicators in these areas over the next several years.

The document outlines the types of activities for which UNICEF will provide direct assistance to central governments, local governments, and/or civil society organizations. In most of the areas described, UNICEF will provide this support in partnership with others, and in the context of the United Nations Development Assistance Framework (UNDAF). Among the agencies that UNICEF will work closely with are the multilateral development banks, WHO, UNAIDS, UNDP, UNFPA, UNESCO, UNCHS/Habitat, WFP, bilateral donors, and international and local civil society organizations. For the sake of brevity, these partnerships are not described in detail in the list of priority actions which follow.

Critical supplies will include learning materials and school supplies, vaccines, and injection equipment, injection materials, cold chain equipment, micronutrient supplements, essential drugs and sanitation supplies. Specific supply strategies will be an integral part of UNICEF action and priority will be given to the appropriate and timely delivery of inputs from global, regional and local sources. Wherever relevant, kits and set packs will be rapidly developed and stocked in Copenhagen to facilitate the logistics of delivery to services and communities. UNICEF will also offer its procurement services to both developing countries and donor countries in order to increase the volume of basic supplies available for meeting the objectives stated. Additional efforts will be made to monitor and document the effectiveness of these actions.



Unfinished business of the WSC

1. Actions to Reduce Under 5 Mortality, Morbidity and Disability Rates

Child-focused and cross-cutting approaches will be stressed and strengthened, particularly in the areas of health care access, immunization, nutrition, hygiene and sanitation and women's health and equality.

Community-based actions to promote and protect children's health and nutrition will be complemented by improved management of childhood illness at health facilities. This will be reinforced by the extensive programme of health worker training and related support to improve health systems' management of life threatening childhood illnesses. The initiative, integrated management of childhood illnesses (IMCI), is spearheaded by WHO in collaboration with UNICEF and many other partners. UNICEF will work to ensure that facility-level IMCI is operating well in the same areas where intensive support for community and household activities are provided by UNICEF. Further, in countries/districts where the comprehensive IMCI programme has not been introduced, ongoing support will continue to be provided to programmes for the control of diarrhoeal disease and acute respiratory infections. IMCI drug kits will be developed for mass availability at facility level, and adapted to local conditions.

UNICEF will continue to focus on preventing childhood disabilities due to poliomyelitis and iodine and vitamin A deficiencies, through sustaining the effective strategies already in place. In addition, UNICEF will seek more aggressively to reduce the childhood disabilities associated with the health of mothers during pregnancy, the care of mothers and infants during the perinatal period, and care to children during the first years of life (see section 2 on reducing maternal morbidity and mortality below). The feasibility of reducing debilitating neural tube defects in infants, through increasing folate intake of women of childbearing age (through fortification or use of supplements) will also be investigated. UNICEF will also continue efforts to prevent death and disability of children due to land-mines. These actions will be complemented by support in a number of countries for community-based rehabilitation of children with disabilities. UNICEF will also continue to support activities to eradicate Guinea worm.

In all countries in which the under-5 mortality rate is above 70 (See Annex 1):

1.1 Achieve high immunization/vitamin A supplementation coverage.

- Over 90% of children will be immunized with all primary EPI antigens, including measles. To reduce the incidence of neonatal tetanus, mothers will be immunized in all administrative regions in each country. All vaccinations will be done using

injection equipment and quality assurance procedures that reduce the risk of transmission of infections and other preventable adverse effects to virtually zero. Autodestruct syringes bundled with incineration boxes for their safe disposal will be used for all mass campaigns.

- In the Annex 1 countries, over 90% of children will receive high dose vitamin A supplements, to be given wherever possible during EPI visits. All immunizations and vitamin A supplementation will be recorded on a child health card, kept by child's parents or caregiver, to facilitate monitoring.

- National and local capacity will be strengthened in order to sustain viable immunization programmes. UNICEF support will continue at least until the year 2005 and possibly longer, especially in the poorest (Band A) countries. This will include support to technical and management capacity building and to renew or re-habilitate the cold chain. It will also include the establishment of a viable medium- term mechanism to finance vaccine purchases, to ensure that all necessary vaccines can be purchased well in advance of need.

1.2 Support special measles control activities in countries with high measles morbidity and mortality. UNICEF offices in the following 20 countries, which carry a large proportion of the global measles burden, will give this priority attention:

EAPR:	**Indonesia**
ESAR:	**Angola, Ethiopia, Kenya, Madagascar, Somalia, Tanzania, Uganda**
ROSA:	**Afghanistan, India, Pakistan**
WCAR:	**Burkina Faso, Cameroon, DR Congo, Cote D'Ivoire, Ghana, Guinea, Mali, Nigeria, Senegal.**
	(Additional countries will also support accelerated measles control)

- Conduct special measles immunization mass campaigns, combined with vitamin A supplementation, in under-served, densely populated urban and peri-urban areas for children in high risk age groups.

- Establish measles surveillance.

- Improve household skills in caring for children with measles (in conjunction with IMCI activities below), including the use of vitamin A supplements in treatment of children with measles.

1.3 Support intensified neonatal tetanus control activities in countries that have not reduced neonatal tetanus incidence to fewer than 1/1000 live births in all districts. UNICEF offices in the following 26 countries, which carry a large proportion of global neonatal tetanus burden or where neonatal tetanus remains an important cause of infant and maternal mortality, will give these activities highest priority:

EAPR:	**China, Cambodia, Indonesia**
ESAR:	**Angola, Ethiopia, Mozambique, Somalia**
MENA:	**Sudan**
ROSA:	**Afghanistan, Bangladesh, India, Nepal, Pakistan**
WCAR:	**Burkina Faso, Cameroon, Chad, DR Congo, Cote D'Ivoire, Ghana, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal**

- Conduct special tetanus toxoid mass campaigns in high risk areas to ensure all women of child-bearing age have received at least three doses of tetanus toxoid. Newly developed pre-filled single-use syringes, likely to be available within a year, will be utilized, allowing tetanus toxoid to be safely given to mothers who do not have access to health facilities.

- Support activities to improve child birth practices, including encouraging the wide use of home delivery kits and making available basic supplies in local health facilities for safe delivery.

1.4 Introduce yellow fever vaccine in targeted countries where this is epidemiologically justified and introduce hepatitis B vaccine in all countries which have high carrier rates, and where DPT3 coverage rate is above 70% ; provide support to governments to decide on and prepare for introduction of HIB vaccine.

- Both yellow fever and hepatitis B vaccines are of proven effectiveness and relatively low price (and a concerted effort is expected to reduce prices further), but they have not presently been widely used in developing countries, particularly the poorest developing countries. The successful introduction of these vaccines will pave the way for the use of new vaccines, to prevent some types of diarrhoea and pneumonia, for example. These new vaccines are expected to be available and relatively affordable by 2000.

1.5 Support integrated community based approaches to improve child health, nutrition, sanitation and hygiene in 27 countries which have both high under 5 mortality rates and a potential for rapid improvement and where integrated efforts to improve child health, nutrition, sanitation and hygiene are already being initiated:

CEE/CIS:	**Tajikistan, Kazakstan**
EAPR:	**Cambodia**
ESAR:	**Angola, Kenya, Madagascar, Malawi, Mozambique, Namibia, Tanzania, Uganda, Zimbabwe**
MENA:	**Egypt, Yemen**
ROSA:	**Bangladesh, Nepal,**
TACR:	**Bolivia, Haiti**
WCAR:	**Benin, Burkina Faso, Cameroon, Ghana, Guinea, Mali, Mauritania, Senegal, Togo**

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- Expand and enhance existing community-based health and nutrition activities in the 20% of districts or regions in the country where under-5 mortality rates are highest. Actions will be initiated and implemented using the principles of the 1990 UNICEF Nutrition Strategy - an explicit conceptual framework, community participation, empowerment, management and use of locally relevant information collected in a participatory way to guide implementation and course correction. Actions will also be based on country actions already demonstrated to be successful, for example those highlighted in the 1998 SOWC report.

- Community and household actions will focus on improving care of young children: support for breastfeeding; adequate complementary feeding; and early recognition of illness and appropriate home management and early referral of children with pneumonia, diarrhoea, malaria and measles, in the context of the integrated management of childhood illness. Mass de-worming and anemia prevention will also be supported.

- These same communities and households will also be helped to improve sanitation and hygiene through support for locally identified relevant actions such as hand washing, hygienic preparation of food for young children, sanitary disposal of human excreta with particular attention to the faeces of infants and young children, and the establishment of hygienic play areas for young children.

1.6 Improve environmental sanitation in urban areas of eight countries with large urban populations:

EAPR:	**China, Philippines**
ESAR:	**Ethiopia**
ROSA:	**India, Pakistan**
TACR:	**Brazil, Mexico**
WCAR:	**Nigeria**

- Strengthen integration with health and nutrition activities

- Give special emphasis to capacity building in the following areas: a) latrine construction, b) on-site and off-site waste water disposal, c) garbage disposal and d) communication skills for behavioural change.

- Implement pilot projects in community-managed sanitation to demonstrate the low cost and feasibility of such actions.

- Within the context of GESI, along with Habitat, assist governments in the development of sanitation policies and strategies.

Sanitation ?

1.7 Support to improved access to safe water, in the following countries which have a potential for significantly improved coverage:

ESARO:	**Ethiopia, Madagascar, Mauritania, Uganda, Zambia, Zimbabwe**
ROSA:	**India, Sri Lanka, Bangladesh**
EAPRO:	**China, Philippines**
WCARO:	**Guinea Bissau, Guinea Conakry, Nigeria, Liberia, Gambia, Mali, Chad**
TACRO:	**Bolivia, Guatemala, Honduras, Nicaragua,**

- Country programmes will focus on building capacity for improving operations and maintenance through institutional reforms, formal training, on-the-job training and sharing of experiences to ensure long term sustainability and household water security.

- Improve the economic efficiencies of water supply, through ensuring better management of programmes and the appropriate choice of technologies.

- Work with governments to set up regional/district level monitoring systems to facilitate knowledge of water-supply disparities and needs.

- Assist governments in the development of appropriate policies (or support to improve existing policies) to increase coverage and reach the unreached.

- Promote school water supply and sanitation programmes.

- Ensure gender issues are given high priority in water programmes.

- Promote the close convergence of the water supply programmes in these countries with sanitation and hygiene programmes as well as with health, nutrition and education to achieve maximum impact for reduction of under-5 child mortality, morbidity and malnutrition.

1.8 Malaria prevention and treatment.

Provide intensified support for community-based malaria prevention and treatment in:

CEE/CIS:	**Tajikistan**
EAPR:	**Cambodia, Myanmar, Laos and Papua New Guinea**
ESAR:	**Angola, Eritrea, Malawi, Zambia**
WCAR:	**Benin, Burkina Faso, Gambia, Ghana**

- Provide mosquito nets, and ways to regularly re-dip in insecticide, to at least half of all families in the 20% of districts or regions where U5 mortality rates are highest and where malaria is a major contributor to young child deaths.

- Ensure appropriate first line drugs for malaria treatment readily available (including through commercial outlets) together with education on importance of correct dosing and home care of sick children. Ensure that second-line drugs are available at health facilities and health workers trained in correct management of malaria (linking with IMCI).

- Establish mechanism for monitoring and evaluation.

- Malaria prevention and treatment will be integrated with other community based health and nutrition improvement programmes.

1.9 Continue to support and expand Baby Friendly Hospital Initiative, and continue to support local compliance with the International Code of Marketing of Breast Milk Substitutes.

1.10 Support actions to reduce mother to child transmission of HIV in countries and areas of countries where HIV prevalence in young women is high:

EAPR: Cambodia, Thailand, Viet Nam
ESAR: Botswana, Rwanda, Uganda, Zambia
WCAR: Cote d'Ivoire

- Increase access of pregnant women to voluntary counseling and testing for HIV, drawing on community involvement and participation, and the use of low cost testing techniques, and link this with efforts to ensure wider access to counseling and testing for young people.

- Support for population-wide actions which are likely to be effective in reducing risk of transmission of HIV virus from mother to child. Such actions are likely to include low-dose vitamin A supplementation, prevention and treatment of malaria in pregnancy, treatment of sexually transmitted diseases and preparation for breastfeeding so as to minimize cracked nipples and mastitis. The results of research presently underway to determine effectiveness of these, and other actions, should clarify programming options before the end of 1998.

- Work with partners and pharmaceutical industry to develop ways that HIV+ pregnant women can have access to short course anti-retroviral therapy to reduce

risk of transmitting virus to infant.

- Linking to the BFHI wherever possible, support counseling of HIV+ mothers on infant feeding options. Where HIV+ mothers choose to use infant formula, develop ways to make infant formula available, together with ways to minimize risks associated with its use, without compromising the principles of the International Code of Marketing of Breastmilk Substitutes.

1.11 Support to achieve poliomyelitis eradication.

- In all countries, where necessary, UNICEF will work with WHO and Government to ensure that efficient surveillance systems to detect remaining poliomyelitis cases are operational.

- In countries in Africa, Middle East, CEE/CIS and Asia, UNICEF will, together with WHO and others, support National Immunization Days (NID) to complement routine immunizations as a major part of the polio eradication effort. In countries and areas with civil unrest and unstable governments, UNICEF's role will be especially critical.

- As a major supplier of polio vaccine, UNICEF will continue to source quality vaccine at competitive prices. All countries will plan well in advance for their vaccine requirements given the end-year peak in NID's and consequent demand for vaccine.

1.12 Support to eliminate iodine deficiency disorders (IDD)

In all countries where IDD has been identified as a potential problem, UNICEF will continue to support efforts to monitor progress towards IDD elimination. These will include monitoring salt iodine content, including participatory monitoring by consumers and schoolchildren using rapid test kits, and monitoring of biological indicators of iodine nutrition as part of multi-indicator sample surveys. UNICEF will supply as necessary the newly developed semi-quantitative salt test kits.

1.13. Prevention of disabilities due to land mines and support to landmine survivors in:

CEE/CIS: Bosnia, Croatia
EAPR: Cambodia
ESAR: Angola, Mozambique

- Promote and support landmine education and awareness programmes.
- Catalyze efforts to ensure access to social services and in particular to basic education and professional training of children and youth with acquired disabilities.

- Facilitate provision of sustainable support to community based rehabilitation programmes.
- Contribute to improvement of knowledge base through evaluation of quality and the impact of existing preventative, education/training and community based rehabilitation initiatives.
- Support where necessary the development of workshops for the production of prosthetics and therapy aids for disabled children.

1.14. Protection of and care for children with disabilities:

EAPR:	**China**
ESAR:	**South Africa, Tanzania, and Uganda**
MENA:	**Egypt**
TACR:	**Guatemala**
WCAR:	**Cote D'Ivoire, Gambia, Mali**

- Support development of national and local plans of action that will provide for access to basic health, nutrition and education service to children with disabilities,
- Enhancing ability of parents or care givers to recognize earliest signs of disability and to encourage them to seek early treatment and to demand appropriate services.
- Creating an enabling social environment for children with disabilities, with special focus on reducing gender based negative attitudes and stigma.

1.15 Support to Guinea worm eradication in the 18 countries where this disease remains endemic:

ESAR:	**Ethiopia, Kenya, Uganda**
MENA:	**Sudan, and Yemen**
WCAR:	**Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Ghana, Ivory Coast, Mali, Mauritania, Niger, Nigeria, Senegal, Togo,**

- Support epidemiological surveillance and early case containment, supply of water filters, vector control.

- Improve access to safe water in remaining endemic villages through construction or rehabilitation of wells and boreholes.

2. Actions to Reduce Maternal Mortality

2. 1. Support the development of a "Mother Friendly" environment in societies, with priority to countries with the highest maternal mortality rates. Continue to support efforts to establish effective national policies for reducing maternal mortality, and

document successful approaches to broaden support for efforts to reduce maternal mortality:

EAPR:	**Cambodia, Indonesia, Laos, Myanmar, Papua New Guinea, Viet Nam**
ESAR:	**All countries**
MENA:	**Egypt, Morocco and Yemen**
ROSA:	**All countries**
WCAR:	**All countries**

Elements of support will include:

- Advocacy for the application of human rights instruments (CRC, CEDAW) to the area of safe motherhood.

- Ensuring that maternal and neonatal health care services are strengthened and given priority in all efforts to strengthen health systems and reform health sector.

- Improving quality and professionalism of workers who attend mothers during birth.

- Provision of equipment and supplies (birth kits, medical equipment in health centers and district hospitals, obstetric drugs, micronutrient supplements) where appropriate.

- Development of quality assurance standards and protocols for maternal and newborn health services and establishment of systems for investigating causes of maternal deaths.

- Expansion of community and family actions which can prevent and reduce maternal and neonatal deaths. These will include advocacy about delaying age of marriage and childbearing, importance of breastfeeding and family planning, interventions for improving nutrition of girls, adolescent girls and women, and improved home childbirth practices, improved preparations for birth and for possible emergency transportation and referral.

2.2 Expand and replicate strategies and experiences that have successfully increased professional training among those attending births in:

ESAR:	**Angola, Mozambique**
MENA:	**Egypt**
WCAR:	**Ghana, Mali, Niger, Nigeria, Senegal, Togo**
EAPR:	**Indonesia**
ROSA:	**Bangladesh, India, Pakistan, Nepal**

- Because trained assistance at births is so important in reducing maternal mortality and morbidity as well as helping prevent childhood disability, the replication and expansion of successful programmes in the above countries is a major priority. The positive results of Indonesia's experience in the training and placement of mid-level community midwives, for example, have led national and state Governments in Bangladesh and India to commit to replicating this intervention.

and expand and replicate strategies that have increased coverage and impact of district-level safe motherhood projects in:

WCAR: Benin, Burkina Faso, Cameroon, Cote D'Ivoire, Guinea, Mali, Niger, Nigeria, Senegal, Togo

- Ongoing support to district-centered projects in many of the countries named above will be maintained and expanded. For every 500,000 population this will typically include revitalization of four health centers, upgrading of one district or regional hospital with surgical capacity, and ensuring that all of these facilities have adequate levels of supplies, equipment and essential drugs. Community participation, linked to the Bamako Initiative strategy, will be encouraged. Support will also be provided to establish emergency communication and transportation systems.

2.3 Demonstrate the feasibility of reducing low birthweight and perinatal mortality through judicious use of food and nutrient supplements as part of an approach to improve care for women in:

EAPR: Indonesia, Philippines, Viet Nam
ESAR: Mozambique and Tanzania
ROSA: Bangladesh, Nepal
WCAR: Gambia

- A multiple micronutrient supplement with all essential micronutrients commonly deficient in family diets which are particularly protective (including but not only Iron, Vitamin A, Zinc, and Folate) will be provided for all women in preparation for pregnancy. Those women that have Chronic Energy Deficiency (CED) (i.e. a BMI of less than 18.1 or a mid-upper arm circumference of less than 23.5cms) will be provided with food supplements where collaboration with WFP and local NGOs is possible. Mothers will also be offered de-worming and access to malaria prevention with impregnated bednets and anti-malarial drugs.

2.4 Establish system of quality assurance in maternal health , including support for capacity strengthening, development of instruments, and establishment or strengthening of system for auditing maternal deaths, in the following 10 countries:

CEE/CIS:	**Romania**
EAPR:	**Indonesia, Laos**
ESAR:	**Uganda**
MENA:	**Tunisia**
ROSA:	**Bangladesh, India (one state)**
TACR:	**Bolivia, Peru**
WCAR:	**Senegal**

3. Improving Access to and Quality of Education

3.1 Increase enrolment in 12 countries where net enrolment rates are less than 50%:

EAPR:	**Cambodia, Viet Nam**
ESAR:	**Eritrea, Ethiopia, Malawi, Mozambique**
MENA:	**Yemen Arab. Rep**
ROSA:	**Bhutan, India, Nepal,**
TACR:	**Guatemala, Haiti**
WCAR:	**Burkina Faso, Mali, Mauritania, Senegal**

- Each country will have identified for itself realistic enrolment and completion rate targets for the years 2000, 2005, and a timeline for universal primary education. Innovative strategies for realizing these targets will then be put in place for reaching the targets individual countries set for the year 2000.

- Human and other resources needed to reach these targets will be identified by the end of 1998, including the need for and means of providing school supplies, teaching guides and textbooks, and they will be in place so that the country-set target for the year 2000 can be achieved.

- A simple and accurate system for monitoring basic data on progress will be in place and in use.

3.2 Actions to give further priority to girls education in:

EAPR:	**Myanmar**
ESAR:	**Botswana, Eritrea, Ethiopia, Malawi, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Uganda, Zambia, Zimbabwe**
MENA:	**Djibouti, Egypt,**
ROSA:	**Bhutan**

WCAR: **Benin, Burkina Faso, Cameroon, Cape Verde, Chad, Cote D'Ivoire, Gambia, Ghana, Guinea, Guinea Bissau, Mali, Mauritania, Niger, Senegal, Togo**

- Girls education will continue to be addressed within Education For All efforts that strengthen existing systems in sustainable ways. Particular emphasis will be at primary level, but lower secondary and other levels may be addressed as appropriate per situation-specific analysis.

- Momentum in Sub-Saharan Africa will be continued. Support for the 27 countries participating through the Norwegian-, NORAD- and CIDA-funded initiatives will be continued and financial support will be made available to an additional three countries.

- A South Asia regional approach will be in place with a common thrust and financial support for country-specific activities.

- A simple and accurate system for monitoring basic date on progress will be in place and use.

3.3 Actions to improve the quality of education and of the learning environment in the countries identified above. It is to be noted that there is overlap and linkage in the suggested actions for improving quality and girls' enrolment, as the low enrolment of girls is a major factor in the low enrolment status of these countries. Actions will also be taken to develop sustainable education systems in four post-conflict countries of Bosnia, Liberia, Sierra Leone and Somalia.

- Specific actions for improving the quality of the learning process will be identified and implemented according to specific country circumstances.These could include such improvements as access to quality learning materials, improved mechanisms for pre- and in-service teacher education, and appropriate mechanisms for community-school partnerships that improve school governance and development of systems to monitor the learning environment.

- In Africa, these efforts will be closely tied to the UN Special Initiative for Africa (UNSIA) Low Enrolment Countries' (LEC) programme. The LEC programme is designed to generate additional resources in support of countries that put policies and programmes in place to substantially increase enrolments in improved education systems.

- With specific reference to improving the learning environment of girls, the options include offering education closer to home, providing appropriate sanitation facilities, and ensuring that girls and boys have equal access to

furniture, learning material, and supplies in the classroom. Other measures are the use of gender-sensitive curricula and materials throughout the system; improved teacher education systems to develop gender-sensitivity in teachers; classroom practices that are equitable for boys and girls; and selection procedures that treat girls and boys equally.

- To ensure that the lessons learned in this important area are shared appropriately, regional offices are asked to identify countries in the region that have interesting programmes that have focused on and succeeded in improving the quality of education, to document these experiences and to transmit them to headquarters for wider dissemination.

In the post-conflict countries:

- New mechanisms for national planning of education will be introduced. Plans will be in place, and in the process of being implemented for re-institution of a gender-sensitive, cost-effective system of education.

- In each country one or two key areas of education that require priority attention, such as materials production or teacher education will be identified and a strategy to address the area(s) will be implemented. The "school in a box" and "school in a bag", as well as basic teaching guides and textbooks, will be supplied as broadly as possible so that basic teaching and learning materials are available.

4. Reduction of Exploitation, Abuse and Harm of Children

4. 1 Progressive elimination of child labour in:

EAPR:	**Philippines, Thailand, and Viet Nam**
ESAR:	**South Africa, Tanzania, Uganda**
MENA:	**Egypt**
ROSA:	**Bangladesh, India, Nepal, Pakistan**
TACR:	**Brazil, Colombia, Guatemala, Peru**
WCAR:	**Benin, Cote d'Ivoire, Senegal**

Support will be focussed on the above 18 countries that have made a commitment to systematic capacity building to address child labour and have subscribed to the Agenda for Action adopted at the Oslo Conference.

- **Establish national plans of action:** using the growing political momentum behind the proposed new ILO convention on extreme forms of child labour, UNICEF will facilitate the design of national and local plans of action which will

identify priorities, time bound goals for elimination (starting with efforts to eliminate the most extreme forms of child labour), analysis of resource needs and strategies for resource mobilization.

- **Make education a part of the solution:** Ensure universal access, improved quality, relevance and efficiency of education systems. Among the changes that may be introduced are school schedules that accommodate life demands, curriculum content relevant to the learning needs of children and the skills that they will require for adult work, and classroom environments that respect children's dignity so that children do not try to escape them. Implement ways of stimulating the demand for education, including use of economic incentives. Encourage active participation of children, families and communities in education improvement, as the means for creating cultural and social commitment to education for all children.

- Implement, (with partner organizations), area based strategies aimed at preventing child labour and at removing children from workplaces. These local level initiatives will combine interventions in education, social mobilization and support to family income.

4. 2. Reduce the impact of the AIDS pandemic on children in the most affected countries of Eastern and Southern Africa, and in:

EAPR: **Cambodia, Thailand, Viet Nam**
TACR: **Brazil**
WCAR: **Cote d'Ivoire, Senegal**

- Build capacity to care for children made orphans or otherwise affected by HIV/AIDS based on successful and innovative experiences already undertaken in a number of countries.

- Develop alternative care and protection arrangements for children in areas where the number of orphans is rapidly increasing as a result of the HIV/AIDS pandemic.

- Strategic actions will include a) identify most affected communities, b) ensure that UNICEF-supported programmes target the most affected communities, c) linking voluntary associations of national and local organizations supporting community-based programmes for children affected by AIDS with governmental efforts to shape policy changes and service delivery, d) improving knowledge base and horizontal information sharing by establishing Regional Technical Support Groups and encouraging the active participation of the most seriously affected countries, providing sustainable and flexible support to community-

based alternative care programmes.

4.3 Reducing impact of armed conflict on children and preventing family separation in:

CEE/CIS: Bosnia-Herzegovina, Yugoslavia
ESAR: Burundi, Rwanda, Tanzania, Uganda
ROSA: Sri-Lanka
WCAR: Congo, Democratic Republic of Congo, Sierra Leone

- Promoting agreements to ensure respect and adherence to UN proposed guiding principles on Internal Displacement, extending protection to high risk groups to prevent sexual violence, providing assistance in ways that build community resilience and reduce dependency, and in cases of involuntary separations, ensuring interim care, family tracing and reunification.

- Promote development of enabling, community based psycho-social interventions to support children exposed to violence in countries affected by armed conflict.

4.4 Preventing recruitment of children as soldiers in above countries and in

MENA: Sudan
TACR: Colombia

- Catalyze efforts to ensure adoption of the Optional Protocol on raising the age limit for recruitment and brokering arrangements and agreements to ensure adherence to universal human rights and humanitarian standards by warring parties and improving access to alternative services, in particular to education and training for jobs for children most at risk of recruitment.

4.5 Prevention of sexual abuse and exploitation and trafficking of children in:

EAPR: Cambodia, Philippines, Thailand and Viet Nam

- Improve legislative measures at both central and local levels and promote their enforcement
- Train law enforcement personnel and establish communities or school centered monitoring mechanisms.
- Provide strategically selected recovery programmes for children at the community level.
- Accompanying regional and global efforts will focus on improving data-collection systems in support to the Special Rapporteur, and specific support to those women's organizations that are including prevention of commercial sexual exploitation as their follow-up activity to Beijing.
- Make learning materials readily available to exploited children.

4.6 Actions towards ending the practice of female genital mutilation (FGM):

ESAR:	**Eritrea, Ethiopia, Kenya, Somalia, Uganda**
MENA:	**Djibouti, Egypt, Sudan**
WCAR:	**Burkina Faso, Cameroon, Guinea Bissau, Mali, Nigeria, Senegal**

- UNICEF will advocate for ending FGM and continue to assist local advocacy groups with information and educational support including sensitization of midwives and birth attendants to the harmful effects of effects of mutilation.

Emerging issues

5. Actions to Improve Early Childhood Care for Child Growth and Development

Actions will be supported in:

CEE/CIS:	**Romania, Macedonia**
EAPR:	**Indonesia, Myanmar, Philippines, Viet Nam**
ESAR:	**Malawi, Namibia, South Africa, Uganda**
ROSA:	**Bhutan, India**
TACR:	**Guatemala, Mexico**
WCAR:	**Ghana, Mali,**

- Facilitate development of an integrated approach to Early Childhood Care for Child Growth and Development that addresses the physical, social, emotional and intellectual development of children through health, nutrition, early learning, and better parenting. This includes promoting the rights and role of women and the role of men in sharing responsibility for child care development. A national policy will be established in each of these countries.

- In most countries, activities will include training of current community workers in early child development. These child development workers will work with parents of young children and support them in carrying out simple actions to ensure appropriate intellectual stimulation and play, good "active" feeding practices, and the existence of clean and safe play areas for children. In addition, in all countries, important hygiene practices for young child care and development will be emphasized. Simple IEC messages emphasizing key messages for caregivers will be disseminated through locally appropriate channels.

- Establish a monitoring system that enables the proportion of first grade children who have completed a programme in this approach, and the proportion of parents who have participated in a parent education programme, to be assessed.

6. Actions to improve young people's health and development

CEE/CIS:	**Romania, Russia,**
EAPR:	**Philippines, Thailand, Viet Nam, the Pacific**
ESAR:	**Malawi, Namibia, South Africa, Uganda, Zambia, Zimbabwe**
MENA:	**Egypt, Gaza/West Bank, Jordan**
ROSA:	**Bangladesh, Sri Lanka**
TACR:	**Brazil, Caribbean, Costa Rica, Nicaragua**
WCAR:	**Cote d'Ivoire, Gambia, Ghana, Mali, Senegal, Sierra Leone**

6.1 Meeting the health and development rights of children in their second decade of life is central to preventing a range of problems that undermine their health and potential in the present (e.g. HIV/AIDS, substance abuse, accidents and violence), their heath, nutrition and opportunities as adults (addressing, e.g., maternal mortality, tobacco-related death and disease), the health, nutrition and development of their children (addressing, e.g., HIV/AIDS, child mortality), and their capacity to be caring, supportive and responsible parents and members of civil society (addressing, e.g., Life Skills).

6.2 UNICEF will focus on promoting the provision of information, skills and services; supporting the creation of safe and supportive environments (both the immediate environment of families, friends and service providers, and the wider environment created by policies and legislation, social values and norms of behaviour); and facilitating opportunities for young people to participate. This will require the engagement of a range of sectors (e.g. health, education, WES, communications, protection) and partners, including young people themselves. The programming focus will be on:

- **Policies and planning**: Ensure a focus on adolescents in the situation analysis/assessment, including a review of key policies that have an impact on young people's health and development and the facilitation of partnerships between organizations and across sectors to address specific problems (e.g. HIV/AIDS, adolescent pregnancy, substance abuse, violence, nutrition, etc.).

- **Schools**: Implement a basic package in schools that contributes to children's health, nutrition and learning capacity, with a focus on:

  * Implementing key policies (addressing problems such as discrimination against children with HIV/AIDS, preventing tobacco use, etc.)
  * Providing water and sanitation facilities
  * Providing age appropriate skills-based health education (life skills)

* Providing medical/nutrition interventions that can be safely and effectively administered by teachers in collaboration with health workers (e.g. micronutrients and antihelminthics)

- **Health Services**: Contribute to the development of youth-friendly health services that focus on young people's physical and psycho-social needs (e.g. counseling):

  * Training health workers
  * Involving health workers, youth NGOs and young people in the development and implementation of policies and services
  * Ensuring that a focus on adolescents is included in health sector reform

- **CSOs**: Outreach to particularly disadvantaged adolescents through NGOs and other CSOs, including the development of programmes that meet and protect adolescents' rights through peers and parents/care givers

- **The Media**: Working with the news and entertainment media to:

  * Provide information
  * Monitor young people's health problems and the responses to them
  * Provide opportunities for young people's involvement
  * Raise debate and dialogue in society about the factors that undermine young people's health and development

In the development and implementation of these programmes there will be a specific focus on involving young people and parents.

7. Actions to Improve the Availability and Use of Data in Critical Areas Relevant to Improving Situation of Children and Women

- The mid-decade assessment process demonstrated the feasibility of collecting quality and timely data, particularly through the use of household surveys. Governments in 60 countries carried out Multiple Indicator Cluster Surveys (MICS) and additional data were collected through a further 40 plus other household surveys. Despite capacity improvements from the mid-decade process and other interventions, countries still require support to collect and use disaggregated data for assessing the end-decade situation.

- National household surveys similar to the MICS are a major component of this process, but additional data are needed, such as: urine and blood samples to assess IDD and vitamin A status; community studies that investigate familial values, perceptions and decisions related to child care, support and development; school-based surveys to assess learning achievement; facility-based surveys to measure process indicators related to reduction of maternal mortality; and prospective mortality surveillance to directly measure current child mortality.

- This measurement process was initiated last September in an informal presentation to the UNICEF Executive Board. Global indicators and measurement tools must be developed, in collaboration with other international organisations and bilaterals, and documented by the end of 1998. Workshops and country level measurement activities have to be started by early 1999 so that relevant data can be obtained by the end of year 2000.

- While country-based surveys will produce national estimates, such surveys can also provide estimates for subnational areas and specific population groups, thus facilitating better targeting of programme interventions. Furthermore, such surveys can provide a foundation for obtaining other more country-specific data to meet national and subnational information needs.

- Data will be disaggregated, whenever possible, and matched against the distribution of services, using geographical information systems where these are available.

Annex 1:

List of countries with U5MR of 71 per 1000 and above in 1996.

Country	U5MR	Country	U5MR	Country	U5MR
Afghanistan	257	Rwanda	170	Nepal	116
Angola	292	Sao Tome & Principe	80	Tajikistan	76
Burundi	176	Sierra Leone	284	Eritrea	120
Cambodia	193	Somalia	211	Bolivia	102
Cameroon	102	Sudan	116	Iraq	122
Central Afr. Rep.	207	Tanzania	144	Egypt	78
Congo	108	Togo	125	Indonesia	71
Congo DR	207	Uganda	141	Morocco	74
Cote d' Ivoire	150	Yemen	105	Pap. New Guinea	112
Equatorial Guinea	173	Zambia	202	Cape Verde	73
Ethiopia	177	Bangladesh	112	Djibouti	157
Ghana	110	Benin	140	Maldives	76
Guinea	210	Burkina Faso	158	Namibia	77
Guinea-Bissau	223	Chad	149	Swaziland	97
Guyana	83	Comoros	122	Marshall Islands	92
Kenya	90	Gambia	107	Gabon	145
Liberia	235	Haiti	134		
Madagascar	164	India	111		
Malawi	217	Lao People's DR	128		
Mali	220	Pakistan	136		
Mauritania	183	Senegal	127		
Mozambique	214	Zimbabwe	73		

Myanmar	150	Bhutan	127		
Niger	320	Lesotho	139		
Nigeria	191	Mongolia	71		

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A Human Rights Approach to UNICEF Programming for Children and Women:

What it is,
And some changes it will bring

UNICEF, New York
17 April 1998

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Introduction

Human rights are fundamental to UNICEF's work. UNICEF, as part of the United Nations system and guided by the United Nations Charter, has a responsibility for the realization of human rights along with all of the system-wide organizations, agencies and funds. In addition, as the Mission Statement makes clear, the Convention on the Rights of the Child (CRC) is the organization's guiding frame of reference. The other important underpinning of the organization's mandate and mission is the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW).

Both CRC and CEDAW belong to the wide family of international human rights instruments, starting with the Universal Declaration of Human Rights and the two Covenants on Civil and Political Rights, and Social, Economic and Cultural Rights (adopted by the General Assembly in December 1966). Because the CRC and CEDAW reinforce human rights principles that are applicable to all human beings and also specifically address those aspects of social, economic, cultural, civil and political life that need attention if children and women are to enjoy their rights fully, both are fundamentally important to UNICEF.

There is growing appreciation in the organization for the new dimensions that a human rights perspective brings to the programming process. For UNICEF, adoption of a human rights approach to programming will entail some new activities consistent with the broader rights agenda, particularly in terms of civil and political rights, special protection, problems of adolescents and other areas. In addition, greater attention will be needed to areas already being addressed by UNICEF, e.g. policy dialogue and issues related to discrimination and equity.

However, rights-based programming does not mean that everything we do must change. In fact, the policies and programmes of cooperation supported over the last 20 to 30 years are very largely consistent with what the CRC and CEDAW mandate. Adopting a human rights approach simply means that we look for the "value-added" that the general principles and specific standards of the Conventions can provide.

There is a demand from many national and international partners for UNICEF to play a new and more dynamic role in supporting the implementation of various treaty-based obligations to children, especially those established by the CRC. The renewed importance of civil society movements and UNICEF's exploration of strategic partnerships with a broader range of actors create unprecedented opportunities for UNICEF to help shape a human development agenda for the future built on human rights principles.

These important new dimensions of our work are understood in broad terms throughout the organization, but staff have also asked for specific guidance on what is expected of them. This document, therefore, aims to explain how important aspects of the programming processes should be approached, building on what staff already know, so that UNICEF's work contributes directly to the realization of children's and women's rights. It is the product of

extensive consultation within UNICEF and with other partners.
Without question, each country situation will continue to require a country-specific strategy and good programming skills will more than ever be a required core competency of programme staff, including:

- The ability to assess a situation, analyze the causes of problems facing children, women and their families, understand the linkages between problems and how the available human, financial and organizational resources in a country contribute to solving them;

- The ability to uncover the different levels of causation and, with national partners, make informed decisions on what needs to be done for children and where UNICEF should invest its resources.

What will change as a result of the rights approach is the scope of the issues examined as the basis for programme development. In order to make appropriate programme decisions, UNICEF staff at country level will need to:

- Understand the synergy, or lack thereof, between the legislative process, the development of public policy and the national development choices that affect children, women and families either directly and indirectly;

- Know those institutions in a society that work to protect the best interest of children;

- Work effectively with state institutions especially those of central and local overnments, in ways that fully include and develop the new opportunities that growing civil society movements present.

This paper addresses the following:

- The definition of the rights approach;
- The broad context for a basic understanding of needs and rights;
- General human rights and child rights principles;
- General implications for programming *and* advocacy;
- Specific implications for programming - assessment, analysis, strategy development and actions;
- Other implications for programme support, communication and capacity building;
- Promotion of the rights approach through UNDAF and other development assistance frameworks.

Part I
Guiding Principles

A. What is a Rights-Based Approach to Programming?

A rights-based approach to programming means that we must be mindful in our development work of the basic principles of human rights that have been universally recognised and which underpin both CRC and CEDAW: inter alia, the equality of each individual as a human being, the inherent dignity of each person, the rights to self determination, peace and security. Among human rights instruments, CRC and CEDAW are the most widely ratified and the most directly relevant instruments to the UNICEF mandate.

Programming from a rights perspective does not mean that for every article of a convention there must be specific indicators to measure it and an appropriate programme- or project-level response. This would, in fact, be contrary to the spirit of these treaties, which have key principles or "foundation articles" that underlie all other articles. The foundation articles of CRC express the overarching principles of non-discrimination, the best interest of the child, the right to participate and have one's views considered and the right to survive and develop. These articles have to be considered in designing programme activities to address specific problems (also see part II, section 3).

Analysis from a rights perspective should lead to an understanding of the mix of causes that together prevent some children from enjoying their rights. To deepen our understanding we must ensure that data is disaggregated by sex , geographic origin, age and ethnicity in order to expose disparities, which are too often concealed by averages. We must also look at whether national laws protect all children and women equally or whether in the application of laws there is inherent discrimination. We need to examine whether the allocation of national resources actually reinforces discrimination against women, girls, certain ethnic groups or disabled children, or helps to overcome it. Also, we must determine whether macroeconomic and social sector policies and programmes are consistent with the general principles of human rights (particularly the best interests of the child) and whether in fact they provide a sound basis for the "progressive realization" of rights.

A human rights approach to UNICEF programming also calls for more inherently integrated, cross-sectoral and decentralized activities, and for participatory approaches recognizing that those we are trying to help are central actors in the development process.

B. Needs, Rights and Development

1. Human Rights as the Foundation for Development

Recent efforts to reaffirm human rights as an integral focus of development activities have been strengthened by a number of political and social trends and events since the early 1980s. The emergence or resurgence of democracy in many parts of the world, for example, has reinforced international support for democratic principles and human rights. Recent civil conflicts, wars and acts of genocide have also elicited strong international calls in defense of human rights. In addition, the expansion and impact of communications technology and transportation are making the world a virtual village, giving people easy access to each others' experiences. Taken together, these changes are creating renewed demand for public sector accountability, good governance and the realization of human rights as the ultimate purpose of development efforts.

The extraordinary momentum behind the process of ratifying international human rights treaties, in particular CRC and CEDAW, is another important factor in reinforcing the concept of public accountability. Since States commit themselves, in ratifying such treaties, to respect the standards the treaties establish, individuals and institutions can be held accountable when human rights are not realized or are wilfully violated.

The CRC, which is the most comprehensive human rights treaty, is also the most widely and most quickly embraced, evidence of the consensus possible with regard to children. This consensus can help to create a more positive climate for the acceptance of other human rights standards.

The process of encouraging CRC and CEDAW ratification, plus a series of global conferences, most notably the 1990 World Summit for Children and the 1995 Fourth World Conference for Women, have further fuelled social and political support for human development and human rights. Among the other conferences that have adopted agendas for action that aim to transform various human rights principles into practical actions and time-bound goals are:

- World Conference On Education For All (1990)
- World Conference on Environment and Development (1992),
- International Conference on Nutrition (1992),
- World Conference on Human Rights (1993),
- International Conference on Population and Development (1994),
- World Summit for Social Development (1995),
- Second UN Conference on Human Settlements (1996),
- World Food Summit (1996)
- Stockholm Conference on the Commercial Sexual Exploitation of Children (1996),

- Amsterdam and Oslo Conferences on Child Labour (1997).

In tandem has come a shift in the definition of development. The concept of Sustainable Human Development means that economic, political, social, environmental and cultural dimensions of development are aspects of one holistic process, a vision of development consistent with the aims of CRC and CEDAW. With this vision, governments and international financial institutions have come to increasingly recognize that expenditures on human development are both sound economic investments and necessary conditions for the enjoyment of human rights.

2. Relationship Between Needs and Rights

The human rights of women and children are need-based in origin and aspiration. Many of the interdependent and interrelated children's human rights that the CRC codifies, for example, are need-based in origin, such as the right to the highest attainable standard of health, to education, or to protection from abuse and neglect. CRC and CEDAW recognize that women and children have specific needs that have been historically neglected or overlooked by societies, neglect that is both a cause and a result of the specific forms of discrimination these groups suffer.

A rights based approach introduces the following additional important considerations:

- the notion of the legal and moral obligation and accountability of the State and its institutions with regard to meeting the basic needs of its people;

- the affirmation that children and women are subjects of rights, or in other words they are rights holders, not objects of charity. This change in attitude also initiates a process whereby children, within the context of their evolving capacities, participate in the processes and decisions that concern them and affect their lives.

- the principle that benevolent and charitable actions, while good, are insufficient from a human rights perspective. A rights approach is based on the premise that there are shared interests between rights holders and those working to help realize rights. In a rights approach, it is accepted that the State is normatively required to work consistently towards ending denials or violations of human rights, and that the empowerment of rights holders is in itself an important result of various processes. A rights-based approach, therefore, better guarantees the sustainability of development programmes.

C. Key Guiding Principles

The following are key guiding human rights principles, with specific reference to CRC and CEDAW. It is essential to keep them in mind in negotiating and developing country programmes.

1. Accountability & Duties

States voluntarily acknowledge and accept obligations when they ratify human rights treaties. In doing so they agree to implement these treaties and to be accountable for meeting the rights and providing for the needs of the people within their jurisdiction. Ratification also requires States to align their domestic laws with treaty provisions and to ensure that steps are taken to make structures in society, at national and sub-national level, respond in a way consistent with the letter and intent of the law.

States Parties must therefore be proactive in efforts to implement the rights recognized in the treaties they ratify. Ratification makes them legally accountable and opens the way for UNICEF and other UN agencies to discuss issues with governments when children's or women's rights are not realized and to comment on progress. As all UN development agencies are required by the UN Charter to play an important role in the realization of human rights, UNICEF and other UN agencies must advocate for change when national policies and practices, or the policies and practices of bodies other than the State, undermine the realization of rights. In the case of CRC, the special mention of UNICEF in the implementation articles places a further distinct responsibility on the organization vis-a-vis this Convention.

The World Conference on Human Rights (Vienna, 1993) has recalled in the Preamble of its Declaration, "The determination of the United Nations to establish conditions under which justice and respect for obligations arising from treaties and other sources of international law can be maintained". States Parties are accountable before the international community and in this spirit they have to submit to the Committee on the Rights of the Child, and the CEDAW Committee, through the Secretary General of the United Nations, regular reports on the measures they have adopted to realize the rights of children and women.

Civil society organizations concerned with human development and the realization of human rights also play a legitimate role in ensuring that established human rights principles guide both the specific actions of the State and the overall aims of national development. Such organizations are important actors in helping to create and strengthen the culture of rights within communities and countries.

2. Characteristics of CRC and CEDAW as Human Rights Treaties

a) Universality

Article 1 of the Universal Declaration of Human Rights states "All human beings are born free and equal in dignity and rights." This principle is the foundation of all human rights treaties. In the country-level work of UN agencies the application of this principle, therefore, means that country programmes of cooperation need to identify issues of exclusion and injustice as central concerns in the dialogue with national partners.

While the well-being of all children is of importance to UNICEF, the organization gives priority in its actions to the most disadvantaged children in the countries in greatest need. We must, therefore, assess the immediate needs of the most disadvantaged children and analyze the underlying causes of their exclusion, always mindful of what is most likely to be in children's best interest in a local context.

b) Indivisibility and Interdependence of Rights

One of the basic principles of international human rights law is the indivisibility and interdependence of rights. As the Committee on the Rights of the Child has pointed out, "All rights are indivisible and interrelated, each and all of them being inherent to the human dignity of the child. The implementation of each right set forth in the Convention should therefore take into account the implementation of and respect for, many other rights of the child."

This principle has an important programmatic implication:

- The indivisibility and interdependence of rights means that all rights have equal status as rights and it is necessary to look holistically at the full range of human needs: physical, psychological, developmental, and spiritual. The principle of indivisibility, however, does not prevent UNICEF from deciding with national partners on priorities for action, based on a combination of situation assessment, problem analysis, and available resources.

For the CRC, the Committee on the Rights of the Child has grouped the issues addressed by the articles of this Convention in the most useful manner for assessing the situation of children:

- Freedom and civil society (articles 7, 8, 13, 14, 15, 16, 37)
- Family environment (articles 5, 9, 10, 11, 18, 19, 20, 21, 25)
- Health and welfare (articles 6, 18, 23, 27)
- Education, leisure and cultural activities (articles 28, 29, 30, 31)
- Special measures of protection (articles 22, 30, 32, 33, 34, 35, 37, 38, 39, 40).

3. Four Foundation Principles of the CRC

The CRC Committee has also identified four CRC articles as "foundation" principles that underpin all other articles.

a) Non-discrimination (article 2)

The principle of non discrimination (on the basis of race, colour, gender, language, opinion, origin, disability, birth or any other characteristic) means that all children have the same right to develop their potential. Analytical categories can be discerned, such as gender, that will permit identification of discrimination. In programming, the disaggregation of indicators - at least by age group, ethnic group, geographic area and gender - are essential for making programming decisions that are rights sensitive.

b) Best Interests of the Child (article 3)

The best interest of the child is to be "a primary consideration" in all actions regarding children. The use of the article "*a*" rather than "*the*" is significant. Best interest is identified as "the" primary consideration only in relation to adoption. The use of the article "a" implies that the best interests of the child are relative to the best interests of others in the society and that the child's autonomy rights need to be balanced with a child's need for protection. This principle cannot be used to justify actions that would contradict other provisions of the CRC.

Saying that the best interest of the child is a primary consideration also means that certain factors should be taken into consideration in determining outcomes and guarantees, and that other interests such as those of the State, parents or other, will not automatically prevail. This principle also emphasizes the right of each child to express his or her views in all matters related to his or her life, in accordance with age and maturity. The CRC encourages appropriate participation of children in making decisions. CEDAW has a similar principle with an even a higher standard: the principle of "paramount consideration".

The principle of the "best interests of the child" is applicable in three main ways:

- First, it supports a child-centred approach. When read in conjunction with the other articles of the CRC, the "best interests" principle is meant to guide the interpretation in a particular direction.
- Second, serving as a mediating principle, it can help to resolve confusion between different rights.
- Third, the "best interests principle" provides a basis for evaluating the laws and practices of States Parties with regard to the protection provided to children. In this connection, UNICEF and others have invoked the "best interests" principle to argue that basic services for children and women must be protected at all times, including during wars or periods of structural adjustment and other economic reforms.

A major challenge is to determine what constitutes the 'best interests' in a particular socio-cultural context. When traditional societies are confronted with new concepts, the resulting

upheaval in value systems may not benefit children. Clearly, rights-based programming is also about values, to ensure that society values women and children, protects their rights and responds positively to their entitlements. As many societies, therefore, go through periods of political, economic and cultural transition, CRC and CEDAW should serve as touchstones and guides for defining the desirable direction that change should take.

c) Right to Life, Survival and Development (article 6)

Children have a right to life, survival and development. In this regard, it is crucial to take into account the issue of accessibility, which seeks to guarantee the right to basic services, equity of opportunity for all individuals to achieve their full development. This is based on, among other things, distributive justice, which implies the adoption of positive measures that ensure that the policies truly cover all sectors.

d) Views of the Child (article 12)

The views and voice of children must be heard and respected. This principle is closely linked to the best interests of the child.

4. Characteristics of the CRC as a Specific Child Rights Instrument

a) Child as a Subject of Rights

As rights holders, children have active roles to play in the enjoyment of their rights and in helping to define how the rights are to be fulfilled. The Convention thus clearly recognizes the fact that rights are not just "provided for" but also rely on the participation of those who are concerned.

For UNICEF, this means that children's opinions are important and their views and voices must be heard and taken into account concerning the realization of their rights. They should also participate in decision-making processes that affect them, in ways that are appropriate for their age. There are special implications in this regard for programmes in education, juvenile justice, social welfare, adoption, HIV/AIDS prevention and reproductive health.

b) Role of Parents, Family and Community - Evolving Capacities of the Child

The CRC concretely recognises the role, rights and duties of parents, or the "extended family or community" as the primary caregivers and protectors of children. This recognition involves the obligation both to support the family in these roles, and to step in when the family is unable, or fails, to act in the best interests of children.

The Convention also recognizes the role of the family in providing -- "in a manner consistent with the evolving capacities of the child" -- appropriate direction and guidance for the child in the exercise of the rights recognized in the Convention (art. 5). Both the role of the parents and family and the child's status as the subject of rights are forcefully underpinned by this provision. This principle means that parents should guide children in the exercise of their rights but that a child, as he or she grows and matures, should become more directly responsible for decisions on how to exercise rights.

An important programming implication of this is that UNICEF should assist governments in supporting families that are unable to care for their children and monitor the outcomes. UNICEF programmes should also be designed to inform/empower families - as the primary care givers - to provide better care. Account also needs to be taken of children's evolving capacities during adolescence, when access to information, for example on reproductive health, emerges as a vital issue. The phrase "the evolving capacities" restates and emphasizes the importance of the participation of children and adolescents in decisions concerning their own life.

5. Implementation of the CRC

a) Realism of the CRC: Children First, doing the maximum with existing resources.

Article 4 of the CRC says: "States Parties shall undertake all appropriate legislative, administrative, and other measures for the implementation of the rights recognized in the present Convention. With regard to economic, social and cultural rights, States Parties shall undertake such measures to the maximum extent of their available resources and, where needed, within the framework of international co-operation." This article means that the State has a duty to act in the best interest of children when allocating the resources available in the society, no matter how small the amounts. The State must also demonstrate good faith by being able to show that actions have been or are being taken to give children the priority they deserve.

While governments have the principal responsibility, this duty covers both governmental and other resources, human and financial - such as public and welfare institutions, including at sub-national level. Civil society organizations can also be very efficient in mobilizing resources at all levels of society.

Thus, States Parties are responsible for moving forward to implement the provisions of the Convention with whatever resources they possess and, as necessary, must mobilize support from outside. The challenge is, therefore, usually to ensure that the term "available resources" is viewed as "total available resources", and not just those currently allocated to the social sector. It is also necessary to demonstrate that even with existing resources, efforts are being made, and that there is a plan to mobilize additional resources at both national and sub-national levels.

b) International Cooperation (articles 4 and 45)

It is rare that a human rights treaty explicitly includes the international community among those responsible for implementing its provisions, yet the CRC stresses the role of the international community in supporting implementation. By including the phrase "where needed, within the framework of international co-operation" in the article concerning available resources, the CRC clearly links the responsibilities of States Parties with those of international development partners. In addition, a number of articles call for international cooperation to support implementation, for example: the child's rights to health (article 24), to special care when disabled (article 23), and education (article 28).

Furthermore, UNICEF is specifically mentioned several times. "The specialized agencies, UNICEF and other United Nations organs shall be entitled to be represented at the consideration of the implementation of such provisions of the present Convention as fall within the scope of their mandate". In addition, "the Committee may invite specialized agencies, UNICEF and other competent bodies as it may consider appropriate to provide expert advice... and to submit reports on the implementation of the Convention in areas falling within the scope of their activities."

c) Setting Priorities - a Country Level Focus

As noted above, both the CRC and CEDAW are based on principles of universality and indivisibility, which make it clear there is no inherent hierarchy of rights and that all rights are equal as rights. The Conventions do, however, often contain phrases such as "the appropriate resources", "will take all appropriate measures," and specifically in the CRC: "Taking due account of the importance of the traditions and cultural values of each people."

These phrases recognize that societies differ and there is need to adapt implementation strategies to country realities. It is the recognized responsibility of States to determine where to begin and what is most urgent, always in a manner that is true to the spirit of the treaty under consideration, and in the case of the CRC, in a manner true to the best interests of the child. Under no circumstances, however, should a State violate the rights of children or women or allow them to be violated, regardless of a lack of resources. All States are required to take direct action to protect human rights in such circumstances and a lack of resources is never an excuse for not taking such action.

It also follows that organizations working to implement and fulfil human rights also need to prioritize according to their own resource availability, their expertise and the knowledge of what others are doing in similar spheres of activity.

6. Relationship between CRC and CEDAW

CEDAW was adopted by the UN General Assembly in 1979 and entered into force in 1981.

The CRC was adopted in 1989 and entered into force in 1990. CEDAW has been ratified by 166 countries, and the CRC by 191 countries. These two treaties are the most widely endorsed human rights treaties in the history of the United Nations. Both are based on the principles of human rights as articulated in the International Covenants, and both reaffirm human rights as universal, indivisible and interdependent.

CEDAW essentially builds on the existing international human rights machinery but points out that they are not sufficient to guarantee the full enjoyment and exercise of women's human rights. In its preamble, it elaborates that discrimination violates the principles of equality and is an obstacle to the realization of women's political, economic, social and cultural rights . The thirty operative articles of CEDAW together with the General Recommendations of the CEDAW Committee deal with the obligations of States Parties in enacting appropriate legal, administrative, and other measures to ensure the comprehensive prohibition and elimination of discrimination against women. Its scope extends beyond public life to include discrimination that occurs in private life, and in the family. CEDAW applies to females of all ages since no specific age-group is specified. For UNICEF purposes, it is important in our focus on girls.

The Committee on the Rights of the Child and the Committee on the Elimination of All Forms of Discrimination Against Women have emphasized the complementary and mutually reinforcing nature of CRC and CEDAW. Together, they form an essential framework for a forward-looking strategy to promote and protect the fundamental rights of girls and women, and decisively eradicate inequality and discrimination.

The mutually reinforcing nature of the two Conventions protect the rights of girls and women throughout the life cycle, beyond the specific articles in each text. To illustrate how inter-related women's rights and children's rights are, for example, is the well-established medical fact that a significant percentage of infant deaths -- particularly those that occur within the first 28 days after birth -- are attributable to the poor health and nutrition of the mother during pregnancy and in the immediate post-partum period. In some cases, neglect in the care of the female infant due to cultural attitudes of son-preference results in higher mortality among female infants. Also well-documented is the strong positive correlation between women's literacy and girls' educational levels. Women who have experienced the benefits of education themselves are in a better position to take decisions on the education of their children, especially of their daughters.

Equally important is the centrality of women's human rights to the overall achievement of human rights. This needs to be understood from the perspective of women's individual and collective rights and the implications women's inequality has for the achievement of human development goals, beyond those associated with women's reproductive and caring functions. Women and girls constitute just over 50 per cent of the populations of most countries and if their political and social participation is disproportionately low or altogether lacking it means that half the population is not represented.

Since the mid-1980s, the UNICEF Executive Board has approved policies on women in development and gender equality, and has endorsed women's rights and the understanding that CRC and CEDAW jointly provide the umbrella of rights and norms for gender-responsive programme goals and strategies.

The World Conference on Human Rights held in Vienna (1993) declared the human rights of women and girls as "an inalienable, integral and indivisible part of the universal human rights". The Platform for Action of the Fourth World Conference on Women in Beijing (1995) reaffirmed this and outlined specific objectives and strategies for the implementation of these rights.

In many countries, the application of both CRC and CEDAW has directed attention to the situation of girls and women. This has led to identification of the overlapping issues and calls for specific actions for elimination of discrimination and reduction of gender-based disparities. Some examples include:

- Special policy measures for girls' education to remove obstacles of discrimination. In some cases, girls' education and vocational training have been linked to employment opportunities for women.

- Legal reform for guaranteeing a child's right to a nationality and women's right to inherit property has been critical to the care and development of children, particularly in war affected areas.

- The rights to information on sexual and reproductive health issues will ensure equal access of both adolescent boys and girls to such information.

- Harmful cultural practices such as female genital mutilation is recognized as a violation of girls' rights and not only as a health hazard.

- Recognition of sexual exploitation and gender-based violence against girls as violations of rights, leading to legal measures for punishing the perpetrators and for protecting vulnerable groups. In some places, new programmes of family support services provide incentives for education and employment.

- Child care facilities for protecting the best interests of the child and providing support to women's economic participation.

- Collection and analysis of gender- and age-desegregated information for monitoring the implementation of CRC and CEDAW.

Part II
Programme Implications and Suggested Methodology

While there are many ways in which a human rights perspective will change the way we as an organization do things, our strength will remain our ability to identify and respond in practical, country-specific ways to the situations that rob children of their chance to realize their full human potential. The ability to influence, shape and help implement policies and programmes of action for children, to stimulate public dialogue on issues that affect the quality of children's lives and to monitor and publicize progress for children will continue to be UNICEF's main business. A rights approach to programming builds on these strengths.

A. General Programme Implications

1. Foundation of Our Work

A State's ratification of a human rights treaty means that the State recognizes its obligations to provide for and to protect the rights of the people within its jurisdiction. The State also recognizes a person's right to participate fully and equitably in the civil, political, economic, social and cultural life of the State. In relation to UNICEF, the CRC provides a legal foundation for the ethical and moral principles that have always guided UNICEF's work for children.

As a member of the United Nations Family, UNICEF also has an obligation to help countries honour their commitments to human rights. UNICEF is identified as having a special role in relation to CRC and must therefore ensure that country programmes of cooperation and global activities specifically support the implementation of the CRC.

2. Links Between Monitoring and Reporting Processes for Conventions and UNICEF Efforts to Assess and Analyze the Situation of Children, Women and Families

Most human rights conventions and treaties have established follow-up mechanisms that require States to monitor and periodically report to a Committee on compliance with, and on progress and difficulties encountered in implementing, such treaties and conventions. UNICEF must now find effective ways through the programming process to link its situation assessment and analysis in programming with the State's process for reporting on its treaty obligations to children and women. This means that the UNICEF assessment and analysis of children's and women's situation must also be guided by the vision for children and women's rights that the CRC and CEDAW have established.

An important new dimension of using the CRC as a framework for developing action for children is the recognition that individuals up to age 18 are children. The CRC is, however, mindful of changes in needs and the evolution of capacity from early childhood through puberty and adolescence. The UNICEF situation assessment must examine the degree to which national laws and, where applicable, customary laws do or do not provide children and women with legal safeguards. The analysis must examine how legal frameworks are being developed and applied in a country with respect to children and women. In other words, UNICEF must know and understand how legislation, public policy and national institutions impact on the realization of children's and women's rights.

3. Building Public and Private Partnerships

In the cooperating partnership that has always been at the heart of UNICEF's programme approach, Governments have been our principal partners. However, this cooperation becomes even more vibrant and productive when the groups and organizations of civil society that share common values join the partnership for good governance, which is an essential condition for the protection of children's and women's rights.

For this reason, the alliance with civil society organizations is not an alternative to working with governments, but is a cornerstone of the effective private/public collaboration essential to CRC and CEDAW implementation. The well-being of women and children is heavily determined by what happens in the private spheres of their lives; within their families, households and communities. With regard to children, the ability of parents and to a great extent their mothers, to provide for and to protect them is the key determinant of their survival and optimal development. A rights approach requires UNICEF to find effective ways of influencing outcomes for children at the family and community level, as well as through institutional and administrative arrangements of the State, at local and national levels.

The role of many groups whose actions impact directly or indirectly on children must be considered in the assessment and analysis process. This is necessary in order to decide who needs to take what action, and in monitoring and evaluating whether the action has in fact helped to make the lives of children and women significantly better. Programmes that permit a variety of actors to play a role in addition to the government increase the opportunity to generate positive and lasting social change.

Even before the importance of CRC and CEDAW was widely apparent, the best UNICEF-supported programmes always gave high priority to advocacy for people-centred development and broad community involvement in decision-making, as essential to the achievement of specific programme objectives. In areas where UNICEF has helped strengthen real dialogue between communities and government, and where programmes have placed emphasis on community, household and individual participation for improved decision-making, the ground is already fertile for introducing the principles of CRC and CEDAW as guiding frameworks for action.

4. Influencing Public Policy and Policy Formulation

UNICEF has an increasingly vital role in working with national partners to improve public policy development to realize the rights of children and women. As part of this effort, explicit attention must be paid to the following:

i) the links between a given policy and the realization of particular rights in the CRC and CEDAW;

ii) the degree to which a given policy is consistent with the general human rights principles, including the best interests of the child, non-discrimination, participation and survival and development;

iii) whether the policy provides a sound basis for the "progressive realization" of rights;

iv) whether the policy making process allows for effective participation of all the holders of rights, including children and women themselves. In this way, UNICEF engages in a systematic effort to leverage the decisions and resources of other development partners in ways that advance children's and women's rights.

CRC and CEDAW provide States with the framework for determining the substantive content of children's and women's rights. As the CRC identifies States Parties' obligations with regard to children, public policy directions can be linked explicitly to the commitments that a State assumes through its ratification. UNICEF is uniquely placed to support local and national governmental bodies to develop the policies and programmes of action that are informed by, and consistent with, the principles of CRC.

A programming approach that is guided by CRC and CEDAW should explicitly seek to create conditions that allow women and children to participate more fully in community life and in the development of policies that affect them. Such a focus also helps to create a climate for the broader acceptance of human rights principles and facilitates the orientation of national policy to build a value system that recognizes human dignity, values tolerance and acknowledges the rights of people to be partners in the development of their communities.

A rights perspective in programming requires that UNICEF country teams have good skills in public policy analysis and formulation, and a keen sense of the political processes that shape major social changes in a country. UNICEF must promote the universally accepted standards of CRC and CEDAW and, as an advocate for children, must use its voice and moral authority effectively and appropriately. A rights perspective also implies the need to create alliances with other organizations, especially those whose mandates and roles complement ours. Such alliances are particularly important in volatile situations where the human rights of women and children are especially threatened.

5. Influencing Budgets and the Use of Resources

In order to fulfil their commitments to the principles of the CRC, States need to consider how to maximize the use of available resources for children. In many countries this could involve significant shifts in the allocation of government resources. It also implies that resources beyond public finance need to be seen as potentially "available resources" for children: For example, institutional and privately held resources may need to be tapped.

In assessing the situation of children, both UNICEF and the UN country team should examine the extent to which national resources, as defined above, are used in a given country to advance the human development agenda. In particular, this means determining the level and effectiveness of the resources devoted to children and women, and examining on this basis whether the standard of "maximum extent of available resources" is met, making use of tools like the 20/20 initiative.

6. Much More Intersectoral Work

A rights approach will not fundamentally change all UNICEF's current programme activity. The social and economic rights of children and women must be met through the provision of essential services such as health, education, access to adequate food and to care. However, a rights perspective requires that attention be paid also to the civil and political dimensions of meeting basic needs. Inequity and discrimination which are both direct and underlying causes of children's and women's deprivation must be addressed as well.

A rights approach also means that we work in ways that situate short-term programme objectives in the context of longer term goals that seek to fundamentally change deeply rooted conditions that perpetually undermine the full implementation of CRC and CEDAW. Put another way, UNICEF programmes need to find the right balance between activities that respond to the urgent survival and protection needs of children, while contributing to the social, economic and legal transformation that will guarantee sustained protection and fulfilment of children's rights.

Priority attention must always be paid to ensuring that UNICEF programme activities help lead to greater cohesion and integration in a community or society, especially for those most affected by discrimination based on gender, ethnic origin or social class. UNICEF must also be able to demonstrate that programmes of cooperation contribute in observable ways to making the participation of women and children possible, especially in family and community activities that directly influence their well being.

Children's survival and their fullest possible development depend on the convergence of several essential interventions and on the quality of care and protection offered by their family. UNICEF's cooperation, therefore, should be situated within a broad strategy that draws on the contribution of many key parties. UNICEF also has an obligation to help facilitate the development of such partnerships and to constantly monitor whether its work

and that of others are contributing holistically to the realization of children's rights.

B. Specific Programme Implications and Suggested Methodology

The UNICEF programming process is based on the Triple-A model of *assessment, analysis and action,* an iterative process of learning and doing, with no marked beginning or end. In recent years, the need has emerged to distinguish more clearly between the *assessment* phase of the Triple-A process, and the analysis process.

In the *assessment* phase, undertaken jointly with national and international cooperation partners, the condition of children and their families should be broadly examined. The analysis phase, reflecting UNICEF's unique perspective on the situation, should explore the various levels of causality of identified problems, and determine the role played by various actors.

A rights perspective requires us to enhance the process of assessment and analysis through a full understanding of the legal framework of a country, and the factors that create and perpetuate discrimination and social exclusion and hinder many children from realizing their potential. A rights perspective, therefore, helps us to more fully understand how law, social norms, traditional practices and institutional responses positively or negatively affect children and women.

While the situation assessment should be a broad examination of how children and women fare in relation to the full range of rights addressed by CRC and CEDAW, the analysis should be the basis for determining the country programme objectives and strategy. It will be important to continue to distinguish between the problems UNICEF will address directly through service delivery and capacity building strategies; those problems it will not address and why; and those it will deal with either directly or indirectly through monitoring and advocacy. In all aspects of strategy development, partnerships with other actors are critically important. The following section provides guidance and suggests methods for programming effectively on the basis of the CRC and CEDAW.

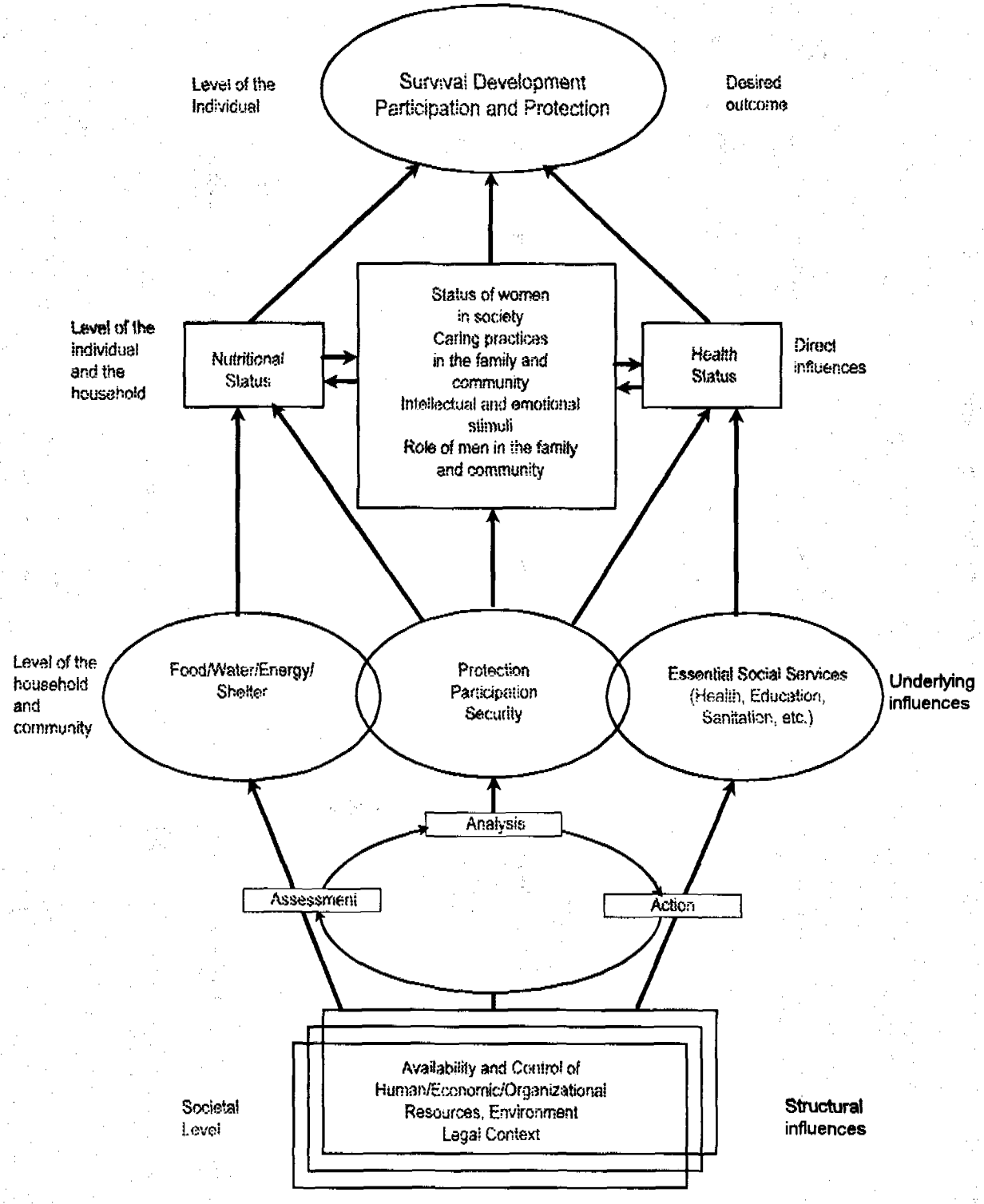
1. Situation Assessment Through Human Rights Lens

A rights-based approach changes the way most of us think about development. In the past we have used a conceptual framework to provide a common reference during the situation analysis (assessment and analysis) stage of our programme development. A conceptual framework helps to identify what is important and what are the key problems in a specific country context. It cannot be all inclusive nor it is a basis for prioritizing action.

Country offices have usually developed their own framework of causality. Some have utilized the initial work of UNICEF in Tanzania, later promoted as part of the UNICEF Strategy for Improved Nutrition. This "nutrition" framework, particularly in its later and somewhat

broader versions, has proven to be a good basis for understanding the factors most likely to affect the situation of women and children. In addressing gender disparities, country offices have also used the Women's Equality and Empowerment Framework (WEEF) in the formulation of objectives and strategies.

Conceptual Framework for Assessing and Analysing the Situation of Children and Women from a Rights Perspective



a) The Need for Rights Sensitive Indicators

Choosing indicators that will give accurate readings on a range of children's and women's rights concerns is demanding. Some indicators, of course, better yield the quantitative and qualitative data that are essential to monitor progress from a rights perspective.

The clusters of principles that the Committee on the Rights of the Child has proposed for the CRC are helpful in identifying indicators, especially since the clusters are the same ones that Governments use in monitoring and reporting on their implementation of CRC. But this approach also has disadvantages since the clusters do not explicitly address a number of issues that are also important to UNICEF, including, for example, certain principles of CEDAW, some issues addressed by global conferences such as ICPD and the impact of environmental factors on children.

In this regard, it is also essential to remember that child rights are not limited to children=s special protection rights, or in UNICEF terms, to the rights of those children in especially difficult circumstances. In deciding on rights sensitive indicators, this is important to remember since we have an obligation to monitor and assess children's equitable access to their full range of rights, including health care, quality basic education, adequate care and nutrition, safe water and sanitation.

Country programmes of cooperation should also assess the degree to which all members of society enjoy their participation rights. If we continue to restrict our understanding of rights to the abuse, neglect or exploitation of children, we will continue to miss the opportunity to use CRC and CEDAW effectively in the full range of our programmatic activities.

The Committee on the Rights of the Child has suggested that States use the following clustering in monitoring CRC implementation and in reporting to the Committee on progress:

* General principles:
  - Nondiscrimination (including equity and gender equality)
  - Participation
  - Best interests of the child
  - Survival and development
* Civil rights and freedoms (including birth registration)
* Family environment and alternative care
* Health, nutrition and welfare (including disability)
* Education, leisure and cultural activities
* Special protection measures
* General Measures of Implementation
  - Existence of legislation on child rights/women's rights
  - Existence of national institutions to promote and protect children's and women's rights (Ombudsperson, National Commissions, Parliamentary Commissions)

- Coordinating and/or monitoring mechanisms at national level and local
- Resource allocation for children and women in the national/regional/local budget and as part of Overseas Development Assistance
- How NGOs and other actors of the civil society participate in the national debate on children
- Existence of associations that enable women and children to promote their best interests.

b) Participation and Empowerment

The degree to which participation rights are seriously assessed will influence the extent to which a country programme will reflect a rights perspective. Determining the questions to ask and collecting information about the extent to which children's rights are respected should involve children. Under the terms of Article 12, children have the right to be consulted about their own perception of their situation and, depending on their understanding and their maturity. They also have the right to play a significant role in shaping the response to their problems, in close cooperation with families, communities, NGOs and other interested parties. This article complements the accepted principle that women must be involved in the assessment of their own situation at all stages.

c) Links to the Monitoring and Reporting Process of CRC and CEDAW Committees.

In assessing the country situation of children and women, UNICEF offices should be guided by the List of Issues, Concluding Observations and Summary Records of the Committees for CRC and CEDAW. The concerns and specific problems identified in these documents by these Committees might point to the need for further study on specific issues within the mandate of UNICEF. Such Observations also highlight issues and concerns which in the view of the Committees require attention and may warrant a UNICEF programmatic response.

As requested, UNICEF provides the Committees with relevant information when they are preparing to review States' reports. The CRC Committee has adopted an approach of constructive dialogue with States and this Committee relies heavily on UNICEF to help them understand the situation and context of children when country reports are being reviewed.

2. Problem Analysis

a) Suggested Analysis Methodology in Three Steps

The overt manifestation of a problem is usually only the tip of the iceberg, signalling the problem's existence, but not its cause. The process of problem analysis is not done merely to satisfy an institutional requirement, but it is, instead, the very essence of programme strategy

development and a critical element of the programme itself.

Just as a rights perspective broadens the scope of assessment, it also influences the scope of problem analysis. From a rights perspective, problem analysis must address the economic, social and cultural rights of children and women, as well as their political and civil rights.

Step 1: Causality Analysis - Different Kinds and Levels of Causes

The problems identified in a situation assessment have immediate, underlying and structural causes, which are interconnected and which together impact negatively on vulnerable children and women in various ways. The analysis stage of our work should help us to understand these levels of causes and the linkages between various problems. The situation analysis, therefore, makes it possible to give relative weight to various problems, to understand how their interaction affects communities and individuals and to arrive at a consensus on the causes and possible solutions. An explicit conceptual framework facilitates this process and for this reason it should show the possible immediate, underlying and structural causes of problems, and the relationships between them.

As we go through the various levels of causes, we will often discover that many problems have certain common roots. These could be discrimination, gender bias, unsafe environments or chronic poverty. The identification of the root causes of problems is very important because the type of strategy that might be pursued at the structural level should also be influenced by our understanding of how these multiple negative factors impact on children and women in different ways. Programme objectives can then be clearly defined and action can be planned and implemented in a multi-disciplinary manner, rather than in rigidly sectoral ways. Although integrated programmes may be more complex, when effectively planned and managed they address a broad range of problems and produce more sustainable results.

Step 2: Role Analysis /Pattern Analysis

There are many relationships and roles that exist among various actors and institutions at community, district or country level which are essential for the realization of rights. With regard to children, many individuals and institutions have specific obligations to protect and provide for them. In CRC terms, these groups have obligations towards the child who the CRC has recognized as the subject or holder of rights. In every society, there is a discernible pattern of relationships between children and those who have obligations towards them, and this pattern of relationships needs to be studied and understood. In the analysis of problem causes, the problems identified will most often constitute violations of children's rights and the analysis needs to guide our understanding of why and how various individuals and institutions have failed in their duties to children.

With regard to children, parents normally have the first line of responsibility to provide for a child's basic needs, to protect the child from harm and to create a family environment that is conducive to the child's maximal development. Beyond a child's family, the immediate

community is usually the source of basic services, and the place where schooling and wider social interaction takes place. Beyond the community, regional and national bodies have the responsibility to create the broad normative and institutional contexts for the enjoyment of children's rights. UNICEF and the agencies of the UN system have the responsibility to support countries' efforts to implement their treaty obligations, and when appropriate to remind States Parties of such obligations. UNICEF's programmes of cooperation in this context are part of the international community's response to the realization of children's and women's rights.

The situation analysis should not only focus on problems but should also reflect areas where progress has been made and where gains for children's and women's rights are manifest. In relation to positive developments, UNICEF should promote ways to continually monitor progress.

Step 3: Resource Analysis - Availability and Control of Resources

Linked very closely to the analysis of the structural causes of a problem and to the analysis of roles to be played with respect to the realization of rights, is the issue of the availability and control of resources at all levels of society.

Resources are key in determining both short-term and long-term development possibilities. Problems and their causes are often directly linked to how resources are allocated and who controls them. Therefore, the country programme of cooperation should assess the constraints that resources pose to the achievement of children's and women's rights. This assessment needs to consider not just levels of wealth or poverty but also the decision-making processes that allocate resources at national, community and household levels.

Resources, both existing and potential, can be distinguished as human, economic and organizational. Resources can also be either assets (savings) or flows (income). Human resources include knowledge, skills, time, self-confidence and the will to take action. Economic resources include the means of production, such as land and water, credit and income. Organizational resources include the extended family, kinship groups, civil society organizations, government organizations and other formal and non-formal institutions.

In many countries, more progress for children is possible within the bounds of existing resources if decision-making on the control and use of those resources can be altered. In the analysis of resources, it is also important to distinguish inability from unwillingness. An important issue is the extent to which the current decentralization of social sector responsibility in many countries is adequately supported by fair distribution of national resources, and whether the resources allocated match the responsibility that has been assigned at a sub-national level.

b) Broad Participation in the Search for Solutions

A rights-based approach entails the involvement and participation of individuals and social groups. The involvement of children, women, communities and civil society organizations in situation assessment and analysis can be as important as the findings. Broad participation in the analysis of constraints and opportunities can lead to increased understanding by all members of society of what their roles are in realizing the rights of children and women. Also, when people examine problems together and agree on the causes, they are more likely to agree on the actions to resolve them.

This participation is now a right and it is crucial for accelerating change. Broad, effective partnerships for rights become particularly essential if long-term, sustained changes are to be achieved in values and in consciousness about children and women. This calls for an approach to partnership that is based on continuous strategic analysis, not just on short-term opportunities.

This process is also a key element for learning in UNICEF. Broad participation in the analysis of constraints to building a rights-based culture also means that UNICEF can learn important lessons that will help us improve our support to participatory activities. Developing a "listening culture" in UNICEF is important to becoming an effective partner.

c) Crucial Areas of Analysis

Analysis of Behaviours and Cultural Patterns

The situation analysis must look carefully at societal, behavioural and cultural patterns in order to understand these interactions. The change of societal values is a long term proposition and a strategic analysis of opportunities to set change in motion is important. We need, therefore, to understand better what factors influence current social values and behaviours concerning children and women and how these can be influenced over time. A specific programme objective should be to influence attitudes towards children and women so as to contribute to the development of a culture of respect for their rights.

Analysis of Prevailing Norms and Legal System

i. Legislation

The administrative and legal frameworks that govern the relations between women, children and the State are important determinants of rights. How schools and child care and welfare agencies function, the conditions in prison, the administration of justice, the behaviour of the police, health workers and others all have important consequences for children and women. National legislation and, increasingly, decentralized government structures also need to be looked at for their compliance with CRC and CEDAW. How existing standards influence the treatment of children and women, and whether there are mechanisms that enable them to claim their entitlements and rights, are pertinent issues for UNICEF. The organization can contribute to real empowerment by helping to improve the ways in which such institutions

operate. The importance of traditional law should also be considered since it may govern the lives of the majority in some countries.

ii) Tradition as a Factor of Resistance to Change

The legal systems of many countries are strongly protective of children's and women's rights, but these achievements may be negated or neutralized by traditional practices and local authorities. The law may be explicit about women's right to own land but traditional inheritance practices and banking procedures may both make it nearly impossible for women to actually benefit from these clearly established legal rights.

Traditional law can often be the dominant norm for the majority of a country's population. As part of the social tradition it is respected but it is not static and UNICEF should support traditions that favour children and women. A country's ratification of Conventions and adoption of compatible legislation is necessary but often not sufficient to make necessary changes occur so dialogue with those who adhere to traditional or customary law is necessary. Customs that are incompatible with the CRC and CEDAW must be identified and ways to change negative aspects addressed collectively.

iii) Tradition as a Factor of Change

It is important to recognize and understand that tradition can be an asset. Customs are often deeply respected and an important part of people's history. Customs and practices that are positive for children and women should be recognized and specifically promoted as important aspects of CRC and CEDAW implementation.

A related subject of analysis is social cohesion. Socio-political structures that create a strong sense of social cohesion can help to promote human rights and the recognition of basic needs. A rights approach to programming should identify, analyze and try to preserve those aspects of traditional society that advance social cohesion for the benefit of the child and the woman. It is also important to remember that some modern practices and attitudes have negative effects and our analysis may need to compare modern and traditional norms in ways that help to revive and protect positive traditional practices.

3. Formulation of the Country Programme

Determination of UNICEF's strategic role in a national or local context follows the situation assessment and analysis process. The results of the analysis should produce a strong indication of UNICEF's strategic role in a given context. Although human rights cannot be individually prioritized, actions to address specific problems may need to be ranked in order of priority. Based on its mission and mandate, UNICEF is required to give priority to those who are deprived in a society. They are usually the poor whose most basic needs are still unmet and whose civil and political rights are either openly violated or ignored. There are many ways to establish a hierarchy of needs, and decisions should be based on a rational assessment and analysis of the problem and the strategic actions that will lead to social transformation.

a) Suggested Methodology

Defining Different Strategies at Different Levels of Society

The next step is to identify the resource-relevant strategies and actions to be taken at each level of society, from household to national level, that will be the most efficient and effective in building the individual and institutional capacity to fulfil obligations to children and women.

UNICEF programmes will increasingly have to show what mix of the three fundamental programme strategies - advocacy, capacity-building and service delivery - is being pursued to address the immediate underlying and basic causes of problems. Obviously, the actions aimed at addressing basic or structural causes of problems will often require longer term strategies. This various obligations to respect, protect, facilitate and fulfil rights should be explicitly defined and broadly understood among all programme partners.

Comparative Advantages and Disadvantage

The choice of programme strategy also depends on two crucial, but often overlooked, considerations: the understanding of UNICEF's "core competencies" (absolute and largely fixed in the short-run but able to be modified, e.g., through the CPMP) and our "comparative advantages and disadvantages" (relative to existing or potential partners).

UNICEF needs to continue to learn to distinguish between *what it can do best, and what it should persuade others to do.* We may need to learn to be more selective in the range of our direct interventions and far more competent in influencing public policy, in developing partnerships and undertaking well-programmed advocacy. This kind of analysis should be based on critical self-examination of the strengths and weaknesses of our performance, systems and capabilities, and an understanding of the intentions and capabilities of other intervening organizations.

With this analysis, the country programming process will be able to develop a strategic view of how UNICEF cooperation can effectively assist a society to move in the directions indicated by CRC and CEDAW. The crucial issue is to ensure that the roles of others are complementary, since the range of children's and women's rights is too broad to be dealt with by any single actor working in isolation. Important points of reference in defining the programme strategy are the concluding observations of the CRC and CEDAW Committees.

Partners, Participation and Empowerment

From a human rights perspective, broad participation is both a means and an end. The CRC and CEDAW stress participation rights in particular, since traditionally women and children are those most marginalized and excluded from the processes of mainstream society.

Rights are not realized in the things "we do for others." For UNICEF, this concept will entail a shift away from an emphasis on social mobilization, away from creating a demand for goods, services and even rights to be granted or provided by "others." It will require instead that we engage communities and individuals in discussing what those services will include, how they will be organized and the role of the State and/or others in service delivery and follow-up.

From a human rights perspective, poor people must be recognized as the key actors in their own development rather than as the beneficiaries of commodities and services provided by others. This is the essence of empowerment and for this reason, empowerment is not a "strategy" per se, but a necessary aspect of all strategies. UNICEF needs to ensure that the programmes we support develop genuine modes of partnerships and participation, which include communities and local associations as full actors in their own development rather than as participants in projects which are planned and managed outside their sphere of influence.

Children's participation rights include their involvement in the social, cultural, political spheres of life. One of the more meaningful participatory roles of youth is in helping determine their "best interests". This is already happening in youth AIDS prevention programmes and increasingly in other programme areas. Participation is an end in itself, and we must help to develop programmes that have exactly this as the main objective.

The empowerment of children, their families and communities should certainly be an outcome of a rights-based programme approach. More than ever, country-level cooperation should emphasize the design of programmes that build strong communities and sustainable programme activity. Such an objective will probably require that country programme cooperation extends beyond community participation to community management of programmes and services, in partnership with NGOs, civil society organizations and local governance institutions. UNICEF cooperation in a number of countries is already focussed on building the capacities of local authorities and local governmental institutions, to better respond to increasing decentralization. Another emerging challenge for UNICEF cooperation is to help sub-national institutions to become better coordinators of child-centred and rights-enhancing programmes at community level.

UNICEF Programming Perspectives on Rights

UNICEF programmes of cooperation need to:

* Influence or convince governments and other actors to make the right choices, by avoiding actions and omissions that violate rights. All institutionalized forms of discrimination and the failure to enforce legislation, therefore, constitute serious failures on the part of a State;
* Directly support other actions to help realize the rights of children and women;
* Empower poor people and particularly children to claim their rights, and help families, guardians, care givers and all responsible groups and bodies to meet their obligations

to children and women.

Specific Implications for Advocacy

As noted earlier, a rights-based approach will entail a greater focus on advocacy to bring about changes in national and sub-national policies. Advocacy is neither an external-relations activity or an add-on to a sectoral intervention. It is a key programme component, based on accurate data regarding the rights situation in specific areas which is derived from systematic monitoring, and it forms a thread linking the various aspects of the entire programme.

As a key programme component, advocacy will demand new competencies. Staff may need to develop skills in public speaking, abilities to use the mass media, especially radio and television, effectively, and good presentation skills. The messages conveyed also must be clear.

UNICEF staff must play a crucial role in advocating for children's and women's rights in the context of the country programme and in influencing and contributing to national debates that shape public policy. This also relates to what national counterparts are prepared to say and do about children's and women's rights.

b) Ultimate Objective

The majority of children whose rights are seriously violated, ignored or only partially fulfilled are those who live in poverty. Their families, in general, are unable to enjoy their own rights or protect those of their children. A human rights approach to programming requires UNICEF to make the empowerment of poor families an explicit objective of our work, based on the recognition that poor people are potentially the key actors in their own development. Without the full engagement of the so called target population or beneficiaries, development will be elusive and human rights simply an aspiration.

C. Other Implications of a Human Rights Approach

1. Human rights programming and UN Reform

According to the UN Charter, human rights are about respecting, protecting and fulfilling the inherent dignity of the individual as well as promoting the ability of each individual to reach his or her full potential, in the context of equality, self-determination, peace and security. Along with the Charter, the collection of international human rights instruments constitute a clear and compelling development agenda both for individual countries and for the UN system.

Duly ratified human rights conventions constitute legal obligations for a country. For the UN

system, they define its ultimate purpose and rationale. In his "Programme for Reform" the Secretary-General acknowledges "that human rights are inherent to the promotion of peace, security, economic prosperity and social equity" and calls for the integration of human rights into all principal United Nations activities and programmes.

UNICEF, whose mission centres upon protecting the rights of children and women, is well-placed to bring a human rights focus to the UN reform process. To this end, we need to apply what we have learned about the implications of rights-based programming to the broader UN reform effort and particularly to the UNDAF process at the country level. UNICEF must work to ensure that human rights instruments -- especially the CRC and CEDAW -- are the essential reference and framework for programming. Among other things, this entails:

i) ensuring that the objectives and strategies of UN-supported programmes as outlined in the Country Strategy Note and/or the UNDAF document are informed by the general principles of human rights including the best interests of the child, non-discrimination, the right to participation and the right to life, survival and development;

ii) ensuring that the indicators which serve as the basis for the Common Country Assessment (CCA) are disaggregated by gender, age-group, physical location, ethnic group etc. in order to reveal disparities which could signal systematic patterns of discrimination and the need for special protection measures;

iii) ensuring that the CCA indicators provide a basis for capturing the rights to participation and protection, for which traditional (sectoral) indicators are insufficient;

iv) defining the scope and structure of the CCA in a way that facilitates an intersectoral analysis consistent with the indivisibility and interdependence of rights;

v) helping the other agencies of the UN system to recognize the central importance of human rights to their own programmes.

Adopting a human rights approach to the UNDAF process also requires recognizing and respecting the distinction between the legal obligations of countries stemming from their ratification of human rights instruments and those political commitments they have undertaken in the context of global conferences or summits. These two sets of commitments, although distinct, are mutually reinforcing.

Finally, UNICEF needs to use the UNDAF process to help governments translate their international obligations under the conventions and their commitments arising out of the world conferences into national priorities and programmes of action.

2. Advancing the human rights agenda with the International Financial Institutions (IFIs) - particularly the World Bank

In addition to the UN Reform process, UNICEF's growing collaboration with the IFIs -- especially the World Bank in the context of Sector Investment Programmes (SIPs) -- represents another strategic opportunity for UNICEF to advance the human rights approach to development. In this connection, it is useful to keep in mind the following recent developments within the Bank which augur well for stronger UNICEF-Bank collaboration in the pursuit of rights-based development.

First, as the President of the World Bank noted in his November 1997 meeting with the United Nations Development Group, there has been an important evolution in the Bank's approach to Sector Investment Programs linked to the Bank's overarching goal of poverty alleviation. Rigid definitions of what constitutes a "sector" are giving way to approaches that facilitate the integration of cross-cutting issues like gender discrimination, equity, participation. There is thus more "space" within the SIP policy dialogue for the systematic treatment of overarching issues like universality, non-discrimination, participation, best interests of the child, etc. This is particularly important for UNICEF because in many instances the SIP process is the main operational mechanism for UNICEF-Bank collaboration at the country level.

Second, there is a far-reaching process of decentralization under way within the Bank that involves a substantial devolution of decision-making authority to resident missions. This is illustrated by the greater role country directors are playing in the loan approval and implementation processes, particularly in terms of loans of up to $5million, which can now be approved within 60 days. This greater flexibility will make it easier for the Bank to collaborate with UN and other agencies on innovative pilot projects.

Third, there is the growing importance of the Country Assistance Strategy (CAS) which, in the context of Bank decentralization, is developed in substantial measure at the country level. As with the case of UNDAF, UNICEF must position itself to bring a human rights perspective to the policy dialogue and decisions surrounding the CAS.

Conclusion

UNICEF is exploring the implications of rights-based programming through its focus on CRC and CEDAW. Increasingly, this exploration will take into account the comparative advantage of the organization in the context of UNDAF which presents a range of strategic, conceptual and programmatic challenges. In place of a definitive conclusion, therefore, this paper ends by identifying several key issues integral to this ongoing debate.

First, in using human rights conventions as the foundation for development, the international community has to balance the wide scope of these instruments with the need to set clear and realistic programme objectives. What is required, therefore, are innovative strategies and interventions that will translate ethical and legal principles into practical programme activities with verifiable results.

Second, there is a need to explore different ways of conceptualizing rights which, at the same time, respects their indivisibility and interdependence. For example, organizing rights around the themes developed by the Committee on the Rights of the Child can help to provide a coherent and manageable structure, making them more understandable and "user-friendly" tools. While it is clear that rights-based development must be holistic and integrated, it is less evident how this can be operationalized in a context of limited resources, multiple actors, and growing demands.

Third, with the rights approach, the ultimate "results" of development efforts may be longer in coming and harder to measure and quantify. It will thus be necessary to re-examine and modify our traditional monitoring mechanisms - indicators, information system, etc. - while preserving efficiency and effectiveness.

Finally, the issue of how development should address those rights that are politically sensitive, and hence controversial, merits further discussion. As in other areas of international law, human rights raise questions about the limits and scope of national accountability. When a government ratifies an international human rights instrument, it commits itself as well as all actors in society - the media, NGOs, civic associations, schools, development partners, and others - to ensuring that those rights are recognized, respected and fulfilled. In this way, the rights approach to programming implies that national governments will expand the scope of participation to encompass society as a whole, assuming collective responsibility for both the fulfilment and monitoring of rights.

COUNTRY CASE STUDIES BY MAIN THEME

COUNTRY	TITLE	MAIN THEMES ADDRESSED			
		Integrated approaches	School Sanitation	Urban sanitation	Sanitation promotion
Bangladesh	*Communication and Social Mobilisation: Behavioural Development in Sanitation, Hygiene and Safe Water Use*	*	***		****
Brazil	*Garbage and Citizenship: An Administrative Urban Environment Experience with a Focus on Social Issues*			****	
Burkina Faso	*Hygiene and Sanitation Promotion: The Social Marketing Approach of the Saniya Project"*	**	*	***	****
China	*Environmental Sanitation and Hygiene Education*	***	**		****
Guatemala	*Urban Environmental Sanitation in Illegal Settlements*	**		****	
Honduras	*The Construction of Low-Cost Sewage Systems in Tegucigalpa: A Feasible Solution for the Urban Poor?*	**	**	****	***
India	*Sanitation and Hygiene: Moving Towards the 21st Century: The Rural Sanitary Mart*	***			****
Indonesia	*Jumat Berish 'Clean Friday' Movement*	****			
Iraq	*Environmental Sanitation*			****	
Mali	*Rural Water Supply, Hygiene Education and Sanitation Promotion*	****	**		*
Myanmar	*Making 'Sanitation for All by the Year 2000' a National Objective & Networking on WATSAN via WESNET*		**		****
Nigeria	*Sanitation Promotion*	***			****
Nigeria	*Urban Sanitation: Ibadan case study*			****	**

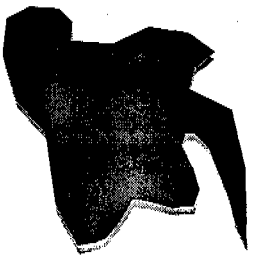
COUNTRY CASE STUDIES BY MAIN THEME

COUNTRY	TITLE	MAIN THEMES ADDRESSED			
		Integrated approaches	School Sanitation	Urban sanitation	Sanitation promotion
Nigeria	*WES in Schools*	**	****		
Tanzania	*Hare & the Tortoise: Sanitation and Hygiene Promotion*	****	**	*	
Uganda	*Sanitation Promotion*	**	**	*	****
Vietnam	*Intensive Sanitation Project*	**	**		****
Zambia	*Water, Sanitation and Hygiene Education Programme*	**		*	****
Zimbabwe	*Participatory Hygiene Education and Sanitation: Playing Games or Improving Health*	****	**		*

****	Main issue addressed
***	Issue addressed extensively
**	Issues addressed in brief
*	Some mention

Case Study:

Bangladesh



SANITATION PROMOTION

COMMUNICATION AND SOCIAL MOBILISATION: BEHAVIOURAL DEVELOPMENT IN SANITATION, HYGIENE AND SAFE WATER USE

Abstract

The case study outlines a new programmatic thrust on **behavioural development**, through a comprehensive **National Communication Strategy for Sanitation, Hygiene and Safe Water Use**, developed in 1998 for scaling up in 1999. The strategy uses synergistic media delivered through various channels to reach the family, particularly with **media for, by and with children**, to promote behavioural development for a healthier environment. The communication strategy will provide a 'software component' of hygiene education to the **School Water and Sanitation Programme**. Also, as part of the **Social Mobilisation Programme**, students and teachers will map and monitor latrine construction and hygienic behaviour in the school catchment area, complementing wider advocacy efforts using influential community members. Through the reduction of disparities, promoting gender balance in caring for the environment, and supporting a decentralised approach to planning, implementation and monitoring, there are programmatic grounds to expect a giant leap forward for a safer, cleaner environment in Bangladesh by 2001.

Key elements of the communication strategy include, establishing a campaign identity and personality and using a cartoon character to create a visual linkage between various campaign packages. The strategy includes: a **school package** with *inter alia* games, songs, comic books and child-to-child activities to carry messages to the home and community; a **media package** using TV 'infomercials', spots and 'break-bumpers', and radio spots; a **sani mart** to help build the marketing ability of local masons and use the service delivery point as a communication medium; **interpersonal communication** using health workers, religious leaders and NGOs; and **advocacy** materials targeting elected members of the lowest level of local government. Suggestions for **best practices** are based on experience in social marketing, i.e. sourcing out the campaign strategy, setting standard operating procedures, building capacity in-house and with government counterparts, and creating inter-sectoral linkages. **Programmatic lessons** are learned from the ongoing School Sanitation Project and the Social Mobilisation Project, i.e. more transparent and accountable approaches with greater participation and sense of community ownership; school children as an effective medium to prompt parents to build, use and clean sanitary latrines; involving NGOs and recognising the role of private latrine producers.

UNICEF Workshop on Environmental Sanitation and Hygiene, New York, June 10-13, 1998

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Case Study:

Brazil

URBAN SANITATION

GARBAGE AND CITIZENSHIP: AN ADMINISTRATIVE URBAN ENVIRONMENT EXPERIENCE WITH A FOCUS ON SOCIAL ISSUES

Abstract

Large numbers of families survive on garbage picking in rapidly growing urban and peri-urban areas, where sanitation is precarious. Problems of urban environmental degradation have devastating repercussions on people's lives, solid waste is one of these, and carries with it other problems that can lead to social conflict and economic exploitation. The perception of garbage dumps as inhuman and environmentally and socially unsustainable, is decisive in combating the phenomenon of children and adolescents working as garbage pickers. As such **the objectives** are: to remove children and adolescents from garbage dumps, making their return to school possible and improve living conditions; to organise garbage pickers into associations to stimulate activities generating jobs and income; to reduce the impact of careless discarding of trash; and to reduce infant, youth, and maternal mortality rates among families of garbage pickers. **Activities** include: technical support to seminars, producing materials, and information gathering. The aim is to create an administrative model for urban solid waste management, which takes into account the intersectoral nature of the problem (strengthening the understanding that education, health, social mobilisation and promotion are, among other things, fundamental), and considers the relationships between various actors involved, and is responsive to local needs. Issues such as the negative environmental and epidemiological impact related to the operation of the city's public sanitation system, are considered within this approach, so that engineering solutions are combined with other initiatives, addressing the comunity's relationship with its living environment.

Challenges include: limited comprehension of how to incorporate environmental aspects in solutions and create proposals for sustainable human development; a need for monitoring; the fact that promoting discussion between communities and decision-makers is not customary; and that in general the population has been apathetic due to a perceived lack of credibility of public power. **Lessons learned** include: that the project should be formulated with community participation (using the growing amount of community organisations), and that of municipal and state entities, so that it is understood to belong the city, not just city hall; the need for political support (as it can be considered as an innovative and controversial project). **Recommendations** include the need to establish instruments to facilitate the continuity and sustainability of projects.

UNICEF Workshop on Environmental Sanitation and Hygiene, New York, June 10-13, 1998

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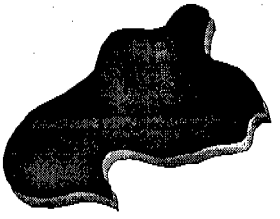
Case Study:



Burkina Faso

SANITATION PROMOTION

HYGIENE AND SANITATION PROMOTION: THE SOCIAL MARKETING APPROACH OF THE SANIYA PROJECT

Abstract

The Saniya "hygiene" Programme is a public health communication programme to promote specific hygiene practices among mothers and children. The **objectives** are, to reduce child intestinal infections through hygiene promotion and primary health care, develop a reference model, and evaluate the effectiveness of the public health communication approach for achieving hygiene behaviour changes. The programme's main **activities** include: installing neighborhood committees called *Responsables Saniya*, hygiene messages through health centers, radio and local forum theater, school sanitation promotion and latrine construction, action-research, advocacy of experiences, institutional adjustment and capacity building. Target **practices** are hand washing with soap and disposal of stools in potties and latrines. Primary target **audiences** are mothers of children under 3, maids and child caretakers and children of primary school age. **Factors considered to motivate behaviour change** are, for mothers/ caretakers, that hygiene is a social virtue, and for children, that hygiene helps to avoid diarrhoea. **Channels and materials of communication** include: neighbourhood hygiene commissions (female volunteers with visual reminder sheets), discussion in health centers and neighbourhoods (using a poster series), street theater (using a play outline), local radio (using microprogrammes and interviews) and primary schools (using a teaching pack, manual and posters).

Constraints encountered included, the time it took to identify and formalise new forms of collaboration between the key stakeholders/partners, the difficulty of adapting to UNICEF's administrative procedures, and the departure and change of personnel at different levels. **Lessons learned and best practices** included, recognising that in an urban setting it is difficult to maintain volunteer motivation, thus the role of the *Responsables Saniya* was reviewed and their integration with local health centers considered - as such their numbers will be reduced and a remuneration will be provided by the health center operating within the Bamako Initiative - they will liaise between the health center and the population and may assist in other health campaigns; recognising the efficacy of the tool kit elaborated by Curtis et al. (1997) of best practices for formative research for hygiene promotion; and finally learning that institutional clarity and division of responsibilities is extremely important for correct programme implementation.

UNICEF Workshop on Environmental Sanitation and Hygiene, New York, June 10-13, 1998

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Case Study:

China

SANITATION PROMOTION

ENVIRONMENTAL SANITATION AND HYGIENE EDUCATION

Abstract

Water supply, sanitation and hygiene education projects are implemented as '3 in 1' packages, or sanitation and hygiene is promoted in areas where safe water supply is already available. A **push** and **pull** strategy is used to gain government commitment at all levels and motivate communities to improve hygiene and sanitation and their living environment. The 'push' includes, advocacy meetings with officials, establishing regulations, research and development of affordable technology; and promotion of inter-sectoral linkages (i.e. with agriculture, education, women, poverty alleviation, and environment). The 'pull' uses social mobilization, communication and social marketing to create demand for latrines from communities, demonstrating affordable/ culturally acceptable latrines, using mass and inter-personal media to disseminate key messages, using primary schools as entry points for promoting community behavioural change, and strengthening participation, especially that of women. **Activities** include: advocacy meetings; capacity building, development of communication strategies, grassroots training, action research, latrine construction, school sanitation including support to "health and hygiene" education in all schools as per the government's regulation, and monitoring and evaluation. **Constraints** included, low demand at grassroots level and a lack of human resources and sector staff capacity.

Lessons learned and best practices include the importance of strong Government commitment at all levels and decentralization of project planning and implementation. Experience has also shown the need for: the right policy at the right time, the right low-cost technology, community resource generation (small subsidies have generated financial inputs from the community and motivated self realisation of the need for a clean living environment), linkages to economic, social and health benefits, the proper collaboration of all sectors and the use of existing structures at all levels, advocacy, social mobilization, community participation and local level monitoring, but also patience but persistence with respect to creating awareness on improved environmental sanitation and hygiene behavioural change, linkages to the government "Healthy City/Town" Campaign, and private sector involvement. **Challenges** include combatting insufficient maintenance and effective use of the latrines, strengthening hygiene education, and remedying the lack of communication strategies, insufficient use of mass media and monitoring.

UNICEF Workshop on Environental Sanitation and Hygiene, New York, June 10-13, 1998

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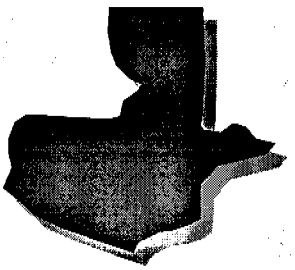
Case Study:

Guatemala



URBAN SANITATION

URBAN ENVIRONMENTAL SANITATION IN ILLEGAL SETTLEMENTS

Abstract

The case study describes the **Urban Environmental Sanitation Project** within the **Urban Basic Services Programme** in Guatemala City (1984-1997). The programme began a variety of community based initiatives (initially with NGOs, later with government agencies) for water, sanitation, drainage, housing improvement, health promotion, health-care and child development in illegal settlements. It included an innovative network of health promoters selected by their community, and new models for community based day-care centers. The Urban Environmental Sanitation Project **objective** was to improve sanitary conditions and water supply and sanitation services in precarious illegal settlements like El Mezquital, that lack the necessary infrastructure for a healthy environment. The main **activities** included: water supply, sanitation (latrines, drainage, sewer, garbage), hygiene education, reforestation (for sustainable wood supply and to avoid soil erosion), new woodburning stoves (to decrease wood demand and minimise indoor air pollution), and low-cost appropriate technology development. Water supply was considered by the community as the most critical need. A portion of water fees charged were left aside for local infrastructure, i.e. drainages and sewers and low-cost latrines. Volunteers received training in basic environmental sanitation, public taps and dry latrines were installed and existing latrines improved and sewage drains and cobblestone sidewalks built in alleyways.

Lessons learned include: that health and sanitation education and training helps communities, with horizontal linking of different initiatives within settlements; that community participation is vital; that fundraising for projects in peri-urban settlements is not easy; and that success lies not only in a participatory methodology but rather in its integrated nature, while taking into consideration that no single institution has resources to make significant inroads into problems of servicing settlements; nor do they have a single-issue approach which is adequate for addressing the complex reality faced by those living in low-income settlements. **Constraints** included: a lack of solid community organisation and participation, a rigid government structure which makes difficult for the community to handle their own solutions, a lack of easy access to financial support from international credit banks and intercommunity disagreements

UNICEF Workshop on Enviromental Sanitation and Hygiene, New York, June 10-13, 1998

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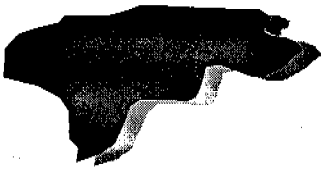
Case Study:



Honduras

URBAN SANITATION

THE CONSTRUCTION OF LOW-COST SEWERAGE SYSTEMS IN TEGUCIGALPA. A FEASIBLE SOLUTION FOR THE URBAN POOR?

Abstract

'The Tegucigalpa Model' peri-urban water programme built its reputation on **community participation, cost sharing and use of a rotating fund**. In 1995, it added a sanitation component. The case study describes the **low-cost technology** used and the **influence of sanitary solutions** on health, behaviour, costs and environment. Emphasis is given to constraints and points needing attention, in the context of the question of whether low-cost sewage systems are a feasible solution for the poor in Tegucigalpa.

Peri-urban communities quickly appreciate health benefits of infrastructure improvement and are motivated to use opportunities offered. Criteria are set to select eligible communities for the sewerage programme. Construction, administration, maintenance and operation of the sewage systems are organised through the Community Water Board. The community owns the system and takes decisions on technology, tariffs, maintenance, operation and speed of repayment of the cost-recovery Rotating Fund. In communities where sewage systems are constructed, there is a commitment to implement a hygiene education programme - *Healthy School and Home*. **Constraints** included: that even with education some misuse led to partial failure of the system; that for some the connection costs are too high; that huge investment needs to be made to expand the city's sewage collectors capacity before being able to use the proposed technology on a large scale; and that none of the wastewater discharged by the sewage systems receives treatment before being discharged into the river. Thus UNICEF will **focus on**: intensified education on rational use and maintenance of sewage systems; exploring means to stimulate connection to the system at low costs; exploring the viability of constructing small-scale off-site wastewater treatment facilities; and developing political awareness about the water and sanitation problems of the poor in Tegucigalpa. From a micro-financial and health perspective it seems that low-cost sewage systems are a feasible solution for the poor in Tegucigalpa. However, from an overall environmental impact and macro-financial perspective, a detailed impact and cost study is proposed. Thus **currently the answer to whether low-cost sewage systems are a feasible solution for Tegucigalpa's poor is 'possibly'.** Meanwhile, UNICEF will continue with small-scale implementation of low-cost sewerage and support research on larger scale solutions.

UNICEF Workshop on Environmental Sanitation and Hygiene, New York, June 10-13, 1998

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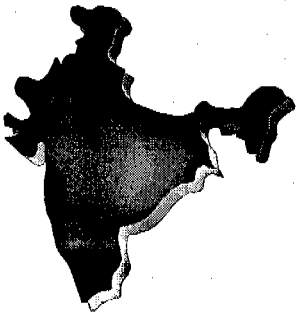
Case Study:

India



SANITATION PROMOTION

SANITATION AND HYGIENE: MOVING TOWARDS THE 21ST CENTURY
THE RURAL SANITATION PROGRAMME: RURAL SANITARY MARTS

Abstract

The rural sanitation programme evolved through experiences indicating that poor people can be motivated to construct toilets without subsidies, provided they are motivated. Responding to the need to cater to motivated households unable to construct toilets due to non-availability of information and materials, **Rural Sanitary Marts** (RSM) were established. RSM, conceived as commercial enterprises with social objectives, with other arrangements to accelerate sanitation coverage including production centres and credit mechanisms, supported by information, education and communication (IEC), are collectively known as the **Alternate Delivery System**. RSM (initially in Uttar Pradesh) represented a shift from a subsidised government programme to a privatised one. Offering a low subsidy component increased coverage, as the necessary IEC and technical back-up, and materials were provided. Thus reducing subsidies became popular. The aim was to: promote zero-subsidy, stimulate demand generation and awareness creation for sanitation and hygiene, and commercialise the provision of sanitary facilities to meet the requirements of rural and peri-urban areas, facilitating private initiative to accelerate coverage. RSM, which are strategically located, are also intended as outlets for a package of health related interventions or 'total sanitation'. RSM have also been linked to rural industrial complexes.

Lessons learned include: RSM are cost effective and economically viable, opening a new area for investment, and as such need to form an important component of future sanitation promotion strategies. RSM are self-sustainable with an average break-even time of one to one and a half years. It is imperative for RSM managers to undergo marketing and salesmanship training, and be familiarised with the linkages between safe water, sanitation and health, and that they adopt a social mobilisation strategy. RSM can create employment opportunities for women, thereby empowering them. The RSM initiative is replicable and is expanding and as such is no longer an initiative but a movement; and that it can influence national policy, as reflected in the fact that Alternate Delivery Systems including RSM are an integral component of the Government's sanitation promotion strategy. **Best Practices** include, the need for a balance between subsidised and self-financing components of programmes aiming to promote the use of toilets; and that these programmes should capitalise on the employment potential generated through toilet construction.

UNICEF Workshop on Enviromental Sanitation and Hygiene, New York, June 10-13, 1998

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Case Study:

Indonesia

INTEGRATED APPROACHES

JUMAT BERSIH "CLEAN FRIDAY" MOVEMENT

Abstract

Gerakan Jumat Bersih (GJB or Clean Friday Movement) is closely linked with religious and cultural values of communities to promote hygiene practices. It calls for active involvement of all segments of a community (individuals, families, organisations and government agencies), with an emphasis on religious leaders. It originated as a **district movement** in West Lombok, became a provincial initiative and then a **national movement**. The **objective** is to promote healthy living through religious and social activities to improve standards of community health. To increase awareness of the importance of hygiene practices (use of sanitary latrines, hand washing, consumption of properly handled drinking water, and proper garbage disposal); and facilitate the adoption of these practices (provision of latrines, water supply and waste disposal facilities in household and public places such as houses of worship and schools). **In West Lombok**, activities included training female village cadres to deliver hygiene messages. While perhaps not directly attributable to GJB, there is a marked improvement in the prevalence of diseases (i.e. ARI, diarrhea, skin diseases, dysentery). **At the national level** support is *inter alia* given to the role of religious leaders, providing educational material (i.e. a booklet on sanitation and water according to Islamic teachings). GJB has an established organisational structure, good latrine coverage results in provinces with action plans, and continuing political commitment.

Constraints include: lack of commitment among regional leaders; that most district heads have yet to translate national commitment into local action plans; insufficient coordination among agencies (in West Lombok, the commitment of the District Head overcame this by setting up an inter-agency team); and poor data management. **Lessons learned and best practices** include: that commitment of the Head of the District who can influence budget allocation, issue regulations and is at the level of implementation, is needed; that agencies can improve sanitation if the community is approached in a familiar manner particularly through religious channels (i.e. going to religious meetings, communicating a receptive position - religious activities and those involving the youth provide opportunities to impart hygiene education); that it remains difficult to expect active involvement of women beyond their "traditional" roles; and that support, such as moral support visits by distinguished figures, could enhance local governments' commitment.

UNICEF Workshop on Environmental Sanitation and Hygiene, New York, June 10-13, 1998

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Case Study:

Iraq

URBAN SANITATION

ENVIRONMENTAL SANITATION

Abstract

The sanitation sector witnessed **severe deterioration** following the Gulf War. With vanishing budgetary allocations, foreign aid formed a small portion of what was needed. The aim was to address the most alarming problems such as, preventing a major breakdown of the system, interim support to schools and hospitals and attempts to divert sewage away from residences, schools and health facilities. The correlation between the deterioration in environmental sanitation status, water quality and quantity, with water borne diseases and malnourishment is evident (in figures for diarrhoea related deaths in U5 children and typhoid fever cases). The most serious problems include: that WES facilities were based on high technology requiring high financial inputs; the exodus of skilled sector employees; that the private sector has no role to play in providing WES services; that when communities can not manage water schemes they opt for untreated and unprotected water sources resulting in an unhealthy environment; that long power cuts damage sewage disposal and water facilities; that the highly subsidized cost of water and lack of awareness leads to wastage and irrational use, also of sewage disposal facilities; and that garbage collection is ad hoc and disposal sites are getting closer to cities and communities.

Lessons learnt and challenges ahead include: that even though the Oil for Food programme will help to improve WES facilities with equipment and supplies, finding competent technical people and training required staff is key to ensuring efficient performance of the sector. The private sector could play a major role, this should be investigated. The government could enact new legislation concerning WES services cost to the population, to increase profit margins for the private sector (encouraging competition), and force more rational use of WES facilities. This should be well planned and communicated to the people, justifying the need, raising awareness, adapting people to the new system and winning support. With the Oil for Food programme, it is anticipated that the main thrust will be on an assessment of the situation to determine priority problems, address and define strategies for the sector recovery. Focus will be on the poor and schools. Community participation will be promoted (due to no precedence, pilot projects will be supported), local capacity building will essential. Advocacy on proper use of WES facilities will be given priority to reduce water borne disease, as will advocacy for private sector involvement.

UNICEF Workshop on Enviromental Sanitation and Hygiene, New York, June 10-13, 1998

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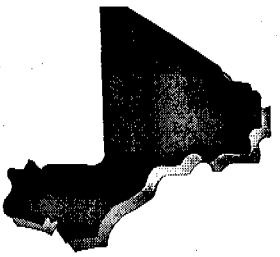
Case Study:

Mali



INTEGRATED APPROACHES

RURAL WATER SUPPLY, HYGIENE EDUCATION AND SANITATION PROGRAMME

Abstract

The programme aims to **benefit from integrated health/nutrition/water/hygiene and sanitation activities to maximise health impacts of interventions**. The integrated rural water supply, hygiene education and sanitation programme aimed to reduce WES related diseases and increase access to water to reduce the work load of women and children by targeting: inadequate water supply and sanitation facilities, non optimal operation of equipment, poor awareness of the relationship between WES and health; and low priority accorded to environmental sanitation in national policy. The aim was to improve sanitary conditions, by setting up low cost sanitation infrastructure and promoting behavioural changes through hygiene education for the eradication of dracunculiasis. Three interdependent projects (rural water supply; hygiene education and sanitation; and support the eradication of dracunculiasis) were implemented simultaneously.

Achievements included: improvement of WES services; reinforced community participation; positive contribution of animation activities; a better understanding of WES related diseases and behavioural change; introduction of hygiene education in school curriculum, reduced time spent fetching water, and a reduction in guinea worm cases. **Constraints** included: social-cultural obstacles; difficulty in meeting demand for latrines; insufficient involvement of the population, particularly women; lack of harmonisation of community participation principles; a tradition of vertical project management which hindered intersectoral coordination; insufficient number of technical surveys and impact studies; little interest by private economic dealers; and limited political commitment for the hygiene and sanitation subsector and weakness of institutional capacities in intersectorial coordination. **Lessons learned** included: that the programme elaboration profited from favourable factors, that the results were obtained thanks to its varied activities and fundamentally their integration, and that the programme set up approaches and introduced tools and methods that should be developed and spread out to other regions. In working towards **the promotion of integrated community based activities**, to contribute more efficiently to the reduction of child mortality and morbidity due to diarrhoeal diseases and to poor nutrition, the programme will focus on geographic and intersectorial convergence of integrated and decentralised health and nutrition activities with those of water, hygiene and sanitation.

UNICEF Workshop on Environmental Sanitation and Hygiene, New York, June 10-13, 1998

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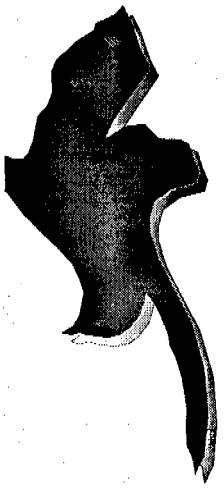
Case Study:

Myanmar



SANITATION PROMOTION

MAKING "SANITATION FOR ALL BY THE YEAR 2000" A NATIONAL OBJECTIVE & NETWORKING ON WATSAN VIA WESNET

Abstract

Part 1 outlines UNICEF Myanmar's role in **Sanitation for All**, in advocacy and contributions to shaping national policies and strategies. Sanitation was given low national priority, progress was limited. The paradigm shift was to **consider sanitation on a national scale**. The good health infrastructure, vast school network, experiences in social mobilisation for immunization, growing private sector involvement, and community support were considered in developing a new strategy. The supply of plastic latrine pans was phased out and a programme founded on a **self-help approach** advocated, shifting from "provider" to "helping oneself". To make it workable the **low-cost do-it-yourself concept** was developed, with a minimum latrine standard. **Social mobilisation** was moved to the forefront, to motivate communities for sanitation and hygiene behavioural changes, including through schools and the mass media. The approach bore fruit when "Sanitation for All by the year 2000" was declared a **national commitment**. Translating political commitment to actions was challenging, many implementors considered the supply of plastic pans as the answer to sanitation coverage. National sanitation week, inaugurated by a top political leader, was organised to invigorate efforts. People have been motivated to build sanitary latrines, there is greater confidence among implementors in promoting the self help - do -it-yourself approach, and greater commitment of officials. Social mobilisation efforts need to be intensified, but there is greater optimism that 80% sanitation coverage can be realised by 2000, as the programme is increasing driven by positive lessons and reported success breeding success.

Part 2 describes **WESNET** regional networking among East-Asia and Pacific offices via **virtual conferences**. The **objective** is to provide a forum for WES colleagues to interact and share experiences to enrich country programmes, providing inputs to help shape country policies and guidelines for more effective programming. Conferences were held on various topics, including: strategies towards achieving universal access to safe excreta disposal, the role of the private sector, and how UNICEF can facilitate the achievement of the "National Programme of Action" sanitation goal. Conclusions are provided as inputs to the RMT meetings. WESNET is being replicated by other programme sections in the region. There are opportunities to expand the WESNET to involve other partners. The modus operandi of WESNET are described.

UNICEF Workshop on Environmental Sanitation and Hygiene, New York, June 10-13, 1998

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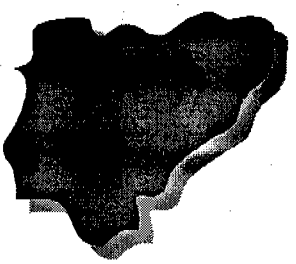
Case Study:



Nigeria

SANITATION PROMOTION

SANITATION PROMOTION

Abstract

A study on latrines, beliefs and hygiene practices resulted in the adoption of **community driven systems** for promoting sanitation to rural populations, using **low cost appropriate latrine (Sanplat) technology**. Institutionalisation of implementation at all levels and skill development and empowerment of implementors and communities, have enabled the proliferation of sanitary facilities, mostly paid for by households, and improved hygienic practices. The programme is aimed at reducing faecal borne diseases and thus improving health. From field experiences, it has been recognized that in addition to the provision of facilities, changes in hygiene conditions and behaviour are needed for any meaningful impact on health. Thus the **objective** is to develop and implement a sanitation programme that can achieve sustained behaviourial change vis a vis sanitary habits, taking into account existing beliefs. Sanitation promotion strategies are dedicated to community led initiatives with the Federal, State and Local Governments providing the enabling environment for the programme implementation. The community-managed programme (run by community WES committees) is more than latrine construction, and includes social mobilisation, hygiene education (to reinforce linkages between poor sanitation and health), capacity building and income generating activities through the establishment of 'sani-centres'.

Low-cost sanplat latrines and the concept of community managed systems has increased awareness of safe sanitary practices. **Lessons learned** include: the need to conduct a study; that a sustainable programme requires good institutional arrangements; the need for the community to be empowered and women's involvement increased; the need to use low-cost technologies compatible with local culture; the need for an initial subsidy to encourage the very poor; and that interest and commitment grows due to income generating activities of sani-centres. Sanplat is a household name. The success recorded could be attributed to the active community participation. There should be constant appraisal of strategies to ensure quality standards of production and installation. In light of present coverage levels, there is urgent need for programme expansion while ensuring the sustainability of existing facilities, and thus increased funding. The need to strengthen capacity building cannot be over emphasized, and to meet demand, there is need for private sector participation and revolving funds, especially in the operation of sani-centres.

UNICEF Workshop on Environmental Sanitation and Hygiene, New York, June 10-13, 1998

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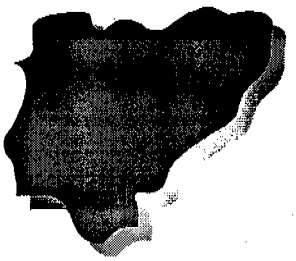
Case Study:



Nigeria

URBAN SANITATION

URBAN SANITATION: SOLID WASTE MANAGEMENT IN IBADAN

Abstract

Intense urbanisation causes rapidly deteriorating sanitary conditions. Household waste disposal falls on women and children, who trek long distances to dumps or pay collectors from meagre earnings. Environmental degradation causes severe health risks, problems include: waste water (breeding grounds for mosquitoes), poor ventilation and overcrowding (indoor smoke, spreading disease), and solid waste. Ineffective solid waste management is due to, inadequate funding, lack of awareness and appropriate technology. A project was initiated on urban sanitation and waste management, to be community driven and managed, focusing on improving sanitation practices. **Objectives** are to: support communities to improve their environment, reduce household waste and excreta contamination, support Government efforts by providing refuse collection and disposal facilities, support training of artisans, install waste recycling plants, create awareness, promote environmental care among communities and children, and mobilise policy makers and partners to provide financial support. **A solid waste pilot project** was implemented in Ibadan, where sanitary facilities and waste management are almost non-existent. A market and core areas were selected for intervention. The strategy includes: interaction with government and communities on key interventions; development of action plans (advocacy, mobilisation, capacity building and service delivery); establishment of core-groups to provide leadership, technical support and administrative coordination; establishing a cost sharing principle; and participation.

The main achievement is a waste recycling (composting) plant converting garbage into organic fertiliser which is sold, backed by training to ensure sustainability. There has been environmental improvement, revenue generation, production of cheaper/safer fertiliser, and economic incentives for children, women and scavengers. **Lessons learned** include: the need for pro-active financial and political support, and willingness of farmers to buy the fertiliser generating demand; and that women and children are proud/committed stakeholders. The project has the potential to go to scale and be replicated, so institutional arrangement have been proposed. **Challenges** are to: liaise with partners to ensure replication, build capacity through on the job training, fund technology R&D, involve the private sector, fund on a cost sharing basis the installation of waste composting plants, and empower community based entrepreneurship through revolving funds.

UNICEF Workshop on Environmental Sanitation and Hygiene, New York, June 10-13, 1998

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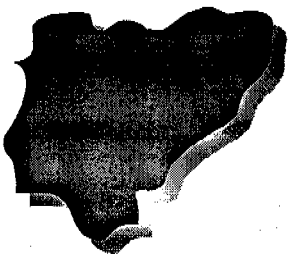
Case Study:



Nigeria

SCHOOL HYGIENE AND SANITATION

WES IN SCHOOLS

Abstract

Realisation of the important **role WES facilities play in enhancing educational opportunities** for children, particularly girls, prompted the WES in schools project. Inadequate access to safe and convenient means of excreta disposal and water supply contributes to low school enrolment and attendance, especially of girls. This is due to social upbringing and cultural restraints (female privacy, sexes not sharing toilet facilities), as well as inadequate water supply (as productive time is lost fetching water). It is a common to see feaces around schools, making the environment unhygienic and giving parents a reason to withdraw girls from school to keep them away from social risks. The unclean environment and unhygienic practices of food vendors whom the pupils patronise, pose major health risks. Thus, the WES Programme in conjunction with Basic Education supported the WES in schools projects. To ensure the desired health impact, the project was executed as a package with sanitation, water supply, nutrition, and hygiene education components, with full participation of the PTAs and communities. **Objectives** were to: reduce unsafe excreta disposal and oral-faecal contamination by providing toilets and water sources; minimise sharing toilets between sexes to increase girls attendance; consolidate project gains by promoting intersectoral linkages among programme components using WES as an entry point; increase awareness about environmental sanitation to alter household behaviour.

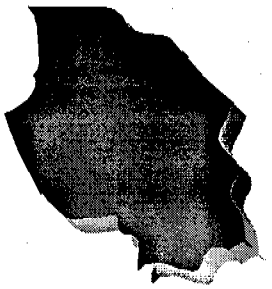
Achievements include: significant environmental improvement in the schools with less diarrhea complaints; pupils do not have to spend time fetching water; girls do not have to go in search of privacy; and latrines in schools are promoting such facilities at the household level. **Lessons learnt** include: that child friendly environmental sanitation and water facilities in village schools serve as models for community improvement; that community involvement provided the opportunity for mobilising them for household latrines and water security.; and that the project provided an excellent opportunity for actualising the inter-sectoral linkage between programmes (WES, Education, Nutrition and Health). **Constraints** include: the number of schools and pupils needing WES facilities; that communities lacking WES facilities use school latrines; the lack of funds for project expansion; and the lack of institutionalisation of environmental sanitation and hygiene promotion in the school curriculum. Suggestions are given for the way forward.

UNICEF Workshop on Environmental Sanitation and Hygiene, New York, June 10-13, 1998

Contributors: Mohammed Kamfut, Project Officer WES, UNICEF Bauchi Zone Office, Dr. Comfort Olayiwole, Project Officer, Sanitation and Engr., and Z.O. Agberemi, Sanitation Consultant, UNICEF Lagos

Case Study:

Tanzania



INTEGRATED APPROACHES

HARE & THE TORTOISE: SANITATION AND HYGIENE PROMOTION

Abstract

A hygiene and sanitation transformation strategy aims to impact leading causes of childhood and maternal morbidity and death. Sanitation is defined in holistic terms, so efforts are made to **link nutrition, education and health** counselling workers in promoting **sanitation & hygiene** behaviour analysis **within the context of community level IMCI and ECCD** initiatives. The hygiene and sanitation **objective** (to promote research and policy analysis to strengthen advocacy and effect behaviour changes in the domestic domain of disease transmission) is presented within overall programming objectives aimed at reducing malnutrition and childhood and maternal morbidity/mortality. Meanwhile, the government recognises that hygiene and sanitation must be demand led and based on affordable and sustainable steps achieved without financial subsidy.

Strategies include: mapping priority behaviour areas (i.e. latrines; home births, home care for children aged 0-3, and care of Cholera and HIV/AIDS patients); participatory processes for community planning; capacity building for community analysis of constraining and enabling factors; strengthening linkages between demand and supply for affordable and sustainable technology; assessing traditional health behaviour and incorporating best practices within a school hygiene campaign; and advocating lessons learnt to policy makers particularly in support of IMCI and ECCD. A key **activity** is developing behaviour assessment tools, i.e. **perception mapping** to visualise and analyse individually perceived causal relationships affecting physical and psychosocial health in a given domain, it is being developed in the IMCI pilots. Another activity is marketing sanitation through a campaign to enhance awareness of SanPlat and its affordability. To give SanPlat an identity, it was noted that the shape of the drop hole and footplates resemble a hare. As the hare is considered clean, honest and clever, it is the logo on all promotional materials. **Lessons learned** include: the commitment made during programme preparation and adequate resource earmarking; initiatives are seen as a consolidation of earlier efforts promoting self-financing sanitation and developing participatory assessment capacities; and a consistent team of health professionals. **Challenges** include the need to: facilitate a network of health professionals, design community based monitoring systems, maintain quality control and forge stakeholder teamwork. Factors enabling or constraining progress are presented.

UNICEF Workshop on Environmental Sanitation and Hygiene, New York, June 10-13, 1998

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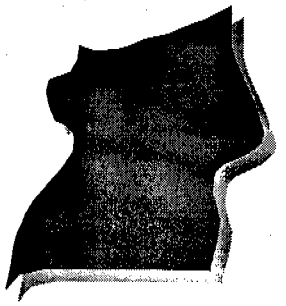
Case Study:

Uganda



SANITATION PROMOTION

SANITATION PROMOTION

Abstract

To break down vertical project thinking a **programmatic approach** was adopted, thus instead of thinking sectorally the programme looks at issues by levels called components. There are four components: community enablement, service delivery, resource mobilisation and management, and policy development and quality assurance. The WES programme's **objective** is to raise the profile of sanitation, through a political **'top-down'** process targeting all elected officials from the President to the village level, in combination with a **'bottom-up'** community based participatory approach to changing behavioural norms. A definition of sanitation was developed (safe human excreta disposal, personal and public hygiene, solid and liquid waste disposal, vector control and keeping drinking water safe), and problems identified, analysed and means to solve them developed and synthesised into an action plan. The bottom up approach focused on: awareness creation through social marketing, utilising community information to develop plans, utilising participatory approaches to effect behaviour change, and an integrated approach to school sanitation. The case study concentrates on the political process which has to date had a greater impact through its comprehensive advocacy plan. A concept paper, "Promotion of Sanitation in Uganda", was endorsed by the Ministry of Health. The multi-disciplinary nature of sanitation, as it affects health education, gender, the environment, and the overall economy, was recognised. A national working group on sanitation focused largely on the lack of appropriate legislation, policy and guidelines. One of its successes was a National Forum on Sanitation culminating in the Kampala Declaration, a bold statement with a ten point action strategy.

Lessons Learned include: that the effect that a few highly committed (politically well-placed) individuals can have is tremendous; that the support and involvement of the President was crucial giving motivation and credibility to the work; that it is important to seize any opportunity to promote sanitation; that sanitation is not just a health issue (the Ministry of Health acknowledged that while they could lead they could not solve the problem of sanitation themselves, presenting a number of opportunities); and that it is necessary to lead by example promoting sanitation in every aspect of our work and showing personal commitment. UNICEF works on the premise that sanitation is a responsibility for all and should be main streamed in the country programme.

UNICEF Workshop on Environmental Sanitation and Hygiene, New York, June 10-13, 1998

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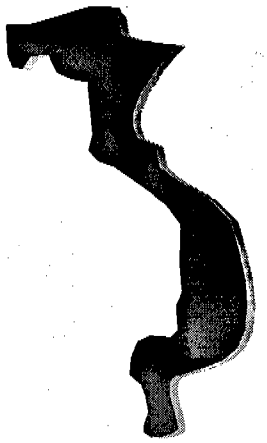
Case Study:

Vietnam



SANITATION PROMOTION

INTENSIVE SANITATION PROJECT

Abstract

The subsidised approach of demonstration latrines produced limited sanitation coverage and behavioural change results. The new approach recognises that WES is closely related to health and quality of life. It is based on community participation, raising awareness so that people will voluntarily construct and pay for sanitary facilities. The **objectives** are: to reduce water-borne diseases (through sanitation education and low-cost sanitation facilities); to raise awareness (of personal and food hygiene, safe water, excreta disposal, solid and liquid waste disposal, disease transmission and the relationship of WES to health); to create a safer environment for better living through a package of sanitation measures; to introduce low-cost appropriate technology; to develop a methodology and strategy to make the project self-sustaining and self-expanding; and to involve the community. **Activities** include: strengthening infrastructure, conducting a base-line survey; developing communication materials; conducting training; mobilising funds; finalising designs and estimates for low-cost sanitary facilities; constructing sanitary facilities; involving the community - particularly women; facilitating augmentation of water supply; promoting immunisation, ORT, nutrition education and income generation activities; and monitoring.

Achievements include: that project management boards were established; that motivators were trained to promote WES through different channels; that WES coverage increased; and that other sanitary facilities i.e. smokeless stoves and garbage pits were constructed. It terms of the project's **health impacts**, incidence of diseases related to environmental sanitation, water and sanitation practices have been declining. It can be concluded that the intensive sanitation project and integrated efforts made on vector control, CDD, EPI, ARI etc. within the context of socio-economic development, has contributed to the reduction of morbidity, especially among children. **Constraints** included low economic conditions and that funds provided were lower than planned. **Lessons learnt** include: that the commitment and involvement of the local People's Committee was key; that social mobilisation and project communication conducted by mass organisations i.e. women and youth unions are effective; that people's participation in planning, communication and financially is a must as without it the project could not expand nor the facilities be properly used. Lessons learnt are used as the base for the expansion of the project.

UNICEF Workshop on Enviromental Sanitation and Hygiene, New York, June 10-13, 1998

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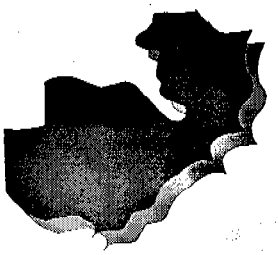
Case Study:



Zambia

INTEGRATED APPROACHES

WATER, SANITATION AND HYGIENE EDUCATION PROGRAMME

Abstract

With the assessment that "major threats to child health and survival-including malnutrition, diarrhoea and respiratory infections-are linked with the impoverished, unhealthy and unhygienic environments that people live in", UNICEF supports the Government to improve water sanitation and hygiene education (WASHE). A National Water Policy and an **Environmental Sanitation Strategy** were developed. A Working Group on Sanitation (WGS) developed the sanitation strategy emphasising the needs of poor rural communities and deprived low-income urban populations. The strategy was developed through workshops to, build consensus on a sanitation definition, identify issues, analysis the situation, draft the strategy, and develop a multi-year action plan. The strategy is awaiting cabinet approval. WASHE committees were established at the district level. **Activities** include: institution/capacity building, community management, sector coordination, appropriate technology, research, and monitoring/evaluation. At the village level, organisers trained in participatory methods have started to create demand for WASHE. UNICEF produced a leaflet on the WASHE basic needs package. WASHE activities will intensify capacity building for villages to prepare WASHE plans and implement and monitor them, intensify hygiene education and training of masons, and improve monitoring and reporting.

Factors for success include: national interest (successful workshops, government interest, WGS commitment, active district committees), capacity and consensus building (workshops with broad participation, consultants, relevant strategy documents, i.e. the UNICEF Sanitation Handbook), gender (i.e. WES gender guidelines from UNICEF and donors), and UNICEF involvement (advocacy/support for WASHE and specially the WGS and funding to maintain momentum, and technical support from WES New York and other offices). **Lessons learned** include the need for: motivated and inter-sectoral WGS, linkages with a working group on WES for urban areas, and a strong policy. Within the Health Reform, water/sanitation has been declared a major thrust of health, which will also generate momentum. **Issues for further discussion** include how to: while taking a holistic approach, ensure WES issues/related diseases still get adequate attention; ensure integrated approaches; improve monitoring and evaluation; properly address gender issues; and improve information flow, build capacities and create demand for WES with hygiene education.

UNICEF Workshop on Enviromental Sanitation and Hygiene, New York, June 10-13, 1998

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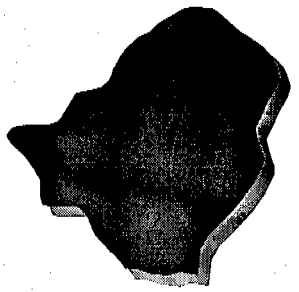
Case Study:

Zimbabwe



INTGRATED APPROACHES

PARTICIPATORY HYGIENE EDUCATION AND SANITATION IN ZIMBABWE

Abstract

The **objective** is to improve health (and nutrition) by reducing WES related diseases, through an intensive programme of participatory hygiene education (PHE), supported by the construction of hygiene enabling facilities. The aim is to identify and change key hygiene behaviours to maximise the health impact of WES improvements, and to increase the rate of latrine construction and associated works, i.e. hand washing facilities and upgraded family wells. PHE represents a shift from a didactic technical model to a participatory social model. The goal is that all health workers will use participatory methods in their learning sessions with community groups and in approaching communities. Training workshops are used to disseminate PHE knowledge and skills. The development of PHE material is a key activity. There is a general acknowledgement among health staff of the appropriateness and effectiveness of the PHE approach, methods and tools. PHE has spread to other areas of health education and other projects. PHE raises hygiene education's profile and makes it a tangible entity for which plans and targets can be made. Due to PHE, there are encouraging signs of changes in hygiene practices. PHE has also facilitated an increase in the number of women actively participating in hygiene education sessions.

The **challenges** are to strengthen the indicators of behaviour change, and make PHE a standard part of basic training for health staff. PHE as a process, requires attitudinal change among implementers and behaviour change among communities. **Lessons learned** include the need to: assure quality training; provide support at all levels and build the confidence of implementers in the use of participatory approaches; strengthen reporting systems; and assure the availability of PHE tools. There is the need to: strengthen community involvement in risk identification, monitoring and evaluation of their health; use PHE tools in the correct order; train school health teachers and other social groups to use PHE tools; identify cadres needing exposure or training; review processes used, share experiences and ensure exposure to new tools; use hygiene evaluation procedures; and institutionalise the PHE approach. **Best Practices** include that: PHE is very strong tool in changing the behaviour of individuals and communities; indicators need to be firmly established; the project should start small and grow slowly; and the process by which PHE tools are developed is key, they need to be acceptable to environmental health staff.

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Communication and Social Mobilization in Bangladesh: Behavioural Development in Sanitation, Hygiene and Safe Water Use

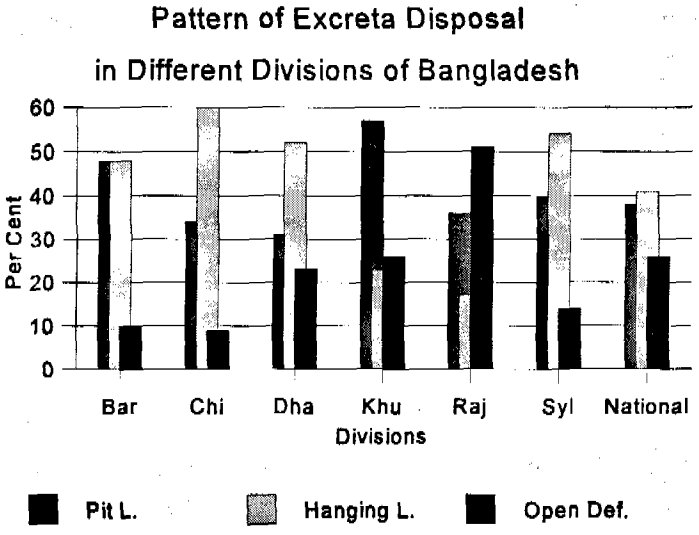
A. Problem Context

Bangladesh has been successful in ensuring access to drinking water supply from a protected source:

- 97% of the population drink water from tubewell, ringwell or tap;
- 62%, however, use contaminated water from ponds and rivers for household purposes other than drinking.

There has been a healthy trend in having nearly doubled the sanitation coverage in the last seven years, from 21% in 1990 to 38% in 1997. This is still unacceptably low, less than half of the goal set for the year 2000 at the World Summit for Children in 1990. 20,000 metric tonnes of faeces are discharged into fields and waterways every day. According to the 1997 national data,

- 41% use hanging latrines;
- 26% defecate in the open;
- 13% dispose children faeces in latrines;
- 66% wash hands after defecation and use a rubbing agent (soil, ash, or soap).



Sanitation and behavioural patterns vary considerably from one division to another, as shown in the adjoining figure.

There are indications that incidences of diarrhoeal diseases have declined slightly over the years. However, 16% of children under five still suffer from the debilitating effects, contributing to the death of approximately 110,000 children each year. Annually, 75 million episodes occur among children under five. Young children are particularly at risk, but everyone is vulnerable.

B. A New Focus

Through social mobilization, expanded latrine production and the promotion of home-made pit latrines, coverage increased significantly until the mid-1990s but has remained constant for the past few years. Moving beyond that plateau is today's challenge and the

rationale for a new programmatic thrust on ***behavioural development,*** which aims to influence and shape attitudes and habits that can lead to a life-time of healthy living. Achieving this behavioural breakthrough means moving beyond the social mobilization of the easily reached and convinced. Instead, what is required is a programmatic and communication thrust that focuses first on children.
Earlier communication initiatives in this sector were limited to the production of piece-meal materials without an overall communication strategy and a comprehensive media plan. Standardization and uniformity in messages were missing, and campaign activities were limited to pocket areas. In contrast, a comprehensive ***National Communication Strategy for Sanitation, Hygiene and Safe Water Use,*** using synergistic, reinforcing media delivered though a variety of strategic channels, is being developed in 1998, for scaling up in 1999. It aims to reach the family, and children in particular, to promote behavioural development for a healthier, safer environment in Bangladesh. The principal target will be the 41% households who are already using hanging latrines, hence representing a group with latent demand and potentially interested in replacing them with sanitary latrines. Innovations in the form of new strategies, products and participatory processes are being adopted, all incorporating UNICEF's core values with respect to gender equality, ethnicity, disability and class. ***Media for, by and with children*** are at the center of the new communication strategy.

Primary schools become a natural focal point for reaching the child, and the wider community. According to current estimates, 55% of the 57,600 government primary schools do not have basic water and sanitation facilities. The communication strategy will therefore provide a strong 'software component' of hygiene education for behavioural development to the ***School Water and Sanitation Programme***, which will construct water and sanitation facilities in 10,350 primary schools and promote their regular use and maintenance. In addition, as a part of the ***Social Mobilization Programme,*** both primary and secondary students and teachers will be mobilized to map and monitor latrine construction and hygienic behaviour in the school catchment area. This will complement a wider advocacy effort involving influential members in the community to convey the imperatives of sanitation and hygiene measures as a civic responsibility. 10,000 demonstration latrines will be established in E.P.I. centers, located in the households of influential community members. These will be constructed by private latrine producers who will be motivated to act as promoters and service providers for sanitation and hygiene in the community. The programme includes, in addition, establishment of water and sanitation facilities in 600 Union Parishad health centres, another hub of accelerated mobilization efforts in the area.

Reducing disparity is another important component of the package, and will thus increase access and use of safe water for drinking and hygiene needs, in the Chittagong Hill Tracts, low water table areas and the coastal belt. The programme will provide 52,000 Tara handpumps, 7,860 deep tubewells, and other appropriate technologies such as pond sand filters, rainwater harvesting, infiltration galleries, household-level disinfection and

gravity flow schemes (particularly in the hilly areas). The emerging problem of arsenic contamination in Bangladesh will also be given due attention in this effort. Through the reduction of disparities, promoting a gender balance in caring for the environment, and supporting a decentralized approach to planning, implementation and monitoring, there are programmatic grounds to expect a giant leap forward for a safer, cleaner environment in Bangladesh by 2001.

It is anticipated that support for this programme will be provided by U.K. Department for International Development. An appraisal mission will review the various components of the programme by July-August, 1998. A final decision to provide approximately US$30 million in supplementary funding is expected by October-November, 1998.

C. Communication Objectives

Clearly identified, measurable objectives were set for the National Communication Strategy in 1997, as a first-step in developing the campaign. Broad objectives were identified through a national workshop with key stakeholders in June, 1997. These were further refined in the following months by carefully matching communication objectives to programme goals. Not only did this allow for greater synergy between programme and communication activities, it set benchmarks for determining which communication activities to pursue. Overall, the communication campaign supports the central WES programme objective which is to reduce childhood morbidity and mortality due to diarrhoea. Specific objectives include:

- by 2001, 80% of the population is aware how faeces contaminate water, soil, fingers and food and an additional 41% of rural households are motivated to construct sanitary latrines;

- by 2001, all children in classes 4-5 of schools targeted under the School Sanitation Project are actively involved in cleaning and properly using latrines at school and home;

- by 2001, all children in classes 1-3 in schools targeted under the School Sanitation Project know and practice proper techniques for washing hands and use the latrine regularly;

- by 2001, at least 50% of the adult population know and practice three methods of safe water collection, and know how to keep the water safe to drink once its collected, and 50% of the population know the four golden rules for protecting ponds from contamination.

D. Key Elements of the Communication Strategy

Establishing an identity

Good communication requires an identity that is instantly recognizable by people, no matter their literacy level. A campaign logo is being developed that puts the benefit of sanitation, hygiene and safe water use up-front. It integrates programme activities with a tangible benefit, i.e., protection against disease, which leads to good health and economic prosperity. Specially designed campaign borders and colours will also draw together the various campaign packages, creating synergy across media.

Campaign personality

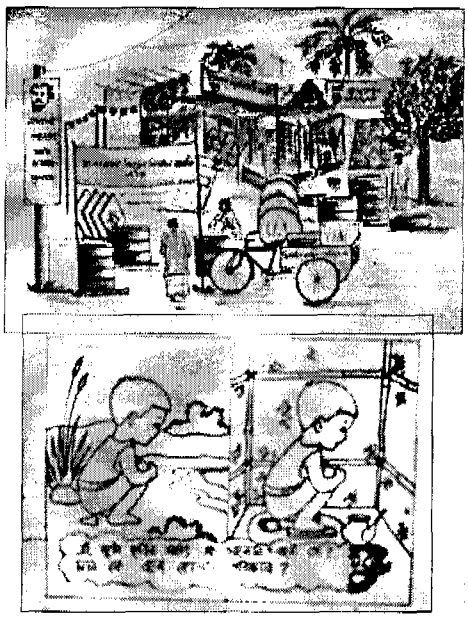
A campaign personality, in the form of a cartoon character called Kamal Chacha (Uncle Kamal), is being developed. This friendly, funny character will be integral to the campaign, creating a visual linkage between the various packages. His appeal to children and adults, based on the development of a personality rooted in a firm understanding of social and cultural norms of Bangladesh, will help to ensure the popularity of the campaign.

Campaign packages

Synergistic, reinforcing 'packages' are being designed to reach the child and community directly. The campaign's focus on behavioural development necessitates an approach that starts first with the child. For this reason, a strong concentration is placed on media for, by and with children, including:

- **'school package'** : Focussed primarily on children in Classes 1-3, activities such as games, songs and rhymes will promote self-efficacy, joyful learning, learning by doing, and learning through vicarious experiences. The simple telling of how germs are spread through the use of drawings, comic books and demonstration will also promote sequential learning and problem-solving abilities. Older

children will model correct behaviour through 'child-to-child' activities. Social mobilization activities will carry the message of the benefit of sanitation and hygiene from the school to the home, and the community at large. This package reflects the commitment to behavioural development, reaching children as early as possible to shape habits and attitudes which are precursors of life-long values. Importantly, it puts the programme closer to the age group most at risk of diarrhoeal disease.



- **'media package'** : Innovations in television production for Bangladesh are planned, including two minute animated 'infomercials', regular 30 second spots and five second 'break-bumpers' with messages promoting core behavioural change (e.g., 'did you wash your hands today'). The infomercials will dramatize the issue of germs and empower the audience to solve problems by following up with a solution sequence. Because of its creative treatment, the spots will be of special interest to children who are avid television watchers, even in media-poor areas of Bangladesh. Radio spots will rely on traditional media, such as *jari* songs, as well as a rendition of the *namta* (the mathematics table set to song) to messages about sanitation.

- **'sani mart'** : To encourage sustainability, the campaign will help build the marketing ability of local masons who construct rings and slabs. A 'sani-mart' is envisaged, which will turn a mundane shop into an exciting, interactive communication opportunity. Marketing aids, such as buntings, flyers and posters, as well as miniature latrine models, will foster greater local supply and demand. The service delivery point will be developed as a communication medium, attracting local people through appropriate branding, while building knowledge and understanding through demonstration.

- **'interpersonal communication'** : Surveys repeatedly show that families in Bangladesh tend to get most of their information on issues related to health through interpersonal communications. Communication packages are being designed for those who come into closest contact with the family, including 60,000 front-line health workers, religious leaders such as Imams, and Bangladesh's extensive network of NGO workers.

- **'advocacy'** : Any change requires enabling factors (including political, social, economic). This campaign will include advocacy materials focussed on elected members to the Union Parishad, the lowest level of government in Bangladesh. In

particular, materials will be developed for the female members of the UP, who hold specially designated seats on the 12-member council. Communication aids will help UP members promote the link between health and sanitation/hygiene to villagers, while advocating a role for the council in ensuring land is available to families who want to construct a sanitary latrine.

E. Best Practices

Communication

Implementation of the National Communication Strategy begins in 1999. The Bangladesh Country Office's experience in social marketing offers some 'best practice' suggestions.

- **source out** the campaign strategy and prototype development to a full-service social marketing agency to gain access to private sector initiatives and resources. The campaign in Bangladesh is being developed by Thompson Social of New Delhi, in collaboration with its junior partner, Asiatic Communication, in Dhaka;

- set **standard operating procedures** such as a standard Request for Proposals, critical path for agency selection, printing guidelines, copies of which are all available with the Bangladesh Country Office;

- **build capacity** both in-house and with the government counterpart to manage the development and implementation of the campaign through in-house communication training and by apprenticing staff to social marketing agencies.
- create **inter-sectoral linkages.** In Bangladesh's case, a national **ORT communication campaign** is being implemented this year, which includes a school activity book for all Class 4 and 5 students and a health workers' package. These will provide a good foundation for the sanitation, hygiene and safe water use campaign, which also aims to create greater awareness about reducing diarrhoeal mortality and morbidity. Such linkages are critical to ensuring synergy and maximum effectiveness.

Programmatic

Lessons learned from the ongoing School Sanitation Project and the Social Mobilization Project also lend themselves to several 'best practice' suggestions.

- In the early years of the School Sanitation Project, beginning in 1992-93, the programme was implemented through contractors hired by DPHE. Since 1996, the water and sanitation facilities are being constructed through the **School Management Committee (SMC).** To facilitate the SMCs' efforts, terms of reference concerning the roles and responsibilities of various government officials (including local government, education, health and public health) and NGO representatives at district

and subdistrict levels were endorsed and circulated by the Ministry of Local Government, Rural Development Cooperatives. More transparent and accountable, this approach has led to an improvement in construction and maintenance of the facilities as a result of greater participation and sense of ownership by the community. Some of the tangible results include:

- attendance of girl students rose 11% on average;
- percentage of running tubewells increased from 68% to 89%;
- satisfactory discharge of water increased from 55% to 95%;
- soap or ash was kept in 52% schools, encouraging proper handwashing among students;
- schools that kept funds for maintaining WATSAN facilities increased from 7% to 44%;
- status of cleaned and flushed pans increased from 36% to 80%.

- Experiments in social mobilization through schools, as in Banaripara (Barisal district), Dashchira (Manikganj district) and Asadia (Noakhali district) have effectively demonstrated that school children are effective in prompting their parents to build and use sanitary latrines and to keep them clean. The process was helped greatly by the personal interest and political will demonstrated by the Divisional Commissioners and District officials to promote sanitation and hygiene. This case was exemplary in unleashing the potential of school children, with proper support by the concerned high officials. Attempts are being made this year to engage high school students and young unemployed youth in social mobilization. Early indications are that this could be a potent force in the drive to accelerate sanitation and hygiene efforts in the country.

- The involvement of the NGO Forum for Drinking Water and Sanitation in 20 thanas during 1993-1995 confirmed that a concentrated effort of social mobilization with local NGOs can effectively increase sanitation coverage by 90% and improve hygienic behaviours significantly. Partnership efforts are underway this year for the organization of advocacy workshops at district and subdistrict levels by Executive Engineers and Sub-Assistant Engineers of the Department of Public Health Engineering, with the help of the NGO Forum as facilitators. Also training/orientation workshops as well as promotional efforts are being attempted at the village level by the NGO Forum and other major NGOs (BRAC, VHSS, Proshika and others). An assessment of these social mobilization efforts will be carried out in October 1998. These ongoing efforts provide the foundation for scaling up the programme in 1999, with the new communication strategy.

- A 1995 survey showed that the number of private latrine producers increased in response to the growing demand created by the communication and social mobilization efforts - from 934 in 1985 to 2,337 in 1990 to 4,152 in 1994 - a healthy

indication of the entrepreneurial spirit in the country. These producers provide a whole host of services including the sale of water-sealed slabs, sanplats, concrete and clay rings for pit lining as well as advice on how to build sanitary latrines. They have played a major role in raising sanitary latrine coverage. At present they are concentrated mostly in market centres and sub-district headquarters. The programmatic focus in the future will be directed towards widening the presence of such production centres to relatively under-served areas, and ensuring that at least one such centre per union in the country.

- The Sanitation and Family Education (SAFE) Project of CARE International, and its subsequent expansion to SAFER (Sanitation and Family Education Resource) with greater involvement of local NGOs, has shown the effectiveness of six integrated interventions (clean water, sanitary latrine use and safe disposal of faeces, environmental cleanliness, proper hand washing, food hygiene, and diarrhoea management) in reducing diarrhoeal incidences by two-thirds within one year in a diarrhoea-prone area (Chittagong district) of Bangladesh. The inter-sectoral approach, active involvement of children, effective role of local NGOs, and development of a monitoring system for behavioural development are some of the lessons that could be applied on a wider scale.

GARBAGE AND CITIZENSHIP

An Administrative Urban Environment Experience with a Focus on Social Issues

I. Presentation

The "Garbage and Citizenship" Project is a formal reaffirmation from UNICEF, the Executive Power of Olinda and partners to the Child and Adolescent Statute which provides for the integral protection of children and adolescents and the application of public resources with this end.

UNICEF's participation in this project began with becoming aware of the large number of families in personal and social high-risk situations, living and surviving on garbage picking. This participation in the form of technical support has been taking place since the forming of the operation through its various stages. Support for seminars and debate forums, as well as the production of materials and information gathering to form the bigger picture has been evidence of UNICEF's presence in this process.

The "Garbage and Citizenship" Project should be understood as an ample recovery and revitalization program for the civil rights of the inhabitants of a vast region that incorporates the Olinda city dump in the state of Pernambuco and three other densely-populated neighborhoods - Peixinhos, São Benedito and Jardim Brasil IV. The project counts on participation of the public as well as that of the different municipal and state entities, as much in administrative concepts as in the implementation of its various actions.

The social-environmental perception of the garbage dump as an unfair and inhuman phenomenon, both environmentally and socially unsustainable, is one of the implicit goals of this project. It is a decisive factor in the removal of the children and adolescents that live and survive as garbage pickers. It makes their return to school and better living and survival conditions possible, as well as the generation of jobs and income for the respective families.

However, in making the project viable, the intervention is not limited only to the most affected area, but to the all of the municipal territory, expanding to neighboring cities. The garbage problem is not specific to one single locality, but to the entire Metropolitan Region of Recife.

II. CONTEXT

With more than 7,200,000 inhabitants, the state of Pernambuco is composed of different micro-regional realities which, among the northeastern states, gives it the best perspectives of social-economic development and, paradoxically, places before it great obstacles in the struggle for the creation and consolidation of the citizenry.

The Metropolitan Region of Recife, on the coast of the state of Pernambuco, has a total area of 2,238 Km^2, corresponding to 2.87% of the state territory. It is made up of 14 municipalities and has a population of approximately 3 million inhabitants, which represents about 45% of the state population.

Greater Recife is responsible for 75.9% of the total income generated in Pernambuco, while it contains 30.68% of all indigent families of the state. Thus, the social-economic reality of the Metropolitan Region of Recife presents one of the most challenging scenarios among the large Brazilian urban centers to the planning and execution of public policy for the improvement of the quality of life.

Greater Recife's basic sanitation is precarious. There are deficits in the supply and distribution of water. The conventional sewage system only serves 27% of the residences, 56% of these utilize it inadequately as a refuse deposit. Solid waste collection is limited to 72% of the residences, the rest of it being tossed into canals and gutters, affecting the water drainage during the rainy season and causing numerous sicknesses as reflected in the infant mortality rate of 127‰.

Olinda, with a total area of 42 Km^2, has a population of approximately 380 thousand inhabitants and more than 60 shanty towns, most of with little or no basic service infrastructure.

Bordering the state capital Recife, Olinda has the advantage of having lower housing and transportation costs. It is one of the country's densest demographic areas, approximately 11 thousand inhabitants / Km^2. In recent years this situation has been aggravated by the migrations coming from the sugar plantation zones and from neighboring states, and by the latest economic adjustment plans promoted by the federal government.

However, this same period has seen a modest increase in organizations and public action groups in the city struggling for improvement in the quality of living. They bring social segments that have been historically excluded from any participation process to the public administration agenda.

This fact is fundamental to any social project. Even in regions of the city where the people's struggles are limited to the most elementary claims for the recognition of human rights, where the concept of citizenship is still a fiction in the real world, we can find community organizations that in some ways push the movements in the right direction, demanding basic

urban services of higher quality and that reach more of the population.

It is in this context that we find the "Environment and Citizenship" project, proposed by city hall. It originates from the manifestation of the public indignation with the social and economic misery of one of the most violent regions of the state of Pernambuco, regarding as much the structural aspects as the extermination of poor adolescents living in shanty towns.

III. A New Administrative Model for Urban Solid Waste

III.1. Considering the Problem

The discussion over environmental conservation and the processes that contribute to its degradation has stood out as one of the foremost concerns of modern society as a result of the deepening understanding of the relationship between the quality of life and a healthy environment.

The challenge that presents itself is how to materialize these concerns in practical questions, where any individual can, in a decisive way, contribute to the minimization or suppression of problems that affect the environment. This means breaking down the barrier that separates abstract discussion from pragmatic intervention.

In the case of the urban landscape, it is possible to identify numerous problems of environmental degradation with devastating repercussions in people's lives. Solid waste is an example of one of these problems.

It carries with it other diverse problems that lead to social conflict, economic exploitation and environmental impact, demanding creativity on the part of the formulators and operators of city public policy[1] in the face of these questions.

This proposition requires a great capacity for comprehension of the garbage issue in contexts different from the traditional conception of the waste specialist. The loosening of exclusive administrative control on the part of the systems operators is one of the fundamental paradigms. The sectoral power, present in the traditional administrative model, should give way to an intersectoral power, exercised by way of a commission because of the diversified nature and scope of the discussions that speak to this problem.

Issues such as negative environmental impact and epidemiological aggravation directly related to the operation of the city public sanitation system are inserted into this context, as well as issues such as families in high risk situations both personally and socially, child labor and school absenteeism. These issues are aggravated further in the context of those members of the population that find their survival alternatives in the city dump.

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1 2 Another relevant aspect regards its treatment in the political-administrative life of the city, where resources of 15% of the municipal budget are applied in cities that maintain structures capable of responding to the public sanitation demands

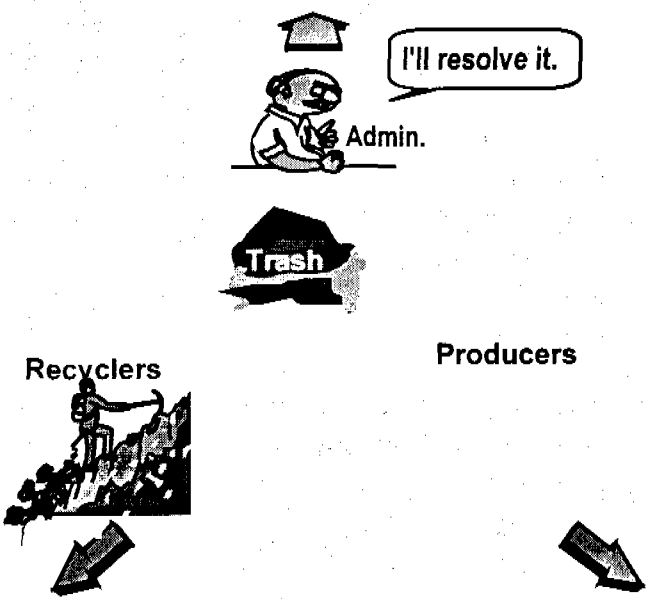
The interdisciplinary treatment that the problem requires is obvious, because of its diversity and the factors that contribute to its aggravation. However, it is equally relevant to comprehend that the relationship between the social players that interact, or should interact, principally in the realm of problem-solving, should not promote the mistaken logic of the area leadership, normally exercised by the segment that has the technological knowledge.

In some occasions, appendices to the public sanitation structure are created which contribute to increase further the cost of the service, as well as create competitive rivalries in the municipal public power. This type of intervention, which acts on the problem symptomatically, corresponds to transference of responsibility where a short-term solution is employed to correct a problem with apparently positive immediate results.

It is necessary to strengthen the understanding that Education, Health, Social Mobilizing and Promotion, among other things, are fundamental ingredients in this new conception. They possess their own dynamics, defined and contextualized in city public policy. The sector specialized in public sanitation should operate this system and contribute to the discussion, in general occupying at first only the place that by vocation is appropriate to it.

III.2. The Collective Construction Process

The construction of an administrative model that is adequate to the local needs requires understanding the nature of the players involved and the relation of the forces that interact in this system. The figure below reflects the contradictions concerning this discussion.



Although the centrality of the interactions is directly related to solid waste and the interests of these segments are not in conflict, but complementary, seen in the logic of the fundamental solution to the problem, the forces that interact in this system are divergent.

The identification and contextualization of the problem is the starting point of this discussion, where the construction of an administrative model compatible to the needs and/or interests of the players involved is proposed.

The challenge that arises regards the compatibility of the interests of the different segments involved, culminating in the construction of an administrative model adequate to the local and operational conditions, where the engineering solutions are combined with other initiatives which integrally address the relationship of man, as a social being, with the environment in which he lives.

The process of discussion dealing with these issues defined the following programmatic structure for the operation of the project in accordance with impact objectives:

1. Removal from the dumps of all children and adolescents who live and survive as garbage pickers in the city of Olinda, making their return to school possible as well as improving living and survival conditions;
2. Organization of Garbage Pickers into Associations and/or Cooperatives to stimulate activities that generate jobs and income;
3. Reduction in the negative environmental impact produced by the careless discarding of trash;
4. Reduction in the infant, youth, and maternal mortality rates among the families of garbage pickers in the city of Olinda.

IV. Principal Difficulties

The clientele culture ends up tying the hands of many administrators, hindering local creativity and the enterprising capacity of the decision-makers.

Limited comprehension of the environmental problems and their interface with affected areas. This stems from the difficulty that community organizations and even public sanitation service operators have in incorporating the environmental aspect and creating proposals for sustainable human development.

As a model in construction, the methodology of intervention has always been altered toward a more interactive participation, which has contributed to the development of a learning process, as much on the part of UNICEF as on its counterparts. This dynamic has required a monitoring of criteria of the various stages and fields of action.

Other difficulties summarized:

- ✔ Promotion of discussion of problems with the community on the part of the decision-makers is not customary;

- ✔ In general, the population has been apathetic as far as the implantation of new projects. This is due to a lack of credibility on the part of the public power, which historically has been denounced as being corrupt, creating a generalization of the fact by the population. There is also the presumption that any efforts will be nullified when a political party in opposition to the one that implanted the project

comes to power.

V. Lessons Learned

The project will only reach its goal if there is participation from everyone and if it is understood as belonging to the city and not just city hall.

The introduction of democratic and participatory line of action is, and has been, fundamental in arriving at a model of rationalization of the interventions. However, many times the lack of objectivity from the team involved, principally due to changes in power and a lack of effective political commitment, has greatly extended the period of time originally foreseen for the project, resulting in scanty effectiveness.

One clear lesson is that without the due political prioritization that the bold ideas of the innovative projects require, it becomes difficult to make them viable.

A policy of communication should be considered as one of the fundamental aspects, seeing that projects of this nature are controversial. The lack of such a policy with the internal and external public could invalidate the project. Only an effective participation can provide the necessary flexibility on the part of the involved parties, in what best represents the sentiment of the majority.

The participation of the external partners in official circles should be sought and made viable. Controversy should not be avoided as it can help clarify the different technical and political factors that can attract the different forces that make up the society toward the achievement of common goals.

VI. Recommendations

The planning of the actions should include the conception of sustainable human development, making opportune the formulation of global policies and the operation of appropriate technologies locally. Between these two extremes, the interactive integration and inter-institutional cooperation represent a guaranty of conditions for the implementation of the actions.

The creation of instruments of social control should be encouraged. Instruments that can facilitate the continuity of the projects during changes of political power or the occurrence other factors that place its progress in risk. So that the project is better anchored and has a greater possibility of becoming sustainable, further leadership should be identified among municipal departments that have some interface with the problem. From the initial stages, this identification is necessary so that the project can be formulated with the participation of the community.

PROJECT INFORMATION

Project title:	Saniya, a public health communication Programme in a West African Town
Location:	Bobo Dioulasso, 2nd city of Burkina Faso: interventions in 11 out of 25 sectors
Date of implementation:	Saniya programme: 1995 (November) - 1998
Key stakeholders:	✧ Ministry of Health, Regional Direction of Health - Bobo Dioulasso (DRS-Bobo) ✧ Ministry of Education, Provincial Direction of Basic Education ✧ London School of Hygiene and Tropical Medicine ✧ Centre Muraz - OCCGE- Bobo Dioulasso
Financial and technical support:	UNICEF (principal donor) WHO-Geneva
Programme Managers:	Ministry of Health: * Dr. Michel Nikiema, Regional Health Director, Bobo Dioulasso * M. Sangaré, M. Programme Coordinator, DRS-Bobo Dioulasso UNICEF: * Lizette Burgers, Administrator WATSAN Programme, Burkina Faso LSHTM: * Valerie Curtis; principle investigator Saniya Programme

Hygiene and Sanitation Promotion: the social marketing approach of the Saniya Project in Bobo Dioulasso, Burkina Faso[1]

Introduction

Diarrheal diseases rank alongside malaria and respiratory tract infections as the main cause of child morbidity and mortality in Burkina Faso. Children in Burkina Faso suffer from an average of five episodes of diarrheal disease per year and diarrheal diseases contribute dramatically to the under-five mortality. Control programmes so far laid more emphasis on the promotion of oral rehydration therapies and the installation of improved water supplies than on the promotion of personal and domestic hygiene. However, it is increasingly being realised that a few simple practices , such as the safe disposal of child stools, followed by hand washing, could play a major role in breaking the fecal-oral cycle of infection.

Burkina Faso is a landlocked country in West Africa with about 10.5 million inhabitants. With a GNP of US$ 230 per capita the country ranks among the five poorest countries in the world: 40% of the population lives below the poverty level. The under-5 mortality rate is 164 and 30% of the under-5 children are underweight. Primary school enrollment is 33% with a wide variation between rural and urban school enrollment and between girls and boys enrollment.

Bobo Dioulasso is the second largest town in Burkina Faso. Its population, currently around 400.000 people spread over 25 administrative sectors, is growing rapidly, putting sanitary conditions under increasing strain. Nevertheless, the vast majority of compounds (90%) has one or more improved dry pit latrines and the town has a well-managed modern water supply. About one-third of households have a tap in their yard, another third buy water from public standpipes and the final third of the population rely on private or communal open wells

Findings from studies aiming for strategies to prevent childhood diarrhea conducted in Bobo Dioulasso between 1989 and 1993 suggested that there was a 30 - 50% increase in the incidence of child hospitalizations with severe diarrhea when the mother disposed of child stools other than in a latrine. The risk of diarrhea was about 35% higher for children living in compounds where human stools were observed on the ground.

Programme outline and objectives

The Saniya Programme - Saniya means "hygiene" in the local language - is a public health communication programme trying to promote a number of specific hygiene practices among mothers and children in the town of Bobo Dioulasso. The Saniya programme was launched in 1995 after formative research by the Ministry of Health, in

[1] This document a summary of different articles and summary reports provided by the Saniya team and its collaborators from the London School of Hygiene and Tropical Medicine and the Centre Muraz. For further details see list of references.

collaboration with the London School of Hygiene and Tropical Medicine.

The Saniya programme is supported by UNICEF within the context of the Urban Hygiene and Sanitation Project of the Plan of Cooperation 1996-2000, elaborated with the Government of Burkina Faso.

Saniya Hygiene Promotion Plan

Target practices
- Hand washing with soap after contact with stools
- Disposal of stools of small children in potties and latrines

Primary target audiences
- Mothers of children under three years
- Maids and child caretakers
- Children of primary school age

Primary positioning
- For mothers/caretakers: hygiene is socially desirable
- For children: hygiene helps avoid diarrhoea

Channels of communication // Materials
- Neighbourhood hygiene commissions -female volunteers // visual reminder sheet
- Discussions in health centers and neighbourhoods // Portable poster series
- Street theater // play outline
- Local radio // microprogrammes, interviews
- Primary schools // teaching pack- manual - posters

The general objectives of the Saniya programme are:

- To reduce the incidence of intestinal infections of children between 0 and 35 months in Bobo Dioulasso through hygiene promotion and primary health care.
- To develop a reference model for hygiene promotion programmes.
- To evaluate the effectiveness of the public health communication approach to achieve changes in hygiene behaviour.

The specific objectives are:

- To increase the proportion of women disposing young children's (0 - 36 months) stools into a latrine from 40% to 60%
- To decrease the number of children between 4 and 12 years observed defecating in the open air by 30%
- To increase the proportion women observed using soap to wash their hands after cleaning a child's bottom from 4% to 25%.

Target practices

The target practices have been defined after a study had shown which practices put children at risk of infection and which practices were a priority for intervention. It was concluded that unsafe stool disposal and inadequate hand washing after contact with stools were of sufficient importance and were sufficiently widespread to warrant intervention. Behavior trials suggested that the adoption of the target practices - disposal of child stools in potties and latrines and hand washing with soap after contact with stools was both feasible and sustainable.

Target audiences

The target audiences are segmented as follows

- ☺ *Primary Audience*: those who will employ the new behaviors, like mothers, child caretakers and children at primary schools. During behaviour trials the school age children became the most enthusiastic proponents of latrine and soap use. Their complaint that there was no soap in schools to continue what they had learned at home led to also target children in primary schools.
- ☺ *Secondary Audience*: those who can influence the primary audience, like family, older women, neighbors; health workers, pharmacists, traditional healers; and opinion leaders

- ☺ *Tertiary Audience*: those whose support will be critical to the success of the programme, like decision makers, authorities; agencies, collaborators and funders.

Primary positioning or what can motivate behavior change?
To understand what might make a woman or a child want to adopt a new hygiene practice the notion of hygiene in women focus groups was investigated. This showed that women recognize about ten types of childhood illnesses which have diarrhea amongst their symptoms, the causes of which range from teething, fever, inappropriate food and transgressing the taboo on post-partum sexual relations. Only one, non-serious illness, was seen as being related to hygiene. As existing perceptions of diarrhea causation are so well grounded in the women trying to change them is likely to be fruitless. Therefore motivations other than possible health benefits were needed.

Investigation of the notion of hygiene in focus groups showed that it is an important social virtue. Therefore the programme positioned the messages for mothers around the social desirability and the reduction of nuisance that the new practices could bring.

Channels of communication
Data on the reach and the acceptability of different channels of communication for the target audiences were collected. These showed that "word of mouth" remained the most important source of information for many women. However, information disseminated by local radios is growing in importance. Video and local theater were thought to have the potential to contact "hard to reach " groups such as child caretakers (maids, young cousins). The use of print media, including posters, newspapers, billboards and brochures had little relevance to the mainly illiterate target groups.

Main activities

The Saniya programme includes:

- Communication activities in 11 sectors of the town, including the installation of Neighborhood committees , the so called``Responsables Saniya``; hygiene promotion at health centers and promotion of messages through radio and local forum theater

- School sanitation promotion and latrine construction
- Action-Research
- Advocacy of experiences
- Institutional adjustment and capacity building

Communication activities in 11 sectors of Bobo Dioulasso

In 10 out of the 11 target sectors of Bobo Dioulasso local hygiene committees, composed of elected women who make 15-20 home visits in their neighborhood, have been installed. These women, most of them illiterate, are trained in communication of the Saniya messages and received training in soapmaking to enable them to create some revenues.

About 50% of the women with children under three attend regularly pre- or post-natal consultations at the health centers. Eighteen first line health workers of 8 basic health centers have been trained to organize causeries around the Saniya messages for mothers attending these consultations.

As 60% of the mothers have a radio in the household and 67% of all mothers claim to be regular listeners, a series of spots and micro-programmes are being broadcasted during the most popular programmes in the different local languages (Dioula, Fulfulde, Bobo, More, and French).

A local group of young actors presents a play called "My bad Neighbor" at popular spots in the 11 sectors and sometimes at schools. The play presents a family living in difficult circumstances facing different problems , including frequent diarrheas, while they cannot manage the health expenditures.

School sanitation promotion and latrine construction
All 64 schools in the target sectors (65% of all schools in Bobo identified in 1995) have been covered by the school hygiene programme, including training of teachers, provision of soap and buckets for each class, production of a teaching pack (manual, posters) for use by teachers. The construction of school latrines - usually the major objective of Unicef supported sanitation programmes - has been included to support the correct behavior in schools.

The action-research component and dissemination of findings
Different studies have been and will be realized in order to evaluate the impact of the interventions. A series of manuals concerning hygiene promotion in French and English, with additional support from Unicef HQ, will be published.

Institutional adjustment and capacity building
The replicability of the programme very much depends on the institutional set-up. The programme was more or less an externally driven project and its original institutional set-

up didn't match with any of the possible forms of cooperation Unicef can have with its partners. Therefore review and adaptation of the collaboration between the different partners was necessary.

Impact

As the programme is in full implementation it is difficult to define its impact on the change of behaviour. Meanwhile the mid-term evaluation of the school activities and the coverage study, both in 1997, show that:

- after 18 months of intervention 74% of the target women had at least one contact with the Saniya programme
- 50% of the women are capable to cite the two principle messages of the programme.
- The coverage for the child caretakers and primary school children was 47% and 56% respectively.
- The radio had the wides outreach (59% of the women) followed by the ``Responsable Saniya``. However the effectivity of the radio is rather limited as only 31% of the women reached by this communication channel cited the messages correctly, compared to 84% by women who received a visit by a ``Resonsable Saniya``.
- The forum theater, although very much appreciated and a strong tool to mobilize the population, turns out to be limited to transfer the correct messages.
- The causeries in the sectors have been limited in outreach.

While the explicit aim of the intervention is to change behavior, the implicit aim is to reduce the level of fecal contamination to which children are exposed thus reducing the incidence of intestinal infections in young children. The impact of the programme will be assessed by spot observations to define the frequency with which the child's environment is visibly contaminated with fecal material and by "fingertip rinses" to measure the level of fecal contamination on child caretaker's hands. These studies are currently under preparation.

Constraints

The main obstacle was the identification and formalization of new forms of collaboration between the MoH/Saniya, Unicef and the LSHTM, which took much more time than envisaged. This had a strong impact on the implementation of the programme activities.

The adaptation to Unicef's administrative procedures, like the timely and accurate justification of advances, has been a painful process. As the health and project staff had no experience with Unicef support, training has been provided on Unicef's rules and guidelines for project financing. To strengthen the management and planning capacities, the staff was trained in and outside Burkina Faso. However the programme has been

blocked several times due to outstanding advances.

The departure and change of personnel at different levels , e.g. at coordination level, at the health centers and in schools, created discontinuity and hindered the course of the activities.

Lessons learned and best practices

Lesson 1
It is difficult in an urban setting to keep up the motivation of volunteers, as was the case with the ``Responsables Saniya`` (RS). A revision of their role and possible integration with the local health centers took place. The number of RS will be reduced to 3 or 4 per sector and a remuneration will be provided by the health center operating within the context of the Bamako Initiative. The RS will act as a liaison between the health center and the population and may also assist in other campaigns like vaccination, promotion of ORS/ORT, etc.

Lesson 2
One of the strong elements of the Saniya programme is its concept based on a certain number of variables. These variables can only be defined by studying the community the programme is adressed to. Whilst in Bobo Dioulasso the studies prior to the intervention programme have been carried out over several years, many of the techniques could readily be refined for use over a three month period prior to an intervention. Curtis et all elaborated a tool kit for formative research which provide the best practices for any planner who wants to set up a hygiene promotion programme.

Table 1. Plan of formative research for hygiene promotion (source: Curtis et al, 1997)

Objective	Questions to Answer	Research methods
1) Identify risk practices	Which specific practices favour tranmission of enteric pathogens?	Epidemiological common sense Literature search Unstructured observations
2) Select practices for intervention	Whichrisk practices are most widespread? Whichrisk practices are alterable?	Structured observationin representative sample of households Focus group discussions
3) Target audiences	Who employs the practices? Who influences the peoplethat employ the practices?	Structured observations Focus group discussions
4) Determine message positioning	Do target groups perceive a link between the risk practice and health? Child diarrhea? What motivates those who currently use "safe"practices? What advantages are perceived by those adoption safe practices?	Focus group discussions In-depth interviews with current users of safe practices Behavioural trials with volunteers, interviews with volunteers, with adopters
5) Select communication channels	What channels are currently used for communication? What channels are trusted for such messages?	Interview representative sample of target audiences. Focus group discussions
Design communication materials	What type of materials & events are likely to be attractive, understood, believed, remembered?	Focus group discusssions(FDG's) trials in pilot programme Revision and retest of materials Further FDG'sif needed
Plan intervention	What is the likely reach and cost of each channel? What combination of channels is likely to be most cost-effective?	Result of above, consultation with community groups and collaborating agencies, cost estimates, review of pilot programme

Lesson 3

Institutional clarity and devision of responsibilities is extremely important to ensure the correct implementation of the programmes. The integration of action-research programmes like the Saniya programme in plans of cooperation between Unicef and the the Government need probably special attention in order to identify the best ways of cooperation.

References

Curtis V., Kanki B., Cousens S., Sanou A., DialloI. and Mertens T. (1997). Dirt and diarrhoea: formative research inhygiene promotion programmes. *Health Policy and Planning*, vol. 12, no. 2.

Curtis V., Kanki B., Mertens T. et al (1995). Potties, pits and pipes: explaining hygiene behaviours in Burkina Faso. *Social Science and Medicine* 1995; **41**: 383-93

Kanki B., Curtis V.,Mertens T. et al (1994). Des croyances aux comportements: diarrhée et pratiques d'hygiène au Burkina Faso. *Cahiers Sante* 1994, **4**,: 335-9.

Direction Regionale de la Santé de Bobo Dioulasso/Programme Saniya (1997). Enquête de couverture.

Direction Regional de la Santé de Bobo Dioulasso/Programme Saniya (1998). Revue des activités dans les écoles. Version préliminaire.

Ministry of Health, Burkina Faso et al (1994). Saniya, a public health communications programme in a west african town: a project proposal from the Project Saniya team in Bobo Dioulasso, Burkina Faso.

Environmental Sanitation and Hygiene Education, China

Background

China has achieved substantial strides in addressing the decade goals for children as embodied in its National Programme of Action(NPA). However, the achievement of sanitation coverage still lags behind. As stipulated in the Chinese government's current 9th Five-Year Plan on Health, the 2000 and 2010 goals on rural sanitary latrine are 40% and 65% respectively. However, the government's 2000 goal on sanitation in the Health Plan is not reflected in the NPA, where it refers only to increase in sanitation coverage but no specified target is given. NPHCCO in collaboration with NWCCW is in the process to set the NPA and Health Plan goal on rural sanitation at 40%.

The 1993 National Survey on rural latrines and human excreta disposal conducted by NPHCCO revealed that 85.9% of households have access to latrines, but only 7.5% of households had sanitary latrines in rural areas. In March 1995, a National Multi-Indicators Cluster Survey reported the national coverage rates of sanitary latrines as 24% with urban 74% and rural 7%.

In 1995, a national annual statistics reporting system on rural sanitation has been established, for the first time, through PPHCCO at all levels. The annual statistics on rural sanitary latrines coverage of 1995, 1996 and 1997 have been reported as 15.78%, 20.91% and 29.55% respectively. Although an annual meeting is held to discuss the result of the report with participation of NPHCCO and PPHCCO staff, no spot checks to validate and fine-tune the system for the accuracy of the data have been done so far.

In recent years, many provinces and municipalities have made tremendous progress on rural sanitary latrines. For example, Shanghai municipalities has achieved rural sanitary latrine coverage of 78.95%, which is the highest coverage among all provinces and municipalities in China. Henan, Guangdong, Hubei and Fujian provinces are considered as the leading provinces in rural sanitation promotion with relatively high sanitary latrine coverage of 55.03 %, 45.61%,41.0% and 35.72% respectively .

It is estimated that more than 600 million people living in rural areas of China have no access to sanitary latrines. Most families use the traditional latrines, a dug hole with two stones as foot rest, from which excreta are scooped out regularly and stored for direct use as fertilizer in their fields.The use of excreta as fertilizer for agriculture is an age-old practice in China over several thousand years. The consequence of parasitic worms transmission is very high including ascariasis, hookworm and schistosomiasis. A national survey on helminth infections of 1,477,742 rural population in 726 counties conducted during 1988-1992 has revealed that the overall infection rate of helminth infection is 62.63%, and 17 provinces having infection rate of more than 50% and 6 provinces (Hainan, Guangxi, Sichuan, Fujian and Zhejiang) with higher than 80% infection. Overall Ascaris infection rate

is 46.99% which equivalent to 530 million population.

In some of the poorer areas in China, as many as 90% of children suffer from ascariasis infection, seriously impairing their normal growth. Every year about 140,000 Chinese children die of diarrhoeal diseases. Frequent diarrhoea and worm infection due to unsafe excreta disposal and poor hygiene are the major factors contributing to stunting that affects about 39.1 percent of children in rural China as reported by the China Academy Preventive Medicine.

The Project Approach

The Water and Environmental Sanitation (WES) Programme within the UNICEF supported China Country programme (1996-2000) consists of 3 projects namely water supply, environmental sanitation and hygiene education projects. The WES programme adopted "3-in-1" approach with the objective to support the Chinese Government in achieving the NPA sanitation goal. The "3-in-1" approach is that the provision of water supply, sanitation and hygiene education are implemented as a package or the sanitation and hygiene promoted in project areas where safe water supply is already available. The UNICEF supported WES programme is implemented in selected counties classified as "national poor counties" and is linked to the Government Poverty Alleviation Programme.

The projects adopts a combined "Push" and "Pull" strategy to gain commitment of government at all levels from central to township levels and to motivate communities/families to take action to improve sanitation, living environment and changing hygiene behaviours. The **push** includes advocacy meetings with the participation of the national and provincial leaders; establishing regulations; research and development of affordable sanitation technology; and promotion of linkages to include sanitation and hygiene education within the development initiatives of other sectors like water, agriculture, education, women in development, poverty alleviation, and environment.

The **pull** uses social mobilization, communication and social marketing strategies to create demand for sanitary latrines from communities. These include demonstration of affordable and culturally acceptable sanitary latrines at role model households, schools and township hospitals; using mass and inter-personal media to disseminate key messages; using primary school as an entry point for promoting attitudinal and behavioural change in communities; and strengthening community participation especially women's participation.

Project Areas and Implementation Structure

Among China's over 1,700 rural counties, of which 592 are classified as "national poor counties". UNICEF is presently assisting environmental sanitation and hygiene education projects in 21 national poor counties of 8 provinces namely Xinjiang, Gansu, Shaanxi, Hebei, Shanxi, Henan, Anhui, and Yunnan.

The Environmental Sanitation and Hygiene Education Project Leading Groups have

been established at all levels (province, county, township) to oversee the project implementation. Members of the leading groups are: Governors or Vice Governors as Chairpersons, Directors of related agencies as members e.g. PHCCO, Water Resources, Health, Education, Women's Federation Union, Media, Youth League, Land Management Bureau, etc. The roles of the leading groups are to coordinate between the member sectors to ensure smooth project implementation. Therefore it is important for the Project Leading Group at the respective level to organise regular meeting with the for project planning and review to ensure effective collaboration between sectors.

The UNICEF supported WES project implementation offices have also been established at all levels (province, county, township) and are responsible for project planning, implementation and monitoring.

The village WES committee, a community-based management team was also established in each project village. The committee members are village leaders/party secretary, women cadres, school teachers, village doctors etc. The village WES committee is directly involved in implementation and follow up of progress.

Project Activities

The project assists the following activities:

* Advocacy meetings-- for governors and leaders of related sectoral agencies at all levels.

* Capacity building--including workshops for government functionaries at provincial and county levels on planning, management and monitoring and evaluation; training of government technicians and trainers on safe sanitation technologies such as "double urn latrines", three compartment septic tanks, etc.; and training of trainers on communication skills and social marketing.

* Communication--on conducting baseline KAP/RAP surveys; development of communication strategies; development of hygiene messages and IEC materials including pre-test, production and appropriate use of materials; development of appropriate media including folk media, local media workshop, audio-visual aids production (e.g. video, TV spot, radio messages, etc.).

* Grassroots training-- of village leaders, teachers, doctors, extension workers and women cadres who work as sanitation mobilizers, using SARAR participatory methods to involve communities, mobilize family pride, and engage the communities in planning and investing to own and operate their own water and sanitation facilities. Training also provides skills to village masons, to equip them with technical skills on sanitary latrine construction, operation and maintenance.

* Action research-- on sanitation technologies is being done to develop appropriate

technologies for arid and frigid areas in China.

* Sanitary latrine-- affordable models of household sanitary latrines are built as demonstration models in the villages.

* School sanitation-- including the support to "health and hygiene" education in all schools as per the government's regulation and the construction of safe water supply and sanitary latrines and handwashing facilities in schools to strengthen hygiene education and to reinforce students behavioural development and as a good model for demonstration to parents and communities.

* Monitoring and evaluation includes: monitoring communication activities and the use of IEC materials; monitoring construction quality of sanitary latrines; monitoring proper use of sanitary latrines and hygiene behavioural changes, etc.

Constraints

* *Low demand at grassroots level:* rural people do not have much awareness of the relationship between sanitation and health. Traditional culture also regards a latrine as a dirty place unworthy of care and investment. Awareness of the benefits of hygiene to health is also low.

* *Lack of human resources and capacity of the sector staff:* As a result, the efficiency and quality assurance of sanitation and hygiene promotion are affected.

Lessons learned and best practices

1. Government commitment

In the project areas, strong government/political commitment for promotion of sanitation and hygiene education at all levels (province, county, township and village) is noteworthy and the decentralization of project planning and implementation are two of the major factors for the success of the programme.

In almost all project areas, the sub-national government leaders at all levels have signed the agreement for promotion of sanitation in their respective areas. The agreement clearly set the goals of year 2000 and the annual project target of sanitary latrines to be built.

In many project counties, local governments have issued regulation and its enforcement for any new house construction, a sanitary latrine must be built by adopting a "cash deposit for sanitary latrine in new house". A fix deposit of about RMB 200(US$24) is to pay to the county government when applying for the construction of new house. The cash will be returned to the family immediately after the sanitary latrine is built and inspected.

#Promotion of sanitation and hygiene is collaborating with the Government's Poverty Alleviation Programme and in many project areas are linked to the on-going government economic and civilisation development programmes such as "Civilisation village", "Better off village", "Civilisation Establishment", "Health Education for the 900 millions peasants", and "Healthy City/Town Campaigns".

2. Decentralisation, Resource Generation and Linkage to Economic Activities

The project has demonstrated the fact that once the local government and community have understood the essence of sanitation and hygiene, it is possible to mobilize the much larger resources from not only the local governments large financial support but also the community cash contribution to build own sanitary latrines and to improve their living environment. About 80% of financial inputs to the activities are allocated from the local governments of sub-national levels due to the decentralisation nature of the Chinese government structure.

In 1996-1997 UNICEF supported social mobilization and communication activities along with providing part of the cement for 23,670 demonstration sanitary latrines in 20 project counties, the local governments and the community not only provided the remaining inputs for those demonstration latrines, but have gone on to construct 214,931 household sanitary latrines. This demonstrates that the limited UNICEF input has triggered a multiplying factor of 10 time achievement at the grassroots. The ratio of financial contribution in project areas from UNICEF:government:village/family is 1:1.7:3.3.

Under the Poverty Alleviation Programme, poor farmers are entitled to a loan of RMB 1000(US$200) for income generation. As a trial case in Ningling county, Henan province, agreement between some township government and farmers is that RMB 100(US$20) out of RMB 1000 loan were deducted as part of the cost for sanitary latrines to be built with the support of the township government. After the families earned some income, the cost of loan will then be returned to the government.

In Guoyang county of Anhui province, the administrative village committees collect RMB2(US$0.25) per person out of the people's annual income tax for promotion of sanitation and hygiene in the respective village.

There are many resource mobilization initiatives done by the local governments in the project areas. A pilot experiment of using revolving fund as one of financing scheme on sanitation is underway in 2 project counties.

3. Advocacy

The physical presence of UNICEF as catalyst to simulate the acceleration of sanitation and hygiene promotion in China is essential.

UNICEF participated in the 1997 meeting in Anhui province, where strong commitments were given by the provincial vice-governor and by city and prefectural governors of this province(over 60 million population). The outcomes of the meetings were the development of plans of action and defining targets on how to achieve 2000 goals on water and sanitation in each city/prefecture. Under the leadership of the Provincial Vice -Party Secretary, follow-up activity has engaged the Youth League in cooperation with Provincial Public Health Bureau and PHCCO to make promotion of safe sanitation, water and hygiene education a focus of its mobilization activities as part of the civilization campaign for the entire province in the coming years. The involvement of the Youth League in the promotion of the "3-in-1" approach can be replicated eventually nationwide.

It is anticipated that the planned UNICEF supported National Advocacy Conference on rural sanitation to be organized by NPHCCO in 1998 with the participation of high-level government officials like State leaders, Ministers of related Ministries and Provincial Governors who are responsible for PHC. works, will create a new momentum on sanitation promotion in the entire country.

4. Social Mobilization, Community Participation and Local Level Monitoring

In most counties village party cadres and leaders, teachers, women federation union cadres, Youth League cadres and members were encouraged to take the lead to build sanitary

latrine at home. As such, it established many good model "points" spreading across in the local community as "live educational tool" so that people can see in reality what a sanitary latrine is and it's advantage. This methodology proved to be effective in acceleration of sanitation in many areas.

As the result of active and effective social mobilisation, many communities are fully motivated and it has created "self realisation" among the people for the need of sanitation and clean living environment. People attitude on sanitation and hygiene have been change 180 degree from "you have to change" to "I want to change".

In one township where village cadres and leaders regularly follow up with families for proper use and maintenance of sanitary latrines. Small prizes such as soap or towel are awarded to the first three most hygienic families. Dirty families are announced through the village loudspeaker.

5. Capacity Building

Project activities in developing training materials on sanitation technology and participatory hygiene education have laid the foundation for an anticipated "going to scale" by the government. The provincial government planned "pilot local capacity building" schemes for "going to scale" on sanitation and hygiene in Henan and Anhui provinces to be implemented in mid 1998 are to train all core trainers in all counties of these 2 provinces. The experience/lesson learnt from these two pilot provinces would establish a model for nationwide application and could pave the way to a new direction of capacity building in the sector in China.

6. Impact on Health and Economics

In many project areas, a substantial reduction of diarrhoeal diseases and intestinal worm infection among children was reported by the Township Hospital doctors and the village doctors, parents and the school children themselves. Shanxi province reported a reduction on medical expenditure on filth-born diseases among communities in the WES "3 in 1" project areas. A study to verify the health benefits gained is needed and has been proposed.

Farmers in some project areas reported higher yield of crop from farmland using the well digested excreta from the sanitary latrines of double urn and three-compartment types. In Anhui province, farmers also reported less money spent to procure chemical fertilizer. Again, research study is needed and has been proposed to evaluate the economic benefits from sanitary latrines.

7. Inter-sectoral linkages

The project has made tangible linkage with other government sectors and UNICEF programme areas in promotion of sanitation and hygiene. For example, sanitation and hygiene activities has been introduced to the All China Women's Federation (ACWF) through the UNICEF-supported Social Development Programme in Poor Areas(SPPA) projects in the NPA's social mobilization project provinces. Such trial project is just being initiated by the ACWF to use profits from their income-generating projects to support members for construction of family sanitary latrines. The ACWF should developed an effective monitoring system and take up frequent follow up actions/monitoring to ensure effective hygiene education carried out by the women's group and the proper utilisation of profits from the income generation activities to build family sanitary latrines.

A Government order has been issued by the State Council on "School Health Regulation" which includes school sanitation and hygiene. Government has developed curriculum and text books for "Health and Hygiene" for all classes in primary and middle schools. Such "Health and Hygiene" classes are being taught in many schools over China. Linkage with Education Bureau in the UNICEF supported WES project areas have been established on promotion of school sanitation and hygiene in selected project schools. The aim is to enhance the teaching of "Health and Hygiene" and to reinforce students behavioural development through the provision of safe water supply, sanitary facilities and handwashing facilities in schools. Such complimentarity of both software and hardware is feasible and effectively in areas where financial and technical capabilities/capacities are adequate. However in some areas although there has been government order by State Council on "School Health Regulation", actions have not been taken in some schools especially in the poor areas due to lack of budget and technical capacity.

8. Private Sector Involvement

During 2 years of project implementation, there are several enterprises/ individuals involved in sanitation related business including trained masons earning their income from construction of sanitary latrines and manufacturers of latrine parts and pans. These also create opportunity for income-generating, which is a good for economic development.

9. Low-cost Technology

Two types of sanitary latrine namely double urn and three compartments are promoted in the project and non project areas. These types of sanitary latrine have been promoted in many areas in China for almost a decade. The squatting pan, however, can be pour flush waterseal or funnel types. The pour flush waterseal pan was recently introduced, from Thailand, by the project to rural China. It appears that villagers in the project counties in Anhui and Yunnan accept the use of this gooseneck waterseal. The gooseneck waterseal pan is yet to be tested for use in cold climate areas.

According to the Chinese standard, the underground compartment of a sanitary latrine should be water proof without leakage and the superstructure should have proper roof and walls. The cost of the underground component up to plinth level of the double urn type is RMB 120- 376(US$14-44), and that for three compartments type is about RMB 250 - 400(US$29-47). A completed sanitary latrine may cost from RMB300 to 800(US$35-84). The variation of cost indicates that there is room for cost reduction for both underground part and superstructure.

The effluent from the 2nd urn or the 3rd compartment are reported to be almost pathogen free and the sludge in the first urn or compartment is well digested. As reported in Henan, the effluent and the digested sludge have higher fertilizer values compared to that of partially digested or fresh excreta. The economic benefit of sanitary latrine is realised by many farmers. People now consider that building a sanitary latrine at home is as if having a "family fertiliser factory". There is a concern on the suitability of these sanitary latrines in areas of severe cold winter conditions. However, the sanitary latrines built in Zhidan county of Shaanxi province were found undamaged after two severe winters with ambient temperature down to -28C.

10. Best Practices

The Henan province sanitary latrine promotion stands out positively compared to other provinces in China. From 1989 to 1997 improved latrine construction increased from 1% of the population in rural areas to 55.03%. Prior to UNICEF involved in the programme started in 1994, the province implemented the programme entirely on local resource and through the existing party and government infrastructure without external support. With limited UNICEF inputs to the province since the bridge programme from 1994-1996 and the current country programme, it has demonstrate the catalytic effect on generating further momentum on the acceleration of sanitation movement in Henan province.

What made the Henan experience work? The lessons learned can be summarized as follows:

1. ***The right policy at the right time***
Given the right policies set at the national level and the provincial authorities translated those into action plans with targets at all levels within the province.

2. ***The right technology***
The double-urn latrine developed and initiated in Henan province is financially affordable and culturally/socially acceptable to the farmers and can be built by local masons with local materials.

3. ***Strong Government commitment at all levels***
Ensuring all levels government commitment from the provincial Governor and Vice Governor to the village leaders to take collective actions

4. ***Community resource generation***
The provision of small subsidy as token and incentive in promotion of sanitation has not only generated much financial inputs from the people themselves but also motivated people's "self realisation" on the need of clean environment and clean living.

5. ***Linkage to economic, social and health benefits***
Strong focus on promotion at all levels on clear economic, social health benefits. The use of effective demonstration assists in this process.

6. ***Ensure proper collaboration of all sectors and use the existing structures at all levels***
reaching village level and involving all possible allies at grassroots.

7. ***Patience but persistence***
Creating awareness on improved environmental sanitation and hygiene behavioural change from the decision makers to community and individuals takes time. It can not be done in a hurry, and requires constant follow up.

8. ***Linkage to on-going government "Healthy City/Town" Campaign.*** Under the "Health City/Town" campaign, Henan province has gained successful expediences of transforming Xingcheng Municipality into one of the provincial model city where sewerage system is available for one-third of the city and good public latrines are available in many locations. Almost all families built and use sanitary latrines within 2 years. The province plans in 1998 to use these campaigns to promote rural sanitation in the entire province. The Henan provincial government has set the target of 80% coverage in rural households as one of the core indicators for earning the entitle of healthy city/town.

Although the physical progress of Henan province's effort on sanitary latrine coverage

can be considered a success, a number of problems still need to be overcome. They concern insufficient maintenance and effective use of the latrines, and hygiene education. As a result, only half of the improved latrines in Henan province were found to be sanitary in a 1993 nation wide survey on sanitation. The lack of a communication strategy, insufficient use of mass media and insufficient monitoring of effective use are among the other weaknesses which need to be remedied.

UNICEF PROJECT

URBAN ENVIRONMENTAL SANITATION IN ILLEGAL SETTLEMENTS (METROPOLITAN AREA OF GUATEMALA CITY)

LOCATION:	El Mezquital, settlement in the outskirts of Guatemala City
DATE OF IMPLEMENTATION:	1984-1997
DURATION:	Approximately 13 years
PRINCIPAL STAKEHOLDERS:	Human Settlements and Housing Division (DAHVI); Executive Secretary of Guatemalan Government; World Bank; Médicins sans Frontiéres, UNICEF/Guatemala; Government of Swizterland and NGOs.
PROGRAMME COORDINATOR:	Dr. Lair Espinoza, UNICEF Urban Basic Services Programme (1992-1997).

SUMMARY

This summary describes the Urban Environmental Sanitation Project within the framework of the Urban Basic Services Programme which UNICEF developed in Guatemala City between 1984 and 1997. The programme began a variety of community based initiatives (initially with NGOs and later on with government agencies) for water, sanitation, drainage, housing improvement, health promotion, health-care and child development in illegal settlements.

The programme included an innovative network of health promoters

selected by their own community, as well as new models for community base day-care centers.

I. PROBLEM CONTEXT

THE URBAN precarious situation in Guatemala is not new and its growth is a product of the increasingly development of the metropolitan area in the last four decades. During the early 1990s the population of Guatemala City reached 2 million people. Many people lived in 231 precarious settlements without basic infrastructure and services. By the end of 1997, the Metropolitan Area of Guatemala City had a population of more than 2.5 million people out of which 231,900 lived in 161 precarious settlements without basic infrastructure and services: there were 176 popular settlements. Most of the popular settlements were during 1991 precarious settlements. The majority of residents could not obtain credit to improve housing conditions and infrastructure.

II. PROJECT START UP

ONE OF THE first actions that UNICEF supported was the emergency water supply system in El Mezquital. This was a settlement made up of 9,400 families who invaded a vacant piece of land in the outskirts of Guatemala City in 1984. The invaded land had no urban basic services (no water supply). The settlers received no support from national or local government agencies. The strategy adopted by the government was to ban funding for invaded land areas. After a critical outbreak of typhoid fever the settlers approached UNICEF requesting its support to improve their water supplies.

Initial surveys and meetings proved that the majority of dwellers in this area lived in extreme poverty. The most serious problems detected were: lack of safe water for human consumption and spreading of diseases.

Medicines sans Frontiéres, a French NGO, developed a basic services project with the cooperation of the Community Association of Student Nurses who undertook a door-to-door health survey and distributed anti-parasitic

medicines to all children. UNICEF provided the materials for 13 community water taps, installed by local volunteers.

III. DEVELOPMENT OF GOVERNMENT COLLABORATION

IN 1986, a change in government provided an opportunity for a closer collaboration. The new elected government created a commission to address the problems encountered by members of precarious settlements. In February 1987, the Committee for Attention to the Population of Precarious Areas in Guatemala City (COINAP) was formally established and became a UNICEF government counterpart.

COINAP had considerable representation among public and private institutions and representatives from community organizations who were already developing projects.

This committee began working under the support of Guatemala´s National Planning Ministry and its aim was to coordinate assistance from public and private sources for the city´s precarious settlements and to promote development and to strengthen community organizations. The committee also played a key role in making alliances between agencies and local communities.

During the first five years, there were many constraints in the implementation of the Urban Basic Services Programme. Technical teams formed by COINAP members worked jointly and closely with the communities in the implementation of different projects. The experiences were disseminated among member agencies, such as the Ministry of Health, who identified new practical models for the application of primary health care strategies.

Five years later, the role of COINAP changed from a project-execution agency to promotion and/or support to other organizations in order to implement basic services projects. The agency´s main role was to mobilize low-income communities and institutional resources from government and other agencies and document the methodologies and experiences. At this present time, COINAP is no longer under the support of Guatemala´s National Planning Ministry. It is foreseen that it might change to a civil association in 1998.

IV. HEALTH PROGRAMME AND COMMUNITY HEALTH PROMOTERS

ONE OF THE MOST important interventions of the community volunteer´s was the development of a health-care and monitoring programme within the precarious settlements. This initiative involved student nurses who undertook door-to-door health surveys and administered anti-parasitic medicines to local children.

V. URBAN ENVIRONMENTAL SANITATION PROJECT

a. Deficiencies

UNEXPECTED URBAN SETTLEMENTS obviously lack the necessary infrastructure for a healthy environment. Just like in many countries, Guatemala´s urban growth has far exceeded the capacity of national and municipal authorities to provide piped water systems, drains and sewers, as well as a regular garbage collection systems. Nationwide, the situation is precarious but in the peri-urban settlements in and around Guatemala City the situation may be considered as critical.

The greatest challenge encountered by the technical committees at the beginning of the Urban Basic Services Programme (to address water and environmental sanitation issues) was to handle the constraints in a non-traditional way due to the shortage of water and funding. The water supply deficiency was considered, by the community members, as the most critical.

b. Water supply

Two different models for improved water supply were developed: the single source tank and the well, both combined the community´s full participation and provided reliance on technical assistance, as well as institutional cooperation from COINAP members. **The single source tank** is an original method for obtaining piped water. The community members requested EMPAGUA, Guatemala´s Municipal Water Enterprise, to install a "corporate" or single source water tank in the neighborhood for which the community created a

supply network to reach each house. In this regard, UNICEF provided funds for the pipes and other materials required. Each family made its own house connections. The local community association receives a global bill from the water company and then they collect the fees from the users. The fees are established according to usage and measured by individual meters. A community member was elected and trained to handle the billing and collection of fees. Most of the fees covered the costs, nevertheless, a portion was left aside for maintenance and miscellaneous expenses for local infrastructure, such as drainages and sewers.

Although the cost of water was higher than the one paid by households who were connected to the city´s water network, it was still far less than the rates previously charged by the private water supply firms. The fact that the water supply is piped to each home saves time for the household members who in the past had to wait in line at public water taps, thus eliminating the physical burden to carry water back to the house. Other communities involved in the Urban Basic Services Programme have already begun to make similar arrangements. The Community Association in charge of the water distribution usually collects a minimum fee to cover the cost of other projects, such as investments in low-cost latrines.

El Mezquital, well-managed by the community: Normally, 40 families share each public tap in El Mezquital. The community members identify this situation as critical. The community association requested UNICEF some funding to dig a well of 305 meters (1,000 feet) which would provide 80 liters of water person/per day to approximately 2,000 families, with a fee ranging from 25 to 60 per cent less than the current cost of other sources. After this, the community instituted a small private enterprise, managed by local members, to handle the new water project. UNICEF financed the initial 900 home connections. Payments received were deposited into a revolving fund which will enable other homes to be supplied with water and, hopefully, the service will supply the entire settlement.

The cost of the project, including initial surveys and research, well-digging, home installations, training of community managers and installation of counters was estimated around US$200,000.00 or US$100.00 per family.

c. Other Environmental Initiatives

Between 1987 and 1990, 48 volunteers from El Mezquital received training in basic environmental sanitation. After the initial training, 14 public taps and 500 dry latrines were installed; 3,000 existing latrines improved and sewage drains and cobblestone sidewalks built in 24 alleyways.

Volunteered projects for reforestation were initiated with the support of the government´s forestation division. Some 20,000 rapid growth trees were planted to establish a sustainable supply of fuelwood. The planting of trees also helps to avoid soil erosion on the hillsides in which many of the precarious settlements are located.

New woodburning stoves were developed and introduced with the support of the Mennonite Church. These stoves decrease wood demand and minimize indoor air pollution.

d. Project Objectives

- Improve sanitary conditions in precarious settlements.
- Water supply and sanitation services in precarious settlements like El Mezquital and others.

e. Main Activities

- Water supply
- Sanitation (latrines, drainage, sewer, garbage)
- Hygiene education
- Reforestation
- New woodburning stoves
- Low-cost appropriate technology development.

f. Impact

- 2,000 families with quality services.
- Two modalities have been developed, "bulk water service",

which is applicable to communities of less than 10,000 inhabitants and an "alternative service" obtained from private wells or private water sources. These modalities are being implemented in other settlements.

g. Constraints

- Lack of solid community organization and participation
  Government´s structure is rigid and, therefore, it is not easy for the community to handle their own solutions.
- Lack of easy access to financial support from international credit banks
- Intercommunity disagreements and disputes.

VI. LESSON LEARNED AND BEST PRACTICES

Reflection and action are key elements to implement an Urban Environmental Project. The provision of education and technical training in health and sanitation helped community members, thus giving them the necessary tools to face daily challenges. Action implementation involved horizontal linking of different initiatives within settlements.

Why is community participation so vital to the success of this project and programme? One of the reasons is that governments in Third World countries do not have the political resources and will to address the problems of the poor population. Fundraising for projects in peri-urban settlements is not easy; governments feel that such funding will encourage further rural-urban migration. Some international agencies have been able to provide assistance; nevertheless, since they have not given follow-up to their projects, their projects have not succeeded.

The installation of alternative, small diameter drainage pipes, in large urban settlements, can be successfully completed but it is necessary that community members change their lifestyles -including disposal of various kinds of objects into drains-. This is a fact which demands for new participatory approaches. Community members should go through an educational process and viability of

low-cost solutions and to be involved in the implementation of the project.

The success of the approach lies not only in the participatory methodology but rather in its integrated nature, taking into consideration the two basic assumptions: no single institution has the resources to make significant inroads into the problems of servicing human settlements; nor do they have a single-issue approach which is adequate for addressing the complex reality faced by those living in low-income settlements.

ANNEX

SLOW PROGRESS IN ACHIEVING GOALS

1. In 1984 El Mezquital was an illegal settlement and, due to the emergency situation, UNICEF gave support providing water and sanitation services. Later on, the project also accompanied the legalization process of this settlement. This process was very slow since the invaded lands were government property.

2. The installation of a formal water and sanitation system initiated along with the legalization process.

3. UNICEF resources were limited and, therefore, the fundraising process was rather slow. Part of the financing was provided by the World Bank. During this period the main activity was to give follow-up to the establishment of this system.

4. Due to the settlement's nature, the work on education and community training has been the nucleous activity, even more important than the infrastructure. Fortunately, 3,000 families participated in sanitary and environmental education activities.

5. While this process was taking place, the environmental sanitation project of the Urban Basic Services programme was supporting other precarious settlements in Guatemala City.

6. In order to avoid erosion, 3,000 trees were planted in the front areas of the lots and all along the gullies of El Mezquital.

7. During the implementation of the drainage system, approximately 500 latrines were installed in El Mezquital. 2,500 latrines were also installed in other precarious settlements.

8. The project supported the installation of 300 wood saving stoves and 200 low water consumption toilets in some settlements. No installations of this kind were provided to El Mezquital.

9. Approximately 3,000 families were trained in sanitary education which constitute the seven settlements of El Mezquital.

10. Two plants for treatment of sewerage waters were installed and are already operating. Three plants are being installed by the community and are in the final construction phase.

11. The project oficially concluded along with UNICEF´s Urban Basic Services Programme and with the World Bank´s urbanization project. Nevertheless, UNICEF will continue to give follow-up to the project.

12. The community is negotiating the concession of the water and sanitation service with the Municipal Government.

13. At this present time the community´s Water and Sanitation service reaches 2,000 families and the other 1,000 families are supplied by the National Water Service (EMPAGUA). It is expected that in the near future everyone will be integrated into the community service.

LESSONS LEARNED

1. In order to develop projects of this nature, the preliminary phase at community level is required.

2. The work must be hard, integrated and continuous for the community training.

3. The community participation is the key for success in any project, seeing it as an integrated management and empowerment exercise.

4. Women and children living in precarious settlements are social entities and they represent dynamic elements in the development process.

5. The interinstitutional coordination is basic for the development of integrated projects.

6. To replicate this type of projects it is a must to have adequate internal and external community conditions.

7. The external support is a new modality which facilitates self development.

8. The municipal government usually fears political, social and economic loss if they allow the communities to administrate / manage their own basic services.

9. The international organizations' support facilitates the process of communities making commitments with the development of the projects of the local government.

10. Projects of this nature require a long period of implementation.

LOW-COST SEWERAGE SYSTEMS IN TEGUCIGALPA

1. INTRODUCTION

In 1987, UNICEF together with the National Autonomous Water and Sewage Authorities, SANAA, started a water programme for the provision of save drinking water to peri-urban communities in Tegucigalpa, the capital of Honduras. At the time, most inhabitants of peri-urban communities lacked access to a water system. Except during the wet season when some rain water could be collected, water had to be bought from private vendors at high commercial prices. For 80% of the families this represented that 11.6% of their monthly income was used just for the purchase of water, which besides could be of questionable quality (Espejo, 1994).

SANITATION:

A Process whereby people demand, effect, and sustain a hygienic and healthy environment for themselves by erecting barriers to prevent the transmission of disease agents (UNICEF/USAID, 1997).

For the execution of the Programme, the Executive Unit for Settlements in Development or UEBD was created. Since then, the UEBD has been institutionalized within the formal structure of SANAA and forms part of the Metropolitan Division of SANAA. By the end of 1997, more than 150,000 persons in 95 communities had benefited from the water supply programme, leaving only 20 urban communities without a water system. Funds have been allocated by the Government of Sweden to cover those 20 communities before the year 2000.

During the eleven years of its existence the Tegucigalpa water programme has been documented on several occasions as a successful peri-urban water programme. At international level, it is generally referred to as '*The Tegucigalpa Model*'. The Programme's reputation is mainly due to its Community Participation, Cost Sharing and Rotating Fund components. We refer to previous publications for more information on the water component (e.g. Torres/Mooijman, 1996).

In 1995, the programme was expanded with a sanitation component. Based on the experiences, this article describes the technology used and the actual influence of the sanitary solutions on health, behavior, costs and environment. In addition emphasis is given to its constraints and points that need special attention. The overall focus of the article is the answer on the question **'Are Low-cost Sewage Systems a Feasible Solution for the Poor in Tegucigalpa?'**

2. EXISTING SANITARY CONDITIONS

According to official statistics, 86% of the Honduran urban population has access to some kind of sanitary facility[1]. For the poor in Tegucigalpa, sanitary facility generally means a ventilated-improved-pit latrine because connection to a sewage system is mainly restricted to middle and higher income neighborhoods only. Latrines and sewage systems are the only sanitary facilities used in Tegucigalpa. The limited infiltration capacity of the soil does not allow for the construction of septic tanks. In 1995, 150 peri-urban communities (or 279,000 persons) in Tegucigalpa lacked access to a sewage system[2]. This represented about 30% of the city's population and 70% of the city's peri-urban population.

At the moment, 13,127 latrines[3] have been constructed in the peri-urban areas of Tegucigalpa through the Honduran Fund for Social Investment, FHIS. FHIS was established in 1990 to alleviate the impact of the, World Bank stimulated, Structural Adjustment Programme on the poorest sector of society. Because of the rapid implementation of the FHIS programme, especially in its first years of existence, little attention was given to the sustainability of the projects. Also, no participation or contribution was requested from the community. Latrines were constructed by contractors and given at no cost to the beneficiaries. The average cost of the prefabricated FHIS latrines constructed so far has been US$ 104.36. At this moment the costs of a FHIS latrine has risen to US$ 140.

During the first years of the FHIS latrine programme, no hygiene education component was included. As a probable effect, it was reported that many of the beneficiaries did not or improperly use their latrine. For this reason, in 1995 a hygiene education component emphasizing on use and maintenance was developed. This has increased the rate of use of the latrines but still too many are without proper use.

When no sewerage exists, generally no healthy solution for the discharge of grey water has been developed. Water discharged from sinks and stand pipes runs from the patio on the street where it searches it way to the lowest point, causing insanitary situations due to smelly and polluted water standing on streets and, among others, allowing mosquitoes to breed.

For the communities with a sewage system it is important to note that none of the wastewater collectors in Tegucigalpa has been connected to a sewage treatment plant. All

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[1] source: Division de Desarrollo-SANAA, projection made by SECPLAN

[2] Inventory of situation in marginal communities of Tegucigalpa, by UEBD, 1995

[3] Information received from FHIS II, 16 March 1998

wastewater is directly discharged into the Choluteca river. The collectors are used up to their maximum capacity if not overcharged and in addition often leak.

In recent years, it was more and more being recognized that the use of latrines on a large scale in a peri-urban context could cause a future environmental problem for its local pollution, through infiltration of contamination in the soil or from filling up. The lots in peri-urban areas are normally quite small so there is few space to build a latrine in the patio of a peri-urban house, especially when is considered that a latrine should be transferred once it is filled up (another option is emptying of a latrine but that is not common in Honduras). Latrines are in general quite useful for the removal of pathogens and parasites from faeces but a latrine does not solve the grey water problem. As demonstrated in the text box, almost half of the organic pollution, measured as BOD5, is caused by grey water. Organic pollution is in the case of Tegucigalpa the main source of contamination.

Average breakdown figures for daily per capita BOD5 contributions in the Tropics (g/hd.d)

Personal washing		*5*
Dishwashing		*8*
Laundry		*5*
Toilet	*- faeces*	*11*
	- urine	*10*
	- paper	*1*
TOTAL		*40*

source: Sewage treatment in hot climates, Duncan Mara, 1978

Mainly because of the inconveniences of traditional latrines (such as; smell, mosquitos, location, etc.), communities started asking the UEBD to support in the construction of a sewage system. Their additional argument was the higher health benefits of flush toilets in comparison with latrines. In 1995, the UEBD constructed its first sewage project; a traditional design sewage construction. Because of its high investment costs per capita this was not considered as an appropriate strategy to be used on a large scale for the urban poor. In 1996, the UEBD started to develop a different approach through the construction of low-cost, non-conventional sewage systems. Due to the high necessity for sanitation solutions and because the need for water supply projects is nearing its end, a gradual shift of the key activities of the programme has been planned for the coming years from the construction of water projects to sanitation projects.

By the end of 1997, 4 sewage projects based on simplified design had been constructed, benefiting almost 3,500 people. For 1998 and 1999, 19 sewage projects are planned to benefit 25,000 people.

3. COMMUNITY DEMAND AND PARTICIPATION

The general impression about peri-urban areas is that since the population comes from different parts of the country, they do not feel such a strong link with their neighbors, as do rural people. This may be true, but practice has shown that this does not directly imply

that it is difficult to organize and motivate the urban poor for a programme to improve their community. The situation as described by Maggie Black (see box next page) is certainly more true for Tegucigalpa: the people in the peri-urban communities quickly appreciate the health benefits of infrastructure improvement. The reason why they came to the capital was the search for a better living and this makes them very motivated to use the opportunities offered by institutions such as SANAA/UEBD or FHIS.

Evidence from 'urban basic services' programmes indicate that **slum and shantytown populations are quick to appreciate health and economic benefits of infrastructural improvement** - usually quicker than rural folk. The impulse to better their lot which took them to town in the first place needs only to be channeled and supported with technical advice and small levels of investment. (from M. Black, 1994)

At this time approximately 150 peri-urban communities in Tegucigalpa do not have a sewage system. It is not difficult to imagine that as soon as it became known that the UEBD, in addition to water systems, was also constructing sewage systems, communities started applying for such a system. Because the UEBD's capacity to construct sewage systems is much smaller than the demand, fair selection criteria had to be set. The criteria can roughly be divided in physical and financial criteria. Since all systems, so far, have been connected to the existing sewage network, there has to be collector capacity available at a reasonable distance from the community. Another criteria is related to the financial status of the community's water project. A community can only apply for a sewage project once it has (almost) completely paid its contribution due to the Rotating Fund (more about the RF can be found under point 5). This criteria has two aims: first it ensures that only communities are selected that already have proven to be competent in the organizational and financial areas and secondly, once the Rotating Fund has been paid completely, the costs paid for water tariffs will be lower and the population will have funds available to pay their monthly sewage contribution.

The construction, administration, maintenance and operation of the sewage systems is organized through the same entity as the water systems: the *Junta de Agua* or Community Water Board. The community is the owner of the system and as much as possible takes independent decisions on the technology of the system to be constructed, the tariffs, maintenance, operation and speed of repayment of the Rotating Fund. In 1998, the UEBD will for the first time organize a course on operation and maintenance of low-cost sewage systems for Community Water Boards. In future, similar courses will be held every six months.

In all communities where sewage systems are constructed, the UEBD has the commitment to implement a hygiene education programme for all beneficiaries and finalize it within three months after the sewage system has been put into operation. The time frame has been established with the philosophy that it is easier to teach something correctly right away than to change an inappropriate behavior once people have gotten used to it. Except for the evident arguments in favor of hygiene education, in this case we

have to focus additionally on the rational use and maintenance of the system, because most people have never lived before in places that had access to sewerage. For example; what can be thrown in the toilet and what cannot; how often do you have to clean it; what to do when the pipes are blocked; etc.

The hygiene education programme of the UEBD is called: *Escuela y Casa Saludable* (or in English, *Healthy School and Home*). Access to the community is roughly through two channels: the schools and the homes. Voluntaries from the community are trained by UEBD social workers to make visits to the houses of approximately ten of their neighbors. During these visits the volunteers explain to their neighbors, with the help of theme posters, the treatment, storage and handling of drinking water, sanitary facility use, garbage and personal hygiene. School teachers are trained and given educational material to teach the children of the community on the same subjects.

4. LOW-COST TECHNOLOGIES USED

The technologies used and planned are known as 'small-bore sewage systems' and 'simplified sewage systems', which have been implemented successfully in e.g. United States, Brazil and Australia. This is the first project using these technologies in Central America.

'Small-bore' or 'solids-free' sewerage refers to the transport of domestic sewage which is settled on-site in a septic tank, so that only fluids are discharged through the sewage pipes to the main collectors. 'Simplified sewerage' is for the conveyance of raw unsettled sewage in flat, shallow sewers (it is a conventional sewage stripped down to its hydraulic basics, and with simple inspection boxes replacing expensive manholes)[4].The main reason why theses technologies were developed was to reduce construction costs in comparison with traditional sewage designs. Cost reduction is mainly due to a optimization of the capacity available in the system leading to the use of less material. Cost reduction factors are: gradient reduction, smaller pipe diameters and smaller collectors.

One of the strengths of the UEBD Programme is its emphasis on community participation. The community is very involved in the selection of the technology to be used. In this particular case it has led to a situation that communities can not be convinced to construct small-bore systems but rather choose for a simplified design because it is more conventional and 'known' And even when using a simplified design it is sometimes quite difficult to convince the beneficiaries that a low-cost sewage system as offered can work as well as conventional sewerage. The UEBD engineers have to answer many questions from worried community members when they make their daily inspection visits to the construction sites. People question whether it will be possible to discharge all their waste water through pipes of only 4 inch diameter. Sometimes the

[4] Definition as provided by The Low Cost Sewerage Network, University of Leeds, United Kingdom

engineers discover that an inspection box has been constructed 'overnight' with traditional dimensions rather than with the proposed design. After having implemented some good working infrastructure in other communities, people slowly discover that the solution offered to them indeed is a 'real solution' for their sanitary problems. This year, the UEBD engineers are working hard to promote the small-bore technology because in the peri-urban setting it would even be more appropriate than a simplified design.

5. COSTS AND FINANCING

As in the water supply projects, the community commits itself to provide manual labor, and some of the local construction materials and PVC accessories. In general, each household has to excavate 15 meters of trench. This is not an easy task considering that due to irregular topography excavations are sometimes as deep as 4 meters. All work is done manually in very rocky soil. In addition, every family pays an initial financial contribution of 500 Lempiras (approx. US$ 38) in order to be allowed to connect to the system.

Alternative Waste Disposal Systems
the costs per household (1990 prices)

VIP latrine	*68-175 US$*
Shallow Sewerage	*100-325 US$*
Small-bore Sewerage	*150-500 US$*
Conventional Septic Tanks	*200-600 US$*
Conventional Sewerage	*600-1200 US$*

source: The Poor Die Young, Earthscan 1990

The sewage systems are being administered by the Community Water Boards and monthly sewage tariffs of approximately 5-10 Lempiras (US$ 0.38-0.76) are included in the water bill. Except for the monthly sewage contribution to be made to SANAA and costs for operation and maintenance, the tariffs go to repay investment costs. A similar cost recovery policy is applied as for the construction of water systems; through monthly payments to a Rotating Fund. At the end of the construction of the system the UEBD calculates the investment costs (without incorporating inflation or interest) financed by UNICEF and SANAA (materials and technical assistance respectively). This makes the total amount to be repaid by the community to the Rotating Fund. Every community can decide at what speed it pays back to the Rotating Fund, with a maximum recovery period of seven years. The Rotating Fund enables the UEBD to develop water and sewage systems in other communities and to expand the programme's coverage.

Initial calculations show that the investment costs for simplified sewage systems are US$ 35.45 per person (including a community contribution of US$ 19, a UNICEF contribution of US$ 14 and a Government contribution of only US$ 2.45)[5] . By comparison, the per capita investments costs of a Dry Composting Latrine in El Salvador is US$ 26.70[6], of a FHIS latrine is US$ 23.33 and a traditional sewerage system in Tegucigalpa is US$

[5] Calculations by UEBD/SANAA on basis on actual construction costs, August 1997

[6] Source: Evaluation of UNICEF's Programme for Water and Sanitation in Central America, 1996

66.72. In case of sewerage, additional expenses have to be made to link up the households to the system.

6. SUPPORT IN LINKING-UP TO THE SYSTEM

The first UEBD (conventional) sewage system was constructed in 1995 in a community called La Canada. One year after the system was put into operation, 80% of the 352 houses had still not linked up to the sewage system.
Some reasons were given for this: in contrast to other communities, this community did not have to sacrifice as much as other communities because all the investment costs for their water and sewage system had been donated by the Canadian Government. No repayment had to be made to the Rotating Fund. Does this mean that the community was less motivated? The UEBD-staff thinks this is partly the case. The community itself indicated that many families lacked the funds to link their existing facilities to the sewerage or to invest in the construction of appropriate sanitary services.

To support families that were not able to make investments for the construction of sanitary services, UNICEF decided to reinitiate a micro-credit programme with the US-based NGO, Cooperative Housing Foundation (CHF). In April 1997, an agreement was signed for the initial provision of 85 credits to families in the urban community of La Canada. At the same time as the micro-credit programme started, the UEBD entered the same community with its hygiene education programme.

The CHF programme provides the families with near-market-rate credit for the construction of household sanitary services, i.e. toilet, shower and *pila* (a combination water storage tank and washboard). The families benefiting from the programme would never have had access to credit from commercial banks because of their relatively low or unstable earnings. The maximum credit given is 10,000 Lempiras (approx. US$ 750). In most cases, families contribute materials or personal funds to complement the money they

"When potable water and sewage services arrive, everything changes"

These are the words with which the family of Antonio Ramon Escoto, his wife Marta and their small daughter Bessy Lorena, 5, stated their joy at the availability in their house of basic services such as potable water and sewage. Antonio and his family form part of the population living in developing neighborhoods of Tegucigalpa, such as the Altos de Loarque Community.
"To have potable water service is our home is good, but now that we have sewage service is even much better. My wife is very happy now we have a shower and a toilet in the house. We know that these things will help us improve hygiene conditions in our home and we will work hard on it."

"It is nice to know that we now have water, bath and pour-flush toilets in our house"

Delmis Palma is a single mother with two young daughters. She also lives in Altos de Loarque Community along with her father and brothers and sisters. I still remember when fifteen years ago we arrived here, said Delmis, we had to go get water at a far well, o do our necessities in the open air. Thank God and the organizations that have supported us that all that is behind us. We are proud of what we have done, and each week a member of the family has the assigned task of keeping the latrine and bath clean, and in general, the whole house.

borrow, and often provide some labor as well. The repaid funds go back into a capital fund which can provide credit to another 108 families within the same community, without decapitalization. (Ocasio, et al., 1995) Due to the programme, conditions in the community have improved rapidly. Where one year ago, most houses discharged grey water, this is now a rarity.

For the sewage systems that were constructed after the La Canada system, selection criteria as explained under point 3 were used. This made that the community was more motivated to struggle to get a sewerage constructed. This motivation can immediately be noticed in the connection rate in those communities. For example in community Altos de Loarque (see text box), more than 80% of the people had linked up to the sewerage within the first year of getting into operation. In those communities in order to overcome the problems and delays with the connection to the sewage systems, UEBD/UNICEF provided the opportunity for Community Water Boards to purchase pour-flush toilets at cost price and repay it in several payments to the Rotating Fund. Also a design was made to rebuilt the FHIS-latrine in a pour-flush toilet by using the same superstructure. Costs to install toilet and connect black and grey water to the sewerage are in this case as low as 500 lempiras (approx. US$ 38).

7. CONSTRAINTS

* Even though all inhabitants of communities where sewerage is constructed received hygiene education and education on its rational use, some misuse leading to partial failure of the system occurred. For example, because of cross-connection of rain water drains to the sewerage, flushing of cloth in toilets, garbage in the inspection boxes (due to lack of garbage collection) etc.

* For some of the beneficiaries the costs to connect their house to the sewage system are too high. Without stimulation or help, many households stay disconnected for a long time, not taking advantage of the improve hygiene situation available in their community.

* As mentioned earlier, the sewage systems constructed so far have all been connected to existing sewage collectors. Knowing that the available capacity of the existing collectors is nearing its end, huge investment should be made to expand the city's sewage collectors capacity before being able to use the proposed technology on a large scale.

* At the moment, none of the wastewater discharged by any of Tegucigalpa's sewage systems receives treatment before being discharged to the river Choluteca. Where local, dispersed pollution and no grey water treatment are disadvantage of latrines, we could from an environmental point of view question whether it is a better solution to collect the pollution and to discharge it to a point downstream of the city as is currently the case.

8. POINTS OF SPECIAL ATTENTION

As a result of the constraints mentioned before, UNICEF will for the next two years try to focus on the following points.

* *Education on rational use and maintenance of sewage systems*: Even though this activity is already part of the programme, problems have shown that education should be intensified. From 1998, more emphasis will be given to this theme.

* *Linking-up to the system*: Considerations are made to continue the programme with CHF. Unfortunately due to the relative high costs and UNICEF's limited budget, the CHF programme will only cover part of the communities where sewerage is being constructed. Also the provision of pour-flush toilets for low-cost connection will continue. During 1998, other possibilities to stimulate connection at low costs will be studied.

* *Small-scale off-site wastewater treatment*: Because the existing collectors do not have sufficient capacity for the connection of many additional sewage systems and because no wastewater treatment is taking place, a solution considered for some communities is the construction of small-scale off-site wastewater treatment facilities. Taking into consideration that Tegucigalpa is located in a mountainous setting and that in the peri-urban area few land is still available for construction, few technologies can be applied and only under certain circumstances which avoids use on a large scale. The UEBD with technical support from Delft University of Technology, the Netherlands, will execute a feasibility study on the subject from May till August 1998. If considered feasible, a pilot plant will be constructed during 1999.

* *Developing political awareness:* As in many big cities in developing countries, the peri-urban population of Tegucigalpa has virtually been left out of all urban planning. Why? Because they illegally occupied land? Because they believe the communities are just temporary? Because the land they occupy is worthless and not very appropriate for settlement? Because constructing systems would be too expensive? Because constructing services with even attract more people to migrate to the city? It is difficult to tell but too many excuses have been given for not providing services to the urban poor. One of UNICEF's challenges will be to create more political awareness about the water and sanitation problems of the poor in Tegucigalpa.

9. CONCLUSIONS

The answer to the question: '**Are Low-cost Sewage Systems a Feasible Solution for the Poor in Tegucigalpa?**', is very complex. When implemented on a large scale for the approximately 150 communities actually lacking a sewage system, we would have to

consider several points. From a micro-financial and health perspective we would say yes, go ahead and try to find financing for low-cost sewage systems in all the communities of Tegucigalpa. When also considering the overall environmental impact and the macro-financial perspective, we propose that a detailed impact and overall cost study should be executed first. So for now we unfortunately have to answer with '**Possibly**'.

Meanwhile, UNICEF-Honduras will continue with small-scale implementation of low-cost sewerage and support research for finding as soon as possible an answer to the question. Because a good sanitary solution for people living in difficult circumstances in peri-urban areas has to be found, **All Children have the right to have access to proper Sanitation.**

REFERENCES

Black, M. app. 1993. *Mega-Slums, the coming sanitary crisis.* Water Aid Report

Espejo, N., V. Farach and J.T. Visscher. 1994. *Aprendiendo de la experiencia del Programa de Abastecimiento de Agua para los Barrios Marginales de Tegucigalpa, Honduras.* Informe Final, International Water and Sanitation Centre, the Hague, Netherlands.
Mencia del Cid, R..1997. *Patronatos y Juntas de Agua: Su inserción en el desarrollo de las áreas periurbanas de* Tegucigalpa. UNICEF, Tegucigalpa, Honduras C.A.

Ocasio, R, T.A. Kilbane and J.A. Hermanson. 1995. *An Urban Environmental Sanitation Loan Program in Honduras* Chapter 2 from 'Down to Earth - Community Perspectives on Health, Development, and the Environment' edited by B. Bradford and M.A. Gwynne, Kumarian Press

Salas Sarkis, L.A. 1996. *Diseño de Alcantarillados Sanitarios Simplificados y de Pequeño Diámetro.* PAHO/WHO. Manual Course-Workshop, Honduras, 14-17 May 1996.

Torres, X. and A.M. Mooijman. 1996. *An update on the Tegucigalpa Model.* UNICEF, Waterfront 9, December 1996.

UNICEF/USAID. 1997. *Better Sanitation Programming: A UNICEF Handbook.* EHP Applied Study No. 5, April 1997

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INDIA:

Sanitation and Hygiene
Moving towards the 21st Century

The Rural Sanitation Programme: A Case Study on Rural Sanitary Marts

THE SANITATION SCENARIO IN INDIA

At the 1990 World Summit for Children, India committed itself to provide the entire population of the country with safe drinking water and sanitary means of excreta disposal by the year 2000. In 1992, India also ratified the Convention on the Rights of the Child (CRC), thereby reflecting its awareness that the realization of Child Rights and the achievement of goals as enunciated in the National and State Plans of Action for children are essential for overcoming poverty, population pressure and environmental degradation.

India is a vast country, both in terms of area and population and hence is rightly called a subcontinent. It has a population of nearly 960 million (1997), of which nearly 75% live in rural areas. It is estimated, that of this rural population there are almost 570 million people who lack proper means of excreta disposal, thus making the goal of providing safe means of excreta disposal to all, one of the most difficult for India to achieve and the Rural Sanitation Programme one of the most challenging to implement. India now has the ambitious target of increasing sanitation coverage of the rural population from 20% to 75% during its ninth five year plan period ending in 2002. This would mean covering around 50 million households or around 10 million per year.

EVOLUTION OF THE RURAL SANITATION PROGRAMME IN INDIA

Unlike the Rural Water Supply Programme, which has a thirty year history, the Rural Sanitation Programme started only in 1986 with the objective of providing sanitation facilities to 25% of the rural population by the end of the seventh five-year plan period, 1985 to 1990. In view of the massive task that lay ahead, the Central Rural Sanitation Programme (CRSP) was launched by the Central Government in 1986 with an approximate budget of US$ 25 million per annum, with a condition that matching funds should be forthcoming from the States from budgets set aside from the Minimum Needs Programme(MNP), which was one of the many poverty alleviation programmes being implemented by the States. The

CRSP provided for 100% subsidy to scheduled castes and tribes and for people living below the poverty line and partial subsidy to all people in rural areas willing to construct toilets. Over the next four years, however, the Government learnt valuable lessons from the heavily subsidized programme it was implementing and in 1991 revised its Sanitation Programme Guidelines by stopping the 100% subsidy for toilets, as such toilets were not being used by the beneficiaries. It, however, continued to pay partial subsidy to all rural households. During the years that followed, other valuable lessons were learnt. For example, the Unicef supported Intensive Sanitation Programme (ISP) in Medinipur District of West Bengal indicated that even poor people can be motivated to construct toilets on their own without waiting for the Government subsidy, provided they are sufficiently motivated. This knowledge led to a further revision of the CRSP guidelines in 1993 which stipulated that partial subsidy, amounting to 80% of the total cost of the toilet (approximately $63) would only be given to those living below the poverty line. The 1993 CRSP guidelines also set aside, for the first time, 10% of the CRSP budget for social mobilization and communication. It should however be noted that while CRSP guidelines came from the Central Government, the States were free to adopt them or to proceed with their own State-specific policy related to subsidy. The CRSP funds, however, continued to be given to only those States that were willing to spend an equal amount from their MNP funds, for promoting Sanitation.

SANITATION COVERAGE

According to a National Sample Survey (NSS) conducted in 1989, only around 11% of the rural households had their own toilets as compared to 3% reported by Government figures which reflected those covered by the government's subsidized programme. People constructing toilets on their own accounted for the difference of 8%. These were people who did not qualify for the Government's subsidy scheme or those who wanted to construct toilets independently, without waiting for Government's subsidy, or even those who had already constructed toilets on their own before the Government's subsidy programme was launched. The subsequent 1991 Census figures also revealed a similar trend and the experience gathered from ISP in Medinipur further indicated that there are always people willing to construct toilets provided they are given the necessary know-how and sanitation materials are available at the local level, at cheap and affordable rates.

In terms of the finances required to subsidize toilets, it was noted that at the rate of around $50 subsidy per household per toilet, the country would need to spend more than $5 Billion towards subsidy, which was hardly possible.

These conclusions pointed to the need for establishing a system which took care of those motivated households unable to construct toilets due to non-availability of relevant adequate information on different toilet designs and of sanitary materials and resulted in the establishment of the first Rural Sanitary Mart in Allahabad District in the State of Uttar Pradesh in 1993.

The Rural Sanitary Marts (RSM), along with other arrangements which facilitate acceleration of sanitation coverage outside the government programme, including production centres for manufacturing pans and traps for toilets and other sanitary items, credit mechanisms which are established to provide assistance to the needy, all supported by a strong IEC back-up, are together now popularly known as the Alternate Delivery System.

THE RURAL SANITARY MART INITIATIVE IN UTTAR PRADESH

Located in the North of the country, the State of Uttar Pradesh is the most highly populated State in India with a population of almost 140 million, with around 105 million living in rural areas. The number of households without toilets in Uttar Pradesh is almost 17.3 million. There is a grudging perception across the country that if anything works in the State of Uttar Pradesh then undoubtedly it will work anywhere else in India.
Unicef, therefore, initiated the first experimental RSM project in Allahabad district of UP in 1993 and later demonstrated further its cost effectiveness by expanding the concept to 28 of the 85 districts of the State.

Unicef's Rural Sanitary Mart initiative in UP was the first step towards shifting the focus from a subsidized government programme to one, which is privatized. The strategy adopted a three pronged approach to subsidising house hold sanitary facilities. The first was with a subsidy of $40 ($10 from the beneficiary) the second with $11 ($ 39 from the beneficiary) and the third was without any subsidy (the beneficiary was only given technical guidance and facilities by creating the necessary infrastructure by way of Rural Sanitary Marts).

Unicef negotiated with and provided support to the Institute of Engineering and Rural Technology (IERT) to extend its area of operation to cover 12,000 households with the second approach, the beneficiaries contributing nearly 80% of the total cost (as against only 20% in the case of the government programme). It was noted over the years that offering a very low subsidy component actually increased the sanitation coverage as IERT provided the necessary IEC back-up and technical expertise along with the sanitary items for constructing toilets. The idea of reducing the subsidy thus became popular with a few States and was replicated in the States of Gujarat, Maharashtra, Tamil Nadu, Rajasthan and Bihar.

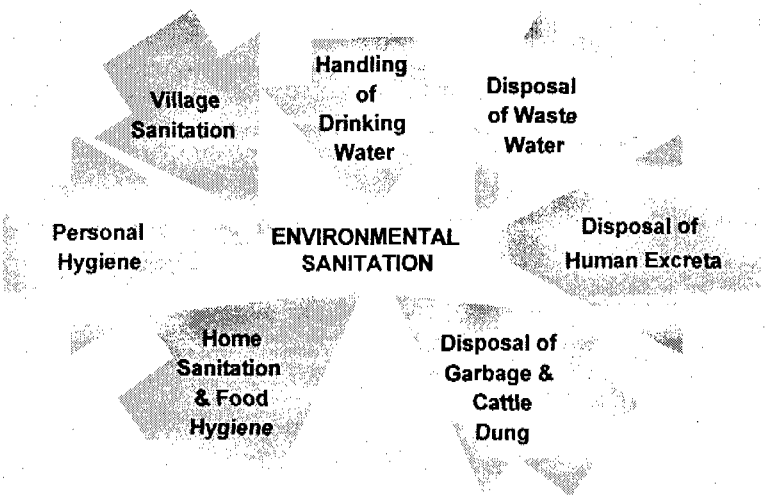
The rationale behind setting up the RSMs in Allahabad (the third approach initiated by Unicef) was three-fold:

- To promote zero-subsidy
- To create a favourable environment for demand generation and awareness creation on the construction and use of sanitary facilities and the promotion personal hygiene facilities.
- To commercialize the provision of sanitary facilities to meet the special requirements

of rural areas and peri-urban areas and to facilitate private initiative for accelerating sanitation coverage .

The RSM was expected to become a marketing outlet for materials required for the construction of toilets and also for all other items which related to sanitation as a package of health related interventions. (For the first time in 1993, the Government of India revised its definition of sanitation and, as given in the revised 1993 CRSP Guidelines, introduced the concept of 'Total Sanitation' having seven components namely, safe handling of drinking water, disposal of waste water, safe disposal of human excreta, disposal of garbage, home sanitation and food hygiene, personal hygiene and village sanitation. Besides being an outlet, the RSM was also expected to be a counselling centre and make available information on designs for various low cost options for sanitation along with their estimated costs.

SEVEN COMPONENTS OF SANITATION



A list of trained masons was also available with each RSM so that a household could approach them if required. In this way, the RSM was also conceived as a resource centre for promotion of 'Total Sanitation'

Since the success of RSMs depends on their economic viability, the site for each RSM was strategically located, at places such as markets and mandis, frequently visited by farmers and traders -- people who had the money and who, with some efforts at motivation (an extended activity of the RSM) would be willing to construct toilets on their own.

All the 16 RSMs now functioning in Allahabad have been established in market places with a rich hinterland, expressed in terms of high irrigation and cropping intensity and a large surplus of agricultural produce, in order to ensure their sustainability and viability Certain other factors such as high population density and higher literacy levels among the people strengthened the choice of the market area where the RSM was established.

LINKAGES WITH PANCHAYAT UDYOG : (RURAL INDUSTRIAL COMPLEXES)

Till 1995, in Allahabad, the 'Swachata Seva Kendras"(RSMS) were only connected to the 10 Panchayat Udyogs promoted by groups of village Panchayats,(elected local bodies), of which many were already making profits over the years manufacturing and selling steel trunks, agricultural implements, steel and wooden furniture, water tanks storage bins. Some also ran their own printing press. These Panchayat Udyogs then took on the manufacturing and selling of sanitation related hardware as well as cement and mosaic pans and traps, cattle troughs, footwear and food safes. Backed by a strong social mobilization component for demand generation, the RSMs operated from Panchayat Udyogs made profits over the years while providing evidence that RSMs are economically viable and that they open up a whole new area for investment for private entrepreneurs. Between 1993 and 1998, the Panchyat Udyogs sold more than 35,000 pans and traps and 813 ferro-cement squatting platforms to private buyers with a turn over of $3.05 Million.

COST EFFECTIVENESS OF RURAL SANTARY MARTS

The RSM initiative in Allahabad provided the Government of India with one more valuable lesson – that RSMs are cost effective and economically viable and that they need to form an important and necessary component of the future strategy being developed to promote sanitation. An analysis of costs incurred on the RSMs showed that, had the government supported subsidy for 35,000 households, the number reflected by the number of pans and traps sold by the Panchayat Udyog RSMs, it would have incurred a cost of nearly $17.50 million as subsidy whereas only a total of approximately $60,000 was provided by Unicef to help the Panchayat Udyogs to operationalize them. Unicef provided managerial support to each of the Marts was only for a period of one and a half years. The RSMs, therefore were self-sustainable with the average time taken by them to break even being around one to one and a half years.

AWARENESS CREATION AND SOCIAL MOBILIZATION

The RSM has been conceived as a commercial enterprise with a social objective. This concept has made it imperative for the Manager and the salesperson who run the RSM, to not only undergo specific training on different aspects of Marketing and Salesmanship but become familiarized with the components of 'Total Sanitation' and the linkages between Safe Water, Sanitation and Health. Unicef, therefore, developed an elaborate 4-day training schedule with the help of experts from Institutes of Management across the country.

The success of the RSM initiative in Allahabad rested largely on the quality of training given to Managers as also the social mobilization strategy adopted by the Managers of the RSMs.

Main social mobilization activities included:

- Home visits by motivators and face-to-face interaction with members of the household. The household was encouraged to buy the sanitation materials from the RSM.
- Identification of masons for training and facilitating their training with the help of the Block Development Officer(BDO).
- Village contact drives and use of pamphlets, posters and films.
- Displaying lists of masons and designs of toilets and counselling customers.
- Providing a small incentive of $1.25 to each motivator through whom a toilet was constructed. The same amount was provided to a family which directly bought the sanitary items from the Panchayat Udyogs.
- Training of Managers and motivators responsible for running the RSM

WOMEN'S EMPOWERMENT

Many RSMs are linked to Production Centres with sometimes one Production Center selling sanitary items to a network of RSMs. These Production Centres have provided opportunities for employment for women who are first made to undergo skill training in constructing cement and mosaic pans and traps. The income earned by the women have given them a new status in society. Most RSMs also make a special effort to display the names of the increasing number of women masons being trained in rural areas. Women masons in Rajasthan and Uttar Pradesh and in other States now construct sanitary toilets and even houses.

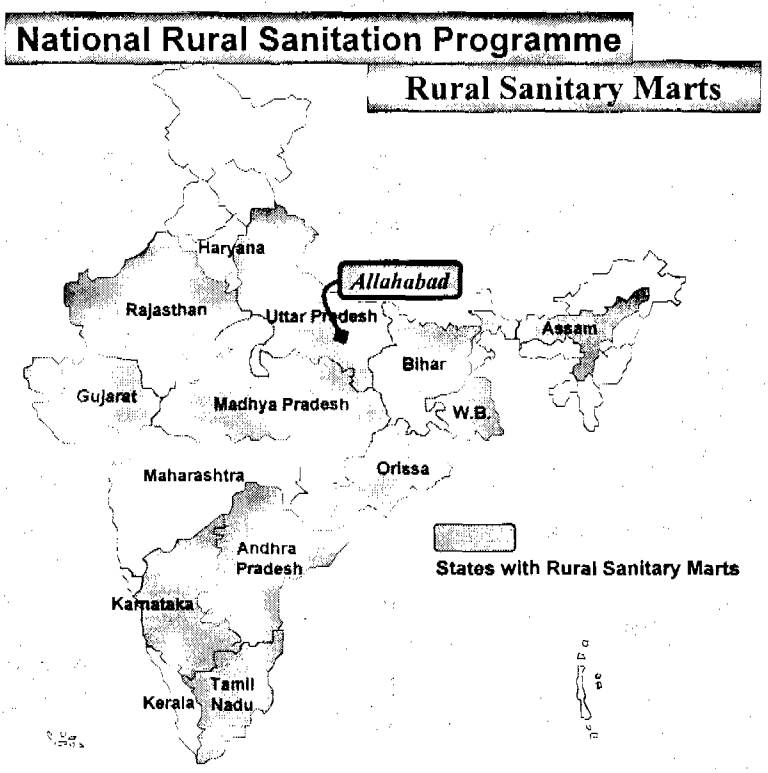
REPLICABILITY AND EXPANSION

In Allahabad today a total of 16 RSMs are functioning of which 10 were started by the Panchat Udyogs in 93-94, 2 are being run by an NGO and 4 by the Rural Sanitation Division of Uttar Pradesh, Jal Nigam which is the State department in charge of Water Supply. The last 6 RSMs were added during 1997-98. Two Production Centres of ferrocement squatting platforms were also set up by UP Jal Nigam in 97-98 These Production Centres have manufactured a total of 1,500 squatting platforms out of which 813 have been sold at a cost of $10 each. These platforms are used for making single-pit water seal toilets with superstructures made of local material. The pit is dug by the householder. The possibility of upgrading a sanitary toilet in stages, over the years, from a single pit to a double pit, pour flush toilet is kept in mind while constructing the single pit toilet. This experiment is being

implemented through trained motivators who are paid an incentive of $1.50 for every toilet constructed through them.

The average monthly sale of each of the RSMs being run by UP Jal Nigam is around $3,125. There is evidence that this is the case with most of the other RSMs also. It is estimated that in Allahabad the total turnover in the last 5 years, for all RSMs and Production Centres has been $2.19 million as against an approximate Unicef support of $0.55 million.

The RSM initiative is now no longer an initiative but a movement. Of course, just as in any other business the RSM takes a year or so to break even, before it starts making a profit. The economic viability of the RSM, however, can be justified from the simple fact that most of these RSMs have been able to sustain themselves over a period of 5 years and have shown increasing sales each year. Where RSMs did not show profits and have failed the reasons can be traced to wrong site selection, non-effective advertising and most of all to faulty product pricing, sales projection and purchase. With the cost-effectiveness of RSMs well established, over the last 5 years, they spread throughout 28 districts of the State of UP, the number increasing from 16 to 175. Of these, 87 are being run by NGOs and 88 by the Panchayat Udyogs.



The movement has spread to other States and the Rural Sanitary Marts are linked up to Production Centres, as in Medinipur in West Bengal, or to employment schemes such as the Prime Minister's Rozgar Yojana in the State of Madhya Pradesh which provides loans to rural youth to start their own business.

An innovative intervention by Unicef involves the National Dairy Development Board in India which has District Dairy Cooperatives accounting for 10 million members, sells milk through regional chilling centres run by village based Primary Dairy cooperatives in many States in the country. The District Dairy Cooperatives in two cities of Gujarat have been encouraged to sell sanitary items for

rural areas, along with milk, at the local milk outlets. The Sugar Cooperatives too, in a similar manner, are being roped in to sell sanitary items.

From 1993 to 1998, the number of RSMs in India has increased from 16 to nearly 700. The majority of them are being managed by NGOs or different Government Departments. Thus, the Rural Sanitary Marts initiative, which is only 5 years old has become a movement.

ASSESSMENT OF SANITATION COVERAGE AS A RESULT OF PRIVATE INITIATIVE

Assessment of Sanitation coverage (in terms of access to toilets) is not an easy task as toilets are constructed under different programmes, including rural housing schemes, as well as through private initiative. It is also difficult as the sanitation coverage is estimated in terms of households with the assumption that there is no difference in the size of the household reporting access to a toilet. However, recent data gathered from National surveys indicates that this is not the case. The percentage of population covered is reported to be larger than the percentage of households covered. Thus, the 1991 Census (conducted once in 10 years) figures revealed that the percentage of population covered is higher than the percentage of households covered; that 8.84 percent of households accounted for 11.40 percent of the population, thereby giving a multiplier of 1.29.
Applying this multiplier to the figures obtained from the Government's National Sample Survey (conducted once in 5 years) which showed a coverage of 10.96% households , the percentage of population having access to toilets worked out to 14.25. (This does not include the population with access to public toilets).

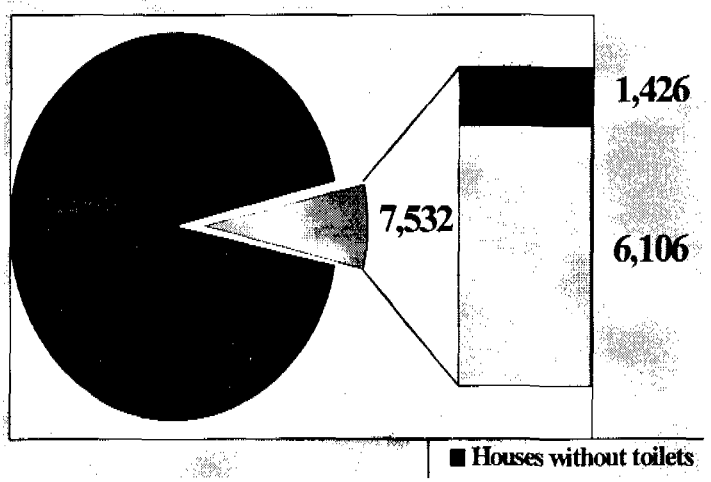
During the years 1989-96, India added around 2.5 million toilets under the CRSP and MNP (3 million including those constructed under bilateral assistance and other housing schemes.) An analysis of data on households reporting toilets as given in different national surveys and of figures obtained on coverage through Government programme, before 1995, also showed that for every toilet constructed under the subsidized government programme, two more were constructed through private initiative. Thus, during 1989-96, by applying the ratio 1:2, one could realistically estimate that an additional 9 million toilets were added making the coverage increase from 11% in 1989 to 20% in 1996. If this figure is expressed in terms of population, the coverage will be more than 20%.

However, since 1995, data from different Government sponsored national surveys when analysed further, showed even more interesting and encouraging trends with regard to private initiative... The analysis clearly pointed out that for every toilet constructed through the Government programme, 4 more were being constructed by households on their own. The estimate was corroborated by the figures provided by the Multi-indicator Coverage Evaluation Survey (MICS) conducted in selected States by the Government, with support from UNICEF.

PERCENTAGE OF HOUSEHOLDS HAVING TOILET FACILITIES IN RURAL AREAS
(ALL INDIA)

NSS (1988-89)	Census\ (1991)	NFHS (1992-93)	HDI (1994)
11	9.5	12.9	15.3

India (1991 - 1994) : home toilets added *(in '000)*:



Number of households with toilet facilities through private initiative. The graph at left indicates that at the National level the ratio of toilets constructed with private initiative to those constructed under the Government's subsidy programme as 4:1.

INFLUENCING NATIONAL POLICY

The Government of India target of reaching 75% coverage level by the year 2002 based on the assumption that of the additional 55% coverage, while 18% can be attributed to the subsidized government programme, 37% will be added through private initiative by way of the Alternate Delivery System, including Rural Sanitary Marts. This is based on the assumption that for every unit constructed through the Government programme, another two units will be added through private initiative ie. Half the present estimate.

The concept of Alternate Delivery System including Rural Sanitary Martst has therefore, been included as an integral component of the Government of India's strategy for promoting sanitation and has been included in the Central Rural Sanitation Programme guidelines, with Central Government funds allocated for RSMs to be opened in the States by private entrepreneurs and NGOs The Government estimates that around 3,000 RSMs will be

established during the ninth five-year plan period, throughout the country. Other initiatives for expanding the reach of RSMs through linkages with different Cooperatives and poverty alleviation programmes are expected to find a major place in the Central Rural Sanitation Programme once the guidelines are revised in July 1998.

RSMs initiated in 1993 as an experiment, are now expected to play a major role in the achievement of the sanitation goal of 75% coverage.

'BEST PRACTICES', FOR WIDER REPLICATION

There should be a good balance between the subsidised and the self-financing components of any sanitation programme, which aims to promote the use of sanitary toilets.

Programmes promoting toilets should capitalise on the employment potential, which the construction of the large numbers of toilets has to offer.

JUMAT BERSIH "CLEAN FRIDAY" MOVEMENT

Background

Gerakan Jumat Bersih (Clean Friday Movement), widely known by its local acronym **GJB**, is a national movement which is closely linked with the religious and cultural values of the communities to promote hygiene practices.

The Movement calls for active involvement of all segments of a community including individuals, families, organisations and government agencies to achieve the GJB objectives. There is a special emphasis on the role of religious leaders.

Originated as a district level movement in West Lombok in the province of West Nusa Tenggara (see attached map), GJB became a provincial initiative which was subsequently launched as a national movement in November 1994. In his remarks at the launching of the occasion, Indonesia's President stated that :

" All religions teach their followers of the importance of clean and healthy living. While conceived in the context of Islam, GJB can be adapted for regions where other religions are predominant. Environmental sanitation is great importance for our health. Healthy environment will promote well- being and increase productivity."

Objectives of GJB

General Objectives

- To promote healthy living behaviour through religious and social activities towards improved standard of community health.

Specific Objectives

- To increase community's awareness of the importance of the following hygiene practices:
  - Use of sanitary latrines
  - Hand washing
  - Consumption of properly handled drinking water
  - Proper garbage disposal
- To facilitate the adoption of the above practices, particularly the provision of latrines, water supply and waste disposal facilities both in household and public places such as houses of worship, educational institutions and office buildings.

The National Experience

The modest target (40%) for access to sanitary family latrines outlined in the current national five-year development plan (1993/94-1998/99) for rural areas reflects the low level conditions at the beginning of the plan (22%) and the somewhat limited political commitment towards improving the situation . It was subsequently agreed upon that under the auspices of the GOI-UNICEF cooperation in the WES programme, a higher level target of 60% would be adopted.

The GOI ratified the WSC (World Summit for Children) goals in 1990. It was recognized that in order to provide access to sanitary latrines to all families in Indonesia by the year 2000, at least 4 million units needed to be constructed on an annual basis. It was also recognized that it was a goal beyond the capacity of the Government to meet without the active participation of the community.

Apart from the above, however, a national strategy to achieve the universal goal for sanitation had never been developed. It was under these circumstances that the Jumat Bersih Movement was adopted as a national movement with the expectation that it will mobilize the active participation of the communities throughout Indonesia.

UNICEF's Role

UNICEF has provided support for the Movement, at its place of origin in the district of West Lombok and subsequently through the efforts to have it brought to the national forefront, nurtured and developed on a mass scale. Assistance has been provided to the MUI (Indonesian Council of Islamic Leaders) to facilitate the role of religious leaders in the Movement. This has included the provision of CIE (Communication, Information and Education) material such as a booklet on sanitation and water according to Islamic teachings for use in religious meetings, films and leaflets for Haj pilgrims. Orientation and training workshops for religious institutions as well as support for religious NGOs in their efforts to mobilize their millions of members throughout the country are also supported. Support is also provided in selected provinces under the ongoing GOI-UNICEF cooperation in the WES programme through, among other things, provision of stimulant funds to motivate communities to build latrines

Current Status of the National Movement

Well into the fourth year since its launching, the following achievements have been made within the Movement:

- A well-established organisational structure from the village up to the central level has been achieved. A secretariat was specifically established within the Ministry of Health in 1997 to serve as a coordinating point and a resource centre for the

Movement. The roles and responsibilities of the various agencies, both government and non-government, for planning, implementation and monitoring of related activities have been clearly defined;

- Regular evaluation exercises have been conducted on an annual basis at the national level;
- The provinces which have translated the general guidelines issued at the central level into specific plans of actions have managed to achieve a higher rate of increase (up to 9.6% per year during the past three years) in the coverage of family latrines compared to those which have not (as low as 1.3% per year);
- A continuing high level political commitment at the national level to ensure the success of the Movement;
- The national coverage of family latrines (in urban and rural areas) has increased from 51.5 % in (1993) to 65.7 % (1996)

The West Lombok Experience

Introduction

Lombok has rapidly gained popularity as a major tourist destination during the past decade due to, among other things, its close proximity to Bali, the pristine white sandy beaches and the extensive lush rice paddies that still exist even in the urban areas.

In many other aspects, unfortunately, Lombok is far from the image of an ideal place. Poverty is still widespread, monsoons are unpredictable and southern Lombok has suffered repeated droughts with ten famines in the past 40 years causing the deaths of thousands of people. The health conditions are considered to be worse than those of Indonesia as a whole. Infant mortality rates are reducing but are still higher than the national average. The most common diseases treated at health clinics are infections of the upper and lower respiratory tract. Skin and eye infections and diarrhea are widely prevalent, as are malaria, tuberculosis and malnutrition.

One of the major causes of the high incidence of respiratory diseases among villagers was the unhygienic conditions of Lombok houses. These houses are mainly two roomed constructions with dirt floors, walls of lightly fired bricks or woven bamboo skin and thatched roofs supported by bamboo trusses. Most have few or no windows and it is commonplace for the people to cook, eat, sleep and even keep animals in a single room.

Lombok has also been well-known as one of the major sources for Indonesian workers migrating overseas, particularly to Malaysia, creating a considerable number of female headed households. This translates as an extra burden on family resources and health status.

Sanitation condition

The NTB Province, made up of the Lombok and Sumbawa islands, still ranks the lowest (25.70%), among the 27 provinces, in the national statistics of households with private latrines. For comparison, 5 provinces have coverage between 60-75%; 5 provinces between 50-60%, 9 provinces between 40-50%; and the rest below 40%. People traditionally prefer to defecate in the open air ie rivers, ponds and backyards. A study conducted in the early 1990's in the Province revealed the following :

- <10% of mothers wash their hands before feeding their children;
- 60% of the people in rural areas do not wash their clothes on a daily basis
- most people do not understand the co-relation between gastro intestinal and use of latrines
- most people consider clear water to be clean water
- many places of worship do not have WES facilities.

The origin of the *Jumat Bersih* Movement

Most government departments in Indonesia rely on the traditional top down approach and systems and attitudes are ingrained which tend to perpetuate this way of doing things. Likewise, villagers tend to expect a benevolent bureaucracy to provide facilities to the people.

The West Lombok administration attempted to make a difference through the Jumat Bersih Movement. Although the role of the government is very well defined, it is primarily to motivate, to provide guidance and to facilitate a self-help approach among the community. This role is widely recognized but not sufficiently put into practice among government agencies.

Under the leadership of Mr Mudjitahid, the *Bupati* (Head of the District), a district WES team was formed among the 7 agencies involved in the sector. The *ABS* Team, as it was locally known, was assigned to "go down" to the community. Instead of the normal practice of going to villages to give instructions in a very top down manner (wearing distinguished uniform and sitting on an erected platform above the villagers), the Team visited the villages to pray and to listen to sermons together (94% of West Lombok population are Moslems). This communicated a receptive position to the community.

Pre-dawn and after dusk visits to villages, often with the *Bupati* himself, have become routine activities when officers come donned in traditional *sarongs* and shirts ready for prayer meetings. They sit on the floor with the villagers and encourage the local *Tuan*

Gurus (religious leaders) to teach the people of the importance of hygiene behaviour and the particular consequence of the need to have a family latrine. These religious leaders have cooperated to pass on community messages on family planning in the past to great effect.

All sorts of religious activities such as the Koran reading between the *Magrib* and *Isya* praying time and the activities involving the Youth of the Mosque groups always provides a window of opportunity to educate the people.

The district Motivating Team of PKK (family welfare movement, chaired by the wife of the Bupati), also part of the ABS Team, trained the village PKK cadres who were given the responsibility of motivating and assisting 10 families each toward improved hygiene behaviour. They are in the best position to deliver health education through face to face contact, very often in an informal gathering such as at the village shops. They also managed the revolving funds provided by the Government for toilet construction.

Communities are encouraged to ensure personal, domestic and community hygiene specifically starting from Thursday evening (in preparation for the holy day, Friday). Families who do not have latrines are expected to construct one.
Facilitation is provided by the Government through the provision of stimulant funds for constructing toilets and floor plastering. Village masons and technical cadres were trained to use FRP molds to produce toilet basins and concrete rings.

The *Bupati* also motivated the people through "positive enforcement" by issuing *SKBs* (*Bupati's* instructions with legal status) :

- each prospective Haj pilgrim is required to show a letter from the village head testifying that he/she has already built a toilet either for his/her own family or as contribution to a poorer family;
- each bridal couple is required to demonstrate that they already have a latrine;
- a building permit is issued subject to evidence that the proposed building will have a toilet;
- each member of the village cooperative (KUD) is required to have a latrine; those who do not have one could apply for a loan from the cooperative;
- each community group is required to demonstrate that the members have already had latrines prior to being considered eligible for government assistance for income generating activities
- ch sub-district is required to have at least one village with a 100% latrine coverage and the other villages within the sub-district are required to have at least one hamlet with a 100% latrine coverage.

Achievements

during the 1994/95-1997/98 period, the following facilities have been constructed with funds from the Government budget, foreign assistance, and community contributions.

Type of facilities	No built (units)
Family latrines	79314 *
Communal latrines	22
School latrines	15
Latrines at mosques	15
Dug wells	15151
Spring protection	30
Rain water collectors	99

(*) translates into more than 25,000 units per year compared to the rate of 1500 units per year achieved prior to the launching of the Movement.

Many existing wells were also rehabilitated. Traditional wells were only wide enough to accommodate one person during excavation, and their small size made many of them inadequate for community use.

Coverage

	West Lombok District	NTB Province
No of Population, 1996	660,295	3,656,998
No of villages	55	492
Coverage of latrines (%), 1993	30.0	13.48
Coverage of latrines (%), 1996	**61.7**	**48.14**
Coverage of water supply (%) 1993	49.21	65.5
Coverage of water supply (%) 1996	**77.8**	80.8

While the latrine coverage in the other 5 districts are still ranging between 23%-53%, West Lombok has managed to exceed the target of 60% coverage and is confidently aiming for a 70% coverage by the year of 2000. At least 10 villages have achieved 100% latrine coverage.

- While accurate data are not available, field observation has found that hand washing facilities are installed in front of most houses, constructed latrines are used as indicated by the presence of water for flushing. Many villages, including those of the fishing communities which were notoriously unhygienic and unhealthy before, appear to be clean.

- Continuing high commitment from the district government as demonstrated by the recent preparedness to take over the funding responsibility for a school hygiene programme that was previously funded by an external donor agency;

- A well-established and coordinated district WES team which has continued to perform. The West Lombok district has a much more organised data collection and analysis system

- National recognition

  The Movement which originated in West Lombok is now a national movement. The West Lombok Bupati has been requested to share the district experience at various national meetings and the district has received various delegations from other provinces in relation to the Movement. It was also selected as the venue of the recent national meeting on the role of village councils in development programmes.

- Health impact

  While it might not have been directly attributable to the Movement, a marked improvement has been observed in the prevalence rate of diseases such as ARI, diarrhea, skin diseases and dysentery.

Major constraints (West Lombok and national level)

- Lack of commitment towards improved sanitation among many regional leaders

  ➢ Most district heads have yet to translate the national commitment into action oriented plans at the local level. Many have continued to rely on the availability of funding for projects instead of facilitating self-help activities. The national efforts to ensure high commitment from all regional leaders have only recently been made.

- Insufficient coordination

  ➢ The great number and diversity of agencies involved in the sector has always hampered coordination. Again, through the strong commitment of the Bupati, West Lombok managed to address this issue by establishing the ABS Team.

- Poor data management.

  ➢ During the latest national evaluation of the Movement (November 1997), 15 out of 27 provinces failed to provide data on the sanitation situation. In West Lombok, data are available by hamlet (sub division of village). It has not only been useful to motivate the village heads (due to the sense of competition) but also to encourage self-help. Where only a few families are left without latrines in one particular hamlet, it is well within the capability of the community to take actions without external assistance.

Lessons learned and best practices (from West Lombok and national experiences)

- High level commitment from the Head of the District , a key official with the necessary authority to influence budget allocation and to issue regulations who is also close to the level of implementation, has proven most effective in achieving improved condition;
- The highly paternalistic and bureaucratic government agencies could be effective in bringing sanitation improvement as long as approach to the community is made in a familiar manner particularly through religious channels. This seems to have been the most effective in the West Lombok experience with the Movement;
- It was still difficult to expect active involvement of women beyond their "traditional" roles in the CIE component. Strong dominance of technical agencies is among the major constraints;
- Support from external agencies like UNICEF particularly moral support through ,for instance, visits by distinguished figures could enhance local governments' commitment.

Environmental Sanitation

Situation Analysis

Background:

Traditionally, Iraq is a country where water resources are available in abundance (mainly surface water) and by the end of the last decade had achieved a potable water coverage of 93% in urban areas and 70% in rural through advanced treatment plants and networking systems. Piped sewage systems partially served capitals of provinces (25% of the population and urban areas only) with plans to extend coverage to all urban areas. More than US$100 million were spent every year to undertake preventive maintenance to the existed system.

Policy Framework of the Government:

The government set long-term plans of 25 years with defined ultimate goals for a universal coverage of sanitation for both urban (piped systems), rural (cesspools with support of cesspool emptiers) and garbage collection. These plans were divided into 5 years intervals with strategies reflecting the priorities of each interval. The last plan was set in 1985 to cover the period up to the year 2010. In 1986, the scope of the planned interval had to be minimized due to funding constraints. Starting from 1990, the plans became invalid due to the drastic change in the situation and the vanishing budgetary allocations. Short term planning aiming to solve the most alarming and serious problems has been the alternative approach.

Composition:

Three quarters of the population in Iraq have facilities for sanitary sewage disposal (not necessarily operational) the rest dispose off sewage in a manner that causes health hazards. Facilities for sewage are classified as follows:

1- Piped sewage systems. 25% of the population (all in urban areas starting from the center of the country and stretching downwards) are covered with this type of facility. The sewage system in Iraq is composed of 14 sewage treatment plants, some 250 vertical sewage pumping stations, more than 1,000 sewage submersible pumping stations and thousands of kilometers of pipes forming the sewage collection network.

2- Household cesspools septic tanks and pit latrines. 50% of the population use this facility which is supported by a fleet of thousands of cesspool emptiers.

The rest of the population dispose of the sewage directly into rivers, streets or open areas forming ponds of stagnant water and cause contamination and environmental hazards. Those form one quarter of the total population and cover both urban and rural population.

Gender aspects?

Garbage collection is carried out by a fleet of garbage collectors (trucks). On average, a garbage collector covers about 5,000 people.

The sanitation system is state-owned. Cost to the beneficiaries is highly subsidized. Community participation has no history.

In comparison to the water sector, sanitation was always lagging behind. That is because water was always given top priority due to the high demand resulting from the hot/dry climate of Iraq and the type of water resources available making water very costly to be treated. Water services are quite sophisticated in Iraq.

Prior to 1991, potable water coverage of the Iraqi population was over 90% in urban areas and 70% in rural areas. The per capita share of water was approximately 330 liters/day in Baghdad, 210 liters/day in other urban areas and 180 liters/day in rural areas (national standards allocate 150 liter/capita/day for urban population and 80 liters/capita/day for rural population). According to the set plans, water production was to be increased by 50% by the year 1993 while reaching universal coverage.

The water system in center/south Iraq is composed of 218 water treatment plant, 1191 compact water unit, 51 boosting station and thousands of kilometers of water supply pipes. In the north the system is composed of 21 water treatment plants, 640 boreholes and 140 various other systems. Almost all water is drawn from surface resources and there is no difference in treatment technology in urban and rural locations in center/south Iraq. As for the North, people rely on ground water especially in rural areas.

Current Situation:

Similar to other sectors in Iraq including water, the sanitation sector witnessed severe deterioration during the period that followed the Gulf War in 1991. The US$30 million that used to be spent every year to maintain the existing system operational suddenly vanished and sector's dependance afterwards was only on foreign aid coming from the humanitarian agencies working in the country mainly UNICEF and the ICRC. That aid did not form but a small portion of what the sector needed.

As for the piped systems, most of the treatment plants are malfunctioning due to lack of spares, equipment, proper maintenance and skilled manpower and, though not quantified high percentage of raw sewage is dumped directly into the Tigris and the Euphrates rivers, their branches and tributaries causing contamination to these water resources. Because of the lack of supplies, proper maintenance and continuous long-duration power

cuts, sewers are frequently clogged with sediments of the sewage solid particles causing back flow of sewage into living quarters and residences. In Baghdad city for example, the long-duration power cuts caused severe damages to the piping network resulting in 18,000 settlements and breaks during the past 7 years compared to only 18 during the period 1985 to 1990. The formation of H_2S, resulting from the trapped sewage effluent, with its aggressive acidic action will result in a disintegration and corrosion of pipes, disintegration of soil below and eventually collapse of the pipes.

Due to the high water table especially in the center and south of Iraq, cesspools do not function efficiently. The broken down fleet of state-owned cesspool emptiers that are lacking spares, tyres and batteries and the costly rented private tankers is forcing some people to drain off their sewage to streets and open areas. Some people made illegal connections to storm sewers resulting in a damaged network and an untreated effluent flowing directly into the river.

Garbage collection vehicles face the same problem faced by cesspool emptiers, which is the lack of spares . In 1990 and in Baghdad city for example, there were 800 garbage collectors with a capacity of $8m^3$/collector (about 4 tons each) making two trips per day serving 4.25 million with an average garbage disposal of 1.5kg/cap/day. Now, for the 5.4 million inhabitants disposing of 0.5kg/day there are only 80 garbage collectors with much inferior efficiency assisted by 400 hired garbage collectors. This is resulting in more garbage accumulating between residences (about two thirds are not being removed) and the fact that garbage disposal areas are getting nearer to the city (collector are carrying less quantities and travelling for shorter distances).

Due to the economic hardship, the sector witnessed an enormous brain drain. More than 80% of the qualified staff working in the sector left in search for a better income elsewhere. This have had a negative impact equally effective to that caused by the absence of financial resources.

What are the problems?

WES facilities in the country were based on high technology, dictated by the geographical nature of the country, that required high financial inputs to keep the system properly operational. The economic collapse and the absence of the required financial resources have lead to a fast deterioration of the system.

The exodus of employees working in the sector, the shrinking number of new recruits and the absence of manpower, have had their hard negative impact on the sector's performance. Skilled and experienced people left the sector in search for better income. These staff were neither compensated with competence nor with numbers. This meant that systems are managed by less skilled staff thus are less maintained and poorly operated.

Private sector has no role to play in supporting or providing WES services to the community. This would have very much eased the burden on the Government with so many other important issues to deal with in a collapsed economy country.

The unprecedented, unplanned shift of responsibility of rural water schemes to the community has had a negative impact on the effectiveness of decentralization of services. When not able to manage these schemes, community opted to untreated and unprotected water sources resulting in an unhealthy and unhygienic environment.

The correlation between the deterioration in environmental sanitation status, water quality and quantity with water borne diseases and malnourishment is quite evident. The increase in water samples contamination from an average of 5% in 1990 to more than 30% in 1997 and the 40% reduction in quantity of water delivered contributed to an increase in the percentage of U5 underweight children from 9% to 25%, an increase in in diarrhoea related deaths in U5 children from 0.2% to 1.7% and Typhoid fever cases from 2250 to more than 17,000 cases.

Long-hours power cuts have had a damaging effect on both sewage disposal and water facilities. Sewage effluent that is standing still in a sewer will have its solid particles settling down and clogging the sewer in addition to the damaging effect of formed acidic gases on the material of the sewer. Moreover, flooding sewage will migrate through the broken water supply pipes that have no pressure and cause contamination.

The highly subsidized cost of water coupled with lack of community awareness is leading to high percentages of wastage and irrational use. Despite the prevailing water shortage, garden irrigation is done with potable water, household water leaks are rarely repaired and main water breaks are slowly reacted to . Besides, cooling systems used by the majority of households in Iraq consume large quantities of water and adding to the burden of the problem. The same applies to sewage disposal facilities. These facilities are often misused because people don't pay for it or not aware of it importance on their health status.

Even when garbage collection was properly undertaken, disposal of garbage was done on rather adhoc basis. This is now getting more serious when these disposal sites are getting closer to cities and communities.

What are the lessons learnt and what is to be done?

Through the Oil for Food programme, Iraq will be importing some supplies and equipment that would assist in gradually improving the performance of both sanitation

and water facilities. This will be a boost to the financial resources required by the sector. What remains to be dealt with is the human element as a resource for managing and operating the sector. It will be a long time until this element is revived and fine tuned to ensure optimum utilization of the financial resources. Finding and attracting the competent technical people and training the required sub staff is key in ensuring efficient performance of the sector.

The private sector could play a major role in that respect. With the objective of sharing the burden of the sector's problems with the authority, giving better chances of work to people and for the private sector to grow progressively, this possibility could very well be investigated. Under proper monitoring and accountability system, the authority could delegate part of its responsibilities in managing and running WES schemes. This is done in so many countries.

For the private sector to be involved in a fruitful and successful manner, the government should enforce new legislations concerning WES services cost to the population. This will, on one hand, increase the margin of profit that could be gained by the private sector thus attracting more people and companies to compete, and on the other hand, force the people to be more rational in using the WES facilities.

All this should be well planned and communicated, well in advance, to the population. This is neccessary for justifying the need for that change, raising people's awareness, adapting people to the new system and winning their enthusism and support. This should increase possibilities for success.

Due to the absence of a Master plan for the sector, a comprehensive WES assessment should take place. This will provide a clear definition of the sector components and set different strategies for different possible scenarios of funding aiming at sectors rehabilitation and further development. Both Water supply and Sewage (liquid and solid) disposal policies and standards should form the core of that assessment.

Community involvement should be well investigated in managing WES schemes especially in rural areas where the number of community people is smaller and easier to deal with. Since this has no precedence before, pilot projects should be supported to be replicated if proved to be successful. These kind of micro level problem are normally overlooked by the national programme. Local authorities with the support of the local council should form the nucleus of a community level WES schemes management.

UNICEF Past/Future Intervention/Objectives

During the period 1991-1997, UNICEF's attempt as the main partner of the Iraqi water and sanitation authority was to prevent further deterioration of the sector's problems that were getting more severe and further complicated.

Though substantive from a UNICEF perspective, intervention into the sanitation sector was minimal in comparison to the country's needs (in financial terms about US$60 million for the whole sector with less than 20% for sanitation) and was only capable of scratching the surface of the problem. UNICEF assisted in preventing a major breakdown of the system and kept the decline less sharp. At some time UNICEF provided interim kind of support to schools and hospitals by hiring cesspool emptiers to help clean the flooded environment. Sewage submersible pumps and mobile sewage pumps were also provided in an attempt to divert sewage away from residences, schools and health facilities to a location where it is less harmful. UNICEF also supported with the provision of tyres and batteries to repair the state-owned cesspool emptiers. Spare parts were provided as well to some sewage treatment plants to maintain a minimum level of operation. In the water sector, chemicals, spares and equipment were provided for water treatment plants and compact units to assist making minimum quantities of potable water available to the population.

With the emerging Oil for Food programme , it is anticipated that the programme of cooperation between the government of Iraq and UNICEF in the WATSAN sector will witness a strategy change. The main thrust should focus on a nation-wide assessment of the current situation of the WATSAN systems to determine priority problems, address and define strategies for the sector recovery. The programme will also focus on the poor urban and rural areas and schools. Community participation and involvement will be promoted to partake share of the responsibilities of the programme with the authority, to tackle problems at the micro level that are normally overseen by the concerned authority.

Continuation of local capacity building at the various levels will be of prime importance to the programme. The monitoring system at the national and sub-national level will be reviewed to include/reinstate the water quality surveillance. Advocacy on proper use of water and sanitary facilities will be given priority to contribute to the reduction of the water borne diseases. Advocacy to involve the private sector in managing the sector will also be given top priority in anticipation to have improved WES services.

TARGET GROUPS

Six hundred and six villages from 6 districts, affected by the dracunculiasis, were targeted for hygiene education and sanitation activities in the Mopti region (total population estimated at 300,000 or close to 30% of the rural population). The population of this target group is in general poor and far removed from basic essential services. Within the selected villages, the programme orientated its activities towards women and children's needs as well as those of schools.

The population of 158 villages (108,000 persons) having no access to any source of safe drinking water and where the incidence of guinea worm disease is the highest, were to benefit from new water sources. Efforts to improve the maintenance and up keep of water sources concerned the villages which benefitted from the new water sources as well as those water sources put in place in the previous programme. In total, 542,000 persons benefitted from this support.

AREA OF INTERVENTION AND ACTIVITIES

The programme was based on an integrated approach. It was comprised of 3 interdependent projects all of which were implemented simultaneously in the same geographic zones. The three projects were : rural water supply; hygiene education and sanitation; and support the eradication of dracunculiasis.

ACTIVITIES OF THE RURAL WATER SUPPLY, HYGIENE EDUCATION AND SANITATION PROGRAMME

PROJECTS	AREAS OF INTERVENTION	ACTIVITIES
PROJECT 1 RURAL WATER SUPPLY	Drilled wells	- Drilling of 260 wells under state control - Handpump installation with community participation
	Borehole upgrading	- Replacement of some pumping devices due mainly to pipes' corrosion
	maintenance of Handpumps	- Creation/Dynamisation of village committees - Setting up of spare parts stores - Support to private operators - Training and equipment of artisans and village care takers

PROJECTS	AREAS OF INTERVENTION	ACTIVITIES
	Information, Education, Communication (IEC)	See PROJECT 2
PROJECT 2 HYGIENE EDUCATION AND SANITATION	Surveys	- Monograph of villages in the intervention area before and after project implementation - Study on water contamination (from source to consumption)
	Information, Education, Communication (IEC)	- Setting up of a community based animation network (animators, village agents) - Creation/Dynamisation of village committees - Organisation of monthly IEC sessions in target villages - Design and use of participatory tools and
	Excreta disposal at household and school levels	- Training of village masons - Support to households for the construction of simple test latrines - Support to households for the extension of coverage - Support for the construction of VIP latrines in schools
	Environmental sanitation	- Support for the implementation of sanitary facilities around groundwater sources - Support to households for the construction of soakaway pits in
	Water quality control	- Quarterly analyses of water physical, chemical and bacteriological parameters
PROJECT 3 GUINEA WORM ERADICATION	Epidemiological surveillance	- Monthly data collection in villages infected by the Guinea Worm disease
	Training	Training of health workers and community agents
	IEC	See PROJECT 2

RURAL WATER SUPPLY , HYGIENE EDUCATION AND SANITATION PROGRAMME MALI/UNICEF 1993-1997

BASIC PROGRAMME INFORMATION

Title : Rural Water Supply, Hygiene Education and Sanitation Programme, MALI/UNICEF

Location : MOPTI region in Mali

Period of implementation : 1993-1997

Key Stakeholders :

- Ministry of Mines, Energy and Hydraulics
- Ministry of Health, Solidarity and the Elderly
- Ministry of primary Education
- UNICEF-MALI
- Global 2 000; US Peace Corps; World Health Organisation

Programme Managers :

- Mr Mahamadou Sidibé, National Director of Hydraulics
- Dr Mamadou Kané, National Director of Health
- El hadj Moustapha Diouf, PO WES, UNICEF-Mali

PROBLEM CONTEXT

Access to clean water and improved sanitation has always been considered a priority in the social and economic development of Mali. Important progress in these areas has been accomplished during the International Drinking Water Supply and Sanitation Decade IDWSSD (1981-1990) thanks to the intensification of national efforts and international cooperation. However, despite these efforts, , water and sanitation related diseases (mainly diarrhoeal diseases and malaria) were found to be the main causes of the high rate of child mortality and morbidity in Mali (296‰ in 1991) in the early 90's.

The integrated rural water supply, hygiene education and sanitation programme, elaborated in the framework of the Mali/UNICEF cooperation 1993-1997, was to contribute to the reduction of the incidence of water and sanitation related diseases and also the increase of access to water so as to reduce the work load of women and children by targeting the following aspects : inadequate water supplies and the shortage of sanitation facilities, non optimal operation of the equipments, little understanding by the population of the relationship between water, environment and health; low priority accorded to environmental sanitation in the implementation of the national policy.

Prior programmes which mainly centered on rural water supply did not have a decisive effect on hygiene conditions. The 1993-1997 programme, which has also a rural water supply component, puts a big emphasis on hygiene and sanitation.

The programme, located in the Mopti region, which is one of 8 administrative zones in Mali, is characterised by very high rates of child mortality (380‰), large number of guinea worm cases (57% of the cases in Mali in 1992), low access to safe water (14.1%) and overall unsanitary and unhygienic conditions.

PROGRAMME OBJECTIVE

The overall objectives of the programme were to decrease the incidence of faecal and water related diseases, especially *the dracunculiasis* and to reduce the time spent by children and women for fetching water. These objectives were to be achieved by :

- increasing access to safe water for rural population in the Mopti region,
- assuring full access to potable water by strengthening operation and maintenance systems,
- improving sanitary conditions of people through the setting up low cost appropriate sanitation infrastructure and by promoting behavioural changes through hygiene education for the eradication of dracunculiasis.

PROJECTS	AREAS OF INTERVENTION	ACTIVITIES
	Pond water filtration	Making, distribution and checking of filters at household level
	Water treatment	Treatment of ponds' waters with *abate*
Other intersectorial activities of the programme	Coordination-Monitoring-Evaluation	Monitoring committee at national & regional level; Annual and mid course review; Periodical reports; Coordination with UNICEF partners; Monthly meetings of the animation network; Monitoring and supervision at different levels; Evaluation

SOME RESULTS AND IMPACTS

The programme improved water and sanitation services. This is demonstrated by the high level of achievement of project objectives concerning infrastructure development: 100% of wells were drilled; 85% were equipped, 83% received sanitary infrastructure; 55% of sanitary facilities were put into place at well sites; 220% of latrines were constructed; 143% of latrines were constructed for schools; and 80% of soakaway pits were constructed. Moreover, the rate of handpump breakdowns declined from 40% to 20%.

Community participation was reinforced during the course of the programme. Communities participated in the choice of borehole sites and the choice of some of the sanitary infrastructure around the water sources. The communities participated financially for the acquisition of pumps and also provided the labor for the construction of the infrastructure (labor provided by the population for the construction represents more that 50% of their total cost).

Animation activities contributed greatly to the improvement of the infrastructure management and to increasing use of water sources by the communities. Through village committees, the programme promoted the use of the new water infrastructures in their community as well as the participation of the communities in equipment management. Village committees were also organized to maintain the area around the water source and assure the maintenance and repair of handpumps. In addition, the communities gained a better understanding of water and sanitation related diseases and how they are transmitted. This new information helped change people's attitudes concerning water use and led to new practices in the community such as: the use of potable water (pumps, improved wells); the use of filters for filtering water from ponds; and a high demand for latrines. The programme played a role in the introduction of hygiene education in school curriculum.

Additional achievements of the programme resulted in reducing the time women and children spend fetching water. New wells were drilled in close proximity to the communities; a maximum of 300 meters from the village (versus more than one kilometer for old contaminated water sources). Boreholes were equipped with handpumps which reduced the hardship and the time it took to draw water.

The most significant impact of the programme is the considerable reduction in the number of guinea worm cases. With the combined actions, the number of cases had been reduced by 95% between 1992 (9,200 cases) and the end of 1997 (450 cases).

SOME CONSTRAINTS

a) *Social-cultural obstacles* : In spite of the importance of the animation activities, some socio-cultural obstacles still exist (*eg* : continued use of pond water, preference for open air defecation). These obstacles limit the use of water infrastructure put in place. Removing these social-cultural obstacles is especially difficult when for technical reasons water sources are not functioning correctly (pump breakdown, difficulties in pumping for deep wells).

b) *Difficulty in meeting the demand for latrines for excreta disposal* : Despite the high demand for latrines, extension of coverage was limited by both geographic accessibility and the financial capacity of individuals to purchase the necessary building materials for a latrine as well as the availability of limited resources on the side of the programme.

c) *Insufficient implication of the population, particularly women* : the population has not been involved to a great extent in the monitoring and evaluation activities of the programme. The participatory approach developed resulted in monitoring and evaluation being the responsibility of the programme rather than the population. The empowerment of women in the decision making process was insufficient.

d) *Lack of harmonisation of community participation principles* : between programmes in the same region and in the same field.

e) *A tradition of vertical project management* : by public services and ministries. This was a constraint to intersectorial coordination at the central and regional levels.

f) *Insufficient number of technical surveys and impact studies* : a study to measure the impact of the programme was not undertaken, neither were baseline studies which would have led to the adoption of specific operational strategies (wastewaters and solid wastes management and disposal).

g) *Little interest by private economic dealers* : to invest in rural areas in the field of water supplies, but above all, in the hygiene and sanitation subsector which is often considered less profitable.

h) *Limited political commitment for the hygiene and sanitation subsector* mainly in rural areas; and also the weakness of institutional capacities in intersectorial coordination.

LESSONS LEARNED

1. The elaboration of the programme profited from some favourable factors and conditions

a) The existence of a national policy in the water and sanitation sector gave a special importance to: hygiene education and environmental issues; strengthening of individual and collective participation; reinforcement of intersectorial coordination; administrative decentralisation and decentralisation of decisions.

b) The surveys and studies conducted before the design of the programme allowed for a better understanding of environmental and sanitation conditions in rural areas and helped define areas of the programme.

c) The commitment of the Malian government to pursue the objectives of the IDWSS Decade and to realise those of the World Summit for Children; and to support the guinea worm eradication objective as well as the existence of a national action plan for the survival, the development and the protection of childhood, were key factors to advance the programme.

d) The availability of civil servants and voluntary workers in the fields of water, sanitation, health and community development, contibuted to set up and develop an animation nerwork.

e) The existence of community based organisations constituted a support base for the programme for the reinforcement of community participation

2. *The results and impacts of the programme were obtained thanks to its varied activities, but also thanks to their integration. However, some interventions were decisive :*

a) The monthly hygiene education activities conducted in each target village facilitated all the other activities of the programme, especially by promoting behavioural changes.

b) The creation and the equipping of water sources, but more so, the efforts made to insure a continuous functionning of these equipments, reinforced the use of simple filtration techniques endorsed by the populations, had a great impact on the reduction of guinea worm cases.

c) The follow up and the surveillance system from village to national levels facilitated monthly gathering of information and the adoption of appropriate measures.

d) The improvement of agents' skills and the decentralised management of the project contributed certainly to the achievements.

3. ***From some difficulties encountered, the following lessons can be drawn:***

a) The emphasis being put on the eradication of dracunculiasis, its incidence has decreased considerably; however, other water and sanitation related diseases such as diarrheoal diseases continue to be a public health problem. In the future, they should be given more attention.

b) The results related to the creation of water sources are satisfactory; however, the major challenge remaining is to insure a continuous functionning of water lifting devices in order to improve the service delivery and to support durable behavioural changes.

c) The geographic convergence with other Mali/Unicef programmes (health, nutrition, education) has been difficult because the choice zone for programme intervention was guided by the criteria of guinea worm endemicity. It will be appropriate to give more consideration to geographic convergence and to the synergy of interventions in order to maximise health benefits.

d) The obseved weaknesses in the organisation of community management committees mainly in relation to the empowerment of women, requires an approach suitable to the socio-cultural context in order to tackle this problem.

e) The participatory approach set up by the programme should go farther by involving communities, not only in the implementation of activities, but also in the diagnosis of the situation, in the planning process, in the monitoring and the evaluation phases.

4. ***The programme set up approaches and introduced tools and methods that should be developed and spread out to other regions***

a) The programme developed and applied an approach that permitted the integration of water-hygiene-sanitation interventions on a regional scale; and that gave the proof of its efficiency. That constitutes a rich experience replicable in the other regions of the country and in other countries.

b) The setting up of an animation network leaning on perennial administrative and community structures, and the reinforcement of the planning, monitoring and management capacities of administrative agents as well as community workers (village health workers, artisans, masons, village repair men, village pump guards), allowed for efficient support of the activities and the creation of conditions for sustainable service delivery.

c) In spite of some limitations, the introduction of the participatory method SARAR and that of relevant animation tools culturally appropriate has been an innovation that attracted great interest by the other projects done in the country and in the subregion.

d) The emphasis put on the use of local materials for the construction of infrastructure created favourable conditions for replicability , more community participation, quick acceptance of technologies, reduction in the cost of facilities.

TOWARD THE PROMOTION OF INTEGRATED COMMUNITY BASED ACTIVITIES

In order to contribute more efficiently to the reduction of child mortality and morbidity due to diarrheoal diseases and to poor nutrition, the survival programme, within the context of the present Mali/Unicef programme 1998-2002, plans to support interventions in the areas of water, hygiene and sanitation.

Activities will be consolidated and the experiences of the previous programme 1993-1997 will be extended to the other regions of the country according to the progressive implementation of the sectorial health policy.

Beyond the sector and in complementarity with other partners, the focus will be on geographic and intersectorial convergence of integrated and decentralised health and nutrition activities with those of water, hygiene and sanitation.

Since the adoption of a sectorial health policy in 1991, a network of community managed health centres is progressively set up. These health centres, which regroup on average 10

villages, offer a minimum package of services (MPS) meeting the main curative, preventive and promotional needs of the population. However, it must be mentioned that the range of activities remains minimum .

It will be relevant to diversify the service delivery of health centres by setting up a progressive minimum package of community based services including health, nutrition, hygiene and sanitation components. The programme activities will be designed, monitored and evaluated in close collaboration with beneficiaries.

Hence, in the scope of the Mali/Unicef survival programme 1998-2002, 80 functional health areas out of 345 presently in the country will benefit from integrated health/nutrition/water/hygiene and sanitation activities, in order to maximise the health impact of interventions

MAKING 'SANITATION FOR ALL BY THE YEAR 2000' A NATIONAL OBJECTIVE & NETWORKING ON WATSAN VIA WESNET

Sanitation for All by the year 2000 is a flagship programme of UNICEF Myanmar and falls within the framework of the Convention on the Rights of the Child (CRC) to provide a brighter future for children. This country note outlines the role and achievements of UNICEF Myanmar on the Sanitation for All (SFA), particularly in its advocacy and contributions in shaping national policies and strategies, as described in Part 1. Furthermore, UNICEF Myanmar has taken the initiatives to establish a regional networking among UNICEF country offices via virtual conferences using the Internet system, as outlined in Part 2.

Part I: Making "Sanitation for All by the year 2000" a national objective

Background:

The Ministry of Health launched a National Sanitation Programme in 1982, covering 88 of the 324 townships in the country. By 1995, the programme realized success in some 25 townships where sanitation coverage reached levels exceeding 80% to 90%. The strategy was to provide free plastic latrine pans to the families, with the aim of reaching 100 percent coverage in the townships. The result fell short of expectations, due to the limitation of programme funds. Following the World Summit for Children, universal access to sanitation by the year 2000 also became a goal of the National Programme of Action (NPA) for the 1990's.

The experiences of this early national programme have provided a good basis to analyse the positive and weak elements as well as the feasibility of achieving Sanitation for All. The major conclusion one can draw is that it is very costly to provide to every family or to raise the expectations of families to receive a plastic pan, if all townships were to be covered; besides, one has to ensure that the pans are used for the intended purposes. The NPA was not translated into actions at the national or sub-national levels. What was evident was an absence of concrete plans and secured funds to meet the requirement of every family without a sanitary latrine. Equally evident was the lack of high level commitment.

Why was sanitation given low national priority?

The relationship between poor sanitation & hygiene and health is well recognized. However, the gap between the perceived need for improved sanitation and the development and implementation of a national plan of action remained wide until the mid-1990's. The National Plan of Action which emerged as a result of the World Summit for Children was given inadequate attention. Until mid-1990's, the efforts to bring as

many townships to full coverage using the limited available resources, largely from UNICEF, continued. As at end 1995, a national survey showed sanitation coverage at 43%. As the year 2000 approaches, the achievements of the goal appear to recede further.

The reasons for the low priority are not very obvious, although one can speculate on various factors. To what extent was the absence of an effective and dynamic national programme a factor, given the inadequate capacity at the national level to formulate such a plan? Did the lack of leadership at the central level to encourage the sub-national offices reduce the tempo of the programme? Was the tremendous gap between 25 successful townships and the full coverage for 324 townships too enormous to bridge, and therefore the goal of universal access was only paid lip service? How realistic was the replication of providing plastic latrine pans to every family ... which would have cost US $ 12.5 million for some 5 million households? Was a lack of sound and workable strategy the over-riding factor? It is more likely that a combination of these factors have played varying roles in keeping sanitation in the background.

The Paradigm shift:

Conventional wisdom suggests that people are keener to embark on a meaningful programme if the programme interventions have good chances of being successfully implemented, rather than one with high risk of failure. So, what are the ingredients that can make Sanitation for All a programme that the Ministry of Health will consider challenging, relevant and with great potential for success?

The major shift by UNICEF, in the Myanmar-UNICEF Country Programme of Cooperation (1006-2000) was to consider sanitation implementation on a national scale, rather than for a very limited number of townships, as determined and constrained by the size of programme funds. This will help to achieve high coverage or at least a critical mass in order to realize health impact. The good health infrastructure, with some 7,000 health centres/sub-centres all across the country, the vast school network, the experiences of social mobilisation for Universal Child Immunization, the growing private sector involvement, and support within the community were factors that were considered in developing a new strategy.

In mid-1995, UNICEF phased out the supply of plastic latrine pans, and advocated for a national sanitation programme founded on self-help approach. In order to make the self-help approach workable and produce significant results, against a background of poverty, the low-cost do-it-yourself concept was developed; this was combined with the promotion of a "minimum" latrine standard which requires that the excreta be contained in a covered pit in the ground. Last, but not least, social mobilisation was moved to the forefront, so that communities and families can be reached and motivated for sanitation and hygiene behavioural changes. The interventions include hygiene education, which is imparted through social mobilisation and uses the school network as one of the main channels of communication.

UNICEF advocacy bore fruits in late 1995, when the National Health Committee declared "Sanitation for All by the year 2000" as a national commitment. The self-help approach was fundamental to SFA, and marked a shift from the traditional "provider" to "helping oneself". Translating high level political commitment to actions at the grassroots was challenging, since many planners and implementors still consider the supply of plastic pans as the answer to increase sanitation coverage.

From policies to actions:

The Ministry of Health launched in early 1996 the SFA programme at a UN-assisted workshop with the participation of the 14 States and Division health directors, and other partners, including the Department of Development Affairs for the urban sanitation. Guidelines were developed for the establishment of Task Forces at the different sub-national levels including township, health sub-centre and village levels. UNICEF organised a national workshop on social mobilisation, including communication, and how this can be applied for sanitation. The School and NGO network are increasingly tapped to reach out to the communities, in addition to the health workers, the field level mobilisers and the 10-household leaders in the villages. The mobile team of the Information Department, the local video parlours and more recently, the mass media, particularly TV, are being increasingly used. However, there are further opportunities to strengthen the current social mobilisation efforts.

Since 1996, UNICEF has provided support to about 100 townships in social mobilisation for sanitation, with emphasis on self-help and low cost concept. Furthermore, the need to monitor progress of all townships by the national sanitation project team was emphasised. In mid-1997, a national review workshop was held, which highlighted that the sanitation strategy was working in committed townships where coverage was high; progress was slow where implementors were inactive. The monitoring of progress by the national programme team was found to be inadequate. The success in the active townships facilitated advocacy efforts for accelerating the programme.

As part of the Mid-Term Review of the Country Programme scheduled in mid-1998, field surveys undertaken in 22 townships revealed that

- 40% of the townships reached sanitation coverage beyond 70%
- 35% of households spent less than US$ 4 for a latrine, and 65% less than US$ 7.
- 58% built latrines after 1996 & 17% built for the first time
- 91% of households knew how to build latrines or learnt from neighbours
- 99% of the facilities are regularly used

Furthermore, experiences revealed that poverty of certain families in villages was addressed by families using low cost materials, building latrines with their own hands as was the case in 74% of households, and in some cases receiving financial and material help from other families.

The encouraging lessons learnt, and the interest shown by a visiting Indonesian team in late 1997 in the self-help concept to scale-up their own national programme, enhanced the conviction of Central level implementors and decision makers of the effectiveness of the approach.

Prompted by UNICEF to organise a national sanitation week to boost up the programme and invigorate the interest on a national scale, the Ministry of Health launched the first national sanitation week (11 to 17 May, 1998) which was inaugurated by a top political leader and UNICEF Representative. It was attended by some 10 ministers and several high level political leaders, and other key partners, including NGOs and the private sector. The goal was the construction of one million sanitary latrines by families through self-help ... representing about 12% of the households in the country. The goal was challenging, but doable, on the premise that in each of the 66,000 villages and wards in the country, 15 families can be motivated. The Health Department sent a senior staff to each of the 14 States and Divisions to support the activity, which included the erection of billboards, the interaction with villagers leaders, and video shows on the construction of demonstration latrines. While it is early to assess the impact of the Sanitation Week, impressions gathered from field visits showed that more implementors are being convinced of the viability of the shift from latrine distribution to self-help, as reinforced by the video on "how to build your own sanitary latrine"; certain villages have set higher targets, and some village leaders have organised the collective purchase of bamboos for many families to cut down costs, and have helped families to build latrines of varying designs and costs depending on the individual affordability. Townships officers are using this event to further accelerate the sanitation coverage they have planned for 1998 and beyond.

Looking to the future:

Many of the building blocks to reach the SFA goal are in place. The success in some townships where people, rich and poor, have been mobilised and motivated to build their own sanitary latrines; the greater confidence developed by increasing numbers of implementors at both national and sub-national levels to promote the self help and do-it-yourself approach, rather than waiting for latrine supplies to energise their programme; and the greater commitment of townships officials to pursue the tasks are positive signs that the goal is being reached. The task remains challenging as the decade end approaches. There is recognition that social mobilisation efforts need to be further intensified, using local mass awareness campaigns and the mass media. However, there is greater optimism that sanitation coverage of 80% and above can be realised by the year

2000, as the programme is increasing being driven by the positive lessons and reported success ... a situation of success breeding success.

Part 2: Networking of UNICEF country offices on WATSAN via the WESNET

WESNET was initiated in late 1995, with the aim of providing a forum for the chiefs of the Water and Environmental Sanitation section (WES) of the country offices in the East Asia and the Pacific Region (EAPR) to interact via the Internet system. The main objectives set by the participating countries were:

- To provide a forum for WES colleagues to interact and share experiences to enrich their own country programmes
- To provide inputs which can help in shaping respective country policies and guidelines for more effective programming

Since early 1996, five conferences have been organised, with the participation of Philippines, Cambodia, China, Vietnam, Indonesia, Laos and Myanmar, with varying degrees of interest and inputs. Nepal has shown interest in joining the group, and would be included in future conferences. The themes covered a good range of topics, including:

- Strategies towards achieving universal access to safe excreta disposal
- Upgrading of traditional drinking water sources
- The role of the private sector in WATSAN programme
- How can UNICEF facilitate the achievement of the "National Programme of Action" sanitation goal?

As from 1998, the conclusions of the conferences are provided as inputs to the quarterly Regional Management Team meeting. The WESNET model is now being replicated by other Regional programme sections in the region. There are opportunities to expand the WESNET to involve the participation of other partners, including NGOs, academic and research institutions and others ... which will be explored soon.

The modus operandi of WESNET is described below:

1. The chairperson is selected for the conference, several conferences, the whole year, or as the team desires. A co-chairperson can be elected, if desired, to assist the chairperson.

2. The themes to be discussed during the conference are proposed by the individual participants, say 2 themes per person, to the chairperson. The latter picks, say 2 or 3 themes, of greater interest and priority, for the conference, and keeps/shares out the remaining themes for future conferences. (Note that during a conference, the chairperson can also interact with participants for possible themes for the next conference).

3. The chairperson develops questions and issues related to the selected conference themes to facilitate "discussion".

4. The conference is opened and over a period of 2 weeks, the chairperson elicits inputs on the themes. The inputs from each participant is also copied to others.

5. The chairperson analyses the inputs, and brings up any relevant issues for more in-depth discussion, clarification, etc, in 1 week period (3rd week). He shares the issues with the participants for another round of inputs over 1 week period (4th week). Any participant can also do the same and send issues to the chairperson during the 3rd week.

6. The chairperson receives the final inputs, prepares the draft Minutes of the conference, shares with participants for interaction within one week, and finalizes Minutes.

7. A good conference will require 5-7 weeks, with timely inputs from participants. Some groundwork can be done for the next conference, e.g. selecting themes, while the conference is running.

SANITATION PROMOTION IN NIGERIA

A. Introduction:

The global sanitation situation reveals that about 3 billion people have no access to safe excreta disposal systems and possibly a very low awareness on key hygienic practices. The implication of these poor access levels, has significant adverse impact on infant and child mortality/ morbidity rates, particularly in the developing world.

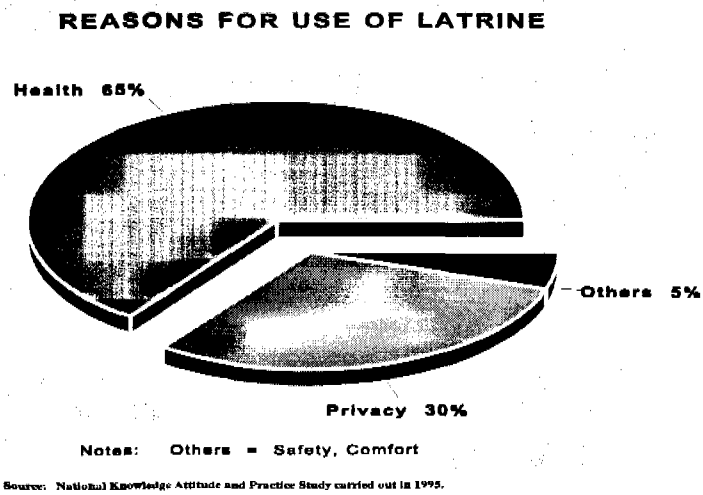
Meanwhile, we continue to report that globally, an estimated 2 million children die annually due to diarrhoeal diseases. Chances are that there is much larger group that is affected.

Nigeria has an estimated population of approx. 100 million people (1995) with more than 60 percent residing in rural areas. From available statistics, about 48 percent of the rural people in the country have access to safe excreta disposal means while 52 percent of those in urban communities could be considered to be using sanitary means of excreta disposal. The infant mortality is an average of 114 per 1000 live births which is mainly due to diarrhoeal diseases. It is estimated that more than 200,000 deaths especially among children occur annually due to diarrhoeal diseases, with an average of almost five diarrhoeal episodes per child per year. Poverty, poor hygienic practices, lack of sanitary facilities and safe water are the most significant contributors to the situation.

Previous attempts have been made in the past to address the issue of poor sanitation coverage with little success. A nationwide knowledge, Attitude and Practice (KAP) study on Traditional Latrines, Beliefs and Hygiene Practices was conducted by UNICEF in 1995 to have a better understanding of the sanitation situation in the country with a view of planning for an effective and sustainable programme.

The findings of the KAP study resulted in the introduction of a community driven/managed systems for promoting sanitation to the rural population, using low cost and appropriate latrine (Sanplat) technology. This change in strategy, coupled with other facilitating structures for service delivery, such as "sani-centers" have set the stage for a large scale implementation of the Federal Government of Nigeria (FGN)/UNICEF Water and Environmental Sanitation Programme.

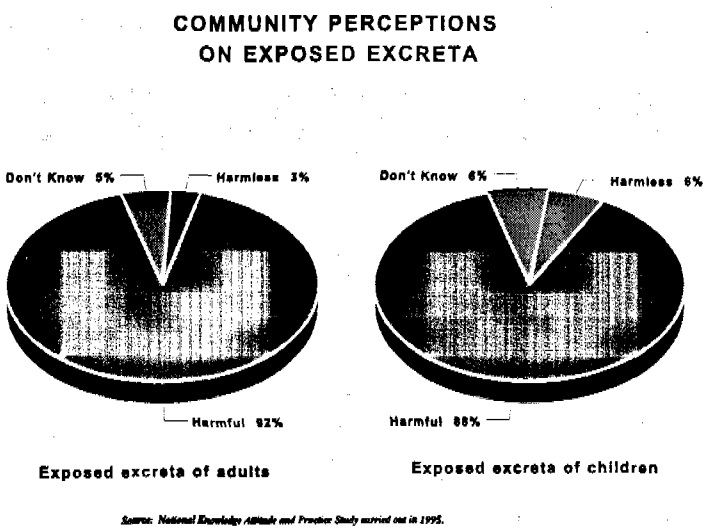
Within the past three years of programme implementation, substantial achievements on Sanitation development have been recorded especially in the areas of: Institutionalization of implementation at all levels, Skill development and Empowerment of implementors and communities. The combination of these efforts has created an enabling environment for proliferation of sanitary facilities, mostly paid for by the householder and thereafter improved hygienic practices and latrine use. More than 1 million people have been provided with safe means of excreta disposal. With the demonstrated involvement, participation and contribution by Communities so far, they are now being recognized as an important stakeholder in sanitation development programmes in Nigeria.



B. Current situation:

From the results of national KAP study conducted in 1995, the perceptions on latrine usage vary with socio-cultural situation and geographical locations. The use of traditional pit latrine is a very common practice in the Northern Nigeria especially among the Muslim communities. It is abnormal not to have a latrine in the compound as this is culturally and religiously unacceptable. Interestingly, latrines are used in the Northern part primarily because of privacy and convenience.

In the Southern and Central parts of the country, which has a higher population density and a tropical climate, lots of ponds and rivers (and bushes), the use of open field defecation is rampant.



The level of awareness on safe excreta disposal is very high amongst those already using latrines in the Southern part of the country. Countrywide, about 46 percent of the rural people use open field defecation while 52 percent use traditional latrines of which not all the latrines in use, could be considered to be hygienic or safe means of excreta disposal. The community perception on exposed excreta is high as over 92 % consider it to be harmful. About 65 percent of the rural people consider health as a strong reason for the use of sanitary latrines.

C. Strategies for programme implementation/promotion :

The main objective of the concept is to develop and implement sanitation programme that can achieve a sustained behaviourial change vis a vis sanitary habits. This requires an effective

implementation strategy taking into cognizance the existing practices and beliefs. Therefore the strategies adopted for implementation are based on the recommendations of the national KAP study. The Sanitation promotion strategies are dedicated to community led initiatives with the Federal, State and Local Governments providing the enabling environment for the programme implementation/promotion.

The programme implementation/promotion involves introduction and implementation of community-managed sanitation programme which is more than just latrine construction and includes social mobilization, hygiene education, construction and income generating activities through the establishment of sanitation centers (sani-centres) at community level. The sani-centers are also used for fabrication and sale of sanplat latrine slabs in the field thereby providing a good opportunity to rural entrepreneurs to generate reasonable incomes for themselves at the same time bringing construction and other materials for latrine building closer to the community.

1. Technology Options:

Until recently, the Ventilated Improved Pit (V.I.P) latrine was being promoted as the most appropriate technology for safe disposal of human excreta especially in the rural and peri-urban communities. The unit cost of Single pit V.I.P latrine is about N12,000.00 (US$144) while that of alternating pit (2 pits option) is N30,000.00 (US$ 360) per compartment (1997 prices). Over the last 3-4 years, the Gross National Product per capita (1995) has dropped significantly and currently stands at about US$260, which is lower than the cost of constructing one compartment alternating V.I.P latrine.

Due to the high cost of construction, the V.I.P latrine is no longer an affordable option, especially for households level usage. The need for a change in programme strategies and technology choice became imperative for improved level of coverage, hence the introduction of a more pragmatic approach with well-articulated concept and strategies using a low cost (affordable) technology such as the Sanplat system as part of a comprehensive mobilisation, hygiene education and construction package.

The major advantage of the Sanplat system is the compatibility with existing practices and beliefs of the rural people and its relatively low cost as compared to the ventilated improved pit (VIP) latrine. The Sanplat system was tried on a pilot scheme in South - eastern part of the country in 1995 and it was found to be suitable and acceptable with necessary modifications taking into cognizance the socio-cultural setting of the people.

Modifications found necessary during the pilot scheme were introduced into the technology based on socio-cultural situations notably, the need for variable dimensions of Sanplat and introduction of vent pipes. The most interesting experience is the demand for the introduction of vent pipe to reduce the heat emanating from the pit. Although, this is more of a psychological problem but modification became necessary for wider acceptability of Sanplat system in some areas.

Three types of Sanplat slabs are presently being promoted in the country and these include;

- Small (60cm x 60 cm)
- Medium (1.20m diameter dome shape and 1.0m x 1.0m flat shape)
- Large (1.50m diameter dome shape)

The unit cost of Sanplat slab depends on the type and varies from N200.00 (US$2.40) to N550.00 (US$6.61). In order to reduce cost of latrine construction local materials are used for superstructure where required. On the average, the cost of Sanplat latrine construction is about N2,500.00 (US$30) with provision for superstructure. In areas where superstructure is not required by virtue of the location of the latrine and cultural preference, the cost of construction becomes lower to about N2,000.000 (US$24). **All prices for Sanplat slabs/latrines are for the year 1997.**

2. Institutional Arrangements:

Sanitation promotion in the country is facilitated by the present institutional arrangements, with strong commitment to succeed from all key stakeholders. Emphasis is always on the community to ensure sustainability of the programme and sense of ownership. One of the most important feature of the programme is the involvement of women in planning, implementation and monitoring of the programme. At community level, 50% of members of village WES committee are women.

In order to ensure sustained service delivery, the following institutional arrangements are in place for programme implementation in 22 out of 36 states in the country;

(i) Federal level:

The Federal Government is responsible for policy, coordination, monitoring and evaluation of the programme. Other major roles include;

- Source funds for accelerated implementation of the programme.
- Set national standards, specifications and guidelines for programme parameters including costs in collaboration with External Support Agencies and Non-Governmental Organizations.
- Contribute financially and provide material support to States for the development of the programme as recommended in the FGN Sector Strategy and Action Plan for Rural Water supply and sanitation.
- Support and coordinate applied research and development as well as encourage training and capacity building at state and local government levels.
- Encourage and support the involvement of the private sector in the local manufacturing of components for rural sanitation programme.

(ii) State level:

The State Government is responsible for the establishment of a single agency (Rural Water Supply and Sanitation Agency) to monitor and coordinate all water supply and sanitation activities in the rural areas. The Agency will also implement rural water supply and sanitation

programmes using low cost and safe sanitary methods. Specifically, the Sanitation & Hygiene Education section of the Agency has the capacity and is responsible for the following;

- Setting up of effective community mobilization strategies for awareness creation on the importance of sanitary habits.
- Encourage and support Non-Governmental Organizations (NGOs) in community based mobilisation, training and construction activities.
- Establish a system of cost sharing between State/LGA/Communities for the implementation.

- Source funds for accelerated implementation of the programme.
- Contribute financially, provide material support to LGAs and communities, facilitate construction and monitor implementation.

(iii) **Local Government level:**

The Local Government Area (LGA) administration is responsible for the following;

- Establish rural water supply and sanitation unit (RWSSU) that will co-ordinate and support all activities of the sub sector within the LGA.
- The established RWSSU carries out supervision, monitoring and coordination of all activities on a day to a day basis.
- Develop and support the community managed system for the promotion of sanitation and hygiene activities including training of master masons, sani-center operators, WES committee members.
- Ensure establishment of cost sharing system between State/LGA/Communities for construction.
- Contribute financially and ensure funds availability from all partners in the cost sharing arrangements, establish bank accounts for LGA WES units & facilitate creation of "sani-centres".
- Facilitate construction, provide material support to communities and monitor implementation.

(d) **Community Level**:

The community is responsible for the establishment of a Water and Environmental Sanitation Committee comprising of ten members with equal representation of gender. The established WES committee undertakes the following;

1. Mobilize and motivate community members on the need for sanitary habits.
2. Identify and cost the resources needed for sanitation activities including "sani-centres".
3. Ensure full representation and establishment of cost sharing system between State/LGA/ Communities for the implementation of Sanitation programme.
4. Ensure that household contribute financially and facilitate construction, provide material support to households and monitor implementation.

3. Capacity building

Skills development at all levels of implementation is an important feature of the Sanitation programme considering the fact that the concept is relatively new. A well articulated training programme was drawn up at National, Zonal, State, LGA and community levels with the primary aim of equipping the key implementors and other stakeholders on the renewed initiative of community led sanitation programme for effective and sustainable service delivery.

More than 12,000 people have benefitted directly from the various training programmes from 1995 to 1997 while several hundreds especially at community level participated in Hygiene education activities of the programme. Women were the main targets for skills development at the community level, both in terms of technical and managerial skills

In order to further consolidate and strengthen the Sanitation development/promotion, two regional meetings sponsored by West and Central Africa Regional Office (WCARO) of UNICEF in collaboration with SIDA were held in Nigeria. The first meeting was held in Enugu in October 1996, focussing on sanitation development, latrine designs and behavioral change, with WES project officers from the West and Central Africa Region in attendance. The meeting provided the much needed opportunity for assessing the sanitation programme implementation and discuss the potential of using Sanplat system in the WES programmes in countries of the region. Nigeria's gain was that the findings and recommendations of the meeting were very timely and useful in improving on the implementation strategies for a more effective service delivery.

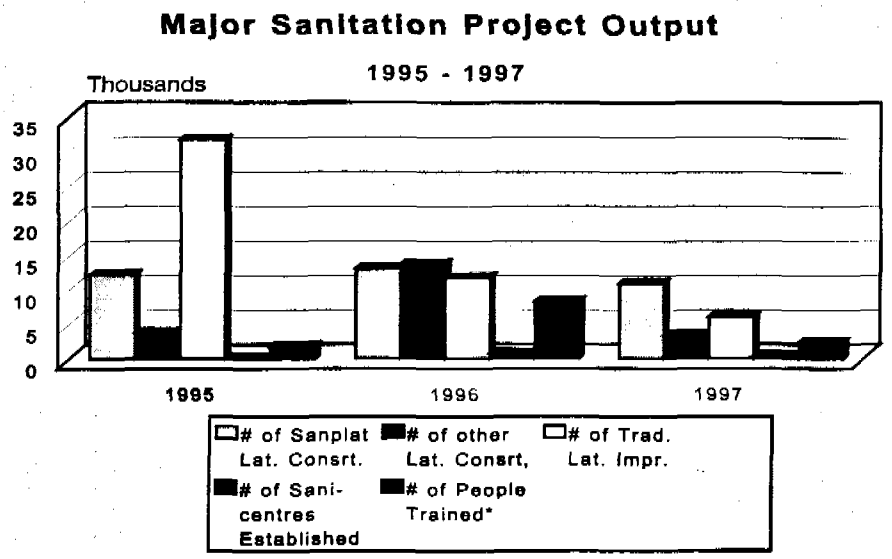
The country hosted another regional meeting in March 1997 for the Anglophone countries in the region. A total of 19 Government/NGO participants from Ghana, Sierra Leone, Liberia, The Gambia and Nigeria took part in the "Hands-on" training on Sanplat production, installation and promotion.

3.1 Sanplat Promotion

The promotion of Sanplat slabs/latrines at the community level revolves round the operation of the "sani-centres" which are strategically located in public places such as markets, health centers, town halls etc either at the LGA headquarters or a large village in the area. The number of "sani-centres" depends on the size and population of the community and later on, by the popularity and demand. The "sani-centres" are managed by the Sanplat promoters who have been trained on the concept of sanplat system and comprise of men and women selected by members of the community.

Services available at the "sani-centres" include the following;

- Sanplat promotion and Hygiene education materials
- Production and sale of Sanplat slabs
- Technical guidelines and skilled masons for installation of Sanplat latrines
- Technical guidelines and skilled masons for upgrading of Traditional latrines
- Sale of ORT Sachet and advise on control of diarrhoeal diseases
- Sale of brooms, soap, disinfectant and other sanitary wares



In the near future, fast moving handpump repair tools and spare parts are planned to be stocked in the "sani-centres" for full integration of WES activities at community level. Also, advise on household water security can be obtained from the centre.

The demand for Sanplat slabs is quite high and often the "sani-centres" are not able to cope and users have to pay in advance. To solve this problem, massive production of sanplat has been transferred to the community level which was hitherto carried out at the local government headquarters. Also more NGOs and CBOs are now involved in marketing and social mobilization of the programme.

Over 50% of the rural people in the country use traditional latrines for defecation. Some of these latrines are however not safe and require some improvement. Considering the large number of these latrines and people's preference, upgrading of traditional latrines became an important aspect of the Sanitation programme. The cost of upgrading traditional latrine depend mainly on the design and could be as low as US$2.00 which is affordable for majority of the users. Over 49,000 traditional latrines have been upgraded since inception of the programme in 1995.

Note* : percentage of women trained : 1995 - <3.0%; 1996 - <20%; 1997 - 50 %.

D. Funding

At the inception of the programme in 1995, funding of Sanitation promotion was shared on an agreed formula among State, LGAs , UNICEF and benefitting communities. The initial amount generated was used for training and establishment of a facilitating infrastructure for improved low cost sanitation materials/ facilities and thus creating a self- sustaining market for widespread construction of low cost latrines.

The community contribution is always in the form of construction materials and labour while the State gives logistic and technical support. At the initial stage of programme implementation, the bulk of financial contribution was from UNICEF and the LGAs with Zonal variations. For instance, in the South- eastern part of the country (Zone A), UNICEF was contributing 50% of

the funds required for Sanitation promotion while the benefitting LGAs were paying the balance 50%.

The individual households are responsible for paying for the construction of their latrines which was initially subsidized to encourage patronage especially from the very poor communities. The subsidy was limited to sale of latrine slabs which has been drastically reduced with members of the community fixing the selling price.

Recently, the funding of the programme has been transferred to the State, LGAs and benefitting communities while UNICEF/Federal Government provides technical assistance in form of capacity building and implementation guidelines. The States report progress on a monthly basis.

Communities are encouraged to take active part in funding of the programme which has resulted in more involvement of CBOs. In some communities, Sanitation promotion has been incorporated in their development plan and is gradually being implemented.

E. Hygiene and behaviour change:

The Sanitation programme is aimed at reducing faecal borne diseases and thus to improve public health. Until recently the main emphasis was on the provision of new and improved facilities. From field experiences, it has been recognized that additional changes in hygiene conditions and behaviour are also required for any meaningful impact on the health of the people.

There is more focus on hygiene education taking into consideration the existing practices and beliefs towards achieving changed attitudes to hygienic practices resulting in a sustained behavioural change. Hygiene education activities are organized at all levels of implementation to create awareness and establish/reinforce linkages between poor sanitation and health.

The introduction of low-cost sanplat latrine and the new concept of community managed system has steadily increased the level of awareness on safe sanitary habits/practices.

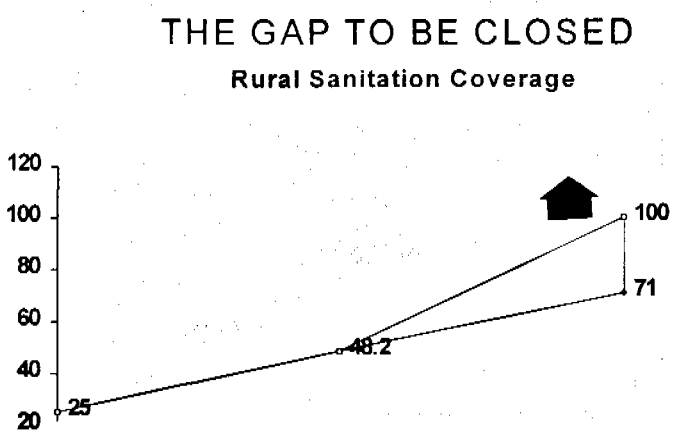
Provision of adequate water supply is being pursued vigorously to enhance good hygiene practices such as washing of hands after defecation/before handling food thereby preventing fecal-oral transmission of diarrhoeal diseases and worm infection.

In linkage with Education and Health sections, sanitation programme is being promoted in schools through provision of sanitary latrines and establishment of Environmental Health Clubs to inculcate good sanitary habits among the pupils and have positive influence on their household members. In order to improve drainage around hand pumps, the programme encourages gardening using the spilled water to grow vegetables/ fruits thereby improving nutrition of the users.

F. Lessons learned:

- Need to conduct KAP study to determine existing practices and beliefs on latrine usage and hygiene practices prior to intervention of sanitation programme.
- Sustainable programme requires adequate and efficient institutional arrangement at all levels of implementation especially at community level.
- Members of the community are empowered to implement sanitation programme with more involvement of women where culturally acceptable.
- Use of low cost concept which is affordable and compatible with local beliefs and culture.
- Initial introduction of subsidy to encourage patronage especially in very poor communities.
- Increased level of interest and commitment due to income generating activities of sani-centres.

G. Challenges ahead:



About 48% of the rural population of this country have access to sanitary excreta disposal systems. Considering this level of coverage, about 30 million rural people require sanitary latrines. By the year 2000, the coverage is expected to increase to 71% of the rural population, if the present level of funding and implementation is maintained. This is a big challenge to all the implementors to ensure that the level of implementation is not only sustained but improved upon. Presently, sanitation and hygiene education programmes are now fully integrated focusing interventions on all sanitation components so as to achieve the desired impact on health and economic well-being of the people.

H. Conclusion:

"Sanplat" is a household name within the intervention communities and this is a sign of acceptability of the programme. The success recorded so far could be attributed to the active involvement and participation of the communities who are recognized as important stakeholder in sanitation development in their areas. The Sanitation programme in Nigeria has benefitted immensely from the introduction of the new concept of community managed system with improved level of coverage.

There should be constant appraisal of implementation strategies so as to ensure quality standards of production and installation.

Considering the present level of coverage, there is urgent need for programme expansion to cover all the states in the country while at the same time ensuring sustain ability of the existing facilities. This requires increased funding to the sector.

The need to strengthen capacity building particularly at the community level cannot be over emphasized. More inputs and efforts are required to sustain the inertia created, to support building of confidence at the implementation level for not just for construction but also to bring about changes in behaviour and practices for adopting safe sanitary habits.

In order to meet up with the demand, there is need for more private sector participation in programme implementation and revolving fund schemes especially in the operation and expansion of "sani-centres".

I FACTS AND FIGURES - NIGERIA

Population (1995)	-	111.7 million
Urban Population	-	40.2 million
Rural Population	-	71.5 million
Population growth	-	2.83%
Average household size	-	5
Life expectancy, 1995	-	51
Infant mortality, 1995	-	114
Birth rate	-	44
Death rate	-	15
Gross primary enrollment-94	-	84
Literacy rate, 1995	-	70
GNP per capita, 1995	-	US $280
Population below poverty line, 1992-96	-	34

J PROGRAMME DETAILS

Project title/Programme name	-	Environmental Sanitation/ Water and Environmental Sanitation
Location	-	22 States of Nigeria
Date of implementation and duration	-	1995-1997 (3 years)- Project is on-going
Key stakeholders	-	Communities, NGOs and Governments
Programme managers	-	Director, Federal Ministry of Water Resources and Rural Development.
	-	Project Managers of State Rural Water Supply and Sanitation Agencies .
	-	Chief, WES Section . UNICEF-NIGERIA

Urban Sanitation

A Case Study on Solid Waste Management in Ibadan

Introduction:

In Nigeria, two thirds of diseases affecting the population can be identified as being related to poor water and insanitary conditions; Onchocerciasis, Dracunculiasis, Cholera, Typhoid and above all Diarrhoeal diseases alone accounts for over 200,000 deaths per annum in the under five age group, with an average of almost five diarrhoeal episodes per child per year.

National coverage levels for water supply are 39% in rural areas and 52% in urban areas. For sanitation, coverage levels are 48% and 52% respectively. Nine States (out of 36) have less than 25% water supply coverage while 7 States have less than 25% sanitation coverage. Actual access levels may be even lower due to non-functional systems.

Urban/peri-urban scenarios are fast approaching alarming levels as the Country tries to survive the downward - spiraling economic situation on both side of the urban-rural divide. This has resulted in a very rapid urban growth with greater numbers seeking employment/business opportunities in these urban centers. As it is, the urban centers in Nigeria were unable to meet the needs of their normal populations and now with the recent surge of the population moving in, from rural areas all over the country, there is rapid deterioration of the sanitation situation in all these centers. As a consequence, disease and despair have set in. The Government efforts to meet up to the needs and aspirations of the people, with their meager resources, are fast being overrun by the rapid pace and increased demands for these services.

States and Local Governments have not been able to maintain and repair the few facilities put in place for effective service delivery. Many installations fail due to poor quality of materials, non availability of spares and/or skills and poor or no maintenance.

From the peoples' perspective, the physical burden alone for access to services may not be so acute in the urban centers, however the frustrations and economic burdens are high, for the whole family. The task of household waste collection and disposal falls mainly on the women and children who have to trek long distances in search of the nearest refuse dump site or to pay refuse collectors from their meagre earnings.

Environmental degradation is a major concern. Accumulation of sullage waste water (often providing breeding grounds for mosquitoes even in normally non-breeding dry seasons) is also an area of concern. Solid waste disposal is a major problem in both rural and urban areas. Poor ventilation and overcrowding exacerbates the effects of kitchen smoke and also accelerates the spread of diseases e.g Meningitis, Cholera and Typhoid, Pertussis and other respiratory infections.

In many of the urban and rural communities throughout Nigeria, the arrangements for waste disposal have been ineffective or insufficient and waste is often indiscriminately dumped on open plots of land, particularly, along and on the streets. Some of the affected streets may be rendered impassable for several weeks or months as a consequence. The conditions in which the solid waste are collected, processed and disposed contribute greatly to health hazards and urban environmental degradation. Some of the important factors responsible for the current ineffective nature of solid waste disposal include: Inadequate sector funding, lack of community awareness on waste management and inappropriate technology. The State and Local Governments particularly have problems in financing systems of solid waste collection and disposal because the probability of cost recovery is very low.

Statement of need:

A diagnostic survey was conducted in 1995 in Lagos and Ibadan, the two largest cities of Nigeria; to assess the sanitation situation with special reference to waste collection/disposal and the associated problems. The focus of the survey was on the market places and other core areas where most of the solid waste are generated. A total of 2,500 household (approx. 20,000 people) and 20 markets were sampled.

The survey revealed that none of the markets have adequate solid waste disposal facilities, and that most of the households (71%) throw their refuse in any available open space. Only about 22% of the sampled households disposed of their refuse in proper depots for which there were containers either of metal, plastic, concrete blocks, or mud walls, while, about 6% of the households threw their solid wastes in pits. The bacteriological analysis conducted in some of the wells and at the household water storage containers showed a coliform count much above the permissible level. A clear indication of the leachates polluting the shallow underground water table.
This was not surprising as Ibadan and Lagos are noted for the regularity with which both cities have out break of cholera and diarrhoea affecting the population, mostly children.

Against this background, the WES programme in conjunction with Urban Basic Services supported Oyo and Lagos State Government to implement Urban Sanitation and Waste Management activities in selected communities. The programme envisaged the implementation to be community driven and managed, with a special focus on improving sanitation practices and having the following objectives:

Objectives:

- Support the communities to improve their environment to reduce the incidence of solid waste and excreta contamination at the household level.
- Reduce the current level of solid waste on the streets and support the Government's effort to improve the urban sanitation by providing appropriate refuse collection and disposal facilities.
- Support the training of the environmental sanitation artisans and install waste

recycling plants to promote the economic importance and management of solid waste.

- Create awareness and promote environmental care to involve the community/households, school children.
- Mobilize the policy makers, the institutions and other relevant agencies to provide financial support for the implementation of environmental sanitation in the big cities of Nigeria.

Pilot Project at Ibadan:

Based on the findings of survey conducted in 1995, a pilot project was implemented on Solid waste management at Ibadan, the capital city of Oyo state.

Ibadan is located in the south western part of Nigeria and has a population of 3 to 4 million people. The city lacks adequate water supply while sanitary facilities, waste collection and disposal are almost completely absent. From the results of the survey conducted in the city, an average of 0.6kg/capita/day of solid waste is generated resulting in about 2,000 tons per day. The statutory responsibility of collection and disposal of solid waste is vested on the Local Government Authority but considering the volume and type of waste generated, this tier of government cannot cope with the situation resulting in heaps of refuse lying all over in any available open space in the city. The problem is further compounded by the rapid urbanization and the cultural belief of the people.

For the purpose of the project, Bodija market and the core areas of the city were selected for intervention. The market is the largest in Ibadan located north of the city. The survey earlier conducted revealed that about 40 tons of solid wastes are generated from Bodija market on daily basis with the peak recorded during the weekends. The wastes are mainly organic in nature with traces of inorganic and toxic heavy metals such as iron, manganese, lead, copper, silver chromium and zinc. These chemicals, however fall within permissible limits and do not pose a major problem yet but may need to be eventually recycled and used for agricultural purposes.

Strategy for Implementation:

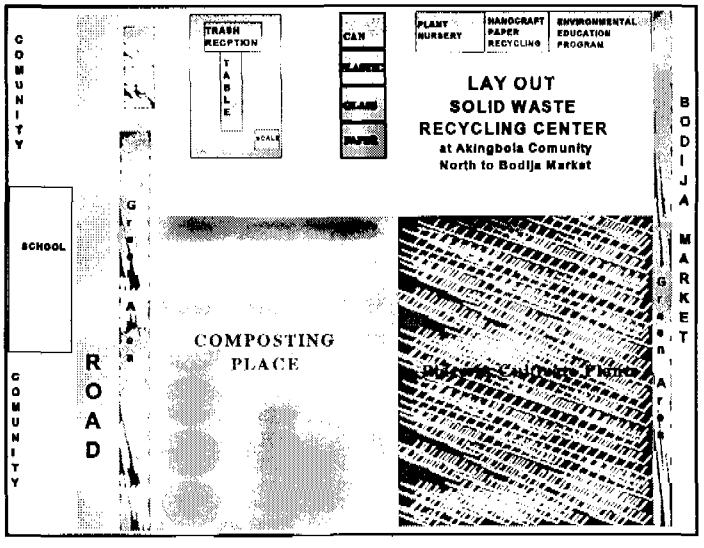
- Interaction with Government at all levels and the affected communities, on the key environmental sanitation interventions.
- Development of action plans to cover all the major components of the project

implementation i.e advocacy, mobilization, capacity building and service delivery.

- Establishment of Core-groups on sanitation to provide the required leadership, technical support and administrative coordination amongst all key players involved in the implementation and monitoring of the project activities.
- Establish agreements on a cost sharing principle for project funding: Government - 65%, Community - 25%, UNICEF - 10%, of the total cost of the project.
- Involving and active participation of women, school children and the community leaders in every stage of project implementation.

Achievement of the Pilot Project:

The Construction of waste recycling (composting) plant with a capacity of converting 40-50 tons of garbage into organic fertilizer is the major achievement of the project. The layout of the installed composting plant is as per diagram on the left.



The biogas generated from the plant is managed by women as part of poverty alleviation programme while the composite manure is sold at the cost of US$3.00 per bag.

The operation of the plant provides monetary incentives to the children and women who are involved in collection and sorting of waste. Training of 30 State officers, 12 LGA officers and 60 community artisans on the operation of the plant has been carried out so as to ensure sustainable solid waste management in the urban areas of Ibadan. The construction of this demonstration unit has created awareness among the 5 urban LGAs, which are now clamoring for similar project in their communities.

Benefit of the Project:

A formal evaluation on the project has not yet been carried out, but from the monitoring report of the project, impact of these facilities shows that there is significant environmental improvement particularly in the communities and selected market. Other recorded benefits included revenue generation, production of cheaper and safer organic fertilizer for farmers

and economic incentives for school children, community women and scavengers in view of readily available market for their wares.

Lessons Learned:

- The pro-active financial and political support from the State and the LGAs due to the severe health risk involved and the potential health and economic benefits that the project offered.
- Willingness and readiness of the farmers to buy the organic fertiliser from the composite plant can generate a greater demand and proliferation of more waste recycling plants.
- Market women and school children are proud stakeholders in the scheme and are committed to the efficient operation of the system.
- Full participation of the private sector particularly the bottling and the plastic industries are the potential collaborators in such ventures.

The Institutional Arrangement :

From experience, this project has a potential of going to scale and being replicated in other urban centres of Nigeria. Therefore, the underlisted institutional arrangement is being proposed.

State Government:

- Coordinate with the other programmes to set up effective mobilization strategies for awareness creation on the importance of environmental sanitation.
- Encourage and support Non-Governmental Organizations (NGOs) and Community Based Organization (CBOs) in mobilization, training and construction activities.
- Establish a system of cost sharing between State/LGA/Communities for programme implementation.
- Source funds for accelerated implementation of the programme.
- Contribute financially, provide material and technical support to LGAs and communities, facilitate construction and monitor implementation.

Local Government Authority:

- To establish waste management programme under LGA WES Unit, and to carry out supervision, monitoring and coordination of all activities on a day to day basis.
- Develop and support the community managed system for the promotion of waste management activities including training of artisans .
- Establish cost sharing basis or formula between State/LGA/Communities for construction .
- Contribute financially and ensure funds availability from all partners in the cost

sharing arrangement, establish bank accounts for LGA WES Units to ensure accountability.

- Facilitate construction, provide material support to communities and monitor implementation.

Community Level:

- Mobilise and motivate community members on the need for environmental care.
- Identify and cost the resources needed for environmental care activities.
- Ensure full participation of community members including women and youths in planning and implementation of waste management programme.
- Ensure that household contribute financially and participate in the construction, proper use and monitoring of the system.

Future Plan:

- Liaise with other institutions and partners to ensure that the demonstration units are replicated in the other selected urban areas of the country.
- Build capacity at national and regional levels through exchange visits for "on the job" training/ learning opportunities for different level of implementors.
- Fund research and development (R&D) for wider and more affordable technological options for urban sanitation interventions.
- Involve private sector in the promotion of urban sanitation and environmental care to ensure that the current drive is sustained.
- Funding on cost sharing basis, for rapid installation/expansion of the waste composting plant in market places and low income localities in urban areas.
- Empowerment of community based entrepreneurship in waste management through establishment of revolving funds.

Project Brief on Sanitation Promotion in Uganda

Programme Name:	Water and Environmental Sanitation (WES)
Location:	Country wide
Date of Implementation:	Jan 1, 1995- Dec 31, 2000
Key Stakeholders:	SIDA, Wateraid
Programme Managers:	A Programme Management Team is chaired by Director of Water Development, MoWLE; Members include Director of Health Services, MOH; Director of Community Development, MoGCD; Director of Gender, MoGCD, Director of Local Authority Inspectorate, MoLG; Head Social Services Section, MoP; Commissioner for Primary schools, MoE; Chief UNICEF WES.

Problem Context:

The Uganda Country programme, in an attempt to break down the vertical project thinking which is prevalent in Uganda and has adopted a programmatic approach. Instead of thinking sectorally the programme looks at issues by levels which are called components.

The first component looks at those activities which take place at community level and is called Community Enablement. The second component considers those services which are vital to community members but which the community itself is not able to provide, this component is called Service Delivery. The third component considers the raising and management of resources required to provide these services and is named Resource Mobilisation and Management. Finally Component four deals with policy level issues and is named Policy Development and Quality Assurance. These components relate roughly but not strictly to Community, Sub-county, District and National level or LC1, LC3, LC5 and Central Government under the GoU National Resistance Movement system. They are also coded under both GFSS and Proms as projects.

When detailed consideration was given to the priorities within the WES programme it was acknowledged by all involved that water was receiving more attention than sanitation at all levels. A decision was taken to try and begin to address this imbalance through both the top (component 4) down and from the bottom (component 1) up. This paper will concentrate on the politically led top down process as it has to date had a greater impact. It should be realised that a complementary process starting at the

community has also been developed and is being implemented. This process involves both an integrated approached, and school hygiene and sanitation (the overall priority of WES for 1998). A final note; apart from component four the programme is not involved in Urban Sanitation but is rather a rural water and sanitation programme, this reflects the fact that the rural sector still represents 90% of the population in Uganda and is still the least served segment of the population. Sanitation policy development does however consider the entire country.

Work at the policy level began to accelerate with the 1996 Presidential elections when improved sanitation was included in the president's manifesto as one of the priorities for this term of office. This inclusion in the President's manifesto preceded the process described in the paper prepared for the Sanitation Promotion Kit and was probably the single most important step as it initiated the process. Exactly why the President decided that improving sanitation was one of his priorities is not known but it is believed that it came about as a result of personal contact between the UNICEF SPO and a top Presidential Aide. What is clear however is that at the start of such a process a few key people must be identified and targeted. Close personal contact can be an effective way to start the process of change.

Another key factor before detailed work began was the faith and commitment of Sida to the WES Programme in Uganda. Before any detailed work began a commitment was made by Sida to fully fund the WES programme for the entire country programme period. This allowed work to begin without the usual uncertainty of funds. This commitment and consequent security has allowed the actors in the process to concentrate on doing what is right and not to have to worry about doing what they can fund. This luxury has greatly enhanced the quality of the process.

Finally Sanitation has a long history in Uganda. In the 1960s Uganda had a very high latrine coverage rate (greater than 80%). Health Inspectors, as they were know at that time, were well trained and motivated. They were more plentiful and the population was smaller allowing frequent interaction between them and the communities. With the insecurity and subsequent collapse of the 70's, latrine coverage rates also fell (reaching 30% in 1983) as did the training and motivation of all health officials. This gives present day health workers two distinct advantages. First they are not "starting from scratch" but rather can build on past experiences. Second improved sanitation has now been equated in a lot of peoples minds with the nostalgia for a return to the "good old days".

Objective:

The main objective can be summed up by the name of the activity (under Proms): Raising the profile of sanitation. We have chosen to make it a highly political process in which the target is all elected officials in Uganda starting with the President and Cabinet and moving down through the District Local Authorities to the Chairmen and Secretary for

Health and Child Welfare at village level. Indirectly we therefore intend to reach the entire population through the elected leadership and in combination with a community based participatory approach change the Behavioural Norms of Uganda.

Activities:

The process began in many ways with one individual. Professor J. Namboze, returning from some years as WHO Representative and Regional Advisor overseas she was upset by the sanitation condition in which she found the country and took the President, and his manifesto, at his word. A professor at the Medical School here in Kampala for many years she had taught all of senior staff in the Ministry of Health including the Director General and the Minister so when she started advocating within the Ministry for something to be done; people listened.

The process gained a great deal of focus with the facilitation of two workshops by the Regional Communications Officer and the Chief of CCA Uganda in January and February of 1997. The first was specifically a sanitation workshop which brought together a group of 20 sanitation experts, rural and urban to look at sanitation and bring them towards a common vision. In addition to government officials participants represented WHO, UNDP/IBRD RWSG and UNICEF.

The two most important results this workshop was a clear definition of sanitation and a general agreement that the role of government in sanitation was promotion. Agreeing on a definition was surprisingly difficult and was a topic which the facilitators had to come back to time after time over the course of the entire week. In the end it was agreed the sanitation consisted of safe disposal of human excreta (by any appropriate means), personal and public (including food) hygiene, solid and liquid waste disposal, vector control and keeping safe drinking water safe until consumed (locally referred to as the safe water chain). Given the difficulty which we had defining sanitation it was surprisingly easy for us to agree that our work in the sector was promotion and skills training.

Along with these two basic agreements a lot of work was done on problem identification, analysis and solving. A VIPP clustering exercise lead to the following priority problem areas; poor collaboration and coordination, inadequate legislative support, not a community priority, no national strategy or guidelines, inadequate human resources, inadequate political will, inadequate funding, and inadequate technological options. These problems were then considered in group work against the background of poor education levels, poverty, insecurity and socio-cultural barriers. Problem causes were identified and then the problems analysed. Plans to solve these problems were developed and then those plans synthesised into an action plan for the Director of Health Services (who came to close the workshop) to accomplish over the rest of 1997. In addition a small sanitation working group was formed to follow up actions planned.

The second workshop was on Communication strategy and in it a smaller group of participants from WES and RUWASA (our sister project funded by Danida and covering the area of the country that WES does not) specifically looked at a communication plan for sanitation. It was meant to further develop the promotional strategy adopted. At this workshop the decision was made to implement a bottom up and top down strategy concurrently and detailed work on each begun. The bottom up approach was developed into a programme communication plan for the two programmes and had four main strategies;

- awareness creation through social marketing,
- utilising community information to develop bottom up plans (water and sanitation),
- utilise participatory approaches to effect behaviour change
- an integrated approach to school sanitation.

The top down process was compiled into a comprehensive advocacy plan. The first step in this advocacy plan occurred during the workshop itself. The UNICEF Representative, Dr. Kathleen Cravero visited the workshop for two days and this opportunity was taken to convince her of the importance to sanitation to the children of Uganda. She became the second powerful advocate in the process and began raising the importance of improved sanitation at every opportunity, including every time she met with the President. This breathed life into the process.

The next step of the advocacy plan was to gather all existing data on sanitation in Uganda. Work on this document began immediately under the guidance of the working group formed at the sanitation workshop. They developed a Concept Paper entitled, "Promotion of Sanitation in Uganda". It is the most comprehensive statement on sanitation ever written in the country. It covers the global situation, the history and present day situation of sanitation in Uganda. The effects of poor sanitation, the reasons for its marginalisation and calls for an accelerated national sanitation programme. This document which was published by the Ministry of Health in June 1997 and was personally endorsed by the Minister, Hon. Dr. C. W. C. B. Kiyonga. Through his involvement in the finalisation of the document the Minister of Health became our third important advocate.

The concept paper set out the following brief plan of action:

Cabinet Memorandum on Sanitation	May 1997
National Working Group on Sanitation	July 1997
National Sanitation Forum	October 1997
Finalisation of National Sanitation Policy	December 1997
Launching of National Policy and Strategic Programme by the President of Uganda	January 1998

A cabinet memorandum was drafted on the basis of the concept paper which obtained parliamentary backing in July 1997 endorsed the development of a National Sanitation Programme.

An important realisation that came out of the process to this point was the multi-disciplinary nature of sanitation; affecting health education, gender, the environment, and the overall economy of the nation. Thus when the National Working Group on Sanitation was formed in June it was important that this multi-dicipline nature be reflected. So while the Group was appointed and chaired the Ministry of Health its membership included; relevant departments of Health, Ministry of Planning and Economic Development, Ministry of Local Government, Ministry of Education, Ministry of Natural Resources (both the Directorate of Water Development and the National Environment Management Authority), Ministry of Gender and Community Development (again both Gender and Community Development), Multilateral Organisations, Bilateral Organisations, Non-Governmental Organisations, Urban councils, District Councils, Training Institutes and Prominent Citizens. With the approval and backing of both the Ministry of Health and the Cabinet the working group began organising a National Forum on Sanitation as well as developing the accelerated programme.

A critical problem that had been identified along the way and which took up much of the working groups time was the lack of appropriate legislation, policy and guidelines. The current Public Health Act was passed in 1965 and has been out of print since 1971. Additionally it is based upon British legislation and clearly reflects normative behaviour in Britain at that time and not Uganda. Draft Legislation and Policy on Environmental Health and Sanitation Guidelines have been developed more accurately reflecting the realities of Uganda in the 1990s. These will be submitted to Parliament for approval in the 1998 legislative session. They are based upon the principles of the Sanitation Working Group of the Collaborative Council to which two members of the Ugandan working group belonged.

In addition a National Sanitation Improvement Programme 1998-2003 has also been drafted. It represents a significant step forward. It attempts to pull together all of the aspects of sanitation from a number of different programmes and projects into one comprehensive plan for the first time. Whether this plan should be implemented as a new programme or as a coordinated effort of all of the already existing ongoing efforts is an issue yet to be resolved.

Although these activities represent significant successes by far the most important success of the Working Group was the holding on 16-17 October of a National Sanitation Forum. The theme "**Better Sanitation, A Responsibility for All**" brought together the

leadership of all 45 Districts in Uganda who together with Members of Parliament, Cabinet, Donors, Non-Governmental Agencies and Concerned Citizens spent two days discussing the issue of sanitation. All of the forum was heavily covered by the press. The culmination of the forum was in the signing of The Kampala Declaration on Sanitation (1997) by the Chairmen of every District council in the Country as well as the Minister of Local Government, and Minister of Health and the Representatives of WHO and UNICEF. This declaration written by the District Council Chairmen themselves represents the boldest statement made to date on sanitation in Uganda and includes a 10 point strategy for action (see annex).

The sanitation forum represented a truly collaborative effort of all of the actors involved in sanitation in Uganda. Financial Support came from all of the programmes and donors involved in the sector. The forum was facilitated by the Ministry of Health, RWSG-ESA and UNICEF. The keynote speaker, Professor Namboze, provided the Ugandan Perspective and Dr. Warner then of WHO, provided the Global perspective. The deep personal commitment of all involved, including the willingness of the Ministers and the Representatives to sign the declaration, was undeniable and lead directly to the success of the forum. A final agreement was a commitment by each District to return one year later to report on progress made in implementing their ten point strategy of action.

The cholera outbreak which started in December 1997 is seen by some to have derailed the process of raising the profile of sanitation, by diverting the attention of the still scarce human resources from finalisation and approval of the national sanitation plans. Others have viewed the outbreak as a blessing in disguise, after having raised the profile the outbreak now presents the opportunity to start concerted action on the ground. Now when the leadership talks, people are listening. A cholera tool kit for improved sanitation has been developed and is currently being used all over the country. The recently held LC 5 (District) elections were fought over sanitation issues. People voted for sanitation. Sanitation has been the subject of over 400 newspaper articles in the national press since the beginning of this year. Home and school improvement competitions are being held. Schools have built hundreds of latrines since the outbreak began. Private entrepreneurs are setting up businesses to recycle garbage. The visit of President Clinton led to a massive clean up Kampala campaign led personally by the first lady. Sanitation is being improved throughout Uganda.

Finally what is the effect of all this on UNICEF. As stated earlier one of the principle advocates in the process was the UNICEF Representative and she with her Senior Management agreed with the premise that Sanitation is indeed a responsibility for all. They decided sanitation should be main streamed into the entire country programme. Each programme is contributing towards one person who has been hired for a year to ensure that his is happening. Tangible benifits so far are increased advocacy for the inclusion of sanitation in Distirct Development Plans and Budgets, an energetic school sanitation programme lead by CCA and planed expenditure of more than 50% within

WES for sanitation (from 3.8% two years ago).

Lessons Learned:

There have been many lessons learned over the last year and a half. These are the most significant:

1. The effect that a few highly committed indiviuals can have is tremendous. These can not just be any individuals of course but just one or two well place people can move a country.
2. The support of the President was crucial. His personal involvement and commitment gave motiviation to those doing the work as well as credablitiy to the work being done.
3. Flexibility. Be ready to seize any opportunity at any time to promote sanitation.
4. Sanitation is not just a health issue. The willingness of the Ministry of Health to acknowledge that while they could lead they could not solve the problem of sanitation themselves allowed a number of oportunities to be taken that might otherwise have been missed.
5. Be ready to lead by example. If UNICEF as an organisation is not ready to promote sanitation in every aspect of our work and to show personal commitment to the issues involved then all of the work we are doing it ultimately doomed to failure.

Annex

Kampala Declaration on Sanitation (1997)

Preamble:

- We the District Authorities of Uganda together with the key stakeholders here assembled at the first ever National Sanitation Forum, on this day the 17th of October, 1997, realising that poor sanitation is a major constraint to development in Uganda as manifested by :
  - environmental degradation and pollution of otherwise protected water sources
  - High rate of morbidity and mortality in the country
  - Lost productivity and high expenditure on curative health care cost
  - Reduced learning capability of children through illness and early dropouts of girls.
  - High levels of stunting among children under 5 years
  - Loss of community and national dignity and pride

- Recognising that sanitation is a way life and constitutes the isolation of human excreta from the environment, maintenance of the safe water chain; the sustained practice of personal, domestic and public hygiene, safe disposal of solid and liquid wastes and control of disease vectors and vermin, sanitation goes beyond the provision of physical devices and encompasses positive attitude and behavioural changes by the people.

- Given the remarkable record of sanitation performance in the 1950s through the 1970s and whilst attributing part of the decline in the status of sanitation in the country to the decades of wars, economic collapse, institutional/social decay and poverty, the current sanitation situation, particularly the low coverage of latrines in Uganda is unacceptable and is bound to get worse if concerted efforts are not taken.

- Acknowledging that the foundation for improvement of sanitation rest with the collective wisdom of our leaders and the inherent desires of our people for a clean and healthy environment (as enshrined in the 1995 Constitution), we hereby endorse the guiding principles to halt the declining status of sanitation in Uganda and further commit ourselves to the 10-point Strategy Action below as the basis for ensuring adequate sanitation for all by the year 2005. We the undersigned hold ourselves accountable for the success or failure of this endeavour.

Guiding Principle:

- Basic Rights: Sanitation is a basic right and responsibility for every citizen of Uganda
- Partnership and Local Implementation: Community Partnership with districts, lower local governments and administrative unit and cultural and religious leaders

should be the framework for delivery of better sanitation services

- Government Facilities and Private Sector/Non-Governmental Organisations (NGOs) Delivery: Government at all levels will create the enabling environment and facilitate the provision of services but service delivery will be enhanced through the increased participation of the private and social intermediary sectors (NGOs)
- District Specific Solutions: Sanitation situation vary across the country. District specific solutions suitable for communities and households and can be sustained will dedicate the course of actions.

Enabling Environment and Required Support

We further declare our full commitment to the National Accelerated Sanitation Improvement Programme (NASIP). The Programme will support overall capacity building and infra structural improvement at all levels. We therefore call on the central government and partner donor agencies to assist in mobilising the necessary resources in support of the programme. Direct and timely channelling of resources to the district and sub-county level will be called for. The re-orientation of available resources in lead agencies (Local Government, Health and Natural Resources) in favour of preventive health care and in particular sanitation should be the starting point. Although this programme is multi-sectoral and therefore the responsibility of all, the lead agency for environmental health at the national and district levels require strengthening to transform it into a credible institutional mechanism for facilitating the implementation of the national programme.

Conclusion - Sanitation is a Responsibility for All

No family, community or institution can escape the negative impacts of an endemic poor sanitation situation. Only a comprehensive and multi-sectoral approach aimed at full sanitation coverage and backed by sustained positive attitudes and behavioural changes by all can make the difference. We therefore call on all leaders, citizens and institutions in Uganda to support the National Accelerated Sanitation Improvement Programme to ensure adequate sanitation for all by the year 2005

The following are the **10 - point Strategy for Action:**

1. **Exemplary Leadership Commitment**: We the collective leadership of the district commit to set good examples at home, at work and in all public places for improved sanitation.

2. **Full Community Mobilization:** We shall mobilize and motivate the totality of the district and sub-county leadership (political, traditional and administrative), households, communities and institutions (schools, health centres, industrial establishments, religious facilities) towards comprehensive promotion and provision of sanitation services for all households, institutions and public places in the district.

3. **District and sub-counties and urban authorities focus:** Sanitation begins at home. We shall facilitate the sub-counties and urban authorities to develop sanitation action plans with clear budget lines. These will be integrated into the District plan with explicit objectives of raising the profile of sanitation in our districts and committing resources to sanitation programmes beginning with the 1998/99 financial year. This approach will be the best way of responding to the peculiarities and needs of special geographical areas (security, pastoral communities, technical constraints, etc.) And target groups (disabled, elderly, etc). A task force shall be established immediately to initiate the process.

4. **Coordination and Multi-sectoral Approach:** Sanitation improvement shall be made an integral part of all social and economic developments in our districts. We shall endeavour to coordinate all of the sanitation activities taking place in our districts, provide linkages to all relevant sectors and establish the necessary framework for rational planning, monitoring and evaluation. A clear definition of the roles of all stakeholders would be defined through consultation to promote transparency, accountability and build collective vision.

5. **Focus on schools**: Schools provide excellent opportunities to encourage positive life-long behavioural change. We shall ensure that every primary school and all other institutions of learning have adequate sanitation facilities (latrines, safe drinking water supplies and hand washing facilities) and with separate facilities for girls by the end of 1998. All primary school shall be involved in school health promotion programme as dictated by the Universal Primary Education (UPE) programme. We further endorse the immediate re-introduction of school health inspections of pupils and premises in all sub-counties.

6. **Fora at Districts:** We shall organise and conduct sanitation campaigns in all sub-counties on a regular basis. This shall be crowned by an annual sanitation forum beginning 1998 on an agreed National Sanitation Day. This will ensure an annual mechanism for reporting of progress (based on agreed indicators) and refinement of the strategies. A massive public education campaign with special focus on rational approaches for overcoming inhabiting taboos and cultural practices will be mounted at all sub-counties. Monthly sanitation days shall be introduced at all districts and sub-county levels. We further endorsed the re-introduction of inter-district, inter-community and inter-school competition. Appropriate incentives for rewarding performance shall be instituted periodically.

7. **Central Role of Women:** We shall ensure that women and youth organisations are adequately represented at all levels of sanitation delivery system and are provided with opportunities for economic advancement and support to sanitation activities.

8. **Private Sector/NGO Development and Service Delivery**: We shall involve the private sector and NGOs in the development, production and dissemination of appropriate sanitation materials. Support to the local private sector and NGOs (including artisans and

community based groups) in skills development in sanitation service delivery inter alia communal latrines, production of sanitation facilities, sanplats, hand washing facilities and sanitation advocacy shall be facilitated. The appropriate enabling environment and incentive structures will be examined and applied to enhance their participation in sanitation services delivery.

9. **Capacity Building at District Level**: We shall ensure that we put in place a multi-sectoral cadre core at the district level to oversee implementation at the sub-county levels. Team work, motivation, balanced staff training and strengthening of the complementary institutions in the districts shall be given top priority.

10. **Policies and Guidance**: The three administrative levels of Government (national, district and sub-county) should collectively develop comprehensive sanitation policy, operational guidelines and pass supportive legislation to support sanitation improvements. Commitment to timely updating and enforcement of existing legislation should be one of the central pillars of the sanitation delivery at all levels.

Case study

Project Title: **Intensive Sanitation Project**

Location: Quynh Phu district, Thai Binh Province

Date/duration: 4 years (October 92-December 96)

Key stakeholders:

Implementers:

- District Health Centre of Quynh Phu
- Provincial Health Service of Thai Binh

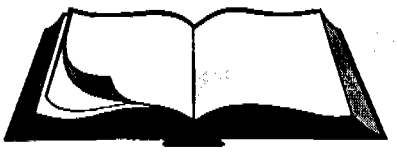
Financing partners:

UNICEF Hanoi

Local Government

Technical advisers:

- Thai Binh Medical College
- Dr. Hoang Dinh Hoi, Director, Department of Preventive Medicine MOH
- Mr. Nguyen Quang Quynh, Project Officer, Sanitation,UNICEF, Hanoi.



Background

Since 1986, the government's Environmental Sanitation project with support from UNICEF has been implemented in most provinces in the country. Water seal latrines have been introduced and constructed at village and commune level as the dominant excreta disposal technology. The project strategy was confined to the 'demonstration" stage. Limited efforts were made on Sanitation Education and promotion through the development and distribution of some posters and leaflets.

After years of implementation, 150,000 demonstration latrines had been constructed in more than 3,000 communes in Viet Nam with provision of the cement and iron bar from UNICEF. It was expected that the demonstration latrines and the educational materials would encourage people to participate in the construction of additional latrines using their own resources, leading to a dramatic improvement in Environmental Sanitation throughout the country.

However, it was observed that the impact of the demonstration latrines and the educational materials was very limited both in terms of sanitation coverage and people's behavioural change. This subsidized approach made it difficult for the project to expand to larger areas and at the same time people tended to be too dependent on the project inputs.

2. Project justification

Water and Environmental Sanitation is closely related to people's health and quality of life. However, in rural areas of Viet Nam, sanitary practices remain poor and the understanding of the importance of hygiene and its impact on the living environment remains low. For this reason, it is essential to increase awareness to a level whereas people will voluntarily construct sanitary facilities in their houses and pay for them.

Recognizing the limitation of the demonstration strategy, in January 1992, a meeting was held between UNICEF and the Ministry of Health to discuss a new approach to promote more active community participation in improving sanitation. In October 1992, an Intensive Sanitation Project was finalized and Quynh Phu District of Thai Binh Province was selected as a pilot area where a package of sanitation measures could be developed including water seal latrines, wells, bathrooms, garbage pits, animal sheds and smokeless stoves.

3. Basic information of the project area

The project was phased as follows:

Phase 1: From Oct. 1992 to Dec. 1993: Implementation in one commune to draw necessary experience for the other communes of the district (pilot phase)

Phase 2: From January 1993 to Dec. 96: Implementation in other communes (expansion phase)

Table 1: Information and statistics of project area before implementation.

	Quynh Phu district	An Vinh Commune
Total population	232,881	7,581
Rural population	227,875	7,581
Total household	38,526	1,126
Sanitation coverage	9.8%	11.4%
Water coverage	15.4%	16.3%
Area	198.35km2	4.85 km2
Literacy rate	96.8%	97.3%
Average family income/year	USD 80.0	60
Number of schools:		
Primary	40	02
Day-care centre	39	01
Kindergarten	38	01
Number of commune health centres	39	01
Number of Health workers	156	04
Main economic activity:	Agriculture/rice cultivation	

4. Objectives of the Project

To reduce water-borne diseases by providing improved sanitation education and low-cost sanitation facilities at household and institutional levels;

a) To raise awareness of personal hygiene, food hygiene, safe water, excreta disposal, solid and liquid waste disposal, disease transmission and relationship of safe water and sanitation to health;

b) To create a safer environment for better living through a total package of sanitation measures;

c) To introduce low-cost appropriate technology, making it affordable and acceptable to different categories of people in rural areas;

d) To develop and test a methodology and operational strategy to make the environmental sanitation programme self-sustaining and self-expanding;

e) To involve the community, especially the local Women's Union, in planning and

implementation of the environmental sanitation programme at the grass-root level.

5. Project Targets

a) General advocacy on environmental sanitation to cover a minimum of 80% population.

b) 75% of the target households to accept package of sanitary facilities.

6. Main Activities of the Project

a) Actual construction of sanitary latrines and use and maintenance of sanitary facilities by 50% of the target households/schools/government offices.

The project has carried out the following activities:

1. Strengthening existing infrastructure for project planning, implementation and monitoring;
2. Conducting a base-line survey in the project area;
3. Developing communication materials using appropriate methods of communication in the villages for awareness and demand creation;
4. Conducting training orientation/meetings at different levels;
5. Mobilizing funds from the beneficiaries and ensuring proper handling of funds/accounts;
6. Finalizing designs and estimates for low-cost sanitary facilities, arranging for the production, storage, distribution of parts for latrines and other facilities;
7. Constructing sanitary facilities at household levels, ensuring supervision and quality control;
8. Involving the community, particularly women, at all stages of the programme;
9. Facilitating augmentation of water supply in the project villages using low-cost appropriate technology;
10. Promoting immunisation, ORT, nutrition education and income generation activities in the project area;
11. Monitoring of the project activities, including timely review meetings at district and provincial levels.

7. Project Implementation and Achievements

7.1 Implementation organization: Project management boards were established at all communes, under the direction of the district project management committee. Working procedures were set up which were very able to manage the project funds and activities and to mobilize funds for the project. Involvement of the People's Committee, of the Party, of the national front and other mass-organizations has made it possible to integrate activities of various sectors.

7.2. Advocacy, Social Mobilization and Communication

More than 1200 motivators were trained by the project and have actively participated in promoting water and sanitation through different communication channels (meeting, home visits, mass media.) 98.6% of the population were informed of the project. 89.2% and 90.9% of the population were aware of the need for sanitary latrines and a safe water source respectively. The communication target of 80% of the population to be motivated on WES was successfully reached.

7.3 Water and sanitation coverage by end of the project

Water: The results of the final project evaluation show that 81.9% of the population in the district are covered with safe water sources (drilled-wells, dug wells and rainwater tanks)

Sanitation: The number of new latrines constructed and old latrines renovated increased dramatically. By Dec. 1996, 61.43% of the households had hygienic latrines of which 81% were water seal latrines. Subsequently, 62.9% of facilities had bathrooms. Other sanitary facilities such as smokeless stoves and garbage pits were constructed, but the level of success was lower than that of the "three main sanitary devices", i.e water source, latrine and bathroom. By mid 1996, all schools, kindergartens, day-care centres and offices had access to water and sanitary facilities which had been constructed on a cost-sharing basis, i.e people's construction and local government fund allocation.

Table 2: Health statistics

Indicators		1990	1991	1992	1993	1994	1995	10/96
Population		226716	229443	229000	240000	241550	242000	243883
Under five children		25437	24684	24045	23535	23309	22322	20399
Diarrhoeal diseases	Morbidity	10973	10421	10014	9714	8514	6669	4143
	%	4.8	4.5	4.4	4.0	3.5	2.7	2.7
Under five morbidity		1.7	1.6	1.6	1.6	0.8	0.8	0.7
Hepatitis	Morbidity	78	71	69	67	65	59	32
	%	3.4	3.1	3.0	2.8	2.7	2.4	1.3
Polio	Morbidity	-	-	6	0	0	0	0
	%	-	-	2.6	0	0	0	0
Trachoma allergy		34.5	35.6	32.8	32.8	28.2	24.6	24.2

Source: End-project Evaluation by WES Reference Centre, Thai Binh Medical College.

The above Table shows that the incidence of diseases related to environmental sanitation, water resources and sanitation practices in Quynh Phu district has been declining Although the yearly decline is gradual, the decline over the six years (1990 – 1995) is quite significant ($p<0.05$)

It can be concluded that the intensive sanitation project in an integrated efforts made on vector control, CDD, EPI, ARI etc. within the context of remarkable socio-economic development has contributed to the reduction of morbidity, especially among children.

9. Constraints

Low economic condition: As the average income of the people in the district was only $80/capita/year, it was difficult for them to invest in WES activities, especially for those who are very poor (about 25%).

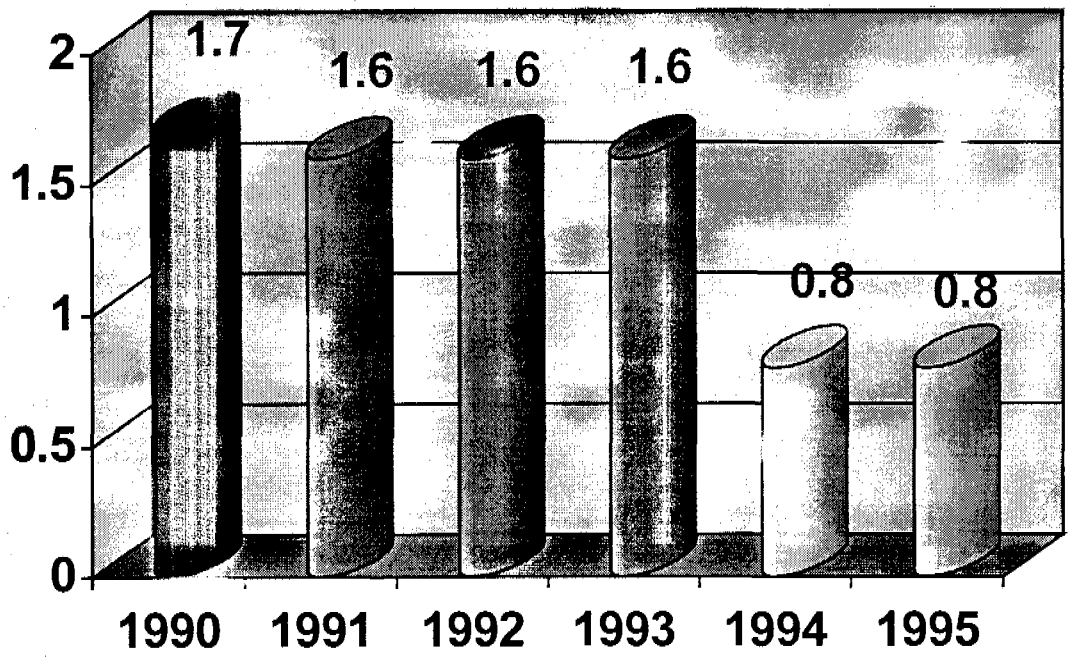
- According to the project proposal, the financing parties were UNICEF, Provincial, district Governments and MOH. However, the actual funds provided by both UNICEF and the local government were lower than planned. Funding from MOH was not provided due to lack of "procedure".

10. Lessons Learnt

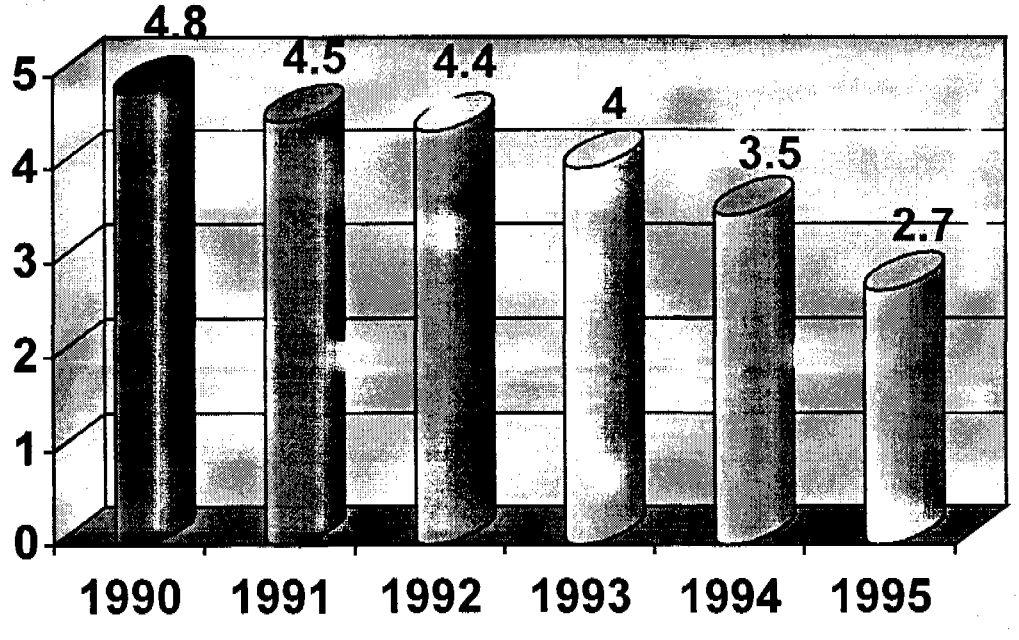
- The commitment and involvement of the local People's Committee was the key factor in the success of the project. The policies and obligations generated by the district People's Council as well as the financial contribution from the Commune People's Committee has put the project in a very favourable condition.
- Social mobilization and project communication conducted by the mass organizations such as the Women's Union and Youth Union have proven very effective. The combination of Public Health Campaign (PHC) and the Community-Managed Programme (CMP) resulted in a very high level of motivation.
- People's participation in project lanning, communication and financial contribution is a must for every sanitation project. Without it neither the project could expand nor the facilities be properly used.
- The role played by the WES Reference Centre of the Medical College of Thai Binh as technical advisor and as project supervisor is very essential. It assured that the project would be well directed, well monitored and evaluated.
- All lessons learnt from the Intensive Sanitation Project in Quynh Phu district are used as the base for the expansion being made in 10 more districts in 10 northern provinces in 1998.

Annex 1

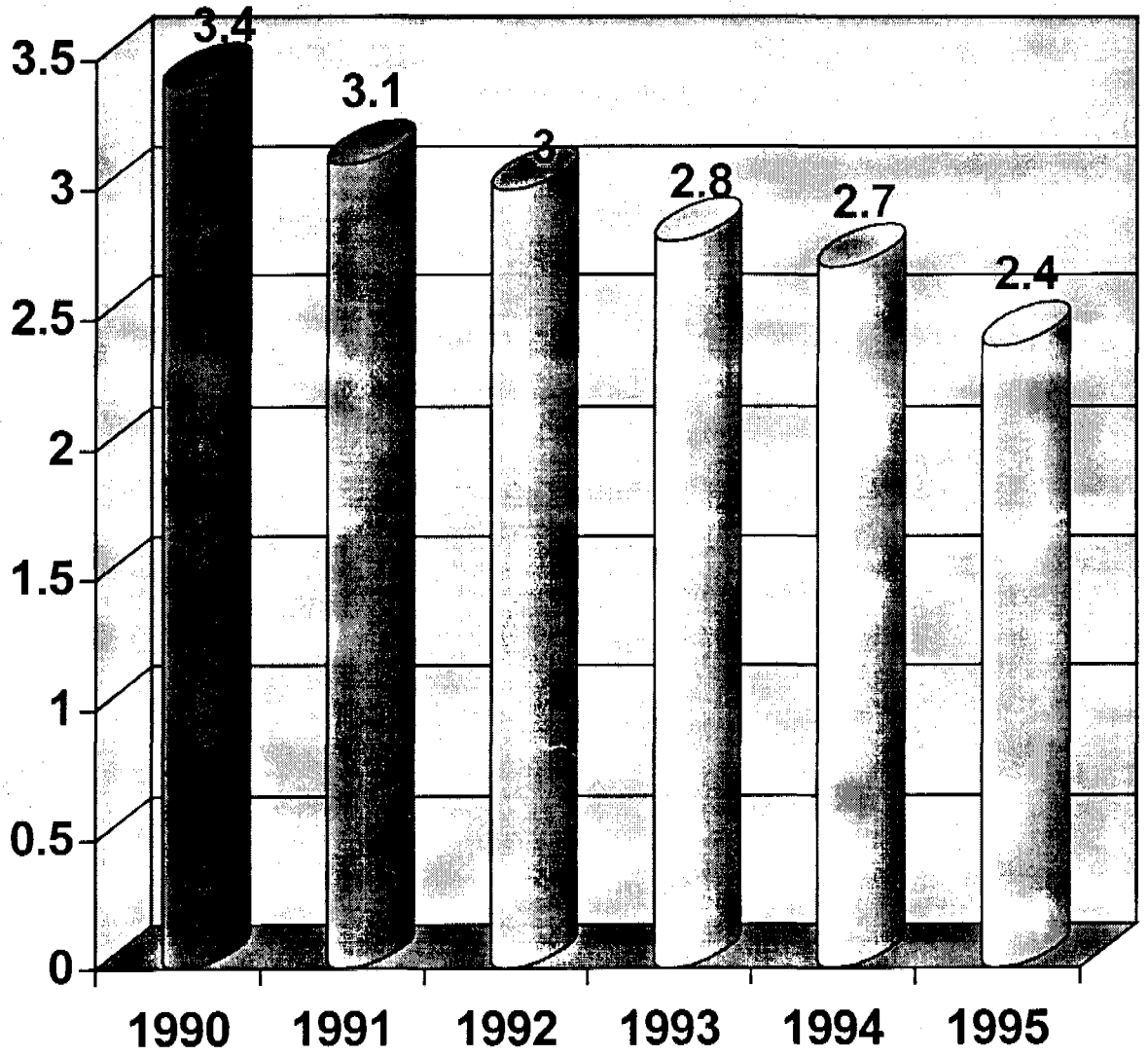
Under five Morbidity



Percentage of Diarrhoeal diseases



Percentage of Hepatitis



WATER, SANITATION AND HYGIENE EDUCTION PROGRAMME (WASHE) IN ZAMBIA

1. BACKGROUND

Situated in the heart of Central-Southern Africa, Zambia covers an area of 752, 614 square Kilometres. It is land locked and shares borders with eight countries including Angola, Botswana, Tanzania, Malawi, Zimbabwe, Mozambique, Namibia and the Democratic Republic of Congo (DRC). Like many developing countries in Africa, Zambia, faces great challenges in meeting the ever-increasing demand for adequate and good quality water supply and sanitation services. Zambia's challenge is to meet the demand of more than 51% of the country's almost **10** million people that still do not have access to safe and adequate drinking water and about **65%** of the same population that do not have access to adequate sanitation. Investment levels to meet this great challenge are low due to the budgetary limitations. The social, economic and environmental decline in Zambia has taken a very heavy human toll. Infant and child mortality rates have been on an increase. One third of infant deaths are still caused by respiratory infections, malaria, diarrhoeal diseases/dysentery, mostly due to lack of safe water supplies, poor environmental and sanitation conditions and inappropriate hygiene practices. Yearly epidemics of cholera and unacceptably high incidences of diarrhoeal diseases are a testimony to this. On any one-day in a year, more than one in ten Zambian children under the age of five years are suffering from diarrhoea. Diarrhoea is known to impair the absorption of nutrients from food, so that even with adequate food, a child with diarrhoea might be malnourished (which leads to vulnerability to other diseases). Diarrhoea also has a negative effect on the absorption of drugs. The effects on school attendance, and also concentration at school, vulnerability for other diseases and in general on the opportunities for development are evident.

"The major threats to child health and survival-including malnutrition, diarrhoea and respiratory infections- are linked with the impoverished, unhealthy and unhygienic environments that people live in"1

This is exarcebated by a long time of the water supply and sanitation sector in Zambia increasingly failing to deliver an acceptable level of service to the urban, peri-urban,

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1 Prospects for Sustainable Human Development in Zambia ; December 1996, page 36

and rural communities. The performance of the sector has been constrained by interrelated problems including lack of comprehensive sector policy; shortage of financial resources to the cost investments and for proper operation and maintenance; and shortage of qualified and experienced manpower. Constraints also existed at the community level. The users had not been involved in the planning, construction or management of their water supplies. As a result communities had few skills and little knowledge with respect to water systems. Neither had they been provided with tangible, village-based support with which they could improve and manage water resources. Critical analysis of the problems revealed that they were not necessarily technical, but more the result of weaknesses in the institutional, legislative, and organisational framework of the sector. Hence solution to these problems required reorganisation of the sector.

Recognising the need for institutional reform, the Government of Zambia launched the water sector reform in March 1993, and established the Programme Co-ordination Unit (PCU), an inter-ministerial committee, with the responsibility to steer the implementation of the sector reforms. Since then, UNICEF's has been active in the water sector reforms at national level and supporting community-based projects in ten districts. (*2*)

However, the basic problem of a lack of water supplies remains formidable. The last two favourable rainy seasons were preceded by a decade of drought. Although access to safe and convenient water increased from 20% to 27% between 1991 and the end of 1995, many people still have to travel long distances and/or risk using unsafe water. It is estimated that between 15% and 20% of traditional dug wells are dry. Less than half of rural households have access to safe and convenient sanitary facilities. This is a good increase over the 1993 estimates of 11% to 15%, but still unacceptable. The WASHE programme has and will continue to endeavour to mitigate these problems of lack of water and sanitation.

OBJECTIVES OF THE UNICEF/GRZ WASHE PROGRAMME:

UNICEF with support from donors, Natcoms and Bilaterals is supporting in the GRZ in the reform process at national level and also supporting to improve the WASHE situation in 10 districts in Southern and Eastern Provinces supporting community WASHE projects. UNICEF, has an yearly budget of about US$ 2 million under the present country programme 1997-2001

The ten districts chosen are those that are the worst effected by drought; communities in these districts have very poor coping capacities and in the last few years house hold

2 Five districts in Southern province (Mazabuka, Monze, Choma, Sinazongwe, Kalomo) and Five districts in Eastern Province(Nyimba, Katete, Petauke, Chipata and Chadiza)

income has reduced by half. Also these community-based projects are helping to test and provide the feed back on the strategies and guidelines developed at the national level.

3. KEY ACHIEVEMENTS:

A. National Level:

ADOPTION OF THE NATIONAL WATER POLICY

The reforms were steered by Government adopting a forward-looking National Water Policy in November 1994 adopted. The Policy recognises the importance of Water as an economic good, which should be guarded jealously. The policy on water supply and Sanitation is based on the seven sector principles outlined below:

1. Separation of water resource management from water supply and sanitation.
2. Separation of regulatory and executive functions.
3. Devolution of authority to local authorities and private enterprises.
4. Full cost recovery in the long run.
5. Human Resource Development (HRD) leading to more effective institutions.
6. Technology appropriates to local conditions.
7. Increased GRZ priority and budget spending to the sector.

Based on the above sector principles the following institutional framework was adopted.

i) The establishment of a regulatory body to be called the **National Water and Sanitation Council (NWASCO)** to perform the regulatory functions. This will mainly be for urban water supply and sanitation.

ii) In line with the second principle of devolution of authority to Local Authorities, the executive (operational) functions of water supply and sanitation, which were previously carried out by the Central Government Department of Water Affairs and the Buildings Department of Ministry of Works and Supply, should be transferred to the Local Authorities under the supervision of Ministry of Local Government and Housing.

iii) Local Authorities should form **Commercially Viable Water Utilities (CUs)** to assist the Local Authorities with the service provision. These would be Water Companies established under the Companies Act for provision of Water Supply and Sanitation to mainly urban and peri-urban areas.

There are basically four ways by which water supply and sanitation service provision can be undertaken in the urban areas of Zambia.

- A Local Authority may through a Department provide the service
- A Local Authority may either on its own or with other Local Authorities come

together and establish commercially viable water supply and sanitation utilities (CUs).

- A Local Authority (ies) may enter into joint venture with a private sector through equity sharing. This equity sharing is however limited to a maximum of 49% asset ownership in favor of the Private Sector.
- Contracting out. A Local Authority may take advantage of the many Private Sector Participation models and enter into contract for the provision of the services. These contracts may take the form of management, lease, concession or even BOOT. This approach therefore just falls short of total privatisation.

It was however recognised that for rural areas the provision of water supply and sanitation would have to be community based. This is through the WASHE concept outlined later in the paper.
As part of the reforms it was also recognised that there was need to develop a Sanitation strategy and also a strategy on peri-urban and rural water supply and sanitation.

DEVELOPMENT OF *THE ENVIRONMENTAL SANITATION STRATEGY:*

In late 1996 UNICEF initiated discussions with GRZ officials, and interested donors on the need to develop the ES Strategy and ESAMEP. Based on these discussions UNICEF prepared a proposal for the Programme Coordination Unit (PCU which is mandated to guide the reform of the water and sanitation sector) to set up a Working Group on Sanitation (WGS). The proposal was endorsed and a Working Group on Sanitation (WGS) was established in February 1997. The main objective of the group was to develop a national sanitation strategy with emphasis on the needs of poor rural communities and deprived low-income urban populations (peri-urban).

- In September 1997, the Ministry of Health with UNICEF supported the appointment of a technical sanitation expert as a secretary to the Working Group on Sanitation.
- The strategy has been developed through a highly consultative process. The consensus building in WGS has been a priority. So far, four major workshops have been held. The First workshop was on consensus building on a working definition of sanitation and identification of issues to be included in the sanitation strategy, the second and third workshops were on situation analysis and the fourth was on sanitation strategy development.
- The draft sanitation strategy has been in principle approved by The PCU and is now awaiting cabinet approval. In the firth workshop the Environmental Health Programme (EHP) from Washington helped the WGS group to prepare a multi-year Action Plan for the promotion of sanitation.

The future work plan for WGS for 1998 is as follows:

- Finalize/approve ES Strategy and ESAMEP (June-August).
- Environmental Sanitation Fair to launch ES Strategy and ESAMEP (September)
- Integration of ESAMEP in plans/budgets of GRZ/donors/NGO's(October-December)
- Start implementation ESAMEP. (January 1999)

B. DISTRICT LEVEL:

Establishment of DISTRICT –WASHE Committees in Zambia

The Government of Zambia has recognised that provision of Water Supply and Sanitation for Rural areas has to be community based. The approach is clearly enshrined in the National Water Policy mentioned above.
As mentioned, the community-based approaches are implemented through establishment of WASHE (Water Sanitation and Health Education) committees at the Village (V-WASHE) and District (D-WASHE) levels. The programme for establishing these committees started in the Western part of the Country with support from the Norwegian Government.

Having recognised the success of such an approach, Government through its PCU decided to introduce the approach countrywide.

WASHE implementation approaches and strategies are specifically aimed at assisting local authorities and communities to get more benefits from water, sanitation and health education programmes. There are several steps and processes needed before local authorities and communities take up fully their roles and responsibilities.

The key elements of the WASHE approach therefore are:

- Institution and capacity building.
- Promotion of community management and empowerment.
- Collaboration and sector co-ordination.
- Promotion of appropriate technology and research activities.
- Monitoring and evaluation.

Establishment of D-WASHE committee is through a highly consultative process. It entails training members through 5 levels of training sessions. The aim is to operationalise the D-WASHE committees so that members have the skill and the ability, to either co-ordinate, implement, supervise or monitor WASHE programmes in the District. The training sessions aim at enhancing the understanding of water and sanitation in the District, develop commitment and forge partnership among the actors towards a District goal and develop a programme that emphasises capacity building

leading into establishment of sustainable WASHE programmes.

National level guidelines, specifications, standards and series of WASHE manuals were developed and produced by Community Management and Monitoring Unit (CMMU) which are used by the National WASHE Training Team in its training programmes for District WASHE Committees. Also, visualisation and Participatory Planning materials were produced and distributed to be used by the District WASHE Committees.

The National WASHE programme is being implemented as part of the Water Sector Reforms outlined above. A specific unit was established under the Water Sector Reform Support Unit to facilitate establishment of the D-WASHEs. While the unit is supported by the Irish Government funds, it gets support from different partners for the actual establishment of the D-WASHEs. The ultimate goal of the programme is to establish D-WASHEs through out the country. One of the major funding agencies on the actual establishment of D-WASHEs is UNICEF through a project Community WASHE project implemented in 10 Districts of the country. More recently, this activity is now expanded to about 30 districts and all major donors like Irish Aid, Water Aid, GTZ, Dutch, KFW and JICA have adopted this approach.

C. VILLAGE LEVEL:

Significant progress is made since September 1995 when the WASHE programme was initiated in these ten districts. Funds from UNICEF has contributed to improve access to safe and convenient water through the construction of 749 boreholes of which 136 are drilled in dry dug wells that are more than 15 metres deep. Another 353 hand pump facilities were rehabilitated. An estimated 220,400 people (*3*) have been adequately served with 20 litres per capita, per day with these 1102 water facilities. The average water point ratio in the ten districts declined from 1 to 681 in December 1995 to 1 to 458 in December 1997. As a result of this, many schools did not close down, girl child attendance and performance improved. Councils stopped supplying water with browsers.

Promotion of private sector is paying off well. Costs of drilling boreholes have been reduced by improving specifications suited for handpump wells, improve the quality of surveys for site selection, reducing unwanted extra footage drilled, reduce screen

3 The formation of user fee groups show an average of 200 people using a water point.

used and by improving the capacities of private sector staff to drill boreholes efficiently and use appropriate equipment. The average cost is now reduced from US$5,500 to US$3000 for a sixty-meter borehole. The failure rate is also now reduced from 40 percent in 1996 to 15 percent in 1997. As the drillers skills are improving all the time, this is expected to go down to less than 10%.

The 200 area pump menders (average of 20 per district) who were trained and provided with tools have so far installed many boreholes for which Communities are directly meeting the cost of materials for apron construction and are paying a fee of US$ 8-10 to the pump menders. Project is able to save significantly as in the past they were paying US$ 250 for each installation to the contractors or district engineer. This capacity building activity has paid off well. With an investment of US$ 20,000 in training and US$ 20,000 for providing tools, the project has saved so far US$ 235,000 with nearly 1,100 handpumps installed / rehabilitated by these pump menders. Presently communities no longer depend on the district engineer for repairs of their facilities.

The 200 community organisers trained in participatory methods and equipped with their tool kits have started to mobilise communities and create a demand for constructing and using WASHE basic need facilities (1). So far, an estimated 72,000 People have access to safe and convenient family latrines in these ten districts. Around 200 Area Masons (AM) were also trained who have assisted the families to construct over 12,000 new latrines. Initially, the sanitation activities moved much slower than planned. (i.e. 200 on 1995, 3,600 in 1996 and 8,000 in 1997). Also the 200 trained community organisers have gained experience and are undertaking an intense follow up of education activities raising awareness of basic hygiene principles. Some villages have reached 100 percent coverage, while a few villages, especially in Mazabuka have just completed constructing Concrete slabs.

The capacity building of D-WASHE and that of the communities was simultaneously achieved with the infrastructural support. Districts and communities were supported to develop their own capacity to plan, maintain and manage water and sanitation facilities. This has created a sense of ownership of the water facilities and thus has increased their sustainability. Some of the D-WASHE members are trained as trainers on hand pump installation and latrine construction, rain water harvesting techniques, participatory techniques and on the use of computers for water point inventory and management. Warehouse staff are trained in logistics and cashier and Chairman in financial management.

Technical support through a consultant to a local manufacturer resulted in transfer of technology to locally produce fibre glass ZAMPLAT (Molds developed in Zambia for casting sanitary platforms for latrines). Also this technical support improved the capability to develop master molds and improve the manufacturing process which helped to improve quality and accelerate production of fibre glass ZAMPLATS molds. 600 of the 1,000 molds ordered for production were procured so far and distributed to communities.

UNICEF has continued to promote a coherent approach among all partners involved, a leaflet on the WASHE Basic needs package was produced in collaboration with the Water Sector Development Group and CMMU. This leaflet gives an overview of the objectives of the WASHE programme and the needs it addresses.

In future, WASHE activities will focus on consolidating past achievements and will intensify capacity building activities of V-WASHE to prepare their WASHE plans, implement and monitor on their own. The hygiene education activities will be intensified and continued along with the training of masons. V-WASHE will be supported to increase access to sanitation and improved monitoring and reporting system starting from household level. Positive actions will be initiated to improve co-ordination of the many partners involved in the water and sanitation sector.

KEY FACTORS FOR SUCCESS AND THE ROLE OF UNICEF:

National interest

- WASHE, especially Sanitation being a major problem in the country has attracted a lot of interest. This is evident through very active participation in the workshops that have been called to address different topics.
- The government has shown great interest in the success of the Working Group on Sanitation (WGS).
- The members of the core group of the WGS are all committed, as they have devoted their time through attending regular meeting which have resulted in the production of substantial documents and proposals.
- The D-WASHE members are quite activity and feel proud to ownership and decision making power given to them.

Capacity and consensus building

- Frequent workshops with a broad based participation from other participants who are involved in the whole process (helps to build a network and strengthen capacity on ES issues)

- Contracted consultants to support the WGS
- The regular dissemination of relevant strategy documents/guidelines, water and handbooks such as the 1995 draft version of the UNICEF Sanitation Handbook proved useful in preparing programmes of the workshops)

Gender

The use of gender guidelines for Water/Sanitation from different donors and UNICEF

The inclusion of a national gender specialist in the ESAMEP team in the preparation of a multi-year Action Plan.

UNICEF

- Involvement of the UNICEF Representative and WES staff to advocate for the work of the WASHE and specially WGS
- UNICEF funding for consultants and secretary who have been assist the WGS and UNICEF in preparing documents
- Funds from UNICEF and other donors to support the consultancies and the workshops. UNICEF has played a very critical facilitation role and provided the push needed to keep momentum of the process.
- Technical support from WES Cluster in New York, Regional Office and from other country offices support and sharing of information and materials.

5. COMMENTS/LESSONS LEARNED/ROLE UNICEF

Intersectoral Working Group

- With a small group of motivated persons it has proven possible to achieve a lot in just 16 months. One of the main reasons is that the WGS operates on a working level that comprises all relevant actors including representatives from projects in the field (donors and NGOs).
- Looking at the effects at community level at a later stage can only assess the final results, once the ESAMEP is being implemented. But already at this stage many projects and district initiatives which were mostly concentrating on water supply has started to focus more on sanitation and hygiene education.

Urban and Peri Urban Areas:

The mandate of the WGS does not include urban areas, as the problems differ from rural areas (and proposals were made in the past on how to address sanitation issues

in urban areas). Peri urban areas are included in the mandate, but require some additional/separate attention for which there was not sufficient time/capacity. There is a Working Group currently looking at Water and Sanitation issues for Peri Urban areas. Linkages between the two Working groups are of course essential to ensure efficiency and maximum results.

Policy

- The policy to promote ES is very important. The decentralization process-taking place in Zambia enables the promotion of ES in a sustainable way. The Local Authorities are supposed to play a more active role in the promotion of ES. As capacities are limited, the capacity building of Local Authorities is very important.

- Within the Health Reform, the decentralization process has a very high priority. Under the Health Reform a new approach for community level work is being implemented: Community Empowerment, which means that assistance, is based on community determined needs and priorities. The ES Strategy and ESAMEP have the same vision. Furthermore Water/Sanitation has been declared one of the six major thrusts of Health. This has resulted in including Water/Sanitation as a specific attention area in all-new guidelines and handbooks within Health. Therefore, in future the momentum can be kept to start implementing the ES Strategy and ESAMEP.

6. ISSUES FOR FURTHER DISCUSSION:

Some issues that need further discussions and hopefully the Workshop in New York can spend some time to share experiences on:

- While avoiding vertical programmes in health (in the past there were separate plans and budgets for TB, Malaria and other programmes) and taking a holistic approach, how can it be ensured that ES issues and ES related diseases still get adequate attention and support.

- Improving sanitation and hygiene practices is not sufficient to improve health and well being. How to ensure integrated approaches (include income-generating activities, improve quality and quantity of education, etc).

- Monitoring and evaluation is still a weak area in most of the WS Programmes and Projects in Zambia. Because the systems are still weak, the experiences are very limited. In the development of the ES Strategy and ESAMEP there was therefore little capacity to build upon. How to strengthen M/E capacities at community, district and national level.

- Gender issues need to be addressed at all levels and at all stage of Programme

planning and implementation. How can Programmes and project indeed ensure women benefit. How do we ensure that capacity in dealing with gender issues is strengthened and guidelines adequately address gender issues.

- Improve information flow and continue to build capacities of Communities for their empowerment. at least 50% of the households in each village has all the five WASHE basic need facilities: latrines, hand washing, safe storage of food and drinking water, garbage pits and soak away pits or means of managing waste water. This will be through demand creation through hygiene education activities.

6 INVOLVEMENT WITH OTHER AGENCIES.

Improving Water and sanitation requires a multi sectoral approach. The WASHE programme, in recognition of this, liaises with several Ministries and NGOs. These include the Ministries of Health, Education, Local Government and Housing, Community Development and Social Services and Energy and Water Development. Work with these Ministries is at all levels, from National to District.

The National WASHE programme is being supported by a number of donors via the UNICEF WASHE programme and these include NORAD and the EU through the Fertiliser Development Fund supports, as well as the National Committees for UNICEF in Germany and the Netherlands. The National WASHE programme also receives direct support from GTZ, NORAD, JICA and SNV/Netherlands.

NGO partners include Africare, Water Aid, World Vision International, Theresian Sisters and Care International. These NGOs were already active in communities and their capacities have been strengthened and other activities complimented through WASHE activities.

PARTICIPATORY HYGIENE EDUCATION AND SANITATION IN ZIMBABWE

"Playing Games or Improving Health"

A Case Study
1993 – 1998

SUMMARY SHEET

Project Title:	**Participatory Hygiene Education and Sanitation.**
Programme Title	**Water and Environmental Sanitation**
Sub-Project:	**Participatory Hygiene Education and Sanitation**
Country:	**Zimbabwe – National programme (44 out of 56 Districts covered to date)**
Duration:	**1993 – 1998 (5 Years)**
Key Stakeholders:	**Community Members** **Parent Ministry: Ministry of Health and Child Welfare** **National Action Committee – GOZ** **Rural District Councils (Various)** **Mvuramanzi Trust** **Africare** **Irish Aid** **BADC – Belgian Agency for Development and Cooperation** **UNICEF – Australia** **AusAid**
Programme Managers:	**Bijaya Rajbhandari/Therese Dooley, Project Officer** **UNICEF Harare.** **William Rukasha, Department of Environmental Health Services, MHCW.** **George Nhunhama, National Coordinator, NAC, Min. of Local Government.**

1. Problem Context:

In Zimbabwe water and sanitation related diseases remain one of the leading causes of child morbidity and mortality. Diseases such as diarrhoea, dysentery, malaria, schistosomiasis, scabies, skin and eye infections are common and account for a large proportion of outpatient visits to clinics and rural health centers. From January to September 1997* alone there were 176,853 cases of Diarrhoea (and 406 deaths), 45,526 cases of dysentery(86 deaths) and 728,060 cases of malaria (1704 deaths) reported country wide.[1] In addition to these are the unreported cases which are not presented at health care facilities. Also of concern is the fact that the use of the Salt and Sugar Solution (SSS or ORS) in the treatment of diarrhoea cases has gone done with less than half of the reported cases using it as a treatment option.[2] Such high morbidity rates have a negative impact both on the socio-economic status of the community as a whole and could be a major contribution to the nutrition status especially in children.

A recent study on child morbidity and mortality patterns in Harare[3] indicated that diarrhoea, severe malnutrition and malaria were among the six most frequent conditions presented. A retrospective analysis of the incidences of diseases showed that both Gastro-enteric disease and malnutrition had increased since 1973, in fact the cases of diarrhoea had more than doubled. These figure may be influences by the incidence of HIV/AIDS but they also highlight the need for improved hygiene practices in urban areas.

The KAP study that was carried out in Gwanda one of the project districts showed that over 70% of the people know the importance of washing hands after visiting the latrine. Also 20-55% of people know the association between unwashed hands and disease. The need is to turn that knowledge into positive and sustained attitude and behavior change. The traditional strategy for the delivery of health and hygiene education had proved to be ineffective. Mainly because of it is largely inarticulated and unclear didactic in its approach to hygiene education based on a wholly prescriptive philosophy, viewed as a support or add on activity to the construction of water points and/or latrines uncreative and boring for the administrator and the community.

Annual construction figures indicate that the latrine construction rate is falling and is currently not keeping pace with the population growth rate. Therefore all the advances made during the eighties are being undermined as National coverage rates are actually decreasing. Access to sanitation is a basic human right and yet over 70% of the rural population of Zimbabwe do not have access to proper sanitary facilities. The National goal of 50% coverage by the year 2000 no longer appears to be achievable as annual construction rates are less than population growth rate of 3.1%. It was estimated in 1996 that it would be necessary to construct over 90,000 latrines a year in order to meet this target, the average annual construction rate is 10,000. Coupled with this 21% of all schools in the country lack adequate sanitary facilities, the need to place sanitation higher on the agenda and to develop a National Sanitation policy and implementation strategy is vital.

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[1] Ministry of Health and Child Welfare – Weekly Report on rapid notification of diseases, deaths and public health events. Year 1997, Week 40* Can be updated before final submission

[2] Sentinel Site Survey – Seventh Round: Ministry of Labour and Social Welfare/UNICEF

[3] Childhood morbidity and mortality patterns in Harare -

2. Project Objective:

The objective of this proposed project is to contribute towards the improvement of health status by reducing the water and sanitation related diseases in the selected communities in Zimbabwe, through an intensive programme of participatory hygiene education, supported by the construction of hygiene enabling facilities.

Immediate Objectives:

- To identify and change key hygiene behaviours that will maximise the health impact of water and sanitation improvements in 60% of the target population by the year 2000.
- To increase the rate of latrine construction and associated works (Hand washing facilities, upgraded family wells) in the selected areas order to contribute to the achievement of the national goal of 50% coverage by the year 2000.

Target Groups: The target group cuts across from National level to community level. The beneficiaries are mainly the national and district level officers, Sub district level extension staff and the communities.

3. Activities

The participatory hygiene education project in Zimbabwe set out to facilitate a change of approach in hygiene education from a didactic technical model to a participatory social model. The goal of the project is that all health workers (extension) will use participatory methods in their learning sessions with community groups and a participatory approach in their dealing with the community which will be very influential in bringing about behaviour change in hygiene practices.

Training: Training workshops are the mechanism for the dissemination of (PHE) Participatory Hygiene Education knowledge and skills. It has team training approach that represent a vertical cross-section of officers within the province are trained together so that they can start the implementation. In this system the field staff are trained with their district and provincial heads. These senior officers provide the support for the field staff who, as a result, do not operate in isolation.

The training is organized to be in three stages. In Stage One a team from one province consisting of officers from the provincial office together with officers from a number of districts and extension workers are trained. The workshop is facilitated by central DEHS staff and one or two people from the province of district who have some field experience in PHE. This cross section team are expected to be able to start the district and ward training

within on district and begin the community work. This provides the practical implementation experience which will be used in the training for Stage Two.

Stage Two is managed by the Provincial Environmental Health Officer. In this stage the original team facilitates the training of staff from the remaining districts in the province. This is carried out with one or two districts per workshop. In the early training a person from the Ministry often assists with the facilitation until the team from within that province has the skills and confidence to continue alone. The participants from a district are, again, a cross section. District officers are together with ward extension workers ministry of health staff combine with other departmental staff. Deliberately, there is no set pattern to the participants. It is left to the district to decide on its own strategy. One common pattern is that the training is not for environmental health staff only. All staff who work with communities are welcomed. The Third Stage happens within one district. There is training for the councilors and for the remaining and for the remaining ward extension staff who did not attend the Stage Two Workshop.

Materials and tool development: The material development is one of the most important activities in the project. It has taken a great deal of work from the development in the field to mass production. A set of tools have been developed to use in a learning session to specifically attract people to participate in the session and to focus on a specific hygiene topic and is the very to of the project. The top is composed of an explanation note that describes steps to facilitate the session together with a set of drawings. The materials are distributed at the various level for their use and tools are distributed at the ward level.
A training tool kit to support at the lower level has also been developed. The PHE project has taken a bottom-up strategy to develop the methods and tools to introduce them into the system and this strategy has proved to be very successful.

Sanitation and Hygiene Enabling Facilities Promotion: The project is also supporting directly to the householders in terms of the provision of the subsidy for the materials. This comes to around 4-5 bags of cement. The project also supports the promotion of other hygiene enabling facilities like hand washing facilities and upgrading of family wells. This is more in supplementing the effort of the householders whereby the householders contribution comes to around 75% of the total cost. The materials on sanitation with washing hands facilities to be printed and distributed.

4. Impact:

The greatest impact, in these early stages, can be seen within institutions. There is a general acknowledgement of the appropriate and effectiveness of the PHE approach, methods and tools. This acknowledgement is held by health staff throughout the system from national to health center level. It has also spread to other areas of health education and to other projects. PHE has raised the profile of hygiene education and made hygiene education a tangible entity for which specific plans and targets can be made. As a result

donors under integrated rural water supply and sanitation Project increased by 300% in Hygiene Education activity whereas previously hygiene education was a small part buried for the funding for water and sanitation. Attitudes of staff at all levels have become increasingly positive towards the PHE approach, and its methods are being adopted by other projects.

It is too early to see significant changes in hygiene practices in communities but there are encouraging signs. All the districts, which have established PHE, report on positive changes. There are reports of increased latrine construction, changes in hand washing practices especially at public meetings where the run to waste method is now used, improved hygiene at water points and significant changes in water storage practices. The methods and tools have also been used for CDD, malaria campaigns, cholera and dysentery outbreaks and schistosomiasis control and the results are very positive.

The methods and tools have been replicated in this projects, notably Africa 2000 and UNICEF assisted Community Based Management

Area specific studies on the **Health Impact of PHE** were undertaken in different sites throughout the country. The most significant study related to the use of PHE in the control of schistosomiasis in school children. In Gutu Ward, Goromonzi District, the PHE in combination with other intervention, brought 62% reduction in schistosomiasis infection in school children.

The participatory tools and materials coupled with the overall approach have noticeably facilitated an increase in the number of women who actively participate in hygiene education session. The drawings are largely responsible this shift in willingness to participate.

In Gwanda district, 296 latrines and 113 boreholes were constructed on self help basis after the participatory hygiene education intervention.

However, it is not possible to be exact on impact at the community level until appropriate indicators for behavior change and reporting system, that clearly describes the process of participatory education and behavior changes, is devised and in operation.

5. Challenges:

The main challenge ahead for PHE is to strengthen the identification of indicators for behaviour change, which can be monitored and used as a signpost by health staff as well as a way to measure change. There is also a need to turn the acknowledgement of PHE into commitment and this will include establishing a reliable support system for extension staff, making PHE a standard part of the basic training for health staff, including behaviour change indicators into the reporting system and putting community capacity process indicators into staff performance appraisals.

Participatory hygiene education is a process rather than an event, it requires attitudinal change among the projects implementers and behaviour change among the target communities. It is not a once off training but rather a series of events which require constant follow-up and support particularly in the area of confidence building in the use of the methods and approaches. Due to the rapid expansion and demand for training during phase one of the project the provision of this support has not always been possible. The need for consolidation of the approach and the refining of activities is essential for greater overall impact. Area specific indicators need to be identified and the methodology needs to be applied proactively in line with community identified needs, rather than reactively.

6. Experiences Gained and Lessons Learned:

Following five years of implementation a lot of experience has been gained within the project. In line with the participatory nature of the implementation strategy all project implementers and actors in the sector were provided with the opportunity of identifying those aspects of the project which need refining. The findings have been summarised as follows:

Quality of Training: It is necessary that an overall strategy and guidelines be developed for the support teams to assist them in monitoring the quality of training. In relation to the reduced training periods being given at the different levels suggestions as to which tools particularly the conceptual tools which should be used with the various cadre should be provided. Training should be seen as a process rather than a once off event as the project seeks to address both attitudinal change among the project implementers and behaviour change within the target communities.

Back-up support at all levels: In the area of confidence building the need for back up support at all levels was identified as being crucial. This mainly relates to the attitudinal change of project implementers from the use of didactic methods to a more participatory process. It was acknowledged that this requires a lot of confidence building in the use of participatory approaches and methods among the project implementers and support from their managers and counterparts. In line with this the provincial and district support teams need strengthening and a forum must be provided for the implementers to share their fears and experiences with others.

Identification of Indicators: A lot of work has been carried out on the identification of indicators for project impact. There is a need to consolidate these indicators and prepare guidelines on the selection and monitoring of these indicators.

Reporting Systems: The need to strengthen existing reporting systems particularly in relation to community level sessions needs to be strengthened. However the submission of these reports is very irregular. The fact that community level activities

normally have a zero financial input means that reports are regularly not forwarded to head office. Mechanisms must be put in place to ensure on-going reporting of these activities.

Availability of Tools: The availability of PHE tools at all levels of implementation needs to be assessed. Originally tools were provided to all clinics and rural health centers where staff had been trained. It appears that in some instances the tools are not being made available to all cadres in the area but are being personalised by individuals. An assessment of the situation needs to be undertaken and tools which can be best used by Village Community Workers, Farm Health Workers, Teachers and community level activists need to be identified and made available to these individuals. It was also suggested that for future production purposes some of the initial tools such as Flexi-flans be discontinued as they are not being widely used, while some of the new ideas from the field be included.

7. Lessons Learned:

Many lessons have been learned by the project over the years. Some of these lessons are as follows:

1. **Strengthening community involvement in priority (risk) identification, monitoring and evaluation of their own health**: Behaviours (and/or risks) to be targeted at community level should be identified by the community themselves. Greater community involvement in the overall process will result in a greater overall impact. Currently in many cases the topics or issues to be dealt with during a PHE session are identified by an EHT based on clinic data. This identified topic may not necessarily be a priority issue for the target community and therefore the impact of the session may be greatly reduced. Greater focus needs to be placed on community based needs assessment, planning, monitoring and evaluation. The community should be the cornerstone of the whole process.

2. **Sequential use of the tools**: The need to use the tools in a sequential order is necessary. In many cases this is something which comes with experience, however the failure by some implementers to use the tools sequentially has resulted in reduced impact. Use of the tools sequentially, greater community involvement in the identification of risk behaviours and the identification of appropriate indicators will help to overcome this problem.

3. **Training of School Health Teachers**: and other groups such as church groups in the use of the tools would assist in greater overall impact of the project. Improved hygiene behaviour is more than just a health issue. While every effort has been made to train all Government extension staff in the use of the tools, more people could be involved in the process if School health teachers, Church Groups and other community level activists were also trained in the use of the approaches,

methods and materials.

4. **Identification of Cadre who need (1) Exposure or (2) Training**: Currently everybody is "trained" whereas in reality certain cadres only require to be exposed to the methods and approaches so that they can support the overall process. Some other cadres interact regularly with the community and these are the individuals who need to be trained in the use of the materials and tools. Other cadre manage projects and provide support to these community based cadres and these individuals should be exposed to the process rather than be trained in the use of the tools.

5. **Reviews**: The need for the project implementers to periodically review the processes they are using and to share experiences and be exposed to new tools and techniques is an area needing strengthening. This is most applicable at field level and would greatly assist with back up support and many of the other weaknesses identified above. The need to acknowledge that PHE and Sanitation are on-going processes and not just once off training activities needs to be acknowledged at all levels. Locally organised reviews at all levels starting at community level right up to National level needs to be instituted.

6. **Hygiene Evaluation Procedures (HEP):** The incorporation of participatory evaluation procedures into the overall project cycle needs to be planned for. HEP activities utilise many of the tools currently being used at community level, the use of these tools for on-going monitoring and evaluation and the recording of the outputs needs to be increased. HEP should not be seen as a separate activity to the ongoing activities but as an integral part of the overall process.

7. **The Institutionalisation** of the approach during Phase one of the project where PHE is now an examinable subject within the environmental health curriculum will also help in strengthening long-term sustainability. At community level, the self help emphasis engendered by the projects participatory approach and the technical and hygiene skills acquired will further strengthen sustainability.

8. The Project was allowed to grow slowly. Initially working in two wards each in 3 districts. A year later to it stared working in a further 2 – 3 wards in the same districts. This helped in confidential building and in demonstration effect for expansion.

8. Best Practices:

1. It is important to note that the indicators are established before the start of the project so that the impact could be measured.

2. Participatory Hygiene Education is very strong tool in changing the behaviour of the individuals and the communities.

3. The project should start small as a demonstration and grow slowly.

4. The process by which the tools would be developed was very important. It had to be carried out in a way that would make the tools and methods acceptable to the environmental health staff and other extension workers;

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CASE STUDY

Simplified Sewerage System in the "Santa María" periurban district, Guantanamo City, CUBA

CUBA,
Total population: 11,250,000 inhabitants
Sanitation coverage: 90%

GUANTANAMO CITY,
Population: 230,000 inhabitants
Sanitation coverage: 45% (sewerage and fosses)
Aqueduct coverage: 93.8%

SANTA MARIA DISTRICT,
Population: 9,000 inhabitants (3,600 children)
Sanitation coverage: 88%
Latrines, septic fosses and now, the new sewerage system
Almost all inhabitants have toilets.

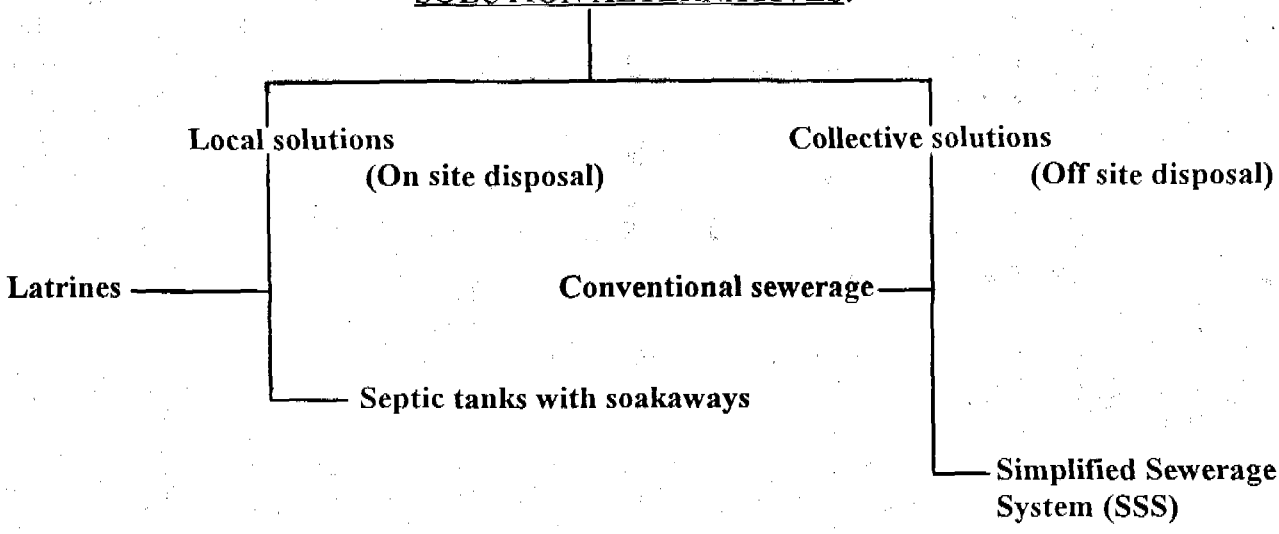
Situation analysis: DEFICIENT SANITATION

Santa María neighborhood (400 inhabitants ~ 100 dwellings)has a safe water supply system during 24 hours.

But it was an unsanitary district with frequent diseases, bad smell.....

The Santa María neighborhood had serious problems with the domestic waste water evacuation, which rendered it a dangerous area for the human health, with a high incidence of hydric diseases in children and old people, as well as a considerable degradation of the environmental hygiene.

SOLUTION ALTERNATIVES:



LATRINES: - They are not advisable due to the dwellings water connections, which cause abundant waste water that should be drained.
- Approximate cost of the latrines: 120 pesos per dwelling (27 pesos per inhabitant).

SEPTIC TANKS: - They are not recommended because of the low infiltration capacity of the soil (high level of water table: 1.5m)
- Approximate cost: 400 pesos per tank to be used by 4 ~ 6 dwellings (18 pesos per inhabitant).

CONVENTIONAL SEWARAGE: It is not recommended due to its high costs: 150~ 200 pesos per inhabitant.

SIMPLIFIED SEWARAGE: This technology has a cost lower than the conventional, appropriate for the sanitary evacuation of excretas. This type of sewerage in its two known ways of "small diameter" and "small depth" has proven to be a convenient and economic system for Cuba due to its low cost and constructive easiness.

It has two possibilities:
- small diameter: a manhole on the way out of every dwelling, removes the solids. The waste water only flows through the small diameter network.
- small depth: it makes use of yard layouts (condominium) or by sidewalks.

The SIMPLIFIED SEWERAGE was chosen for its ADVANTAGES:

1. Construction costs are reduced.
2. Simplified devices are used for the inspection and maintenance of the main sewage channels.
3. It offers easy and safe connections.
4. Smaller piping length.
5. Smaller excavation depth and width.
6. The population participate in its construction.
7. It does not need great skilled labour.
8. Users' great interest and attention towards the maintenance works.

A small diameter sewerage system was not designed because, although many dwellings of the area had septic fosses, there were other houses which did not have these fosses.

DESIGN BASIS:

The engineers of the Aqueduct and Sewerage Direction of the Guantanamo Province were in charge of the design, based in international bibliography and experiences.

Basis: · Design period: 20 years
· Present population: 450 inhabitants
· Future population: 770 inhabitants
· Waste water incorporation: 0.8 drinking water entry flow to the network plus infiltration (hardly zero)

In general:
$$Qmax = \frac{0.8\ q.P.K_1 K_2}{86400}\ Qc + Qi$$

Qm: maximum flow
q: water consumption per capita
P: future population
K_1 and K_2: daily irregularity coefficient and schedule
Qc: concentrated flows (schools, factories...)
Qi: infiltration flow

· Hydraulic design: using the tractive force
· Diameter determination:
for Qmax: $D = 1.793\tau^{-0.231}\ Q^{0.461}$
for Qmin : $D = 2{,}146\tau^{-0{,}231}\ Q^{0.461}$
· Pending determinations:
$I = 0.00647\tau^{0.231}\ \ Q^{-0.4615}$ (Q in l/s)

· Depth:
- in yards: 0.2 m + D
- in green areas and pathways: 0.4 m + D

THE CONSTRUCTION: Construction with community participation.

a. location and laying out by the technicians in the provinces.
b. constructive method: excavation of ditches, piping placing, construction of manholes and refilling with community mobilization and technical assistance.
c. materials used: PVC piping and connections; block and concrete manholes.
d. duration: 3 months, working in principle during the weekends.

Materials supplied for UNICEF: 144.7m. ø100
482.2m. ø150
24 couplings ø100, No Y → manholes
80 couplings ø150
4 tins of glue

FINANCING:

In October 1995, UNICEF NYHQ alloted a US$ 100 000 financed by PBA GI 95/73011, for the "Urban Sanitation Project in the Eastern Region of Cuba". These funds were focused to complete the local efforts of urban sanitation in the provinces of Granma and Guantanamo, specifically in the localities "Rosa La Bayamesa" and "Guisa" (in Granma) and "La Sombrilla" and "Santa María" (in Guantanamo).

For the periurban Santa María neighborhood were alloted US$ 10 000, distributed for the purchase of PVC pipings and connection parts, 100 and 150 mm, and cement.

The Cuban counterpart contributed with the rest of the funds:
- construction materials: bricks, steel, sand, stones.....$2,400
- transportation..... $850
- design and technical assistance.....$3,500
- payment for affectations of pavements and cultivated field.$3,502

Subtotal: $ 10,252 Total: $ 20,252

NOTE: the official UN exchange rate is:
1 Cuban Peso = 1 US$

INDICATORS:

· Beneficiaries (inhabitants)	402
· Manual excavation length (m)	630
· Piping length (PVC, 100 and 150 mm)	630
· Amount of connection parts (u)	104
· Block manholes (50 x 50 cm)	26
· Piping (m per inhabitant)	1.57
· Total cost of the system ($)	20,252
· $/inhabitant	50,38

HYGIENIC AND SANITARY EDUCATION:

At present, hygienic and sanitary education activities are carring aut in Santa Maria.

- **Do not throw garbage, paper, cloth fabric, ... into the manholes**
- To take care of piping location, there should be no excavations or perforations
- Do not pour harmful products (acids or others) which could damage the biological treatment systems

OPERATION AND MAINTENANCE: The same as conventional sewerage; Manholes cleaning.....

BENEFITS:

1. Protection of the ecology and environment of the area.
2. Disappearance of the flood plain areas and of the swamps.
3. Decrease of 90% of the vectors indexes.
4. Decrease of the children's morbidity rates.
5. Increase of the inhabitants' living conditions.

LESSONS LEARNED:

1. **The deficient sanitation problems were eliminated:** waste water flowing in yards and streets; diarrheic diseases; bad smells...
2. The community mobilization with the specialists' technical assistance made possible the construction of the Simplified Sewerage System; these neighbors made the system their own and now reap its benefits.
3. It was shown that it is possible to use this sanitation alternative in periurban areas.
4. This sewerage system is satisfactorily working after more than one year.
5. A Study Case was finished and a National Workshop was held to train the engineers of the other provinces.

REPLICA:

The Simplified Sewerage System can be extended in the periurban areas and in neighborhoods with medium or low inhabitants concentration having a regular water supply and where the dwelling layout and the topography allow to do it.

In Cuba, 3 Simplified Sewerage Systems are being carried out (in the provinces of Havana, Granma and Ciego de Avila) and there are 6 other projects to be accomplished in the near future.

COMPARATIVE TABLE

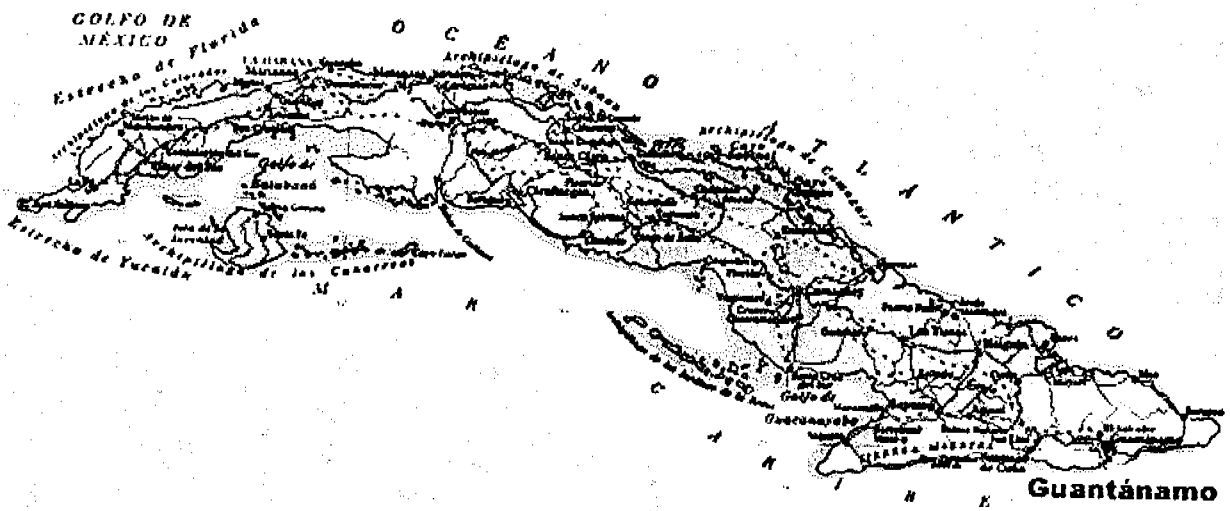
Aspects	Conventional sewerage	Simplified sewerage
Main sewage channels layout	By the center of the way	In areas out of the way
Design criterion	Minimum speed	Traction force
Minimum diameter	Connection: 150 mm Lateral: 200 mm	Connection: 75 mm Lateral: 100 mm
Work construction	A constructive institution is contracted	It is carried out with the participation of the beneficiaries, that means the community
Use	Generally in the city	Rural and periurban residential areas, subject to the topography, urban characteristics and houses layout
Minimum main sewage channels cover	100 cm	20 ~ 40 cm
Skilled labour	Skilled	Less skilled
Construction cost per capita in accordance with international experiences	~ 200 USD	~ 100 USD

Additional information in the Poster: maps, photos, sketchs.

Bibliography:

* Tecnologías innovadoras y de bajo costo utilizadas en los sistemas de alcantarillado; OPS/OMS Serie Técnica No. 29.
* Simplified Sewerage: Desing Guidelines; UNDP-WB.
* The Desidn of Shallow Sewer Systems; UNCHS-HABITAT.
* Estrategias de UNICEF en materia de Agua y Saneamiento Ambiental; UNICEF.
* Small Scale Sanitation; ROSS.
* Better Sanitation Programming: A UNICEF Handbook.
* Evacuación de Excretas en las Zonas Rurales y en las Pequeñas comunidades; Wagner-Lanoix.

UNICEF La Habana
06/06/1998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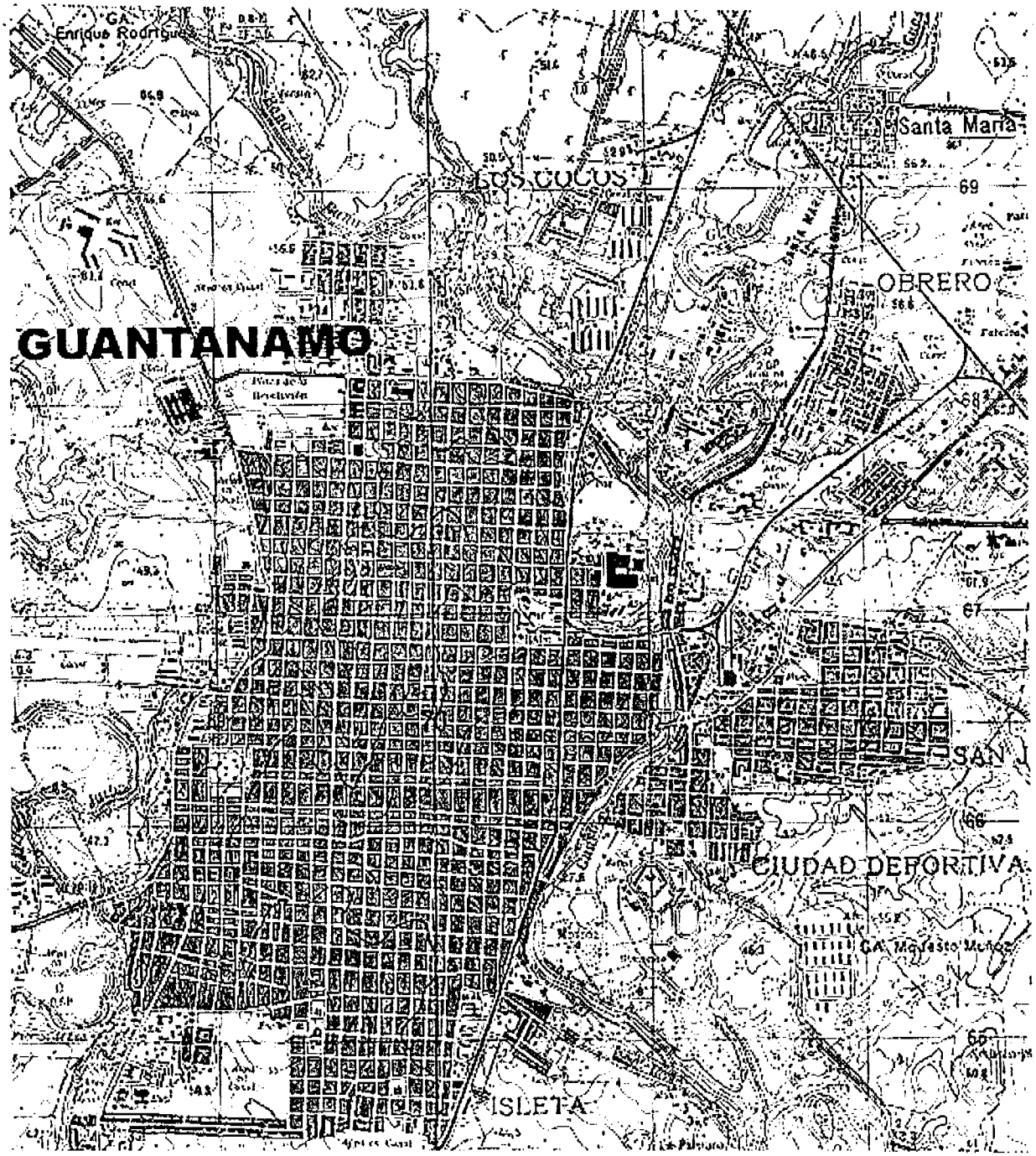
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LOS COCOS
OBRERO
Santa María
CIUDAD DEPORTIVA
ISLETA
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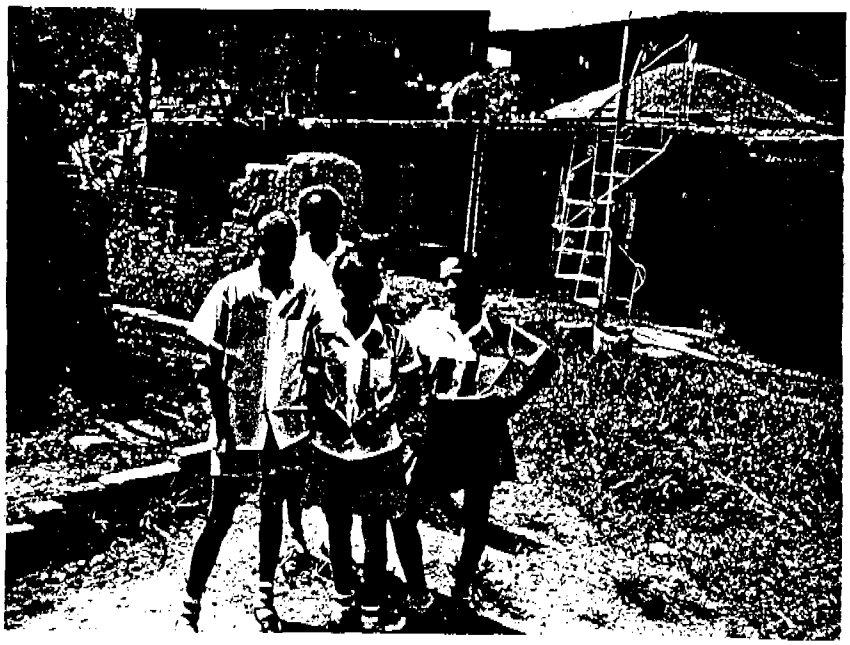
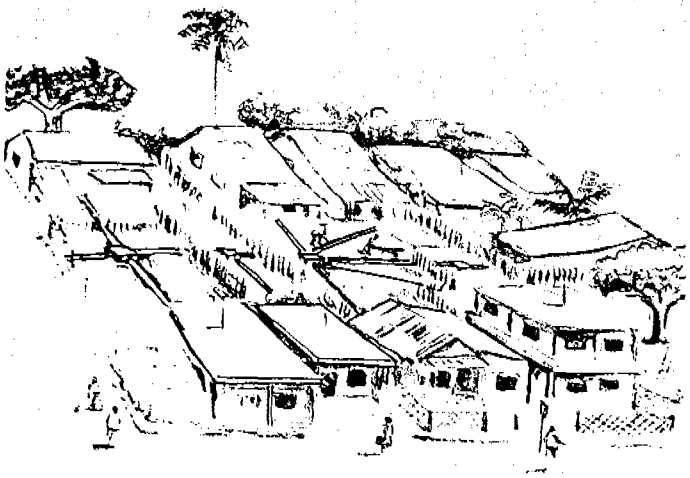
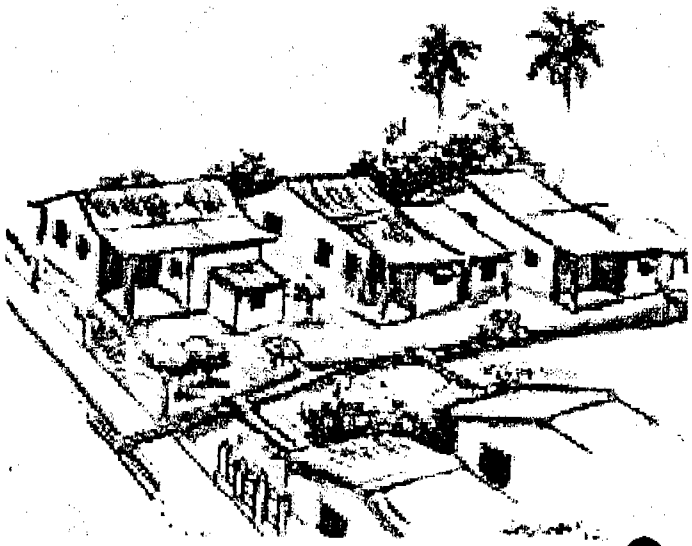
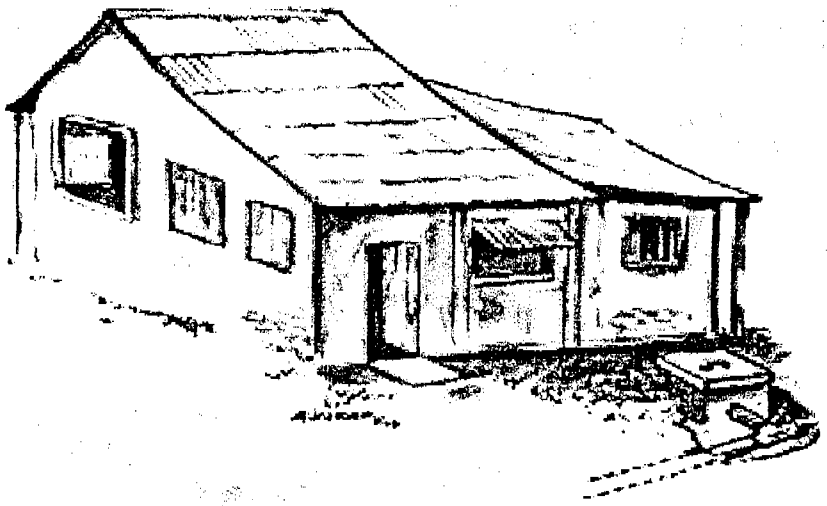
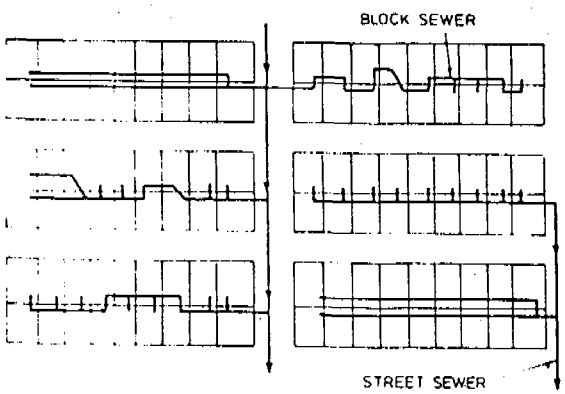










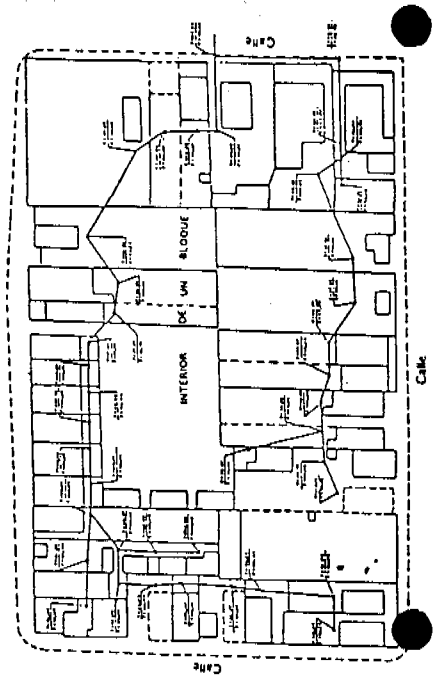
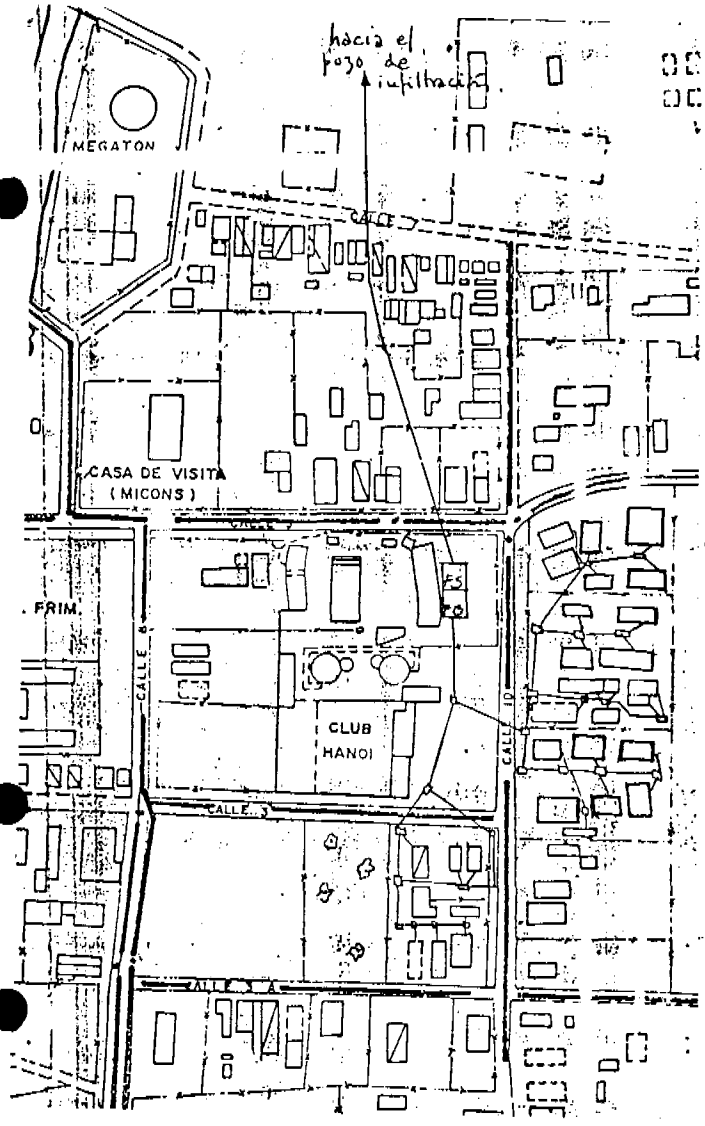
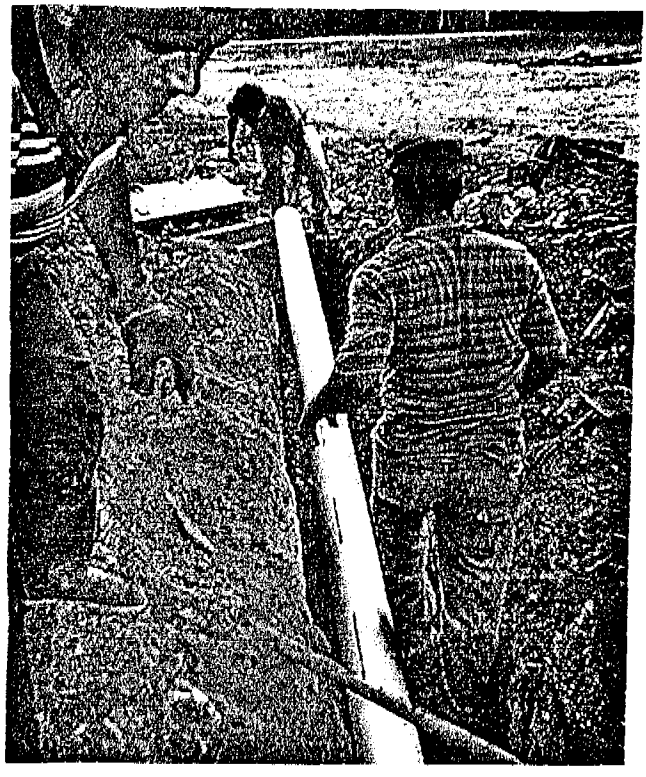
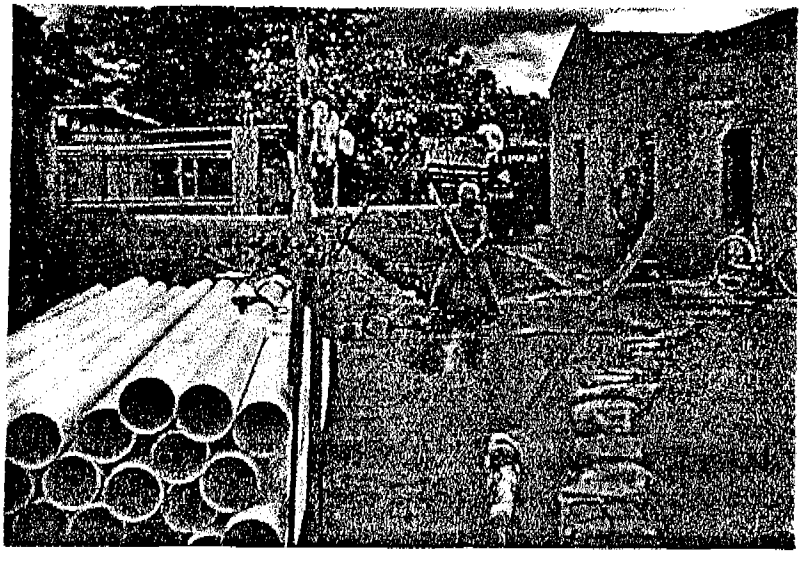


Figura 13. Sistema en régimen de condominio
Colector de derivación en condominio (dentro de una cuadra)


hacia el pozo de infiltración
MEGATON
CASA DE VISITA (MICONS)
FRIM.
CLUB HANOI
CALLE 8
CALLE 9
CALLE 10
CALLE A






SANITEC

Global Workshop on Environmental Sanitation and Hygiene

10-13 June, 1998
New York

Women & Sanitation : The Indian Experience

by

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Government of India
Ministry of Human Resource Development
Department of Women & Child Development
New Delhi.

"Though we may not ourselves observe rules of cleanliness, it is very essential to teach them to our children. If they learn to follow them, much improvement is likely to result in the course of a generation."

Mahatma Gandhi

Commitment to the Child

National Plan of Action

Major Goal Sanitation
Improved access to sanitary means of excreta disposal

Norm pertaining to Sanitation

A package linked with the demand and need and with a differential beneficiary contribution.

Objectives

i) To cover 10 per cent of population with sanitary facilities by the year 1997.
ii) To eradicate guineaworm disease by 1995

Activities

i) Taking sanitation as a package
ii) Adoption of a demand and need based approach to make the programme a people's movement
iii) Establishment/Strengthening of State/District Sanitation Cell
iv) Intensive district programming
v) Development of appropriate delivery system
vi) Adoption of an appropriate IEC strategy
vii) Empowerment of women on improved sanitary practices
viii) Involvement of community, voluntary organisations and NGOs
ix) R&D to develop appropriate area specific low cost technology to suit different geo-hydrological conditions.

WOMEN AND SANITATION : THE INDIAN EXPERIENCE

Sanitation per se is important for all as it impacts on the wellbeing of the individual as well as the community as a whole. Adequate sanitation is not only a prerequisite of a minimum standard of living but also affects the overall environment, health and quality of life of the community. In respect of women, the linkage between sanitation and health as well as the status of women within the household and the outside is even more important. Other than the direct impact on the women's health, lack of access to adequate sanitation also increases the vulnerability of women making their lives less secure and unsafe, and exposes them to inconceivable indignities (crimes), humiliation and suffering. There are also the substantially high economic costs of poor sanitation which manifests themselves in various ways. For the women, particularly, it implies loss of several potentially productive hours, thus contributing to her lower economic status, which in turn is an important basis for her lower social status. Inadequate sanitation also impacts on the quality of water available. Once again, while this does present a negative impact on the community as a whole, the resultant negative health implications, which particularly effect children, contributes to an added burden which is primarily borne by women.

2. The World Development Report, 1993 highlights the immensity of the problem of environmental pollution, which is a major health hazard. Globally, about 1.3 billion people in the developing world lack access to clean potable water and nearly 2 billion people lack adequate system for disposing faeces. Open

defecation, faeces deposited near homes and farms, contaminated drinking water, polluted rivers are all health hazards. The lack of water supply and sanitation is the primary reason of prevalence of 80 communicable diseases in developing countries. Among these, diarrhoea and intestinal worm infestation accounts for an annual burden of 117 million DALYs (disability adjusted life year) or 10 per cent of the total burden of disease in developing countries. In addition, inadequate water supply increases the risk of skin and eye infections, contaminated water causes guinea worm diseases.

3. Despite massive state intervention for safe water and sanitation, and in poverty alleviation programmes, the environment and poverty situation in India remains dismal. Millions of people still do not have access to adequate water particularly during the summer months, the women and girls have to walk long distances to fetch water from remote sources which causes physical stress and malnourishment and also exposes them to insecure environment away from home. In India, even after fifty years of independence, sanitation remains a relatively neglected area. The estimates reveal that around 90% of houses in rural India are without individual sanitation facilities and in cities and towns estimates show the range varies from 40% to 50%. Further, hardly 20% of the urban population have access to flush arrangement connected to sewerage system, 14% have access to water-borne toilets connected to septic tanks, 33% have bucket or dry latrines and the remaining 33% do not have access to any facility whatsoever." In rural areas, sanitary latrines are practically non-existent, merely 3% of the population was covered by the end of 1992, despite the country having started the National Water Supply and Sanitation Decade

Programme from 1 April 1981. People are facing an immense challenge to meet the basic needs of safe drinking water and protection of the natural environment.

4. Studies on environmental sanitation reveals some alarming facts and figures – around 87% of the population either defecates in the open or uses insanitary dry privies. Six hundred thousand scavengers, mostly women, are still employed to physically clean and carry human excreta to earn their livelihood, despite a ban on such employment and schemes for their rehabilitation. This exposes them to various health risks such as respiratory disorders, jaundice, tuberculosis. However, there is no legislation or Constitutional provision to support sanitation as a necessity and as a basic right. With the 73rd Constitutional Amendment in 1992, giving the Panchayati Raj Institutions the responsibility for drinking water and sanitation, it is now hoped and expected that the gram panchayats would be activated in accelerating the availability of water supply and sanitation. Air pollution is causing 4000 premature deaths. As a result, respiratory ailments have more than doubled over the last decade in major cities in India. Globally, 45% of the population of the world falls sick by using polluted water. Every year, industries across India discharge enough solid and hazardous waste to fill a pit one metre deep across 96 sq. km. The plastic garbage in the country has increased from 2% to 50% in five years. India is also the second largest plastic waster in the world. It recycles three times more plastic waste than it produces! More than 70% of food commodities are contaminated with toxic residual pesticides in India. Delhites generate 7,000 metric tonnes of garbage every day. Wastes of nearly 100 million tonnes every year are dumped on public land,

leaching into the water we drink and mingling with the air we breathe. Several million people in India live under water scarcity and stress. Deforestation, soil erosion, water pollution, and lowering of water table are consequences of direct human actions. The impact of this adverse sanitation status in the country is closely associated with the health, nutrition and quality of life of women in particular. This is reflected in the high incidence of IMR, morbidity, MMR, childhood diseases, and physical and mental retardation of children and a host of other communicable diseases. Women, particularly do not have equal access to the limited sanitation services due to the cultural and other constraints, including the issue of personal security and safety and lack of privacy.

5. The water supply and sanitation sector particularly in rural areas has been receiving increasing emphasis in successive Five Year Plans. The total investment upto the end of the Eighth Plan is estimated at Rs.336 billion approx. to Rs. 3.3% of the total government Plan allocation of which over 60% was for the rural areas. Today, the term sanitation connotes a comprehensive package of health related measures like safe drinking water, liquid waste disposal, solid waste disposal, excreta disposal, home sanitation and food hygiene, personal hygiene and community hygiene. The Policy planners are increasingly recognising the linkage between improved sanitation and the need to bring about better management of water, energy, and environmental sanitation with equal participation of women. Lack of sanitation is also in many ways a direct outcome of poverty, non-availability of shelter and mushrooming of unplanned habitation without basic amenities.

6. The Government of India launched a Centrally Sponsored Rural Sanitation Programme (CRSP) in 1986 with the objective of improving the quality of life of the rural people and to provide privacy and dignity to the women. The programme has been revised in 1991 and again in 1992. Fresh guidelines have been issued to combat the problem of sanitation. The revised programme aims at generation of felt needs and peoples' participation. The subsidy pattern has been changed limiting it to 80% for persons below the poverty line for individual household latrines. For exclusive sanitary complex for women, the subsidy will be limited to 70% the balance 30% being the contribution by the Panchayats/beneficiaries. For other sanitation facilities in the village, the subsidy will be 50%, balance cost being met by the Panchayats, 3% of the funds can be utilised towards administrative cost and 10% for health education, awareness campaigns, training of masons, demand generation based on felt needs, etc.

7. The revised programme aims at an integrated approach of rural sanitation. The concept of Rural Sanitary Marts for supply of materials required for construction of sanitary latrines, and involvement of voluntary organisations in publicity campaign and execution of the programme are also the new elements. Another salient feature of the revised programme is to develop at least one model village covering facilities like sanitary latrines, conversion of dry latrine, garbage pits, soakage pits, drainage, pavement of lanes, sanitary latrines in village institutions, cleanliness in ponds, clean surrounding around handpumps and other drinking water sources. With the

introduction of the revised guidelines, it is expected that the programme will gain the desired momentum and result in better coverage of the weaker sections of the society.

8. In the urban areas, due to rapid urbanisation and industrialisation, provision of water supply and sanitation facilities has emerged as a challenge. The Ministry of Urban Affairs has undertaken programmes like Low Cost Sanitation for Liberation of Scavengers, Accelerated Urban Water Supply Programme and Solid Waste Management. The 20 Point Programme of the Ministry lays emphasis on environmental improvement of urban slums.

9. The Government has also introduced the CDD-WATSAN Strategy (Control of Diarrhoeal Disease – Water and Sanitation). The goals of the policy include reducing the incidence of diarrhoeal cases among children under five years by 25% persons over three to four years period; and providing universal access to safe drinking water and improved sanitation coverage during the same period. The strategy is active in 15 States and aims to reduce the incidence of diarrhoeal diseases by improving access to drinking water, sanitation and health services, and by training mothers to prevent diarrhoea through sanitary practices and to manage it with oral rehydration therapy.

10. The linkage between water, sanitation and healthy sanitary practices was realized by Government from the beginning. Programmes for drinking water were launched from mid 50s. The Rajiv Gandhi Drinking Water Mission had identified strategies for meeting the short and long term needs and for undertaking macro-watershed management such as the

conservation of water and recharging of ground water acquafers. A total of over 520 million people have been provided access through public water supply since the launch of the first national water supply programme in 1954. By 1994, it was estimated that less than 5% of the rural population lacked access to safe water. It cannot, however be denied that issues of adequate supply of water, maintenance of the physical infrastructure for water and sanitation and significant problems of water quality continue to pose technological, financial and managerial challenges. The lives of women and children are particularly threatened as a result of excessive extraction of ground water, resulting in critical shortages and increasing distances over which water has to be transported. High levels of fluoride, arsenic and iron are posing major environmental health problems. Over extraction of ground water from the coastal acquafers has resulted in the increasing ingress of sea water leading to high salinity.

11. In India, beginning 1987, several area-based innovative projects have been introduced. These projects have made deep inroads in achieving their objectives and have also influenced the strategy for sanitation promotion at both national and state levels. Women have played an important role in making these programmes a success. Some of these projects are at Annexure.

12. Recognising the impact that sanitation and sanitary practices have on the status of women, with a view to review the existing situation pertaining to sanitation and evolve a proper strategy, the Department of Women and Child Development, Ministry of Human Resource Development organised a National Workshop on Women, Children and Sanitation on 11-12 April,

1997 in collaboration with Sulabh International Social Service Organisation and UNICEF. The Workshop focussed on issues relating to magnitude and dimensions of sanitation in India and its implications on the social, health and well-being of women and children. In pursuance of this, the National Institute of Public Cooperation and Child Development, an autonomous organisation under the aegis of the Department of Women and Child Development, Ministry of Human Resource Development is in the process of evolving a National Plan of Action for Sanitation.

13. On the whole, women, children and young girls in the society suffer the most for want of sanitation facilities. Provision of a latrine can save the female members from the ordeal of waiting for a particular time (before sunrise or after sunset) to ease themselves at the cost of their health and security and dignity. With mounting population pressure and vanishing/ receding village forests, the drudgery faced by women is in no way less painful than fetching the drinking water. Added to this, is the problem faced by the old and the sick who may find it difficult to travel long distances for defecation.

14. Recognising that safe water and sanitation development is an integral part of the socio-economic development for women specially, a multi-pronged approach and strategy to involve governmental, non-governmental, local bodies and communities is being adopted. The process of coordination, networking and linkages at national, intermediate and community levels has already begun. Sanitation is being included in all the Government schemes and programmes as an important component. The Department of Women and Child Development

has also set-up a system of networking with voluntary organisation to strengthen Government – VO partnership. The network with an initial 3000 Voluntary Organisations as its members is making efforts to create awareness and build-up the capacity of voluntary organisations on issues concerning children and women, including sanitation. One of the issue of NGOs Newsletter 'Sampark' focusses on sanitation. This network is being expanded to include all NGOs working with women and children. In addition, the Rashtriya Mahila Kosh, which is a Fund for women, has incorporated a component for providing micro-credit funding for low cost sanitation facilities self-help groups of women.

15. It is paradoxical that the women and children who are directly affected by poverty and environmental hazards have a limited participative role in the change process. Women have by far the most important influence in determining hygiene and household practice and in inculcating correct practices in their children. Women, therefore, can play a critical role in mobilizing the community to improve the environment and sanitation. With the 33% reservation for women in Panchayati Raj Institution, the focus on needs of children and women is receiving greater attention which will have a positive impact on the quality of life and status of women.

16. Women hold the key to the continued operation and effective use of these sanitation facilities for the benefit of the family's health and better environment. Therefore, Self Help Groups of women throughout the country are being sensitized on sanitation issues, as they can play an increasing role in creating a demand for provision of latrines by the family within

the premises or in the vicinity. These groups are also working towards women's empowerment through hygiene education and by helping them to take on non-traditional roles such as masons and to construct sanitation facilities. The Panchayats and local bodies have an important role with reference to sanitation as well as the involvement of women as managers and decision makers. In particular, the critical areas in which they have been called upon to act as catalyst are – awareness which includes changes in civic attitudes and habits, development of technology for collection and disposal of urban waste, mechanisms for maintenance of assets created.

17. While direct assault on sanitation issue is undoubtedly important, the long term strategy for sustainable development is achievable only through significant attitudinal changes in society. Thus, sanitation facilities, if planned with full understanding and awareness of perceptions and requirements of women by town planning and urban and rural development departments by the local bodies down to the village level will certainly have the desired impact. This necessarily implies increased efforts at sensitizing men to women's needs and empowering the women to enable them to play their rightful role in management of the environmental sanitation. The essential first step, however, is to increase the awareness of the issue among all concerned – men, women's groups, policy makers, medical practitioners, technicians and project personnel at all levels. Dialogue between women's organizations and various government departments need to be established and maintained.

18. The National Basic Strategies for the Enhancement of the Role of Women in Sanitation and Development in the Year 2000 calls for promoting efforts in mobilizing human and financial resources from the community for water and sanitation, as one of the basic needs for improving family welfare; Increasing the participation of women in construction, design and planning of water and sanitation facilities; Enhancing women's knowledge and capabilities in the maintenance of water supply and sanitation; and defining women's role in occupational training programmes so that they can become the forerunners of innovation in all spheres of life and livelihood.

19. India is a signatory to the World Summit Declaration (1990) on the Survival, Protection and Development of Children which, among other goals, envisages Universal Access to Sanitation by 2000 A.D. This would mean providing 97 million rural families with latrines! The National Plan of Action for Children in India commits itself rather to progressive improvement in access to sanitation with variations between the States, depending on their specific conditions and resources. And, while it is not possible for universal access to latrines by the year 2000, the universal promotion of hygienic sanitation practices and the adoption of programmes for improved sanitary practices through community and NGO intervention will greatly improve the quality of life for all families, and specially women.

20. To sum up, in India environmental sanitation is a necessity, but it has remained subdued and neglected at the community level. Sanitation, a way of life, has to be nourished by knowledge, so that it grows as an obligation and an ideal in human beings. At present, sanitation status is poor in the

country and is not supported by any legislation or adequate infrastructure. In the current scenario, sanitation has to be fought on war footing. There is an urgent need to sensitise women and mobilise families and communities by creating awareness about environmental sanitation. To make programmes of sanitation a success, women have to be empowered. In this context, the words of Mahatma Gandhi, the Father of the Indian Nation comes to mind – **"Women is the companion of man, gifted with equal mental capacities. She has the right to participate in the minutest details of the activities of man and she has the same right of freedom and liberty as he. I am firmly of the opinion that India's salvation depends on the sacrifice and the enlightenment of her women"** - Therefore, all concerned with women and children must join hands at national and international levels, to create an environment of networking, coordination and linkages to meet the sanitation needs of one and all, and reach the goal of "Sanitation for all of 2000 A.D.". We are hopeful that dramatic strides will have been made in the country when we next meet again to review the global progress.

****

Annexure

Innovative Community-Based Interventions in Sanitation

Sl. No.	Name	Year	Focus	Achievements
1.	Alwar Model – Community Motivation for Sanitation Package	1987	To promote a package of sanitation facilities	- 15% households had own latrines - 95% households kept drinking water on raised platform - 80% of family members used footwear while going to fields for open defecation. - 57% households had adopted smokeless chullahs
2.	Banswara – Community Handpump maintenance	1988	To involve and train illiterate rural women for maintenance of the village level operation and maintenance (VLOM) of handpumps	- Improved version of the 1975 and 1987 models of handpumps - Since the late 1980s, over 2500 women have been trained as village handpump mechanics and 20,000 as handpump caretakers
3.	Periyar Sanitation Package	1989	To promote the general cleanliness of the house and its environment as an indicator of improved sanitation - to promote school sanitation	- Of the 1662 primary schools existing, 1,372 schools have been covered under School Sanitation Programme. - 19% of households in periyar had access to latrines. - A number of States including Haryana, Tamil Nadu, Orissa, Uttar Pradesh, Rajasthan and Bihar are actively involved in school sanitation project.
4.	Medinipur – Rural Sanitation through Community	1990	Full cost recovery approach in providing sanitary facilities to the households	- 60% of the families covered belonged to lower socio-economic strata - 40% of families made the down payment towards full cost for constructing latrines. - Full Cost recovery approach has been extended to other states such as Assam, Karnataka and rural Delhi - Significant contribution in creating wage employment and facilitating income generation in rural areas - Unmarried women have started using the slogans 'No Weddings in Houses without Latrines' - By 1994, 74,000 latrines had been built in the district.

5.	Allahabad – A three Pronged Approach to Subsidised Rural Sanitation	1991	To provide subsidy for construction of latrines for promoting sanitation	- By mid-1994, the number of households provided with sanitary latrines exceeded 30,000
6.	Mysore – Clean Village Scheme	1991	To create awareness among people with regard to linking sanitation with health. - To link sanitation with literacy campaign called Akshara Arogya	- Covered over 20,000 households for providing sanitary latrines - Two production Centres for manufacturing pans, traps and other construction materials have been established with help of an NGO-Myrada
7.	Rural Sanitation Marts – commercial Enterprises	1991	To set up and run Rural Sanitation Marts (RSMs) - RSM deals with materials required for the construction of not only sanitary latrines but also those items which are required as a part of the sanitation package for whom sanitation and personal hygiene. - RSM is a commercial enterprise with a social objective	- RSM is a retail outlet offering a "Sanitation Package"- that is, all the materials required for latrines and other sanitary facilities as well as water jugs, ladles soap, nailclippers, plastic sandles, clothespins, oral rehydration salts (ORS) packets.
8.	Rajasthan – Empowering Women in Masonary	1991	To train women to become skilled masons	- Goal one mason per panchayat - These women earn Rs. 60-70 per day
9.	Ambala – Promoting Sanitation Through Schools	1995	To create awareness about the 7 components of sanitation and bring about a change in their attitude and behaviour	- Safe drinking water has been provided to all schools in the district - Two-pit latrines have been constructed in some schools of the district with PTA providing schools with basic materials

				- 7 to 8 year olds have zealously started talking about cleanliness, safe drinking water and personal hygiene - Change was visible in 73 schools of the district where the project was launched, as full sanitation had been achieved.
10.	Parbhani, Maharashtra – Intervention improves Health, Hygiene and Habits in slum kids	1991	School going slum children were exposed to 3H – health, hygiene and healthy habits.	- Had positive and remarkable impact on slum children's habits, hygiene and behaviour
11.	Garbage Management : Vatavaran Cleaning Brigade	1996	To work for the betterment of humans, whose daily life blends with the flora and fauna of the country	- implementing an indigenous resident friendly, scientific, eco-friendly and decentralised garbage management scheme the 'Cleaning Brigade'. - 'Cleaning Brigade' scheme provides employment to local ragpickers and unemployed youth - Army has joined Vatavaran in its endeavour. The jawans are managing a wormi-pit in their mess - Army officers' wives have started Cleaning Brigades in their respective residential localities with the help of Vatavaran
12.	Human Waste Management : Experience of Sulabh International Services Organisation	1970	To synthesize science – to date based technology with traditional wisdom so as to ensure a healthy community life through the creation of a pollution free environment and to provide toilet facilities in rural and urban areas in the country. - To take technology to the doorstep of the mud-hut of the common man.	- Sulabh alone has constructed 7lakh Shauchalayas called SulabhSauchalaya. - Sulabh has deviced an economical way of human waste management i.e. converting human excreta from toilet complexes to bio-gas which can be used for cooking and lighting purposes in households, streets or roads - More than 60 units in India have been established for generating bio-gas in India.

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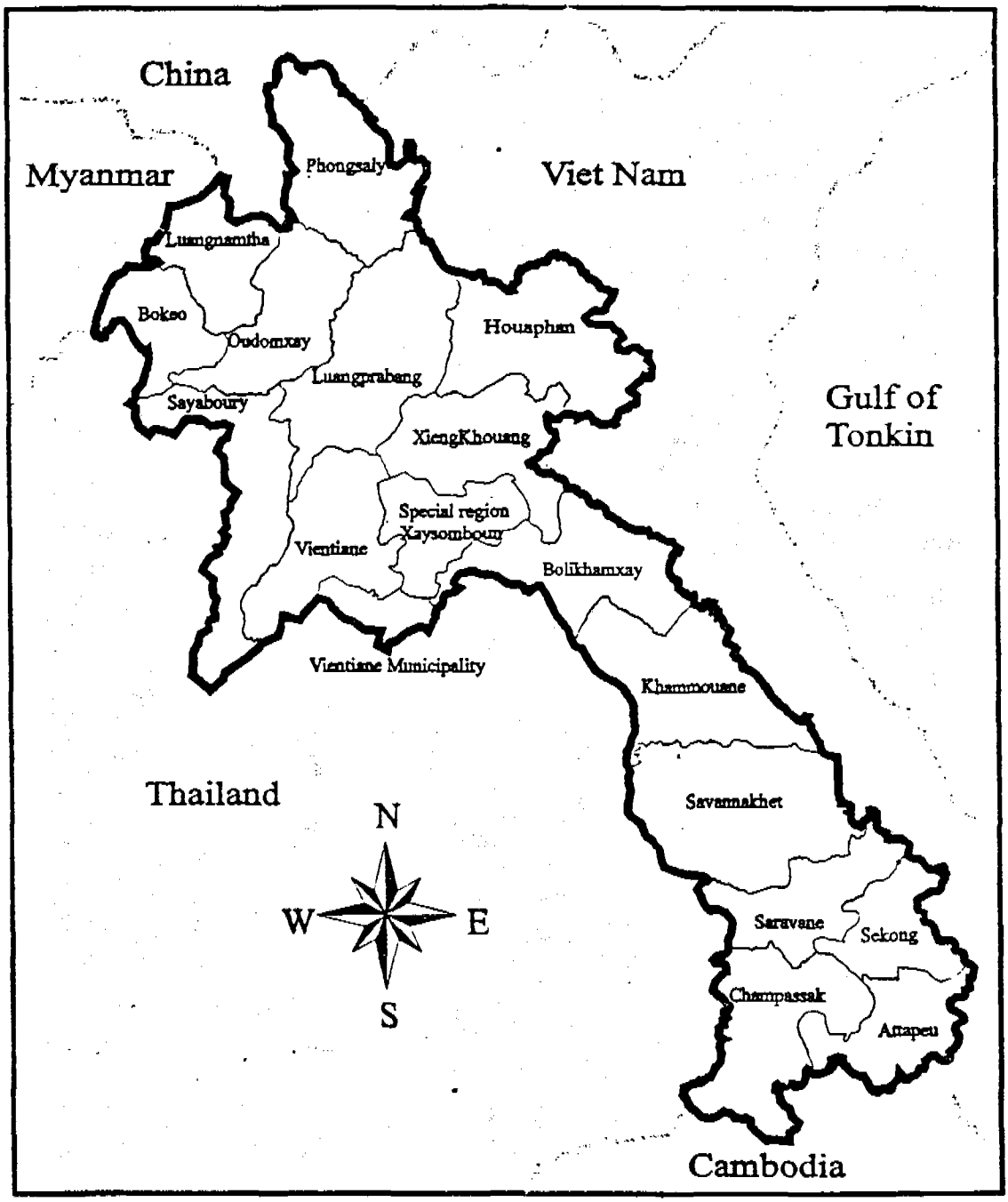
UNICEF Experiences in Leadership

WES in Lao PDR

Summary

UNICEF Laos, May 1998

MAP OF THE LAO PDR



Situation Analysis Summary of Children and Their Families in Lao PDR

Demographic Profile:

Population	- 4.6 M(1995)
Population density	- 19.4 persons/sq.km
Population Growth Rate	- 2.4 %
Fertility Rate	- 7.1% (LFBSS1995)
Women of Reproductive Age	- 23 %
Life Expectancy	- 51 years

Selected Wellbeing Indicators:

Infant Mortality Rate	- 113/1000 live births
Under 5 Mortality Rate	- 142/1000 live births
Maternal Morbidity Rate	- 653/100,000 live births
Rate of Unattended Births	- 65 % (estmiated)
Main Morbidity/Mortality Causes	* Malaria * Diarrhoeal Diseases * Acute Respiratory Infections (ARI)
EPI	- 54% DPT3 Immunization - 68% Measles Immunization - 35% TT2 - Pregnant Women
PEM	- 40% underweight - 47% stunting - 10.5% wasting
Breastfeeding	- 26-70% receive colostrum - 86% breastfed for at least 12 months - 47% fed premasticated rice in first month - 7% receive first food after 12months
IDD	- 95% of population affected - 65 severely affected
WES	- 51% population access to safe drinking water - 32% population accesses to latrine
Female Literacy Rate	- 70 % Lowland Women - 28% Midland/Upland Women
Literacy	- 58 % Total (42% Female, 64 % Male)

Clean, Safe and Sustainable

Water and Environmental Sanitation Programme

"I know this water pumps and latrines project will work for us because we have the whole village involved in it." Mr Poun, Head of Ban Phai Village, Savannakhet province.

The Context

Eighty-five per cent of the population of Lao PDR live in rural areas. Most of these people have access to traditional sources of water, but only a few of these are sustainable enough to last through the dry season, and people often have to walk several kilometres to fetch water. Moreover, water used by rural communities is often unsafe for consumption.

The poor level of awareness regarding good water consumption and sanitation habits, combined with the poverty of most rural communities are major barriers to good health. Most village hand dug wells are unlined, and rivers, streams and ponds are used for personal washing, laundry and as drinking troughs for animals, as well as for human consumption. The major cause of contamination to rural water systems is the common practice of using forest adjacent to the village as the toilet. In rural areas, 98% of existing schools have no water and sanitation facilities.

As a result, diarrhoeal diseases are still the second largest cause of morbidity in Lao children under five. Considering this, and the fact that, for six months per year, access to many rural villages becomes difficult because of heavy rains and flooding, preventive sanitation measures take on a high significance. Developing better hygiene practices through effective hygiene and health programmes is a priority.

Significant progress has recently been achieved in improving rural population access to clean water and sanitation (latrines). In 1996, rural water supply and latrines were accessible to 50 and 25% of the rural population respectively, compared with an estimated access in 1991 of less than 15% (water supply) and less than 2% (latrines). These achievements derive from improved service delivery and advocacy and were matched by institutional strengthening at different levels. However, the sanitation coverage in Lao PDR is still very low compared to other countries in the region.

Communities in Lao PDR generally contribute from 40 to 60% to the construction costs for water and sanitation facilities. This leads to greater sustainability and ownership, which in turn results in better usage of facilities and an improved impact on overall health. At the central level, institutional, financial and human resources have improved in the last few years, but the Government is still depending on external support for the implementation of Water and Environmental Sanitation programmes. Further capacity-building and institutional strengthening is required to reduce this dependency.

The Water and Environmental Sanitation Programme for 1998-2002

The programme goal is to improve and increase the accessibility, use, sustainability and impact of water supply, sanitation facilities and hygiene, resulting in a general betterment and advancement in the quality of people's life in poor, rural communities.

This will be achieved through institutional strengthening and capacity-building at all levels and in the private sector; by increasing sustainable water and sanitation coverage; by improving and increasing health and hygiene education in rural, remote and poor communities, as well as in primary schools; and by reducing the work load of people, particularly women, from rural, remote and poor communities.

Under the Water and Environmental Sanitation programme for 1998-2002, the rural water supply coverage should increase from 50% to 80% and the rural sanitation coverage from 25% to 45%. A total of 1,500 primary schools shooed are equipped with water and sanitation facilities.

The Water and Environmental Sanitation programme includes four projects:

Project 1 Support to Institutional strengthening and Capacity-building
This project will aim at developing and strengthening institutions at the central, provincial, district and community levels, in the planning, management and implementation of water and environmental sanitation interventions. The project will also assist these institutions to focus on the community as the client. The needs of poor, undeserved and remote areas will be emphasised.

Capacity-building and institutional strengthening will be achieved by identifying target groups and training needs and by conducting training in relevant areas such as water supply and sanitation techniques and health and hygiene education. The establishment of human resources and institutions at the provincial and district level will be promoted.

The project will equip the districts according to such parameters as the needs of the population, the appropriate technology and local customs, in order to ensure sustainability, cost-efficiency and replicability.

Project 2 Support to Primary School Sanitation Programme
This project will provide assistance and advocate for the provision of water and sanitation facilities in primary school of rural areas. The project will also promote better hygiene practices and behaviour at school and at home.

This will be achieved through installation of water supply facilities and latrines in primary schools, as well as by the establishment of standards, designs and guidelines for such facilities. Education on water and environmental sanitation will be integrated into the primary school curriculum and education materials will be designed. Primary school teachers will receive training in hygiene and health education.

Project 3 Support to Promotion of Better Hygiene Practices and Service Delivery at Community Level
This project will serve to promote appropriate, affordable and cost-effective water and environmental sanitation technology at the community level.

This will be achieved through the installation of water supply facilities, the establishment and training of Water and Sanitation committees, hygiene and health education and control of water quality standards. Cash assistance will be provided to communities and families in remote and poor areas for the installation of water and sanitation facilities. Pilot demonstration schemes will be established for the improvement and expansion of such facilities throughout the country.

Project 4 Reinforcement of the National Structure to Ensure Sustainability
This project will provide support to the Government so that it can improve its capacity to face present and future challenges in the sector of Water and Environmental Sanitation.

This will be achieved by supporting the institutionalisation of the training for Water and Environmental Sanitation technicians and engineers at the National University. The project will also support the adoption of national standards and policies, as well as the establishment of national gender policies and strategies. The private sector involvement in the Water and Environmental Sanitation sector will be encouraged.

Major Achievements

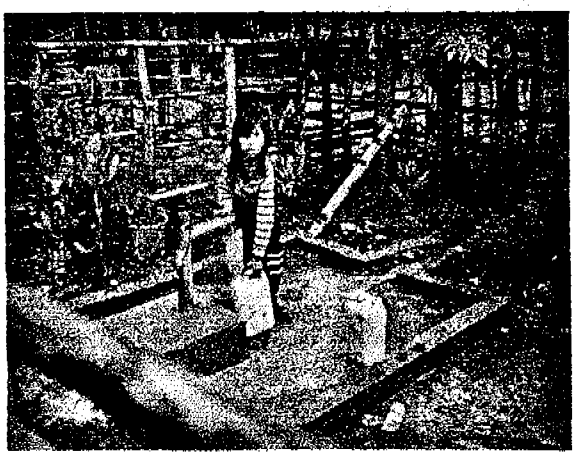
- More than 162,156 people benefit from 29 gravity fed water systems, 115 hand dug wells, 100 rain water jars and 888 borehole water systems
- 48,000 people benefit from the construction of 8,100 family latrines
- 50,509 primary school children from 145 primary schools in nine provinces benefit from the Primary School Sanitation Programme
- Over 5,000 water supply care-takers and 500 village masons trained
- Over 400 provincial and district technicians and 29 central level staff trained

Impact of WES–Human Interest Story

Home-based Sanitation

Ban Phai, 55 km from Savannakhet, is the site of a community-based water system. Mr Poun, the village head at Ban Phai for six years, has helped his village start building a new family latrine and in-school latrine system. He is very active in promoting the villagers to use the facilities and to be involved with the project from the outset.

In 1997 the village organised the first step, the installation of 105 water pumps, "We can see that the water is cleaner and it encourages people to be hygienic, now people only want to use water from good sources and do not want to go back to the old ways", said Mr Poun. After the success of the water pump system the village decided to apply to the local water authorities for funding for a new latrine project.



The village is now constructing latrines for the Primary School and for each house in the village. It is the first time any of the villagers will have used latrines.

The village is now constructing latrines for the Primary School and for each house in the village. It is the first time any of the villagers will have used latrines. A group of young men from the village mix the cement out of local materials and everyone joins in to mold the new latrines. Mr. Poun said, "I know this water project will work for us because we have all the village involved in it."

He sees the future of his village in developing their living standards and has many ideas as to how they can improve their small-scale economy. " We must complete our water projects and then we can start organising crops to plant, I would like the village to start growing chili and more field rice." The water scheme has created a new sense of community achievement and motivation in the village for them to improve their lives.

Together with the local water authority Namsaat, UNICEF is supporting the Water and Environmental Sanitation Community Level project, under its Water and Environmental Sanitation Programme

LESSONS LEARNED FROM THE SANITATION PROMOTION WORKING GROUP

Umbrella Concepts

1. Partners, including the private sector, must be mobilized for networking and alliance building to sing in harmony.

- Collaboration - 'we should be singing in harmony'
- Knowledge Center
- Inter-Country, Internal & External
- Build new alliances with the private sector/financial institutions
- Remember to build on the existing efforts of other players in sanitation promotion
- There exists alliances such as Garnet/WSSCC. The challenge is for UNICEF to make use of these mechanism

2. Applied research gives strength to co-operation through the exchange of ideas.

- There should be an exchange of experience
- If there is a history of sanitation promotion to build on, build on it. If there is not, do not hesitate to create.
- Provide guidance for colleagues by sharing the results of new technologies
- Pilot studies of behavioral change provide new ways to position the messages driving promotion. Share these experiences through a network

3. Information/Data collection, analysis, and dissemination and use.... leads to advocacy; this requires skilled people.

- situation analysis, MPO, PPA
- programme planning
- Develop sector memories at country level, create and use knowledge centers
- Create success stories
- This needs to be done jointly with local and national partners (including communities). This promotes consensus building
- There is a lack of dis-aggregated data about the peri urban poor. This is a constraint

4. Promotion needs to take place at three levels to build political will

- There appears to be consensus that 'political will' is crucial. However, waht are the best practicies for acheiving it? How does one secure the commitment that is neccesary?
- Groups such as the Collaborative Council Working Group on Sanitation work to establish political will & commitment. Use structures that already exist and have
- Use the mass media and include in the alliance building process

The levels

- a) The International Community
- b) Regional networking
  - I. Networking
  - ii. inter-governmental cooperation
- c) National level
  - I. Relevant Legislation
  - ii. Policy guidelines
  - iii. Government political will
  - iv. Focus on high level authority
  - v. Compulsion
    - a. Regulation/compulsion should not be alien to the culture
  - vi. Decentralization
  - vii Political commitment at a high level
- d) Local
  - I. Social mobilization leading to action

- ii ground level access to information, resources and control
- iii. Micro credit
- iv. By-laws
- v. Gender

5. Sanitation should not focus solely on health

- Education; Environment; Link to ongoing government programmes; economic development; dignity; poverty alleviation; civilization promotion; health education to farmers; school sanitation and primary education

6. We need to broaden our definition of sanitation

- to include behavior and facilities,
- recognizing that it is a continuum, not something we have or do not have.
- Inappropriate standards (all or nothing approach) may not be helpful.
- Recognize that the community may already have a wealth of experience. Draw on that experience and (especially where resources are extremely scarce) encourage a level of coverage that they can accomplish themselves

ISSUES:

a. Development assistance should know no political boundaries
b. Using local builders may help to create commitment
c. Create a cycle - users, providers, decision makers, aid agencies, etc. Information dissemination and promotion is enhanced by links between these stakeholders.
d. The link to water should never be ignored
e. Don't miss any opportunity that arises
f. Subsidy - promote or not? A difficult and much debated issue.
g. Sustaining the promotion is important to its success.
h. Promotion through demonstration projects
i. Use of incentives such as providing one or two bags of cement to each household
j. Sanitation promotion programs need to differ depending on the target population's perception of theproblems and the availability of solutions. *e.g. 1. Problem perceived and affordable and acceptable technology is available...match the need with solutions such as training. 2. Perception of sanitation problem but no solution is directly available... applied research with the community and technology and communication 3. Sanitation problem not perceived by the community.... a) social mobilization and awareness b) behvaioral change programs c) marketing specific problems.*

SSH

Additional comments and suggestions in plenary discussion:

- Need and room for involvement of NGOs
- To ensure the relevance of sanitation and hygiene as a topic in the school curriculum it can be linked to environment and/or health education
- Teacher's association are important allies and partners to involve in SSH programmes.
  Experience, INDONESIA, INDIA
- CHINA: UNICEF support teachers to make better use of existing text books
  Technology: good existing government document on SSH - the challenge is how to transfer this document to action
- It is important to supplement existing textbooks and to promote participatory, inter-active learning
- Vietnam: Good cooperation between WES and Education
  Main aim: promotion of hygiene education is the focus, but at the same time sanitation facilities are important
- Pakistan
  and India:training of teachers very important (both pre-service and in service)
  Important to focus mainly on a few key messages toi achieve behavioural change
- Try to integrate hygiene messages in the existing curriculum (not add additional subject to overburdened teachers)
- Also target pre-schools for developing good behaviours of young children from an early age.
- Adequate water supply in schools close to the sanitary facilities is a necessary prerequisite to achieve improved hygiene behaviour by children
- In urban areas lack of space for adequate facilities can be a constraint
- The organisational aspects of operation and maintenance of water supply and sanitation facilities in schools are crucial. Who is responsible and who will pay for O&M? Assure community ownership of the school as a whole and their capacity and ownership to maintain WS&S in schools
- Resources, both human and financial must be carefully accounted for in programme planning and design?
  - Cost-sharing is important
  - In every country different cost sharing and cost recovery arrangements are needed.

Going to scale

13) Going to scale needs to be part of the programme design already at the pilot phase
14) Programmes need to utilize and build on existing country specific systems and opportunities and institutionalize them for going to scale.

Cost sharing

15) Technical options need to be considered cost-effective and beneficial by all potential cost sharers
16) Cost sharing is important to ensure sustainability and increased coverage
17) Cost sharing contributes to commitment from all stakeholders and community ownership thus leading to sustainability

Suggestions on Urban Sanitation

- Improved collection and use of dis-aggregated data to identify access to services and disparities, including use of GIS-mapping

- Community mapping, linked to city mapping is useful in analyzing the situation of services, land-used patterns, and areas affected by poor environmental conditions.

- Different strategies need to be considered dependent on community perception of sanitation as a need: If high priority, then one can deal with meeting the demands appropriately, resource mobilization. If low priority, then motivation is required to create demand.

- Issue of good governance and local government as an extension of and decision maker on behalf of the community needs discussion (meaning unclear ??)

- R&D in urban sanitation is important

- Lessons learned show how we can do better - but not how we can accelerate coverage - which is the main challenge

- "PLA" processes should be promoted to involve community in need identification, *rappeur* building with outside facilitators, etc.

- Advocacy with major donors/financing agencies to ensure poor are included in major infrastructure programmes. They need to be encouraged to participate in planning, design, choices, implementation, monitoring.

- Watch for including local solutions

- Need to think more thoroughly about cost-sharing

ECOLOGICAL SANITATION
– a realistic alternative

Presented by Ingvar Andersson and Bengt Johansson, Sida, Stockholm

Conventional waterborne sewage system has proven to be inappropriate to solve the sanitation needs in developing countries. Only wealthier upper- and middle class areas are normally provided with those services. Approximately 90% of the sewage in cities in developing countries is today discharged untreated, polluting rivers, lakes and coastal areas. Pit latrines have certain limitations, especially in densely populated areas, with risks of contamination of groundwater etc. Further, there is a need to utilise the nutrients, especially in human urine, rich in nitrogen and phosphates, for agricultural purposes, thereby reducing the needs for fertilisers.

Furthermore, many of the rapidly expanding towns and cities are located in arid och semiarid areas where water scarcity is, or will be, severe reducing the volume of water available.

About three billion people are today lacking adequate sanitation. Within 20 years from now, it is expected that an additional two billion people will live in towns and cities, mainly in developing countries, demanding safe sanitation.

It is obvious that this enormous challenge leads to a need to re-think, a need to raise the status of sanitation and a need for new approaches, techniques and methods. To this end Sida supports a research and method development programme in ecological sanitation called SANRES.

The purpose of this paper is to give an overview of ecological sanitation ('sanitise-&-recycle') based on the experiences and conclusions from the SANRES R&D programme.

The SANRES programme

Most conventional technologies are based either on removal of human excreta through a network of underground pipes ('flush-&-discharge') or indefinite on-site storage in deep pits ('drop-&-store'). In both cases sanitation is regarded as a disposal problem. We need an alternative based on the fact that human excreta is a valuable resource.

In 1993 Sida launched the SANRES R&D programme, aimed at developing alternatives in sanitation. Over the past 5 years SANRES has built up an international network of researchers and practitioners. New ideas have been discussed at a number of national and international workshops and are at present tested in full scale projects in Bolivia, China, El Salvador, Ethiopia, India, Mexico, South Africa, Sweden and Vietnam. A monograph, 'Ecological Sanitation', is to be published by SANRES in August this year.

The work of SANRES is based on the notion that sanitation should contribute towards equity and a sustainable society and must meet or at least be on the way towards meeting the following six criteria:

- Affordable: A sanitation system must be accessible to all households in the community.

- Prevents disease: A sanitation system must be capable of destroying or isolating faecal pathogens.
- Protects the environment: A sanitation system must prevent pollution and conserve valuable water resources.
- Returns nutrients: A sanitation system must return plant nutrients to the soil.
- Acceptable: A sanitation system must be aesthetically inoffensive and consistent with cultural and social values.
- Reliable: A sanitation system must be easy to construct and robust enough to be easily maintained within the limitations of the local technical capacity, institutional framework, and economic resources.

Sanitation systems fulfilling these criteria can be called 'ecological sanitation'.

Key features of ecological sanitation

A key feature of ecological sanitation is that it regards human excreta as a resource to be recycled rather than as waste to be disposed of. There are several reasons for recycling the nutrients in excreta. Recycling prevents direct pollution caused by sewage being discharged or seeping into water resources and ecosystems. A secondary benefit is that recycling returns nutrients to soil and plants, and reduces the need for chemical fertilisers. It restores good soil organisms to protect plants, and it is always available locally, wherever people live.

Another key feature is sanitation of human excreta. SANRES recommends the following strategy for sanitation (pathogen destruction) in ecological sanitation:

- Keep the volume of dangerous material small by diverting the urine and not adding (flushing) water.
- Prevent the dispersal of material containing pathogens by storing it in some kind of secure device until safe for recycling.
- Reduce the volume and weight of pathogenic material by dehydration and/or decomposition to facilitate storage, transport and further treatment.
- Reduce pathogens to a harmless state by sanitation: primary treatment on-site (dehydration/decomposition, retention), secondary treatment on/off-site (further dehydration, high temperature composting, changes in pH by the addition of lime), and, if necessary, tertiary treatment (incineration).

Urine is usually sterile and contains about 90% of the fertiliser value of human excreta. In ecological sanitation systems urine is often diverted away from faeces – they are never mixed with each other. Urine diversion requires a specially designed toilet seat-riser or squatting slab. Such devices are manufactured in a number of countries (for example in USA, China, Mexico, Australia and Sweden).

Urine can either be used as fertiliser by the producer household or else collected at a communal level and used by commercial farmers. (Where there is no interest in actively using urine it is possible to dispose of it in an evapo-transpiration bed or by evaporation.)

Human faeces, not urine, are responsible for most diseases spread by human excreta. The most common methods to sanitise faeces are dehydration and decomposition. Dehydration of faeces is easier if they are not mixed with urine and water. When faeces decompose, the different living things in them die and are broken down into smaller parts. Thus with either method germs, eggs and other potentially unsafe, living things are made harmless. It is only then that faeces can be safely recovered and recycled.

Examples of ecological sanitation

The forthcoming SANRES monograph will present a number of examples of ecological sanitation, both ancient and modern. In its own context each of these examples does, to a certain extent, meet the criteria listed above: disease prevention, environment protection, return of nutrients, acceptability, affordability and reliability. All of the examples have a great potential for disease prevention, all of them do protect the environment and conserve water, and the variety of ecological sanitation systems available makes it possible, in most cases, to find one that is culturally acceptable. Affordability is relative and while some of the systems described here are sophisticated and expensive, others are simple and low-cost. There is often a trade-off between cost and operation: lower cost solutions mean more manipulation and care of the sanitation system – with higher cost solutions, manipulation and care can be reduced.

The examples that follow are organised according to the process used to achieve pathogen destruction: dehydration or decomposition.

Sanitation systems based on dehydration

When something is dehydrated all the water is removed from it. In a dehydrating toilet the contents of the processing vault are dried with the help of heat, ventilation and the addition of dry material. The moisture content should as quickly as possible be brought down to below 20%. At this level there is a rapid pathogen destruction, no smell, and no fly breeding.

The use of specialised collection devices, which divert urine for storage in a separate container allows the faeces to be dehydrated fairly easily. As discussed previously, since urine contains most of the nutrients but generally no pathogens, it may be used directly as a fertiliser without the need for further processing. It is generally difficult to dehydrate excreta without urine diversion, although in extremely dry climates this is possible.

The classic example of an ecological sanitation system based on dehydration is the Vietnamese double-vault toilet. It is widely used in northern Vietnam and over the past 20 years the concept has also been used in Central America, Mexico and, with some modifications, India.

The LASF (Letrina Abonera Seca Familiar) is a slightly modified version of the Vietnamese toilet. It was introduced into Guatemala in 1978 and over the past 20 years thousands of units have been built in Central America, particularly in El Salvador. A similar development has taken place in Mexico where the system is promoted under the name of Sanitario Ecologico Seco.

In Mexico and Central America there are now many examples of urban use of this type of sanitation. One example is in El Salvador: Hermosa Provincia is the name of a small, densely built up low-income barrio in the centre of San Salvador. Water is scarce, plots are small and the sub-soil is hard. Here all the 130 households built LASF toilets in 1991. As there is little space

between the houses and often no backyards, the LASF toilet is usually attached to the house, sometimes even placed inside the house.

All the units in Hermosa Provincia are still, after 6 years, functioning extremely well thanks to a high level of community participation. There are no bad odours from the toilets and no fly-breeding in the processing chambers. The dry mixture from the toilets is used to reclaim wasteland or put in bags and sold.

Another example is from Mexico where the Vietnamese double-vault toilet has been promoted since the early 80s. The Mexican version of the Vietnamese toilet is conceived as a high-standard, in-house solution. Properly managed there is no smell and no fly breeding in these toilets when used in the dry climate of the Mexican highlands.

In Mexico the price (1997) of a seat-riser in polished concrete is the equivalent of USD 16 (Mexican Pesos 126). A complete free-standing unit including superstructure is the equivalent of USD 150 (Mexican Pesos 1,200). In El Salvador the price (1997) of a contractor built LASF toilet excluding superstructure is the equivalent of USD 125 (Colones 1,100).
The experience of almost 20 years of use of the Vietnamese double-vault system in Mexico and Central America is overwhelmingly positive. Where the systems failed it was usually due to non-existent, weak or bungled information, training and follow-up.

Two urban applications are particularly significant. In San Salvador the system has been successfully used in a poor, high density squatter area; in Cuernavaca by a number of middle class families living in modern, high standard houses. The common factor is highly motivated and well-instructed users.

A sanitation system based on urine diversion and dehydration was developed in Sweden in the early 80s. Urine is flushed into an underground storage tank with 0.1 litre of flush water. Faeces and toilet paper drop down into a insulated vault where it is collected by an 80 litre plastic container. When the container is full (after 2–3 months) it is put aside and an empty container is placed under the toilet. The full container is left in the vault for about 6 months. The dehydrated contents can then be further treated in a ventilated compost bin (for the toilet paper to decompose) or burnt. These toilets are placed in indoor bathrooms. A fan sucks air from the bathroom, down the toilet to the processing vault and out through a ventpipe.

The retail price of the porcelain toilet seat-riser with urine diversion is about USD 360 (SEK 2,900). The total on-site cost for a toilet like this (seat-riser, fan, processing vault, transport container and a 1,000 litre urine tank) is in Sweden USD 650–750 (SEK 5,200–6,000). There are at present about 800 units installed in Sweden: in weekend houses, permanent houses, industries and institutions.

Sanitation systems based on decomposition (composting)

Composting is a biological process in which, under controlled conditions, various types of organisms break down organic substances to make humus. In a composting toilet human excreta, along with additional bulking agents such as vegetable scraps, peat moss, wood shavings or coconut husks, are deposited into a digestion vault where soil-based micro-organisms decompose the solids – just as eventually happens to all organic materials in the natural environment. Temperature, airflow and other factors are controlled to varying degrees to promote optimal conditions for composting. The humus produced by the process is an excellent soil conditioner,

free of human pathogens when the right conditions are achieved and adequate retention time is allowed in the digester. Odours can be extracted directly out above the roof through a ventilation system.

Composting systems could often benefit from urine diversion but most composting toilets built today collect urine and faeces together. While much of the nitrogen in urine is lost in composting systems, the resulting humus, or compost, retains other nutrients and is a valuable soil conditioner.

Composting toilets for use in weekend houses were introduced in Sweden more than 50 years ago. Since then a wide variety of models have come on the market and they are now used in different parts of the world, including North America and Australia. Commercially available composting toilets range from small units about the size of a standard flush toilet fixture to larger ones which utilise a simple toilet pedestal in the bathroom connected by a chute to a digestion vault below the floor. Nowadays they are used not only in weekend houses but also in regular houses, in institutions and as public toilets. About 10.000 'Clivus Multrum' toilets for individual households are in use world-wide. In USA there are also a few thousand public installations in use in national parks, highway service areas, military camps, the biggest ones catering for about 20,000 persons per day.

Other examples of ecological sanitation based on composting can be found on some of the small island nations of the Pacific where environmental contamination is a major concern. The experience so far indicates that it is possible to attain a degree of liquid evaporation and maintenance-free operation not previously reported for composting toilets in a humid environment. All of the demonstration units have achieved zero-discharge of pollutants for at least one-and-a-half years of use.

In Kerala, India, the Vietnamese sanitation system has been adapted to a population using water for anal cleaning. Not only urine but also the water used for anal cleaning is diverted - in this case into an evapo-transpiration reed-bed next to the toilet. Straw, leafy material and paper scraps are also added which means that in the Kerala version the process is decomposition rather than dehydration. A dry, above-ground toilet was chosen because in this area with a high groundwater table wells have been contaminated by seepage from pit and pour-flush toilets. The new system has been introduced cautiously over the past 4 years: so far to 70 households in a number of villages. The results are promising: the toilets are well maintained and free of flies and smells.

Making ecological sanitation work

The ecological sanitation systems described above are neither widely known nor well understood. They cannot be replicated without a clear understanding of how they function and how they can malfunction. They have several unfamiliar features, such as urine diversion toilet seat-risers and squatting slabs, which raise questions about their cultural acceptability. In addition they require more promotion, support, education and training than ordinary pit latrines, VIP latrines or pour-flush systems.

Some concerns have been voiced about the cultural acceptability and health aspects of the handling of the end-product at household level. While some cultures do not mind handling human excreta, others find it ritually polluting or abhorrent. Most cultures are probably somewhere in between these two extremes and our experience is that when people see for themselves how a well-managed ecological sanitation system works, most of their reservations disappear. We should not therefore presuppose how a culture will react but rather carry out a trial and gauge the reaction. The roles and responsibilities of men and women in relation to health and sanitation in

the household and community have also to be considered when the concept of ecological sanitation is introduced.

Another important point about handling is that once ecological sanitation has gone to scale and hundreds or thousands of units are in use in towns and cities, individual households no longer need to handle the products at all. At that scale the output from ecological sanitation toilets can be collected, further processed and sold by neighbourhood or centralised collection centres with trained personnel. This, in fact, is the ideal solution.

An issue, which causes debate, is whether ecological sanitation toilets will be used properly in cultures where washing after defecation is mandated by tradition or religion. It is assumed that such cultures would always require users to wash over the vault and this additional water would soon spoil the delicate process going on inside. This concern is again overcome with greater familiarity of where these systems are used. Two Muslim cultures, in Yemen and Zanzibar, where ecological sanitation systems have been traditional, wash away from the toilet opening. This is done by tradition, for the principles behind their dry systems require that it be done this way. There is no reason to believe it should pose insurmountable problems in other washer cultures, as indicated by the success of the project in Kerala.

Sceptics often claim that ecological sanitation is an inferior alternative: it will be smelly, fly-producing and incompatible with modern living. In many cultures the toilet is placed far away from the house, at the back of the garden, near the pig-pen. It has a rough finish, is dark and not kept very clean. This low-standard toilet has given ecological sanitation systems a poor image. This is a valid concern because ecological sanitation systems are more sensitive to bad design and management than other on-site options such as pit toilets. If they are not designed and managed properly they can be unpleasant and not achieve the health and environment protection features for which they were intended. However, once newcomers gain familiarity with the options and see them in practice when designed and managed properly, they realise that ecological sanitation can be a high-standard, modern option. Upscale versions for non-poor households have been developed in Europe, North America and Australia. These are very attractive and situated inside a modern bathroom, so the image changes completely. Such systems, rather than being inferior, should be viewed as superior, as they protect the environment as no other existing toilet option can.

A concern is often expressed that some of these systems are simply too expensive for low income households in developing countries. Costs still tend to be high because there is no mass production of specific components and no institutions and routines for emptying toilet vaults, secondary processing and marketing of end products. Ecological sanitation systems need not cost more than conventional systems though. In most cases it is possible to find or develop an ecological sanitation option to fit the budget. Some ecological sanitation systems are sophisticated and expensive, while others are relatively simple and low-cost. There is often a trade-off between cost and operation: lower cost solutions mean more manipulation and care of the sanitation system – with higher cost solutions manipulation and care can be reduced.

Ecological sanitation systems need not be expensive to build:

- the entire device is built above ground – there is thus no need for expensive digging and lining of pits;
- because urine is diverted, no water is used for flushing and the toilets are emptied periodically the volume of the processing vault(s) is fairly small;

- the contents of the processing vault(s) are dry which means that there is no need for expensive water-tight constructions.

Ecological sanitation or 'sanitise-&-recycle' is more complex than 'drop-&-store' but infinitely less complex than 'flush-&-discharge'. The potential advantages of ecological sanitation can only be realised as long as the system functions properly. There is, particularly with a new concept, the risk that those who plan, design and build do not fully understand the basic principles involved and how they relate to local conditions. This may lead to the selection of a system or options within the system that do not fit the climate or the socio-economic conditions.

The most common reasons for failure of ecological sanitation systems are lack of education and training for families, defective materials and workmanship, lack of understanding leading to bad management, and non-use. A sure recipe for failure of an ecological sanitation programme is to put it in place without the participation of the intended users and without suitable education and training.

The introduction of ecological sanitation systems is bound to lower the total costs of urban sanitation. This is particularly important for Third World countries, where public institutions face stringent financial limits. Ecological sanitation systems require much less investment as they require neither water for flushing nor pipelines for the transport of sewage, nor treatment plants and arrangements for the disposal of toxic sludge.

However, ecological sanitation systems will involve costs for information, training, monitoring and follow-up that might initially be greater than for conventional sanitation systems. Furthermore, an urban ecological sanitation system will generate additional costs that are not usually present in small rural projects, such as the safe handling, transportation and storage of urine and dehydrated or composted material from many households. On the other hand, the economic (and ecological) value of the recycled fertilisers could be significant.

Advantages of ecological sanitation

If the ecological sanitation concept could be realised on a large scale, then it would confer a great many advantages to the environment, households and municipalities. These advantages are summarised below.

Advantages to the environment

If ecological sanitation could be adopted on a large scale, it would protect our water from faecal contamination and therefore be consistent with the goals of Agenda 21. Ecological sanitation will prevent pollution of groundwater, streams, lakes and the sea. In addition, farmers will require less amount of expensive commercial fertilisers, much of which today washes out of the soil into water, thereby contributing to environmental degradation.

Ecological sanitation also allows us to recover the resource value of faeces. Human faeces can be turned into a valuable soil conditioner. But faeces may also contain dangerous micro-organisms. Before we can recycle faeces back to the soil, these pathogens must be destroyed. Pathogen destruction as well as handling is easier if the faeces are not mixed with urine and water.

Recycling would rejuvenate rural and urban agriculture. Returning human urine and sanitised faeces to fields and gardens on a regular basis has the potential to replenish soil nutrients to levels at which productivity will rise. A Swedish study found that the nutrient content of compost removed from composting toilets compared well with that of farmyard manure, and in some ways was superior.

Advantages to households and neighbourhoods

Ecological sanitation systems, if properly managed and maintained, do not smell or produce flies and other insects. This is a great advantage over ordinary pit latrines. Urine and faeces do not come into contact to produce smell. Moisture levels are too low for fly breeding.

A frequently heard objection to ordinary pit toilets is that small children may fall into them and die. Ecological sanitation systems pose no such risk because they are neither deep nor wet and usually built entirely above ground.

No matter how unpleasant the immediate environment may be, individual households can improve their conditions considerably by adopting an ecological sanitation system. There is no need to wait for the authorities to come and install piped water and a sewerage system. The device itself can be relatively inexpensive and is not difficult to build. Households can immediately have the privacy, convenience and aesthetic advantages of an odourless and flyless toilet, attached to or even built right into their homes.

The nutrition of families would also improve if urine and faeces were recycled to grow additional vegetables in garden plots and on rooftops and balconies. The fertiliser value of recycled urine and the soil-improving properties of decomposed faeces should produce excellent crops even from poor soil or soil-less horticulture.

The emptying of ordinary pit toilets and the sludge removal from septic tanks is both messy, expensive and technically difficult. In many informal settlements, the vacuum trucks needed for the process cannot negotiate the narrow streets and the steep slopes. If contents are removed by hand, the sludge is smelly, wet and dangerous to the workers. Ecological sanitation systems based on dehydration or decomposition reduce the volume of material to be handled and transported and result in a dry, soil-like, completely inoffensive and easy-to-handle product. As the toilet is built completely above ground there is easy access to the sanitised faeces for recycling and easier management of contents for pathogen destruction.

A great problem of building toilets in some areas is the subsoil and groundwater conditions. In some areas the ground is too hard for digging. In other areas the water-table is close to the surface. Both conditions prevent or make difficult the construction of pit toilets, VIP toilets or pour-flush toilets. As ecological sanitation systems can be built entirely above ground, they allow construction anywhere a house can be built, they do not collapse, they do not destabilise the foundations of nearby buildings and they do not pollute the groundwater.

Over half the population of the developing world has no sanitary system of excreta disposal. The market for appropriate sanitation devices is enormous and the demand is there. Also over half of poor people are unemployed. The majority of ecological sanitation toilets do not require expensive or high-tech equipment. Jobs can be created for builders and for collectors of urine and sanitised faeces. These products can be sold to farmers or households could use them to grow food.

Advantages to municipalities

Municipalities all over the world are experiencing greater and greater difficulty in supplying water to households and neighbourhoods. In many cities water is rationed and supplied only a few hours a week. Wealthier households collect this water in large tanks while the poor queue up at public taps to receive their daily ration. Ecological sanitation systems do not use these scarce water resources and may result therefore in a more equitable allocation of water.

A major advantage of ecological sanitation systems is that they have the potential to increase sanitation coverage of the unserved more quickly than any other method. Municipal governments are under increasing pressure to provide sanitation coverage for the entire urban population. Even if there is political will, the options available are severely limited owing to lack of water and/or money (for 'flush-&-discharge' systems) and lack of space and/or difficult ground or groundwater conditions (for 'drop-&-store' systems). The ecological sanitation options outlined in this paper are in general affordable to the poor and have almost no recurrent costs for operation and maintenance. In most cases they require no excavation, do not depend on water and pipe networks, and, as the units have no odour and can be placed anywhere (even inside a house and on upper floors), they can be used even in congested areas. Ecological sanitation could be an inexpensive and attractive alternative to expansion of sewerage systems.

Finally, ecological sanitation systems allow decentralised waste-to-resource management. The burden for guaranteeing a well functioning sanitation system is taken from the municipal government and transferred to neighbourhood level where citizens can monitor conditions and take direct action at the neighbourhood level when necessary. The role of municipal government then become regulatory with the goal of safeguarding public health.

Conclusions

Ecological sanitation, if applied on a large scale, would have great implications for health, ecology and municipal economy: less environmental pollution, reduced water consumption and considerable savings on sewers and treatment plants. In addition it would provide valuable resources for food production.

It is also imperative that national and local authorities, research institutions, donors and financial institutions, such as the World Bank and Unicef, have to reconsider their policies and implementation strategies to include also ecological sanitation.

Stockholm 30 April 1998

For more details, illustrations and references, see the monograph 'Ecological Sanitation' by Steve Esrey, Jean Gough, Dave Rapaport, Ron Sawyer, Mayling Simpson-Hé bert, Jorge Vargas and Uno Winblad. To be published by SANRES in August 1998.

SANITATION PROMOTION

Example of Regional-level sanitation programming: Report Extract

IMPROVEMENT OF ACCESS TO LOW-COST SANITATION IN THE WESTERN AND CENTRAL AFRICA REGION

Executive Summary

The Government of Sweden (Sida) granted US$122,949.08 to the West and Central Africa Regional Office (WCARO) of UNICEF to support the improvement of access to low-cost sanitation in the region. These resources were used to finance three ten-day sub-regional workshops in Ibadan, Nigeria; Labe, Guinea and Ouagadougou, Burkina Faso respectively. The UNICEF Water, Environment and Sanitation Cluster (WES) in New York contributed with US$25,000 for the purchase and distribution of SanPlat molds to 14 country offices. The latter have in the past, and plan for the future to continue funding technology transfer as well as molds to equip trainees. Governments (Nigeria and Ghana), other multi-lateral agencies (World Bank), bi-laterals (Netherlands, Germany, Denmark) and NGOs are also buying into the technology after the three workshops were held. While no accurate data exists, it is likely that the resources allocated by Sida have already been matched, if not surpassed, by WES/New York, WCARO and country level resources allocated to this initiative.

Approximately 36% of the Sida resources were used to pay for consultants and facilitators while 64% were allocated to travel and perdiem for 76 participants from 20 countries, as well as materials for the workshops. The unit cost per participant amounts to US$1,455. Workshop evaluations pointed out a high appreciation for this technology transfer process.

UNICEF Workshop on Environmental Sanitation and Hygiene, New York, June 10-13, 1998

Contributor: Carel de Rooy, UNICEF WCARO, Abidjan, e-mail: cderooy@unicef.org

Executive Summary (continued)

The workshops comprised of plenary theoretical sessions or group work in the morning followed by construction work and/or field visits in the afternoon. The practical sessions focused on the construction of three different types of SanPlat latrines, a 60x60 cm flat slab, and two different sized dome-shaped slabs (120 and 150cm).

After the subregional workshops approximately 3,500 people have been trained at country level (2,650 in Nigeria) and 2,085 SanPlat molds have been ordered or manufactured locally (1,200 in Nigeria).

The total cost of a household SanPlat latrine ranges from US$40 to US$75. The average cost of SanPlat slabs produced are US$11 for the 150 cm; US$9 for the 120 cm and US$3 for the 60 x 60 cm slabs. Subsidies provided by UNICEF vary between 35% to 150% the cost of a slab, which ranges between 1.3% and 22% the cost of a latrine. Demand is on the increase in intervention areas and in some cases (Nigeria) subsidies are being reduced.

Some NGO participation has been witnessed (Guinea Bissau, Ghana, Cote d'Ivoire) but it is still limited, likewise for the private sector. Most latrine slabs are being produced directly by community masons at village level.

Some Governments (Cote d'Ivoire and Burkina Faso) have in the past or continue presently, resisting the idea of very low-cost options for sanitation, but generally Governments are very supportive.

Challenges for the future include further sensitisation of Governments; rigorous quality control and regulatory functions with the private sector involvement; financial solutions for the expansion of production and coverage; mechanisms at community level to identify and protect the poorest families from exclusion; harmonization of strategies and policy development.

The WCARO has prepared, with effective WES/New York and country offices' support, a US$16.5 million multi-country funding proposal to addresses sanitation, hygiene and water point rehabilitation in 18 countries of the region on a modular basis, whereby potential donors can choose to fund the full package in one or several countries or a given module in a few or a large number of countries.

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All Participants who attended
The GESI Meeting in the Hague

15 April 1998

Dear Colleague,

The Global Environmental Sanitation Initiative

... Attached is the record of the Meeting which was held at IRC on 26 February 1998 to get things moving on GESI.

The suggested second meeting on 23 March 1998 could not be worked out because of the many activities which got crowded in during that period (IRC Governing Board Meeting, Vision 21 Meeting, the Paris Meeting and responses, communicatinos and lobbying related to the forthcoming CSD Sessions in April 1998).

In the meantime:

(i) I have had a very helpful input from Jon Lane on alternatives for a Mission Statement of different lengths to capture the essence of the first draft included in the attached record of the meeting. I copy them below and ask for your pick with or without any changes you may like to make.

(a) To promote environmental sanitation and increase its impact on human health.

(b) To promote the awareness of the importance of environmental sanitation and to increase the impact of environmental sanitation on human health.

(c) To promote politicians' awareness of the importance of environmental sanitation, to strengthen the case for allocating more resources to environmental sanitation, and to increase the impact of environmental sanitation on human health.

(d) To promote the awareness of the importance of environmental sanitation and to increase the impact of environmental sanitation on human health through improved collaboration and information exchange.

(ii) discussions have been conducted with IRC on taking on the responsibility for information support and exchange in collaboration with others. IRC will also manage the Council's Web Page and work with a family of web pages associated with the Council;

.../...

.. Encls. As stated

(iii) discussions have taken place with UNICEF on taking responsibility for developing a common advocacy programme environmental sanitation in collaboration with others: A formal request has been sent by the Chair of the Council to the Executive Director of UNICEF on this account. A request will also be sent to the Director General of WHO for support and involvement in line with WHO's interest and programmes in environmental sanitation which have recently received high advocacy in WHO;

(iv) Preliminary discussions have been had with the Environmental Health Program (EHP) of USAID on whether they would accept responsibility to identify indicators/benchmarks in collaboration with others for evaluating successful environmental sanitation arrangements and progress. This matter needs further discussion with EHP.

(v) In establishing a Steering Committee: We need to limit the Steering Committee to about 12 (with facility for rotation of members periodically in order to have wide participation and involvement). We need women and men, participation of developing countries and aid agencies. My assessment of expertize needed based on the discussions in the Hague are:

- health and hygiene
- environmental issues
- technology
- economic issues
- participatory approaches, community based activities
- advocacy
- behaviour change, communications
- media, information management
- development aid, programme/project evaluation
- resource mobilization (big and small)
- small credit, personal credit
- the politics of getting decisions at the highest levels in important ministries and agencies (local & global)

It is possible that one person could cover one or many of these areas. It is also possible that we establish a pool of experts from whom we could draw at any time 10 to 12 people for a Steering Committee meeting depending on what critical activities we would deal with during a particular Steering Committee session and who will be available. All of course need to be kept informed.

We now have the following names, but all are men:
Gouri Ghosh
Roland Schertenleib
Jose Hueb (proposed by WHO)
Ingvar Andersson
Jon Lane (proposed by DFID)

Please remember we also have Dr Richard Jolly.

May I have your very early responses/reactions on:

(i) the Mission Statement
(ii) expertize needed as listed; and
(iii) the idea of a pool of experts to call on and if agreed what number to limit the pool to (20? 30?)

May I also have suggestions of persons for the Steering Committee indicating the expertize they could bring to the Committee.

Hoping to hear from you soon.

Yours sincerely,

Ranjith Wirasinha
Executive Secretary
WSS Collaborative Council

RW/dr

LIST OF PARTICIPANTS

Roland Schertenleib, SANDEC
A.C. Mpamhanga, Africa Regional Group
Gerardo Galvis, CINARA
Heikki Wihuri, Group 29
Ian Curtis, DFID
Jon Lane, WaterAid
Gourisankar Ghosh, UNICEF
Mayling-Simpson Hebert, WHO
José Hueb, WHO
Andrew Cotton, WEDC
Craig Hafner, EHP
Hans van Damme, WSSCC
Siyan Malomo, CSC
Ranjith Wirasinha, WSSCC
John Kalbermatten, Consultant GWP
Jan Teun Visscher, IRC

Facilitator: Ineke van Hooff, IRC
Raporteur: Dick de Jong, IRC

THE GLOBAL ENVIRONMENTAL SANITATION INITIATIVE (GESI)

Report on Brainstorming Meeting on 26 February 1998 at IRC in the Netherlands

Preamble

The stakeholders including the decision makers in the water supply and sanitation sector meet once every two years during the biennial Global Forum of the Water Supply and Sanitation Collaborative Council. The Fourth Global Forum was held in Manila in November 1997 co-hosted by the Government of the Philippines and the Asian Development Bank. The participants at the Forum were of the view that the promotion and provision of arrangements to increase access to safe disposal of human waste and complimentary improvements in hygienic practices and behaviour was deplorable. They were emphatic that environmental sanitation required the highest priority if the status of health of particularly the poor was to be effectively and significantly improved, water as a resource was to be protected, economics of water management were to be addressed, and the water based/related environment in particular, sustained.

The Forum therefore launched a Global Environmental Sanitation Initiative (GESI). The initiative resulted from a proposal made by the United Nations Children's Fund (UNICEF) and the World Health Organization (WHO) backed by the majority of participants from developing countries and aid agencies, to raise the profile and support for environmental sanitation globally through a major thrust in advocacy, collaboration and funding. GESI was expressly launched to address the issue and in particular to make things happen on the ground, through a collective push by all concerned. The approach was therefore not to intervene in any agency agenda but to obtain the best of current and planned programmes of countries and agencies by eliminating unecessary duplication and by covering gaps through exchange and collaboration, with all working in concert.

GESI would therfore provide opportunities to help countries and agencies to: (i) talk to each other about their programmes, exchange information and thereby harmonize activities, remove unecessary or excessive duplication and cover gaps; (ii) formulate a common advocacy programme to draw international attention and provide a major thrust and agree on arrangements to carry it out; (iii) establish common indicators for monitoring and evaluation; (iv) agree on sharing of responsibilities/tasks that emerge from the above; and (v) agree on a schedule/strategy to meet periodically to assess progress and make adjustments as may be necessary.

Collaboration being central, the Manila Forum felt that in the water supply and sanitation sector the Collaborative Council would best provide the neutral and participatory platform which will be essential for success.

The setting up of an international Working Group on Environmental Sanitation to work in parallel and in concert with GESI was also accepted at the Manila Forum to attend to those sanitation related activities which required greater investigation of developmental issues for formulation of ways and means to overcome them and facilitate progress in field applications. Solid waste disposal, drainage, peri-urban sanitation, and inventory of appropriate technology options etc were some of these.

Pursuant on the Manila recommendations, the Council invited a group of concerned people to a meeting on Thursday 26 February 1998 to help start the planning process of GESI. (A list of participants is attached). The meeting was held in the Netherlands and hosted and facilitated by the International Centre for Water and Sanitation (IRC). The Agenda covered the following:

(i) Identification of the scope of GESI

(ii) Setting up a neutral Steering Committee which would help (a) bring focus and co-ordination to the many activities in environmental sanitation around the world; (b) shape and facilitate a supportive advocacy/communications programme to enhance understanding amongst all, and raise the profile of environmental sanitation; and (c) find ways to clear obstacles to progress;

(iii) Setting up arrangements to provide an information base and a network for information support and exchange;

(iv) Sharing responsibilities by agencies for the various tasks identified;

(v) A monitoring and evaluation strategy to maintain dynamism and progress.

The Global Water Partnership (GWP) in preparation for a meeting called by the Government of France for March 1998 had engaged Consultants to prepare an initiative for environmental sanitation in the urban sector. The GWP Consultants (John Kalbermatten and William Cosgrove) the Co-ordinator for the Collaborative Council's Working Group on Environmental Sanitation (Roland Schertenleib of SANDEC), one of the promoters of GESI (Gourisankar Ghosh of UNICEF) and Council Secretariat (Ranjith Wirasinha) met in Delft on 25 February 1998 to explore avenues for collaboration between the two initiatives.

Meeting Conclusions

The results of the GESI brainstorming day at IRC can be summarized as follows:

- Promotion of environmental sanitation is not only needed to improve public health, it has also environmental and economic impact. Rural and urban poor were mentioned as clients/primary target groups of GESI.

- The participants agreed that environmental sanitation covers a wide range of issues including: household sanitation, waste and wastewater treatment, stormwater, drainage, water quality, reuse

and recycling. Within these fields technological, social, institutional, health and economic aspects need to be tackled.

- After discussing the content areas mapped out by the participants it was agreed that GESI focus on two areas where the initiative could make a difference:

A. Knowledge/information
B. Behavioural change

Under each of them a number of content areas were identified.

Knowledge/Information:

Information sharing
Strengthening global and country level advocacy and promotion
Advocacy and knowledge networking
Knowledge generation
Education/training/applied research

Behavioural change:

Behavioural change at political level, professional level, community and individual level
Hygiene promotion
School sanitation and hygiene education
Children as agents for change

- Discussing about the objectives of GESI the group agreed on three related ones at all levels, but with a strong focus on country-level action:

1. The overriding one is to give a boost to and increase impact of sanitation. This includes raising political awareness, giving sanitation a stronger voice in the fight with other sectors for resources.
2. Improved information exchange.
3. Promote collaboration.

- The meeting helped clarify the complementarity and linkages between GESI with the WSSCC Working Group on Environmental Sanitation (WG/ES). The Working Group's focus is on exploring ways to solve developmental issues in environmental sanitation. GESI in addition to its main functions described above will identify gaps for WG&ES to work on and also move solutions to the field. In the urban sector, the Council's WG/ES and the GWP Urban Environmental Sanitation Initiative have agreed to work together as a think tank on environmental sanitation. The field related activities of the GWP Urban Environmental Sanitation Initiative will also be brought to the GESI Forum for collaboration with others.

- On this basis the following, a first rough draft mission statement for GESI was prepared and briefly discussed if only to capture the vital objectives and for later refinement to a clear statement.

  To promote attitudes and behaviours so that attention for environmental sanitation will be given a boost to increase impact on health and nutrition of human population for reduction of morbidity and mortality through improved collaboration, particularly at country level, assisted by global information exchange of best practices, experiences and knowledge.

- The group then brainstormed in smaller groups about the possible mechanisms to reach these objectives. Presentation in plenary resulted in a list of activities, which were grouped together under the three objectives. A start was made to list the actors per activity. This overview needs to be expanded by members of the GESI network and will need to include related initiatives outside the sanitation sector.

1. **Boost Sanitation**

Advocacy	*Agency active*	*Action in pipeline*
- involve higher officials	WHO, DFID, GWP, CINARA	UNICEF
- help develop tools (e.g. interactive computer programme)	WHO, DFID, USAID/EHP, UNICEF	IRC/WSSCC
- involve ESA's	DFID	
- help influence discussion at higher level	DFID, WaterAid, WSSCC, WHO	
- target children, holistic approach	UNICEF, IRC	
- political advocacy meetings	UNICEF, WHO, CINARA	
-(social) marketing/mobilization	UNICEF, IRC	
- involve group of marketing/communication experts outside sanitation	UNICEF, IRC	
- develop marketing strategy		
- sound out interest of other sectors	UNICEF	
- organize Sanitation Week/Day		
- develop indicators for success	UNICEF, IRC	

Consideration was to be given to an agency like UNICEF with a good track record in the area of advocacy to spearhead this activity.

2. Information Exchange

- discussion forum national	ARG, CINARA, WHO	
- discussion forum global		
- GESI web page		
- exchange of quality information	WEDC	
- develop criteria for top 10 books, training courses	DFID, USAID/EHP, GWP	
-dissemination of GESI quality information	WEDC, WSSCC	
- information collection	CINARA	
- networking	WEDC, GWP, WSSCC	

By the nature if its work IRC is active in all these areas at global level and with partners in a few countries, mainly on hygiene promotion and community sanitation, through short training courses, publications, advisory support, advocacy, research.

The Council is presently working on a family of information networks, including IRC and WEDC, to develop an information exchange base in Internet for water supply and sanitation. IRC presents itself as a good candidate to spearhead this activity.

3. Collaboration

- international level	UNICEF, WHO	
- country level partners	ARG, UNICEF, WHO, WSSCC, IRC	
- link with private sector	ARG	WaterAid
- develop common policy/strategy		
	USAID/EHP, IRC, WaterAid	UNICEF
- agreement on complementarity WSSCC WG /GWP Sanitation group	WSSCC, SANDEC, GWP	
- incentives		

- create institutional framework	WSSCC
- networking	WEDC, USAID/EHP, CINARA, CSC
- mobilize local partnerships	WHO, UNICEF, DFID, WaterAid, GWP

SANDEC is chairing the WSSCC Working Group on Environmental Sanitation (WG/ES) and is as such active in all the above areas of collaboration. A multi-disciplinary/multi-agency steering committee with the inclusion of the Council's WG/ES could spearhead collaboration.

These lists require further refinements and additions. Participants were requested to do this in time for the next steering committee meeting on 23 March.

- Additional questions and constraints mentioned include:

  Questions:

  What are the user perceptions ?

  How to get a strategic approach for sanitation programming at the town level

  How to ensure links between community-level initiatives and town planning? (All raised by WEDC)

  Constraints:

  Lack of information
  Lack of funding
  macro economic scenario (All mentioned by ARG)
  We ourselves/lack of innovative brains (Hans/SANDEC)
  too much focus on implementation by ESA too little involvement of local organization and people (CINARA)
  training curricula and methodologies need revision (CINARA)
  istitutional problems (USAID/EHP)
  political commitment (WSSCC)
  lack of interest in small islands (CSC)

- It was agreed that a central, flexible and informal steering committee with its secretariat at the

  WSSCC Secretariat in Geneva will be needed to facilitate GESI action. In addition a Co-ordinator of the information network will be needed to facilitate information sharing. As much as possible use should be made of organizations in the various regions both as outlets for and feed into GESI. To reduce costs, piggybacking GESI steering committee meetings with other international meetings

will be aimed for. The forthcoming IRC Governing Board Meeting was suggested as a possibility.

- A brief discussion took place on needed skills and possible names of members of the steering committee. Commitment to and a passion for sanitation, communication and marketing skills, being in a position to commit resources, people of moral or intellectual stature, were mentioned.

Names proposed:

Gouri Ghosh, who offered UNICEF's expertise on advocacy and social mobilization and is a passionate advocate for sanitation.
Roland Schertenleib as Coordinator for the WG on Environmental Sanitation and also representing Swiss Agency for Development Cooperation (SDC) will be a member.
WHO, which co-ordinatedd the Working Groups on Promotion of Sanitation and Water Pollution Control was added.
Ingvar Andersson of the Swedish Institute for Development Assistance (SIDA) was also proposed on behalf of the Nordic countries emphasis on sanitation.
DFID and the Dutch were added as potential members.
CINARA indicated that someone from Latin America would be found shortly.
Africa WG would indicate someone from Africa.
GWP will also have representation in the Steering Committee.

Participants were requested to suggest names to Ranjith in the next week.

- Some of the "follow-up" items listed on the Agenda could not be tackled in the limited time available. They will be the first agenda points of the next Steering Committee. The Secretariat will try to deal with some of them through correspondence.

- WHO made available to the group the press release of 29 January 1998 on the call for action on sanitation from the Executive Board. The Sanitation Promotion Kit produced by the Council's Working Group on Promotion of Sanitation was considered a useful tool for promoting GESI.

- IRC handed out a prototype of a GESI web-page as part of the proposed family of web pages of the WSSCC, on which comments are invited.

- **Follow-up**

From the follow-up items on the agenda only the proposed Steering Committee could be discussed. They will be the first agenda items for the next Steering Committee. The Secretariat will try to deal with some of them through correspondence.

Other items were referred to the first meeting of the Steering Committee. They concern:

Mechanisms at country-level

Activities and volunteers
Information and information exchange basis
Donor support
Time frame

- At the end of the meeting Chairperson Jon Lane thanked the IRC for hosting this meeting, Ineke van Hooff for her facilitators role, Dick de Jong fjor the reporting and the participants for their committed contributions. Jon was in turn thanked for chairing the meeting.

GESI

GLOBAL ENVIRONMENTAL SANITATION INITIATIVE

Preliminary proposals for information exchange and dissemination

Sharing of information on sanitation policies, programmes and research activities is at the heart of the Global Environmental Sanitation Initiative (GESI). The Water Supply and Sanitation Collaborative Council (WSSCC), the IRC International Water and Sanitation Centre (IRC) and the Water and Engineering Development Centre (WEDC) are developing a series of information management mechanisms to facilitate the sharing process. The purpose of this note is to outline current thinking and obtain feedback which will help to ensure that the resulting mechanisms provide helpful information without imposing excessive burdens on those contributing data.

The components of the proposed system are (NB. These are the information elements only, proposals regarding GESI's role in sector advocacy are covered separately):

1. A database on each agency and each country, covering policies, projects and other relevant sanitation activities
2. An E-mail listserver enabling all participants to communicate continuously on emerging issues
3. A GESI Home Page on the Internet giving access to the database and regular news items
4. Periodic Newsletters distributed by E-mail and in printed form
5. Briefing notes for the GESI Steering Committee.

Taking each in turn:

1. The GESI Database

To share information, we first need to collect it. That means some work for those contributing the information the payback being that they gain access to equivalent information from many more sources. As information processing takes time and resources, and too much information can sometimes be as bad as too little, the aim is to store and share only information which will be of practical use to most people. By noting contact names, the database will guide users to sources from which more information can be obtained where necessary.

Our suggestion is that the database should have two main elements:

- **Agency-based information** with an introductory section setting out the agency's sanitation policy, any special conditions for supporting sanitation programmes, and, if thought appropriate, brief notes on past activities in the sector. This would be followed by a continuously updated section listing new activities (approved and pipeline projects, policy papers, research activities, etc).
- **Country-based information** with an introductory section on national policies and strategies for sanitation, a list of agencies involved in the sector, including donors and NGOs, contacts for more information. This might also include sector statistics, drawn initially from the Joint Monitoring Programme and adjusted as later information becomes available. Again, the basic information would be supplemented by a list of approved and pipeline projects and other relevant sanitation initiatives. GESI proposes that there should be a national GESI focal point (an individual, rather than an agency) for each country, helping the WSSCC to gather the necessary data and maintaining regular contact through the Council's regional chapters.

Because this database is going to be the core of the GESI information exchange, it is crucial to get the balance right now between usefulness and operational feasibility. Annexes 1 and 2 illustrate possible ways in which the two components of the database might be presented; Annex 3 shows a tentative project data sheet. Feedback is wanted as soon as possible on the desirability and practicality of gathering and disseminating the type of information shown and on any additional information which people believe it would be useful to include. One particular issue is the degree to which GESI should attempt to monitor the level of investment in sanitation programmes. Bearing in mind that what comes out of the database can only be as good as what goes in, we need to consider whether agencies will be willing to contribute financial data which GESI could aggregate.

2. E-mail listserver

Using a listserver, anyone who is part of the group can send one E-mail message that will be seen by everyone else. The intention is that WEDC will set up a listserver dedicated to GESI. That will create a continuous discussion forum on which anyone can post questions, comments, opinions, etc, or seek support for activities such as workshops. There is also the option to hold electronic conferences on a particular theme over a period of days, with a moderator later producing a report on the discussions. WEDC has experience of electronic conferencing and would take on the moderator role. It is also possible for selected contributions to the GESI listserver to be disseminated more widely through other listservers, so as to reach a particular audience (for example there is a listserver which is specifically for local government professionals).

3. GESI Home Page

WSSCC, IRC and WEDC are creating a family of Home Pages covering each organization's own activities and some shared news items. The intention is that there should be a page dedicated to GESI, through which anyone will be able to get access to the GESI database, as well as reading the most recent news items about sanitation progress. In this way, interested parties will be able to access information about a particular agency or country to brief themselves for visits or project appraisals. Up-to-date information will be available at any time, without the need to wait for published reports from the Secretariat.

4. Newsletters

A number of existing newsletters carry water and sanitation news items. News about Council activities appears regularly in *Source,* which is published electronically and in hard copy form by IRC, and in the GARNET newsletters. A dedicated Newsletter for GESI will be published regularly on the GESI listserver and in hardcopy form for those without E-mail access. The Newsletter will summarise new activities notified to the Secretariat. It will also be the opportunity for spotting possible overlaps or competing activities by different agencies — one of GESI's objectives.

5. Steering Committee Briefs

Once or twice a year, the Secretariat, supported by IRC and WEDC, will analyse the data coming into GESI and produce progress reports for review by the Steering Committee. These Briefing Notes may include comments on potential conflicts or opportunities for collaboration, as well as pointers to innovative activities which may be seen as case studies for replication elsewhere. New agency policy initiatives will also be reported.

Comments on these preliminary ideas, and any suggestions for additional information activities, will be most welcome and should be addressed to the WSSCC Secretariat, c/o WHO, 1211 Geneva 27, Switzerland. Fax: 41 22 791 4847, E-mail: wsscc@who.ch. One of the criteria is that people should be able to obtain as much GESI information as possible for themselves, without always having to request it from the Secretariat, so minimising the extra workload for the Secretariat.

Annex 1: Example of Agency Data to be included in GESI Database

(for illustration purposes only)

XXXXXX International Development Agency

Address: _____

Phone: _____ Fax: _____ E-mail: _____

Internet Home Page: _____

GESI CONTACTS:

A.N. Other, Programme Officer. **Phone:** _ _____ Fax: _____ E-mail: _____

A.N. Other, Programme Officer. Phone: _ _____ Fax: _____ E-mail: _____

Sanitation Policy

A priority of XXXXXX development assistance is poverty alleviation and improvement of the living conditions of the urban and rural poor. Investments in sanitation improvements are seen as prime contributors to this development goal. XXXXXX IDA therefore looks favourably on proposals from partner governments to include sanitation improvements in development cooperation programmes.

Etc, etc, etc .....

.....

XXXXXXX IDA has been actively involved in the development of innovative approaches to water supply and sanitation development. The agency favours programmes based on demand-responsive approaches, those which ensure a full consideration of gender issues, and the creation of stakeholder partnerships with optimum involvement of local NGOs and private entrepreneurs. The concept of decentralization and management at the lowest appropriate level is always followed. Assistance for local capacity building is an integral part of most XXXXX supported sanitation projects.

Examples of XXXXXX IDA supported sanitation projects

During the last five years, XXXXX IDA has supported sanitation improvements in a total of eight developing countries (Mozambique, Tanzania, Zimbabwe, India, Indonesia, Sri Lanka, Ecuador and Paraguay). Projects have ranged from an NGO-led latrine-building programme in rural Paraguay to co-funding with the Asian Development Bank of an urban water supply and sewerage project serving 200,000 people in India.

Etc, etc, etc .....

.....

XXXXXXX IDA and GESI

XXXXXX IDA is committed to the Global Environmental Sanitation Initiative. Information on ongoing and proposed projects is being shared with GESI partners and XXXXX IDA will endeavour to avoid duplication or competition among donors and other ESAs in the support of national programmes. Innovative financing mechanisms are being sought to channel funds effectively to community-based entities supporting self-help sanitation initiatives. XXXXX IDA is open to suggestions for partnership arrangements with NGOs and CBOs who can provide effective support for participatory and demand-responsive approaches.

New Sanitation Projects

Approved projects

Utopia: Small towns sanitation improvement project (link to project detail page — see Annex 3)

Etc, etc, etc .....

Pipeline projects

Laos: Dry sanitation demonstration project in two villages (link to project detail page)

Etc, etc, etc .....

Publications

A Clean Fight – The XXXXX IDA approach to sanitation improvement in developing countries July, 1998

Etc, etc, ...

Annex 2: Example of Country Data to be included in GESI Database

(for illustration purposes only)

Utopia

NATIONAL GESI CONTACTS:

A.N. Other, WASA. Phone: _____ _____ Fax: _____ E-mail: _____

A.N. Other, MLG. Phone: _____ _____ Fax: _____ E-mail: _____

Sanitation coverage (1996 statistics)

	Population (' 000)	*No. with adequate sanitation*	*No. unserved*	*Coverage (%)*
Urban	10,600	8,400	2,200	79
Rural	7,400	1,600	5,800	22
TOTAL	18,000	10,000	8,000	56

Extracts from National Development Plan

"Water supply and sanitation services are inadequate. The government is committed to improving basic services for the urban and rural poor through partnerships with NGOs, CBOs and external donors. The approach will be demand-responsive, with optimum involvement of appropriate private sector enterprises in partnership with local governments and communities. .....

"Priority attention is being given to poverty alleviation programmes and improved environmental sanitation in the fringe areas of cities and towns. Significant financial and technical support will be needed from the external donors, to build local capacities. .....

"etc, etc ....."

Agencies active in Sanitation

Government departments

National Water Supply and Sanitation Authority, Address, Phone, Fax details
GESI Contact:

Ministry of Health, Address, Phone, Fax details
GESI Contact:

Etc, etc ...

Municipal agencies

Chieftown water and sewerage authority Address, Phone, Fax details
GESI Contact:

Nextown environmental protection agency Address, Phone, Fax details
GESI Contact:

Etc, etc ....

External support agencies with sanitation programmes

SIDA, DfID, DGIS, etc (note, provide hotlinks here to agency home pages)

WaterAid,

Collaborative Council members

List of names and contact details

.....

.....

GESI National Contact:

A.N. Other Address, Phone, Fax details

New Sanitation Projects

Approved projects

Small towns sanitation improvement project (link to project detail page — see Annex 3)

Etc, etc, etc .....

Pipeline projects

Dry sanitation demonstration project in two villages (link to project detail page)

Etc, etc, etc .....

Annex 3: Example of Project detail Sheet

Utopia: Small towns sanitation improvement project

Project partners

Utopia Water and Sanitation Authority (implementing agency)
Municipal water and sanitation utilities in Town1, Town2, Town3, Town4, Town5, Town6 (local project management)
XXXXX IDA (financial assistance + technical support for capacity building)
UNICEF (hygiene promotion, quality control, financial assistance)
WaterAid (field staff for capacity building and implementation support)
Alltown cooperative (private enterprise consortium for sanplat supply and latrine construction)
Utopia Community Credit Association (local credit facilities for latrine construction)

Scope of project

Improved sanitation facilities in six small towns with a combined population of 22,000. Residents currently have no suitable sanitation facilities and there is a high incidence of diarrhoeal disease. Improvements will be demand-driven and dependent on willingness to pay by individual residents, schools or other public agencies. Grant assistance will cover approximately 60% of investment costs. There is a water supply component to improve current water services on a full cost-recovery basis if there is a demand for improvements.

Hygiene promotion and education is underway.

Coverage targets are expected to emerge after the community mobilisation phase. Preliminary estimates are that approximately 14,000 people will obtain improved sanitation as a result of the project.

GESI Checklist

GESI registers all new sanitation projects notified to the WSSCC Secretariat. The checklist is a means of identifying those projects which incorporate concepts advocated by the WSSCC on the basis of consensus from Global Fora. Check boxes indicate whether the project includes the indicated concept. Amplifying comments are helpful for those seeking to learn from or replicate the project.

- ☐ Demand-responsive approach

  (check if the project incorporates ways of involving users directly in decisions on choice of technology, willingness to pay, implementation procedures, sustainability, ...)

- ☐ Focus on the poor

  (check if the project incorporates measures to ensure that the unserved poor will benefit)

- ☐ Gender sensitive

  (check if the project makes specific provision for assessing the individual needs of women, men and children, and for equipping women and men to play appropriate parts in achieving project goals)

- ☐ Promoting behavioural change

  (check if there is a specific project component for hygiene promotion and behavioural change – give details where possible)

- ☐ Respect for traditional practices

  (check if the project specifically includes provision for incremental improvement of local sanitation practices, respecting local beliefs)

- ☐ Involve influential community groups

  (check if the project specifically includes involvement of schools and schoolchildren as agents of change. Note also whether other influential groups such as religious leaders are involved)

- ☐ Involve all stakeholders

  (check if there is specific provision for involving local NGOs and private entrepreneurs, banks and credit agencies, or other stakeholders)

- ☐ Build local management capacity

  (check if capacity-building components are included to strengthen local institutions and develop skills)

- ☐ Cost recovery

  (check if a proportion of costs are recovered from users and indicate the extent of any subsidies)

[NOTE TO REVIEWERS: PLEASE ADD OTHER FAVOURED CONCEPTS, IF APPROPRIATE]

Project statistics

A. Finance

Total project costs in US$

(please indicate local and foreign exchange costs and specify contributions made by all project partners)

User charges

(indicate how users will be expected to pay for installation and upkeep of facilities and how any remaining investments will be recovered)

B. Coverage

Targeted population to be served

(give total numbers and percentage of target communities; where possible indicate coverage targets for different sections of the population – e.g. low-income groups)

Contacts for further information

(give contacts in each partner agency, who would be willing to amplify project data)

[REVIEWERS: PLEASE SUGGEST FURTHER PROJECT DATA IF APPROPRIATE]