Annex IV

Terms of Reference

Impact Evaluation of the Sanitation and Hygiene Program

Background

Zambia is one of the countries in Africa with least access to sanitation and hygiene services. Accessing clean water and adequate sanitation is a major challenge. Based on the UNICEF/WHO Joint Monitoring Program 2012 report, an estimated 4.5 million Zambians live without access to safe water, and 5.6 million lack access to improved sanitation, of which around 2.3 million practice open defecation. It has been reported that only 67% of the 8.4 million rural population have access to improved sanitation facilities. This contributes to a high prevalence of diarrhoea and other waterborne diseases, which are further driven by poor sanitary health practices. In addition, the lack of access to improved sanitation in schools means a low quality learning environment for millions of children in rural areas.

With an estimated 2.5 billion cases of diarrhoea each year, diarrhoea remains the second leading cause of death among children under five globally (1 in 5 deaths). Africa and Asia account for over half the cases of childhood diarrhoea.

In order to address the high incidence of diarrhoea, Zambia has a comprehensive policy to guide the development and management of sanitation and water sectors. The specific policy measures for rural water supply and sanitation include a community-based approach; the promotion of appropriate technology; and capacity building at all levels. The Ministry of Local Government and Housing is implementing a National Rural Water Supply and Sanitation Program (2006-2015). The sanitation and hygiene component of this Program was developed in 2009 covering all aspects of sanitation including human excreta management, liquid and solid waste, bathing shelters, other elements of hygiene besides hand washing and school sanitation.

The Government of Zambia and its cooperating partners, with technical support from UNICEF, have placed emphasis on maximizing health benefits through promoting hand washing with soap (HWWS), household water treatment (HHWT), and construction and use of latrines to achieve an “open defecation free” (ODF) environment. The promotion of the three thematic areas, (HWWS, HHWT and ODF) is meant to contribute to an improved quality of life through the delivery of integrated services and behaviour change programs focused at communities, households and schools. If implemented effectively, the promotion of the three thematic areas (HWWS, HHWT and ODF) is expected to have an impact on hygiene behaviours which, in turn,

could lead to reduced cases of water and sanitation-related diseases such as diarrhoea and acute respiratory infections.

The purpose of the Sanitation and Hygiene Program is to support the achievement of the Millennium Development Goal (MDG) for sanitation in Zambia, with an additional 3 million people consistently using improved sanitation facilities and adopting related hygiene practices (such as hand-washing with soap or ash). This corresponds to an increase in sanitation use from an estimated 46% to 75%.

The achievement of the Program's purpose will contribute to the Program's goal of reducing morbidity of diarrhoeal disease amongst children from 15% to 12%.

In terms of activities, the Program will promote community-wide sanitation improvements, hand washing with soap or ash, household water treatment, and safe handling and use of water. The Program will also support the health system to reduce WASH related diseases such as diarrhoea in rural areas, contributing to an improved quality of life and an improved learning environment for children.

In view of the ambitious purpose, goal and scope of the Sanitation & Hygiene Program, which forms a significant component of the National Rural Water Supply and Sanitation Program 2006-2015, the Ministry of Local Government and Housing (MoLGH) and UNICEF Zambia have identified the need to conduct a thorough impact evaluation. The purpose of this evaluation is to generate knowledge to inform the design and implementation of the Sanitation & Hygiene Program as well as to generate evidence and lessons learned about the ways in which programme strategies and interventions have contributed to sustainable changes in sanitation & hygiene behaviour, in disease incidence, and in economic opportunities for and empowerment of households and communities.

The impact evaluation comprises two components: i) a formative research on hygiene practices, which includes a baseline survey, and ii) a detailed assessment of the Program's results at outcome and at impact level, which includes an end-line survey.

The formative research and baseline, conducted in 2012, will inform the Program's implementation, thereby contributing to Program performance. The baseline survey will provide a solid foundation for the development and use of performance monitoring modules, which aim to steer the Program during the course of its implementation. The monitoring information will also inform the impact assessment at the end of the programme cycle. Specifically, the end-line survey and impact assessment will provide robust evidence and lessons learned relating to the

achievement of the sanitation targets associated with MDG 7 and observed associated changes in hygiene behaviour, as well as about the conditions under which these changes have taken place. The impact assessment will measure reductions in diarrhoeal disease amongst children and other non-health impacts and examine the contribution the Program has made in this respect, noting that without a randomised case-control study (not feasible in the context of a nationwide intervention), a detailed assessment of attribution cannot be made. Rather, the aim is for the findings to generate a deeper understanding of the ways in which a combination of sanitation & hygiene strategies have contributed to observed changes in disease incidence and hygiene and sanitation outcomes. In that way, the findings of the impact assessment will enhance the global evidence base on how Community Approaches to Total Sanitation can contribute to a reduction in the incidence of water and sanitation related disease, and child morbidity and mortality.

The findings of the evaluation will be used by the Ministry of Local Government and Housing as it continues to develop and strengthen WASH policies and systems beyond the timeframe of this Program.

Purpose and Objectives

The purpose of this evaluation is to generate knowledge to inform the design and implementation of the Sanitation & Hygiene Program as well as to generate evidence and lessons learned about the ways in which programme strategies and interventions have contributed to sustainable changes in sanitation & hygiene behaviour, in disease incidence, and in economic opportunities for and empowerment of households and communities.

The specific objectives of the evaluation are as follows:

1. Identify and analyse the determinants of current sanitation and hygiene behaviour in rural Zambia, in order to fine-tune the design and implementation strategy of the hygiene communication component of the Sanitation & Hygiene Program;
2. Assess the extent of change, over the course of Program implementation, in sanitation and hygiene behaviour, including the consistent use of improved sanitation facilities, hand-washing practices, and the incidence of diarrhoeal disease amongst children under five;
3. Analyse the extent to which and how the Program strategies, in combination with external factors and in different contexts, have contributed to the observed changes in sanitation use, hygiene practice and the incidence of diarrheal disease;

4. Analyse the extent to which the Program has contributed to improved economic opportunities for and empowerment of households and communities, in particular women;
5. Analyse the extent to which observed changes are likely to be sustained and further expanded, in particular through adequate governance capacity in the public and private sectors, and in community structures;
6. Identify strengths and weaknesses in Program implementation, with a focus on the main programmatic strategies used, partnerships, the use of evidence to improve Program performance and inform policy, and the cross cutting issues of gender and the environment;
7. Formulate lessons learned and recommendations around scale-up and replication of the Program approach, to inform policy and plans to further reduce morbidity associated with diarrhoeal disease amongst children, in Zambia and globally.

The evaluation is justified given the significant scale of the Program and its ambitious goals relating to the achievement of MDG 7 and a reduction in diarrheal disease. In particular, the Program's core strategy, which is based on the elimination of open defaecation across whole communities, is relatively new. The impact of this approach, focused as it is on sustained changes in hygiene practice, rather than improvements in coverage relating to sanitation infrastructure, on the incidence of diarrhoeal disease merits proper investigation to inform global understanding and strategies post 2015.

Evaluation questions

The Sanitation and Hygiene Program will be evaluated using the following OECD/DAC evaluation criteria covering impact, effectiveness, efficiency, relevance and sustainability. Ensuring that **women and girls** participate in decision making relating to the provision of appropriate sanitation and gender sensitive hygiene promotion, and also benefit to the maximum extent from the Program's various outputs, is of particular concern. This critical aspect should be taken into consideration throughout the evaluation. Another important cross-cutting issue concerns the Program's complex relationship with a range of **environmental issues** and the need to adapt to changing climatic conditions in the longer term**.** The impact evaluation will therefore be guided by the following indicative (but not exhaustive) list of evaluation questions:

1. Impact

- What changes have occurred in the incidence of diarrhoeal disease and other water related diseases amongst children under five over the course of the Program?
- What other significant differences has the Program made in terms of the wellbeing of beneficiaries, especially women and girls, in particular in terms of life skills, dignity, self-confidence, school attendance, and economic opportunity?
- To what extent has the Program contributed to the reduction in water and sanitation related diseases among children under 5 years? Which factors explain this contribution?
- To what extent has the Program contributed to the participation of children in school, especially of girls? Which factors explain this contribution?
- To what extent has the Program contributed to establish the conditions to sustain the observed changes in behaviour change and use of sanitation facilities, in particular in terms of governance and capacity of public and private sector actors as well as of community structures;
- To what extent has the Program impacted on the local environment, and to what extent have environmental factors impacted on the performance of the Program?
- What other factors have contributed to the observed impact? What are the implications of the interaction between the Program and these other factors for the future replication and scale-up of a similar combination sanitation and hygiene strategies?

2. Effectiveness

- To what extent did the Program achieve its expected results, in particular in terms of behaviour change and the consistent use of improved sanitation facilities? Were the assumptions underlying the programme's intervention strategy correct? Which factors, internal and external to the Program, explain the extent to which results have been achieved?
- To what extent has the roll out of CLTS been effective in achieving ODF status in villages? To what extent did the monitoring of the ODF certification processes contribute to effective project implementation?
- To what extent were women and girls involved in community processes (such as CLTS) and related economic opportunities (for example, sanitation and hygiene marketing)?
- To what extent did school sanitation improvements and school based hygiene promotion meet the specific needs of children, especially girls, in terms of privacy, cleanliness, security or comfort, including menstrual hygiene etc.?
- How effective was the sanitation marketing in moving people up the sanitation ladder?

- Which [combination(s) of] interventions appear to have achieved the best results in terms of sanitation behaviour change in different contexts?

3. Efficiency

- How long after CLTS triggering did communities achieve ODF status?
- What proportion of latrines constructed after CLTS triggering were of an improved standard in line with JMP definitions?
- What was the average household expenditure on the construction/improvement of latrines and hand washing materials, such as soap?
- Were the activities under different interventions completed in a timely manner?
- Were expected results (outputs) delivered within budget? How does the cost-effectiveness of different programme components compare?
- What were the most important cost drivers in the programme and how can costs be contained without compromising results?

4. Relevance

- To what extent are the objectives and the approach of the Program responsive to the needs and priorities of the rural population and to their socio-cultural and economic situation?
- To what extent are the objectives of the Program valid in relation to the NRWSSP?
- What are the implications of the analysis of the Program's contribution to observed impacts for the scale-up and replication of its approach and strategy, in similar and other programme contexts;
- To what extent do the interventions target the most vulnerable and marginalised groups?

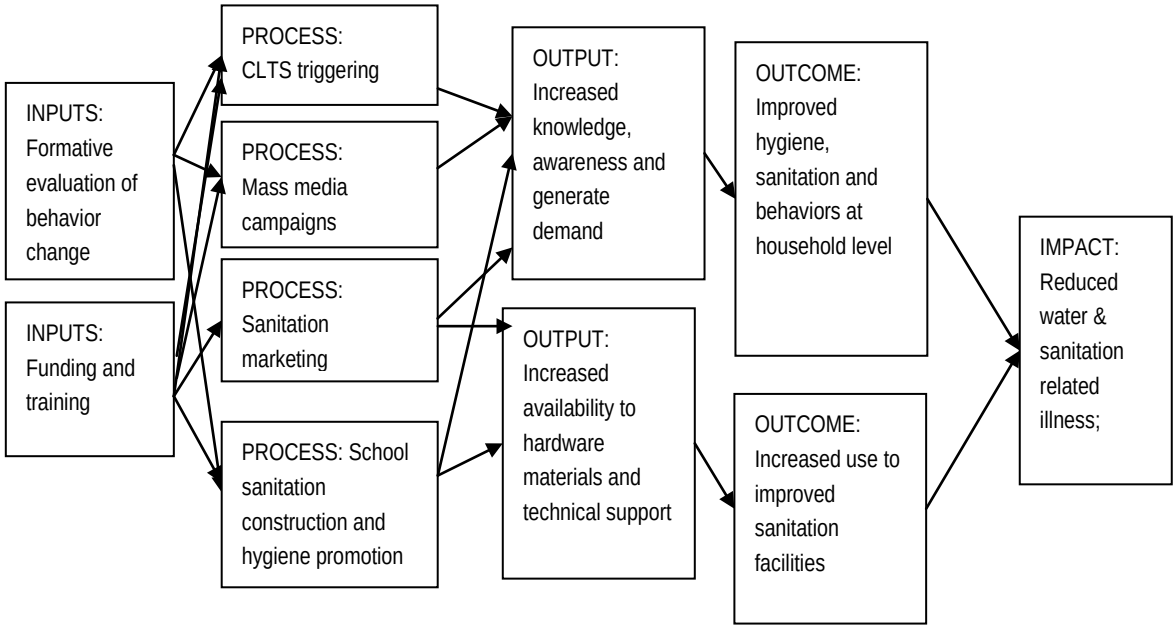
5. Sustainability

- Was behaviour change related to sanitation and hygiene sustained after initial intervention? Were latrines cleaned and maintained after initial intervention (for both school and households)?
- Which factors explain the observed sustainability of behaviour change?
- To what extent has government capacity, including information management systems, for the delivery of sanitation and hygiene services been strengthened as a result of this Program? Has there been an increase in budget allocations for sanitation and hygiene?
- To what extent has sanitation marketing contributed to enhanced and sustained private sector capacity and interest?

- To what extent has the Program contributed to strengthened governance of community structures, directly or indirectly involved in hygiene and sanitation?

Methodology

The evaluation framework should be based on the Sanitation & Hygiene Program logic model, which is also presented in the related DFID business case:



In view of its objectives, the impact evaluation methodology is structured around three main components:

- A baseline survey and formative research (Objectives 1 and 2 above)
- An end-line survey (Objective 2)
- An impact analysis (Objectives 3 to 6)

For each of the components, the contractor is expected to propose a detailed methodology. The contractor is also expected to prepare a detailed inception report for the Impact Evaluation. This would comprise an evaluation framework; a data collection methodology and sampling strategy, with detail of the instruments proposed for the baseline survey and formative research; a detailed fieldwork plan; a data processing, analysis and reporting plan; and details of how stakeholder consultation is to be accomplished.

Component 1 – Baseline Survey and Formative Research

The baseline survey needs to inform relevant impact, outcome and output indicators of the Sanitation and Hygiene Program as outlined in the logic model and in Annex A, and as derived from the implementation approach. Instruments should be developed with reference to good practices in questionnaire design from survey instruments such as MICS and DHS. In addition to a survey, a formative research approach will be used to arrive at an in-depth understanding of determinants of sanitation and hygiene behaviours, including issues such as perceptions, social norms, community-level factors, or the institutional environment, which are typically difficult to capture through a survey.

The baseline data will be analysed to further inform the Program's design and implementation approach. The contractor should take into consideration that 26 out of the 65 districts have already been targeted by the Program and it is planned for all districts to be triggered through CLTS by the end of 2012. In addition, the contractor should take account of the fact that the school sanitation component will be implemented in a more phased manner.

Component 2 – End-line Survey and Impact Analysis

The end-line survey will inform the key performance and impact indicators from the agreed list of indicators at baseline (see also Annex A). This will allow tracking changes in behavioural outcomes and disease incidence over time. A detailed field implementation plan is expected from the contractor.

With the use of data from baseline and end-line surveys, the impact analysis will focus on examining and explaining the extent to which the Program has contributed to the observed changes in hygiene and sanitation behaviours (program outcomes), and, at impact level, to changes in the incidence of sanitation and hygiene related diseases both in under 5 children..

Whilst this is not implicit in the project log frame, the assessment will also explore the Program's contribution to changes in school attendance, differentiating between the impact on girl and boy students, empowerment, improved economic opportunities, and capacity of public and private sector actors as well as community structures.

As already stated, the impact analysis will not aim to measure the attribution of results to Program interventions at impact level. This would require a randomised control trial with treatment and control groups, which is considered too complex to apply in the context of a National Sanitation & Hygiene Program.

Apart from using the data obtained through the baseline and end-line surveys, and in order to achieve a comprehensive understanding of the Program's contribution and the factors that facilitated this, the impact analysis will require additional collection of primary data through key informant interviews, focus group discussions, use of programme monitoring information, and reviews of Program documents. It is considered critical that the impact analysis incorporates the views and opinions of various stakeholders, including those of women and children.

Expected Deliverables

	Expected Output	Tentative Dates
INCEPTION PHASE	Inception Report, which contains the following: - An evaluation framework with a comprehensive set of evaluation questions and indicators in line with the Program log frame - A data collection methodology and sampling strategy for the entire impact evaluation, with proposed instruments for the baseline survey and formative research (component 1) - A detailed fieldwork plan - A data processing, analysis, and reporting plan - A plan for adequate stakeholder involvement throughout the impact evaluation	September 2012
Component 1	**Expected Output**	**Tentative Dates**
BASELINE SURVEY & FORMATIVE RESEARCH	Finalised data collection instruments and sampling strategy	October 2012–February 2013
	Field Work	
	Formative research analysis	
	Draft Report	
	Final Report and Dissemination, including a contribution to Program design and implementation strategy	
	Data Archive	
Component 2	**Expected Output**	**Tentative Dates**
END-LINE SURVEY	Finalised questionnaire and sampling strategy	March-May 2015
	Field Work Implementation Plan	
	Data processing, analysis, and reporting plan	
	Field Work	
	End-line Survey Report	
	Data Archive	
Component 3	**Expected Output**	**Tentative Dates**
IMPACT ANALYSIS	Data collection methodology, data analysis and fieldwork plan	May-July 2015
	Field work	
	Impact Evaluation Draft Report, based on all survey data and additional data collected	
	Presentation to Steering Committee	
	Impact Assessment Final Report	

Management Arrangements

The research institution will be contracted by and report to UNICEF Zambia, which will assess the deliverables for payment. The Ministry of Local Government and Housing and UNICEF will establish a steering committee, chaired by UNICEF Zambia's Chief Social Policy with representatives of various stakeholders of the Sanitation & Hygiene Program. These include: Ministry of Health, Ministry of Education, Research and Development Program, MOFNP, and DFID. The role of the committee is to ensure quality, independence and use of the evaluation findings. In particular, it will coordinate and facilitate stakeholder involvement at all stages of the assignment. It will also provide technical support and quality assurance to expected deliverables. Finally, it will facilitate access to information and resources for the consultancy institution.

Annex 1 – List of Indicators; extracted from finalised DFID LFA

IMPACT	Impact Indicator	Source
Reduced diarrhoea morbidity amongst rural children under 5	Percentage of children under five years with diarrhoea in the two weeks preceding the survey	Impact Evaluation
OUTCOME	**Outcome Indicator 1**	
3 million people consistently using improved household toilets and practicing hand-washing with soap or ash thereafter	The proportion of people in rural areas using improved sanitation facilities with a functional hand-washing facility at the toilet	Performance Management System (PMS); Validated by Impact Evaluation
	Outcome Indicator 2	
	Number of additional people with sustainable access to improved sanitation facilities - cumulative from baseline year - attributed to DFID support to UNICEF	
	Outcome Indicator 3	
	The proportion of households in rural areas with a designated place to wash hands, in or near the sanitation facility, with a hand cleansing agent (soap or ash) and water available at the time of inspection	

OUTPUT 1	Output Indicator 1.1	
3,000,000 people reached with sanitation and hygiene promotion activities	Number of people reached with hygiene promotion activities undertaken in communities, focusing on the importance of using latrines and hand washing with soap or ash	Performance Management System (PMS); Validated by Impact Evaluation
	Output Indicator 1.2	
	National Sanitation and hygiene Behaviour Change Communication (BCC) strategy and plans established with MoLGH and implemented, with both community level interventions and mass media components	Annual BCC Strategy, Plans and Review Reports from MoLGH
	Output Indicator 1.3	
	Number of verified Open Defaecation Free (ODF) villages achieved through DFID support	ODF verification reports

OUTPUT 2	Output Indicator 2.1	Source
1,000 schools and health centres have appropriate sanitation facilities including hand-washing facilities, and soap available; with hygiene promotion and management system	Number of schools and health centres that have appropriate sanitation facilities including hand-washing facilities, and soap available; together with an appropriate management system and hygiene promotion activities (see Note G)	Annual UNICEF Project Progress Reports in December each year, with 10% of the results reported being verified by field visits from UNICEF Project Staff

OUTPUT 3	Output Indicator 3.1	Source
National, provincial and districts level administrations have capacity to plan, implement and monitor sanitation promotion	No of districts implementing District Total Sanitation and Hygiene Plans	Annually updated Districts Total Sanitation and Hygiene Plans and Annual Reviews of the same
	Output Indicator 3.2	Sanitation TWG Minutes
	No of National Sanitation Technical Working Group meetings convened by MoLGH with CPs participating	
	Output Indicator 3.3	PMS Annual Reports
	Sanitation and Hygiene PMS established as a component of Goverment's WASH IMS	

OUTPUT 4	Output Indicator 3.1	Source
The private sector in 74 rural districts is enabled to supply sanitation and hygiene services in response to HH demand	No of local enterprises established and able to offer sanitation and hygiene related services to HH in rural districts	Annual District Total Sanitation and Hygiene Plans and associated Review Reports, verified by UNICEF field visits

Annex 2: Program Strategy

To meet the program objectives within an exacting timeframe, UNICEF, working in close cooperation with its partners (primarily MLGH, but also the Ministries of Health and Education), District based Local Authorities, NGOs with particular capacity in hygiene and sanitation or a related field, and a variety of other stakeholders, has devised the following strategy.

Building on the highly successful demonstration of Community Led Total Sanitation (CLTS) in Choma, a district in Southern Province, the same approach is being introduced in an expanding number of districts across Zambia. The approach is based on the 'triggering' of whole villages to abandon the practice of open defecation, and build and use home-built toilets. Change is achieved by developing and building on a feeling of collective disgust and shame, through a process of village meetings (an initial triggering visit, and up to five follow up meetings). After a period of up to four months, an open defecation free (ODF) status is expected to be achieved throughout the community. The use of toilets is accompanied by the adoption of hand-washing with soap or an ash-based equivalent.

In the first 'wave', CLTS was introduced in 12 districts in five provinces (Southern, Copper Belt, Luapula, Eastern and North West) in April 2012. A further 16 districts were added in the same provinces, with 2 more in Machinga, in July 2012. By October 2012, CLTS will be introduced in a further 20- district, and by early 2013, all districts in the country will be included.

The introduction of CLTS is being complemented by a parallel programme of Legal Enforcement (LE), which focuses on related public health legislation as it applies to public and commercial premises – including government offices, shops and restaurants, hotels, schools and other educational facilities, factories and other businesses. This component focuses in the townships of the same districts which are implementing CLTS.

To implement CLTS and LE, each participating district has appointed four District Trainers. The trainers are responsible for developing the district's capacity to implement CLTS and LE. The four trainers typically include the RWSS focal point from the Local Council, a member of the District Health Office, a member of the District Education Office, and an additional person usually drawn from the Community Development Office.

At Ward level, Sanitation and Hygiene 'Champions' are selected and trained to undertake triggering, support the development and implementation of local sanitation action plans and the

establishment of a sanitation action group, and follow up missions to specific communities. The Champions include representatives of the local traditional leadership, environmental health technicians, and the local council.

District Trainers are supported by a National Team of 35 Master Trainers. These are experts in either CLTS or LE, and operate at provincial level, currently in three or four person teams. The National Team itself is supported by six coaches / mentors who are deployed from Lusaka by UNICEF and the Directorate of Housing and Infrastructure Development (DHID) at MoLGH.

CLTS and LE will in the future be reinforced by a number of other components of the programme. These include a broad based behaviour change communication (BCC) strategy, focusing on sustained changes in hygiene practices. The BCC strategy will include national and district communication components (mass media) as well as more intense communication at community and household level (interpersonal communication). The BCC strategy, which includes aspects of recognition of ODF status, will be informed by the formative work included as part of the Impact Evaluation. A number of appropriate communication channels and messages will be selected, the former are likely to include the press, radio, TV and theatre, a school based programme (see below), and other forms of print media.

As the programme continues, UNICEF will increasingly link the BCC component for sanitation and hygiene with a broader based communication strategy – Communication for Development or C4D. C4D enables communities to express their demand for locally relevant development that encompasses multiple sectors including WASH, education, health, nutrition and social protection. The process also develops the capacity of government to respond to this demand. The C4D strategy is clearly linked to UNICEF's involvement in a number of development sectors and is best implemented in districts where UNICEF is supporting a number of sector programmes.

Another important programme component is the introduction of sanitation marketing, which focuses on the identification and development of local sanitation and hygiene related suppliers, and the development of demand stimulation for higher levels of service. Whilst CLTS is designed to achieve a change in sanitation practice, often through the use of fairly rudimentary toilet facilities, it is likely that a significant number of rural and peri-urban households are willing and able to inform more sophisticated forms of sanitation. The sanitation marketing strategy will involve gathering evidence to determine what drives individuals to demand for services, measuring what really works and makes sanitation marketing sustainable. It also involves

advocacy efforts to engage governments and other public and private partners to prioritize sanitation policies that address this urgent issue.

The final programmatic component of the sanitation and hygiene capacity focuses on schools. The programme will implement improvements in sanitation and hygiene hardware (including adequate numbers of physically separated, child friendly toilet blocks for girls and boys, separate hand-washing facilities for boys and girls, soak pits and other forms of physical hardware). The design of the facilities will be worked out with a number of government and non government stakeholders including the Ministry of Education, with a focus on the use of low cost materials, child friendly designs, operation and maintenance, and the conservation of water. Improvements in hardware will be accompanied by the orientation and training of sanitation managers within the school, and an expanded programme of hygiene promotion and education that links school and community and vice versa.

In terms of monitoring program performance in terms of process and results, UNICEF is working with project partners to establish a Performance Management System (PMS) that is associated with the Government's on-going development of a WASH Information Management System (IMS). This work is due to commence shortly. As an interim measure, program performance data is being collected by the National Team and Coaches, as well as by participating districts, based on a simple reporting format. Data on project progress will inform UNICEF's scheduled quarterly review with DFID (late September 2012) and the National Rural Water Supply and Sanitation Program Mid-Term-Review in October / November 2012.

Reflecting the fact that the program equates to a significant proportion of the sanitation and hygiene component of the National Rural Water Supply and Sanitation Program, UNICEF will work with Government, Collaborating Partners (CPs) and NGOs to strengthen sector coordination in this area. UNICEF will strengthen its participation in related fora, including monthly CP meetings, the Water Sector Advisory Group (involving government, CPs and NGOs), the NGO WASH Forum, quarterly, annual and mid term sector reviews and other processes.