Sanitation and hygiene in developing countries: identifying and responding to barriers

A case study from the Democratic Republic of Congo

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February 2007

The research was carried out in February and March 2006 and this report records the status of sanitation and hygiene in DRC before the end of 2006.

This report will also be available in French, via the Tearfund website: http://tilz.tearfund.org/Research/Water+and+Sanitation

This case study is part of a project investigating barriers to sanitation and hygiene promotion in three francophone countries in sub-Saharan Africa: Madagascar, Burkina Faso and the Democratic Republic of Congo. A description of the project is set out in Section 1.3 of this document.

As well as country case study reports, see also the Briefing Paper synthesising and commenting on the results of the studies in the three countries – on the ODI website www.odi.org.uk/wpp/Publications.html

A Tearfund synthesis paper is also available: http://tilz.tearfund.org/Research/Water+and+Sanitation

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Tearfund is an evangelical Christian relief and development agency working with local partners to bring help and hope to communities in over 70 countries around the world. Many of its partners work on water, sanitation and hygiene promotion projects. Through its advocacy work, Tearfund hopes to raise awareness of the current global water and sanitation crisis among its supporters and policy-makers; it also hopes to build the capacity of its partners to advocate on water issues on behalf of poor communities.

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The mission of the Water Policy Programme (WPP) at ODI is to contribute to poverty reduction and social development through research and advice on water policy and programmes.

***Programme de Promotion des Soins de Santé Primaires en Zones de Santé Rurales* (PPSSP)**
'Programme for Promotion of Primary Health Care in Rural Health Zones' is one of Tearfund's partners in the Democratic Republic of Congo (DRC). Its mission is to contribute to improving people's quality of life by promoting good public health practices and minimising the impact of trauma caused by war, conflict, sexual violence and HIV/AIDS.

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Abbreviations

ADB	African Development Bank
ARI	Acute respiratory infection
BPD	Building Partnerships for Development
CNAEA	National Committee for Action on Water and Sanitation – *Comité National d'Action de l'Eau et de l'Assainissement*
CRAEA	Regional Committee for Action on Water Supply and Sanitation – *Comité Régional pour l'Action de l'Eau et de l'Assainissement*
CRONG	Regional Council of NGOs – *Conseil Régional des Organisations Non Gouvernementales*
CLTS	Community-led total sanitation
DFID	Department for International Development (of the UK government)
FEC	Federation of Entrepreneurs of the Congo – *Fédération des Entrepreneurs du Congo*
ISDR	Higher Institute for Rural Development – *Institut Supérieur de Développement Rural*
MDG	Millennium Development Goal
MICS	Multiple Indicator Cluster Survey
NGO	Non-governmental organisation
OVD	Office of Highways and Drainage – *Office des Voiries et Drainage*
PNA	National Sanitation Programme – *Programme National d'Assainissement*
PPSSP	Programme for Promotion of Primary Health Care in Rural Health Zones – *Programme de Promotion des Soins de Santé Primaires en Zones de Santé Rurales*
PRSP	Poverty Reduction Strategy Paper – *Document de Stratégie pour la Réduction de la Pauvreté*
REGIDESO	Network for Distribution of Water and Electricity – *Régie des distributions d'Eau et d'Electricité de la République de Zaire*
S&H	Sanitation and hygiene
SNHR	National Service for Rural Hydraulics – *Service National de l'Hydraulique Rurale*
TNG	Transitional National Government
WASH	Water, sanitation and hygiene
WSP	Water and Sanitation Programme of the World Bank
WSS	Water supply and sanitation
WSSCC	Water Supply and Sanitation Collaborative Council

1 Introduction

1.1 Rationale

Many people believe that simply providing a fresh, clean water supply will substantially reduce water-borne illnesses. What most people do not know is that safe hygiene practices and access to sanitation are crucial for combating the main health threats to children under five, in particular diarrhoea. Approximately 88 per cent of all diarrhoea infections worldwide are attributed to unsafe water supply, the lack of safe hygiene practices and basic sanitation infrastructure (Evans 2005). And the scale of the problem is immense: today, nearly twice as many people lack access to sanitation compared with water supply (UN 2005).

In recent years, sanitation has risen up the international policy agenda. In 2002, sanitation was included in the Millennium Development Goals (MDGs), and specifically within MDG 7, Target 10, which sets the aim of halving *'by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation'*. Yet, at national level in most developing countries, hygiene and sanitation do not yet receive much attention, despite important health implications. The aim of this report is to explore the underlying reasons for this apparent paradox.

1.2 Defining sanitation and hygiene

The first thing that comes to mind when talking about sanitation is a latrine. The term 'sanitation', however, commonly covers a much broader area of activities. Box 1 lists the broad elements that most professionals would classify as sanitation, according to Evans (2005). Elements particularly studied in this project are shown in *italics*.

Box 1 Broad elements encompassing sanitation, hygiene and water management

Source: Evans (2005)

Sanitation	• *Safe collection, storage, treatment and disposal/re-use/recycling of human excreta (faeces and urine)* • Management/re-use/recycling of solid waste (rubbish) • Collection and management of industrial waste products • Management of hazardous wastes (including hospital wastes, chemical/radio-active and other dangerous substances)
Hygiene	• *Safe water storage* • *Safe hand-washing practices* • Safe treatment of foodstuffs
Water management	• Drainage and disposal/re-use/recycling of household waste water (also referred to as 'grey water') • Drainage of storm water • Treatment and disposal/re-use/recycling of sewage effluents

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The range of activities in Box 1 is wide. The result is that a typical view of the 'sanitation and hygiene sector' extends from investment in large and costly items of infrastructure such as trunk sewers, via simple 'on-site' latrines for individual households, to provision of 'soft' items, e.g. support for women's groups seeking to change defecation practices in their community.

In Box 1 the usual order of presentation for 'WASH' as promoted by the Water Supply and Sanitation Collaborative Council (WSSCC) – water, sanitation and hygiene – has been adjusted. The key feature of the WASH approach is that it promotes the three components in combination, in policies and practice.

Not all elements in Box 1 have the same impact on reducing under-five child mortality. This DRC case study has paid particular attention to safe disposal of human excreta and safe hygiene practices, which are elements of basic sanitation and hygiene lacking in many poor areas in Africa and other developing countries (listed in *italics*).

'Solid waste disposal' (of rubbish/garbage, not faeces) is also included in Box 1, as is disposal of waste from hospitals/clinics. Less attention is, however, paid to both those aspects during this project.

Improved hygiene is also a factor in reducing acute respiratory infections (ARIs). Studies tracing the routes of faecal-oral contamination in households suggests that hands are the microbe 'superhighway'. They carry faecal germs from toilets or defecation sites to utensils, water and food. While washing hands at critical times is accepted as an effective intervention against diarrhoeal disease, evidence is also now growing for its effectiveness against respiratory infections (Cairncross 2003) such as tuberculosis (including transmission of germs from mouth to hand to mouth, e.g. via sneezing).

Improving sanitation in line with Millennium Development Goal (MDG) Target 10, alongside improved water supply, may directly contribute to progress towards MDG Targets 4 and 6 shown in Box 2. Improving sanitation will also contribute, indirectly, to other MDGs such as Target 3 on education and Target 8 on maternal health, also shown in Box 2.

Box 2
Sanitation and hygiene-related targets under the MDGs

MDGs	Targets
7 **Environmental sustainability**	**Target 10** Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation.
4 **Reduced child mortality**	**Target 4** Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate.
6 **Combating disease**	**Target 8** Have halted, by 2015, and begun to reverse, the incidence of malaria and other major diseases.
3 **Achieving universal primary education**	**Target 3** Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.
5 **Improving maternal health**	**Target 8** Reduce by three-quarters the maternal mortality ratio.

Diarrhoeal diseases and parasites reduce attendance and attention at school in a number of ways: girls often stay away from school unless there are female-only latrines; time spent collecting water may take precedence over school attendance and this burden falls on girls, as does looking after sick family members. Teachers may be unwilling to live in areas without adequate water and sanitation. Women bear the brunt of poor health and the security risks from lack of private sanitation or washing facilities, and the burden of carrying water. A hygienic environment will be more conducive to maternal health: a healthy pregnancy and hygienic labour practices reduce the risk of maternal illness.

1.3 Objectives, methodology and scope

This report is based on a project commissioned by Tearfund with two objectives.

- First, this project is designed to contribute to better understanding of factors which hinder or, conversely, support:
  - the development of policies on sanitation and hygiene at national level
  - the effective implementation of sanitation and hygiene programmes (delivery to those who need it).
- Secondly, Tearfund aims to build the capacity of its local partner organisations in carrying out evidence-based advocacy on sanitation issues in their respective countries. The starting point for choosing which countries to study was therefore individual Tearfund partners' interest in sanitation and hygiene policy. From among those interested, Tearfund selected three Francophone countries which were therefore less well-known to UK-based organisations, namely Madagascar, Burkina Faso and the Democratic Republic of Congo (DRC).

The research methodology is informed by the objectives above. Rapid research methodologies with a strong capacity building element have been used to allow Tearfund's local partners to participate in carrying out the study. This report therefore presents the findings from 'scoping' rather than in-depth analysis.

In DRC, the research was jointly carried out by ODI, which took the lead at national level, and PPSSP, Tearfund's local partner organisation, which implemented the local-level research. The research is based on a desk study of relevant policy and materials in-country and on semi-structured interviews at national level of representatives of government, NGOs and donors, both sanitation and hygiene specialists and other development practitioners. This was complemented at sub-national level, in a 'province' and 'territory' in DRC, by semi-structured interviews to collect the views of representatives of actors and focus groups in two localities in that territory, to investigate how two sanitation initiatives (*actions* in French) were impeded by 'barriers' and/or supported by positive factors. (All three levels – province, territory and locality – are referred to, for convenience, as the **local** study.) The results of the three country studies were compared in a workshop held in London in November 2006.

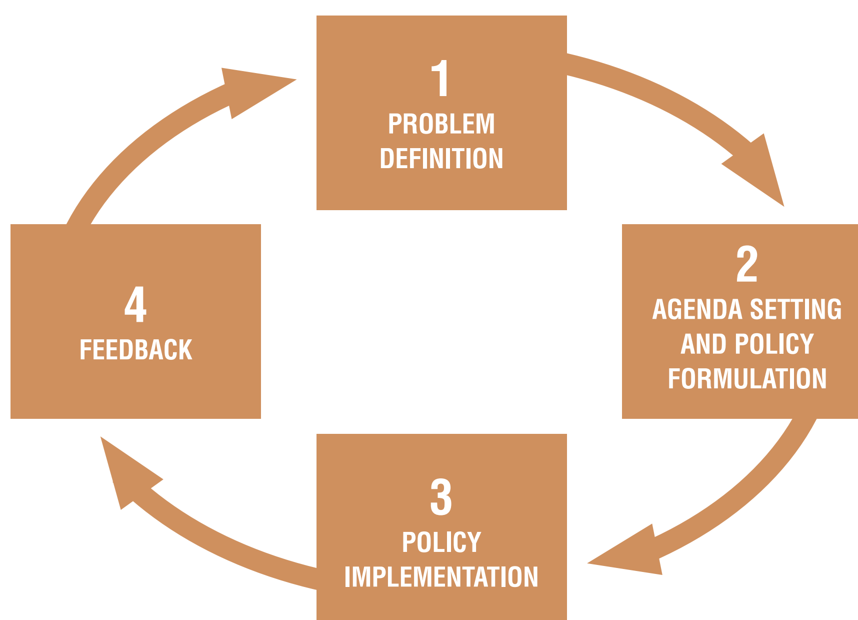
This report offers a snapshot of the sector as it is perceived by key decision makers and experts at national and provincial/territorial levels, and by users in two localities.

1.4 Approach to identifying barriers and supportive factors

There are a number of potential barriers to developing and implementing sanitation and hygiene policies – and some factors which are supportive of them.

A typical policy process broadly encompasses the four essential stages of: 1 – **Problem definition**, 2 – **Agenda setting and policy formulation**, 3 – **Policy implementation** and 4 – **Feedback**, as shown in Figure 1.

Figure 1
The policy process: stages in the development and implementation of public policy



As will be seen, barriers to development and implementation of sanitation and hygiene policies may occur during each of the first three stages. The fourth 'Feedback' stage was not covered by this study, although clearly monitoring and evaluation of how programmes are being implemented is an important element of the policy cycle, to feedback lessons learnt.

The studies in the three countries suggest that, once agendas have been set and policies on sanitation and hygiene formulated (stage 2), the challenges of achieving policy implementation (stage 3) are substantial.

1.5 Structure of the report

The report is organised in the following way.

SECTION 2 is a summary of factors which are considered by 'international' commentators to impede investment in sanitation and hygiene programmes in developing countries. Perceived 'barriers' applying at each of the first three stages in the policy process above are listed (and numbered) under the above headings: 'Problem definition', 'Agenda setting and policy formulation', and 'Policy implementation'.

SECTION 3 contains an introductory description of the country context in DRC and a survey of its sanitation and hygiene sector.

SECTION 4 reviews the scope and results of the 'local' study carried out by PPSSP in the selected province/territory in DRC, described below.

SECTION 5 considers whether the barriers alluded to in Section 2 are present in DRC, and whether there is evidence of other barriers to – or supporting factors for – improving sanitation and hygiene services. It also considers how sector actors are responding to the challenges of promoting sanitation and hygiene, with donors' support.

SECTION 6 concludes the report with a summary of the barriers, and supporting factors, which are currently operating in DRC. The seminar to be held in Goma in April 2007 will propose steps to be taken to improve future sanitation and hygiene programmes in DRC.

The three case studies reveal that each country is at a different stage in the policy development process. They provide insights into how the barriers and responses suggested in the international literature manifest themselves (or not) in these three sample countries – as reported to the researchers by key actors in each nation.

Differences between sanitation challenges in urban and rural contexts are exemplified by the principal focus of the local study in DRC on (two) urban localities and in Madagascar and Burkina on rural settlements.

In DRC, it will be seen that even progression from stage 1 to 2 of the policy process has been problematic.

In DRC, the process of transition from conflict to reconciliation and reconstruction, and then on to the post-conflict stage, provides an especially challenging backdrop for the sanitation sector, and indeed all sectors. This added dimension of a 'collapsed' state is discussed in Section 3. The term 'post-conflict' is not used to suggest that conflict is absent from all locations in DRC: it may be more accurate to refer to a context of continuing insecurity.

2 Perceived barriers

Why, then, is sanitation proving *'such a hard nut to crack'*? (Evans 2005, page 16) In this Section, we set out the factors which international commentators perceive as being the principal impediments to investment in sanitation and hygiene in developing countries. Each of the fifteen barriers listed below is described in relation to one of the first three stages of the policy development process: 1 – 'Problem definition', 2 – 'Agenda setting and policy formulation', and 3 – 'Policy implementation'.

2.1 Problem definition

The first challenge in developing sanitation and hygiene policies is to define terminology – an integral part of the first stage of the policy process.

Box 1 showed the three components of WASH and activities commonly included under each.[1] But interpretations vary and it cannot just be assumed that stakeholders are using the terms 'sanitation' and 'hygiene' in the same way. Differences of interpretation which remain unnoticed and unexplored will undermine efforts to identify and agree the problems which future policies and programmes must resolve.

Jenkins and Sugden (2006) note that use of the term 'sanitation' is in danger of blurring the important distinction between 'on-site' methods of handling human waste on the one hand, and connections to sewer systems on the other.[2] Experience shows that a decision relating to an on-site pit latrine for an individual household involves issues which are substantially different from those surrounding a network of sewers and household connections to them. In French, a distinction is made between *assainissement autonome* (autonomous sanitation) and *assainissement collectif* (collective sanitation).

2.2 Agenda setting and policy formulation

The second stage of the typical policy cycle is agenda setting and policy formulation. There are five key barriers which can hinder development of policy during this stage:

2.2.1 Lack of information

Problems may be caused in many developing countries by lack of recent, reliable information on the condition of existing sanitation and hygiene infrastructure, including whether or not it is actually functioning. Official statistics on sanitation coverage are often inconsistent or even hopelessly inflated. Needs and demands, particularly in more remote

1 Vector (i.e. insect and rodent) control is not included in Box 1: it was little referred to by the persons interviewed.

2 While household connections to sewers are, Jenkins and Sugden (2006, page 8) note, a technical option, *'it is unrealistic to believe that anything but a small percentage of the world's urban poor will be served by sewered systems in the next 20 years'.*

rural areas, are frequently unknown, making the task of setting a coherent and balanced agenda more difficult.

2.2.2 Tensions between mindsets

Mutual incomprehension between different mindsets is frequently a barrier to improving sanitation and hygiene provision. Some policy-makers argue, for example, that sanitation as a household amenity is a household responsibility, so that public agencies should concentrate their energies on public aspects of sanitation, e.g. on public networks for storm water drainage, sewerage etc, i.e. large public works projects. Health experts advise, however, that removing excreta from living spaces has major health benefits, not just for individual families, but also for their neighbours; and that many health benefits stemming from improved sanitation are shared by the community at large, rather than accruing principally to individual households. According to this view, such externalities justify the use of public funds for latrine promotion.[3] So public institutions, both central and decentralised, have an interest in – and an obligation towards – allocating public resources for household and small community-level sanitation improvements.

The UN Task Force (UN 2005) explains the danger of transferring to developing countries a utility model current in developed countries which focuses on piped networks, sewers and other large public works, with much less interest in and attention to sanitation at the household level. A 'utility mindset' inclines naturally to the conclusion that sanitation is best institutionally 'housed' within the same (national) ministry and (regional and municipal) agency responsible for public water supply networks. Most water supply and sanitation agencies in industrial nations have very little direct interaction with the hygiene behaviour of households at all. Yet, in countries dependent on external aid, national policy-makers and practitioners who favour a household hygiene focus may encounter pressure to divert from that approach and keep in line with the utility vision of international consultants.

Another example of possible tensions between mindsets is between those who accord priority to public education campaigns designed to promote behaviour change, and those who favour a more (private) market-oriented approach. Research[4] has suggested that low uptake of household sanitation facilities may be explained by sanitation programmes which do not sufficiently understand users and their needs, as compared with those which treat users as having a say in which products (e.g. latrines) they buy to meet their needs. The distinction lies in seeing people not as passive beneficiaries of gifts, but as active citizens and consumers.[5] There are some indications that the latter kind of 'social marketing' increases demand and uptake of sanitation. Jenkins and Sugden (2006) make a case for this (page 16ff), although, as observed elsewhere, health professionals in public agencies (Newborne and Caplan 2006) may be instinctively sceptical of marketing techniques, at least those practised by private sector companies. This is despite the proven success of, for example, private soap producers

3 Cairncross and Curtis (undated).

4 *Social Marketing for Urban Sanitation: review of evidence and inception report*, WEDC, Loughborough University, UK. Research carried out by WEDC, UK, in conjunction with the London School of Hygiene and Tropical Medicine, TREND Group, Kumasi and WaterAid Tanzania: www.lboro.ac.uk/wedc/projects/sm

5 Uptake of latrines could increase if they were designed to meet more of people's demands: if they offered the opportunity to sit while using it, no smell and good ventilation, and easy access for desludging (emptying); and if they were cheap to install, less dependent on water and safe for children.

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in promoting sales of soap.[6] A recent report for Building Partnerships for Development (BPD) highlights potential barriers for social marketing: where, for example, potential 'consumers' of sanitation products (e.g. latrines) are tenants of low-grade rented dwellings/sites, landlords have little interest or incentive to invest their own resources in sanitation, due the perceived interim nature of their accommodation (Schaub-Jones et al 2006).

Jenkins and Sugden (2006) point out that, as regards sanitation services, there is evidence to challenge the views of those who instinctively favour public sector solutions to all 'water sector' problems. In developing countries the contribution of public-sponsored construction of sanitation infrastructure has been very small to date, compared with action by private households and providers to households.

2.2.3 Lack of coordination

Other commentators point to the lack of clarity in some developing countries over who – or **which** institution(s) – is responsible for which of the functions referred to in Box 1.

The most commonly adopted arrangement is that the institutional 'home' of sanitation is located within ministries of water. A second option can be to place sanitation within the remit of the ministry of health: a number of activities in Box 1 have a public health element, and there is a natural link therefore between hygiene and health (particularly preventative health – see further below). Another possibility might conceivably be a separate ministry for sanitation.

Since, however, the range of water, sanitation and hygiene-related activities is so wide, searching for 'the right institutional home' may not be fruitful. Arguably more important is establishing links between institutions, e.g. via planning processes which bring together departments from several responsible ministries. The above BPD report calls for tasks to be shared, *'rather than agreeing that one agency should always "lead" the process'* (Schaub-Jones et al 2006, page 26). Creating and linking **budget** lines across several responsible agencies may be an effective way of achieving coordinated policies. National WASH platforms, placed alongside but kept distinct from government, can help support joint planning by several agencies responsible for sanitation and hygiene, without joint **implementation** being necessary or appropriate, due to e.g. differing time-scales and skills requirements.

2.2.4 Lack of political and budgetary priority, lack of demand

A limiting factor commonly evoked is lack of funds for investment. Both water and sanitation have been losing out to other sectoral interests in the competition for scarce public funds. For example, in a 2003–2004 survey of Poverty Reduction Strategy Papers (PRSPs) and budget allocations in three countries in sub-Saharan Africa (ODI 2002; ODI 2004a), other 'social' sectors, such as education and health, attracted much larger budgetary allocations than water, and sanitation was especially under-funded. It prompts the question as to whether the political will exists to increase budget priority of sanitation.

6 The objection is that soap sales do not reach the poorest groups.

Advocates of increased support for sanitation need to address the fact that, in many instances, household and community expressed demand for sanitation facilities is lower than for other forms of support, including drinking water supply. Sanitation and hygiene specialists note that, for example, *'toilet acquisition may not be a priority item of expenditure, especially for the poor'* (Cairncross and Curtis, undated, page 1). Allocation of public funds to sanitation facilities in households which have not made them a priority may run the risk that, after installation, those facilities will not be used.

2.2.5 Donors' agendas

In aid-dependent developing countries, donor priorities will tend to be influential in setting sectoral agendas, and if pursued individually they will undermine efforts to promote collaborative planning.

2.3 Policy implementation

The third stage of the typical policy process is policy implementation. International commentators point to the following barriers which commonly need to be overcome in developing countries.

2.3.1 Lack of human and technical capacity

In many developing countries a lack of capacity in terms of human resources inhibits development, particularly at a decentralised level. The multi-faceted nature of WASH means that a wide range of different disciplines and skills is required to improve sanitation and hygiene provision. While the water sector has tended to be *'dominated by engineers who feel comfortable with technical problems and tend to lean towards technical solutions'* (Jenkins and Sugden 2006, page 7), household sanitation *'requires softer, people-based skills and takes engineers into areas where they feel uncomfortable and unfamiliar'* (page 8). Promoting behaviour change at household level is an area *'where most countries have few skills… and limited capacity. Most public agencies are unfamiliar with or ill-suited for this role'* (Evans 2005, page 25).

2.3.2 Low capacity to absorb funds

In a sector where spending has historically been low, a question arises about the rate at which flows of finance may be increased, at least funds channelled through state (public) bodies. It cannot simply be assumed that more resources will rapidly translate into improved outcomes. All development interventions need to be designed taking into account constraints in *'absorptive capacity'* (ODI 2005). As well as funds being available, it is important that they *'be used in the right way'* (Tearfund 2005, page 23).

2.3.3 Lack of service providers

The reality in many locations in Africa is that there is limited choice of sanitation and hygiene providers, whether agencies of local government, community associations, NGOs or private suppliers.

In cities in some developing countries, empirical studies have highlighted the activities of small **private** suppliers (e.g. Collingnon and Vézina, undated; WSP 2005). In relation to sanitation, these include, for example, bricklayers (or 'masons') for latrine construction and people to empty pits manually. There are still some doubts as to slum populations' willingness to pay, but the significance of the role of small private providers in meeting the needs of poor populations is now more widely recognised, where they are able to offer the right product for the right price.[7]

What is 'affordable' is very context-specific, and among poor communities affordability may be a persuasive limiting factor on uptake of new sanitation facilities, such as latrines. '*The decision to install home sanitation for the first time can be a big one and often involves changing [other] household-related infrastructure*' (Jenkins and Sugden 2006, page 13).

2.3.4 Methods/technology ill-suited to context

Suitable sanitation services/facilities will vary according to context: there will be differences between urban and rural contexts, large and small towns, planned and unplanned settlements – as well as between different ethnic and social settings (e.g. communities with more or less collective organisation and identity).[8] Since different products embody different technology choices, technology options which prove inappropriate will constitute practical barriers. There is broad consensus in the literature that the right choice of technology is an important determinant of take-up and use of sanitation facilities.

2.3.5 Lack of access to credit

Access to credit is also noted as something which is commonly lacking in sub-Saharan African countries,[9] particularly micro-credit for small service providers, whether community-based or private (WSP 2003). Loans available are often only for income-generating activities, rather than for improving community and household infrastructure (both sanitation and water facilities). And credit such as is available may not be at affordable interest rates or offer repayment periods long enough for poor borrowers.

2.3.6 Lack of strong messages

Promoting sanitation and hygiene presents a substantial communication challenge. As one Indian specialist explains: '*Statistics make no impact on people, so that it is not enough to state to villagers that diarrhoea kills x thousands of children in their country every year … The real challenge is to make clear the links between common illness and the practice of e.g.*

7 Recognising that, for very poor populations, availability of a public subsidy (in whatever form) may be essential.

8 See for example Jenkins and Sugden (2006) for a summary of differences in urban and rural excreta management (page 22).

9 There are a few exceptions where the microfinance sector is reported as being more developed, e.g. Benin and Kenya (WSP 2003, page 14).

open defecation' (WSSCC, undated, page 26).[10] *'If the campaign is focused only on the building of latrines … there will always be people who are not reached, people who defecate in the open and who continue to pollute the water sources and spread disease. High levels of latrine coverage, therefore, are simply not good enough. At the very least … this movement should be marching under the banner "No Open Defecation"'* (page 8).

The above types of approach have been brought together in a concept called Community-Led Total Sanitation (CLTS) which has been pioneered in South Asia. It uses *'peer pressure, shame, disgust and pride to create dissatisfaction'* with existing practices (Jenkins and Sugden 2006, page 15) and aims to create behaviour change that leads not only to the use of latrines, but also to a range of other activities: the washing of hands, the cutting of nails, the safe preparation of food, the refusal to spit in public places and the vigilant protection of local water bodies from all sources of contamination' (page 6). It is this *'attitude of mind, not building toilets'*, argues the WSSCC, which *'will lead to the really dramatic improvement of public health'* (WSSCC, undated). In parts of South Asia, CLTS seems to have been successful in mobilising whole communities. In other regions, it has been less tried and tested. It remains to be seen how CLTS might be adapted into the cultural context of DRC.

2.3.7 Lack of arrangements for cleaning and maintenance

A key aspect of the financial viability of shared and communal sanitation facilities is payment for maintenance – cleaning and pit-emptying. Sustained demand for use of latrines will depend on their being clean and without smell. If the rota or other system for cleaning breaks down, the facility will become unpleasant to use. The BPD report (Schaub-Jones et al 2006, page 7) suggests for communal facilities that *'engaging a caretaker is strongly recommended, preferably a local person paid from usage receipts, rather than a public employee. To cover this expense, as well as [other] maintenance and emptying costs, a fee for use is charged.'*

2.3.8 Complexities of behaviour change

However compelling the 'societal' reasons may be for investing in sanitation – reduced disease burden, reduced public health costs, increased school attendance for girls, greater economic productivity etc – the 'private' motivations of individuals for better sanitation at home may be different. As commentators have pointed out, an individual is likely to be prompted to improve his/her sanitation facilities by a mix of motives, including some which are **not** linked to a concern for health – see Box 3.

'…Old-fashioned didactic approaches based on education about germ theory and threat of disease have been the norm,' states one commentator (WSP 2002). But, although discouraging poor hygiene practices and encouraging good hygiene practices is important, it will not be enough: just because people know about disease and the cause of disease it does not necessarily follow that they will do something about it. The regular daily conduct of individuals and their habits will be based, at least in part, on reasoned decisions as to how they organise their daily lives, within the limits of time or resources. Where open defecation

10 WSSCC is here citing the words of Surjya Kanta Mishra, Minister for Health and Family Development in West Bengal, India, a former doctor and local government leader, who apparently helped launch a well-known pilot project in Medinipur and thereafter promoted a 'total sanitation' campaign in West Bengal.

Box 3
Why might an individual/household choose to use a latrine, instead of opting for open defecation?

Source: WSP and WaterAid (2000)

- **PRIVACY** Lack of privacy during open defecation is a major issue for women. A household latrine means that women do not have to wait for certain times of day, e.g. dawn or dusk, to relieve themselves.
- **CONVENIENCE** Latrines can be constructed next to the house, which is closer than traditional open defecation areas. Latrines can also be built with bath extension, increasing their utility for women.
- **SAFETY** Encounters with snakes, insects, vehicles and vegetation are common. Examples include the death of a 12-year-old girl from snakebite and a 48-year-old man killed by a bus while defecating by the roadside.
- **STATUS/PRESTIGE** A household latrine is a symbol of progress and material wealth. WaterAid-India has anecdotal evidence from its project areas to show that if the poorest households can be motivated to construct household latrines, the more affluent households follow suit.
- **COST SAVINGS** The recurring cost to treat consistent poor health is a considerable drain on household resources. A latrine is a one-off cost that is offset, in the longer term, by the cost savings on health bills.
- **INCOME GENERATION** A latrine can be built with a bath extension and the waste water from bathing can be used to generate income from kitchen gardens. In one village, several women used the extra income to pay off the latrine construction loan to the village self-help group.

offers people adequate privacy, convenience and safety, they may not wish to change their 'bad' habits ('bad' when viewed from a broader public health perspective).

Predicting when one or more of the above motivations might become persuasive or compelling for an individual, household or community, is a matter of considerable complexity and subtlety. Lessons from projects in Burkina Faso and Zimbabwe suggest (WSP 2002) that: *'The key to changing behaviour is first to understand what drives and motivates it. This issue is far more complex than was once thought. Behaviour change is difficult to achieve and requires considerable resources'* (WSP 2002). Different cultural contexts will require different solutions.

2.3.9 'Cultural' factors

Indeed, beyond individual motivations, further potential barriers referred to in the international literature are cultural factors which make the intended beneficiaries of sanitation and hygiene promotion projects reticent or resistant to new facilities. Cultural difference arises from gender: variations in the perspectives of women and men on sanitation facilities are noted by many commentators. The views of adults and children vary too. Household circumstances are also diverse. Different ethnic groups may have varying beliefs and customs, while attitudes to sanitation and hygiene may vary substantially between urban and rural contexts.

3 DRC survey – national level

In this Section, the country context in DRC is described and an overview given of the sanitation and hygiene sector. The sector overview is based on the interviews conducted by ODI in the capital, Kinshasa, as well as information supplied by the persons interviewed.

3.1 Democratic Republic of Congo

DRC's first prominent feature is its size – see Map 1. It is a national territory of 2.345 million square kilometres (three times the size of Zambia and nearly ten times that of Uganda). The population of DRC is estimated, in the absence of a recent census, at 60 million. The average population density nationally is low, at 22 inhabitants per km^2; population density in many rural areas is lower. The population is growing at between an estimated 3 per cent and 3.2 per cent per year, with nearly half the population thought to be aged under 15 years, according to the Poverty Reduction Strategy Paper (PRSP – 3rd version,[11] page 17). DRC is one of the poorest countries in sub-Saharan Africa, with an estimated 80 per cent of the population living below the income poverty line of US $1 per person per day. The rate of infant mortality is 126 per 1,000 and the rate of maternal mortality (per 100,000) is 1,289.[12]

Map 1 Location of Democratic Republic of Congo

KEY: Capital city; Major towns; Water body; Mountain

11 The information on DRC cited here is provided in Table 1 on page 18 of the 3rd draft of the PRSP, which in turn cites as its sources the *'Central Bank of Congo, UNDP 1999, MICS2 and Christian Aid (2001)'*.

12 Information taken from the PRSP. As a comparison, Madagascar: life expectancy at birth is 55.4 years and infant mortality is 76 per 1,000 live births.

After many years of despotic leadership and misrule under Mobutu (when the country was called Zaire), the people of the Congo have endured a period of conflict which has affected many parts of the country and left over 3 million people dead. In June 2003, a Transitional National Government (TNG) was installed with the aim of presiding over a three-year process of reconstruction and reconciliation.

The five priority objectives for the TNG were defined as:

- reunification of the country and its administration
- integration of the army under the new name of the Armed Forces of DRC (FARDC in French), including disarmament, demobilisation and re-insertion of the armed groups and militia
- unification of the police and security services
- holding of free, transparent democratic elections
- restoration of state authority over the whole of the national territory.

The disarmament and demobilisation process is ongoing. A new constitution was signed in December 2005. Accordingly, the country has been divided into 25 (formerly 11) provinces. Kinshasa remains the administrative and political capital with a population estimated at between 6 and 10 million (the widely divergent estimates being, again, explained by the lack of a recent census).

Elections (for president and national parliament) were held at the end of July and October 2006. Joseph Kabila was inaugurated as DRC's President on 6th December, 2006. He is the country's first democratically elected leader for more than 40 years. The country also now has an elected parliament and provincial assemblies. Senate elections are to take place in early 2007. The elections marked the end of the Transitional National Government.

The political prospects for DRC are more optimistic than they have been for two generations. The development challenges facing the country are, however, very substantial. As the website of DFID puts it, *'Huge challenges and many risks remain. The challenge for the people and future government of DRC is to put in place a sustainable peace and to bring to an end the poverty that blights the lives of most Congolese.'*

3.2 From reconciliation and reconstruction – to a 'post-conflict' state

The DFID website also comments: *'This is a complex, post-conflict environment with a collapsed state, widespread chronic poverty and social exclusion and some of the worst social indicators in Africa.'*

While the conflicts in DRC have primarily taken place in the east, high rates of mortality are reported in other provinces (e.g. Equateur and the Kasais) as a phenomenon of under-development. And in the sanitation 'sector' (as will be seen below), low levels of investment over a period of 30 years, since the mid-1970s, have created very large gaps in public services, i.e. aside from the destruction and pillage of war. Where state capacity is absent or lacking, NGOs (national and international) have – to some extent – been filling the

gaps (see below). Chronic lack of state capacity is made more complex by variations in the extent and consequences of hostilities in each region. It may be more accurate to talk of continuing insecurity, where conflict is ongoing or may possibly reoccur. It will be seen below that the province in which Tearfund partner PPSSP has been working, North Kivu, is not completely free from insecurity.

A key issue for the newly elected government is how – with the support of international donors – to lead the country from the phase of transition on to a new era. The preoccupation of the transitional phase was reconciliation and reconstruction (as set out in the UN Reconstruction Plan). Moving on will also involve a further transition from humanitarian response – which is essentially reactive and, by its very nature, designed to address emergencies – to medium-term development programming, which is not concerned with emergency.

There are some key questions in relation to sanitation and hygiene. First, in what circumstances are there 'emergency sanitation' interventions, as compared with medical emergencies? Other than in refugee camps, it may be that sanitation is considered wholly in the development domain. Secondly, as referred to in Section 2, which type of actor is best suited to carry out which sanitation activities, in which circumstances? In DRC, answering that question requires an understanding of the special circumstances of the 'collapsed' state.

In practice, this means deciding in which locations the best option will be:

- to build government capacity through state agencies, including holding them responsible and accountable for improving the standard of services; **or**
- to channel development funds and efforts through alternative service providers, for example, via NGOs and community associations (including faith-based organisations).

Figure 2 on the next page gives an overview of the range of those possible options for delivery of sanitation and hygiene services, towards medium-term goals, e.g. the MDGs, along its horizontal axis. Down the vertical axis, the table provides the country context outlined under broad headings: the Political Economy, the Status of the Sanitation and Hygiene (S&H) Sector, the condition of Governance and Accountability (in other sectors as well as the S&H sector), and Aid Coherence and Effectiveness[13] (since external funding is important).

Figure 2 is designed as a framework to help consider medium-term development strategies. The right-hand column in Figure 2 acknowledges, however, that a number of international and national NGOs (including PPSSP) are engaged in water and sanitation projects (especially via Health Zones, *zones de santé* – see below), as part of a humanitarian effort.

The NGOs have been working to help, for example, internally displaced persons and other populations with urgent needs arising out of the disruption caused by the violence. In terms of planning for this next phase of governance, it would be too simplistic to draw a line between either humanitarian or development action; in some cases there will be a case for continued support to humanitarian relief operations where they are still required, at least in the short term. However, in the medium term, it would presumably make little sense to contemplate a presence of international NGOs (INGOs) or national NGOs in every village.

13 These headings and the layout of Figure 2 have been adapted from the (as yet unpublished) work carried out by Tom Slaymaker of ODI for DFID.

Figure 2
Framework for considering strategic options for delivery of sanitation services in a *post-conflict* situation – towards medium-term development strategies

Adapted from T Slaymaker (2006), forthcoming work on WSS 'failed' states

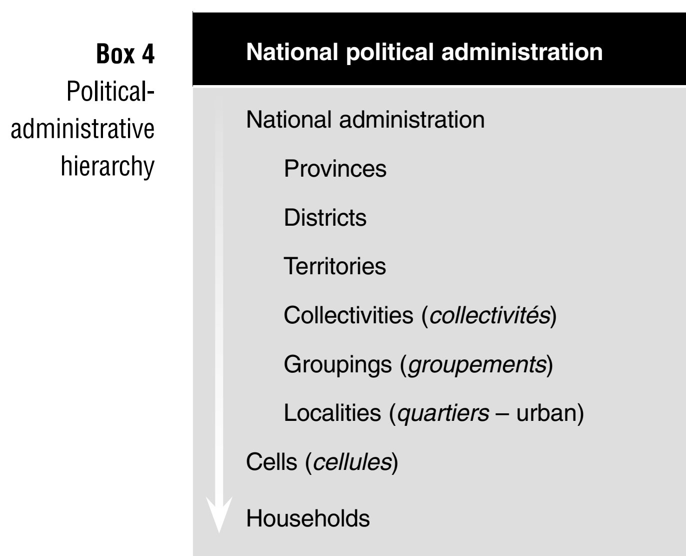
KEY S&H – Sanitation and hygiene
italics – Strategic decisions to be made

CONTEXT	IMPROVING STATE PROVISION		SUPPORTING ALTERNATIVE DELIVERY OPTIONS		HUMANITARIAN OPTION (short-term relief)
	Engaging central government	**Working with local government**	**NGOs & community (inc. faith-based) organisations**	**Small private service providers**	**UN and INGOs**
Political economy of country	• *Status of political and legal authority? Policy-making and economic management?* • Mood/state of 'society'?	• *How far are local government agencies willing and able to provide/improve services? And where?*	• *Already filling (some) gaps in services.* • *What/where will be their role from now…?*	• *Already providing some services for which people are willing to pay.* • *What/where will be their role from now…?*	• Short-term humanitarian relief e.g. emergency medical aid to displaced populations.
Sector status – S&H	• Re-establish core systems to rebuild S&H sector. • Update sector policy, with clear institutional roles.	• Rebuild/build decentralised capacity to deliver services of the S&H sector.	• Deliver services to areas and groups which government is unable or unwilling to reach, e.g. rural.	• Deliver services to areas and groups which they are best equipped to reach, e.g. urban.	• Continue some targeted interventions to address acute WSS needs…?
Governance/ accountability – S&H sector and other sectors	• Strengthen government-wide governance systems (all sectors). • Promote dialogue between actors across the S&H sector.	• Re-build/strengthen decentralised capacity to provide S&H services. • Promote dialogue between actors across the S&H sector.	• Capacity-building of communities, including community 'voice'. • Piloting standards for S&H service, e.g. equity.	• Support with a licensing framework, and complementary state services, e.g. education. • Implement S&H service standards.	• …but effect staged hand-over to other providers, i.e. draw up and implement exit strategies.
Aid coherence and effectiveness of external funding	• Donors support re-building of S&H sector. • Coordinate inputs of external funds including decisions as to who delivers services where.	• Donors support capacity-building of local government. • Includes finding pilot projects to test models of good practice.	• NGOs/community associations are supported by donors as key component of S&H sector. • Includes developing coherent framework for their role.	• Private suppliers supported are by donors as key component of sector. • Includes developing coherent framework for their role.	• Donors support transition from short-term relief interventions to medium-term development programmes.

The questions highlighted in italics in Figure 2 point to the strategic decisions to be made. Answers to these questions depend, of course, as much on what is possible, as well as what is desirable; in many instances it may be that the only viable option is to work with what/who is already there. Making the best of available resources where these are scarce will in practice mean assembling a combination of different actors and complementary interventions according to context, i.e. combining strategic options in Figure 2.

Box 4 shows the political-administrative hierarchy in DRC. The size of the national territory is such that the colonial administration saw fit to divide the country into six different types of administrative units, with 'localities' at the bottom of the ladder. This number of sub-divisions in itself surely poses a substantial challenge for decentralisation.

Box 4 Political-administrative hierarchy



3.3 Poverty in DRC

The UNDP Human Development Report 2005 ranked DRC 167 out of 177 countries in the world.[14] The Human Development Index cites life expectancy at birth in DRC at only 43.1 years (UNDP 2006, page 222). Lack of sanitation and hygiene facilities are cited in the Poverty Reduction Strategy Paper (PRSP) as causes for concern, but not as the most urgent priorities for action. Yet, the draft PRSP (3rd version again) laments that *'public services responsible for sanitation do not have the [necessary] resources, human, material and technical'* to deal with these problems, i.e. there is a lack of state capacity and state provision.

The 3rd draft of the PRSP dated December 2005 notes that in DRC there are low levels of household access to means of disposing of solid and liquid wastes and eliminating vectors of illness from homes (see section 3.2.7, devoted to Water Supply and Sanitation – pages 61 and 62). It cites only 17 per cent of households having a 'hygienic latrine'. It also notes,

14 http://hdr.undp.org/reports/global/2005/pdf

on the basis of *'a number of studies and results of analyses'*, that ***'more than 80 per cent of illnesses are linked to the bad state of the environment',* including rubbish thrown and defecation in the street, as well as young people unaware of the benefits of hygiene.** Yet, again, in this third version of the PRSP, neither water supply nor sanitation featured among the five pillars of the strategy for poverty reduction cited in that draft. The only reference appears in a list of seven sectoral objectives, which include increasing rates of access to water.

In the final version of the PRSP, published in 2006 (but not available during the researchers' visit for this study), sanitation/hygiene and water are apparently identified among six key poverty reduction priorities. As part of the process of preparing the PRSP, participatory poverty assessments were carried out in different provinces and territories of DRC. Each province and territory, including North Kivu and Beni, was asked to present the hierarchy of its priorities (DRC 2005) – see Section 4.

There are considerable disparities between figures cited for levels of **sanitation coverage** in DRC. According to WSP, access to sanitation was 8 per cent and 10 per cent in urban and rural areas respectively in 2004, making an average of 9 per cent – a dramatically low figure even compared with coverage levels in other countries of sub-Saharan Africa (WSP, undated[15]). UNICEF, meanwhile, points to the substantially higher 2001 figures of 61 per cent access to 'hygienic latrines' in urban contexts, and 39 per cent in rural contexts, i.e. a national average of 46 per cent, according to the MISC 2.[16] The term 'access' as used by WSP is not specifically defined, but it clearly measures a different standard from the 'hygienic latrines' of the UNICEF-commissioned study. A key point is that coverage levels decreased in the decade since 1990. The task of improving sanitation and hygiene facilities in DRC is a huge one: in order to meet the DRC national sanitation target under the MDGs, an estimated 30 million people who are currently unserved will need to be provided with sanitation services.

3.4 Key sector actors

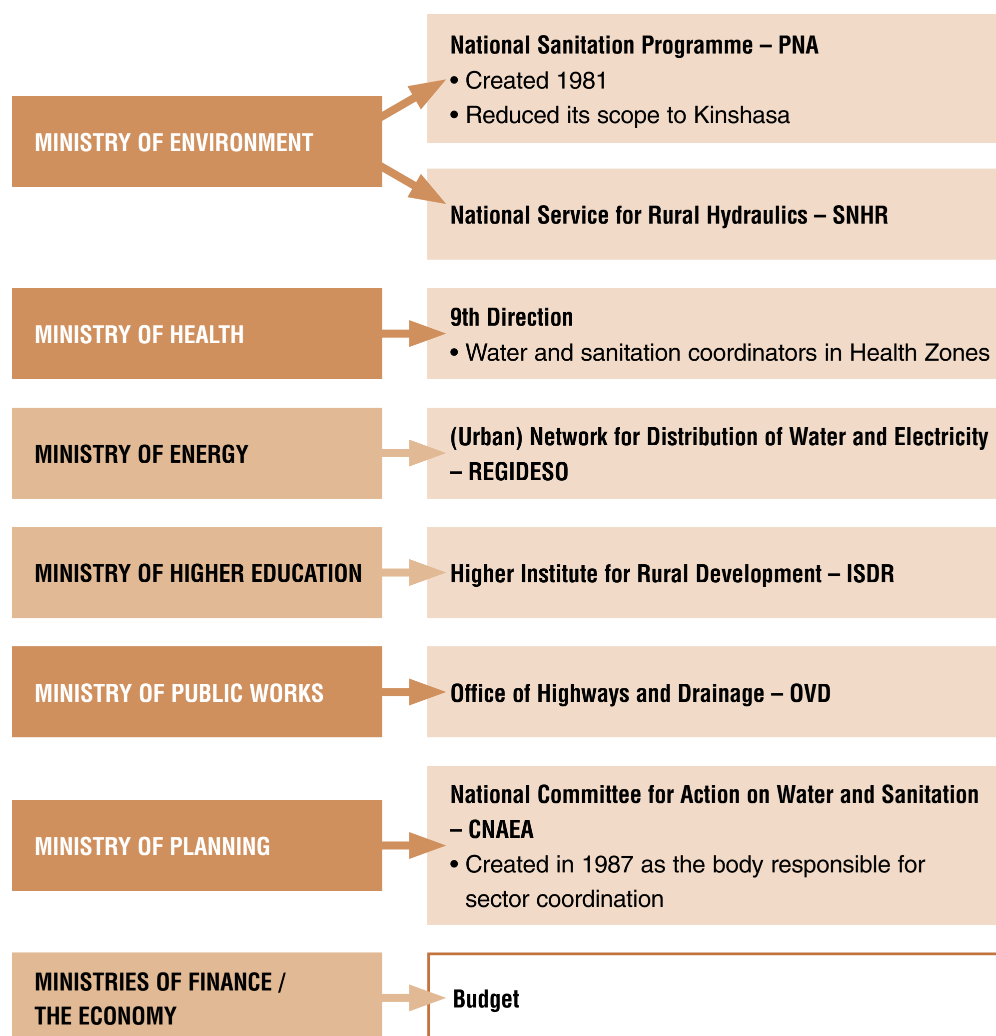
A schematic representation of the structure of the sanitation/hygiene and water sectors in DRC – the key sector actors – is shown in Figure 3. There are four ministries with responsibilities relating to sanitation and hygiene, namely Environment (the full name of which is 'Environment, Nature Conservation, Water and Forests') Health, Public Works and Planning, plus other ministries which seem to have some involvement, e.g. the Ministry of Higher Education via the Higher Institute for Rural Development (*Institut Supérieur de Développement Rural – ISDR*).

15 Quoting a series of Congolese sources: CNAEA, PNA, REGIDESO, and the PRSP.

16 *Enquête Nationale sur la Situation des Enfants et Femmes*, MISC (multi indicator cluster survey) 2/2001.

Figure 3
Key actors in the sanitation, hygiene and water sectors in DRC

Adapted from *Tableau Institutionnel* provided by UNICEF



The relevant public bodies reporting to the above ministries are as follows:

The National Sanitation Programme (*Programme National d'Assainissement – PNA*) comes under the Ministry of Environment whose responsibilities are wide-ranging (as its full name suggests), from public health, via water (and air) pollution to national parks. The PNA's mission, according to its founding Regulation of 1981,[17] is *'to render healthy the living environment of people'*, including the tasks of *'supervision of drinking water quality, combat against vectors of disease (mosquitoes, other insects), control and disposal of solid waste, treatment and evacuation of excreta, household hygiene, prevention of pollution'*. An official government document of 2003 (a set of terms of reference for consultants funded by the African Development Bank[18] – République Démocratique du Congo 2003) noted the above functions of the PNA, and also its *'specific tasks'* in relation to *'information, education and communication on environmental health issues'*.

17 The PNA was originally called in 1981 the National Sanitation Service.

18 Setting out the ToRs of a consultancy mission, but which also included a useful summary of the PNA and its role.

The PNA base has always been in the capital Kinshasa, but the word 'national' in its title is misleading. Its activities have been, for more than a decade, limited to Kinshasa because of lack of funds and operating reach. Indeed, the PNA is only an administrative body, not an implementing agency. Firstly, in terms of human resources, the number of staff employed by (or otherwise available to) the PNA was a total of 74 in 1985, according to the above African Development Bank source. By 1998 it had increased very substantially to 900, reaching a peak in 1990 at 1,041 members of staff. It then fell to 500 in 1992–1993, reducing further to 317 in December 2002.

Secondly, the same ADB source records what the PNA has in its inventory in terms of functioning equipment, for disinsectisation and dealing with waste. The questions at interview revealed the equipment available for the city of Kinshasa and its 6 million-plus people: the number of lorries for emptying septic tanks is **two**; the number of lorries for collecting rubbish (dustbin lorries, with tipper and compressor) is **one** (and the person interviewed shed doubt even on that figure by talking about needing to repair these lorries). When the equipment is functioning, it seems the PNA hires it out, at a fee per day (petrol paid by the hirer).[19] The laboratory for checking drinking water quality was acquired, due to Japanese financing, in 1988, but apparently ceased to operate in 1991 at the time of political conflicts, including fighting in Kinshasa.

In other words, the PNA's capacity, as the principal agency of the state, is very low – and in practical terms non-existent for such a large country. The head office of the PNA (which was visited for this study) is itself in a very dilapidated state, confirming what seems to have been a period of sustained low investment over 15 years since 1991, including periods when the Ministry of Environment was apparently behind in payments of the PNA's running costs.

The extent to which the PNA is failing to exercise its supervisory and 'normative' role was suggested by two further points which arose during the interview for this study. First, there are apparently no officially designated waste disposal sites; the PNA dumps sludge and solid waste in 'ravines', which means either hollows in the ground, or the dried beds of watercourses (which may of course become rivers during the rainy season). The PNA apparently also dumps waste in the marshes near the city – which it considers a good anti-malaria measure.

Meanwhile, it is not clear what information and education activities the PNA is carrying out (if any). The PNA has not, it seems, organised any information campaigns on hygiene and public health, but has collaborated with local communities, through 'brigades'. (It did not emerge from the interview with the PNA what form of support these 'brigades' provide.)

In the absence of state services, small **private sector** operators – men with large, low barrow-like carts on wheels (*chariots* in French) – collect household rubbish for a fee from those who can pay. The PNA engineer interviewed said that the PNA would like to develop a collaboration with the association of these barrowmen of Congo, known collectively as the ASSECECO.

19 Presumably thereby supplying a supplement to the salaries of the staff who arranged the hire.

The 9th Direction at the Ministry of Health had (at the time of the research visit to Kinshasa) just been created and was not fully operational.[20] Its director had been appointed, but was waiting for office premises, and the division had in practice yet to commence its work (including defining its precise remit).

The *Office des Voiries et Drainage* (OVD) is responsible for highways and drainage. For that purpose, it used to receive part of a tax on petrol (together with the roads), but that has been discontinued.

The Higher Institute for Rural Development (ISDR) is referred to below.

The National Committee for Action on Water and Sanitation (CNAEA) was created in 1981 with a view to achieving more effective action in the sector of WSS (as stated in the preamble to its founding Regulation). Under Article 2, its aims are said to be *'to identify strategic options and priorities; to carry out sector studies, mobilise resources and strengthen capacities in the sector'*.

The CNAEA is under the tutelage of the Ministry of Planning, and the Ministries of Planning and Environment are represented on the board as chair and vice-chair respectively.[21] The CNAEA was created with support from donors (e.g. USAID) in the 1980s, which funded CNAEA presences in the provinces (known as CRAEA – Regional Committees of Action on Water and Sanitation) and paid the salaries of CRAEA personnel.

The question arises, 25 years later, whether the CNAEA has had sufficient political authority and backing to do its job of coordinating the actions of the various public authorities in the sector and mobilising actions in WSS.[22] The impression from this study's interviews is that the CNAEA has largely failed to fulfil this role. In practice, the CNAEA seems to have functioned in great part as an agency which commissions studies.[23] The CNAEA apparently carried out mapping of water resources and some sanitation activities (training of 'brigades' and support to households), but this source of support ceased in 1992 when the USAID programme in the country was closed due to the conflict.

One interviewee stated, however, that the CNAEA now has a lead role in defining a new strategy for the sector, including sanitation.

Another person interviewed expressed the view that the CNAEA has focused on water issues, placing them first above sanitation and hygiene. Water issues are controlled by both the Ministry of Environment and Ministry of Energy. The institutional focus of the **National Service for Rural Hydraulics** (SNHR) is in rural areas, but its capacity has also been very limited, since donor programmes were cut off during the conflict years. The **Network for Distribution of Water and Electricity** (REGIDESO) works in urban areas only and predominantly in Kinshasa itself (both are shown in Figure 4).

20 At the time researchers for this study visited Kinshasa to carry out interviews, its Director was appointed, but was awaiting allocation of premises.

21 The other members of the board include 11 ministries (including Health, Rural Development, Energy, Finance, Budget), as well as a representative of the National Electricity Company and the President's office.

22 The CNAEA was not established as an 'apex' committee or council as in some countries where the chairmanship of the prime minister or deputy PM is designed to bestow authority sufficient to resolve competition and conflict between ministries. In DRC, the representative on behalf of the President's office is a technical advisor only.

23 Through its three 'commissions', on Drinking Water, Sanitation and Research (hydrological and hydro-geological), each chaired by a different agency (REGIDESO and ministries respectively).

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The Plan Director for the region of Kinshasa, for example, is a 20-year plan for both the CNAEA and the REGIDESO in four phases each lasting five years. It deals, on paper, with sanitation as well as water supply. An example of its contents in relation to sanitation is a target to provide sanitation facilities to around 5.2 million new beneficiaries over the 24 zones of the city and surrounding region between 1991 and 2010. Under the heading 'sanitation', the Plan Director deals with waste water and urban drainage, as well as solid waste, but not the promotion of household hygiene, i.e. not a full WASH approach.

The state health administration structure is shown in Box 5. In its study in North Kivu/Beni territory, PPSSP was able to assess the presence of state health services, as compared with sanitation services.[24]

Box 5
Health hierarchy

24 No information was collected during the interviews on the School Health and Environment Programme.

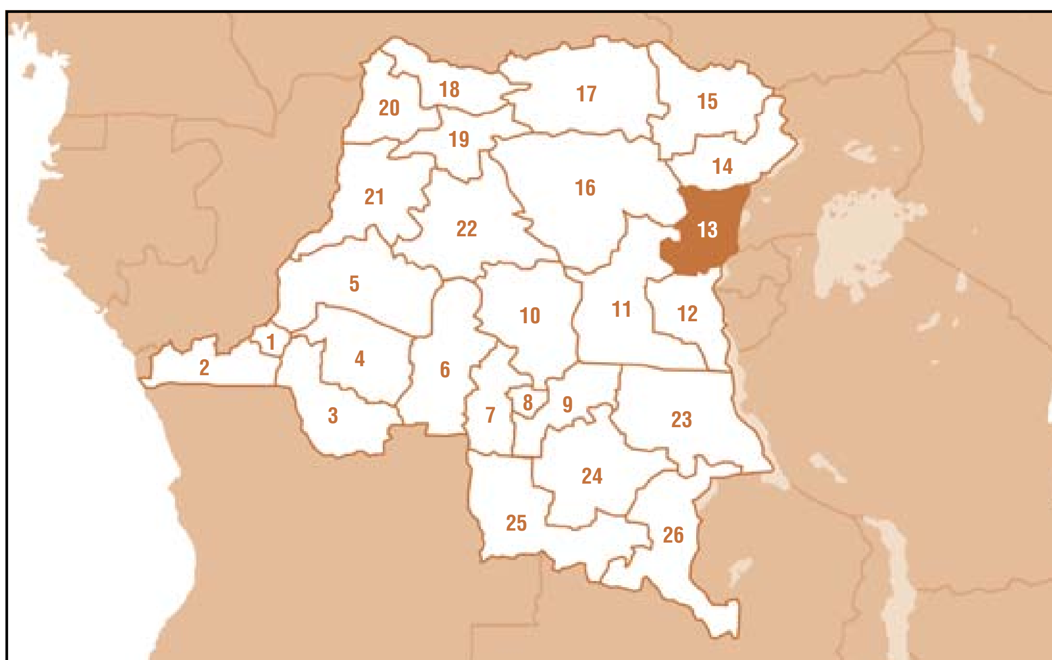
4 DRC survey – local study

In addition to the 'scoping' by ODI of the sanitation and hygiene 'sector' at national level, PPSSP, a Tearfund partner in DRC, carried out a study at province, territory and local level. In this section the context and scope of that 'local' study are described, and the findings summarised.

4.1 Context of local study

The province selected for this study is **North Kivu** and the territory **Beni**. Beni has been chosen as the case study area for this project because it is one of two territories where PPSSP carries out its activities. Map 2 shows the 26 provinces of DRC, of which North Kivu is number 13.

Map 2
Provinces of DRC and location of North Kivu province



North Kivu is located astride the Equator in the north-east of DRC, adjoining the frontier with Rwanda and Uganda. The province has an area of nearly 600,000 km^2 and a population estimated in 2003 at 4 million. It comprises five territories including Beni[25] and three towns: Goma (provincial capital), Butembo (the commercial centre) and Beni town, which was, at least prior to the recent years of conflict, a centre for agricultural activity. Approximately 70 per cent of the population in the province are small farmers, both livestock and arable, with the crops cultivated in these fertile lands (known as 'the granary of the Congo'), including coffee, cinchona, papaya, as well as potatoes and sweet potatoes, palm olive, rice, beans, manioc, soya and groundnuts.

25 The other four territories in North Kivu being Lubero, Rutshururu, Walikale and Masisi.

North Kivu is mountainous, including part of the Ruwenzori massif, with two active volcanoes: the eruption of one (Nyiragongo) in 2001 caused loss of life and substantial damage in Goma. The population of the province is composed of different ethnic groups: principally the Nanda (or Yira) who make up the majority, but also Hutu, Hunde, Nyanga, Tembo, Tutsi, Watalinga, Bapere and Mbuti (pygmies).

PPSSP is working in the Health Zones of Beni and Mutwanga (two of the four zones in the territory). Beni (territory and town) is located in the north of the province. A large altitude range means that there are tropical, temperate and cold climates in Beni territory, culminating at the 5,120-metre summit of the Pic Marguerite on the frontier with Uganda.

PPSSP's operational activities include close working relationships at the level of health facilities (*aires de santé*) and PPSSP personnel sit on health committees.[26] PPSSP also has contacts with government officials at Health Zone level, for example where approvals or other decisions by Health Zone authorities are required to enable the health facilities to carry out their roles. Similarly, in the two political-administrative districts in which PPSSP is working (Beni and Ituri), PPSSP maintains contacts with officials in the health 'districts' as part of its public relations. **PPSSP's presence fills gaps in public health capacity so, in the absence of state personnel, it acts as the replacement health provider.** Health facilities established and operated by faith-based groups in DRC make an important contribution to available health care.

The principal religions present in DRC are: Christianity, encompassing a number of Catholic and Protestant denominations (about 80 per cent of the population); Islam (about 10 per cent); and traditional religions, e.g. animism (about 10 per cent) (source: PPSSP).

PPSSP reports that the most significant illnesses present in Beni (malnutrition apart) are malaria, intestinal worms, sexually transmissible diseases, and water-related diseases, including cholera (e.g. in Mutwanga, within the study area).

In North Kivu, as in other parts of the Congo, inter-ethnic violence has occurred in the province since 1993, especially during the conflict years of 1996 and 1998. The recent years of conflict (1993–2003) came on top of the already critical socio-economic condition of many people in North Kivu; the killings, displacements and insecurity increased people's vulnerability, particularly in rural populations. Between September 2002 and June 2003, an estimated 120,000 people fled the inter-ethnic violence in Ituri.

4.2 Poverty in North Kivu and Beni

As noted above, as part of the process of preparing participatory poverty assessments for the PRSP, North Kivu and Beni were asked to present the hierarchy of their priorities (DRC 2005). In the PRSP (3rd draft), perceptions of poverty which are summarised include the following:

26 The relationship is reciprocated by government representatives of health facilities being members of the board of PPSSP.

- Lack of access to drinking water is referred to, as well as 'insufficient' health facilities, including in the province of North Kivu. Lack of sanitation and poor household hygiene are **not** mentioned.
- In North Kivu, it is noted that one of a long list of causes of poverty is insufficient knowledge of hygiene. Yet, the proposed response downplays addressing poor sanitation and hygiene as a cause of ill-health (prevention), in favour of treating it (cure).
- In Beni, among the features of poverty perceived at village level, people noted difficulties of assessing drinking water supply and mentioned the lack of latrines as part of a lack of hygiene.
- Also in Beni, among the 20 most important problems listed, difficulties of access to water and also to health treatments/medicines are seen as high-ranking (3rd and 4th priorities); yet, lack of sanitation is not listed as a priority.
- Furthermore, in Beni, promotion of behaviour change (including training) is not prioritised.

4.3 Scope of local study

For this DRC study, PPSSP conducted interviews at provincial and territory level, with the help of Nelson Paluku, and collected information, through focus groups at locality level, in two localities: Mbelu and Lubiriha.

At provincial level, the agencies which are supposed to look after sanitation and hygiene are the Provincial Health Inspectorate (*Inspection Provinciale de la Santé*) and the Provincial Environment Division (*Division Provinciale de l'Environnement*). In North Kivu, there is as yet no Regional Committee for Action on Water Supply and Sanitation (CRAEA).

At territory/town level, there are several agencies which are supposed to look after sanitation and hygiene, namely: the Health District of Beni, which has a department of public hygiene; the Urban Environment Department of Beni town (*Service urbain de l'environnement*); the Health Zones of Beni and Mutwanga; and the Public Hygiene and Quarantine services at the frontier (formally a department of the Health Zone of Mutwanga).

PPSSP carried out interviews in Goma, the capital of North Kivu province, as well as in Beni as centre of the Territory of Beni (including Beni town which has its own local government officials). This was to see what state policies and programmes (if any) were present to guide and oversee state provision of sanitation and hygiene services.

As well as these interviews (a total of seven in Goma and eleven within Beni territory – see list in Annex 2), PPSSP conducted focus groups to investigate in each of two (urban) localities in the territory, Mbelu and Rubiriha, a local project aimed at providing sanitation facilities. This was to find out what factors were barriers, or contributors, to the success of that intervention.

4.4 Findings from the local study

The findings of the research by PPSSP are summarised in Figure 4: Mbelu and Figure 5: Lubiriha.

In these figures the categorisation of delivery options – along the horizontal axis, State Provision, Alternative Delivery Options and Humanitarian Option – is the same as seen above in Figure 2. The headings in the vertical axis echo those employed in Sections 2 and 4. The negative symbol represents a barrier, and positive symbol represents a positive factor – both as reported to PPSSP by the focus groups and interviewees.

The interviews indicated that the operation of the health 'sector' in the province is affected by lack of resources, though less so than sanitation and hygiene, which is clearly less prioritised, says PPSSP. One explanation given for this is that health interventions provide some income for the survival of health centres (i.e. the inference being that these are higher priority than sanitation facilities).

In both cases, Mbelu and Lubiriha, failures were due to factors other than violence directly caused by the conflicts in the east of the Congo, including North Kivu province. In both cases a number of the barriers to success, as communicated to the PPSSP researchers, were however **indirectly** due to the condition of the province as a result of years of conflict and misrule in the Congo, i.e. due to the absence of state provision of services including sanitation and hygiene in the collapsed state.

The unplanned layout of slum areas, with high density of population, is a disincentive to hygienic habits: e.g. in Lubiriha, a focus group said that four or five families of between five and ten members could commonly be located in a plot of around $20m^2$. They commented that, in those conditions, unless the community mobilised itself, individuals were unlikely to change their hygiene practices. Some members of focus groups lamented a more individualistic, and less collective, culture in their local communities.

The focus groups cited inaccessibility of water supply as a factor in talking to PPSSP. In Lubiriha, because of water shortages, water supply comes mostly from across the border in Uganda, in jerry cans of 20 litres at 100 Congolese Francs (US $0.2) each.

The picture which emerges from the study of these two initiatives in Mbelu and Lubiriha is:

- Weak presence of state health agencies, and no presence of any sanitation agency, which meant that the community had largely to mobilise itself
- In both locations, it is the women who showed the keener interest in sanitation and health, but their voice in the community is relatively weak – an example of the barrier of gender inequality which is referred to in the Human Development Report 2006 (UNDP 2006)
- In both cases, outbreaks of cholera provoked action on sanitation and hygiene, although this was reactive rather than proactive and was not pursued once the outbreak has passed
- A major obstacle to success, observed by both focus groups, **is misappropriation of funds**, a symptom perhaps of a wider malaise in DRC. The culprits can be state officials or, perhaps even more shocking, elected representatives of the local community.

Figure 4
Factors operating in DRC at local level, as emerging from PPSSP's study focusing on **Mbelu**

KEY ⊖ Factor representing a **barrier** in this location
⊕ Positive factor **supporting** improvement of sanitation and hygiene services in this location
S&H – sanitation and hygiene

FACTORS	IMPROVING STATE PROVISION		SUPPORTING ALTERNATIVE DELIVERY OPTIONS		HUMANITARIAN OPTION (short-term relief)
	Central government	**Provincial / local government**	**NGOs & community (inc. faith-based) organisations**	**Small private service providers**	**UN and INGOs**
Governance and budgeting: financial, political, institutional issues	⊖ Lack of policy-making by central state agencies. ⊕ ISDR provided help at the outset of the project… ⊖ …but little follow-up, and otherwise state agencies did not assist.	⊖ Very little support from the head of the locality (*quartier*) or his council. ⊖ Distortion by state officials who imposed fines for alleged infringements, ⊖ and enforced appropriation and privatisation of communal assets.	⊕ Initial commitment shown by the community… ⊖ …but misuse of funds by members of community committee undermined enthusiasm. ⊖ Many church organisations accord less priority to S&H than health clinics.		⊖ Most INGOs present in the province plan S&H interventions as part of relief… ⊖ …which means there is a lack of INGO support for S&H on an ongoing 'development' basis ⊖ INGOs tend to compete with each other.
Delivery mechanisms including decentralisation of services: capacity, public/private, technology etc issues	⊖ Paralysis/closure of most state-run health facilities during conflict period, including in Beni territory. ⊖ Lack of funding available to state agencies.	⊖ Lack of personnel, infrastructure and functioning equipment of state agencies, e.g. local health officials have no resources for travelling around local villages. ⊖ Lack of land tenure rules which are humane (i.e. responsive to needs of poor people); non-compliance with planning norms.	⊕ Community made contributions in kind e.g. labour and materials. ⊕ And women of the community fed labourers… ⊖ …but lack of follow-up by community committee. ⊖ Counting of number, not quality of latrines.	⊕ The 'union of entrepreneurs' (FEC) did fund some public latrines by local market. ⊖ Local association of masons did not contribute to this project.	⊖ Little involvement of INGOs (or NGOs) in the locality of Mbelu.
Cultural: gender perspectives; customs and beliefs	⊖ Generally, the approach of state health agencies is cure, rather than prevention (a cultural, as well as a funding, issue).	⊖ General disinterest in S&H, except around cholera outbreaks.	⊕ Only women showed real enthusiasm for hygiene… ⊖ …but they have a small voice in decision-making processes.		

Figure 5
Factors operating in DRC at local level, as emerging from PPSSP's study focusing on **Lubiriha**

KEY ⊖ Factor representing a **barrier** in this location
⊕ Positive factor **supporting** improvement of sanitation and hygiene services in this location
S&H – sanitation and hygiene

FACTORS	IMPROVING STATE PROVISION		SUPPORTING ALTERNATIVE DELIVERY OPTIONS		HUMANITARIAN OPTION (short-term relief)
	Central government	**Provincial / local government**	**NGOs & community (inc. faith-based) organisations**	**Small private service providers**	**UN and INGOs**
Governance and budgeting: financial, political, institutional issues	⊖ Lack of policy-making by central state agencies ⊖ State agencies did not assist	⊕ Some support from local authority who helped mobilise the local population. ⊖ Embezzlement of funds collected from the community by accountant of local health centre.	⊕ Oxfam (Uganda) supported the project. ⊖ Lack of motivation of women to support project. ⊖ The embezzlement undermined community confidence.		⊖ Most NGO interventions are short-term and geographically dispersed, with little coordination between NGOs.
Delivery mechanisms including decentrali-sation of services: capacity, public/private, technology etc issues		⊖ Illicit sale of land plots. ⊖ Land tenure dispute between national park and community over rights of ownership. ⊖ Vague talk by local officials of raising awareness (*sensibilisation*)…	⊕ Oxfam provided technical assistance as well as funds. ⊕ Women in the community (only) did show real enthusiasm for hygiene… ⊖ …but they were not paid to do latrine-cleaning.	⊖ Because of lack of state capacity to provide S&H services, a private contractor was hired, but without support of community.	⊖ Oxfam constructed public latrines in 2003/04, though as a reaction to cholera.
Cultural: gender perspectives; customs and beliefs	⊖ Generally, the approach of state health agencies is cure, rather than prevention (a cultural, as well as a funding, issue)	⊖ …but no evidence of real action by local govt to provide education on S&H.	⊖ Perceived rise in individualism rather than community solidarity in a frontier context. ⊖ When cholera outbreak is over, people tend to forget.		

5 Barriers to sanitation and hygiene

This section reviews how far the factors hindering sanitation and hygiene policy development referred to in Section 2 are present in DRC.[27] It uses the same structure as Section 2, based around that of the stages of the typical policy cycle, to assess which barriers are present in DRC.

5.1 Problem definition

No national policy document on sanitation and hygiene exists in DRC. No policy document has, it seems, been produced to set the direction of public policy in relation to sanitation. The same policy void also applies, it seems, at provincial level[28] – at least if the province of North Kivu is typical. The picture seems to be the same in the Territory of Beni in North Kivu: state officials (such as exist) are working **without** a frame of reference, either official policy guidance or programme plans setting out operational objectives.

The experience in DRC illustrates how development of sanitation and hygiene policies can falter at an early stage. The consequence of institutions directly or indirectly involved in sanitation and hygiene having differing agendas has meant there has been little 'problem definition', which is identified as stage 1 in the policy process outlined in Section 1. No document exists setting out a common understanding of what 'sanitation' means (or at least none was referred to in the interviews).

5.2 Agenda-setting and policy formulation

5.2.1 Lack of information

As Section 3 suggests, there is a lack of up-to-date information on sanitation and hygiene needs in DRC. As noted in Sections 3 and 4, such empirical studies as are available point to great needs in terms of improving sanitary/hygiene conditions among large parts of the population. In Beni territory, the sanitation gap is still large, both in terms of access to services, but also in terms of the absence of state institutions and agencies to provide them. Health provision seems to represent somewhat of an exception to this. In North Kivu, for example, PPSSP (active in the province during that period) reports that a few individual state facilities managed to keep functioning, namely: in the case of health facilities, the hospital of Oicha, and, apart from some occasions during local fighting, the hospital of Mutwanga.

27 The extent of comment against each of the potential barriers below varies according to the degree of information and insight which the interviews, focus group discussion and questionnaire employed by this study has provided. As foreseen in Section 1 above, some gaps in information collection have resulted from the relatively rapid methodologies employed for this study.

28 According to the interviews carried out by the PPSSP researchers in the provincial capital, Goma.

5.2.2 Tensions between mindsets

The people interviewed did not refer to tensions between different mindsets in relation to sanitation and hygiene in the case of DRC, where there is no policy on sanitation and hygiene, and little open policy debate.

5.2.3 Lack of coordination

The sector is, one interviewee commented, like a *'sausage cut into slices'*. Decisions and approvals relating to sanitation and hygiene matters are made by several different hierarchies, and the institutional structure is confusing as to who is accountable. The division of tasks between the different institutions is unclear and there is no one strong institution to lead on sanitation and hygiene (or indeed water).

Reform is needed in the way the sector is organised. Sanitation need not have, as one interviewee expressed it, a *chasse gardée* (literally, 'its own protected hunting ground'). Yet, the task of setting out clear roles and divisions between the functions of government agencies, with mechanisms for coordination and information-sharing between them, will be an essential basis for re-energising the sector in the future.

Meanwhile, the current legal framework for the sector in DRC is old and outdated – see Box 6. It dates back to pre-Independence (i.e. 1960), with some changes during the Mobutu years, but in-depth review and reform has not occurred for more than a generation.

Interviewees referred to several different laws (*Code de l'eau* or *loi cadre*) which had been drafted and proposed over the years by different ministries, including the Ministry of Environment and the Ministry of Energy, but which had not progressed beyond draft stage. This duplication was caused, it seems, by each ministry not being willing to allow the other to lead the process. One interviewee considered that this reflects what has been a general resistance to change among the four ministries which currently have control of public action in the sector.

Another interviewee commented that the sector *'needed to go back and start at square one again'*. Work is apparently now in progress at the CNAEA to review sector laws and prepare a new draft, but it is not clear at this point how this will buck the previous trend of a new law being blocked by rival interests.

To date the CNAEA as 'coordinating' body has not resolved the issue of lack of clarity over the division of tasks; this lack of coordination between the ministries which have partial responsibilities for sanitation is debilitating.

None of the interviewees taking part in the study spoke of a national WASH initiative and it would seem this does not exist.

Virtually no leader or champion of sanitation and hygiene is evident within government, at national, provincial or territorial level. As discussed above, the effects of misrule/poor governance and conflict have been to paralyse government functioning, amounting to the collapse of the state.

Box 6
Current legal framework for the sanitation, hygiene and water sector in DRC

- Regulation (*ordonnance*) no. 69-146 of 1 August, **1969**, determining the responsibilities of the Ministry of Environment, Conservation of Nature and Tourism (*Ministère de l'Environnement, Conservation de la Nature et Tourisme*)
- Regulation no. 75-231 of 22 July, **1975**, relating to the responsibilities of the Ministry of Environment, Conservation and Tourism, and adding to the 1969 regulation
- Regulation no. 77-022 of 22 February, **1977**, transferring departments and services of the Department of Environment, Conservation and Tourism
- Regulation no. 77-019 of 22 February, **1977**, setting out the terms of reference/list of tasks (*cahier des charges*) of the (future) Network of Water and Electricity Distribution of the Republic of Zaire (*Régie des distributions d'Eau et d'Electricité de la République de Zaire – REGIDESO*)
- Regulation no. 78-197 of 5 May, **1978**, establishing the corporate constitution of the public company named REGIDESO
- Regulation no. 78-197 of 5 May, **1978**, relating to the constitution of REGIDESO
- Framework law of 78-002 of 1978 setting out legal provisions applying generally to public companies
- Regulation no. 81-023 of 14 February, **1981**, establishing the National Committee of Action on Water and Sanitation (*Comité National d'Action de l'Eau et de l'Assainissement – CNAEA*)
- Decree no. 014 of 17 February, **1981**, creating the National Sanitation Service which was subsequently re-named the National Sanitation Programme (*Programme National d'Assainissement – PNA*)
- Departmental decree (*arrête départemental*) no. 00019/BCE/AGRIDRALE/83 of 19 September, **1983**, creating a national agency called the National Rural Hydraulic Service (*Service National de l'Hydraulique Rurale – SNHR*)
- Regulation no. 87-023 of 3 April, **1987**, amending/adding to the 1981 regulation on the CNAEA
- Regulation no. 87-331 of 16 September, **1987**, establishing the Office of Roads and Drainage (*Office des Voiries et Drainage – OVD*)
- Decree-law no. 81 of 2 July, **1998**, relating to the Territorial and Administrative Organisation of the Democratic Republic of Congo

It emerged from one of the focus groups that interventions by state agencies responsible for sanitation and hygiene have sometimes amounted to harassment and distortion, rather than support, e.g. imposition of heavy fines for alleged infringements of waste regulations. (The focus group also thought that the monies paid were pocketed by individuals instead of going into public funds.)

The sector's administration is very centralised: interviewees reported that ministries generally operate as if they were the ministries for Kinshasa not the whole country, and ministers make few visits out of the capital.

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5.2.4 Lack of political and budgetary priority, lack of demand

A lack of political will and leadership means that the situation described above was irresolvable, at least during the transitional phase up to the elections in 2006/early 2007.

The final version of the PRSP has, it seems, given a positive first signal towards water, and sanitation and hygiene. Several interviewees, however, reported that, despite lobbying by some donors, government departments have generally not 'bought in' to the PRSP to any great extent;[29] their lack of interest is interpreted as being due to the political transition. It raises the question whether the PRSP, as a manifesto of policy for combating poverty, will be taken seriously by the future government in DRC.

Sanitation receives very little support from the state, even by the standards of the limited national budget in DRC – less, for example, than the water supply sector (or sub-sector). In terms of budgetary priority, water supply and sanitation are currently rated very low in DRC, attracting a small fraction (about 1 per cent) of budget allocations from public funds. So, measured in terms of public funding allocations at national level, both water supply and sanitation have to work their way up the political agenda, from a very low base.

Furthermore, according to a senior official in an authoritative position at provincial level, no budget line for sanitation appears in the provincial budget, which effectively means that sanitation does not feature within the official planning of actions by state agencies in the province of North Kivu.

One civil society representative expressed the view that sanitation is (or should be) a cutting edge sector (*secteur de pointe*) and that there was a lack of commitment to address the causes of many health problems in the country.

Another civil society representative pointed to a possible root cause in the political culture of DRC for why elected representatives and public officials do not have to be accountable to their citizens. When confronted by a person in a public position, the average (poor) citizen is apparently easily intimidated and accustomed to back off. By definition, the former is a *chef* ('boss') whom *le petit peuple* ('the ordinary people') fear and to whom historically they are taught to defer in all situations. The prevalent notion is that ministers are untouchable (*intouchable*), rather like feudal leaders in Congo's history. Several interviewees commented that there is a culture of impunity and a lack of accountability, which combine with a culture where citizens' demands may hardly be expressed. PPSSP similarly referred to the legacy of a culture of 'imposition' under colonisation, as opposed to education.

One interviewee said that civil society needed to make a considerable effort to increase its participation in public affairs, requiring perseverance (*insistence*), backed up by facts, for progress to be made in pushing for change. The support of international NGO networks will be important to add external leverage to a national lobbying effort, the same interviewee commented.

29 The PRSP process included one national committee which was multi-sectoral and on which representatives of 25 organisations sat: 15 governmental bodies plus ten other non-governmental organisations. There were no sectoral working committees as in other countries. The UPPE did apparently consult with the National Council of NGOs (*Conseil National des ONG*), the national NGO platform. The UPPE received inputs on WSS from the CNAEA.

As several of the persons interviewed noted, the political transition is very much on politicians' and donors' minds. The focus has been on the Reconstruction Plan, supported by donors such as the World Bank and the European Union as well as the UN. Some donors had been holding back on establishing and approving development programmes until after the elections. It is hoped that a strong, permanent government will emerge to take forward the next stage of transition.

As stated in Section 3 above, a key issue is how to move from donor funding of a short-term, essentially reactive, humanitarian response to medium-term development programmes. As the process of political transition progresses, the question arises whether donors will switch the channel of their funds from UN agencies and NGOs to government – a shift which would signal the beginning of an effort towards capacity-building government institutions.

One person interviewed noted that, during the period of political transition, each organisation, including NGOs, has tended to collect its own information and make its own assessments and judgements as to its agenda for engagement, according to individual institutional priorities and criteria. The people of Mbelu, for example, comment on competition between NGOs. In a new era, more inter-NGO coordination will surely be needed.

The participatory poverty assessments (referred to above) raised the issue of how concerns and needs are articulated in terms of demand. Where there is intense competition for scarce resources, why should politicians seek to stimulate demand where it presently does not exist?

One interviewee noted that demand for **public** latrines at markets, schools and health centres is commonly expressed in DRC, more than demand for individual household latrines. He considered that this is due to people's expectation that public latrines, like water supply, will be provided by the state, as part of its responsibilities, whereas household facilities are not.[30] But, he continued, if relatively little demand is **expressed** for household latrines, this does not necessarily mean there is no need, or indeed that there would be no demand, were the state to take active steps to offer services and incentives to households. Several interviewees recognised the importance of 'reading between the lines' of people's needs. Lack of demand for better sanitation and hygiene may, of course, be due in part to lack of knowledge about the threats to health which poor sanitary conditions pose. Awareness-raising and education programmes are designed to address a lack of understanding about the benefits of better sanitation and hygiene, but these of course need to be funded and effectively implemented.

The comments of the focus groups in Mbelu and Lubiriha (if typical) suggest that demand is mostly articulated by women.

The 2006 Human Development Report (UNDP 2006) refers to a poverty barrier to improving sanitation: *'even low-cost improved technology may be beyond financial reach'* of poor populations (page 119). *'In Kibera, Nairobi, constructing a pit latrine costs about US $45, or two months of income for someone earning the minimum wage.'* While interviewees in DRC did not specifically comment on this aspect, the levels of poverty in the country are such that this factor may be relevant in many poor areas.

30 A response to this view is that the nature of the support that the state can usefully provide in relation to creating private latrines at household level is different.

5.2.5 Donors' agendas

As public funds are scarce and sanitation/hygiene starts from a very small share of the national budget, external funds are important to support the sanitation and hygiene sector. Only a few donors are currently, it seems, willing to fund sanitation and hygiene programmes in DRC, as compared with nine donors who have committed funds to the water sector. Information on the three programmes is set out in Box 7.

Box 7
Donor funding programmes for sanitation and hygiene

UNICEF The three components of UNICEF's programme are: rural water supply with the SNHR to create Sanitised Villages; Sanitised School projects, in collaboration with the newly created 9th Division of the Ministry of Health; and building on such capacity as exists at the level of Health Areas, including one Rural Development Technician (the acronym in French is TDR) in WSS per area. TDRs are personnel who work in the field, including with local villages, and are trained in low technologies, e.g. in the case of WSS, how to improve springs and construct simple and VIP latrines (i.e. as compared with engineers of the SNHR who are trained in *adductions de l'eau*). The TDRs will be given relatively short-term 'refresher' training courses. UNICEF is intending to finance a quarter (about US $800,000) of the budget for this programme (total about US $3.2 million) and will be seeking the support from other international sources for the remainder.

WATER AND SANITATION PROGRAMME WSP is supporting a project in Kinshasa only – a three-year pilot. According to WSP, a first activity is already in progress, namely designating and preparing a place for a waste disposal site (*un décharge*, as opposed to small and unprepared depositories), in collaboration with the PNA.

THE AFRICAN DEVELOPMENT BANK is planning to make a loan of US $50 million over three years, intended for WSS in rural contexts, but it has not yet determined which activities are to be supported.

UNICEF is pursuing its mission to bring support to children in need. It is working with contacts in three ministries and is in the process of designing and obtaining approvals (including from the government) for a programme comprising three components, each of which corresponds to one of the three ministries concerned. At the same time, UNICEF is intending to collaborate with the CNAEA in capacity-building the sector, including through policy work. This includes pursuing with government the idea of a framework water law, which in UNICEF's view would also include a code for sanitation.

The other funding programmes supporting the sector, those of WSP and ADB (i.e. also multi-lateral[31]), are noted in Box 7.

Why are more donors' funds not made available for sanitation? Explanations offered by interviewees included the following:

- Many donors' representatives are risk-averse (according to one interviewee), choosing to support projects which are less challenging in terms of achieving results; donors may, for example, be reluctant to take on the logistical challenges of DRC – a large country,

31 A recent study of the water, sanitation and hygiene sector in Sierra Leone (Tearfund 2005, page 9) noted that *'… it is multi-lateral rather than bi-lateral donors who actively support sanitation and hygiene'* in that country.

including very remote areas (with some places only accessible by air, where roads have fallen into such disrepair that they are impassable) and some still insecure, conflict-vulnerable zones.

- As described above, sanitation 'falls between stools' institutionally. DRC represents a complex situation, with 'crossed wires' between a number of ministries and no clear authoritative advocate; from a donor's perspective, in the face of an institutional void and confusion, doubts may exist as to the realistic prospects for sanitation programmes to be implemented, at least via state channels.
- One interviewee considered that donors might be wary of the lack of cost recovery which is obtainable from users in relation to sanitation services; it is not easy to identify a stream of income from sanitation installations, even less so than for water supply in poor areas.[32]

Other donors may simply evaluate other priorities, such as food, nutrition, clothing and security,[33] as more pressing. Or there may be a view among some donors that sanitation is not a 'public good', in that it is sufficient to educate and inform private households, for example, on construction, use and maintenance of latrines, and then to leave each household to provide for itself.

A further reason for the current lack of donor funding – not just in the sanitation sector – relates to the post-conflict issues alluded to in Section 3.

5.3 Policy implementation

5.3.1 Lack of human and technical capacity

Current capacity in terms of human resources in DRC – trained personnel in the sanitation 'sector' – is very limited. For health, interviewees considered, capacity seems to be somewhat greater.

The problem of how to recruit young people is a vicious circle, according to the director of the School of Public Health at the University of Kinshasa. The lack of a strategy for developing capacity combined with little investment means that there is scant information available to make young people aware of the 'public health' profession. The majority are not aware of its existence and, for those who become aware, the levels of remuneration and working conditions in the sector are unattractive when compared with other opportunities for graduates. Yet, the profession needs people trained to degree and post-graduate degree level.

Others mentioned donors' tendency to fund major health programmes (e.g. to bring medicines etc) in such a way as to absorb large number of competent staff, causing a 'brain drain' towards the big international agencies. Where staff are recruited for these programmes within national agencies, the effect is unbalanced: considerable resources might suddenly be allocated to some issues, while others, like hygiene, are disproportionately ill-resourced.

32 In the education sector, parents provide a source of income in relation to the services provided for their children.

33 Even if it soon becomes evident that dealing with related water and sanitation problems must follow.

So, for example, the *Service de l'Hygiène* at the Ministry of Health has few staff. At the same time, a posting to a health facility or a Health Area in a remote part of the country may also be unattractive, where insufficient financial and professional incentives are provided.

The lack of available staff is apparently compounded where recruits are allocated between the various ministries currently responsible for sanitation and hygiene and given functions which make inefficient use of the existing limited supply of trained staff. An example was a case in the Mobutu era where functions of one ministry (Environment) were transferred to another, but the staff holding the qualifications and experience relevant to the transferred activities remained at the Ministry of Environment.

As an insight into the lack of capacity of state agencies responsible for sanitation and hygiene, in terms of people and equipment, the local study was informed that, in the Health Zone of Beni, one officer is nominally responsible for 441 villages in 28 health 'areas'. Meanwhile, the Health Zone of Mutwanga (encompassing 19 health areas and an estimated population of 189,000 in an area of 500 km^2) has one (intermittently) functioning motor cycle.

This situation needs to be changed to release a new generation of health professionals to work in the service of the state. The School of Public Health at the University of Kinshasa trains students in a wide range of subjects: water supply (including quality), disposal of domestic waste water, drainage, latrines and disposal of solid waste (household, industrial and bio-medical), as well as anti-disease vectors.

5.3.2 Low capacity to absorb funds

Donors' reticence about funding sanitation and hygiene programmes in DRC may reflect its capacity to absorb funds. At present, realistically, how much funding may be channelled through state agencies and municipalities (see Figure 2)?

5.3.3 Lack of service providers

As noted above, the state waste disposal facilities and urban drainage/waste water infrastructure in the capital Kinshasa are virtually non-existent.

The impression is that NGOs in Beni have provided the innovation in relation to sanitation and hygiene projects, in the absence of state presence in past years. The activities of PPSSP are an example of the insights into a territory's sanitation and hygiene needs which a (private) organisation with specific expertise in health/hygiene can bring.

It emerged from the interviews that the Health Zones of Beni and Mutwanga are paying less attention to provision of sanitation services to households and communities than to disposal of medical waste and support to Health Committees. This is despite the 2005 report by Health Zone officials (Zone de Santé de Mutwanga 2005) which observed the *'crying lack of latrines'* in one health area in the zone where, for a population of 8,200, there were only five latrines.

As to the role of the private sector, PPSSP cites the example of the *Fédération des Entrepreneurs du Congo (FEC)*, a 'trade union of business owners' which built at Oicha in Beni territory, with its own funds, public latrines by the market where, it is presumed, some of its members work. Meanwhile, the local association of 'stone operators' (bricklayers) did not assist in the projects at Mbelu.

5.3.4 Methods/technology ill-suited to context

No comments were made on this issue during the study.

5.3.5 Lack of access to credit

This issue was not raised or discussed during the interviews.

5.3.6 Lack of strong messages

Many officials talked about *sensibilisation* (awareness-raising) activities, but in such vague terms that the PPSSP researchers felt the term was being used to conceal a lack of action.

A study by the School of Public Health of the University of Kinshasa (Ecole de Santé Publique 2002) provides some insights into behavioural factors in the country, in the Province of Kangu in the west and Kabondo-Dianda in the province of Katanga in the south-east – see Annex 3.

The study noted the lack of a 'communication element' for encouraging behaviour change in relation to hygiene, especially due to an absence of educational materials: only a few posters were found to exist as part of anti-cholera measures. There was, in short, a need for communication of behaviour change (CCC or *comportement* in French).

5.3.7 Lack of arrangements for cleaning and maintenance

Even the women of Lubiriha did not support the local sanitation and hygiene improvement project when faced with the prospect of cleaning the community latrines without being paid.

5.3.8 Complexities of behaviour change

In circumstances of severe poverty, survival may naturally take precedence over preventative action: prevention may not be immediate enough to divert attention from pressing needs, e.g. food and the means to produce it. What allows poor people to break out of this vicious circle of poverty and poor hygiene is a possible issue for further research.

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5.3.9 'Cultural' factors

Interviewees in the capital ventured some cultural explanations for the lack of interest in and attention to sanitation and hygiene issues.

One suggested that cleanliness in DRC is closely associated with appearance. The average Congolese citizen pays much attention to clothes. Although the country is poor, people make an effort to turn themselves out smartly, as is visible in the streets of Kinshasa, even in poorer districts. But outward appearances are often different from what is visible inside people's homes where, he said, less attention is paid to cleanliness. For example, the toilet of a friend's house, even in a middle-class neighbourhood, may be less clean than one would expect. So, children who have received hygiene education at school may go home to parents whose standards of hygiene are more lax. This cultural trait, setting much store by outward appearances and bothering less with what is hidden from public view, was considered to be a relevant behavioural factor.[34]

In different parts of DRC there are different levels of emphasis on the need for privacy when using latrines. Among some ethnic groups living in some rural areas, the requirement of privacy is strongly felt, so that any latrine has to be constructed so that the person using it cannot be seen from the outside. In other areas, people apparently take a more relaxed view.

34 This could perhaps be otherwise interpreted as an effort to maintain standards of dress in difficult conditions.

6 Conclusions and responses

6.1 Conclusions

In DRC there is currently a void in terms of policy and planning on sanitation and hygiene, which runs from national through to local level.

Some of the explanations for this institutional and policy vacuum are to be found within the sanitation sector itself. Yet, others originate from **beyond** the sector, and relate to the current political economy of DRC, including problems of governance within the country. Public funding available to support provision of **any** state services in DRC is limited, and has been for several decades. This research has served to emphasise wider factors acting as barriers to policy development and implementation, such as lack of political leadership, neglect of official positions and active abuses of power, such as misappropriation of public funds, which are by no means confined to the sanitation sector.

As discussed above, the effects of misrule/poor governance were compounded by violence and insecurity during the years of conflict, which made maintaining a state presence difficult or impossible in affected areas. The conflict paralysed all functioning of government, amounting to the 'collapse' of the state. The consequence was that efforts (where possible) were principally devoted to emergency relief and humanitarian response, and programming of development interventions was set aside.

Meanwhile, observations of field staff from NGOs working in different locations in the country, corroborated by such studies as are available, suggest there is a great need to improve hygiene conditions for large parts of the population. The figures (or best estimates) for levels of access to sanitation are **very low**, even by typical coverage levels in the least developed countries of sub-Saharan Africa.

All this means that, as Box 8 overleaf shows, DRC currently has the great majority of barriers to developing and implementing sanitation and hygiene policies as identified by international commentators.

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Box 8
Barriers to sanitation and hygiene (S&H) policy development and implementation in DRC

Process stage	Barrier	Present?	Notes
1 Problem definition			No policy currently exists
2 Agenda-setting and policy formulation	Lack of information	X	
	Tensions between mindsets	–	In the policy vacuum prevailing (at least before the elections of late-2006), specific tensions on policy direction were not detectable
	Lack of coordination	X	
	Lack of political and budgetary priority, lack of demand	X	Demand is, it seems, commonly expressed for **public** latrines; at both sites of detailed local study, demands for improvement in S&H conditions were initiated – by women.
	Donors' agendas	–	Some funding is available to support S&H
3 Policy implementation	Lack of human and technical capacity	X	In Beni, **some** health provision exists, through the presence of health workers
	Low capacity to absorb funds	X	Limited
	Lack of service providers	X	A considerable problem
	Methods/technology ill-suited to context	–	This varies from place to place
	Lack of access to credit	X	
	Lack of strong messages	X	
	Lack of arrangements for cleaning and maintenance	X	
	Complexities of behaviour change	X	
	'Cultural' factors	X	

6.2 Responses

The results of the elections in late 2006 offer a hope that the future government will pursue, and will be supported by external funds to pursue, development programmes – including programmes on sanitation and hygiene promotion. It is clear from the findings of this study that this will mean starting from the first stage of the process of policy development. That process will take time. New investments to address the needs should not all be held up pending the production of policy documents.

The interviews for this study revealed some positive pointers for tackling this task:

- The leadership shown by certain individuals and organisations, in the difficult conditions of recent years.
- Desire for change expressed by many actors in the sector, including state officials.
- Support, in principle, from some donors to reform the sector (both water supply and sanitation); this would include, it is believed, the formation of a donor coordinating group.
- Existing funding commitments by three donors for sanitation and hygiene programmes.[35]

These factors will need to translate into, and combine with, other drivers for reform, for the previous legal and institutional stalemate to be unlocked.

35 At the time of visiting Kinshasa in February 2006, compared with nine donors committed to support water supply projects.

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Annex 1

List of people consulted at national level

Peter Newborne of ODI carried out interviews in the capital Kinshasa, with the support of PPSSP and Nelson Paluku Syayipuma. The help of the people listed below is gratefully acknowledged.

- **Mr Georges M. Kazad**
  Water and Sanitation Specialist, Water and Sanitation Programme
  at the offices of the World Bank
- **Mr Gordon Kihuguru**
  Acting Country Director, Oxfam GB
- **Professor Kiyombo Mbela**
  Director, Public Health School (*Ecole de Santé Publique*),
  Faculty of Medicine, University of Kinshasa
- **Mr Paul Mansiangi Mamkadi**
  Administrator at the Department of Hygiene and Public Health,
  Public Health School, Faculty of Medicine, University of Kinshasa
- **Mr Dominique Sowa Lukono**
  Manager, Action for Development of Rural Infrastructure
- **Mr Justin Kazadi Tambwe**
  Assistant National Coordinator, Unit for Piloting of the PRSP Process,
  Ministry of the Plan
- **Mr Baudoin Kakura**
  Expert in Participation, Unit for Piloting of the PRSP Process,
  Ministry of the Plan
- **Mr Eugene Shamba**
  Permanent Secretary-General, National Committee for Action on
  Water and Sanitation
- **Mr Mangolo**
  Public Relations Officer, National Committee for Action on Water
  and Sanitation
- **Ms Ros Cooper**
  Social Development Adviser, Department for International Development,
  of the British Government
- **Mr Rigo Gene**
  Projects Officer, National Council of NGOs of Congo
- **Mr Mutshipule Musongielo**
  Head of Office of Evaluation and Statistics,
  National Sanitation Programme
- **Mr Chris McCormick**
  Programme Head for Water, Hygiene and Sanitation, UNICEF

Annex 2

(Source: PPSSP)

Interviews and focus groups carried out by PPSSP

Interviews carried out by PPSSP researchers in Goma (province):

- Vice-Governor responsible for finance
- Provincial Health Inspector (*Médecin Inspecteur Provincial de la Santé*)
- Doctor responsible for Primary Health Care (*soins de santé primaires*)
- Provincial official responsible for public hygiene
- Sanitation officer in the Provincial Environment Division (*chargé de service de l'assainissement dans la Division Provinciale de l'Environnement*)
- Executive Secretary of CRONG – the Regional Council of NGOs
- Adviser in Public Health of Oxfam GB (for the province)

Interviews carried out by PPSSP researchers in Beni (territory/town):

- Sanitation Officer for Beni district
- Chief Medical Officer for the Health Zone of Beni
- Secretary General Administrator of the Higher Institute for Rural Development – ISDR
- Supervisor responsible for sanitation in the Health Zone of Beni
- Administrator responsible for administration and finances for the territory (based in Oicha)
- Chief Medical Officer for the Health Zone of Mutwanga (based in Mutwanga)
- Supervisor responsible for sanitation in the Health Zone of Mutwanga (based in Mutwanga)
- Chief of the locality of Lubiriha
- Nurse at the health centre in Lubiriha
- Officer in charge of Frontier Hygiene Services
- Officer in charge of Frontier Public Health Services

Focus groups conducted by PPSSP researchers in Mbelu and Lubiriha

- Three (a women's group, men's group and young persons' group) in Mbelu (a locality in the Health Zone of Beni, *aire* of Paida)
- Three (of the same type of groups) in Lubiriha (a locality in the Health Zone of Mutwanga, *aire* of Lubiriha)
- The persons taking part in the focus groups included representatives of local associations and people otherwise active in community life.

Annex 3

Notes on University of Kinshasa study on household behaviour

The purpose of the study was to look at the types of household-level behaviour, of mothers, which needed to change if the high incidence of diarrhoea among children was to be reduced.

The study pointed to low levels of awareness among mothers that diarrhoea in their infants and young children was related to lack of handwashing at certain critical times, unimproved water sources and inadequate facilities for disposal of human waste. Soap is generally available, but often not used by mothers. Meanwhile, health workers and nurses are aware of the benefits of handwashing, but not aware of the full range of 'critical moments' for handwashing. For mothers, these moments are before eating, after going to the toilet, after cleaning children, before preparing and handling food, before feeding children, before breast-feeding babies. Water is not stored in covered containers or its use supervised. Mothers are using non-hygienic latrines which are not well maintained or cleaned.

The behaviour traits above are reinforced by a lack of facilities, e.g. improved water sources are few and/or distant; there is a lack of receptacles in which to store water in the house; soap is not always available.

In Kangu, diarrhoea in children was not only recognised by mothers to be common but also considered to be normal, pointing to the fact that some accepted it. The study looked at two groups of mothers, including a 'B' group whose greater awareness and better hand-washing practices were seen to be clearly associated with less diarrhoea in their children. The study noted that mothers in the two groups lived in similar socio-economic conditions, but that there were a few differences in behaviour: most of the 'B' group mothers used soap at some of the critical moments (e.g. before eating and preparing food), encouraged their children to wash their hands before eating, and took special precautions for water use by children (e.g. storing water in covered containers).

In both cases, non-hygienic practices include:

- children helping themselves to water without supervision
- hands being dried after washing on cloths or clothes which are not clean.

In the two zones (Kangu and Kabondo Dianda), some beliefs tend to reinforce lack of hygienic practices. These included the following:

- diarrhoea is caused by mothers' milk, teething, hips becoming supple as a child takes his first steps, manioc leaves prepared without oil, a husband's infidelity
- our ancestors did not die of drinking water from the river: why should we boil water before drinking?

- improving a water source will disturb the ancestors who are present in it
- the odour of soap on hands spoils the food
- water is kept cool by storing it in receptacles placed on the ground
- children's stools are inoffensive and, if they defecate on the ground near the house, the pigs can be left to consume them.

A disincentive to building latrines is the cost of certain materials, such as a slab (to cover the pit) and a barrier to good handwashing practice is the lack of water to wash with, and the lack of clean cloths for drying hands.

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