

WASH Assessment in New and Old IDP Sites and Selected Villages in Georgia

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Action Contre la Faim



International Rescue Committee

Executive summary

Background

Following on from the 2009 Assessment of water, sanitation and hygiene (WASH) conditions in sites accommodating people displaced in the August 2008 conflict (New IDPs), the partners – UNICEF, the IRC and ACF – again came together to review changes in the conditions since last year. This year, the partners were also interested in how WASH conditions for New IDPs differ from those for people displaced prior to August 2008 (Old IDPs) and from rural Georgians generally.

The 2010 Assessment built on the process used in 2009, asking communities to rate their own conditions and at the same time undertaking a technical assessment of those same conditions.

Changes in WASH Conditions from 2009

The 2009 and 2010 Assessments asked communities to carry out a rating exercise for the various aspects of WASH, to give us:

- an indication of the **impact** any work has made to the New IDP locations and on the people in the last 12 months; and
- a picture of the changes in IDP **perceptions**.

Technical assessments by the Assessment Team were also made at the same time.

For three of the four elements of WASH that were considered in the two assessments (ie. water supply, bathing facilities and solid waste collection and disposal) communities and technical assessments generally rated conditions the same or better than last year. However, the average rating of conditions (on the 0 to 5 scale) for all three has fallen slightly in the last year, indicating that where conditions have got worse, they have got a lot worse and where they have got better, they have improved only a little bit.

In contrast to the above, the majority of communities and technical assessments believe the condition of toilets is worse than last year and the average rating of toilets facilities by both the communities and technical assessments has fallen.

The Assessment Teams believe that any perceived **improvements in conditions** or facilities is because things have in fact improved, either through projects to build new or better facilities, fewer IDPs sharing facilities in some places, and through the Hygiene Promotion programmes encouraging both more realistic expectations and perhaps a better sense of ownership of shared facilities.

However, as noted above, many communities and the technical assessments state **deteriorating conditions**, which arise from:

- Things may in fact be worse. In some locations:
 - there has been little or no follow up to the training and distributing of maintenance tools in 2009 to fix small problems, and those people who were trained may have moved to another location;
 - people may value maintenance and repair or WASH facilities lower than other needs competing for income or people may simply not have the disposable income needed to maintain the facilities;
 - the initial quality of construction was in some cases very poor with a “rushed job” approach by contractors under pressure from donors, ministries and ministers, agencies and the IDPs themselves to complete work before the winter made impossible conditions for construction.
- Community expectations for WASH were lower in 2009 as they were newly displaced and had other more demanding needs;

- Assessment Teams have higher expectations in 2010 as the instructions to our teams this year are founded in the GoG “robust solution” principle;
- There is anger in the community that the follow up to surveys seems to be more surveys and little or no action;
- Quick fixes and other projects may only target a (small) percentage of the community – “A lack of faith in the implementing agencies by the community meant only a small take up of the projects”; and
- Many of the larger projects have not been completed or even started in some cases – “There’s still a lot to be done”.

The biggest concern is the high percentage of both communities and technical assessments that rate toilets worse this year than last, as well as the lower average rating given in 2010, especially for shared facilities. This is not an encouraging sign, given the work carried out in the last 12 months, but perhaps can be explained by the rapid response to the need for toilets in the first weeks of the crisis. Contractors very quickly built new toilets or rehabilitated old ones in the collective centres. The quality of work was not good, supervision lax or non-existent and IDP expectations were perhaps lower. Another 12 months on, this poor quality and lack of supervision is abundantly obvious and the expectations of IDPs is likely higher, given time and hygiene promotion efforts.

WASH Conditions for New IDPs, Old IDPs and Rural Georgians

About 1.6 million Georgians, or one-third of the total population, are categorised as living in rural areas. Most rural Georgians have little formal input from government in the choice, construction, operation or maintenance of their WASH services, relying on household-level options and finances to develop them.

Overall, the 2010 Assessment shows that rural Georgians have poorer access to WASH services, and that the facilities they do have are often in poorer condition. Fewer rural Georgians than IDPs:

- have water piped directly to their homes, relying heavily on water sourced from protected and unprotected wells and springs, as well as communal standpipes and private sellers;
- have access to a hygienic bathing place, either communal or private. Despite this, all communities in rural areas report that people bath their children at least once a week, using basins or buckets in their living or sleeping spaces or travelling to larger towns where communal bathhouses are available, and where they pay around GEL 0.5 per person for the service;
- have access to a hygienic toilet, although almost all Georgians have a common household unimproved pit latrine; and
- have access to a Municipal organised solid waste collection and disposal system.

More rural Georgians than IDPs trust the quality of their water supplies. However, rural communities more often report that children in the villages have had diarrhoea in the past three months. While it is difficult to attribute diarrhoea to a single cause, it would be naïve to say that none of it is caused by poor quality water.

Disposal of household wastewater is seen by IDPs and rural Georgians alike as largely a household responsibility or problem, with little need for GoG or other intervention, except perhaps to construct better drains in towns and villages. Wet season rainwater flooding is seen as more of a problem, mainly as it interrupts businesses and makes access difficult. There seems to be little public awareness of the health-related dangers of poor disposal of household wastewater, certainly much lower than the awareness of other hygiene issues, such as water quality and excreta disposal.

Most IDPs report access to a Municipal organised solid waste collection and disposal system, whereas most rural Georgians do not. Again, there seems to be little awareness among rural Georgians on the health-related problems of poor solid waste disposal, with many preferring to dump

the waste where they like. That said, most rural Georgians would like to see an organised solid waste collection and disposal system in their villages, but are unsure about paying for it.

Overall, communities tend to understand the importance of hygiene practices quite well, but for a variety of reasons tend not to put that understanding into practice. The understanding at the New and Old IDP sites is better than at the representative villages, which we would expect given the work that has been done there.

Overall, rural Georgians rate themselves as having a lesser understanding of hygiene issues than the IDP communities do, and also rate themselves as practicing what they do know as less. The difference between understanding and practice is considered wider by rural communities, which is related to perhaps giving hygiene a lower level in household priorities, less material resources and breaking traditions and habits. IDP communities may be more loathe to give up the practices they have brought with them (as sometimes it's the last thing they have left) but if an agency is handing out hygiene kits, it can be the impetus to changing behaviour.

Respondents tend to understand the hygiene issues, but their practice of them is limited, by:

- a perceived lack of time;
- unequal distribution of knowledge across the community, and even within families;
- household priority and decision-making allocating financial resources to more pressing needs;
- overall lack of household financial resources;
- non-availability of material resources;
- lack of water;
- lack of hot water;
- lack of trust in water quality;
- habits / traditions and how hard they are to change;
- locked facilities; and
- shame.

Underlying the comparison between rural Georgia and IDPs is the assistance provided to IDPs, particularly those displaced since the 2008 conflict. Despite chronic WASH (and other) conditions, most rural Georgians have seen little or no assistance from NGOs, international agencies or the GoG, who have understandably focussed on IDPs with just as chronic but perhaps more acute needs.

Options for Future Actions

Over the course of the 2010 Assessment, the Assessment Teams identified the main WASH problems in each location and, in response, developed a set of solutions to these problems. Underlying these solutions is the principle of creating **durable solutions** that will fulfil the needs of IDPs today and tomorrow. In essence this principle espouses full community participation (not just involvement), inclusivity especially of the most vulnerable, meeting the long-term needs and technical feasibility of solutions specific to the community and its environment. These WASH principles underlying a set of minimum standards and would be developed further during by agencies and communities project design and implementation.

Due to a lack of Georgian national standards and policy in most elements of WASH, the partners in the 2010 Assessment have agreed to these WASH principles, which have a basis in SPHERE minimum standards but have been expanded to cater for the more durable nature of required actions.

In total 491 projects have been identified for the 105 Old and New IDP sites, with a total cost of implementing them all of USD 13 152 264. The average cost across all projects is about USD 27 000, ranging in size from USD 0 to incorporate a small IDP site into an already established programme of water quality testing, to USD 1 842 732 to construct new toilets and build a new sewerage system for a 400 household New Settlement.

The majority of projects include some form of new or rehabilitated infrastructure, and a HP component incorporating distribution of hygiene supplies has been included in all sites.

Sustainability and Ability to Pay

As stated in the 2009 Assessment Report, the ability and willingness to pay for WASH services by IDPs and / or GoG is a key issue in technology selection, project prioritisation, ongoing operation and maintenance, and service payment options.

Few respondents could or would answer questions about ability or willingness to pay for services, perhaps worrying that stating an ability or willingness would result in having to do so. However, of those who did answer, more indicated what they are **able** to pay than indicated what they are **willing** to pay. This could be related to the relatively high prices of commodities in Georgia compared to income and the very low income of most IDP households, but could also be related to expectations as well as substitute sources for drinking water, such as wells, springs and other communal sources.

This could also be based on an expectation by the household of GoG or other intervention. Many IDPs in the Old IDP locations for example were displaced immediately post-Soviet, and their expectations are likely based on Soviet systems of service provision (ie. largely free albeit of poor quality). Other IDPs expectations could also be influenced by a vision that includes heavy government subsidies for basic services.

GoG reform in the water sector is likely to see rises in the price of water delivered directly to households some time in the near future. While it is likely that consumers will continue to be subsidised for their water, the concept of full cost recovery for piped water supply is likely to drive GoG water policy as they move towards European standards and approaches.

In the rural sector, it is unlikely that Municipal-managed piped water supply schemes, collected sewerage or solid waste collection systems will be affordable for the smaller villages, who will continue to rely on household wells or non-piped communal supplies. They are not likely to see rises in their costs just yet, nor is it likely that they will be willing to pay much more unless income increases.

Shared facilities

The tradition of communal bathhouses is a long one in Georgia. Particularly in the New IDP sites, shared facilities have been built by agencies and by GoG, mainly due to the lower costs of construction and operation. Usually, the shared facilities are managed under the WASH Committee structure with one or two people appointed to run the bathhouses on a day to day basis – to clean them, pay for bills and undertake small maintenance (eg. changing washers in taps). The manager collects a small amount of money from those living in the centre.

Evidence suggests that there is widespread interest in these communal bathhouses, as locals from nearby villages are willing to pay to use the facilities built at some New IDP sites. The villagers who are using these facilities have none of their own, and would otherwise travel to Gori or another larger town where they can use public facilities there. These are the people in the community who cannot afford their own private bathhouses but who have some discretionary income to pay for services.

This use of shared facilities does not appear to extend to toilets, as most people are willing to build a toilet, toilets are cheaper to build than bathhouses (even private ones), and the timing of a visit to a bathhouse is up to the user and not normally as urgent. In the IDP sites where toilets are shared, maintenance and cleaning of toilets are also a shared responsibility. Each of these communities reported that there is usually a duty roster for cleaning. However, even a quick observation shows that this roster does not work as the toilets are in poor condition and are evidently not regularly cleaned.

While a tradition of communal bathhouses exists in Georgia, and managing a bathhouse is seen to be a paying job by most New IDPs and other rural Georgians, managing a toilet is not viewed in the same way. The Assessment Team recommends shared toilets only where there is no other option –

no space in a temporary location. For the newly built settlements, household toilets are the recommended option.

Recommendations

There are a few lessons that can be learned from the 2010 Assessment, some relating to the process of the assessment and others to any ongoing WASH programmes in both the IDP community and in rural Georgia.

Assessment process

For the process of the assessment, three major points stand out. The first is the benefit to be gained from a set of thorough initial training sessions and meetings of the assessment teams throughout the field work. One of the aims of the technical assessments was to provide an objective analysis across the many field sites. The meetings throughout the seven weeks of the field work gave the teams opportunities to compare notes, standards being used and approaches to implementing the questionnaire. Issues with specific questions were raised during this time and practical solutions reached. Particularly for the engineers in the teams, these sessions give them useful opportunities to ensure that agreed standard criteria and approaches are used by all, validating our claim of objectivity.

The second relates to the questioning of communities about their ability and willingness to pay for services. In rural Georgia in particular, this is a difficult question as many communities find the question surprising and are confused as to how to answer it – why would a community be willing to pay for a service they do not necessarily see as useful, such as a solid waste collection and disposal system? For future assessments of this kind, it is recommended that an approach with different tools is taken, eg. a priority ranking of household expenditure including aspects of WASH.

The third is the inclusion of representative villages in this assessment, giving us a picture of the conditions experienced by rural Georgians (see below).

Other aspects of the process that are well worth remembering for future assessments are:

- the benefit of asking communities and technical assessments to rate conditions and facilities using the same scale;
- questioning the role of water quality sampling in an assessment of this nature, given the lack of a seasonal water quality picture and the possibility of raising community expectations, and
- perhaps taking a different approach also to questions relating to HP, particularly those about hygiene kit distribution.

One final pointer for future WASH assessments is to note that both the 2009 and 2010 Assessments focused on water for household use. Given the drive by GoG for durable water solutions extending the assessment to cover water for household-level income generating activities should be considered.

WASH programmes for IDPs

The 2010 Assessment showed that WASH conditions for IDPs have remained about the same in the last twelve months, although the condition of toilets has deteriorated. The results from the assessment indicate a **continuing programme of investment is warranted**, with more careful consideration paid to (and funding made available for) improved construction quality – the initial poor quality of toilets 24 months ago has meant a great deal more work now.

The programme should move slightly, however, to an HP programme that drives demand in communities for better services, supplies and assistance rather than simply handing them out. IDP communities have changed in the past 24 months, finding new economic opportunities and settling into more permanent housing, and the programmes that offer them assistance should take this into account.

Specific recommendations arising from the assessment include:

- the success of communal bathhouses, and the need for a review of their management and operation;
- the failure of shared toilets and the need to avoid them wherever possible.

One aspect that should be investigated by funding and implementing organisations is the need to increase the community expectation of having to pay for services that previously they may not have paid for directly (eg. communal water supplies), or have used a less-hygienic substitute (eg. unmanaged solid waste dumps outside town).

WASH programmes for Rural Georgia

The 2010 Assessment clearly shows that the conditions of WASH facilities and services in rural Georgia are poor, particularly those not related to water supply. However, the underlying reasons for this are not as straightforward as a first impression might make out. Rural Georgians, as with rural populations elsewhere, have traditionally relied on their own efforts and often place a higher priority on other aspects of their lives. While poor hygiene practices may be contributing to a lower standard of living, many rural Georgians would think that a better education for their children or better access to markets more important. GoG support has, understandably, focussed on providing assistance to IDP communities in more acute need.

However, the evidence from the 2010 Assessment on the lack of understanding between a hygienic environment and a better standard of living, as well as the self-rating of very poor environmental health conditions, makes a **coordinated WASH programme for rural Georgia imperative**.

The principles and approach to projects (see Appendix F) have been prepared with such a programme in mind, and are underlain by community participation, technical feasibility and financial sustainability. It is also recommended that water supply options include household-level income generating activities.

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Gamgabelis (community administrators) and members of the communities themselves were the key informants in the collection of information, and we appreciate their patience and attention during the data collection phase.

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Abbreviations and Acronyms

ACF	Action Contre la Faim (Action Against Hunger)
GEL	Georgian Lari (currency of Georgia)
GoG	Government of Georgia
HP	hygiene promotion
IDP	Internally Displaced Person
IRC	The International Rescue Committee
MRA	Ministry of Refugees and Accommodation
UNHCR	United Nations High Commission for Refugees
UNICEF	United Nations Children's Fund
WASH	water supply, sanitation and hygiene promotion
WHO	World Health Organization

1 Introduction

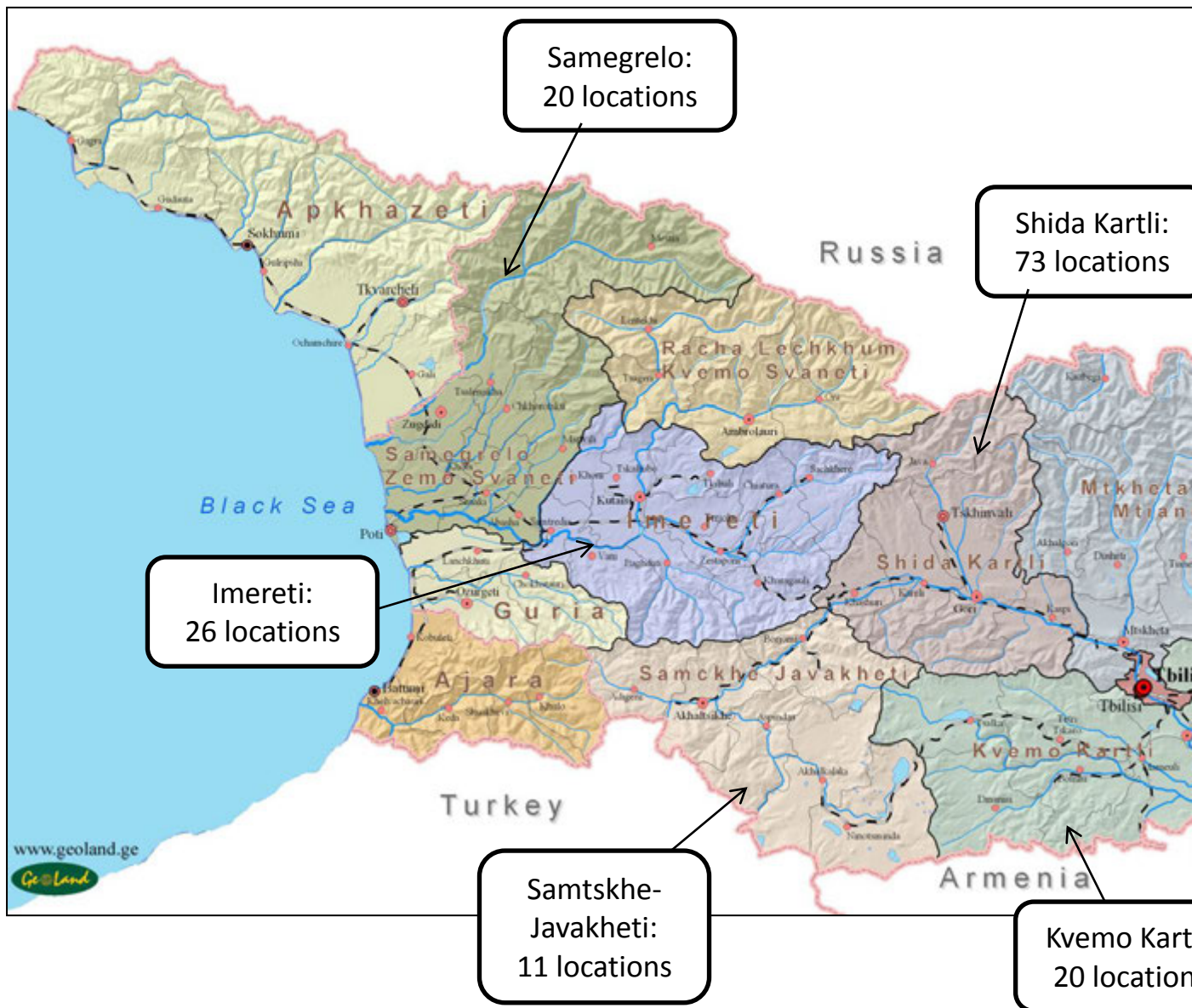


Figure 1 Georgia's Regions and the 2010 WASH Assessment locations

1.1 Context

In the upheaval following the breakdown of the Soviet Union in the early 1990s and the ensuing conflicts in and near Georgia, some 255 000 people were displaced from their homes in South Ossetia and Abkhazia and are unable to return, 25 000 of whom were displaced during the most recent August 2008 conflict. The majority of people who were able to return home, returned to towns and villages in the Shida Kartli region, primarily to the areas north of Gori.

In response to the late-2008 mass displacement the Government of Georgia (GoG), with the support of the international community, moved quickly to provide shelter to Internally Displaced Persons (IDPs) who could not return home. The response took two forms, with the GoG identifying: (a) areas of land on which to build new development of single-family homes, and (b) large empty buildings refurbished

as multi-family apartment blocks. These solutions were intended to provide permanent homes for IDPs with full ownership rights transferred to the residents, and are identified in this report as New Settlements. As a temporary shelter measure, the GoG housed some IDPs in Collective Centres, typically schools, kindergartens or other government buildings.

Providing durable solutions for all IDPs, including housing solutions, is the priority of the GoG as outlined within the framework of the *State Strategy for IDPs* and its Action Plan. The recent revision of the IDP Action Plan also foresees significant improvements of the housing conditions for the those termed “Old IDPs”, ie. those displaced prior to August 2008. This will include reconstruction of existing collective centres and the privatization of refurbished apartments as well as construction of new housing units for IDPs.

In mid-2009 UNICEF, in partnership with the International Rescue Committee (IRC) and Action Contre la Faim (ACF), performed an assessment of water, sanitation and hygiene (WASH) in all New Settlements and Collective Centres for IDPs displaced in 2008, as well as in some villages hosting these settlements. Significant WASH problems were reported by the IDP community and observed by the assessment teams, and some of the key problems identified in the *2009 Assessment*¹ were:

- Less than half of IDPs and villagers had access to sufficient **quantity** of water, based on distance to fetch water and times of availability of water.
- There were widespread problems with water **quality**, and no systematic monitoring of water quality. In a number of settlements, residents do not drink the water because of high levels of dissolved solids, and in others water testing by the assessment teams found bacteriological contamination of drinking water supplies.
- 63% of the IDP population and 49% of the surveyed village population have taps in their homes, with the remainder relying on communal sources such as tap-stands, wells or springs.
- 33% of IDPs and 64% of villagers have no access to any bathing facilities at all. Very few IDPs or villagers have access to hot water for bathing.
- Toilet coverage is very high across the surveyed community, but there are still widespread problems. 67% of the surveyed population rely on pit latrines, and these are simple, wooden, unimproved out-houses with a number of deficiencies. Amongst the 30% served by in-home toilets, there are some problems with poor water supply, damaged sewers, and installation and maintenance problems with the toilets themselves.
- 30% of solid waste is disposed of in rivers, fields, along river banks, and road verges.
- Distribution of hygiene information and hygiene kits (cleaning items and consumables such as soap) has been widespread across the IDP community. However, there remains a clear and continuing need for hygiene support.
- WASH conditions in host villages are also low with widespread deficiencies in WASH coverage. Substantial investment in rural infrastructure and services at government level will be needed to raise standards amongst the rural population.

The outcomes from the *2009 Assessment* included a prioritised action plan to address these issues. They have been recognized as areas in which a commitment in terms of policy and funding are required from the GoG, both for short-term support and in pursuit of durable solutions. At the same time, they were identified as areas of potential intervention for donors, UN agencies and NGOs with the financial and/or technical capacity to assist.

¹ *Assessment of Situation, Needs and Priorities for Water, Sanitation and Hygiene in Georgia IDP Settlements*, IRC / ACF / UNICEF, Tbilisi Georgia, June 2009

Based largely on the *2009 Assessment*, the three assessment partners have implemented a SIDA-funded project to address some of the WASH issues in the new settlements and collective centres, and to develop understanding and knowledge within the communities on good hygiene practices.

1.2 Terms of Reference

To measure the outcomes from this work, UNICEF have again joined with IRC and ACF to undertake this joint 2010 Assessment, covering conflict-affected regions of Georgia where large numbers of recent IDPs presently reside.

New IDP sites

All *2009 Assessment* **New IDP sites** (ie. locations accommodating those displaced during and since the August 2008 conflict) were re-assessed to understand changes that have taken place over the last 12 months, and determine actions that still need to be taken. During the field work for the *2010 Assessment*, five of the New IDP Collective Centres were discovered to have been closed, with people having moved in the last 12 months to more durable accommodation.

It was agreed by the assessment partners that the assessment would cover all 2008-displaced IDPs living in Collective Centres and New Settlements in Shida Kartli, Mstkhetia-Mtianeti, Kvemo Kartli and Kakheti. The assessment does not cover those still living in Collective Centres in the capital Tbilisi, nor IDPs having moved to private accommodation.

Old IDP sites

The scope for this *2010 Assessment* was extended to include **Old IDP sites** (ie. locations accommodating those displaced prior to the August 2008 conflict) to allow a comparison of the WASH conditions in which the two groups of people live.

This *2010 Assessment* also looked to find out how the conditions for IDPs compared to rural Georgia in general, and to give some picture of how those displaced may have affected villages nearby. The inclusion of villages also allows an analysis of rural Georgia where no comprehensive assessments have been made to date. This broader **representative** set of villages includes:

- New Settlement Villages, neighbouring IDP new settlements;
- Adjacent Area Villages with returnees; and
- Baseline villages understood not to be directly affected by the 2008 conflict.

New Settlement villages

The *2009 Assessment* included ten villages “hosting” newly built settlements for New IDPs. These ten villages are also included in this year’s assessment.

Adjacent Area villages

Villages in the Shida Kartli region that are close to areas where New IDPs have been located were included for comparative reasons in this *2010 Assessment*. As agreed to by the assessment partners, the **Adjacent Area villages** were defined as being located in the Kareli and Gori municipalities north of the Kaspi – Khashuri railway line and south of the administrative border. 25 target villages were selected by a random selection from all villages in this area.

Baseline villages

The *2010 Assessment* also included villages where there is little direct impact from the 2008 conflict, ie. no displaced people residing there, and where the local government is unlikely to have been asked to provide assistance to IDPs. Non-conflict **Baseline Villages** were defined by the partners as being:

- in Samtskhe Javakheti, Shida Kartli or Kvemo Kartli Regions; and
- more than 15 km and less than 75 km south of the Kaspi – Khashuri railway line; and

- east of Akhaltsikhe; and
- west of Kaspi.

Ten villages were selected by a random selection of all villages meeting the above definition proportionate to the number of candidate villages within each region ie. 40 % in Kvemo Kartli, 10 % in Shida Kartli and 50 % in Samtskhe Javakheti.

During the field assessment, on visiting two of the Baseline Villages, the team discovered that the villagers had left and there was no-one to survey. To replace these two villages the same methodology of random selection was used.

Table 1. 2009 and 2010 Assessment sites

	ACF	IRC
2009 Assessment		
New IDP Settlements (New Settlement)	3 in Kakheti 4 in Kvemo Kartli 8 in Mtskheta-Mtianeti	20 in Shida Kartli
New IDP Collective Centres	9 in Shida Kartli	14 in Shida Kartli
New Settlement Villages ("host" villages)	1 in Kakheti 2 in Kvemo Kartli 2 in Mtskheta-Mtianeti	5 in Shida Kartli
Total 2009 sites	29	39
2010 Assessment		
New IDP Settlements	3 in Kakheti 4 in Kvemo Kartli 8 in Mtskheta-Mtianeti	22 in Shida Kartli
New IDP Collective Centres		18 in Shida Kartli
Old IDP sites	2 in Mtskheta-Mtianeti 10 in Kvemo Kartli 16 in Imereti 20 in Samegrelo	6 in Samtskhe Javakheti 2 in Shida Kartli
New Settlement Villages	1 in Kakheti 2 in Kvemo Kartli 2 in Mtskheta-Mtianeti	5 in Shida Kartli
Adjacent Area Villages		25 in Shida Kartli
Baseline Villages, not affected by conflict		4 in Kvemo Kartli 1 in Shida Kartli 5 in Samtskhe Javakheti
Total 2010 sites	68	88

Note: Please see Appendix A for a complete list of all assessed sites.

IRC and ACF have been tasked to provide a comprehensive overview of the WASH situation and needs of IDPs and to prioritize new rehabilitation or remediation initiatives. In assessing the WASH situation the survey examines the following specific areas:

- | | |
|---|---|
| <ul style="list-style-type: none">• Water supply – quantity and quality• Bathing facilities• Drainage• Septic and sewage systems | <ul style="list-style-type: none">• Toilet and sanitation conditions• Solid waste disposal and removal• Hygiene promotion and education• Hygiene and water kit needs |
|---|---|

Again, as with the *2009 Assessment*, this assessment report recommends a detailed, costed action plan of further durable solutions to meet the WASH needs of IDPs, and based on the technical assessment of the assessment teams. The solutions have been based on a set of standards approached developed by the team during the field work, with input from the community groups. The standard approach to projects are based on community participation in planning, implementation and monitoring, as well as technical viability. The standard approach has a basis in SPHERE² WASH standards but expands on these to meet the long-term needs and desires of communities.

Prioritisation of the activities has been undertaken, based on the stated needs and desires of the IDPs interviewed during the *2010 Assessment* and on cost. The ambition of this prioritisation is to provide an overall framework for GoG, international organisations, civil societies and the private sector future design and implementation.

1.3 Assessment Methodology

Building on the implementation and outcomes from the *2009 Assessment*, a two month assessment process starting in mid-April 2010 was carried out by the partners. The methodology utilizes a participatory approach, relying on the formation of and information gathering through WASH Committees and / or community Focus Groups in each location.

Assessment Tool

A joint assessment tool was developed by UNICEF, ACF and the IRC to assess core WASH standards including community participation in WASH, quantity of water available and used, access to water points, water management, water quality, bathing facilities, toilets, drainage, solid waste disposal and hygiene behaviour (see Appendix B).

The tool comprises two sections. The first section consists of a set of questions to be asked of community representatives in a Focus Group (FG) session by the assessment teams, covering general demography and the core WASH standards. The questions in the survey and the interview methodology were underpinned by principles of inclusivity and representation. In some places, generally where the partners have worked with communities previously, this FG comprises members of the local WASH Committee.

The second part of the tool is a technical assessment to be carried out directly by the teams observing and measuring WASH facilities, assessing the location, condition, and serviceability of all water, sanitation and hygiene related infrastructure including household wastewater disposal, irrigation and other water drainage, and septic, sewerage, latrine and solid waste disposal. Maps or sketches of water sources and sampling locations are included as appropriate. These technical assessments will form the basis for the prioritised action plan, as well as providing correlating documentation to the discussions with community representatives.

² The *SPHERE Humanitarian Charter and Minimum Standards in Disaster Response* are an internationally recognised standard for humanitarian response, used predominately in disasters and early recovery programmes.

Field Assessment

During the assessment three teams from IRC and four teams from ACF, each with at least a hygiene specialist and an engineer plus a UNICEF staff member as available, visited each *2009 Assessment* site at least once and the new sites twice.

In locations where the IRC and ACF already work, WASH Committees have been formed and these were used as a means of disseminating information and collecting data. Here, as anticipated, only one visit was generally required to conduct the survey.

In the new locations, where no WASH Committees are functioning, it was more practical to follow the *2009 Assessment* methodology of making two visits; one to familiarise the team with the settlement or village and to familiarise the selected group in these settlements and villages with the assessment process, and a second to collect data. As with the 2009 assessment, a flyer was used by the teams as an introduction tool to the communities and authorities in the settlements³.

FG discussions were held in each location, with groups generally comprising five to nine persons on average, but as many as 19 persons were in one group and as few as two turned up to another.

Only one FG in an Adjacent Area village self-identified as including a minority representative, although several of the villages visited were Azeri or Armenian villages, where communications were carried out either through a translator or in Russian. The self-selection of minority representation is perhaps disingenuous, although it does show that within a village, pockets of extra vulnerable ethnic minorities are not likely to be found. Villages are by and large ethnically homogenous, although some people will marry from other ethnic groups (the field assessment teams estimated this is between 1 in 30 families or perhaps 1 in 50).

The technical component of the field assessment also comprised a physio-chemical and microbiological water quality analysis. Samples from municipal water supplies were tested for residual chlorine and faecal contamination (*E Coli*). Samples from non-municipal supplies were also tested for other basic potability parameters (arsenic, fluoride, nitrate, total dissolved solids, turbidity, free and residual chlorine, presumptive and thermo-tolerant coliforms). Samples were sent to the Gori Laboratory, and some testing was carried out by the IRC in office (eg. arsenic, turbidity, electrical conductivity). These samples were then used against the community questioning and technical assessment parts of the survey tool to correlate other information.⁴ Appendix D gives the results in full.

Coordination

Weekly operational meetings were held between IRC and ACF to discuss the progress of the assessment in the field, and to fine tune it over the seven weeks of the field assessments. Weekly coordination meetings were also held between IRC and ACF to move quickly on implementation problems. The WASH Assessment Coordinator managed the meetings as well as the overall coordination within the project.

The meetings were also a useful venue to clarify results from the field as they were collated, and to ascertain the teams' opinions on the results, ie. why have FGs and the field assessment teams responded in the way they have?

³ The flyer was particularly useful for this *2010 Assessment*, as local elections were held at the end of May. The Assessment team was keen to ensure that the survey was not seen as an election activity, and that the assessment was not linked to any political platform.

⁴ Note that this one-off water quality sampling should not be viewed as the definitive condition of water resources in the locations. Water quality changes seasonally, and in response to human or natural activities. Water of a particular quality today may change tomorrow, next week, next month or next year. To get a more accurate picture of water quality in the locations, a thorough water quality sampling and monitoring system should be established.

Timing and Implementation

The initiative began in the week starting 19 April 2010. The survey tool was developed, agreed to by the assessment partners and tested in the first week, with the six to seven-week field work period starting the following week. Draft reports were submitted to UNICEF at the end of weeks nine and ten, for assessment and review.

Output

This *2010 Assessment* report presents the findings of the community and field assessment team questionnaires, as well as other data gathered during this phase. A comparative analysis is made of WASH related needs in New and Old IDP locations and the representative villages, on which to base a generic prioritization of improvement actions which can inform future investment planning.

The report also presents a list of recommended interventions for each of the IDP settlements, renovated buildings and collective centres along with a cost estimate. Emphasis was placed on the **durability** of the interventions, and the criteria for ranking them agreed between the assessment partners. Project prioritization forms a basis for future project design and implementation.

2010 WASH Assessment Report

This report, *WASH Assessment in New and Old IDP Sites and Selected Villages*, is divided into several chapters, covering:

- a general introduction (Chapter 1);
- the findings from the field work (Chapter 2);
- the three outputs from the assessment based on the results from the findings presented earlier – the comparison between 2009 and 2010, the comparison between New IDP sites, Old IDP sites and the representative villages, and a set of prioritised projects (Chapters 3, 4, 5 and 7 and Appendices C and F);
- a discussion on the sustainability of ongoing efforts in both IDP and rural Georgian communities (Chapter 6); and
- a summary of lessons learned and recommendations (Chapter 8).

2 Findings of the Assessment

The findings of the assessment, from the community and assessment team questionnaire results, are presented below. For necessary brevity and to provide robust data sets, results are aggregated into three categories – New IDP sites, Old IDP sites and representative rural villages – and presented across the population groups.

These findings are presented to give a basis for the chapters that follow, ie. the results of the Assessment. The findings simply summarise the responses from the community and the technical teams on the conditions found there. Later chapters investigate motivation and draw conclusions from these findings.

Descriptions of the sites can be found in Appendix C.

2.1 New IDP sites



Figure 2 The New IDP sites

Two sub-categories of New IDP sites were assessed in the 2010 WASH Assessment – the 18 Collective Centres⁵ and 37 New Settlements, totalling 55 sites. The New IDP sites house an estimated 19 788 persons in 6 145 households, averaging 3.2 persons per household. The sites range in size from only a handful of people in some of the Collective Centres to almost 7 000 in one of the larger New Settlements.

The distinction between conditions at the Collective Centres and at the New Settlements is made in the following sections only where it is significant. Overall, the vast majority of New IDPs are now accommodated in New Settlement, with only 567 persons remaining in the 18 Collective Centres. It is expected that these people will continue to move to more permanent accommodation in the coming months.

Table 2 Perception of WASH facilities – New IDP sites

	Focus Groups		Assessment Teams	
	average	Range	average	range
Water supply	2.7	1-5	2.8	0-5
Bathing areas (average private and communal)	2.0	0-5	1.9	0-5
Toilets (average private and shared)	2.7	0-5	2.9	0-5
Sewerage system	N/A	N/A	2.4	0-5
Solid waste disposal	2.7	0.5	2.6	0-4

82% of the New IDP sites have a WASH Committee of which all but three are considered by the FG to be active. The majority of sites (63%) report that the Municipal authority is responsible for WASH-related facilities, although several (15%) reported that the manager of the Collective Centre is responsible, two communities reported that they have an IDP representative and two, sadly, reported that no-one is responsible.⁶

The FGs in these New IDP sites averaged about six or seven members. 43% of participants were men and 57% were women, with women on all FGs and men on all but seven. The elderly were represented in 13% of groups, large households in 8% and young mothers in 10%. None of the FGs had members that identified as representing ethnic or other minority groups or were disabled.

⁵ The CCs at Gori Kindergartens No. 3, 8 and 11, at Rekha and Tiniskhidi closed in the past year bringing the total to 18.

⁶ This question caused some confusion in all FGs across the assessment as responsibility for services are often not clearly assigned. Even when people do identify a responsible organization for a service this is often because they have seen representatives from this organization being part of a discussion or providing assistance.



Figure 3 Examples of New IDP Collective Centre (left) and New Settlement (right)

Water Supply

About two-thirds of New IDP sites have at least some direct access to piped water, with slightly more than half of communities reporting the whole site has direct access. The remainder rely on communal tapstands (25% of the total population), protected wells (5%) or springs (3%). The technical assessments report that a large number of sites do not have tapstands in good working conditions (43%).

42% of communities report that water is not available when they want it, being available for 7.7 hours a day on average, six or seven days a week. 62% of communities report that people transport water to their homes, from ten metres, say from a communal tapstand outside their building, to six kilometres, say a neighbouring village. The average distance to a drinking water source is slightly more than 500 metres, and three communities, Bazaleti, Prezeti and Kareli Technical School I-II Block, report trips of three kilometres or more. Those who do carry their water spend on average 1.3 hours a day doing so with four communities reporting spending three or more hours a day or more on collecting water, Gardabani, Kareli Technical School I-II Block, Khurvaleti Settlement and Ateni Kindergarten. Of those who responded, less than one-quarter of communities believe that access to water is not equal across the settlement. The technical assessments calculate that less than half the sites have adequate water quantity available.

43% of communities trust the quality of their drinking water supplies, 17% somewhat trust the quality and 40% do not trust it. Those who do not trust their drinking water note concerns about the water having sediments (50%), being salty (38%) or being generally “dirty” (17%). One-quarter of communities note that testing has been carried out with “bad” results, one community is concerned about a lack of chlorination, two have concerns about no filtration and two use the water but are not sure about its safety. One community notes that they have “problems with health due to water quality”⁷. Only one-quarter of communities report making the water safer to drink, either by boiling it or buying it from a private seller elsewhere. Only six of the communities report cleaning their systems by chlorination, the others perhaps relying on Municipal or other authorities to do so.

Only three of the 55 communities reported paying an average of GEL 1 per household per month for water, ranging from GEL 0.5 to GEL 2 per household per month. Two of those paying for water somewhat trust the source, with only one community fully trusting the source. Very few communities could or would respond to questions about ability or willingness to pay for water, but of those who did, most were not able nor willing to pay (see Chapter 7).

Overall, communities report the condition of water supplies in their sites as acceptable (2.7) with a range from very bad (1) to fine for long-term use (5). The technical assessments report slightly better conditions overall (2.8) ranging from non-existent (0) to fine for long-term use (5).

⁷ The total of quality concerns is more than 100% as a community may have more than one concern.



Figure 4 New IDP sites – communal tapstand at a Collective Centre (left) and an overhead tank for supply to a New Settlement (right)

Bathing Facilities

Half the Collective Centres and only two of the 37 New Settlements report having no bathing facilities at all in the settlements, forcing households to use basins or buckets in their living or sleeping spaces, to share their relatives' facilities or to travel to larger towns where communal bathhouses are available. 39% of Collective Centres report communal bathhouses and the majority of New Settlements (76%) report private bathing facilities.

Communal Bathhouses

Of those who have communal bathhouses, the communities rate them on average as acceptable (2.9), ranging from poor (2) to fine for long-term use (5). One community, Akhalsopeli, rates their bathhouse as fine for long-term use (5).

The most reported problems in the communal bathhouses are a lack of maintenance and repair, a lack of electricity (and thus hot water but also lighting) and a lack of water. Other concerns are the distance from the family quarters, not enough water, no hot water, problems with drainage and the lack of lights.

Several communities suggested that new, improved or better infrastructure is required (new boreholes, new water tanks), and several are looking for “someone” to pay their electricity bills, perhaps the Municipalities.



Figure 5 Communal bathhouses in New IDP locations

Private Bathrooms

Of those who have private bathrooms, the communities rate them on average as acceptable (2.8), ranging from very bad (1) to generally good (4). Two communities, Akhaldaba and Karaleti, rate their private bathrooms as very bad (1)

The most reported problems in the private bathrooms are a lack of hot water, with 47% of communities reporting this as a problem. Other concerns are damaged taps, pipes and drains as well as general maintenance, a lack of ventilation in the bathrooms, not enough bathrooms, a lack of water or not enough, no electricity and poor installation. About one-third of communities offered more than one concern.

Unsurprisingly, many of the communities recommended to fix or install water heaters, with one community recommending that the hot water heaters they already have just need to be installed. One other community recommended that someone else needs to meet the electricity bill for hot water. Two communities recommend that individual heaters should be bought to replace the communally shared system they have now, placing the imperative to pay and maintain the systems back on the householders. A large number of communities recommend better general repair and maintenance, with three recommending that new ones need to be built to meet the need.

Frustratingly, most of the sites without bathing facilities could or would not answer the question about solutions to their lack. Of those who did the solutions included private bathrooms (four respondents) and communal bathhouses (two).

Toilets

Many of the New IDP locations are households in communal or newly built buildings, so the toilets are generally improved pour-flush or cistern-flush toilets attached to sewer or septic tank toilets. In the Gori kindergarten and school Collective Centres, the vast majority of households share a toilet with at least one other family due to a lack of space. However, of the New Settlements only two, Teliani and Polyclinic "Panatasea", have only shared facilities while one other, Shaumiani, has a mix of private and shared. All of the Collective Centres reported a duty roster to clean, maintain or repair the public facilities as did the Polyclinic Panatasea New Settlement, but the other two New Settlements had no response to this question.

The majority of communities (72%) report that an adequate number of toilets are available, but 28% report that there are not, mostly those Collective Centres that share facilities. Both the community and the technical assessments consistently rate the public toilets as very bad (1) to poor (2). Unsurprisingly, both communities and technical assessments rate household toilets higher than they rate public toilets on average as acceptable (3), with a range from very bad (1) to fine for long-term use (5).

Most of the New IDP sites (60%) report connection to a sewer system in varying condition, any with some damage to the pipes or fittings. Of the remainder eight report that septic tanks are in use, and 27% report no connections to a sewer system (most likely a simple soakage pit).

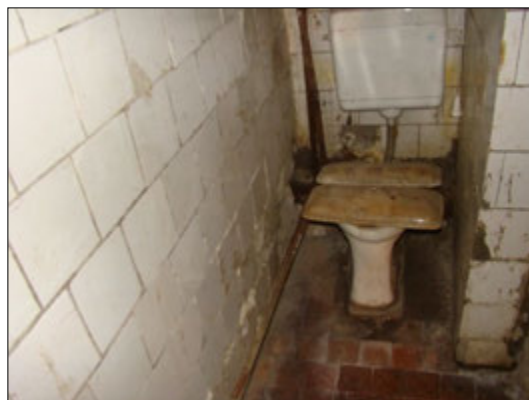


Figure 6 New and improved toilets in New IDP sites

Drainage

The majority of communities report a problem with rainwater drainage (60%) with about one-third (32%) also reporting wastewater disposal problems. The technical assessments support this, with 45% reporting evidence of ponded water, and five sites where there has been damage to the buildings due to flooding. 16 New Settlements (38%) are reported to have had community drainage projects implemented, including all of the locations that display flood damaged buildings. None of the Collective Centres have reported community drainage projects to date.

The majority of communities report that households dispose of wastewater in to the sewerage system (53%) or simply pour their wastewater into their yards (15%) or into a drainage ditch near the householder (10%). The Shaumiani New Settlement reports that people collect their wastewater and re-use it for toilet flushing.

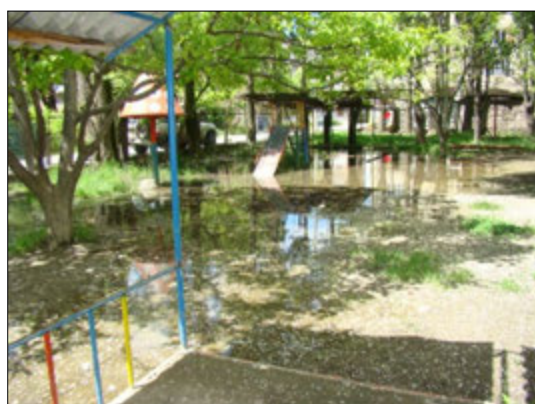


Figure 7 Lack of drainage in New IDP Collective Centre

Solid Waste

The majority of New IDP locations (73%) report some Municipal or other organised solid waste collection and disposal system, collecting at least weekly (45%) but often daily (32%), and they rate the system as close to acceptable (2.7). Of those who do not have an organised system in place, the majority drop waste into a hole, or in or near a river or elsewhere outside the settlement. Akhaldaba New Settlement reports that they burn it. Skra Kindergarten Collective Centre reports that they drop it in the yard near the toilet. Interestingly, two communities reporting no organised system did not respond to the question, perhaps for reasons of shame. Another of the communities reporting no organised system said they drop it into containers, perhaps a municipal system outside their specific location. According to the technical assessment, less than half of sites (47%) do not have adequate systems for waste disposal.

Only two communities reported paying for waste collection and disposal, GEL 0.5 per household per month at Tserovani New Settlement, where waste is collected once a week and they rate their solid waste condition as acceptable (3), and GEL 1 per household per month at Lagodekhi New Settlement, where waste is collected twice a week and they also rate their conditions as acceptable (3).

The response rate for ability and willingness to pay was very low. Despite this, eight of the 14 locations without organised collection systems said that they would like one. The remainder offered no solution to their situation.



Figure 8 Examples of Municipal waste collection in New IDP sites

Hygiene Practices and Materials

Activities

Not surprisingly given agency activities in the New IDP sites, 90% of communities report some hygiene promotion (HP) activities in their settlement. Perhaps more surprisingly 10%, all of which are New Settlements in West Georgia, report they have not. The same 90% report that the hygiene kits have been distributed, most recently earlier this year or a few late last year.

As with elsewhere, all communities agreed that further distribution of hygiene kits would be most useful.

Knowledge and Practices

All communities, even those who report no HP activities, reported that people think handwashing is important, that they **should** wash their hands after defecation and before cooking and eating, before feeding and after cleaning a baby, and that they use soap to wash hands.

Communities report that children are bathed at least once a week (37%), but more likely more often (47% report twice a week and 17% report three times a week).

Almost all communities report keeping water in their homes in a covered vessel, and all report cleaning the water container regularly if not every time they use it.

On average, communities rate their **knowledge** of hygiene issues only slightly higher than their **practices**. Generally, knowledge of handwashing, household hygiene, water storage and public space hygiene all rated close to acceptable (3.5 to 4.0) and practice only slightly worse (3.2 to 3.7). None of the communities rated their knowledge and practice as very bad (1) or worse, and slightly less than one-third rated their knowledge or practice of at least one element as poor (2). Only Teliani Settlement rated the difference in one element, household hygiene, as more than two rating point (knowledge is 4 and practice is 2). The remainder were either the same or difference only by one rating point. Three communities rated their **knowledge** as fine, no problems (5) across all hygiene behaviours and another 26 as generally good (4), ie. about half of the communities rate their knowledge as generally good or better. Only two communities rated their **practice** as fine, no problems (5) across all hygiene behaviours and another 13 as generally good (4).

This small difference between knowledge and practice suggests the ongoing HP programmes in New IDP sites continue to encourage people to practice what they know. It also suggests that people have access to the materials they need to carry out what they know, and that the continued distribution of hygiene kits is having the impact that these distribution programmes want, ie. improved hygiene practices in IDP communities.

Ongoing Programmes

The interest in an ongoing HP programme in the New IDP sites is good, with almost all expressing an interest in HP, and almost all reporting that they talk to their children about HP often or every day. They agree that children should be trained in good hygiene behaviours generally (100%), handwashing specifically (60%), personal hygiene (40%), H1N1 (13%) and other diseases (18%).

Respondent rates for the best methods of disseminating information was good (at least 82% of the communities responded to the questions), and of those who did respond leaflets and posters (82%) and lectures / teaching methods (75%) were most popular.

2.2 Old IDP sites

Figure 9 The Old IDP sites



The 2010 WASH Assessment varied from the 2009 assessment in taking an overview of conditions in the locations housing IDPs displaced prior to August 2008, to allow some comparison of the conditions here and in the New IDP sites. Some of these locations have been occupied by IDPs for ten to 15 years or more⁸.

The sites house 11 869 persons in 4 421 households, averaging 2.7 persons per household, lower than other categories considered in this assessment. The sites range in size from a handful of households to less than 2 000, averaging about 200 households per location.

About 20% of communities report a WASH Committee, of which less than two-thirds are considered to be active. Most communities (89%) report that the local Municipal authority is responsible for WASH facilities, but one reports that a private contractor is responsible, one reports that the manager of the hotel where they are housed is responsible and four, sadly, report that no-one is responsible.⁹

⁸ Some of the sites are reported to be politically difficult to manage with various statements and claims being made by the various actors involved. This Assessment reviews only the WASH nature of activities and conditions at the sites – we make no political statement.

⁹ Again, this question caused some confusion (see section 2.1).

The FGs in the Old IDP sites averaged about seven or eight members. About one-third of participants were men and two-thirds were women, with women on all but three FGs and men on all but four. The elderly were represented on 16% of FGs, large households on 15%, young mothers on 13% and the disabled on 4%. No FG had members that identified as representing ethnic or other minority groups.



Figure 10 Old IDP sites

Table 3 Perception of WASH facilities – Old IDP sites

	Focus Groups		Assessment Teams	
	average	range	average	range
Water supply	2.7	0-5	2.9	0-5
Bathing areas (average private and public)	2.3	0-5	2.4	0-4
Toilets (private)	2.7	1-5	3.2	2-5
(public)	1.0	1	1.9	1-4
Sewerage system	N/A	N/A	2.9	0-5
Solid waste disposal	2.1	0-5	2.3	0-5

Water Supply

Three-quarters of Old IDP sites have at least some direct access to piped water, with 62% reporting the whole site has direct access. The remainder rely on communal tapstands (33% of the total population), protected (9%) and unprotected (7%) wells or springs (2%). The technical assessments indicate that the majority of sites do not have tapstands in good working conditions (77%).

About one-quarter the communities report that water is not available when they want it, being available for four hours a day on average, five days a week. About half the communities report that people transport water to their homes, from five metres to two kilometres. The average distance to a drinking water source is less than 300 metres, and no community report trips of four kilometres or more. Those who do carry their water spend on average 1.9 hours a day doing so with six communities reporting spending three or more hours a day or more on collecting water. Of those who responded, almost three-quarters of communities believe that access to water is not equal across the village. The technical assessments calculate that almost half of sites have adequate water supplies.

Almost half the communities fully trust their water, about 10% somewhat trust the quality of their drinking water supplies with less than half (44%) not trusting it. Those who do not trust their drinking water note concerns about the water being generally “dirty” (34%) and sediments (4%), with one community each reporting concerns with water not being filtered, water not being chlorinated, the pipes being damaged, the water smelling poor or having insects in it¹⁰. One community, at the Khobi Boarding School in Samegrelo, reports that the water has been tested and has shown contamination. Interestingly, four communities report a lack of water testing as a problem, perhaps based on having had a now discontinued testing regime, or perhaps based on earlier experience prior to displacement. Only 16% of communities report making the water safer to drink, either by boiling it or buying drinking water. Only two of the communities reports cleaning their systems by chlorination, the others perhaps relying on Municipal or other authorities to do so.

Seven communities reported paying an average of GEL 2.3 per household per month for water, ranging from GEL 0.5 to GEL 6 per household per month. The two communities reporting paying the most for water (GEL 6 and 4.5 per household per month) also report that they have water piped to their households. The others collect water from a communal tapstand or from a protected well. Unlike in comparison villages, in general people pay more for water that is piped to their homes, which indicates that the cost of water is largely a function of the treatment and distribution (eg. pumping costs). About half of those paying for water trust the source, with only one community not trusting the source. Very few communities could or would respond to questions about ability or willingness to pay for water, but of those who did, most were not able nor willing to pay anything.

Overall, communities report the condition of water supplies in their villages as acceptable (2.7) with a range from non-existent (0) to fine for long-term use (5). The assessment teams report slightly better conditions overall (2.9) with the same range.



Figure 11 A public standpost at Old IDP Collective Centre

Bathing Facilities

The majority of communities (86%) report that they have private bathing facilities, 13% report communal bathhouses and the remainder (7%) reporting no bathing facilities¹¹. The seven communities reporting communal bathhouses rated them on average as poor (2.0), and those with private bathing facilities rating them only a little better (2.4). Only one community (the Students' Accommodation Old IDP Collective Centre) reports bathing facilities as fine for long-term use (5), the remainder being very bad to acceptable (1 to 3).

The most reported problem in the Old IDP sites is the lack of hot water (20 of the 56 communities report this), followed by damaged pipes (11), taps (12) and drains (8). Other problems reported include inequitable or inadequate facilities (2), no or not enough water (3), that the showers spray

¹⁰ The total of quality concerns is more than 100% as a community may have more than one concern.

¹¹ Sites may report both communal bathhouses and private bathing facilities, bring the total to more than 100%.

water into the main room (4), that there are no showers (3) or just generally inoperable (1). Four communities report that private bathing facilities are under repair.

Not surprisingly given the above, the communities recommend providing hot water and better maintenance as solutions. Three communities recommend a complete rebuild of facilities, and one recommends bring the water pipes inside the building (perhaps to prevent freezing). The community at Gardabani "Ministry Council" Settlement recommends new household bathrooms, and three of the communities recommend communal bathhouses.

Toilets

Many of the Old IDP locations are in a communal building, so the toilets are generally not the common Georgian household unimproved pit toilet, but improved sewerated toilets either private (89%) or shared / public (29%)¹². None of the communities reported on activities to clean, maintain or repair the public facilities.

Most communities (89%) report an adequate number of toilets are available, but 11% report there are not. Communities consistently rate the public toilets at very bad (1) with the technical assessments rating them slightly better at poor (1.9). Unsurprisingly, both communities and the technical assessments rate household toilets higher than they rate public toilets on average as poor to acceptable (2.7 and 3.2 respectively), with a range from very bad (1) to fine for long-term use (5).

Most of the Old IDP sites (80%) report connection to a sewer system in varying condition, many with some damage to the pipes or fittings. Of the remainder five communities report that they use septic tanks, and six report no connections to a sewerated system.

Drainage

The majority of communities report a problem with rainwater drainage (59%) with about one-quarter (23%) also reporting wastewater disposal problems. The technical assessments support this, with half reporting evidence of ponded water, and two settlements, Tserovani Settlement and the Rustavi "Vendispenseri" settlement, where there has been damage to the buildings due to flooding. Three settlements, two in Kvemo Kartli and one in Mtskheta-Mtianeti, are reported by the technical assessment to have had community drainage projects implemented, none of which are the villages that display flood damaged buildings.

The majority of communities report that households dispose of wastewater in to the sewerage system (61%) or simply pour their wastewater into their yards (29%). In Saguramo Settlement, the community reports that people collect their wastewater and re-use it for toilet flushing.

Solid Waste

The majority of Old IDP locations (63%) report some Municipal or other organised solid waste collection and disposal system, collecting at least weekly (37%) but often daily (29%), although they rate the system as poor (2.1). Of those who do not have an organised system in place, the majority drop waste outside the settlement, in fields, or in or near water channels, although a significant number do not – 32% of those without an organised system drop the waste "outside the building". Akhalsofeli Boarding School reports that they burn the waste every day. Abastumani Meat Factory reports that they dump it "in the ruin". Interestingly, four communities did not respond to the question, perhaps for reasons of shame. According to the technical assessment, 59% of sites do not have adequate systems for waste disposal.

Only two communities reported paying for waste collection and disposal, GEL 1 at "Rustavmsheni N1" in Rustavi where waste is collected three times a week and they rate their solid waste condition as generally good (4), and GEL 2 at the Military Commissariat in Kutaisi where waste is collected twice a week and they rate their solid waste condition as poor (2).

¹² Some FGs report that the site will use both private and public toilets, meaning the total is more than 100%.

The response rate for ability and willingness to pay was very low. Despite this, all of those without organised collection systems said that they would like one, 57% would like more bins. One community, at Mtis Kheoba, requested a more frequent pick up than their current weekly schedule.



Figure 12 Examples of Municipal waste collection (right) and none (left)

Hygiene Practices and Materials

Activities

Only three communities, the Kutaisi Pharmacy Dept., #26 Uridia Street in Senaki and #3 Public School in Chkhorotsku, report that some HP activities have been conducted in their village. Less than one-third of communities report that the hygiene kits have been distributed, but mostly during the 1990s by ICRC. Three communities report more recent distribution since the August 2008 war.

As with elsewhere, all communities agreed that further distribution of hygiene kits would be most useful, except for two sites, the Prop Institute at Zestaphoni, and the Students Accommodation IDP Collective Centre. This suggests the communities at these sites are not used to a regular distribution and are able to provide their own hygiene materials.

Knowledge and Practices

All communities reported that people think handwashing is important, that they **should** wash their hands after defecation and before eating, and use soap to wash hands. 88% of communities report that they should wash hands before cooking, and 93% before feeding a baby and 86% after cleaning the baby.

43% of communities report that children are bathed once a week, 38% twice a week and 18% three times a week.

89% of communities report keeping water in their households in a covered vessel, and all report cleaning the water container regularly.

On average, communities rate their **knowledge** of hygiene issues slightly higher than their **practices**. Generally, knowledge of handwashing, household hygiene, water storage and public space hygiene all rated close to acceptable (3.7 or 3.8) and practice only slightly worse (3.5 or 3.6). Only one community, Ialguja Settlement at Marneuli, rated the knowledge and practice of all their hygiene behaviours as poor or very bad (1 or 2), and the community at Likani 2 Collective Centre rated their practice of all hygiene behaviours as very bad (1) despite generally good knowledge (4)¹³. 13 communities (23%) rated their **knowledge** as fine for long-term use (5) across all hygiene behaviours

¹³ This is undoubtedly linked to the very poor condition of facilities at Likani 2 – see section 6.2.

and another 15 (27%) as generally good (4). Nine communities (16%) rated their **practice** as fine for long-term use (5) across all hygiene behaviours and another 13 (23%) as generally good (4).

Again, this slight difference between knowledge and practice (plus the high awareness of several good practices) seems to indicate some kind of ongoing HP programmes in the Old New IDP sites, perhaps as part of a school or kindergarten health or social studies curriculum, or perhaps as part of a child-mother community health programme. Given the widespread similarity of a positive response, these programmes may be part of overall Education or Health programmes that have been running for a long time.

The small difference also suggests that people have access to the materials they need to carry out what they know.

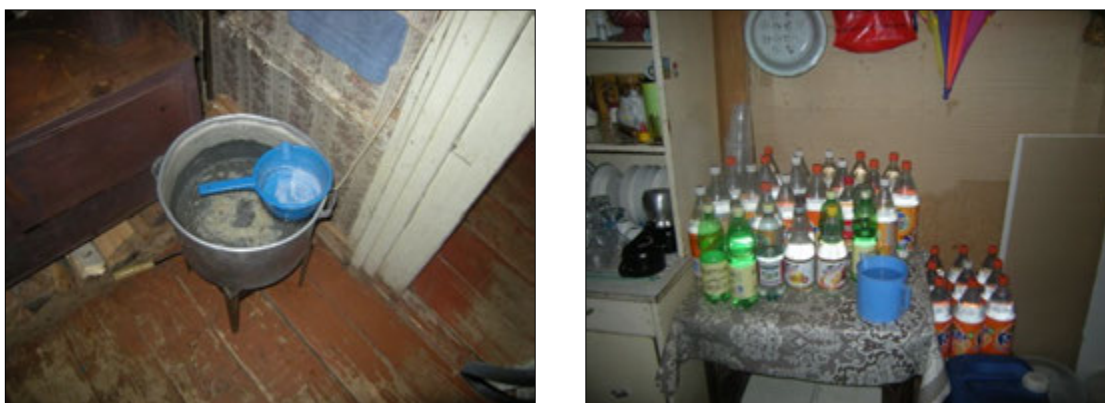


Figure 13 Water storage inside households in Old IDP Collective Centres

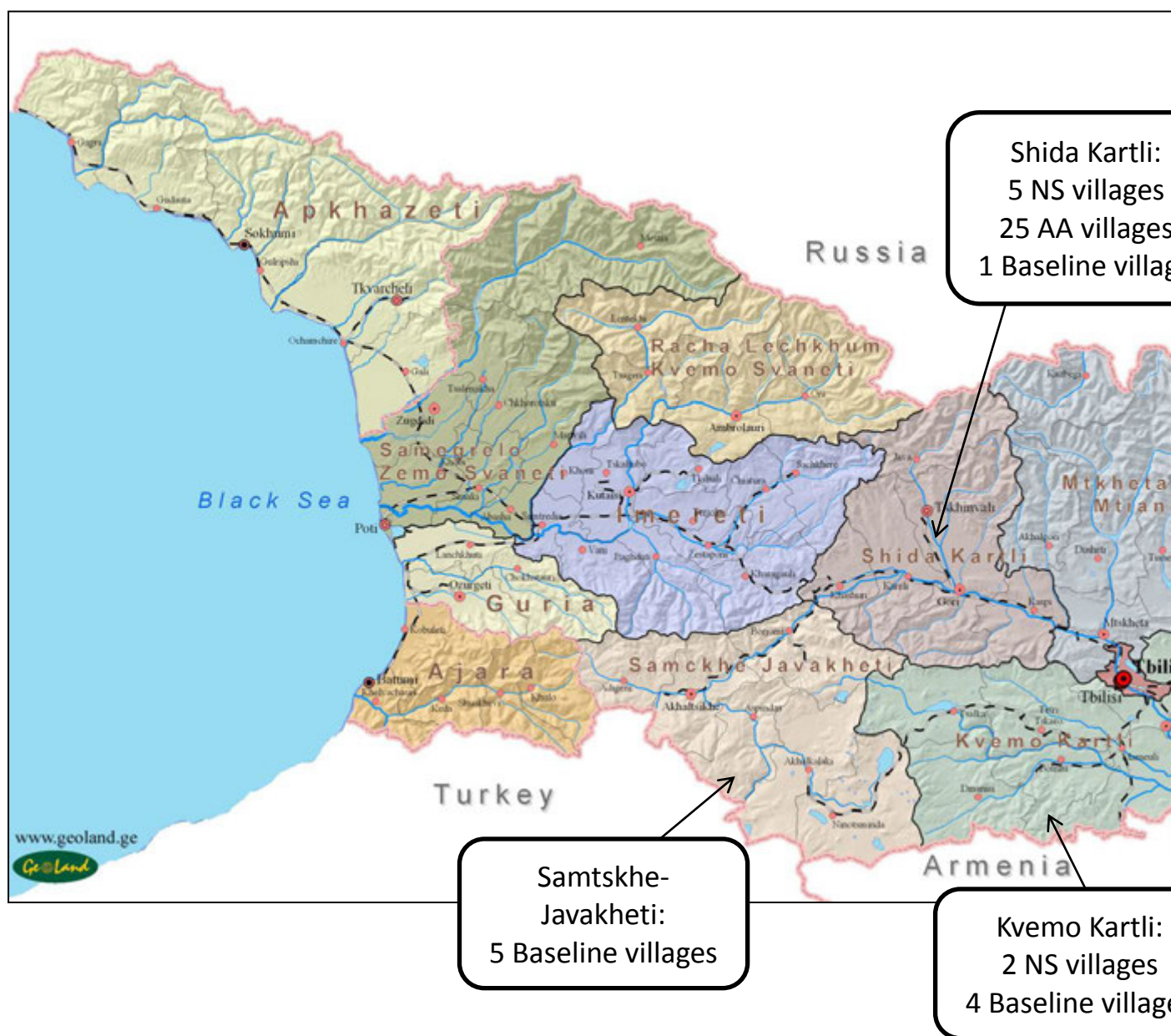
Ongoing Programmes

The interest in an ongoing HP programme the Old IDP sites is good, with 70% expressing an interest in HP, and 95% reporting that they talk to their children about HP often or every day. They agree that children should be trained in good hygiene behaviours generally (48%), handwashing specifically (43%), H1N1 (39%) and other diseases (30%).

Respondent rates for the best methods of disseminating information was low (68% of communities did or could not respond to the questions), but of those who did respond radio or television ads rated high as well as leaflets and posters.

2.3 Representative Villages

Figure 14 Representative villages



For the 2010 Assessment, three categories of representative villages were included to offer a comparison with the IDP sites (see Section 1.3 for a description of the selection of these villages):

- 25 Adjacent Area (AA) Villages;
- ten randomly selected Baseline Villages; and
- the ten New Settlement Villages from the 2009 Assessment.

The 45 representative villages house an estimated 50 757 people in 15 703 households, averaging 3.2 persons per household. The villages range in size from Abakhalo with about 50 people to the huge village of Surami with almost 10 000 residents. The average village size is about 1 270.

Four of the 45 villages report having a WASH Committee, of which two are considered by the FG to be active. Further investigation indicates that these WASH Committees are informal and unsalaried

and are usually one or two “useful” and “active” men who “solve WASH issues”, rather than the formally constituted WASH Committees of the New and Old IDP sites. All 45 villages report that the Municipal authority is responsible for WASH-related facilities.

The FGs in the representative villages averaged about eight or nine members. 42% of participants were men and 58% were women, with women on all but three FGs and men on all but one. Young mothers and the elderly were represented on 45% of FGs, large households on 28%, the disabled on 13%. One of the FGs, Akhaldaba, had members that identified as representing ethnic or other minority groups.

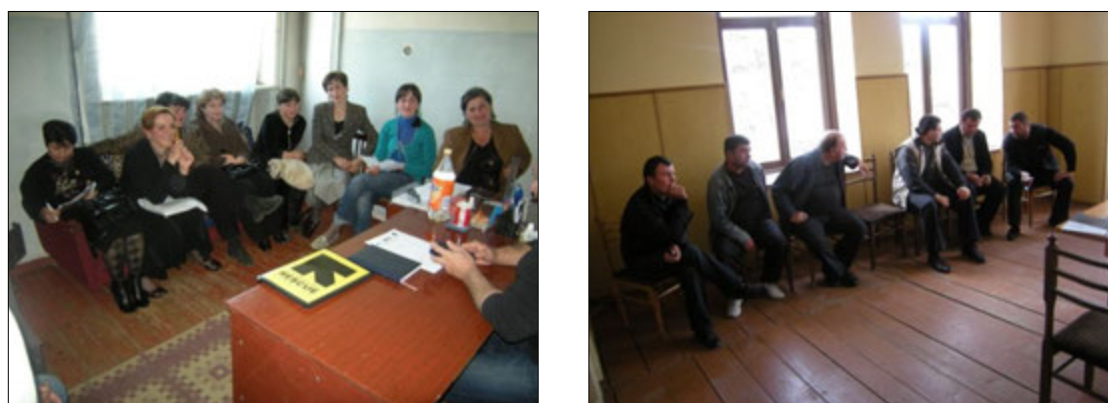


Figure 15 The FG at Skra village (left) and Surami village (right)

Table 4 Perception of WASH facilities – Representative Villages

	Focus Groups		Assessment Teams	
	average	range	Average	range
Water supply	2.3	0-4	2.4	0-4
Bathing areas	0.9	0-5	1.2	0-3
Toilets	1.9	1-4	1.9	1-4
Solid waste disposal	0.6	0-4	0.9	0-4

Note: Low scores for bathing areas, toilets and solid waste disposal are heavily skewed by the lack facilities or system, a “0” rating, in a majority of representative villages.

Water Supply

The majority of representative villages have no direct access to piped water (58%), with households relying on protected (18%) and unprotected (30%) wells, springs (33%), communal tapstands (18%) or other sources (13%). The technical assessments show only six villages with tapstands in good working conditions.

Despite the reliance on communal sources, the majority of communities (63%) report that water is generally available when they want it, but from those who do not, water is available on average for between one and six hours a day, three to seven days a week. Perhaps not surprisingly given the lack of piped systems, all communities report that people transport water to their homes, from less than 50 metres to up to five kilometres. The average distance to a drinking water source is about 800 metres, and four villages have trips of three kilometres or more (Kodavardisubani, Mejudispiri, Patara Mejriskhevi and Tiniskhidi – all Adjacent Area Villages). Those who do carry their water spend on average 2.5 hours a day doing so with 15 villages spending two and a half hours a day or more on collecting water. Of those who responded, about two-thirds of communities believe that

access to water is not equal across the village. The technical assessments calculate that 45% of villages have adequate water supplies.

One-quarter of communities trust their water, 30% somewhat trust the quality of their drinking water supplies with a large number (45%) not trusting it. Even if they do trust their source, communities note drinking water concerns about poor taste (25%), sediments (18%), salty (13%), and poor smell, insects, colour and generally “dirty” (10% each)¹⁴. Arashenda villagers reports that they use the water for drinking but are not sure of its safety. Mokhisi villagers have concerns that the source is not regularly checked, and the community at Manglisi are concerned that the water is not chlorinated. 38% of communities report making the water safer to drink, most of them by boiling it but some by chlorinating it. Only one community, at Machatia, reports cleaning their system by chlorinating it, the other perhaps relying on Municipal or other authorities to do so.

Of those communities who report trusting their water sources (ten), four report a spring as their source, three report a piped system, three report a communal tap, one reports a protected well and two report an unprotected well¹⁵. This last figure is worrying, and indicates that a HP for the rural villages of Georgia is warranted.

Almost half of communities reported paying an average of GEL 2.3 per household per month for water, ranging from GEL 0.5 to GEL 5.5 per household per month. The majority of people who pay for water get it from a non-piped source which is not continuously available. Those who pay the most for water get it from:

- a communal tapstand, two kilometres from their households, and spend four hours a day collecting it, indicating that the high cost is a function of high transport costs;
- a spring, where it also takes them four hours a day to collect water; and
- an “other” source, a private seller only some 200 metres from their household, although it takes them two hours a day to collect water, indicating the cost of water may be supplier driven.

Only two of the communities report trusting a paid for water source, and another four somewhat trusting the source.

Very few communities could or would respond to questions about ability or willingness to pay for water.

Overall, communities report the condition of water supplies in their villages as poor (2.3) with a range from non-existent (0) to generally good (4). The technical assessments report slightly better conditions overall (2.4) with the same range.



Figure 16 Water supply systems at representative villages

¹⁴ The total of quality concerns is more than 100% as a FG may have more than one concern.

¹⁵ The total is more than ten FGs as FGs may report trusting more than one source.

Bathing Facilities

The majority of communities (65%) report that they have no bathing facilities in the village, forcing households to use basins or buckets in their living or sleeping spaces, share their relatives' facilities or to travel to larger towns where commercial communal bathhouses are available. No communal bathhouses are reported. The 14 communities reporting private bathing facilities, rate them on average as poor (2.4)¹⁶, and the biggest concerns relate to a lack of drainage and a lack of hot water.

Of those communities reporting no bathing facilities, half of them report that improvements in bathing facilities would be based on improvements in the water supply within the village. 38% would like to see communal bathhouses built, and one community would like householder bathrooms. Sadly, the villages of Kvemo Shakshaketi (18 households) see no way of improving their conditions.

Toilets

Two communities report that some households are connected to a sewer system in very bad (1) or acceptable (3) condition, and one community reports some septic tanks in very bad condition (1). All communities report that the toilets in their villages are the common household unimproved pit latrine seen all over Georgia, a very simple superstructure usually being a ceramic squat pan in an untiled and unlit cubicle with a pit directly underneath. Rarely, the toilet may have an s-bend from the squat pan to the pit, with water for hand-poured flushing in a container nearby. Very rarely, handwashing facilities are available. All but one community reports an adequate number of toilets in their villages, ie. one per house.

Almost half of the communities report that some householders will pay for a specialised septage truck to come and suck from the pit, but generally when the pit is filled, they simply close the toilet and build a new one somewhere else on their property.

Both communities and the technical assessments rate household toilets on average as poor (1.9 for both), with a range from very bad (1) to generally good (4).



Figure 17 “The common household unimproved pit latrine”

Drainage

The majority of representative villagers report a problem with rainwater drainage (70%) with almost half also reporting wastewater disposal problems. The technical assessments support this, with a little more than half reporting evidence of ponded water, and three villages where there has been damage to the buildings due to flooding. Six of the villages are reported by the technical

¹⁶ The figure for the whole data set is much lower due to the large number of non-existent facilities.

assessments to have had community drainage projects implemented, two of which are the villages that display flood damaged buildings.

The vast majority of communities report that households simply pour their wastewater into their yards (80%) or into the street (23%)¹⁷. In Pkhvenisi people pour their household wastewater into an irrigation channel, and in Bakuriani people pour their wastewater into the sewerage system.



Figure 18 Informal and formal drainage in representative villages

Solid Waste

The majority of representative villages (80%) have no Municipal or other organised solid waste collection and disposal systems, and the condition of solid waste disposal is rated by the community and technical assessment as practically non-existent to very bad (0.6 and 0.9 respectively)¹⁸. The majority of communities (65%) report that households “drop the waste wherever they want”, on the edge of town (8%) or in a nearby river or gully (13%). At Kvemo Shavshvebi people throw their waste “in holes” and at Bejano they burn it.

In the five villages reporting a formal collection system, they all pay something for it, less where rubbish is collected weekly and usually more where the collection rate is higher. The exception is Bakuriani village where householders only pay GEL 0.5 per month for a weekly collection service which they rate as generally good (4). The other communities rate their collection systems as acceptable, except for Gantiadi who rate their as poor (2).

Surprisingly, the community of Kvemo Shavshvebi rate their solid waste collection and disposal conditions as generally good (4), despite no formal system of collection, with residents having a “hole for the waste to be dropped into”. They are also one of five communities not interested in training on waste disposal methods. Again, this lack of perception of an obvious solid waste problem points to a need for HP in rural Georgia.

Despite the lack of response to ability or willingness to pay, 89% of communities without existing systems would like to see a collective system, and four communities would like a “big hole to dump the waste”. Sadly, one community, at Koshka, sees no solutions to their solid waste problems, despite being one of the few reporting a willingness to pay something for waste to be collected and disposed of. The communities with systems already in place would like to see more dustcarts and / or more bins.

¹⁷ The total adds to more than 100% as some FGs reported more than one option.

¹⁸ This low score is very skewed by the lack of a formal, hygienic collection and disposal system in the majority of villages, but is also a function of the large number of systems in very poor condition.



Figure 19 Solid waste dumped at the edge of town (left) or in or near rivers (right)

Hygiene Practices and Materials

Activities

Only four communities, Svaneti, Arashenda and Pkhvenisi and Bakuriani, report that some HP activities have been conducted in their village, but mostly not all parts of the village were reached. 12 communities, however, report that the hygiene kits have been distributed to all the village, mostly immediately after the 2008 war and in one village, Koska, as late as February 2009. No kits have been distributed since then.

As with elsewhere, all communities agreed that further distribution of hygiene kits would be most useful.

Knowledge and Practices

All communities reported that people think handwashing is important, that they **should** wash their hands after defecation and before eating, and use soap to wash hands. 68% of FG report they should wash hands before cooking, and 28% before feeding a baby and 25% after cleaning the baby. Ten communities responded positively to all handwashing scenarios presented to them. This could indicate general Health or Education programmes incorporating HP, but could also indicate a flaw in the design or implementation of the survey tool, with the community being led by the question or the person asking the question.

65% of communities report that children are bathed once a week and 28% twice a week, with a few communities reporting bathing their children more often, despite having poor access to bathing facilities.

Two communities do not report keeping water in the house despite having no piped water supply into the houses. This is likely a recorder error. Two other FGs, Rekha and Bakuriani, do not report keeping water in the house, because they have consistently available piped water supply. Of the remainder, the majority keep water in bucket (75%) and the rest in “water vessels” (25%), about two-thirds of which are covered. All but three communities report cleaning the water container regularly.

On average, communities rate their **knowledge** of hygiene issues higher than their **practices** by about half a rating point. Generally handwashing, household hygiene and water storage knowledge rate higher than public space hygiene. Given the lack of formal HP programmes in rural Georgia, it is hardly surprising that many FGs rate their hygiene knowledge and practices quite poorly, with 60% of communities rating at least one aspect of their practice as poor or less (0, 1 or 2). Only communities, Skra and Abano, rated any of their categories as fine, no problems (5), neither of which reports any HP activities in their villages.

Ongoing Programmes

The interest in the representative villages is not as strong as in the IDP sites – slightly more than half the communities report that they talk to their children about hygiene often – but all communities agree that children should be trained in good hygiene behaviours.

Handwashing rated well with communities on the focus of HP training (70%), with training in general personal hygiene (10%), H1N1 (40%) and other diseases (23%) also being rated as important. Radio or TV ads are seen as the most widely appreciated way of receiving information about hygiene practices with 83% of communities rating it as important. Leaflets and posters rated with two communities, and no other methods rated at all.

2.4 Water Quality Results

As part of the 2010 Assessment, water quality samples were taken at most of the New IDP sites and some of the Old IDP sites and representative villages. Samples were sent to the Gori Laboratory, and some testing was carried out by the IRC in the field and in the office (eg. arsenic, turbidity, electrical conductivity). These samples were then used against the community questioning and technical assessment parts of the survey tool to correlate other information. Appendix D gives the results in full.

Note that this one-off water quality sampling should not be viewed as the definitive condition of water resources in the locations. Water quality changes seasonally, and in response to human or natural activities. Water of a particular quality today may change tomorrow, next week, next month or next year. To get a more accurate picture of water quality in the locations, a thorough and systematic water quality sampling and monitoring system should be established.

Georgian standards for drinking water quality are Soviet era and should be reviewed in light of specific quality demands in Georgia and the newer international approaches to water quality standards that use a risk management approach. In light of this, the water quality sampling undertaken as part of this assessment were judged against WHO's 3rd edition guidelines¹⁹ (see Appendix D).

20 parameters were tested for across the 89 sites. All samples returned results within the WHO Guidelines, with two exceptions – Shavshvebi and Akhalsopeli NS both had high total dissolved solid and chloride counts, and Shavshvebi had high a nitrate reading. There were also high results for turbidity across the sites, but this is considered to be a laboratory error as the results are all consistently too high despite only a few number of complaints about turbidity.

¹⁹ WHO (2008) *Guidelines for Drinking-water Quality* 3rd Ed, WHO Geneva.

3 Focus Group – Assessment Team comparison

The 2010 Assessment methodology asked communities and technical assessments to rate the conditions of four different aspects of WASH in their communities, from 0 being non-existent to 5 being fine for long term use. As with the 2009 Assessment, the idea behind asking the two groups to rate the same conditions was to provide a comparison of a subjective (community) and an objective (technical assessment) assessment.

For about half of responses to rate the WASH conditions (water supply, bathing facilities, toilets and solid waste) both the community and the technical assessment gave the same answer, and more than one-third of responses were within one rating point. Less than 10% of responses varied by two rating points or more. There is no noticeable difference in trend between the different groups – New IDPs, Old IDPs and representative villages – nor between the four different aspects of WASH. The only noticeable variations are for:

- toilets in the New IDP sites, where 14% of communities rate the facilities two or three rating points lower than technical assessment; and
- Bathing facilities in the representative villages where 26% of communities rate the facilities two or three rating points higher than the technical assessment, but it should also be noted that the sample size is quite small, ie. only 19 of the villages have bathing facilities.

There are a range of reasons for the differences between the community and the technical assessment. The teams considered the following issues to be important in our survey locations:

- Communities deliberately **understate conditions** in the hope that they get better ones, especially with Municipal Government elections on 30 May (held at the end of the final week of the survey);
- Communities perceive conditions based on their **experience** – their previous homes may have had good, poor or non-existent facilities;
- Communities perceive conditions based on their **expectations** – they may have been “promised” facilities, or they may have friends and families in IDP locations with better or worse facilities.

Visits to the communities by infrastructure construction teams, other assessments or other project teams can influence expectations, either raising them (eg. assessments precede activity) or lowering them (eg. the community gets a road, not toilets). Specifically, visits to the communities by HP teams should raise expectations;

- Communities deliberately **overstate conditions** as they are shameful of them;
- Technical training encourages considering other priorities, for example total coliform counts in drinking water will cause a field assessment team to rate as 1 an otherwise reliable water supply system; and
- A technical assessment may underplay one specific element that communities consider overwhelmingly important, hot water in the bathing areas for example.

Deconstructing any of these further would require more time and effort than available to this assessment, and the extra in-depth questioning of communities would raise the expectations of delivery, something the assessment teams were very wary of doing.

However, the team does recommend that any implementing agency delve into these in more detail, especially the issue of shame and how it can be an anti-motivator for community participation in selecting, building and maintaining facilities.

4 Comparison of 2009 and 2010 Assessments

The data and findings of this *2010 Assessment* build on those of 2009. Reference is made to the earlier assessment and comparisons of an indicative nature can be made (see Section 4).

Both the 2009 and 2010 Assessments asked the communities and the technical assessments to carry out a rating exercise for the various aspects of WASH, to give us:

- an indication of the **impact** any work has made to the New IDP locations and on the people in the last 12 months; and
- a picture of the changes in IDP **perceptions**.

This comparison can only be made in 52 of the New IDP locations and ten of the villages hosting New Settlement as these were the only locations to be considered in the 2009 Assessment. 62 locations are able to be used in this comparison, as five of the 2009 Assessment locations have closed. Facilities or conditions rating 1 or 0 in 2010 are considered the same as facilities or conditions rating 1 in 2009 as the rating scale is slightly expanded this year.

Overall, half the locations did not change in size, 11 increased in size and 20 decreased. The decreases were largely at the Collective Centres, which is to be expected as people move to more durable housing²⁰. In all but one of the Collective Centres families moved out – eight more families moved into Ateni School. The biggest increases were seen in the New Settlement, which is to be expected as more families take up the option. Altogether about 2 000 people moved out of the IDP locations, mostly into other accommodation.²¹

27 of the 62 locations started a WASH Committee in the last year, some in the Collective Centre but mostly in the New Settlement which have developed over the past twelve months, while five of last year's WASH Committees stopped operating, four of them in villages and one in a New IDP Collective Centre. The four from the hosting villages may be indicative of the departure of the "useful" and "active" men who "solve WASH issues" (see Section 2.3), and the one from the Collective Centre is indicative of the movement of people to more durable housing.

²⁰ One New Settlement also registered a large decrease in the number of houses – Shaumiani New Settlement reported 1 800 households in 2009, decreasing to 1 500 households in 2010. The discrepancy in data is likely due to the 2009 figure possibly being a planning number than an actual number, or it could be a data entry error. The Assessment Team considers the figure of 1 500 households to be correct. Two of the hosting villages also registered small decreases in the number of households, likely part of the natural ebb and flow of rural life.

²¹ It is interesting to note that those remaining in the CCs tend to have smaller families than those who left – in 2009 the average household size in the CCs was 3.5 persons, in 2010 this had dropped to 2.7 – and the decrease in size occurred across all CCs except three. This could indicate that those remaining are elderly single or two-person households, perhaps those with mental or disabilities and their carers, or otherwise vulnerable people. The major difference is at Gori Kindergarten #17 where the remaining families are significantly bigger – 5.8 persons per family in 2010 compared to 3.5 persons per family in 2009.

It is also interesting to note that in the New Settlement, while the average size of families overall did not change significantly, in 21 of the 34 settlements the average size of families grew a little and in seven of the settlements the average family size fell a little. Of those where the family size fell, the number of people didn't change much but the number of households increased, indicating that perhaps in 2009 families were sharing households, or that in 2010 some newly married older children have set up their own households. Of those that grew, the number of households also increased in five settlements, indicating new large families have moved in.

Table 5 below tabulates the average rating of facilities as considered by the communities and the technical assessments in 2009 and 2010, as well as the differences.

Table 5 Changes in perception of WASH conditions – average rating

	Focus Groups			Assessment Teams		
	2009	2010	change	2009	2010	change
Water supply	2.8	2.6	-0.2	2.9	2.7	-0.2
Bathing facilities	2.0	1.5 communal 1.9 = private	-0.5 / -0.1	2.3	1.8	-0.5
Toilets	3.1	1.9 = communal 2.7 = private	-2.1 / -0.4	3.4	1.7 = communal 3.0 = private	-2.4 / -0.4
Solid waste disposal	Not measured			2.7	2.4	-0.3

Table 6 below tabulates the differences in response, measuring the percentage of groups who consider the various aspects of WASH to be the same, an improvement or worse than last year.

Table 6 Comparison of perceptions 2009 and 2010

	Water supply		Bathing areas		Toilets		Solid Waste
	FG	AT	FG	AT	FG	AT	AT
same	19%	32%	39%	42%	18%	26%	39%
improvement	37%	29%	44%	21%	24%	18%	26%
worse	44%	39%	18%	37%	58%	56%	35%

Note, the number of locations = 62 New IDP sites (five of the New IDP Collective Centres have closed in the last year).

Water Supply

Overall, the majority of both the communities and the technical assessments believe conditions are either the same or better than last year. However, the average rating of conditions has fallen slightly, indicating that where conditions have got worse, they have got a lot worse and / or where they have got better, they have improved a little bit.

56% of communities believe conditions are the same or better than last year, with a few more technical assessments showing the same (61%). Rural Georgians tend to have a more positive outlook about water supply than IDPs, most likely as they've developed their own systems to meet their own needs. Slightly more than half of those in the New IDP sites believe conditions have deteriorated, while only 10% of village communities think the same. About one-third of New IDP communities think that water supply has improved in the last year, while half of village communities do.

Bathing Facilities

The comparison of bathing facilities is complicated by some places having only communal bathhouses, most places having only private facilities, some having both and some having none.

However, for the purposes of this comparison, we can use the ratings conducted in both years and look at what has happened on average.

Again, overall the majority of communities and technical assessments believe conditions are either the same or better than last year, but the average rating of bathing facilities by both the community and technical assessments have fallen by half a rating point for private bathrooms, and barely at all for communal bathhouses.

New IDP communities are not quite so pessimistic about bathing facilities, perhaps reflecting the project work going on at the moment. About one-fifth of New IDP communities believe conditions have worsened, and only 10% of villagers do. New IDPs resident in the Collective Centres are not as positive, with one-third believing conditions have worsened.

Toilets

Again, the comparison of toilets is complicated by some places having only communal toilets, most places having only private facilities, and some having both. However, for the purposes of this comparison, we can use the ratings conducted in both years and look at what has happened on average.

In contrast to the perceptions of water supply and bathing facilities, overall the majority of communities and technical assessments believe conditions are worse than last year (56% and 58% respectively), and the average rating of toilets facilities by both the communities and technical assessments have fallen by half a rating point for private toilets, and more than two rating points for shared toilets.

New IDP communities are somewhat less pessimistic about the condition of toilets than villagers, with 70% of villagers believing their toilets have got worse in the past year, compared to 56% of New IDP communities.

Solid Waste

The condition of solid waste collection and disposal was not rated by communities in 2009 and so no comparison can be made. However, the majority of technical assessments rate conditions the same or better than last year, although the average rating has fallen by 0.3 of a rating point, again indicating that where conditions have got worse, they have got a lot worse and / or where they have got better, they have improved a little bit.

Improvements in conditions

The Assessment Teams believe that any perceived improvements in conditions or facilities is because things have in fact improved, either through projects to build new or better facilities, fewer IDPs sharing facilities in some places, and through the Hygiene Promotion programmes encouraging both more realistic expectations and perhaps a better sense of ownership of shared facilities.

For example, overall almost half of communities, and in the New IDP Settlements more than half, report an improvement in bathing areas. The locations include those areas where agencies (including the 2010 Assessment partners) have built new communal bathing houses, and where agencies are running hygiene promotion programmes which encourage more frequent bathing.

Deterioration in conditions

Communities and the technical assessments may have different reasons for perceiving a worsening condition, notably:

- Things may in fact be worse. In some locations:
 - there has been little or no follow up to the training and distributing of maintenance tools in 2009 to fix small problems, and those people who were trained may have moved to another location;
 - people may value maintenance and repair of WASH facilities lower than other needs competing for income or people may simply not have the disposable income needed to maintain the facilities;
 - the initial quality of construction was in some cases very poor with a “rushed job” approach by contractors under pressure from donors, ministries and ministers, agencies and the IDPs themselves to complete work before the winter made impossible conditions for construction.
- Community expectations for WASH were lower in 2009 as they were newly displaced and had other more demanding needs;
- Assessment Teams have higher expectations in 2010 as the instructions to our teams this year are founded in the GoG “robust solution” principle;
- There is anger in the community that the follow up to surveys seems to be more surveys and little or no action;
- Quick fixes and other projects may only target a (small) percentage of the community – “A lack of faith in the implementing agencies by the community meant only a small take up of the projects”; and
- Many of the larger projects have not been completed or even started in some cases – “There’s still a lot to be done”.

The biggest concern is the high percentage of both communities and technical assessments that rate toilets worse this year than last (58% and 56% respectively), as well as the lower average rating given in 2010, especially for shared facilities. This is not an encouraging sign, given the work carried out in the last 12 months, but perhaps can be explained by the rapid response to the need for toilets in the first weeks of the crisis. Contractors very quickly built new toilets or rehabilitated old ones in the collective centres. The quality of work was not good, supervision lax or non-existent and IDP expectations were perhaps lower. Another 12 months on, this poor quality and lack of supervision is abundantly obvious (refer to the site descriptions in Appendix C) and the expectations of IDPs is likely higher, given time and hygiene promotion efforts.

5 New IDP sites, Old IDP sites and Rural Georgians

About 1.6 million Georgians, or one-third of the total population, are categorised as living in rural areas²². Most rural Georgians have little formal input from government in the choice, construction, operation or maintenance of their WASH services, relying on household-level options and finances to develop them.

The inclusion of representative villages in the 2010 WASH Assessment aims to provide a broad picture of the WASH conditions in those areas (see Section 2.3), and, hopefully, supports other efforts in the sector to improve them.

Underlying this comparison is the level of assistance provided to IDPs, particularly those displaced since the 2008 conflict. Despite chronic WASH (and other) conditions, most rural Georgians have seen little or no assistance from NGOs, international agencies or the GoG, who have understandably focussed on IDPs with just as chronic but perhaps more acute needs.



Figure 20 Sanitation facilities at a New IDP site, an Old IDP site and a representative village

Water supply

Table 7 Water supply comparison

	Focus Groups		Assessment Teams		difference
	average	range	average	range	
New IDP sites	2.7	1-5	2.8	0-5	+0.1
Old IDP sites	2.7	0-5	2.9	0-5	+0.2
Representative villages	2.3	0-4	2.4	0-4	+0.1
Overall	2.6	0-5	2.8	0-5	+0.2

The rating of water supply services to rural Georgians is slightly worse than those for IDPs, both New and Old, and by both communities and technical assessments.

Reliability

Significantly, far fewer rural Georgians access water piped directly to their homes, relying heavily on water sourced from protected and unprotected wells and springs, as well as communal standpipes

²² *Improving Rural Sanitation in Georgia* (2010) M. Leblanc, World Bank / Ministry of Regional Development and Infrastructure, Georgia.

and private sellers. They consider these sources to provide a reliable source (63% percent of rural communities say water is available all the time), although when it is not available all the time, their level of service drops considerably.

88% of villagers report having to transport water from the supply to their homes for use, on average 824 metres. By comparison, 62% of communities in New IDP sites are an average of 572 metres from their source, and 54% of communities from Old IDP sites are an average of 299 metres from their water sources.

This suggests that GoG and other programmes for IDPs are bringing sources closer to the sites. It also suggests that perhaps the cost of providing a better service is beyond the reach of most rural Georgians.

Volume

The 2010 Assessment specifically asks the technical assessments to look at the question of volume of water supplied. They report that slightly less than half of all locations have an adequate volume of water, with no significant difference between the categories – 42% for New IDP sites, 46% for Old IDP sites and 45% for representative villages.

However, our technical assessments looked at the volume of water from a household health and hygiene perspective, taking into account drinking & cooking, bathing & personal hygiene, household cleaning. We did not take into account the volume of water a household may require to support economic activities, and in light of the GoG call for robust solutions, perhaps this should be taken into account.

Water Quality

More rural Georgians than IDPs trust the quality of their water supplies, three-quarters of rural Georgians at least somewhat trusting it compared to a little more than half of IDPs. However, communities also report that more children in the villages have had diarrhoea in the past three months than for the IDP sites. It's difficult to attribute diarrhoea to a single cause, but it would be naïve to say that none of it is caused by poor quality water.

Bathing facilities

Table 8 Bathing facility comparison

	Focus Groups		Assessment Teams		difference
	Average	range	average	range	
New IDP sites	2.0	0-5	1.9	0-5	-0.1
Old IDP sites	2.3	0-5	2.4	0-4	+0.1
Representative villages	0.9	0-5	1.2	0-3	+0.3
Overall	1.8	0-5	1.9	0-5	+0.1

The rating of bathing facilities by rural Georgians is significantly worse than for IDPs, both New and Old, and by both communities and by technical assessments, due mainly to the lack of bathing facilities available to rural Georgians. The majority of rural Georgians have no access to a hygienic bathing place, either communal or private. Despite this, all communities in rural areas report that people bath their children at least once a week, using basins or buckets in their living or sleeping

spaces or travelling to larger towns where communal bathhouses are available, and where they pay around GEL 0.5 per person for the service.

Toilets

Table 9 Toilet comparison

	Focus Groups		Assessment Teams		difference
	average	range	average	range	
New IDP sites	2.7	0-5	2.9	0-5	+0.2
Old IDP sites	2.7	0-5	3.2	2-5	+0.5
Representative villages	1.9	1-4	1.9	1-4	0.0
Overall	2.5	0-5	2.8	0-5	+0.3

Note, the small number of public toilets (3 sites only) and large number of private toilets in the Old IDP sites have been combined into an overall Old IDP number.

The rating of toilets by rural Georgians is significantly worse than for IDPs, both New and Old, and by both communities and the technical assessments, due mainly to the lack of hygienic toilets available to them.

For the IDP sites that are in communal buildings in or near towns, shared or family toilets connected to a sewerage or large septic system are the norm. For IDP new built settlements, most agencies are building septic tanks below a pour-flush toilet. The vast majority of toilets for rural Georgians are the common household unimproved pit latrine described in Section 2.3 above.

For all assessed sites, and especially shared facilities, cleaning and maintenance are a problem. Technical assessments report many blocked toilets, flush toilets without water, no soap, damaged sewer or water pipes, damaged pedestals and cisterns.

Drainage

Disposal of household wastewater is seen by IDPs and rural Georgians alike as largely a household responsibility or problem, with little need for GoG or other intervention, except perhaps to construct better drains in towns and villages. West season rainwater flooding is seen as more of a problem, mainly as it interrupts businesses and makes access difficult. There seems to be little public awareness of the health-related dangers of poor disposal of household wastewater, certainly much lower than the awareness of other hygiene issues, such as water quality and excreta disposal.

Solid waste collection and disposal

Table 10 Solid waste disposal comparison

	Focus Groups		Assessment Teams		difference
	average	Range	average	range	
New IDP sites	2.7	0-5	2.6	0-4	-0.1
Old IDP sites	2.1	0-5	2.3	2-5	+0.2

	Focus Groups		Assessment Teams		difference
	average	Range	average	range	
Representative villages	0.6	0-4	0.9	0-4	+0.3
Overall	2.0	0-5	2.0	0-5	0.0

The rating of solid waste disposal by rural Georgians is significantly worse than for IDPs, both New and Old, and by both communities and technical assessments, due mainly to the lack of organised solid waste collection and disposal systems available to them.

Most IDPs report access to a Municipal organised solid waste collection and disposal system, whereas most rural Georgians do not. Again, there seems to be little awareness among rural Georgians on the health-related problems of poor solid waste disposal, with many preferring to dump the waste where they like. That said, most rural Georgians would like to see an organised solid waste collection and disposal system in their villages, but are unsure about paying for it.

Hygiene Promotion

The assessment asked all communities to rate their knowledge and practice in four key hygiene areas – handwashing, water storage and handling, public space hygiene and household hygiene. Table 11 compares the average response across all four areas and within groups for both knowledge and practice.

Table 11 Hygiene knowledge and practices comparison

	Knowledge		Practice		Difference
	Average	range	average	range	
New IPD sites	3.8	2-5	3.5	2-5	-0.3
Old IDP sites	3.7	1-5	3.6	1-5	-0.1
Representative villages	3.0	0-5	2.5	0-4	-0.5
Overall	3.6	0-5	3.2	0-5	-0.4

Overall, communities tend to understand the importance of hygiene practices quite well, but for a variety of reasons tend not to put that understanding into practice. The understanding at the New and Old IDP sites is better than at the representative villages, which we would expect given the work that has been done there.

What is perhaps more surprising is that the Old IDPs rate their knowledge and practices high, given that formal separate, HP programmes have not been undertaken in these sites for some years. More questions arise – Do they remember the HP programmes of the 1990s? How were these programmes run that makes the message stick so well? Are there HP elements built into overall health or education programmes that run in these areas? Are there some other reasons why their knowledge and practice scores are high? It would certainly be useful to investigate this further.

Overall, rural Georgians rate themselves as having a lesser understanding of hygiene issues than the IDP communities do, and also rate themselves as practicing what they do know as less. The difference between understanding and practice is considered wider by rural communities, which is related to perhaps giving hygiene a lower level in household priorities, less material resources and breaking traditions and habits. IDP communities may be more loathe to give up the practices they

have brought with them (as sometimes it's the last thing they have left) but if an agency is handing out hygiene kits, it can be the impetus to changing behaviour.

Respondents tend to understand the hygiene issues, but their practice of them is limited, by:

- a perceived lack of time;
- unequal distribution of knowledge across the community, and even within families;
- household priority and decision-making allocating financial resources to more pressing needs;
- overall lack of household financial resources;
- non-availability of material resources;
- lack of water;
- lack of hot water;
- lack of trust in water quality;
- habits / traditions and how hard they are to change;
- locked facilities; and
- shame.

5.2 New Settlement Villages and the sites they “host”

In 2009 and again in 2010, several New Settlements and their “host” villages were included in the assessment to make a direct comparison between those displaced and those living nearby. For 2010 these are:

- Surami village (ref I23) and Sanatory “Pholady” (ref I09), Sanatory “Surami” (ref I10) and Surami No. 14 Professional School (ref I03);
- Skra village (ref I24) and Skra New Settlement (ref I18), plus Skra Kindergarten Collective Centre (I45);
- Mokhisi village (ref I25) and Mokhisi New Settlement (ref I16);
- Sasireti village (ref I26) and Teliani New Settlement (ref I19);
- Sveneti village (ref I27) and Berbuki New Settlement (ref I12), plus Sveneti Kindergarten Collective Centre (ref I46);
- Shaumiani village (ref A66) and Shaumiani New Settlement (ref. A07);
- Kvemo Bolnisi village (ref A67) and Kvemo Bolnisi Kindergarten (ref A06);
- Tserovani village (ref A68) and Tserovani New Settlement (ref A11);
- Akhaldaba village (ref A69) and Prezeti New Settlement (ref A09); and
- Lagodekhi village (ref. A70) and Lagodekhi New Settlement (ref A01).

The set up of the “hosting” arrangement differs slightly from location to location. Some New Settlement are quite close, within one kilometre, while others are three to four kilometres distance. The New Settlements are all administratively within the boundaries of the village but may not physically be so, and the access to the existing Municipal services in the village available to the New Settlement varies considerably.

On average, **the villages are larger than the settlements they host**, with the exceptions of Tserovani New Settlement which is about 2.5 times the size of Tserovani village, and Prezeti New Settlement which is about ten times the size of Akhaldaba village. Skra, Sasireti, Sveneti and Shaumiani are all hosting New Settlement 10 to 25% of their size, while the remainder host New Settlement 1 to 4% of their size.

Table 12 WASH Conditions at some villages and the New Settlements they host*

	Water supply		Bathing areas		Toilets		Solid waste disposal	
	FG	AT	FG	AT	FG	AT	FG	AT
Surami village	1	2	3	2	1	2	3	3
Sanatory "Pholady"	3	3	3	2	3	3	2	3
Sanatory "Surami"	2	2	3	2	4	3	1	2
Surami No. 14 Professional School	3	2	3	3	3	4	1	2
Skra village	3	3	0	0	2	2	0	0
Skra New Settlement	3	4	3*	3	2	2	0	0
Skra Kindergarten Collective Centre	1	0	0	0	1	1	0	1
Mokhisi village	3	3	1	2	3	2	0	0
Mokhisi New Settlement	2	2	3*	2	1	3	0	1
Sasireti village	3	3	1	1	1	2	0	0
Teliani New Settlement	2	5	3*	5	1	1	1	0
Sveneti village	2	2	0	2	2	2	0	1
Berbuki New Settlement	3	3	3*	3	2	2	3	2
Sveneti Kindergarten Collective Centre	1	3	0	0	1	1	0	0
Shaumiani village	3	3	4	2	3	3	0	0
Shaumiani New Settlement	3	3	3	3	3	3	3	3
Kvemo Bolnisi village	1	3	2	2	3	3	2	1
Kvemo Bolnisi Kindergarten	2	3	3	2	3	3	4	4
Tserovani village	3	2	4	1	3	3	3	3
Tserovani New Settlement	4	4	4	3	4	4	3	2
Akhaldaba village	3	3	1	1	3	3	2	1
Prezeti New Settlement	3	3	0	0	2	2	0	0
Lagodekhi village	3	3	3	4	3	4	3	3
Lagodekhi New Settlement	3	4	2	2	1	4	4	4
Village average	2.5	2.7	1.9	1.7	2.4	2.6	1.3	1.2
New Settlement average	2.8	3.2	2.6	2.5	2.4	2.8	1.8	1.9
Collective Centre average	1.0	1.5	0.0	0.0	1.0	1.0	0.0	0.5

Notes:

- The numbers in the table are the ratings given to each facility by the field assessment team (AT) and the FG, from 0 (non-existent) to 5 (fine for long term use).
- the three New Settlement at Mokhisi, Teliani, Skra and Berbuki all have communal bathhouses. Two villages, Skra and Sveneti, have no bathing facilities and all other villages and New Settlement have private bathrooms.

Comparing the conditions described by the community and the technical assessments gives a slightly mixed picture. Overall, the perception from both the communities and the technical assessments is that conditions in the **villages are worse or the same than in the hosted New Settlement**. However, there are one or two villages where conditions are better. Looking at the more objective field assessment team responses only, water supply is better at Mokhisi, bathing areas are better at Lagodekhi and Akhaldaba, toilets are better at Sasireti and Akhaldaba and waste disposal is better at Surami, Akhaldaba and at Tserovani villages. Akhaldaba village tends to rate better than Prezeti New Settlement across the WASH facilities.

On average, the communities and the field assessment teams rate:

- water supply better at the New Settlement by about one-third a rating point;
- bathing facilities better at the New Settlement by about one rating point;
- toilets as only slightly better at the New Settlement; and
- solid waste collection and disposal better at the New Settlement by almost one rating point.

For most places, the Municipality does not provide services, ie. no piped water supply and no organised solid waste collection and disposal system.

For interest, the two New IDP Collective Centre at Skra and Sveneti kindergartens were also included in the table above. Both the communities and field assessment teams consistently rate condition of facilities as **worse** than at the hosting village. The Municipality does not offer either piped water supply nor an organised solid waste collection and disposal system in either place.

6 Options for Future Actions

Over the course of the 2010 Assessment, the Assessment Teams identified the main WASH problems in each location and, in response, developed a set of solutions to these problems. Underlying these solutions is the principle of creating **durable solutions** that will fulfil the needs of IDPs today and tomorrow. The underlying principles to planning, design, implementation, maintenance and monitoring of projects to meet those needs are similar to those of the 2009 Assessment and are articulated in full in Appendix F. In essence the principles espouse full community participation (not just involvement), inclusivity especially the most vulnerable, meeting the long-term needs and technical feasibility of solutions specific to the community and its environment.

Note that due to a lack of Georgian national standards and policy in most elements of WASH, the partners in the 2010 Assessment have agreed to these WASH principles, which have a basis in SPHERE minimum standards but have been expanded to cater for the more durable nature of required actions.

These WASH principles underlying a set of minimum standards and would be developed further during by agencies and communities project design and implementation.

6.1 New IDP sites

55 New IDP sites were included in this assessment, and potential projects have been developed for all of them. This section discusses the general nature of these potential projects and describes a few. A summary of the proposed projects is in Appendix E, and the detailed work behind the projects can be found under separate cover.

In total 250 projects have been identified for the 55 sites, with a total cost of implementing them all of USD 10 677 969. The average cost of all projects at a site is USD 190 678.

Table 13 Potential projects at New IDP sites

	Water supply	Bathing facilities	Toilets / Sewerage	Solid Waste	Drainage	HP
Total cost USD	827 156	2 151 810	5 313 715	202 444	838 690	1 344 155
No. projects	44	52	38	40	22	54
Average	18 799	41 381	139 835	5 061	38 122	24 892
Largest	135 495	520 561	1 842 732	37 559	433 584	
Smallest	0	0	268	0	271	

Water supply

For the New IDP sites, the focus tends to be on building new infrastructure (new water tanks in 19 sites, new pipelines in 19 sites, new pumps in 17 sites, new wells in 11 sites) with only seven projects to repair an existing facility. Eight sites also identified engaging with the Municipality to test and ensure better water quality.

Bathing facilities

34 New IDP sites require the rehabilitation of existing facilities, despite these facilities being less than two years old in most cases, with only four New IDP sites requiring new facilities to be built. Six sites

require the improvement of just the water supply, the infrastructure in place being adequate. New hot water systems are required in 25 sites and in one site, just the connection of water heaters they already have is all that is required.

Toilets

20 of the New IDP sites require repair or rehabilitation of the existing sewerage system (either septic tanks or piped mains systems), and four require new systems. Four sites need repairs to the household toilets and ten require new toilets.

Drainage

Cleaning out drainage channels was required in only five sites, the eight requiring new pipes, seven new channels and three improvements to other infrastructure in the compound of the building. Repair is required in one site.

Solid Waste

New communal waste collection bins, to be incorporated into the Municipal collection and disposal system, is by far and away the most required item – 35 of the sites need new bins. Two sites already with adequate number of bins require collection for often and one site requires a general clean up.

6.2 Old IDP sites

58 Old IDP sites were included in this assessment, and potential projects have been developed for 50 of them. This section discusses the general nature of these potential projects and describes a few. A summary for each location is included in Appendix F.

In total 241 projects have been identified for the 50 sites, with a total cost of implementing them all of USD 2 474 295.

Table 14 Potential projects at Old IDP sites

	Water supply	Bathing facilities	Toilets / Sewerage	Solid Waste	Drainage	HP
Total cost USD	444 152	702 421	137 970	140 201	158 276	891 275
No. projects	45	41	46	40	21	48
Average	9 870	17 132	2 999	3 505	7 537	18 568
Largest						
Smallest						

Water supply

For the New IDP sites, the focus tends to be on building new infrastructure (water tanks in seven projects, new pipelines in nine projects, new pumps in nine projects, new wells in six projects) with only two projects to repair an existing facility.

Bathing facilities

At the New IDP sites the majority of critical needs projects (79%) involved the rehabilitation of existing facilities, despite these facilities being less than two years old in most cases.

Providing new hot water systems also ranks quite highly (33%), as does repairing existing hot water systems (24%).

Providing new bathing facilities was part of only 3 of the 33 projects.

In contrast, providing new bathing facilities was part of all of the critical needs projects at the Old IDP sites.

Toilets

At the New IDP sites, there is an even split of needing to clean or repair existing facilities and building completely new ones (46% for both). Building new facilities is more expensive.

Slightly differently, at the Old IDP sites more projects focussed on repairing the existing facilities, either repairing toilets (53%) or sewerage / septic systems (40%).

Drainage

Only one drainage project was identified as meeting a critical need – cleaning out and re-digging the drainage channel at Daba Surami No.14 Prof College (ref I03).

Solid Waste

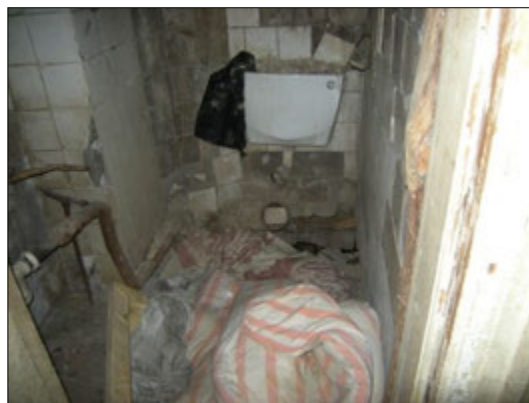
For both New and Old IDP sites, by far the largest number of critical needs projects are simply to purchase new communal bins that can be fitted into existing Municipal collection and disposal systems. In some cases, the Municipal system needs to be developed, especially for those smaller, more rural Municipalities.

Several critical needs projects in the Old IDP sites also involved spending small amounts of money to clean up the existing site.

56 Old IDP sites were included in this assessment.

During the regular weekly meetings, the field assessment team visiting the Old IDP sites noted their deep concerns about several sites, most obviously Likani 2 Old IDP Collective Centre. Some 220 people are “housed” at Likani 2 in desperate conditions. The assessment team recognises that the site has been sold to a private owner who does not consider himself to have a responsibility to provide basic living conditions, and is likely waiting for IDPs to move in order to redevelop the site. The assessment team also recognises that the motivation for this is beyond the scope of this assessment, but also that the impact on people’s lives is real and devastating.





Without making any political statement, the assessment team recommends that the people resident at Likani 2 be moved as soon as possible to alternative accommodation. The team recommends that no further investment be made in the facilities at Likani 2, as the potential project would be to demolish the building and start again.

6.3 Rural Georgia

The 45 representative villages included in the 2010 Assessment showed that by and large WASH conditions for rural Georgians are poorer than those of IDPs and certainly poorer than those of urban Georgians. The terms of reference for the Assessment asked us to develop a representative package of projects that could improve conditions across rural Georgia.

Water Supply

Wells, overhead tanks

Bathing facilities

Communal bathhouses

Toilets

Simple improved pit toilets.

Solid Waste

Waste collection containers, collection system and disposal

Drainage

7 Ability to Pay and Sustainability

As stated in the 2009 Assessment Report, the ability and willingness to pay for WASH services by IDPs and / or GoG is a key issue in technology selection, project prioritisation, ongoing operation and maintenance, and service payment options.

In 2010, provision of WASH services to IDPs is generally the responsibility of the local Municipal government under the *Organic Law of Georgia on Local Self-Government*, but may be delegated to a private or government-owned company or to community groups, such as the WASH Committees established in New IDP sites under recent projects.

Payments for water supply were paid by GoG until late 2009 when the responsibility was handed to the Municipal governments. Water supply is rarely metered even in Tbilisi, and people are charged based on the size of the household. Rates for Tbilisi are GEL 2.4 / person / month²³. Rates outside Tbilisi are generally lower but comparable. However, effective rates (ie. what is collected) are lower, estimated at 40 to 45% on average but possibly much lower in some places²⁴. Households are often supplied collectively and utilities are reluctant to cut off all households for non-payment by only a few.

Payments for electricity and gas (eg. to operate water supply pumps or water heaters) were made directly to service providers by GoG until October 2009, when a system of payments to IDPs to cover their energy costs was instigated. The payment assumes energy consumption of 100 kW per month²⁵ which consists largely of heating costs in winter but also needs to cover water supply-related energy costs. The payment comprises GEL 13.48 per person per month and a family payment of GEL 100 per month to rural families and GEL 70 per month to urban families. Payments to rural families are slightly more than payments to urban families, who live in apartments and are expected to have slightly lower consumption.

The National Statistics Office of Georgia calculates a minimum subsistence income required for an average three or four-member family of about GEL 215 per month, covering very basic living conditions²⁶. It also shows an average monthly wage of GEL 535 per person (2008). Unemployment across Georgia averages 16.9%, and in our project regions ranges from 8% to 17% (but is still much less than urban Tbilisi at 30%). However, the MRA reports higher rates of unemployment or, as importantly, under-employment in the IDP community, leaving many IDP families living below the minimum subsistence line. Many IDP families have no discretionary income and would see hot water or hygiene items, for example, as discretionary items to be abandoned when household income drops.

Paying for water

27 communities report paying for water, on average GEL 2.3 per household per month, about the same as Tbilisi residents. Residents in the Old IDP Settlement at the Kutaisi Pharmacy Dept. Pay the most at GEL 6 per household per month, and residents at Gantiadi village pay the least at GEL 0.25 per household per month. The Old IDP sites pay more on average than anyone else (GEL 2.32 per household per month), rural communities pay a little less (GEL 2.19 per household per month) while New IDPs do not yet pay for water.

²³ This has not changed since 2006, despite massive increases in other utility charges such as gas and electricity. There seems to be a lot of public and political pressure on the Municipalities not to increase charges for drinking water.

²⁴ See, for example, the OECD report *Promote achieving the Millennium Development Goals on Water Supply and Sanitation (WSS) in Georgia through extending the Financing Strategy for WSS to Rural Areas and Facilitating Related National Policy Dialogue* (December 2007).

²⁵ Equivalent to about one quarter of an average European family consumption according to figures from the European Environment Agency.

²⁶ 2009 data – see www.geostat.ge.

Few respondents could or would answer the question of how much do you pay for water and whether this was a sum that people were able or willing to pay (about one-fifth). This is due perhaps to a concern that stating a willingness to pay would result in having to pay²⁷.

The average cost of water to those who answered is less than GEL 2 per household per month, which seems very little and amounts to about 1.5% of the GoG payments to families²⁸. Of those who did respond, more indicated what they are **able** to pay than indicated what they are **willing** to pay. This could be related to the relatively high prices of commodities in Georgia compared to income and the very low income of most IDP households, but could also be related to expectations as well as substitute sources for drinking water, such as wells, springs and other communal sources.

This could also be based on an expectation of GoG or other intervention. Many IDPs in the Old IDP locations for example were displaced immediately post-Soviet, and their expectations are likely based on Soviet systems of service provision (ie. largely free albeit of poor quality). Other IDPs expectations could also be influenced by a vision that includes heavy government subsidies for basic services.

GoG reform in the water sector is likely to see rises in the price of water delivered directly to households some time in the near future. While it is likely that consumers will continue to be subsidised for their water, the concept of full cost recovery for piped water supply is likely to drive GoG water policy as they move towards European standards and approaches.

In the rural sector, it is unlikely that piped water supply schemes will be affordable for the smaller villages, who will continue to rely on household wells or non-piped communal supplies. They are not likely to see rises in their costs just yet, nor is it likely that they will be willing to pay much more unless income increases.

Communal bathing areas

The tradition of communal bathhouses is a long one in Georgia. Particularly in the New IDP sites shared facilities have been built by agencies and by GoG, mainly due to the lower costs of construction and operation. Usually, the shared facilities are managed under the WASH Committee structure with one or two people appointed to run the bathhouses on a day to day basis – to clean them, pay for bills and undertake small maintenance (eg. changing washers in taps). The manager collects a small amount of money from those living in the centre, GEL 0.5 per person.

Evidence from Skra New Settlement suggests that there is widespread interest in these communal bathhouses. Locals from the nearby village are willing to pay GEL 1 per person to use these same facilities. The assessment team estimates that the rate of external users is in the magnitude of low tens per week, adding perhaps GEL 10 to 50 per week to the income stream for the managers. The villagers who are using these facilities have none of their own, and would otherwise travel to Gori or another larger town where they can use public facilities there, for GEL 2 or 3 per person plus transport costs. These are the people in the community who cannot afford their own private bathhouses but who have some discretionary income to pay for services.

The survey feedback also reports that about one-third of rural Georgians see building communal bathhouses as a way to improve their living conditions. The assessment teams think that this practice will spread to other New Settlements when communal bathhouses are available.

This seems to suggest that:

- communal bathhouses are a good option for IDP sites as people are inclined to share facilities and can make some other income from them;
- people generally are willing to pay to use reasonably good quality bathhouses, certainly GEL 1 per person, but perhaps up to GEL 2 or 3; and

²⁷ Subsequent assessments should note this and perhaps re-word or re-structure the survey tool.

²⁸ Which is below the 3% to 5% household expenditure affordable limit used widely, eg. the World Bank and Asian Development Bank, EBRD, but far more than the Georgian national average of 0.2% (EBRD report)

- perhaps this is an opportunity to attach other income generating activities to the space such as a small pharmacy or hygiene material shop, or public health awareness raising.

This use of shared facilities does not appear to extend to toilets, as most people are willing to build a toilet, toilets are cheaper to build than bathhouses (even private ones), and the timing of a visit to a bathhouse is up to the user and not normally as urgent.

One issue that arose during the assessment, is how to manage the bathhouses. When the bathhouses were being built, an open election within the IDP community was held to elect the manager. Now, one year on, there are disputes about who owns and who can manage the facilities, perhaps arising from jealousy. The assessment team recommends that the Municipal authorities, the legal owners of the facilities, re-establish a management committee and a process to elect a the day-to-day manager, and the operating rules of the bathhouse.

Maintenance of toilets

In the IDP sites where toilets are shared, maintenance and cleaning of toilets are also a shared responsibility. Each of these communities **reported** that there is usually a duty roster for cleaning. However, even a quick **observation** shows that this roster does not work as the toilets are in poor condition and are evidently not regularly cleaned.

While a tradition of communal bathhouses exists in Georgia, and managing a bathhouse is seen to be a paying job by most New IDPs and other rural Georgians, managing a toilet is not viewed in the same way. The Assessment Team recommends shared toilets only where there is no other option – no space in a temporary location. For the newly built settlements, household toilets are the recommended option.

Solid waste collection and disposal

Far more communities were able to answer the question about payment for solid waste disposal, with more than half indicating that at least some of the people in the location would be willing to pay something for someone to come and collect their waste. Interestingly, those living in Old IDP locations were willing to pay more than anyone else, GEL 1.5 compared with GEL 1.29 in the villages and nothing in the New IDP sites. This may be due to the location of many of the Old IDP locations (in West Georgia), or perhaps the opportunity seen by the long-term displaced in making a business of solid waste disposal.

8 Project Prioritization and Action Plan

The terms of reference called for the potential projects in the new IDP locations identified by the Assessment Teams to be ranked in priority. During the 2010 Assessment, four different techniques were identified, described below.

Appendix E lists the New and Old IDP locations, each potential project and allocates a priority based on each technique. Ideally, options attracting a high priority from more than one of the techniques would draw the attention of GoG or donor programmes (eg. installing new rubbish containers at Marneuli / Ialguja Old IDP Settlement meets a critical need, in a location with an EH score of less than one, and with low cost per person and low cost / benefit), although specific agencies may prefer one technique over another.

The colour coding for Appendix E is:

- projects meeting a critical need are indicated in green;
- sites with an EH score of less than one are deep red, with a score of less than two but greater than or equal to one are pink, and with a score of less than three but greater or equal to two are salmon; and
- projects in the lowest one-third of cost per person or cost / benefit are deep blue, and projects in the middle one-third are paler blue.

8.1 Technique 1 – Critical need

Although each project identified by the teams addresses a need in the sites, some projects will address a critical need, that is one that is providing a less than “acceptable” service. Where community facilities are rated on a six-point scale (0 to 5), any rating in the lowest three categories (0 to 2) demands attention. Appendix C presents a summary of WASH conditions in each community, highlighting those aspects of critical need (in green).

For the New IDP sites, 250 separate projects were identified across the 56 sites, 84 or about one-third of which are designated as fulfilling a critical need. The 250 projects have a total cost of USD 10 677 969, of which USD 6 034 190 (57% of the total) is for projects meeting a critical need.

Table 15 Critical need projects at New IDP sites

	Water supply	Bathing facilities	Toilets / Sewerage	Solid Waste	Drainage
Total cost USD	276 230	1 293 981	4 430 177	136 879	800
No. projects	17	33	13	20	1
Average	16 249	39 212	340 782	6 844	
Largest	57 000	385 910	1 842 732	37 559	
Smallest	800	0	1 200	0	

The group of critical needs projects for toilets / sewerage is skewed to the high end by two very large projects – USD 1 842 732 to install new toilets at Prezeti New Settlement and connect to the main sewerage system; and USD 1 127 318 to install new toilets at Tsilkani New Settlement and connect to the main sewerage system. Removing these two very large projects brings the total cost of critical needs projects back to USD 3 064 140 or slightly less than one-third of the total cost.

For Old IDP sites, 241 separate projects were identified across the 58 sites, 74 or slightly less than one-third of which are designated as fulfilling a critical need. The 241 projects have a total cost of USD 2 444 992, of which USD 473 269 (19% of the total) is for projects meeting a critical need.

Table 16 Critical need projects at Old IDP sites

	Water supply	Bathing facilities	Toilets / Sewerage	Solid Waste	Drainage
Total cost USD	195 590	139 801	63 874	134 634	
No. projects	13	9	15	37	none
Average	15 045	15 533	4 258	3 639	
Largest	40 961	27 430	15 907	66 008	
Smallest	0	4 756	759	0	

Water supply

The critical needs projects for water supply are the most diverse in the category. For the New IDP sites, the focus tends to be on building new infrastructure (water tanks in seven projects, new pipelines in nine projects, new pumps in nine projects, new wells in six projects) with only two projects to repair an existing facility.

For the Old IDP sites, the focus is also largely on new facilities (new well in three projects, new pipelines in three, new tank in one, new pumps in three, new tapstands in three) but there are also more projects to repair existing facilities (well protection in two, improving the water tank in two, repairing taps in 1 and fixing up the pump house in one).

Bathing facilities

At the New IDP sites the majority of critical needs projects (79%) involved the rehabilitation of existing facilities, despite these facilities being less than two years old in most cases.

Providing new hot water systems also ranks quite highly (33%), as does repairing existing hot water systems (24%).

Providing new bathing facilities was part of only 3 of the 33 projects.

In contrast, providing new bathing facilities was part of all of the critical needs projects at the Old IDP sites.

Toilets

At the New IDP sites, there is an even split of needing to clean or repair existing facilities and building completely new ones (46% for both). Building new facilities is more expensive.

Slightly differently, at the Old IDP sites more projects focussed on repairing the existing facilities, either repairing toilets (53%) or sewerage / septic systems (40%).

Drainage

Only one drainage project was identified as meeting a critical need – cleaning out and re-digging the drainage channel at Daba Surami No.14 Prof College (ref I03).

Solid Waste

For both New and Old IDP sites, by far the largest number of critical needs projects are simply to purchase new communal bins that can be fitted into existing Municipal collection and disposal systems. In some cases, the Municipal system needs to be developed, especially for those smaller, more rural Municipalities.

Several critical needs projects in the Old IDP sites also involved spending small amounts of money to clean up the existing site.

Note that the criteria for option development are a minimum set of criteria and would be developed further during by agencies and communities project design and implementation.

8.2 Technique 2 – Community preference

The Environmental Health indicator, called for in the 2010 Assessment terms of reference, provides a methodology to include community preference for prioritization of options. Using the community ratings for the various aspect of WASH, a weighted average is calculated for each location. The weighted average is calculated using the importance communities gave to the different aspects²⁹:

$$\frac{(Water\ Supply * 0.6 + avg\ Bathing * 1.0 + avg\ Toilets * 0.35 + Waste * 0.35) * 10}{2.3^{30}}$$

Low scores indicate a community perception of poor overall environmental health condition, whereas high scores indicate a better community perception of overall condition.

This methodology has the advantage of providing a single number indicating **community perceptions** of their settlements / villages, which can be used to **compare** locations and options. The drawback is that locations with wide variations in conditions between the different WASH aspects (eg. toilets are particularly bad, whilst everything else is good) can have the same score as locations where all aspects are the same or similar. This means that locations with one particularly bad condition can rank better than locations with a better condition, and perhaps miss out on prioritisation under this criterion.

Table 17 below summarises the outcomes from the process and shows that far more rural Georgians than IDPs self-rate their environmental conditions as very poor, and that Old IDPs self-rate their conditions as poorer than New IDPs.

Table 17 Community self-rating– EH scores

	No. sites	Average	EH score		
			Highest	Lowest	2 or less
New IDP sites	56	2.4	4.6	0.0	13 / 23%
Old IDP sites	58	2.2	5.0	0.0	23 / 40%
Representative villages	45	1.5	4.2	0.3	34 / 76%

²⁹ See the 2009 Assessment.

³⁰ The application of a factor equal to (0.6 + 1 + 0.35 + 0.35) serves to normalise the results to a factor of 5, similar to the rating scale used in the assessment tool.

70 of the 159 sites, 44%, have an EH score of less than acceptable (2 or less) as judged by the communities themselves, although this figure rises to three-quarters of rural Georgians. The rural Georgian average EH score of 1.5 is very low, and is influenced by the lack of toilets, solid waste disposal systems and, in some cases, the lack of bathing areas (which is weighted quite heavily by the community).

8.3 Techniques 3 and 4 – Cost and Cost / Benefit

Considerations of critical needs are the primary criteria in humanitarian responses. However, given the inevitable limitations in budget that many agencies are working under, it is also important to assess the effectiveness of the different solutions proposed.

To evaluate effectiveness, the assessment team applied two criteria to the projects:

- **Cost per person served.** The first criterion is simply the estimated upfront cost of each potential project, divided by the population served. This provides a measure of the extent of coverage that could be achieved with a given budget.
- **Cost/Benefit ratio.** The cost/benefit ratio is calculated by dividing this cost per person served by a further measure of the benefit received.

During the assessment, services at each settlement were rated on a six-point scale ranging from „0 – Non-existent’ to „5 – Fine for long-term use’. To evaluate the benefit of a proposed project, the team used the same scale to rate what the expected score would be for the same settlement after a particular project was implemented. In principle, if a project at a particular location raised a service from „non-existent’ to „fine for long-term use,’ the benefit would be an increased score of 6, so the benefit is normalized by dividing the score increase by 6. Most projects improve an existing service, or provide an imperfect solution, so that the score increase is less than 6, and the benefit less than 1. However, if, for instance, a new water supply would in addition directly improve toilet and washing facilities, it is possible for more than one score to increase, and the total score to increase by more than 6. In summary, the cost/benefit ratio is calculated by:

$$\frac{\text{Cost}}{\text{Benefit}} \text{ ratio} = \frac{\text{Estimated project cost}}{\text{persons served} \times \text{benefit}}$$

where,

$$\text{benefit} = \frac{\text{Increase in score}}{6}$$

Both criteria and well as the calculation of benefit are tabulated in Appendix E. In general both cost per person served and cost/benefit ratio should be as low as possible.

Note that the cost / benefit-based prioritisation in the New IDP Collective Centres (which are still viewed by the GoG as temporary arrangements) are very poor due to the high cost of options for only a very few people.

9 Conclusions

9.1 Conclusions

Comparison between 2009 and 2010

In general, conditions do not seem to have worsened in the past twelve months, but neither do they seem to have improved a great deal. Where communities and assessment teams report an improvement in conditions, it is likely that conditions have in fact improved, with the construction of new infrastructure the likely reason. The HP programmes running in the New IDP locations also encourage both more realistic expectations within the community and perhaps a better sense of ownership of shared facilities.

Reasons for communities and assessment teams reporting deteriorating conditions are more complex and could arise from:

- Things may in fact be worse. In some locations:
 - there has been little or no follow up to the training and distributing of maintenance tools in 2009 to fix small problems, and those people who were trained may have moved to another location;
 - people may value maintenance and repair or WASH facilities lower than other needs competing for income or people may simply not have the disposable income needed to maintain the facilities;
 - the initial quality of construction was in some cases very poor with a “rushed job” approach by contractors under pressure from donors, ministries and ministers, agencies and the IDPs themselves to complete work before the winter made impossible conditions for construction.
- Community expectations for WASH were lower in 2009 as they were newly displaced and had other more demanding needs;
- Assessment Teams have higher expectations in 2010 as the instructions to our teams this year are founded in the GoG “robust solution” principle;
- There is anger in the community that the follow up to surveys seems to be more surveys and little or no action;
- Quick fixes and other projects may only target a (small) percentage of the community – “A lack of faith in the implementing agencies by the community meant only a small take up of the projects”; and
- Many of the larger projects have not been completed or even started in some cases – “There’s still a lot to be done”.

The biggest concern is the high percentage of both communities and technical assessments that rate toilets worse this year than last, as well as the lower average rating given in 2010, especially for shared facilities. This is not an encouraging sign, given the work carried out in the last 12 months, but perhaps can be explained by the rapid response to the need for toilets in the first weeks of the crisis. Contractors very quickly built new toilets or rehabilitated old ones in the collective centres. The quality of work was not good, supervision lax or non-existent and IDP expectations were perhaps lower. Another 12 months on, this poor quality and lack of supervision is abundantly obvious and the expectations of IDPs is likely higher, given time and hygiene promotion efforts.

Comparison between New IDP, Old IDP and rural Georgia

About 1.6 million Georgians, or one-third of the total population, are categorised as living in rural areas. Most rural Georgians have little formal input from government in the choice, construction, operation or maintenance of their WASH services, relying on household-level options and finances to develop them.

Overall, the 2010 Assessment shows that rural Georgians have poorer access to WASH services, and that the facilities they do have are often in poorer condition. Fewer rural Georgians than IDPs:

- have water piped directly to their homes, relying heavily on water sourced from protected and unprotected wells and springs, as well as communal standpipes and private sellers;
- have access to a hygienic bathing place, either communal or private. Despite this, all communities in rural areas report that people bath their children at least once a week, using basins or buckets in their living or sleeping spaces or travelling to larger towns where communal bathhouses are available, and where they pay around GEL 0.5 per person for the service;
- have access to a hygienic toilet, although almost all Georgians have a common household unimproved pit latrine; and
- have access to a Municipal organised solid waste collection and disposal system.

More rural Georgians than IDPs trust the quality of their water supplies. However, rural communities more often report that children in the villages have had diarrhoea in the past three months. While it is difficult to attribute diarrhoea to a single cause, it would be naïve to say that none of it is caused by poor quality water.

Disposal of household wastewater is seen by IDPs and rural Georgians alike as largely a household responsibility or problem, with little need for GoG or other intervention, except perhaps to construct better drains in towns and villages. West season rainwater flooding is seen as more of a problem, mainly as it interrupts businesses and makes access difficult. There seems to be little public awareness of the health-related dangers of poor disposal of household wastewater, certainly much lower than the awareness of other hygiene issues, such as water quality and excreta disposal.

Most IDPs report access to a Municipal organised solid waste collection and disposal system, whereas most rural Georgians do not. Again, there seems to be little awareness among rural Georgians on the health-related problems of poor solid waste disposal, with many preferring to dump the waste where they like. That said, most rural Georgians would like to see an organised solid waste collection and disposal system in their villages, but are unsure about paying for it.

Overall, communities tend to understand the importance of hygiene practices quite well, but for a variety of reasons tend not to put that understanding into practice. The understanding at the New and Old IDP sites is better than at the representative villages, which we would expect given the work that has been done there.

Overall, rural Georgians rate themselves as having a lesser understanding of hygiene issues than the IDP communities do, and also rate themselves as practicing what they do know as less. The difference between understanding and practice is considered wider by rural communities, which is related to perhaps giving hygiene a lower level in household priorities, less material resources and breaking traditions and habits. IDP communities may be more loathe to give up the practices they have brought with them (as sometimes it's the last thing they have left) but if an agency is handing out hygiene kits, it can be the impetus to changing behaviour.

Respondents tend to understand the hygiene issues, but their practice of them is limited, by:

- a perceived lack of time;
- unequal distribution of knowledge across the community, and even within families;
- household priority and decision-making allocating financial resources to more pressing needs;
- overall lack of household financial resources;
- non-availability of material resources;
- lack of water;
- lack of hot water;
- lack of trust in water quality;
- habits / traditions and how hard they are to change;
- locked facilities; and
- shame.

Underlying the comparison between rural Georgia and IDPs is the assistance provided to IDPs, particularly those displaced since the 2008 conflict. Despite chronic WASH (and other) conditions, most rural Georgians have seen little or no assistance from NGOs, international agencies or the GoG, who have understandably focussed on IDPs with just as chronic but perhaps more acute needs.

Priorities for the future

In total 491 projects have been identified for the 105 Old and New IDP sites, with a total cost of implementing them all of USD 13 152 264. The average cost across all projects is about USD 27 000, ranging in size from USD 0 to incorporate a small IDP site into an already established programme of water quality testing, to USD 1 842 732 to construct new toilets and build a new sewerage system for a 400 household New Settlement.

The majority of projects include some form of new or rehabilitated infrastructure, and a HP component incorporating distribution of hygiene supplies has been included in all sites. The prioritised list of proposed projects (Appendix E) is extensive and the total cost to achieve durable solutions to the needs of IDPs is substantial at more than USD 13 million. However, there is much that can be done using small amounts of funds to address critical or community prioritised needs.

9.2 Lessons learned and recommendations

There are a few lessons that can be learned from the 2010 Assessment, some relating to the process of the assessment and others to any ongoing WASH programmes in both the IDP community and in rural Georgia.

Assessment process

For the process of the assessment, three major points stand out. The first is the benefit to be gained from a set of thorough initial training sessions and meetings of the assessment teams throughout the field work. One of the aims of the technical assessments was to provide an objective analysis across the many field sites. The meetings throughout the seven weeks of the field work gave the teams opportunities to compare notes, standards being used and approaches to implementing the questionnaire. Issues with specific questions were raised during this time and practical solutions reached. Particularly for the engineers in the teams, these sessions give them useful opportunities to ensure that agreed standard criteria and approaches are used by all, validating our claim of objectivity.

The second relates to the questioning of communities about their ability and willingness to pay for services. In rural Georgia in particular, this is a difficult question as many communities find the question surprising and are confused as to how to answer it – why would a community be willing to pay for a service they do not necessarily see as useful, such as a solid waste collection and disposal system? For future assessments of this kind, it is recommended that an approach with different tools is taken, eg. a priority ranking of household expenditure including aspects of WASH.

The third is the inclusion of representative villages in this assessment, giving us a picture of the conditions experienced by rural Georgians (see below).

Other aspects of the process that are well worth remembering for future assessments are:

- the benefit of asking communities and technical assessments to rate conditions and facilities using the same scale;
- questioning the role of water quality sampling in an assessment of this nature, given the lack of a seasonal water quality picture and the possibility of raising community expectations, and
- perhaps taking a different approach also to questions relating to HP, particularly those about hygiene kit distribution.

One final pointer for future WASH assessments is to note that both the 2009 and 2010 Assessments focused on water for household use. Given the drive by GoG for durable water solutions extending the assessment to cover water for household-level income generating activities should be considered.

WASH programmes for IDPs

The 2010 Assessment showed that WASH conditions for IDPs have remained about the same in the last twelve months, although the condition of toilets has deteriorated. The results from the assessment indicate a **continuing programme of investment is warranted**, with more careful consideration paid to (and funding made available for) improved construction quality – the initial poor quality of toilets 24 months ago has meant a great deal more work now.

The programme should move slightly, however, to an HP programme that drives demand in communities for better services, supplies and assistance rather than simply handing them out. IDP communities have changed in the past 24 months, finding new economic opportunities and settling into more permanent housing, and the programmes that offer them assistance should take this into account.

Specific recommendations arising from the assessment include:

- the success of communal bathhouses, and the need for a review of their management and operation;
- the failure of shared toilets and the need to avoid them wherever possible.

One aspect that should be investigated by funding and implementing organisations is the need to increase the community expectation of having to pay for services that previously they may not have paid for directly (eg. communal water supplies), or have used a less-hygienic substitute (eg. unmanaged solid waste dumps outside town).

WASH programmes for Rural Georgia

The 2010 Assessment clearly shows that the conditions of WASH facilities and services in rural Georgia are poor, particularly those not related to water supply. However, the underlying reasons for this are not as straightforward as a first impression might make out. Rural Georgians, as with rural populations elsewhere, have traditionally relied on their own efforts and often place a higher priority on other aspects of their lives. While poor hygiene practices may be contributing to a lower standard of living, many rural Georgians would think that a better education for their children or better access to markets more important. GoG support has, understandably, focussed on providing assistance to IDP communities in more acute need.

However, the evidence from the 2010 Assessment on the lack of understanding between a hygienic environment and a better standard of living, as well as the self-rating of very poor environmental health conditions, makes a **coordinated WASH programme for rural Georgia imperative**.

The principles and approach to projects (see Appendix F) have been prepared with such a programme in mind, and are underlain by community participation, technical feasibility and financial sustainability. It is also recommended that water supply options include household-level income generating activities.

Appendix A – 2010 Assessment Sites

No.	Name / Location	District	# families	# persons
New IDP Collective Centres (Collective Centre)				
I28	Ateni Kindergarten	Gori	5	12
I29	Ateni School	Gori	14	34
I30	Gori Kindergarten #1	Gori	32	99
I31	Gori Kindergarten #2	Gori	4	14
I32	Gori Kindergarten #4	Gori	19	35
I33	Gori Kindergarten #5	Gori	7	14
I34	Gori Kindergarten #6	Gori	6	13
I35	Gori Kindergarten #7	Gori	17	33
I36	Gori Kindergarten #9	Gori	14	27
I37	Gori Kindergarten #10	Gori	9	23
I38	Gori Kindergarten #11	Gori	closed	
I39	Gori Kindergarten #12	Gori	27	61
I40	Gori Kindergarten #13	Gori	7	9
I41	Gori Kindergarten #16	Gori	11	28
I42	Gori Kindergarten #17	Gori	5	19
I43	Gori Kindergarten #18	Gori	18	43
I44	Old Police Station	Gori	18	58
I45	Skra Kindergarten	Gori	10	26
I46	Sveneti Kindergarten	Gori	2	9
New IDP Settlements (New Settlement)				
A01	Lagodekhi Settlement	Kakheti	21	60
A02	Telavi	Kakheti	26	85
A03	Sagarejo settlement	Kakheti	24	76
A04	Gardabani	Kvemo Kartli	132	300
A05	Koda	Kvemo Kartli	446	1380
A06	Kvemo Bolnisi (Kindergarten)	Kvemo Kartli	20	68
A07	Shaumiani	Kvemo Kartli	210	571
A08	Bazaleti	Mtskheta-Mtianeti	104	330
A09	Prezeti	Mtskheta-Mtianeti	298	1013
A10	Tsilvani Settlement	Mtskheta-Mtianeti	400	1300
A11	Tserovani Settlement	Mtskheta-Mtianeti	2001	6648
A12	Saguramo (International)	Mtskheta-Mtianeti	36	136
A13	Saguramo Prop	Mtskheta-Mtianeti	36	123
A14	Tsinamdzgvriant Kari	Mtskheta-Mtianeti	40	182
A15	Tsinamdzgvriant Kari/TV	Mtskheta-Mtianeti	61	204
I01	Il Musical College	Gori	40	86
I02	Blood Transfusion Center	Gori	9	13
I03	Daba Surami No.14 Prof College	Khashuri	28	88
I04	Kareli Professional School I-II Block	Kareli	48	154

I05	Kareli Technical School I-II Block	Kareli	64	205
I06	Kindergarten 2 in Vaja-Phshavela Sett	Khashuri	22	76
I07	Polyclinic "Panatsea"	Gori	64	121
I08	Prof College No. 109 Chumateleti	Khashuri	50	194
I09	Sanatory "Pholady"	Khashuri	40	102
I10	Sanatory "Surami"	Khashuri	38	129
I11	Akhalsopeli Settlement	Kareli	100	357
I12	Berbuki Settlement	Gori	134	454
I13	Karaleti Settlement	Gori	298	987
I14	Khurvaleti Settlement	Gori	139	441
I15	Metekhi Settlement	Kaspi	35	129
I16	Mokhisi Settlement	Kareli	58	230
I17	Shavshvebi Settlement	Gori	177	607
I18	Skra Settlement	Gori	86	304
I19	Teliani Settlement	Kaspi	54	171
I20	Tsminda Tskali Karaleti	Gori	182	632
I21	Verkhvebi (GTZ)	Gori	300	960
I22	Sakasheti (Turkish)	Gori	99	306

Old IDP Collective Centres

I47	Likani 2	Borjomi	90	220
I48	Likani 3	Borjomi	126	350
I49	Mtis Kheoba	Borjomi	212	427
I50	San "Borjomi"	Borjomi	152	310
I51	"Plato"	Borjomi	160	320
I52	"Balneological"	Borjomi	59	200
I53	Autocamping "Gori"	Shida Kartli	112	100
I54	Students accomodation	Shida Kartli	107	450

Old IDP Settlements

A16	Bazaleti Old IDPs	Mtskheta-Mtianeti	33	110
A17	Saguramo	Mtskheta-Mtianeti	51	148
A18	Gardabani/ Military settlement "Vaziani"	Kvemo Kartli	80	300
A19	Gardabani/Military settlement "Pobeda"	Kvemo Kartli	19	70
A20	Gardabani/"Ministry Council" Settlement	Kvemo Kartli	36	60
A21	Gardabani/"Tbilsres" Settlement	Kvemo Kartli	27	120
A22	Marneuli/Military Settlement N1	Kvemo Kartli	193	208
A23	Marneuli/Ialguja Settlement	Kvemo Kartli	48	179
A24	Rustavi/"Rustavmsheni N1"	Kvemo Kartli	37	106
A25	Rustavi/"Vendispanseri"	Kvemo Kartli	36	120
A26	Rustavi/"Metalurgy N3"	Kvemo Kartli	22	73
A27	Rustavi/"Metalurgy N4"	Kvemo Kartli	42	208
A28	Kutaisi/Pharmacy Dept.	Imereti	76	284
A29	Kutaisi/Military College	Imereti	65	181
A30	Kutaisi/Military Commissariat	Imereti	10	25
A31	Kutaisi/Kindergarten	Imereti	24	80
A32	Kutaisi/Concrete Factory Adm. Building	Imereti	23	79

A33	Kutaisi/Tractor Factory Adm. building	Imereti	108	350
A34	Kutaisi/Finance College	Imereti	70	220
A35	Kutaisi/Collage of Mines	Imereti	24	95
A36	Kutaisi/Satapia	Imereti	48	135
A37	Kutaisi/Physics-Maths College	Imereti	65	175
A38	Kutaisi/Kopitnari	Imereti	480	1120
A39	Khoni/Khoni	Imereti	181	390
A40	Chiatura/Hotel Chiatura	Imereti	45	119
A41	Chiatura/Auto school	Imereti	Closed	
A42	Zestaphoni/Prop institute	Imereti	68	214
A43	Zestaphoni/Civic Collective Centre	Imereti	65	226
A44	Samtredia/Hotel Samtredia	Imereti	57	180
A45	Samtredia/Railway Hospital	Imereti	27	66
A46	Khobi/Boarding School	Samegrelo	60	179
A47	Khobi/ Village Kheta, "Tech College" #1 & #2	Samegrelo	14	44
A48	Abasha/"Clinic" of Village Gezati	Samegrelo	14	34
A49	Poti/ Training Centre #1 & #2	Samegrelo	98	311
A50	Poti/ Technical School	Samegrelo	24	96
A51	Poti/ Factory 201 Collective Centre	Samegrelo	80	200
A52	Poti/ "Sh.M.O"	Samegrelo	55	157
A53	Tsalenjikha/ Hotel Daba Jvari	Samegrelo	21	58
A54	Tsalenjikha/ Collective Centre of Daba Jvari	Samegrelo	24	67
A55	Tsalenjikha/ Potskho, Etseri settlement	Samegrelo	79	207
A56	Chkhorotsku/ #3 Public School	Samegrelo	12	40
A57	Chkhorotsku/ Village Lesichine, Tea factory area, Kindergarten	Samegrelo	Closed	
A58	Senaki/ Military Town	Samegrelo	630	1855
A59	Senaki/ #26 Uridia Street	Samegrelo	47	158
A60	Senaki/ Menji, Children's Sanatorium	Samegrelo	40	118
A61	Zugdidi/Zeda Etseri Economic Zone	Samegrelo	70	120
A62	Zugdidi/ Akhalsopeli / Boarding School	Samegrelo	28	100
A63	Zugdidi/ Village Ingiri Boarding School #1, #2 & #3	Samegrelo	34	150
A64	Zugdidi/ Village Abastumani, Meat Factory	Samegrelo	14	54
A65	Zugdidi/ Village Chkaduashi	Samegrelo	22	66

New Settlement Villages

A66	Shaumiani	Kvemo Kartli	1500	4301
A67	Kvemo Bolnisi	Kvemo Kartli	1200	5000
A68	Tserovani	Mtskheta-Mtianeti	800	2000
A69	Akhaldaba	Mtskheta-Mtianeti	50	100
A70	Lagodekhi	Kakheti	1650	6590
I23	Surami	Khashuri	2708	9656
I24	Skra	Gori	423	1237
I25	Mokhisi	Kareli	452	1622
I26	Sasireti	Kaspi	144	569

I27	Sveneti	Gori	549	1578
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Adjacent Area Villages

I55	Abano	Kareli	150	265
I56	Dzelivijvari	Kareli	318	1136
I57	Kodavardisubani	Kareli	60	218
I58	Kvemo Shakshaketi	Kareli	100	288
I59	Kventatkosa	Kareli	800	3370
I60	Sasireti	Kareli	140	387
I61	Ptsa	Kareli	920	1260
I62	Akhaldaba	Gori	531	1780
I63	Arashenda	Gori	224	700
I64	Berbuki	Gori	305	948
I65	Ditsi	Gori	463	1377
I66	Jaliasheni	Gori	105	363
I67	Koshka	Gori	130	399
I68	Kvarkhiti	Gori	168	478
I69	Kvemo Shavshvebi	Gori	96	239
I70	Mejudispiri	Gori	200	607
I71	Nadarbazevi	Gori	126	293
I72	Patara Khurvaleti	Gori	82	201
I73	Patara Mejriskhevi	Gori	225	696
I74	Pkhvenisi	Gori	452	1280
I75	Sakasheti	Gori	375	1200
I76	Tiniskhidi	Gori	543	1907
I77	Tirdznisi	Gori	675	2320
I78	Tortiza	Gori	380	1135
I79	Tsitelubani	Gori	251	791

Baseline Villages

I80	Zemo Karaulakhi	Kvemo Kartli	300	1267
I81	Manglisi	Kvemo Kartli	1350	2900
I82	Rekha	Kvemo Kartli	180	490
I83	Gantiadi	Kvemo Kartli	228	950
I84	Tkemlovani	Shida Kartli	10	50
I85	Baraleti	Samtskhe Javakheti	200	1000
I86	Bejano	Samtskhe Javakheti	200	1100
I87	Kochio	Samtskhe Javakheti	140	700
I88	Bakuriani	Samtskhe Javakheti	650	2000
I89	Machatia	Samtskhe Javakheti	350	2000

Appendix B – 2010 Assessment Survey Tool

Appendix C – Site Descriptions

Appendix D – Water Quality Results

Appendix E – Prioritized List of WASH Activities

Appendix F – WASH Principles and Approach to Projects

The design criteria presented here, developed by the engineers and hygiene promotion specialists from ACF and the IRC, are comprehensive, detailed and design to provide the GoG's durable solution. They are the minimum design criteria developed for this assessment, and the teams expect that they would underlie any further implementation work in the IDP sites, both new and old.

The team recognise there may also be an element of the "aspirational" in these criteria, in that they do not produce cheap or quick fixes. Donors and agencies looking for the options with the least cost / benefit may find these design criteria beyond their own. However, the teams are confident that these design criteria set a standard that will provide long-lasting, reliable WASH facilities and programmes.

It should also be noted that these design criteria are applicable to more than simple infrastructure. They have been developed with community-based programmes in mind and as such incorporate elements of community involvement, vulnerability targeting and holistic approached to WASH.

Water Supply

Water supply systems are designed so that appropriate quantities of water are available consistently and on an agreed to regular basis (eg. 24 hours, 7 days):

- the average water demand for drinking, cooking and personal hygiene in any household is 50 litres per person per day;
- the maximum distance from any household to the nearest water point is 100 metres;
- queuing time at a public water source is no more than 15 minutes;
- it takes no more than three minutes to fill a 20-litre container;

- a sanitary survey indicates a low risk of faecal contamination and regular monitoring indicates no faecal coliforms per 100ml at the point of delivery;
- no negative health effect is detected due to short-term use of water contaminated by chemical (including carry-over of treatment chemicals) or radiological sources, and assessment shows no significant probability of such an effect;

- each household has at least two clean water collecting containers of 10-20 litres, plus enough clean water storage containers to ensure there is always water in the household; and
- steps are taken to minimise post-delivery contamination, eg. water collection and storage containers have narrow necks and/or covers, or other safe means of storage, drawing and handling, and are demonstrably used.

For piped water supplies, or for all water supplies at times of risk or presence of diarrhoea epidemic, water is treated with a disinfectant so that there is a free chlorine residual at the tap of 0.5 mg per litre and turbidity is below 5 NTU.

Bathing Areas

Bathing and laundry areas are designed so that:

- where communal bathing facilities are selected, there are sufficient bathing cubicles available, with separate cubicles for males and females, and they are used appropriately and equitably;
- where communal laundry facilities are selected, there is at least one washing basin per 100 persons, and private laundering areas are available for women to wash and dry undergarments and sanitary cloths; and
- the participation of all vulnerable groups is actively encouraged in the siting and construction of bathing and laundry facilities.

Toilets

Toilets are designed so that:

- a maximum of 20 people use each toilet;
- use of toilets is arranged by household or, if communal toilets are required, segregated by sex;
- toilets are no more than 50 metres from dwellings;
- separate toilets for women and men are available in public places (markets, distribution centres, health centres, etc);
- shared or public toilets are cleaned and maintained in such a way that they are used by all intended users;
- toilets are used in the most hygienic way and children's faeces are disposed of immediately and hygienically;
- users (especially women) have been consulted and approve of the siting and design of the toilet;
- all toilets constructed that use water for flushing and/or a hygienic seal have an adequate and regular supply of water;
- pit latrines and soakaways are at least 30 metres from any groundwater source and the bottom of any latrine is at least 1.5 metres above the water table. Drainage or spillage from defecation systems must not run towards any surface water source or shallow groundwater source;
- people can wash their hands after defecation and before eating and food preparation; and
- people are provided with tools and materials for constructing, maintaining and cleaning their own toilets if appropriate.

Toilets are designed, built and located to have the following features:

- they are designed in such a way that they can be used by all sections of the population, including children, older people, pregnant women and physically and mentally disabled people;
- they are sited in such a way as to minimise threats to users, especially women and girls, throughout the day and night;
- they are sufficiently easy to keep clean to invite use and do not present a health hazard;
- they provide a degree of privacy in line with the Georgian norms;
- they allow for the disposal of women's sanitary protection, or provide women with the necessary privacy for washing and drying sanitary protection cloths; and
- they minimise fly and mosquito breeding.

Solid Waste Management

Solid waste management systems are put in place to ensure that:

- all households have regular access to a large communal refuse container and are no more than 100 metres from it;
- at least one 100-litre refuse container is available per 10 families;
- refuse is removed from the settlement (by the Municipal Government) before it becomes a pest, a nuisance or a health risk,
- there are clearly marked refuse bins or specified areas at public places, such as markets, with a regular collection system in place; and
- final disposal of solid waste is carried out in such a place and in such a way as to avoid creating health and environmental problems for the local and affected population.

Drainage

Drainage facilities are designed to:

- keep areas around dwellings and water points free of standing wastewater;
 - keep stormwater drains clear;
 - ensure that dwellings, paths and WASH facilities are not flooded or eroded by water;
 - ensure that drainage waters, especially those from washing and bathing areas, do not pollute existing surface or groundwater sources of drinking water; and
 - ensure that drainage waters do not cause erosion.
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- Project budgets and timelines allow for sufficient numbers of appropriate tools and training for small drainage works and maintenance.

Hygiene Promotion

Underlying any infrastructure project should be a Hygiene Promotion component which:

- identifies key hygiene risks of public health importance;
 - includes an effective mechanism for representative and participatory input from all users, including in the initial design of facilities;
 - provides all groups within the population with equitable access to the resources or facilities needed to continue or achieve the hygiene practices that are promoted; and
 - targets hygiene promotion messages and activities addressing key behaviours and misconceptions for all user groups.
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- Representatives from these groups participate in planning, training, implementation, monitoring and evaluation.
 - Users take responsibility for the management and maintenance of facilities as appropriate, and different groups contribute equitably.
 - People can access at least 250g of soap for personal hygiene per person per month.

The options developed here have a two-fold motive:

- to provide a technical basis for ongoing projects; and
- to enable a comparison and prioritisation of potential future options.

The criteria for developing options are stated above. This assessment recognises the limitations of these criteria, such as they have not been developed with community participation and have not been accepted by the community. However, they form a minimum set of standards on which to base engineering actions. The assessment recognises that in implementing projects, the community may choose to increase these criteria, eg. they may choose a higher water consumption, they may choose higher disability service options. Communities will need to make informed choices during project design and implementation, and must be willing to pay for higher service standards.