Final version

Hygiene and Sanitation in Vietnam

Report of a mission 7th - 22nd May 2005

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Executive Summary

This document is the report a mission to Vietnam in May 2005 by Dr Val Curtis to explore the potential to develop the hygiene component of two projects; the Red River Delta Rural Water Supply and Sanitation project (RRD RWSSP), the Three Coastal Cities Environmental Sanitation project and also the potential for setting up a national effort on hygiene. Though the mission was largely concerned with hygiene, the provision of household sanitation was also reviewed. This document first addresses general issues about hygiene and sanitation in Vietnam. More detailed reviews and proposals for the three projects are provided as stand-alone documents in annexes 1, 2, 3 and 4.

Several issues, however, are common to all proposals. These fall under the headings of hygiene behaviour change, sanitation, schools, and capacity development.

In hygiene behaviour change the same key issues arise in all of the proposed work. First, that changing a few key hygiene behaviours such as handwashing with soap and the safe disposal of stools can have a major impact on public health. These are important to intervene on in their own right, as well as being essential components of water supply and sanitation programmes. Second, that behaviour change is difficult. Education about germs rarely provides sufficient motivation for behaviour change. It is therefore essential to understand what motivates hygiene behaviour in Vietnam, and then to design programmes based on that insight. Because behaviour change is so difficult, only a very few key practices should form the focus of the work. Thirdly, professional approaches to designing and implementing behaviour change programmes are needed if they are to succeed. The skills needed to do this effectively are scarce in Vietnam, and lie mostly with the private sector.

The immediate implication for all three proposed projects is that they should be designed on the basis of valid information. This requires consumer research to document actual hygiene practices and determine the risks they pose, finding out who needs to change behaviour, understand why they might change and understand how to use existing channels of communication most effectively to this end. This provides the framework for detailed programme design. This should be carried out by a coalition of stakeholders and actors advised by professional communicators. Forming an alliance with soap companies is proposed as one means to access high quality communication and marketing skills. Since soap companies stand to gain from public efforts to promote handwashing, they should be asked to make contributions.
A commitment to seed funding for the national programme followed a national workshop on handwashing during the mission. It clearly makes more sense to develop a national programme and use the findings and approaches to develop effective project-level activities. However, the timescales involved mean that consumer research in the RRD RWSS may happen first and can serve as a test bed for the national programme.

In **Sanitation** the same key issues are highlighted in each of the projects. Firstly, sanitation coverage is growing naturally in Vietnam, as levels of development improve and demand for toilets rises. The key question for development agencies should be: ‘how best to facilitate development of this market?’ To answer this question requires understanding what the bottlenecks to market operation are. Again, initial formative research should aim to identify these bottlenecks. Are they lack of demand? Lack of consumer suited technologies? Lack of access? Lack of credit? Lack of a facilitating regulatory environment?

The current model in place in Vietnam assumes that lack of credit is the bottleneck and addresses this through the provision of revolving funds. However, the experience of IDE in Quang Nam province suggests that access to credit may not be a bottleneck, since take-up of sanitation can be increased substantially without it.

If this approach finds favour in Vietnam, the next step, again, is consumer research. Some draft tools exist already to carry his out, but would need work to develop and to integrate with hygiene consumer research. This has not yet been done elsewhere; Vietnam may wish to take up the challenge of being the trailblazer in an integrated approach to hygiene and sanitation marketing.

**Schools.** The final thread running through this document is the need for projects to intervene in schools. Interventions to ensure hygiene and sanitation in schools are feasible, institutionally relatively simple, and can have a major impact on community behaviour and thus on health. All schools in project areas should be furnished with adequate sanitation and handwashing facilities, and practical, motivating lessons on hygiene should be institutionalised. Tools to better understand the environment and the behaviour of school kids are now available to help design effective school hygiene programmes.

**National strategies and project activities**

Whilst the TOR and the realities of development financing mean that this mission was forced to consider hygiene and sanitation in project areas, it clearly makes more sense to develop a national strategy, than several local ones. To professionally prepare an effective local behaviour change strategy will cost almost as much as preparing one at national level. In addition, a national strategy will provide a focal point for all of the diffuse and different efforts of many projects throughout Vietnam, thus adding value to all of them. Happily, WSP is willing to take the first steps towards a national programme by hiring a coordinator and commissioning consumer research, provided that government agrees. A first task for the coordinator will be to figure out how to dovetail project level and national level activities so as to gain maximum learning. This will depend largely on operational timetabling.

**Capacity development**

Marketing approaches to hygiene and sanitation are new to Vietnam and finding and developing local skills will be a critical to their success. The international PPP-HW can provide technical and training support for handwashing and hygiene programme development and IDE Vietnam can provide technical support in Sanitation marketing.
Key to the process of developing alliances to promote handwashing with soap and sanitation is the hiring of a coordinator who can work at national and/or project level. Placed in a key line Ministry (probably the Ministry of Health, Department of Prevention) this person needs to be able to shape and direct the consumer research, build alliances between public and private sector, prepare business plans to attract funding and generate enthusiasm for a shared vision of a clean, healthy Vietnam.
Hygiene and Sanitation in Vietnam

1. Background and objectives

The Government of Vietnam will need to spend some $4 billion over the next 20 years to upgrade the nation’s sanitation facilities. However, simply building infrastructure does not deliver the public health benefits that can flow from access to improved sanitation facilities. These benefits will only accrue through improved hygiene behavior, the most critical of which is washing hands at key times including after defecation and prior to preparing/eating food.

It is vital that the complementary behavioral change programs are implemented to maximize the benefits from such investments (and indeed to provide benefits of their own, irrespective of the investments in infrastructure).

The World Bank is currently preparing two large scale projects to improve water supply, hygiene and environmental sanitation in Vietnam. The Red River Delta Rural Water Supply and Sanitation (RRD RWSS) project is in negotiation following completion of the Prefeasibility study and is set to begin later this year. The Three Coastal cities urban environmental sanitation programme is at an earlier stage of preparation. Both will attempt to maximize the health gain flowing from the project activities via the promotion of safe hygiene. Given that both projects and the many other water and sanitation projects in Vietnam can be enhanced by improving national hygiene promotion strategies, this also formed a focus of the mission.

The objectives of the current mission are set out in the TOR in annex 4. Briefly summarized, they were to:

1. Make an assessment of the current challenge in hygiene, identify capacity gaps, map out possible solutions for enhancing hygiene promotion in the project areas.
2. Present findings to, and seek feedback from, a workshop to be held in Hanoi towards the end of the visit.
3. Develop a project level costed strategy for improving household hygiene practices in communities that will benefit from the planned World Bank financed rural water supply project and, separately, for meeting the hygiene promotion requirements for the World Bank financed coastal cities environmental sanitation projects.
4. Desired outcomes were: a clear direction for the RRD RWSS; help in mobilizing bilateral funding for behaviour change in the Coastal cities and influencing national policy on hygiene behaviour change.

The mission visited the Danida supported IEC project in Ha Tinh, the IDE supported Sanitation marketing project in Quang Nam and the Coastal city of Quy Nhon as well as representatives of Government, mass and partner organizations. A full itinerary can be found in annex 5. Note, the time allowed and the limited local staff time made available for the mission did not allow for the development of detailed or costed strategies. These will need development by the Hanoi team in the light of the recommendations made here.

2. Definitions and principles
2.2 Definitions
From the start of this mission it was clear that expectations differed about the scope of work, whether it concerned just hygiene or hygiene and sanitation. Part of the reason for this is that the two issues are not distinct in Vietnamese. The word *Ve Sinh* means both hygiene and sanitation in Vietnamese. For the purposes of this report we define them as follows:

**Hygiene** means the behaviours that protect people from risk of infection.

**Sanitation** refers to the technology of removing human excreta from households.

Whilst this report mainly focuses around the issue of hygiene, it also, to some extent, covers sanitation as it affects the household environment.

2.3 Principles
The proposals in this document stem from the following six principles:

1/ **Human excreta** are the source of most gastro-enteric diseases (diarrhoeal diseases, including cholera, typhoid and worms). By understanding how humans come into contact with human excreta we can understand how to prevent disease (Curtis et al, 2001).

2/ **Sanitation provision and use.** Removing human excreta, including children's stools, from the domestic environment is therefore of the highest importance.

3/ **Handwashing with soap** after contact with fecal matter can prevent up to 50% of gastro-enteric diseases (Curtis & Cairncross, 2003) and is the hygiene behaviour with the strongest documented health impact. The safe disposal of children’s stools and the treatment of drinking water once contaminated with faecal pathogens can also play a role on the prevention of diarrheal diseases.

4/ **Behaviour change** is difficult to achieve and requires a concerted and strategic approach. Steps include:
   - carry out consumer research to identify and quantify the prevalence of key risk practices, the motivations for changing practices, the target audiences and the best ways to reach them
   - choose one key practice, and, with professional help, develop a communications strategy to utilise existing channels of communication (for example mass organisations and mass media) and existing hygiene motivations to promote this
   - get buy in from all stakeholders to ensure best use of resources and maximised coherence
   - test and revise all approaches
   - monitor impact on reach and behaviour change.

5/ **Household-centred approach.** If health gains are to be maximized it is important to focus on the household, the site of most health risk, and work outwards, rather than having an exclusive focus on the central provision of infrastructure (Bellagio principles, 2000).

6/ **Market-oriented approach.** Consumers in Vietnam procure toilets from the private market. Public money should seek to locate and unblock any bottlenecks in the operation of the market, and not just rely on revolving funds and credit which may damage the market. The first step to a market approach to sanitation is to isolate the bottlenecks preventing sanitation uptake via the operation of the market.
3. Health in Vietnam

Vietnam is one of the world’s fastest growing economies after China. Household survey data suggest that Vietnam has lifted about 20m people out of poverty in less than a decade (General Statistical Office, Hanoi 2003). Vietnam, however, remains a poor country with productivity, health and well-being below potential. 75% of the population still live in rural areas, though urbanisation is progressing rapidly (World Bank, 2005).

The DHS survey for 2002 (VDHS) calculates infant mortality at 18 deaths per thousand live births, almost half what it was ten years ago. There has been a similar decline in under-five mortality, from 47/1000 in 1990 to 24/1000 in 2000. Despite these successes, morbidity from infectious disease remains high. The DHS survey puts Vietnam in the normal range for a developing country with diarrhea rates at 11/100 (child under 5 with an episode in last two weeks). Diarrheal diseases are thus the second most common cause of child illness after Acute Respiratory infections (ARIs), at a prevalence of 19.5/100. These figures are substantially lower in urban areas. (Note The DHS data provide a good snapshot of disease in the community in Vietnam, much preferable to using reported disease statistics, but they may be affected by seasonality since the survey was carried out in October/November). There are occasional outbreaks of cholera and typhoid, and intestinal worms are variously suggested to affect 15-85% of the school age population (Unicef, 2004). Trachoma is also a problem, affecting 15% of the adult population in some areas (Unicef, pers com). Malnutrition remains a problem that is exacerbated by the high prevalence of communicable disease.

Health is improving due to improvements in living standards and knowledge about treatment, for example, mortality due to diarrhoea has probably fallen due to the increased use of oral rehydration salts (40% of episodes according to the DHS survey). However Vietnam will not solve its communicable diseases morbidity problems unless hygiene standards improve.

Improvements in health will translate into economic benefits for Vietnam through reduced health care costs and reduced productive days lost.

4. Hygiene and Sanitation in Vietnam

4.1 Public investment in water and sanitation in Vietnam is running at an average of about $10m per year from government and external sources. The biggest external financial partners in this sector are the Asian Development Bank, the World Bank, the French AFD, Danida, AusAid, JICA and Finida. Private individuals also invest large amounts in building their own household facilities. Most of public sector expenditure is for water supply with a small percentage going to sanitation, and a much smaller amount to IEC activities including hygiene promotion. Most agree that the investment in IEC is not as effective as it could be.
4.2 **Sanitation**: Estimates vary widely, but Sanitation coverage is still low in Vietnam.

Table 1. Access to water supply and sanitation in Vietnam (Household Living Standards Survey 2002)

<table>
<thead>
<tr>
<th></th>
<th>Access to clean water</th>
<th>Access to sanitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>26.2</td>
<td>40.6</td>
</tr>
<tr>
<td>Urban</td>
<td>58.5</td>
<td>76.8</td>
</tr>
<tr>
<td>Rural</td>
<td>18.1</td>
<td>29.1</td>
</tr>
<tr>
<td>Kinh</td>
<td>29.0</td>
<td>44.9</td>
</tr>
<tr>
<td>Ethnic minorities</td>
<td>5.3</td>
<td>9.9</td>
</tr>
<tr>
<td>Poorest</td>
<td>9.4</td>
<td>16.1</td>
</tr>
<tr>
<td>Near poorest</td>
<td>16.7</td>
<td>26.9</td>
</tr>
<tr>
<td>Middle</td>
<td>21.3</td>
<td>31.7</td>
</tr>
<tr>
<td>Near richest</td>
<td>27.5</td>
<td>45.5</td>
</tr>
<tr>
<td>Richest</td>
<td>51.3</td>
<td>72.1</td>
</tr>
</tbody>
</table>

Table 1 shows results from the Vietnam Living Standards Surveys for water and sanitation coverage from 1993 to 2002. The results from the 2004 survey are still awaited. Other sources give very different figures. According to the DHS 78% of rural families have sanitation and 96% of urban. CERWASS again uses different figures, but their graph (fig 2) highlights the rapidity of growth in the market for toilets. This is not the place to discuss why these figures differ (see the Sector status report of 2005 Joint GoV-donor sector review rural water supply sanitation and health). However, one reason why these figures differ so widely is that definitions of what constitutes sanitation, and hygienic sanitation vary widely.

Even with an agreed set of definitions it can be hard for surveyors to recognize different toilet types. An agreed set of operationally useful definitions for types of sanitation would enhance efforts to raise support for the sector. The difficulty in establishing rates of sanitation also highlight how important it is that sanitation projects generate valid baseline data from which to assess the scale of the problem and to measure progress. We highlight later in this report how uncertainties, such as what constitutes 'hygienic', and what constitutes an acceptable latrine design can have programmatic implications and why it is thus so important to start project work with a valid survey of existing toilet provision.

4.3 **Hygiene**: though there is little quantitative evidence, all sources agree that hygiene is poor in Vietnam. Though knowledge about hygiene is high, good practice is low. One particular problem stands out- the habit of washing hands with soap in Vietnam is very rare.
According to a KAP survey in five communes in the Cuu Long Delta in 2003 prior to an AusAid supported project, less than 3% of mothers reported the use of soap for handwashing after the toilet (AusAid 2003). Our household visits were consistent with this. No households had soap placed in such a way as to be easily usable for handwashing, and mothers said they used soap when hands were visibly dirty or smelly, such as after preparing shrimp paste, but did not mention after the toilet or after cleaning up children.

Though there are excellent communications facilities in Vietnam, through mass organizations, government agencies and mass media, efforts to promote hygiene are fragmentary. They try to cover too many behaviours, are not focused on achieving or measuring results, and are not based on any valid assessment of the problems or their potential solutions.

Many approaches are used to communicate health information, and the term IEC (information, education and communication) is often employed. Government policy is to educate the community via health agents and mass organizations such as the Women’s Union. Hygiene figures in government IEC programmes sporadically. Target practices may include toilet construction, bednet use, and clothes washing, as well as handwashing with soap. Such efforts may improve knowledge, but probably have little impact on actual behaviour.

One way in which hygiene has been promoted in many countries is the PHAST (Participatory Hygiene and Sanitation Transformation) approach. This involves training trainers to work with communities to identify their own health problems and to work through a standard set of participatory activities or games leading to local action plans. Developed to help communities understand health problems related to water and sanitation and hygiene in the context of village water supply programmes, the general experience has been that the PHAST approach is difficult to scale up. Activities tend only to reach a minority of people in each village and require too many contacts (often up to six meetings) to be practical.

DANIDA has been attempting to introduce PHAST in Dak Lak, Ha Tinh and Nghe An provinces over the last two years, and their assessment of the difficulties is in accord with this general experience (MARD/Danida 2004). Problems with this approach include the difficulty of training very large numbers of staff (1500 ‘volunteers’ were trained in Ha Tinh), and that trained users may still use the tools in a didactic manner, the issue of how to motivate field workers (not unreasonably, they tend to want to be paid to carry out such intensive work), the inability to set particular behaviour change targets or to measure any resultant changes, and the large number of messages, which leads to a dilution of impact on behaviour, if any at all. However PHAST tools are often well appreciated in schools and DANIDA found the same in their IEC programme. Ultimately, tools are only as good as the conception of the programme they support. Good hygiene promotion depends on setting up a strategic process of communication, PHAST tools, if designed in support of such a strategy, and not seen as an end in themselves, can add value.

**4.4 Schools:** according to Unicef, of the 35,000 main schools in Vietnam 65% have water and 41% sanitation. Handwash facilities are not commonly provided. There is no longer a health education curriculum, because of pressure to concentrate on more academic subjects. Hand washing is incorporated in the curriculum along with many other health messages, such as using bednets. Unicef are currently finalizing support materials for teaching health in
schools. There has been collaboration between soap companies such as Unilever and the Ministries of Education and of Health in developing schools health programmes. These have tended to focus on tooth hygiene, but there is major enthusiasm from Unilever about the idea of promoting handwashing in schools. GoV contacts are also enthused about the idea and apparently have few concerns that such efforts could be branded with a commercial logo. Experience elsewhere shows that substantial commercial funds can be unlocked through branded health campaigns, which are not available if the public sector wishes only to engage with industry in generic campaigns. (See the discussion in the Handwashing Handbook, World Bank 2005)

5. Findings and Recommendations

5.1 General
The detailed findings and recommendations for the three projects, RRD RWSS, the three coastal cities and the national handwash programme can be found in annexes 2, 3 and 4 and will not be repeated here. Furthermore, this report does not set out to explain the approach to developing strong handwash promotion programmes, which is fully set out in the new Handwash Handbook which can be downloaded from the global PPP-HW site: www.globalhandwashing.com.

Ideally, work will begin on a National programme on hygiene that can galvanise efforts across the country, including in the two World Bank supported projects. The steps to achieve this are to:
1) Appoint a coordinator, housed in the anchor agency
2) Advocate at all levels, to obtain government support, to build the partnership and to mobilise resources
3) Carry out a professional consumer research survey of consumer habits, motivations and communications channels concerning hygiene (and sanitation?)
4) With the results, brief a professional communications agency to work with concerned agencies to develop one single unified behaviour change strategy that can be delivered through mass media and mass and government organisations
5) Test the strategy, revise and test again
6) Prepare all materials and implement training
7) Launch and roll out at national level
8) Monitor reach and effectiveness in changing handwashing behaviour.

As annex 2 suggests, a consumer survey in the RRRD RWSS might happen before the national programmes begins. This would provide a useful testbed for the national approach.

WSP is prepared to fund the coordinator post and the first consumer survey. We rely on WSP Jakarta to follow through on this proposal.

5.2 From consumer research to programme
In summary, the suggested way forward for all three activities is similar. Good quality interventions in the health, or any field for that matter, cannot be designed in an office, but must reflect the reality of the situation. Strategic approaches to improving both hygiene and sanitation can only emerge from a detailed and valid understanding of the key issues. This requires a process of formative research, (which we have called consumer research in this
report, to emphasise the consumer focus). Such studies need careful design, conduct and analysis. They are not participatory and require the skills of professional researchers with skill and experience in both quantitative and qualitative research so as to understand consumers (fig 2).

**Figure 1 Consumer research to programme design**

These studies differ from other common approaches such as KAP and PRA in that:
- They focus on a very small number of key questions
- They use sample sizes large enough to give valid generalisation to the project target group
- They are not participatory
- They focus on understanding what happens in households and why
- They provide a solid baseline from which to measure change
- They require skilled supervision from researchers experienced in these approaches
- They draw on the skills of consumer and market researchers in industry
- The answers provided by the studies feed directly into programme design.

Commercial agencies with experience of market and consumer research are likely to be the best choice to carry out such work, but they do need careful supervision if they are to dig deep into the issues and not accept simplistic responses from respondents.

The tools for consumer research in handwashing are well-developed and tested and are set out in the handwashing handbook. The tools for consumer research in sanitation have been developed more recently and have never yet been put together into one package, or indeed fully tested as a package rolled up with hygiene consumer research. Figure 2 shows how a household level market assessment tool seeks to identify the bottlenecks to market functioning. Supplemented with institutional analysis, a carefully designed baseline and a
great deal of skilled advocacy for the approach, it should provide a coherent basis for programme design in sanitation.

It must be emphasised that this approach has never been fully tested. If the Bank decides to go down this route it would make sense to regard it as a learning exercise, with benefits beyond Vietnam. The example of the IDE sanitation marketing programme in Vietnam shows that the overall approach makes sense and can have excellent results (IDE/WSP 2004). The addition to the IDE approach here proposed is to make a systematic assessment of the market before proceeding. A full design for sanitation consumer/market research is thus possible, but needs further work.

Similarly, the Hygiene Centre has developed a tool for formative research in schools which has worked well in Senegal and could be adapted to the Vietnam context with some further work.

Three slightly different outlines for formative research for hygiene, sanitation and schools tailored to the three contexts are provided in the three annexes. If the RRD RWSS project begins first it will provide useful learnings for the others. The Coastal cities projects have slightly different objectives but should follow the same approach of understanding the what and why of the problems before intervening.

From the perspective of global activities in water and sanitation, designing, executing and learning from the results of a comprehensive formative research package for hygiene and sanitation in communities and schools in Vietnam could be an exciting prospect.
The formative research approach does pose some challenges in the context of standard external aid-supported development programming because it requires an initial step before full scale programmes can be fully designed. Nonetheless, programme outlines can be prepared using best experience from elsewhere, and the details changed later depending on the results of the formative research.

5.3 Institutional and capacity

The Ministry of Health, Department of Prevention provides the obvious institutional home for such activities. They have experience in research, in communications programmes and a mandate for health promotion. However, they will need skilled assistance if they are to update their practices away from relying on health messages and away from working through health channels, which may not be the most effective means of reaching target audiences. The private sector has excellent capacity in communications conception and execution and could provide an excellent source of support to enhance the MoHs skills. Unilever, for example, already has a relationship with the Dept of Preventive Health and might be prevailed upon to offer their marketing skills. This will require careful negotiation.

The Women’s Union has the enthusiasm and the network to make a huge contribution to handwash promotion and should be a key partner throughout.

External support to help design and guide the formative/consumer research may be a worthwhile investment to capitalise on experience from elsewhere. The PPP-HW team in Washington can provide technical support (but currently has no funds to do so, they may in future). Technical capacity and experience exists in CDC Atlanta, AED Washington and LSHTM, London. IDE in Vietnam are well placed to offer technical support in sanitation marketing, with some inputs on the consumer research front.

Marketing approaches to hygiene and sanitation are new to Vietnam and finding and developing local skills will be critical to their success. Key to the process of developing alliances to promote handwashing with soap and sanitation is the hiring of a coordinator who can work at national and/or project level. Placed in a key line Ministry (probably the Ministry of Health, Department of Prevention) this person needs to be able to shape and direct the consumer research, build alliances between public and private sector, prepare business plans to attract funding and generate enthusiasm and passion for a shared vision of a clean, healthy Vietnam.
References


Unicef. An overview of parasitic infection in Vietnam, Hanoi 2004


Acronyms

AED Academy for Educational Development, Washington
CDC Centers for Disease Control, Atlanta
CERWASS Centre for Rural Water Supply and Sanitation
HWWS Hands washed with Soap
IEC Information, Education and Communication
KAP Knowledge, Attitudes and Practice
LSHTM London School of Hygiene and Tropical Medicine
PHAST Participatory Hygiene and Sanitation Transformation
PRA Participatory rural appraisal
RRD RWSSS Red River Delta Rural Water Supply and Sanitation Programme

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National Hygiene Strategy

Concept Note
Concept Note

DRAFT May 2005
Val Curtis, The Hygiene Centre, LSHTM,

Executive Summary

Hygiene and handwashing
Improving the hygiene status of the population is government policy in Vietnam. However, efforts to promote hygiene are fragmented, with many different activities in different areas, and have yielded uncertain results.

Of all the hygiene behaviours, handwashing with soap (HWWS) is the most important. It could cut diarrhoeal diseases by almost half in Vietnam. It can also reduce the rate of respiratory infections and prevent transmission of SARS and Bird ‘Flu. Handwashing with soap is, however, very rare, although most households do have water and soap. A national campaign that harnesses the complementary abilities and resources of the many actors interested in this issue, could substantially reduce disease and promote economic welfare in Vietnam.

“2+2=10”
However, changing long established habits is difficult. To succeed, it is important that target audiences are exposed to single-minded messages that are carefully designed to motivate behaviour change through all possible channels, and repeatedly. To do this requires a concerted effort. Luckily in Vietnam there are many partners already working in this area, who are willing and ready to contribute, for example:

- The Ministry of Health, Department of Preventive Medicine, has the ability to develop such a campaign and reach the population through their well-developed health network
- The Women’s Union of Vietnam also has the experience and enthusiasm to develop and lead a handwash campaign and excellent reach to communities even in the remotest areas
- The Ministry of Education wishes to promote safe hygiene in all 35,000 main schools in Vietnam
- Soap companies in Vietnam have the marketing skills that can make a national campaign truly effective. Indeed, the company with the largest share of the bar soap market (Unilever), is to re-launch Lifebuoy as a health and handwash brand in Vietnam before the end of 2005.
- External partners, for example, Unicef, Danida, AusAid, IDE, the World Bank and WSP see hygiene and handwash as a priority and already support IEC activities in project areas and nationally.

In short, if we harness the capacities, abilities and resources of all players to one single high priority objective: *vis*, the promotion of handwashing with soap, it should be possible to have far greater impact than can be achieved by working separately.
Action plan
To realize this vision, it is suggested that the next steps should be to:
1) Appoint a coordinator, housed in the anchor agency
2) Advocate at all levels, to obtain government support, to build the partnership and to mobilise resources
3) Carry out a professional survey of consumer habits, motivations and communications channels concerning hygiene and sanitation
4) With the results, brief a professional communications agency to develop one single unified behaviour change strategy that can be delivered through mass media and mass and government organisations
5) Test the strategy, revise and test again
6) Prepare all materials and implement training
7) Launch and roll out at national level
8) Monitor reach and effectiveness in changing handwashing behaviour.

The approach is innovative because it is based on science: it measures risk behaviours and it uses consumer research to understand them, so as to develop and test strategies that will demonstrate behaviour change on a large scale.

If successful, a national hygiene and sanitation campaign could go on to address other hygiene and sanitation issues, based on evidence of the need for behaviour change.
1. Introduction & Background
Improving hygiene practices is likely to be a very effective way of improving the living standards of the Vietnamese population, of improving their health. Public Investments averaging over $10m per year have been made in improving the water and sanitation infrastructure of Vietnam, a sum that is probably more than matched by private household investment (World Bank, 2005). However, the health benefits of water and sanitation arise not from the technology, but because of the changes in human behaviour that they facilitate, such as washing hands and disposing of adult and child excreta safely. It is now recognized internationally that efforts to promote safe hygiene practices should go hand-in-hand with infrastructure investment.

This concept note arises from a mission by Dr Val Curtis, Director of the Hygiene Centre at the London School of Hygiene & Tropical Medicine, on behalf of the World Bank in Washington, to look at the hygiene situation in Vietnam in May 2005. The brief was to propose how hygiene and sanitation could be promoted in two project areas (the Red River Delta and the Coastal Cities) and at national level. This document concerns proposals for a national strategy on hygiene. It also makes suggestions for a similar approach to promoting sanitation. It is an annex to the full mission report, which also contains proposals for activities in the two World Bank supported project areas.

2. Hygiene: what and why?
There are many different definitions of the work hygiene, even amongst professionals. In Vietnam the word *Ve Sinh* means both ‘hygiene’ and ‘sanitation’, which engenders some confusion. For the purposes of this work we define hygiene as-

"Those behaviours that serve to protect people from the transmission of infection"

In this report we define sanitation as:

"the technology of removal of human excreta from households"

In the field of water supply and sanitation we are mainly concerned to prevent the gastro-intestinal infections. Key practices that prevent the transmission of the microbes contained in excreta are the safe handling and disposal of faeces, and hand washing with soap. Though the evidence base is weaker, other hygiene practices such as the safe handling of food and the home treatment of water may also play a role in preventing infection (Curtis et al 2001). In particular handwashing with soap has been shown to reduce the risk of

![Fig 1. The effectiveness of Interventions vs Diarrhoea](image)
diarrhoeal infection by almost half (Curtis & Cairncross 2003). Figure 1 shows how the health benefits of handwashing with soap outweigh those of both water and sanitation, and demonstrates why it should have a higher priority for investment. (There are other versions of this graph that suggest that home water treatment may also have a large effect on diarrhoeal disease, but definitive data remain to be published).

However, figure 1 shows how the biggest health impacts can be achieved through changes in behaviour, followed by sanitation, followed by water supply. This makes sense because human faeces are the source of gastro-enteric infection, it is therefore a priority to remove them from the household environment, and hands that have come into contact with faecal material, for example, after defecation or after cleaning up a child, need to be washed with soap to remove pathogens. When there is no sanitation, handwashing with soap becomes even more important because the environment is faecally contaminated. It is therefore worth promoting handwashing, even in the absence of sanitation.

3. Health in Vietnam
The DHS survey for 2002 (VDHS, 2003) puts Vietnam in the normal range for a developing country with diarrhea rates at 11/100 (child under 5 with an episode in last two weeks). Diarrheal diseases are thus the second most common cause of child illness after Acute Respiratory infections (ARIs) at a prevalence of 19.5/100. There are occasional outbreaks of cholera and typhoid and intestinal worms are variously suggested to affect 15-85% of the school age population. Trachoma is also a problem, affecting 15% of the adult population in some areas. Malnutrition remains a problem, that is exacerbated by the high prevalence of communicable disease. Health is improving rapidly due to improvements in living standards and knowledge about treatment, however Vietnam will not solve its communicable diseases problems unless hygiene standards improve.

Improvements in health translate into economic benefits for Vietnam through reduced health care costs and reduced productive days lost. It would be useful to calculate what lack of hygiene costs Vietnam, and compare this with the costs of a hygiene promotion programme.

4. Hygiene and Sanitation in Vietnam
Preliminary findings about the situation in Vietnam are set out below.

4.1 Public investment in water and sanitation in Vietnam is running at an average of about $10m per year from government and external sources. Private individuals also invest huge amounts in building their own household facilities. Most of public sector expenditure is for water supply with a small percentage going to sanitation, and a much smaller amount to IEC activities including hygiene promotion. Most agree that the IEC efforts invested are not as effective as they could be. Though there are excellent communications facilities in Vietnam, through mass organizations, government agencies and mass media, efforts to promote hygiene are fragmentary, try to cover far too many behaviours, are not focused on achieving or measuring results and are not based on any scientific assessment of the problems or their potential solutions.
4.2 Sanitation: Estimates vary widely but Sanitation coverage is still low in Vietnam. Coverage is, however, growing rapidly as Vietnam develops (fig 2).

4.3 Hygiene: though there is little quantitative evidence, all sources agree that hygiene is poor in Vietnam. One particular problem stands out- the habit of washing hands with soap in Vietnam is very rare. According to a KAP survey in five communes in the Cuu Long Delta in 2003 prior to an AusAid supported project less than 3% of mothers reported the use of soap for handwashing after the toilet (AusAid 2003). Our household visits were consistent with this. No households had soap placed in such a way as to be easily usable for handwashing and mothers said they used soap when hands were visibly dirty or smelly, such as after preparing shrimp paste, but did not mention after the toilet or after cleaning up children.

4.4 Schools: of the 35,000 main schools in Vietnam 65% have water and 41% sanitation (Unicef). Handwash facilities are not commonly provided. There is no longer a health education curriculum, because of pressure to concentrate on more academic subjects. Handwashing is incorporated in the curriculum along with many other health messages, such as using bednets. Unicef are currently finalizing support materials for teaching health in schools.

4.5 Soap: there is a well developed soap market in Vietnam. Whilst bar soaps are what is preferred for handwashing, liquid dishwash soaps are also used and sometimes powder detergents, or even shampoo sachets, if nothing else is available. The market leader for bar soaps is Lifebuoy (Unilever) with 40% of the bar soap market, Comay (My Hao) has 17%, Safeguard (Procter and Gamble) has 15% and Lux and Dove (Unilever) have 12 and 5% respectively. Unilever thus claims 57% of the total bar soap market. The My Hao company is based in HCMC and makes a range of soaps and detergents. Though we do not have a full market survey we noted that local companies Vico, Lix and Vaso appear to make detergent, but not bar soap. We found little evidence of any local or artisanal soap making, though there are unregistered companies making soaps that mimic established brands and counterfeit soaps from China are sometimes found in local markets.

4.6 Private sector campaign: this is an ideal time to launch a national partnership on handwashing because Unilever are about to launch a major initiative in Vietnam. The details are not yet available, but components may include: mass media launch of Lifebuoy brand extension into handwashing, direct marketing in urban schools and PR activities with MoH and professional organizations. The launch of this campaign is due for September 2005. Because soap companies stand to gain from a national handwash campaign it is vital that they also contribute to it. There appears to be a willingness in government circles to engage with branded handwash soap campaigns. If all agree that this is reasonable, it raises the possibility of accessing very substantial funds from Industry, since brands is where most...
spending power lies. However, public authorities may find this unsuitable and wish to opt for generic sopa marketing campaigns, with less support from Industry.

4.7 Communications channels: Vietnam has excellent outreach capacity via government, mass organisations and mass media. Detailed figures need to be established but surveys such as the VNDHS, the VNLSS and informants suggest that a typical rural women may-

- Attend 2-12 Women’s Union meetings in one year
- Attend village meetings 2-4 times a year
- Be visited by a health worker 1-4 times in one year
- Hear messages over loudspeakers twice a day
- Watch TV every day, and see 10 commercial advertisements
- Read newspapers and listen to radio regularly
- Give birth in a health facility
- In addition, almost all Vietnames children are in school

Beyond these formal channels, Vietnam has strong social networks, hence the most important communications route in Vietnam is probably ‘word-of-mouth’- in other words-individuals talking to each other about topics they find interesting. If handwashing is to become the social norm it has to become a talking point and penetrate these social networks.

Barriers to handwashing. When water is scarce (as for a small minority of people in Vietnam) this makes handwashing more difficult, but still not impossible (simple devices to drip out small quantities of water from a container may be helpful, for example). Soap is generally available, though used for other purposes than handwashing. Availability and cost of soap may constitute a barrier to HWWS in very remote or poor areas, but does not seem to be a problem generally.

5. Can Hygiene be improved in Vietnam?
Improving hygiene practices such as handwashing is difficult. Habits, long established in childhood, are hard to change. Experience from the public and private sector suggests that behaviour change requires the following:

- people to feel an emotional need to handwash for purposes such as nurturing a child, being socially acceptable or to remove disgusting material from hands
- barriers to behaviour change be lowered (if there are any)
- handwashing habits to be introduced at life change events, such as the birth of a new baby, in school or at marriage
- people to be exposed to behaviour change messages repeatedly, in the order of 6 to 10 times a month.
- For handwashing to become sustained as a social norm the idea has to percolate into social networks

Experience shows that educating people about germs does not lead to sustained behavioural improvement. Indeed, most Vietnamese do know that it is healthy to wash hands with soap, but they do not practice.
Experience also shows that trying to deliver many messages at once is ineffective. Two messages have less than half the impact of one, and 20 messages have no impact at all. Hence the need for a single-minded campaign with one single message, delivered to target audiences in a similar high impact manner, through all channels of communication.

This approach uses a blend of the best experience in health promotion coupled with learning from marketers in industry, who have unparalleled professional ability to affect behaviour change in populations. (A marketer who does not sell soap will lose their job!)

Though it will be difficult, a concerted effort to improve handwashing practices that is based on in depth insight into consumer habits, contexts and motives in Vietnam, should bear fruit. A second phase of activities could then target the next most important hygiene practice, either the safe disposal of stools or the need to acquire a latrine. The choice of message will depend on the results of the consumer study of hygiene in Vietnam.

6. Action plan
To develop a concerted national effort to improve hygiene in Vietnam requires political will, partnership, consumer insight, professional approaches to campaign development and management, impact monitoring and resources.

Table 1 sets out a framework for the steps in developing a national hygiene campaign. The first and most important activity is the hiring and housing of a national coordinator. Working out of the lead institution, the coordinator is the glue that holds the whole partnership together. Their role is advocacy with political leaders and partners, partnership building and rebuilding, fundraising and providing the vision to keep the campaign moving. The role requires energy, enthusiasm and the skill to be able to ‘translate’ between the very different expectations and ways of working of the public and private sectors. Annex 1 provides the TOR for the recruitment of a national coordinator.

In Vietnam there are two good candidates for lead agency. Whilst the Department of Preventive Health in the Ministry of Health has the mandate for health, the skills and the ability to deliver, the Women’s Union have the mandate for women, a huge and effective network, and the enthusiasm and drive to implement the campaign effectively. Other possibilities are CERWASS, which has the hygiene mandate at present and the Ministry of Education, because schools should be a prime channel in this campaign.

The coordinator will need to establish a vision and outline business plan for the campaign and proceed to recruit the support of key partners. In Vietnam these will include soap companies. Unilever are already a key player and other soap companies may also wish to take part. Separate roles for different companies will need to be established if others join, since soap companies typically do not like to collaborate with their competitors. Other partners will be the external support agencies including Unicef (already very active in handwashing and in schools), bilateral agencies such as Danida (not yet consulted), DFID, USAID, AusAid. WSP and the World Bank are likely also to want to play a support role. Experience shows that one of the best ways to get Governments to commit to such programmes is to demonstrate the costs of not acting. Early on, the coordinator will need to consult health economists and make estimates of the likely financial savings from lowered treatment costs as well as lost productivity by carers associated with not handwashing with soap.
<table>
<thead>
<tr>
<th>Step</th>
<th>Object</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/Institutional:</td>
<td>Choose anchor agency, leader and hire coordinator</td>
<td>TBD (include local and national private sector)</td>
</tr>
<tr>
<td>2/Advocacy</td>
<td>Get buy-in from decision-makers at all levels</td>
<td>Continuous process</td>
</tr>
</tbody>
</table>
| 2/ Baseline/consumer survey | Find out what we need to know for programme development* | Questions:  
  -what are the risk practices?  
  -what are HWWS rates?  
  -what are HWWS motives?  
  -who are target audiences?  
  -what are the communication channels? |
| 3/ Strategy development | With professional assistance, and a small team - develop marketing campaign in all channels | Choose key message(s)  
  Single idea, single approach  
  Allocate expenditure by channel |
| 4/Strategy testing | Test all approaches and revise before scaling up to full geographic area | Mass media: Test concepts, storyboards and executions.  
  Gov and Mass organisations: Trials and evaluations in 2 communes |
| 5/Implement | Full scale national implementation through government, mass organizations and mass media | Supervise, monitor and improve as needed |
| 6/Measure reach and impact | Compare baseline with final survey, or better, compare with a control area | What proportion of TAs got messages, by what route?  
  What is HWWS rate |

Table 1. framework for developing a national hygiene campaign

*the research will cover a representative sample of whole population of Vietnam and a representative sample of schools.
Once the legitimacy of the initiative has been established and partners agreed to participate, the first key technical task is to commission and supervise the consumer research (step 3). There is now considerable experience in doing consumer research for such campaigns internationally. This experience is documented in the Handwash Handbook, produced by the Global Public-Private Partnership for handwashing based in WSP Washington (www.globalhandwashing.org). Sample TORs are set out in annex 1. The tasks of the research are to set out the what?, the who?, the why? and the how? of behaviour change. They also provide a baseline of the key hygiene behaviours so as to measure future change.

The results lead directly to the brief to a communications agency who will develop mass media approaches (step 4). This is called ‘above the line’ advertising. The communications agency will need also to have ‘below the line’ experience; developing campaigns through mass organizations, governments, direct community contact, etc, etc. The goal of this stage of the work is to develop one simple, but powerful approach to behaviour change, that can be implemented through all channels. So, for example, a mass media campaign targeted at women with young children might show how disgusting dirty hands can be made to feel clean and fresh with HWWS, at the same time the same message will be reaching mothers at meetings of the Women’s Union and from their children in school. The expenditure for each channel is calculated at this stage to optimize ‘bang for buck’. Depending on patterns of household communications established in the consumer research, it may be decided that it is better, for example, to spend more on mass media in the South of the country where WU membership is lower and TV viewership higher, for example.

All approaches thus developed are tested and retested using industry standard tests until it is clear that they can motivate behaviour change (step 5). Only then is the investment in rolling out the full scale national campaign engaged (step 6). Finally the programme is carefully monitored to establish whether it is having the desired effect at household level, both in terms of whether messages are reaching their audiences and in motivating behaviour change.

Additional support activities may be established by the partnership, such as a search to develop a soap and handwash facility that can work in schools, electronic aids to handwashing such as the ‘talking toilet’ developed by Unicef, simple water saving devices and industry may be encouraged to consider producing a cheap handwash liquid in a refillable container, or sachet form, if it seems that that is what consumers prefer.
7. Who will do what?
The mission was only long enough to gain an idea of what commitments might be forthcoming from potential partners. The following table is indicative of the level of effort that might be solicited.

<table>
<thead>
<tr>
<th>Step</th>
<th>Object</th>
<th>Who, what?</th>
<th>Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1/Institutional:</strong></td>
<td>Choose anchor agency, leader and hire coordinator</td>
<td>WSP fund coordinator, employed by IDE, housed in WU or MoH Create a partnership of all key players</td>
<td>One year salary of national coordinator (marketing background)</td>
</tr>
<tr>
<td><strong>2/Advocacy</strong></td>
<td>Get buy-in from decision-makers at all levels</td>
<td>Coordinator and champion organization (WSP, WU, MoH)</td>
<td>Meetings, travel, newsletters, PR material</td>
</tr>
<tr>
<td><strong>2/ Baseline/ consumer survey</strong></td>
<td>Find out what we need to know for programme development*</td>
<td>Funded by WSP or Unicef Technical advice from MoH, Unilever, Unicef, international PPP-HW</td>
<td>Professional Market research agency, 3-4m, 2 weeks international support</td>
</tr>
<tr>
<td><strong>3/ Strategy development</strong></td>
<td>With professional assistance, and a small team - develop marketing campaign in all channels</td>
<td>Funded by Unilever? DANIDA? Tech advice from partnership</td>
<td>Professional communications agency such as Lintas, O&amp;M plus below-the line agency</td>
</tr>
<tr>
<td><strong>4/Strategy testing</strong></td>
<td>Test all approaches and revise before scaling up to full geographic area</td>
<td>Ditto</td>
<td>Professional agencies working with mass organizations (in existing project areas?)</td>
</tr>
<tr>
<td><strong>5/Implement</strong></td>
<td>Full scale national implementation through government, mass organizations and mass media</td>
<td>Mass media: cost sharing Gov and soap companies?? Unicef? Gov and Mass organisations: World Bank? Danida?</td>
<td>Mass media blitz for 6m. (expensive?) Materials and training for mass and Gov</td>
</tr>
<tr>
<td><strong>6/Measure reach and impact</strong></td>
<td>Compare baseline with final survey, or better, compare with a control area</td>
<td>Supervise, monitor and improve as needed Unicef? WSP?</td>
<td>Reach and effectiveness surveys</td>
</tr>
</tbody>
</table>

Table 2. Activities and potential partners

8. Sanitation: a national campaign?
Demand for sanitation is increasing in Vietnam. It may be that a national promotional campaign could help strengthen this demand. Or it may be that demand is already strong and that there are other major barriers to sanitation uptake such as high prices, poor products, policies that constrict the market, lack of knowledge, access or technical skills. It is therefore too early to say whether a national demand generation campaign would be worthwhile. A tool to assess the sanitation situation and answer the questions about bottlenecks in the market has been developed by the Hygiene Centre and could be tested in this setting by adding it to the consumer hygiene study. Results would allow the development of a marketing campaign based on meeting consumer needs from toilets, such as comfort and social status.

9. Conclusion
Hygiene policy is very much on the agenda in Vietnam at present. A national campaign that could galvanise efforts both in the public and private sector on one goal of improving health through handwashing seems like a timely and exciting new way forward for the country.
1. Background

The Government of Peru, with support from the Water and Sanitation Program (WSP) and others, is initiating a new intervention to promote handwashing with soap under a public–private partnership (PPP) with the objective of reducing diarrhea morbidity among children below age 5. A documented PPP experience in Central America has demonstrated the positive impact on handwashing behavior and on the incidence of diarrhea. The World Bank, WSP, UNICEF and USAID at the Global level have formed with the three major soap producers a Global Initiative for PPP in Handwashing. Two pilot countries Kerala, India and Ghana are implementing a local PPP. Peru is another candidate for expanding this PPP handwashing initiative. A local coordinator for this new, promising activity is needed.

Rationale for a Hand Washing Initiative:
- Diarrheal diseases kill 2 to 3 million children globally every year, are the third most important cause of morbidity and mortality in Peru and account for 35% morbidity in children under 5 years old.
- Most diarrheal diseases are caused by fecal–oral contamination
- Diarrhea can be prevented by stopping excreta from reaching the environment through proper sanitation and hand washing
- Handwashing with soap alone could reduce reported cases of diarrhea by 47%. (Curtis & Cairncross, 2003)

Reliable data on handwashing with soap after using a toilet or after cleaning up a child is not available in Peru. Hygiene promotion initiatives have in the past focused on the provision of water and sanitation facilities, good storage methods and water treatment but not on hand washing. Little is therefore known about the availability, affordability and desirability of soap, especially for use after contact with excreta, in rural and semi–urban areas. There is a need to make a connection between hygiene education / provision of water and sanitation facilities on one hand and the production and distribution of affordable soap on the other hand. Industry stands to gain by selling more soap through an expansion of their market into more households and by better market penetration towards poorer households. Public agencies stand to gain by involving soap manufacturers in their programs aimed at improving the quality of life by reducing morbidity related to improper hygiene practices.

2. Objectives of the Consultancy

To assist DIGESA, WSP and the partners in establishing an effective public-private partnership for a successful handwashing initiative. The coordinator will be expected to coordinate all activities of the partnership and manage the planning and implementation of agreed activities during the initial phase of the process. The end result of this first phase is the submission of an approved business plan and communications strategy.

3. Scope of Services
The consultant will perform the following services:

- Promote effective partnership relations between the private, public, NGO and external agencies on the handwashing initiative, with a special focus on establishing credibility and mobilizing technical input from the private sector.
- Liaise with the global team to obtain information and expertise of the global and other country initiatives.
- Conduct background study on existing hygiene studies and reports on hygiene promotion (particularly handwashing practices) programs in Peru.
- Collect additional information on the market situation, with particular reference to the poorer segments of the population.
- Identify potential research firms, and co-ordinate the planning, consultant recruitment and implementation of the consumer study.
- Complement the situation analysis by integrating the results of the three studies (background, market and business).
- Develop a draft business plan and communications strategy as an iterative process, seeking input from the partners.
- Raise funds to cover activities of the business plan.
- Solicit comments and submit final approved plan and budget.

4. Approach

The consultant will work closely with key WSP and DIGESA staff and other partners to build consensus on the direction and scope of the PPPH Initiative through participatory arrangements. Initially the consultant will build trust with the stakeholders by embarking on one to one contacts. Appropriate strategies have to be adopted to generate and sustain the interests of all stakeholders in the PPH Initiative.

5. Output

The consultant is expected to deliver the following:

- A situation report on the soap market and hygiene promotion programs targeted to the poor, conducted by private, NGO and public sectors in Peru.
- Organise meetings and coordinate PPPH Steering Committee (formation will be the responsibility of WSP and DIGESA)
- Provision of oversight to ensure the quality of the consumer study
- Draft business plan
- Final business plan which considers partner comments and commitments

6. Client Input

WSP will provide the consultant with an office space and the necessary communication tools to perform the job. The consultant is expected to provide their own computer. WSP and DIGESA will introduce the consultant to the relevant network of contacts and provide continuous backstopping to strengthen inter-agency relationship building.

7. Reporting
The consultant shall report to the WSP Country Program Coordinator and work closely with the Director of DIGESA and his staff. All reports should be copied to DIGESA. The consultant will submit brief monthly progress reports and the following month’s workplan.

8. **Level of Effort and Duration of Assignment**

The consultant shall initially be engaged for six months of work over a ten-month to completed the first phase of the PPP process. The assignment could be extended to the next phase of work based on performance and funding availability.

9. **Qualification**

The consultant shall have a solid experience working in the private sector in the area of marketing and/or business development preferably with fast-moving consumer goods. The consultant should have proven expertise in developing marketing plans and communication strategies aimed at behavioral change. Familiarity in dealing with market research and communication agencies is a must. Additionally, the consultant should have excellent interpersonal skills and ability to work with all partners in order to act as an effective catalyst. It would be extremely advantage for the consultant to be conversant in English.

10. **Selection process**

Short-listed consultants who meet the qualifications criteria will be invited to an interview with WSP and DIGESA staff. The final selection will be based on the consultant qualifications, the proposed approach to the work, and the financial proposal.
Annex 2 to annex 1. TOR for consumer research,

**Terms-of-Reference**

**Consumer Research**

1. **Background**

Diarrhea kills about 2 million children every year. Human excreta is the source of most diarrheal pathogens. Handwashing, safe stool disposal, and ensuring water quality are generally recognized as the three key hygiene behaviors that can reduce diarrheal disease. Evidence suggests that improved handwashing in particular can have a major impact on public health in any country and can significantly reduce two leading causes of childhood mortality, diarrheal disease and acute respiratory infection. Washing hands with soap at the right times can reduce instances of diarrhea by 35 - 50%\(^1\). Evidence also suggests that handwashing with soap can reduce acute respiratory infections by 30% (Rabie 2003).

The World Bank and the Water and Sanitation Program, the London School of Hygiene and Tropical Medicine (LSHTM), the Academy for Educational Development, and the private sector, in collaboration with USAID, UNICEF, and the Bank-Netherlands Water Partnership are implementing a global initiative aimed at promoting the use of handwashing with soap in developing countries.

Note: this document concerns formative research only. Separate monitoring and evaluation (M&E) studies will be executed for the purposes of documenting the impact of the program.

3. **Objectives of the assignment**

This formative research will enable the partners to design an appropriate handwashing campaign. Therefore, the main objective of this research is to develop the insights needed to design an effective communication program to promote handwashing with soap.

The specific objectives of the assignment are:

To record current handwashing practices and their context,
To understand what drives and facilitates handwashing in communities,
To identify target audiences, and
To document current channels of communication.

4. **Methods**

The study requires the employment of both quantitative and qualitative research techniques and may include focus group discussions, behavior trials, structured interviews, and structured observations for data collection as set out in the table in section B of the annex), as well as the compilation of available routine data.

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Detailed study designs will be proposed by the contracted agency and finalized in collaboration with the Bank (client) or technical advisor designated by the Bank, and with the technical support of the partnership. A methodology for formative research techniques is explained in the booklets “Happy, Healthy and Hygienic” (UNICEF/LSHTM 1998).

5. Responsibilities of the contracted agency
Reporting to the World Bank Task Team Leader, the contracted agency will be responsible for the following:
- Detailed study design in collaboration with the Bank and their technical advisors.
- Set up and manage the study
- Logistics arrangements, i.e., travel, accommodation, allowances, communications, and stationery
- Quality Assurance
- Analysis of the results
- Production of a final report in 10 copies

It is the responsibility of the agency to recruit, train, and supervise a suitable team of field workers.

The Global Partnership will provide technical support to the agency at key stages of the assignment, which may include: the appraisal of technical submissions; review of proposed detailed study designs and guidance from prior experience; assistance with the training of field workers during piloting of instruments, fine tuning and finalizing of proposal; monitoring of the quality control system to evaluate progress and refocus if necessary; review of first draft report and recommendations for production of the final report.

6. Qualifications and selection of the contracted agency
The contracted agency will be a professional consumer or market research organization with a proven track record in conducted consumer and behavioral research. The team will need to demonstrate their members’ experience both in quantitative and qualitative research techniques. Commercial/industry sector experience is essential.

The qualifications of the proposed study team will make up a part of the submission and should be as follows. The agency can use up to 25% of the contract amount to use local sub-contractors:

1 statistician and 1 social scientist or Anthropologist with:
- Track record on qualitative and quantitative surveys,
- Familiarity with industry,
- Experience in cleaning products, and
- Knowledge of the local language.

Field workers should
- Have at least one year of experience of field work,

and
- Be fluent in local languages (as appropriate).

The firm will provide a detailed plan for the management and quality assurance of the study and justify the proposed staffing.

7. Final products
The final products include:
- Cleaned and fully referenced electronic data sets in an agreed format with copies of the original data collection forms
- Full transcripts of all in-depth interviews and focus group discussions in an electronic format
- A document in 10 copies with detailed findings
- An 8-page illustrated summary document suitable for general consumption and an electronic version of the summary document suitable for posting on websites
- A presentation of results at stakeholder workshop.
The main report will include the following chapters:

I. Approach
II. Methods
III. Implementation schedule
IV. Results set out using the framework of table in section A of the annex
V. Conclusion and recommendations

The report will contain graphics when needed. Annexes will contain all relevant background information for the study that is not necessary in the body of the report.

8. Time schedule
The major tasks and deliverables are scheduled as follows:

<table>
<thead>
<tr>
<th>Tasks and Deliverables</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set up and training</td>
<td></td>
</tr>
<tr>
<td>Inception report with refined methodology and pretested materials</td>
<td></td>
</tr>
<tr>
<td>Field survey</td>
<td></td>
</tr>
<tr>
<td>Analysis</td>
<td></td>
</tr>
<tr>
<td>Draft report and presentation and stakeholder workshop</td>
<td></td>
</tr>
<tr>
<td>Final report with 8 page summary</td>
<td></td>
</tr>
</tbody>
</table>
**Section A: Framework of variables and data collection techniques**

The following sets out the framework for the formative research on handwashing and is intended as guidance for the agency in designing and conducting the research.

<table>
<thead>
<tr>
<th>Issues</th>
<th>Data Source/Method</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. What are current handwashing practices?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 What are the handwashing practices of child care givers (at key junctures)?</td>
<td>Quantitative representative sample on handwashing practices using Structured Observation</td>
<td>Note 1: Refer to M&amp;E framework. Note 2: The specific occasions for handwashing to be recorded depend on the exact objectives of the handwashing program. Note 3: Structured observation needs to be designed to capture all handwashing events at key junctures.</td>
</tr>
<tr>
<td>1.2 What are handwashing practices of other family members (at key junctures)?</td>
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<tr>
<td>1.3 What soap (laundry versus beauty soap) or other agent is being used?</td>
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<tr>
<td>1.4 What is the source of water?</td>
<td></td>
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<tr>
<td>1.5 What is the immediate placing of soap?</td>
<td></td>
<td></td>
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<tr>
<td>1.6 How do people dry their hands after washing?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2. What drives and facilitates handwashing?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 Drivers</td>
<td>Behavior trials</td>
<td>Note 4: A driver is a psycho-social motivator or inhibitor for hygiene behaviors and can be either positive or negative. Note 5: When noting drivers for hygiene behaviors it is necessary to note motivators for –general hygiene, bathing, handwashing (without soap) and handwashing with soap separately, paying particular attention to handwashing with soap. Note 6: Probe meaning of ‘clean’ and ‘dirty’ – are these defined visually, by feel, smell, or concepts of moral purity? The environment refers to the external conditions that facilitate or hinder handwashing with soap. See the annexed note on Handwashing Motivation (annex 3). Training on handwashing motivation and concept ranking needed.</td>
</tr>
<tr>
<td>What motivate domestic hygiene, bathing and handwashing with soap?</td>
<td>In Depth Interviews including with school kids (about 12 years old) Focus group discussions (FGDs)</td>
<td></td>
</tr>
<tr>
<td>After what is handwashing practiced? – With/without soap?</td>
<td></td>
<td></td>
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<tr>
<td>Specific cues and occasions for people to wash their hands.</td>
<td></td>
<td></td>
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<tr>
<td>Reasons for not using soap at key handwashing junctures? i.e , psycho-social inhibitors to soap use – cost, smell, drying of skin…</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How and when was handwashing learnt?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Who taught it?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What are the attributes of a good handwashing soap?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brand ranking of both soaps &amp; their attributes for handwashing (ask why ranked like this) and of handwashing practices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ranking of hypothesized drivers/concepts (status, nurture, disgust, aesthetics, attractiveness).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Images/beliefs concerning cleanliness/dirtiness, healthy/non healthy person, hygienic/non hygienic…</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rules for soap use within the household</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2.2 Environment</strong></td>
<td>Household survey</td>
<td></td>
</tr>
</tbody>
</table>
| Water supply: Where, Type, Access (cost, distance, who), Storage | Structured observations  
In depth Interviews  
FGDs |
| Sanitation facilities: Where, Type & Access (including for children), Presence of fecal material in the yard?  
Handwashing facilities: What is it? (probe)  
Where is it?/availability - Distance from toilet, Storage place of soap, State, Access |  |

3. Who are the target audiences?  
3.1 Who buys the soap?  
3.2 Who decides about soap buying?  
3.3 Who influence the buyers and decision makers?  
| FGDs  
In depth interviews  
Household survey |

4. How target audiences communicate?  
Exposure and reach of all channels of communication including modern and traditional  
| Household survey  
FGDs/In-depth interviews (IDIs)  
Commercially available media data |

4.1 Time spent and media consumption moments (quantitative data)  
| Note 7: Allow costs of consulting commercial databases. |

4.2 Reach of all traditional channels of information?  
4.3 Reach of government channels of communication?  
4.4 What programs do they like and why?  
what do they remember? (qualitative data)  
4.5 Which adverts do they know and like, and why?  
4.6 Which communication channels do they find the most credible?  
| Households surveys  
FGDs/IDIs |

Note 8. Traditional channels may include churches, social organizations, women’s groups, markets, local events etc. Government channels include contact with health services (e.g., vaccination coverage, maternity and post natal care), schools, agricultural extension, local authorities etc.
Section B: Definitions of Research Tools

Household Survey: Designed for a representative sample of mothers/caregivers and children under five.

In-Depth Interview: Qualitative one-to-one interview with fully recorded transcript using a discussion guide.

Behavior Trials: Volunteers asked to adopt handwashing with soap over a two-week period and then interviewed.

Structured Observation: Systematic technique for observing and recording particular practices in order to quantify them directly and monitor the impact of the program. It requires careful planning, detailed piloting, training, follow-up and quality control.

Checklist Observation: A list of all behaviors putting children at risk of diarrhea. The list should note behaviors (who, what, when, where) observed in the household. Results are used to design study instruments.

Focus Group Discussions: Interviews with small groups of relatively homogeneous people asked to reflect on the interviewers’ questions, provide their own comments, listen to what the rest of the group has to say and react to their observations. It requires a skillful facilitator guiding the discussion, cross-checking each participant’s comments, and ensuring an even participation from all members.

Note: All instruments should be translated, back translated, piloted, and tested.

**Section C: Note on Handwashing Motivation**

Previous research suggests that handwashing behavior is motivated by psychological drivers, habits, and the environment (Curtis 2001). Drives can be both positive and negative. Positive drivers usually include:

- **Nurture**: the desire to care for children. This is often related to health, as outlined below.
- **Status**: A wish to appear clean for the sake of social status and dignity.
- **Aesthetics**: A desire to look and smell good, to be attractive to others, and please oneself. *(N.B. These last two drivers in particular can be considered as linked.)*
- **Disgust**: An instinct to avoid and remove anything disgusting, which includes sensory cues (olfactory, tactile, visual: such as the sight of stains, feeling of stickiness on hands, bad smells, or a feeling of contamination, both actual or imagined). It is important to know which of these cues plays the greatest role in the disgust instinct in order to direct handwashing promotional messages. There appears to be a strong correlation between the objects of disgust and the sources of infection and disease faced by our ancestors, thus the disgust instinct may be closely linked, according to Curtis (2001) to:

- **Health**: Consumers often explain handwashing as a desire to avoid germs and disease. However, the usefulness of this explanation in behavior change programs is not clear (see note). Often concepts of good health are linked to the nurture instinct and the desire to protect one’s children from disease.

Note that the underlying motivator may be more to create an ordered, balanced life that leads to success and well-being, rather than behavior calculated from an intellectual understanding of the mechanisms by which particular microbes cause specific diseases. Germs are also thought of as invisible beasties that are disgusting and so need removal.

Negative drivers include laziness, a desire to do something else that conflicts with handwashing, a wish to avoid soap because of the perfume, beliefs surrounding links between sensory cues, and the presence of “germs” and disease-carrying agents.

Habits are behavioral routines that are laid down often early in life and are semi-automatic. The external environment can facilitate or hinder handwashing. For example, where soap and water are readily available, handwashing with soap is more likely, whereas if the toilet is situated far from the house and handwashing facilities, handwashing after the toilet may be less likely.

**References**

Annex 2

Rural Water Supply and Sanitation Project Red River Delta
Comments and suggestions on hygiene promotion and sanitation
Val Curtis, May 2005

1. Background: The project
Phase 1 of the RRD RWSSP is to be implemented in about 120 communes of the provinces of Nam Dinh, Ninh Binh, Thai Binh and Hai Duong over the period 2005-2010. Using an APL, the project has four components: to support the construction of piped water schemes and provide revolving funds for sanitation; to encourage hygiene and sanitation behaviour change; to strengthen the capacity of community and local government institutions; and management, monitoring and evaluation.

The project is at negotiation stage and work is expected to start in the third quarter of 2005.

This mission did not visit the Red River Delta area. Proposals and comments are therefore based on reading documents, information from project staff and general impressions from visiting water and sanitation projects around Vietnam. The project is at an advanced stage of preparation, hence recommending major alterations to the approach, as set out, would not be useful. However, some modifications in emphasis are possible within the context of what has already been agreed and these are set out below. The most important shift proposed is to transform the planned KAP studies into prior formative research so as to have the data needed to design more effective interventions in hygiene and sanitation and to measure their impact.

It is also recommended that a close link be forged between this project and any efforts to set up a national hygiene and handwashing programme. Since this project is likely to be the first in a new generation of work on hygiene in Vietnam, any investment in developing the strategy, and in learning about hygiene and sanitation in Vietnam will be doubly worthwhile.

2. Hygiene and sanitation in the RRD RWSSS project
A comprehensive section on hygiene and sanitation has been prepared by a number of consultants for the PFS document. The document describes the importance of hygiene and sanitation behaviour change for health. It offers a wide range of strategies that vary from community participation through to pure market approaches. The document reflects the fact that there is no agreement in the sector about which approaches work best, and represents an attempt to ‘get the best of all worlds’. It blends, the Total Sanitation approach, which has helped improve sanitation coverage in Bangladesh, with the sanitation ladder and informed choice, which has worked well in Indonesia, with sanitation marketing, which is showing promising results in Vietnam, with provision of revolving funds, which have also been well received in Vietnam. In hygiene it adds PHAST approaches, as well as social marketing and private sector links to standard IEC as currently practiced in Vietnam.

Clearly this is problematic. Whilst components of the approach make sense individually, they do not come together as a coherent strategy. However, adding one more attempt to rewrite the document at this late stage would not be helpful. Instead, I propose to set aside the issue of which strategy is best to adopt, and focus on one of the first steps as proposed in the document, that of formative research. The results of this will illuminate the best routes to follow. Funds are already allocated to preliminary studies but these ‘KAP’ surveys have not yet
been designed or commissioned. By transforming this step into solid, detailed and focused consumer research into hygiene behaviour and sanitation in the project areas, we can set out the key problems to be addressed. This will provide a guide map for the next stage, which is to develop a strategic approach towards solving them.

3. Proposals

Pages 81 and 82 of the RRD RWSSP PFS set out a route map for hygiene promotion activities. Formative research is proposed for month 3. It is not clear how this related to the KAP surveys that have also been mentioned, but as suggested, one coherent consumer survey is likely to be the best option. The following diagram sets out a design for this research (I call it consumer research, basically the same as formative research, in other words, research aiming to form a programme).

There is now considerable international experience with carrying out consumer research to design hygiene promotion programmes, on handwashing in particular. This is set out and described in the Handwashing Handbook which is available at http://www.globalhandwashing.org/. Sample TORs for the work are set out in annex to this document. We have found that working with private sector market and consumer research companies is an effective way of getting good results. However, it is vital that they work under close supervision, since results may otherwise be superficial, reflect pre-conceived ideas about hygiene, or not address the right questions.

The results of such research in other countries shows that handwashing with soap is likely to be very low, that key barriers to handwashing with soap after fecal contact are likely to be the fact that hands often do not become visibly contaminated, but not lack of soap, which is found in almost all houses. Motives for HWWS usually include the desire to act in a caring manner towards children, to be seen to be clean and to avoid materials that are found to be disgusting.

Following the consumer research, a key group of stakeholders and implementers needs to review the results and develop a coherent hygiene promotion strategy similar to the one envisaged in annex 1, but at project level.
<table>
<thead>
<tr>
<th>Objective</th>
<th>Questions</th>
<th>Methods</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Characterise existing hygiene problems</td>
<td>What are current risk practices? (including handwashing with soap, stool disposal and household water handling)</td>
<td>Structured observation and spot checks N=400</td>
<td>Survey Tools can be found in the Handwash Handbook Serves as baseline</td>
</tr>
<tr>
<td>What are routes to behaviour change?</td>
<td>What are the motives and barriers to behaviour change (eg HWWS, safe stool disposal, household water treatment)</td>
<td>Behaviour trials and in-depth interviews N=20</td>
<td>ditto</td>
</tr>
<tr>
<td>What are the best ways to communicate?</td>
<td>What routes of communication reach target audiences?</td>
<td>Commercially available figures (if any). Household comms survey women, men and children N=100 each</td>
<td>ditto</td>
</tr>
<tr>
<td>Characterise existing sanitation problems</td>
<td>What is rate of sanitation coverage? What types of toilet?</td>
<td>Household survey N=400</td>
<td>Serves as baseline, indicates scale of problem if some types are unsuitable</td>
</tr>
<tr>
<td>Demand for toilets</td>
<td>What are the levels of intention to purchase/upgrade by segment?</td>
<td>Demand tool</td>
<td>Draft can be supplied</td>
</tr>
<tr>
<td>Barriers to acquiring household sanitation</td>
<td>Barriers may include credit availability, legal issues, problems with suppliers, designs?</td>
<td>Market assessment tool</td>
<td>Draft can be supplied</td>
</tr>
<tr>
<td>Demand for emptying</td>
<td>What is emptying history, intentions, willingness to pay?</td>
<td>Market assessment tool</td>
<td>Draft can be supplied</td>
</tr>
<tr>
<td>Schools</td>
<td>What sanitation and handwash facilities are provided?</td>
<td>Schools tool</td>
<td>Draft can be supplied shortly</td>
</tr>
<tr>
<td></td>
<td>What can make teachers and kids change their behaviour?</td>
<td>Schools tool</td>
<td></td>
</tr>
</tbody>
</table>

Table 2  Study to assess the hygiene and sanitation problem and identify solutions
4. Recommendations
Though the project design currently looks confusing and complicated, there should ultimately be only one issue: how to change hygiene behaviour and how to show that that change has occurred?

Project leaders need to focus on developing simple, coherent and effective messages delivered in concert through a variety of channels, using the best possible approaches that can be afforded. This means involving the main stakeholders in developing the approach, hiring professional agencies to develop effective strategies and tools based on the results of the consumer research. It means designing an investment strategy that optimizes impact based on the capacities of the different actors and channels of communication to deliver them.

It is difficult to know how much room for manoeuvre there is in this project now that funding levels have been agreed.

5. Capacity development
One reason for the continuation of the ‘old’ approaches to hygiene promotion is the lack of capacity to develop new ones. With the publication of the new ‘Handwash Handbook’ (www.globalhandwashing.org) more modern approaches to hygiene communication are set out. Those now working in this sphere will be able to adopt at least some of the new methods. Clearly it will not be possible to adapt the whole approach to the context of the RRD RWSS since a number of funding commitments have already been made. When a national handwash coordinator with experience of strategic communication is appointed they should be able to advise.

Running the consumer research is a specialized job. When a handwash coordinator is appointed they should be able to assist with adapting the approach as far as is reasonable to the context of the project and the commitments that have already been made. The PPP-HW team in Washington may be able to offer technical support.
Annex 3

Three Coastal Cities Environmental Sanitation Project
Hygiene and Household Sanitation Component

Concept Note
Val Curtis,
May 2005

1. Introduction and Background
The World Bank proposes to support the Government of Vietnam to upgrade environmental sanitation in the coastal cities of Nha Trang (population 270,000), Quy Nhon (Pop 230,000) and Dong Hoi (Pop 95,000). The development objectives of the CCESP are (a) sustained improvement to public health, and (b) increased economic development by reducing the incidence of flooding; upgrading the urban environment; and developing more efficient and financially sustainable sanitation and drainage companies. The project is at feasibility study stage. Preparatory work so far has concentrated on waste water, sewage systems, flood control and institutions and finance. The purpose of the present mission was to explore the potential for enhancing health through better hygiene and household sanitation and to make proposals. The mission spent 2.5 days in Quy Nhon and did not visit the other cities. Proposals here are based on the assumption that issues are similar in the 3 cities.

2. Basic Principles in Household Sanitation and Hygiene
The proposals in this concept note stem from the following five principles:
1/ Human excreta are the source of most gastro-enteric diseases (diarrhoeal diseases, including cholera, typhoid and worms). By understanding how humans come into contact with human excreta we can understand how to prevent disease (Curtis, Cairncross et al. 2000).
2/ Sanitation provision and use. Removing human excreta, including children’s stools, from the domestic environment is therefore of the highest importance.
3/ Handwashing with soap after contact with fecal matter can prevent 47% of gastro-enteric diseases (Curtis and Cairncross 2003) and is the hygiene behaviour with the strongest documented health impact.
4/ Household water treatment. If human excreta enters water that is then consumed without filtration or boiling, this can also constitute a source of infection.
5/ Household-centred approach. If health gains from urban environmental upgrading programmes are to be maximized it is important to focus on the household, the site of most health risk, and work outwards, rather than having an exclusive focus on urban infrastructure (Bellagio principles, 2000).
6/ Market-oriented approach. Subsidies (including subsidized credit) create distortions in the market, and are not sustainable. Public funds should rather serve to oil the wheels of the market, eg by creating demand.

3. Health in Quy Nhon
According to the provincial authorities, diarrhoeal diseases remain the biggest disease problem for children in the city. However, the situation is improving, and respiratory infections are becoming the bigger problem. If ARI rates are typical of urban Vietnam there will be a 2 week prevalence of 14 per 100. Urban diarrhea rates are low according to the DHS survey of 2003, at 3 per hundred 2-week prevalence. Data were collected in October/November at the end of the rainy season. Mothers know how to treat diarrhea at home and it is rarely fatal. Neither cholera nor typhoid have been recognized in the city, but Ascaris worm infection is frequent. No detailed community surveys have been carried out. It could be argued that diarrhoeal infection is too low to worry about bringing it down further, however, this still represents 150,000 episodes per year in children under 5, that can be prevented, in the three cities. This disease burden has economic costs as well as to child health and growth.

The health authorities report some cases of Dengue fever and Japanese encephalitis. Dengue may be being transmitted in the city via the *Aedes aegypti* and *Ae albopictus* mosquitoes. These are day-biting and breed in containers, which, in urban areas, means domestic containers. Bednets are not helpful in preventing bites. Clean up campaigns can help, but the main reason for this problem is habit of keeping water in big pots outside the house. Solutions involve changing water storage habits and the use of copepods in village water storage which has been pioneered in Vietnam, and seem to work well. Japanese encephalitis is a very unpleasant disease, but largely confined to rural areas, so city cases may be imported. Before any measures are initiated, more data is needed on the extent of Dengue and JE.

They have been many outreach activities on communicable diseases, including AIDS, and the vaccination programme. The health team were familiar with the idea of social marketing, and were enthusiastic about the idea of a professional communications approach to enhance existing IEC activities.

4. **Hygiene and Household Sanitation in Quy Nhon**

**Household sanitation** No detailed surveys of household sanitation or hygiene were located in Quy Nhon. According to a survey by the central statistical office carried out in 2003 for the city:

- a. 67% have toilet with septic tank
- b. 17% have latrine with no tank (eg pit or sulabh type)
- c. 16% have no toilet.

Toilet provision is very varied by commune, with outlying areas (lagoon front, mountainside, island and peninsula, and rural communes) having the worst toilet coverage- about 50%. In the center coverage is over 90%. It is hard to get a sense of how good the coverage figures are. There was no breakdown by Phuong/commune available at the time of my visit.

The Quy Nhon PFS states that “Existing sanitation facilities … mainly consist of septic tanks with either percolation facilities or direct discharge to the existing drainage network (60%). Grey water is normally infiltrated into the ground or discharged to the drainage network.” It is widely thought that infiltration from toilets is harming groundwater quality, which provides water sources to many households. Again this is thought to be the case all over Vietnam, but I was unable to tell on what evidence this view was based. It would clearly be a waste to encourage the upgrading of household toilet systems if this was not going to contribute to improving ground water quality.
The Women’s Union encouraged the construction of 947 household latrines in poor areas in the last two years with 1692m dong from ADB lent at 0% interest. Funds are now fully spent, and the principal almost all returned to the project PMU. (It was not clear why the project required the funds to be repaid, rather than leaving them for continued activity. There is still a substantial unmet need for household toilets in the town and the WU estimate that at least 5000 households still want credit to build latrines. Because credit rates were so favourable, the fact that cheap loans are no longer available has stifled current demand for toilets.

Households visited that had toilets all had pourflush pans and adequate water supplies to operate them. Septic tanks were in varying states of repair and fullness. Beachfront stilt housing was the most unsanitary, with direct discharge to beach and sea, cleaned by the tide. This housing is due for clearance*

Note. Water supplies are sufficient for hand or mechanical flushing to be standard. Wastes go either to sewers or on-site septic tanks.

**Septage disposal**

The PFS states that “URENCO operates a septage collection service with three (3) vacuum trucks. The septage is typically disposed of at the solid waste dumpsite.” My interview with URENCO suggested that there are two 3m³ tankers, one 20 years old, one six, each averaging one pit emptying per day, and now having to travel to the new waste site, as the local one is closed. Private contractors empty septic tanks in the 60% of the city that cannot be reached by these tankers because the alleys are too narrow. It is not at all clear what these private operators do with the septage, they operate at night and it can be assumed that they do not push their handcarts 22km there and 22km back to the municipal site. URENCO charges 67,000D/m³, effectively 100,000D per tank emptied. Private operators charge twice this. URENCO doubt that there is potential for this business to be privatized, as in HCMC and Ha Noi, but this possibility should certainly be explored further.

Public toilets are not generally thought to be a good idea for household sanitation solutions. Children often do not use them, they are inconvenient and a disincentive for building home toilets. The decision whether to invest in more public blocks in Quy Nhon should only be taken after finding out about the usage patterns, operations and acceptability of the current 5 blocks.

**Hygiene:**

There were no studies on hygiene available in Quy Nhon. From visiting a small number of households it seems that:

- mothers know about handwashing with soap after the toilet, but it is rarely practiced
- bar soaps are seen as being for body washing and may be conserved carefully as a luxury item and not ‘wasted’ on handwashing (see table 1)
- when they are dirty after preparing food for example, hands can be washed with dishwash liquid
- powder soap is available in all homes for laundry, and is occasionally used for washing hands
• there are no major barriers to HWWS after the toilet. People have simple washstands where soap can be conveniently placed, even tin cans fixed on walls, and water is almost always available near the toilet point.
• mothers claim to boil drinking water
• If water is highly fecally contaminated, as suggested above, then home water treatment could be a priority
• children use potties from an early age (about 6m). Pot contents are emptied into toilets. Babies are clad in home made nappies made from old cloths which are washed out and re-used.

Soap availability
Soap is widely available throughout Quy Nhơn. Table 1 gives the soap brands, formulations and their prices on the market in Quy Nhơn.

5. Communications in Quy Nhơn and the coastal cities
Any effort to change behaviour or communicate with the public in the Coastal cities will require understanding how people communicate. No studies of communications channels in Quy Nhơn or the coastal cities were located. However, the following were identified from discussions with households, authorities and the City radio station:

1/ TV ownership is high in Quy Nhơn. If Quy Nhơn is similar to the national picture for urban centres it will be at least 90%, with 95% regularly watching TV (VNDHS, 2003). There are three national channels, of which channel 2 carries provincial TV for several hours each morning and evening. TV1 and TV3 carry advertising.

2/ Radio ownership is lower than TV. Urban national figures put this at about 65% (VNDHS, 2003). There is one national network and in addition Provincial and commune level broadcasting on separate channels. All carry advertising as well as Government communication and entertainment.

3/ Loudspeakers. Every commune has a network of cabled or shortwave loudspeakers for announcements twice a day. Most people can hear them.

4/ Press. 61% of urban women in Vietnam regularly read a newspaper (VNDHS, 2003)

5/ Women’s Union. Whilst no figures are available, membership is less complete in urban than rural areas. The WU has an extensive network capable of reaching and visiting each woman in the city.

6/ Health system. Contact with the health system is good. If Quy Nhơn resembles the national picture 66% will have been exposed to education about Sanitation and 85% about AIDS. Over three quarters of pregnant women will have attended for antenatal care at least twice and 99% of women will have given birth in a health facility. 87% of urban children will have been completely vaccinated.
<table>
<thead>
<tr>
<th>Format</th>
<th>Brand</th>
<th>Size</th>
<th>Cost (VND)</th>
<th>Maker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bar</td>
<td>Lux</td>
<td>90 g</td>
<td>5,500</td>
<td>Unilever</td>
</tr>
<tr>
<td></td>
<td>Co May</td>
<td>120 g</td>
<td>3,500</td>
<td>My hao Company</td>
</tr>
<tr>
<td></td>
<td>Ca-may</td>
<td>125 g</td>
<td>6,500</td>
<td>Procter and Gamble limited company in Vietnam</td>
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<td></td>
<td>Lifebuoy</td>
<td>100 g</td>
<td>4,500</td>
<td>Unilever</td>
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<td></td>
<td>Dove</td>
<td></td>
<td></td>
<td>Unilever</td>
</tr>
<tr>
<td></td>
<td>Protex</td>
<td></td>
<td></td>
<td>Procter and Gamble</td>
</tr>
<tr>
<td>Dish liquid</td>
<td>Thanh Nhan dish liquid</td>
<td>300 g</td>
<td>2000 VND</td>
<td>Thanh Nhan workshop, 17 A nguyen Trai Str, Quy Nhan</td>
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<td></td>
<td>My Hao dish liquid</td>
<td>1000 g</td>
<td>7,500</td>
<td>My Hao beauty chemical company</td>
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<td></td>
<td></td>
<td>5000 g</td>
<td>30,000</td>
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<td>250 g</td>
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<td>Sunlight dish liquid</td>
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<td>6,500</td>
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<td>1800 g</td>
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<td>Lix powder company in Ho Chi Minh and i in Hai Phong</td>
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<td>Skylight</td>
<td></td>
<td></td>
<td>Unregistered company</td>
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<td>Detergent</td>
<td>My Hao liquid for cloth washing</td>
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<td>30 g</td>
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<td>Omo powder</td>
<td>3 kg</td>
<td>47,000</td>
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<td></td>
<td></td>
<td>1,5 kg</td>
<td>26,500</td>
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<td></td>
<td></td>
<td>800 g</td>
<td>14,500</td>
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<td></td>
<td></td>
<td>150 g</td>
<td>3000</td>
<td></td>
</tr>
<tr>
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<td>500 VND</td>
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Table 1. Soap on the market in Quy Nhon
6. Proposals
In view of the above situation it is essential to get more information (see proposal 5). However, in the meantime, consideration should be given to incorporating the following activities into the design for the Coastal cities project.

1. Set up a ‘Clean, Healthy Cities’ partnership. The objectives are to:

- focus attention on improving the cities by all stakeholders
- bring about behaviour change in hygiene, toilet acquisition and emptying, waste disposal and other practices, as needed.

A communications coordinator for each city should have the task of developing relationships with all stakeholders, both public and private. The objective is to focus activities on a few key goals. For example, the Ministries of Health, Education, the Women’s Union and the local media work together with local and international soap companies to develop a healthy city brand image. This is then used as a platform to campaign on important issues, such as the civilizing or status value of acquiring a latrine, the importance of washing hands with soap, the need to take wastes to the appropriate sites. Each message will need at least 6 months of intense work before moving on to another. It should be noted that the Daso Saop Company operates out of Bing Duong province, and Unilever has already supported hygiene activities in Quy Nhon schools.

The role of the communications coordinator is to establish and communicate the shared vision of the project to all partners, stakeholders and the population, commission and analyse the results of research into the communications needs of the project, decide on the key messages that need communicating to the public, liaise with non-engineering stakeholders such as press, TV, Women’s Union, schools and the private sector, provide PR services when needed. The post should be well worth the investment since it should result in galvanizing all concerned authorities around the aims of the projects, thus adding substantial value.

Clearly there will be a temptation to load the new communications vehicles with many messages. However, this will not be effective. Trying to change several behaviours at once is ineffective and not the good use of resources it may at first seem. At a maximum one message should feature intensively for six months before changing the focus. In terms of public health effectiveness, the priorities are likely to be these:

- Handwashing with soap
- Acquiring a latrine
- Ensure that children’s stools are disposed of safely.

For environmental aesthetic and tourism reasons, the disposal of household waste is also likely to be a priority, once a system has been established for citizens to use. One overall, easily recognized, brand for each city should be developed. This serves as an umbrella for further communication. The coordinator might work across the 3 cities but it does not make good sense to have one overall 3 cities brand, each city will need its own, reflecting its own character and objectives.
2. Programme to promote **household sanitation acquisition and upgrade**. The objectives are to:

- Get household toilet coverage in the whole city up to 90% from 84%
- Ensure that all sanitation solutions are hygienic, i.e., they have septic tanks and do not discharge septage to the ground or drainage channels.

The current proposal to extend credit to the Women’s Union to offer loans for sanitation is good and has worked well here, and elsewhere. The issue that remain to be resolved is the rate of interest. At the current ADB rate of 0% in Quy Nhon the WU operates the credit at a loss, effectively providing a subsidy. Some people are building toilets using local credit (with rates as high as 25% pa.). There is a new government initiative for the Social Development Bank to provide credit at a more realistic 0.6% pm. However, early results in pilot provinces suggest that uptake is not good due to the bureaucracy of having to deal with both the WU and the Bank. Rates offered by the project should tend towards the sustainable commercial rates.

The IDE model of promoting sanitation as a business without the use of subsidy is worth considering further, since it suggests that credit may not be a limiting factor for many sectors of the audience. However, the project team has had great success with the approach of loans through the Women’s Union, and wish to continue down this line. This approach has the added advantages of being a well-understood model in the city of Quy Nhon and that WU members become Sanitation promoters because they are keen to offer loans.

The WU may need support in becoming more effective in sanitation promotion. In particular they could use a package of high-impact communications materials, and possibly mass media support. The consumer survey should identify the key drivers for sanitation acquisition and from this, develop strategies and materials that activate these drivers.

The communications component of the project should work to support the toilet promotion efforts of the WU. The WU in Quy Nhon think they could manage a bigger programme, so consideration should be given to increasing the total available in loans.

A harder problem may be the need to upgrade ‘unhygienic’ toilets. This should form a particular focus of the preliminary study. A clear definition of what is meant by ‘unhygienic’ is needed. At the moment water supplies are plentiful and septic tanks fill up in 10-20 years. In theory septic tanks are sealed and do not discharge septage to the ground, however, it is likely that many leak. It is commonly thought that the many household wells are polluted by leaking septage. It might be advisable to carry out a microbiological study of well water to give some indication of the magnitude of the problem. This will not be conclusive as it is often hard to be sure that microbial contamination is from sewage, because indicator organisms live in the environment in many tropical countries, and because contamination may originate from other sources. However, gross pollution will indicate the need for a major effort to avoid ground water pollution on one, or all of the 3 cities.
3. Ensure timely and efficient **septage collection** and disposal. The objectives are to:

- Establish septage collection as a business
- Free URENCO from day to day operations to take on a monitoring and enforcement role

This can be achieved by putting the license for septage collection out to tender. Businesses that tender for the work will need to demonstrate their ability to reach the parts of the city not currently covered, their ability to haul waste to transfer stations and from there to Municipal disposal sites. There are no transfer stations at present, hence the company would need to propose how to site these. They will need to demonstrate an ability to advertise their services to potential consumers and to manage a collection business efficiently and following all relevant regulations. Putting septage collection out to tender will require changes in regulations and study of the experience of cities where this has been done successfully already, eg HCMC and Ha Noi.

4. **Schools programme.** The objectives are to:

- Ensure that all schools in the three cities have adequate toilet provision for girls, boys and teachers
- Ensure that all schools have handwash facilities
- Ensure that hygiene is taught and practiced in all city schools.

It would be unforgivable for this project to complete without having tackled the issue of school hygiene and sanitation. Intervening in schools is simple, and effective. Unicef have considerable experience in intervening in schools in Vietnam and can provide advice on strategies that have been shown to work well. The private sector also has experience of handwashing promotion in schools in the 3 cities and can provide advice and support, and possibly products.

Steps include:
- contacting the Ministry of Education,
- taking advice from Unicef,
- explore interest from commercial partners
- getting basic information on school numbers and facilities,
- a small-scale, but representative, survey of facilities, hygiene practices, hygiene teaching and children’s motivations
- developing a 3-city approach which includes upgrading facilities as needed, providing handwash stations and soap products, or a sustainable means to purchase them, practical lesson guides, support materials such as badges and stickers, and training for teachers.

The Hygiene Centre (Myriam Sidibe) has developed a tool to assess the situation in schools and to determine how to motivate kids and teachers to improve and maintain facilities as well as change hygiene practices. This is in draft form and has been developed and tested in East Timor and Senegal. This could be made available for the three cities if required.

5. **Consumer sanitation and hygiene survey.** Most of the above can only be carried out in the light of better information than is currently available. We need to understand hygiene problems, sanitation problems and identify possible solutions. A number of tools have been developed to do this. The hygiene tools are well tested and published in the hygiene handbook ([www.globalhandwashing.org](http://www.globalhandwashing.org)). The schools and sanitation tools are under
development and have been less well tested. They could be adapted to Vietnam without too much difficulty. The objectives, questions and methods are set out in table 2. Some of these questions could be incorporated into the feasibility study, or they could form one package.

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<td>ditto</td>
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<td></td>
<td>What can make teachers and kids change their behaviour?</td>
<td>Schools tool</td>
<td></td>
</tr>
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</table>

Table 2 Study to assess the hygiene and sanitation problem and identify solutions
Recommendations:
Issues to be addressed by the imminent expert mission

1. Healthy cities partnership
   Set out the idea to all potential partners, including private sector, and establish if the idea attracts support. Establish whether the Department of Preventive Health for each city is prepared to lead. Establish is this is thus the appropriate institution in which to base a communications coordinator. Establish the feasibility of one coordinator covering 3 cities.
   Encourage partners to see that the issues for communication by the partnership to the general population have to be single and taken one at a time, hence establish what partners see as priority. In terms of public health effectiveness, the priorities are likely to be these:
   - Handwashing with soap
   - Acquiring a latrine
   - Ensure that children’s stools are disposed of safely.
   - For environmental aesthetic and tourism reasons, the disposal of household waste is also likely to be a priority

   Determine whether consumer research and communications agency capacity exists in the town, or whether it will be necessary to go to HCMC or Ha Noi for this expertise.

2. Household sanitation
   Explore further with the Women’s Union the issue of the lowest rate of credit that is likely to allow the toilet construction target to be met. Explore the state of demand in the city and their sources of information, as we were unable to be sure how good their figures are. (Overreporting by wards may be elicited when authorities are asked who still needs sanitation facilities). Explore their ability to extend their work and any support needs. Evaluate whether the WU think that demand for toilets is really a key factor limiting uptake. Describe how typical families go about acquiring toilets and set out the barrier factors. Look at any communications materials currently in use and explore how they might be enhanced.

   Collect any ward level data on household sanitation that exists and attempt to find a clear definition of what ‘unhygienic’ means. Take a view on the quality of the data and the need to collect more. Question URENCO as to whether there is any evidence of groundwater pollution from household toilets.

   Trace a small sample of latrine builders and establish their skill level. Do they need training in technology, in marketing, in business skills for example? What are the bottlenecks to expanding their business?

3. Septage disposal
   Discuss further with URENCO the proposals as outlined above. Establish whether there has been any work on the experience of privatizing toilet waste collection in HCMH or Ha Noi, or in the region. Begin to build a business model by collecting figures on likely income and costs. Explore how feasible it will be to set up transfer stations from
handcart to tanker. Explore with city authorities whether the nearer (5km) waste
disposal site is likely to become functional again.

4. **Schools**

Meet with the MoE for the 3 cities and establish the state of water and sanitation
facilities in basic and satellite schools. Handwash facilities are likely to be poor. Establish
if handwashing is actually part of the curriculum (I believe that it is not). Establish
whether the MoE is interested in participating in efforts to improve the situation.
Consult with Unicef (contact Nguyen Thanh Hien nthien@unicef.org) on their current
model of best practice. Establish their willingness to join a partnership in the 3 cities.

5. **Consumer sanitation and hygiene survey**

Collect all available data on health status in the cities (but note that health centre
reporting is not a good guide to real health status as much infection is not reported to
health centres). In particular, establish the extent of the JE and Dengue problem.
From the study TYOR, determine if any of the information needed can be obtained
from existing sources eg media coverage and listenership from commercial sources.

6. **Hospital waste**

The Prefeasibility work has made proposals for hospital waste collection. Review these
with the department of preventive health and city authorities

**Additional Recommendations**

1. The technical glossary of terms in the Quy Nhon PFS summary should be adopted by
the whole project and the Vietnamese terms added, to ensure coherent translation.
Words such as *sanitation* and *hygiene* should be added. Eg: “Hygiene is the ensemble of
human behaviours that prevent the transmission of disease”. This will add value to
external technical input.

2. *Clearance of beachfront housing. Though insanitary, these houses are charming,
unusual and could be considered a part of the cultural heritage of Quy Nhon. Rather
than demolish them, it might make sense to improve the living conditions, including
sanitation, and open up some areas to tourism. This should be considered urgently by
the city authorities as demolition is imminent.*
Annex 4.

Clean, Healthy Cities Partnership,
Project Proposal

Three Coastal Cities Environmental Sanitation Project
Vietnam

Val Curtis, Hygiene Centre, LSHTM, July 2005

Summary

Whilst the plan to upgrade the infrastructure of the three Coastal cities, Nha Trang, Quy Nhonh and Dong Hoi will improve health and the environment, its benefits will only be maximised if the city population also contribute their efforts. Both private and public hygiene behaviours need to improve, toilets have to be upgraded and attached to new sewers and people have to cooperate in paying for services and dealing with solid waste. We therefore propose the creation of a clean healthy cities partnership which will galvanise all leaders, institutions, citizens to take part in improving life in their cities. The programme will draw on the behaviour change skills of the private sector but work with local mass organisations and media to provide a high-impact communications programmes that will target particular behaviours. These may include improving habits such as washing hands with soap and dealing with excreta and drinking water safely. They may also include inciting people to connect to sewers, to dispose of solid waste safely and to pay for services. All primary schools will have their sanitary and hygiene facilities upgraded and children will become hygiene ambassadors. The overall result will be to galvanise citizens and institutions to action such that citizens can feel great pride in their cities.

Contents

1. Background
2. Objectives and aims
3. Activities
4. Institutional and staffing
5. M&E
6. Budget
Clean, Healthy Cities Partnership,
Project Proposal

1. Background
The World Bank proposes to support the Government of Vietnam to upgrade environmental sanitation in the coastal cities of Nha Trang (population 270,000), Quy Nonh (Pop 230,000) and Dong Hoi (Pop 95,000). The development objectives of the CCESP are (a) sustained improvement to public health, and (b) increased economic development by reducing the incidence of flooding; upgrading the urban environment; and developing more efficient and financially sustainable sanitation and drainage companies. The project is at feasibility study stage. Preparatory work so far has concentrated on waste water, sewage systems, flood control and institutions and finance. The purpose of the present proposal is to set out the communication and behaviour change aspects of the project. This component is an essential adjunct to the infrastructure development programme. Hardware alone will have limited impacts on health and economic wellbeing, because such hardware needs to be installed and used correctly, and to be properly maintained, and individual, household and community hygiene also needs to improve.

There is limited data available about health in the coastal cities and no detailed community surveys have been carried out. According to the provincial authorities, diarrhoeal diseases remain the biggest disease problem for children in the city. However, the situation is improving, and respiratory infections are becoming a bigger problem. Urban diarrhea rates are low according to the DHS survey of 2003, at 3 per hundred 2-week prevalence. Data were collected in October/November at the end of the rainy season. Mothers know how to treat diarrhea at home and it is rarely fatal. Neither cholera nor typhoid have been recognized in the city, but Ascaris worm infection is frequent. It could be argued that diarrhoeal infection may be too low to worry about bringing it down further, however, if the DHS 3% figure is correct this still represents about 150,000 episodes per year in children under 5, that can be prevented, in the three cities. This disease burden has economic costs as well as a negative impact on child health and growth. If ARI rates are typical of urban Vietnam there will be a 2 week prevalence of 14 per 100. There are few preventive measures to improve this situation, but handwashing with soap is thought to reduce respiratory infection risk by at least 20%, and sometimes much more (as well as reducing diarrhoea risk by about 47%).

More background to this proposal can be found in annex 3 of the field report entitled Hygiene and Sanitation in Vietnam, by Val Curtis July 2005.

2. Objective:
To create a partnership that galvanises citizens and institutions to act for cleaner, healthier cities.

**Aims**

2.1 Create a partnership of all key stakeholders in the public and private sector to work together for clean, healthy cities

2.2 Develop high impact communication programmes based on understanding the health, environmental and behavioural issues in the cities

2.3 Motivate the general population to:

- protect their health through safer hygiene practices such as washing hands with soap, disposing of child stools safely and boiling or filtering drinking water (if needed).
- upgrade toilets and connect to the sewer system, to use the household waste collection facilities, and to be prepared to pay connection charges and user fees.
- take pride in their environment, keep it clean and make the cities more attractive for tourism.

2.4 Equip all city schools with adequate sanitary and hygienic facilities that are used, and involve school children in protecting the city environment.

**3. Activities**

Following set up, and further work to define the problems and their solutions more closely, a phased approach will be taken. Only one message at a time will be highlighted, and each campaign phase will run in all available channels for a full six months. Professional communications agencies will work with existing institutions such as the Women’s Union, to design hard hitting, single issue campaigns with a recognisable brand (‘healthy city’ or similar) that can be delivered through existing channels such as local TV, radio, loudspeakers and schools. Commercial partners who may be interested in associating their names with the campaign will be sought so as to increase investment, and hence impact. Partners such as UNICEF and IDE can also add value through their knowledge and materials. If there is to be a national handwash programme, the healthy city programme will be complementary to this. The expertise developed in the national campaign can be tapped also for the cities.

The order in which messages are highlighted will depend on local circumstances, and will vary by city. Hence, for example, a handwash campaign would be best carried out at the same time as the national campaign, solid waste collection can only be promoted once the waste collection system is operating successfully and paying connection charges promoted when the system becomes operational.

Depending on the message in some cases more emphasis will be placed on delivery via traditional propaganda approaches and some may use more mass media, for example. Nevertheless, the approach taken is similar, with carefully professionally designed messages that have been tested and shown to work, delivered via the most appropriate routes to reach target audiences.

Following is the workplan in more detail. Timings are set out in the Gantt chart on the last page.
In each city:

1. Establish coordinators in city PMUS with communication and transport facilities, hire assistants.
2. The coordinator investigates all potential partners in the public and private sector and sets out the potential contribution that might be made by each.
3. The coordinator brings partners together for an inception workshop where the vision for a clean healthy successful city is articulated and partners commit to their roles. Key partners will be the women’s union, the Ministries of Health, of Education, of Tourism, NGOs and private sector players, including local and national makers of hygiene products and building contractors.
4. The coordinator, with help from key partners, sets out what is known and what still needs to be known to develop an action plan on hygiene, sanitation and the environment. From the list of what still needs to be known, the three coordinators draw up a TOR to hire a contract research organisation to carry out formative research in the 3 cities. International expertise is needed at the stage of detailed design of the study. A preliminary outline is found in table 1 below.
5. The coordinators supervise closely the execution and analysis of the study.
6. The results are collated and presented to a further stakeholder workshops. A choice is made as to which is the single priority message which should be the subject of the first phase of activities. A small working group takes the findings and turns them into a creative brief for a communications agency.
7. Partnership agreements are drawn up concerning the roles, responsibilities and contributions of each collaborating partner.
8. A TOR for a professional communications agency is drawn up and an agency is selected. (Either one agency or three, depending on the capacity of the local agencies)
9. Agency hired with PMU and steering committee as client. Small group convene to design communications strategies.
11. Launch event involving all stakeholders and all citizens as far as is possible, mass clean up, fireworks, street parties etc.
12. Roll out phase 1 of communications activities through all channels (local TV, radio, loudspeakers, women’s union, mass organisations, NGOs, shops and markets) for a full 6 months.
13. With stakeholders choose a new message for phase 2, follow as above (see Gantt chart). Note, the work required to develop phase 2 will be less, given previous experience.
14. Set up schools programme. Build infrastructure where needed, install handwash facilities in all classes, involve children in city-wide activities: mass clean ups, clean city parades, as city cleanliness monitors.
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Table 1 Formative research study to assess the hygiene and sanitation problems and identify solutions
4. Institutional

The communications programme will be based in the PMU of each city and will involve all key stakeholders. There will be a provincial level steering committee, with membership open to all. Day-to-day management will fall to the PMU and a small cell of those most closely concerned with the activities will meet more regularly.

The role of the 3 coordinators are key. Their responsibilities are to:

- Articulate a vision for a clean, healthy and thus successful city
- Locate all key potential partners and opinion leaders in both the public and private sectors and bring their skills and resources to the partnership table
- Oversee formative research to define the particular problems of each city and set out the solutions
- Learn about and transfer the experience of such partnerships elsewhere and liaise to share growing experience with the other coastal cities
- Hire and brief a communications agency to develop the each phase of the campaign and develop and test the approaches
- Work with all stakeholders to implement the campaign at each phase through the partners
- Liaise with all implementing partners such as radio, Women’s union, schools, agencies
- Seek commercial sponsorship for some of the activities
- Monitor the activities and their reach, and evaluate progress in changing behaviour
- Mandate expenditure from the PMU budget
- Manage the administrative assistants and the data assistant (shared between 3 cities)
- Organise workshops and trainings for actors
- Keep all stakeholders abreast of developments through a regular brief newsletter

Coordinator Job profile

Coordinators will be communicators by background with experience of working in both the public and private sector. They will have to be energetic and independent and have some experience of handling quantitative data. Experience in the health or engineering sector will be an advantage.

The coordinator prepares 3-monthly work plans and progress reports and reports to the director of the PMU.

5. Monitoring and Evaluation

Each change that the project hopes to make has to have a rigorous and measurable set of indicators of success that are measured at baseline and at least two occasions over follow-up. These must be set out by the coordinators at inception of each phase of work. A solid survey of existing sanitation provision is needed anyway and can serve as a baseline for those choosing to upgrade. Handwash rates can be measured at baseline during the formative research and followed up after six months of intense communication (see Handwashing Handbook for methods). Safe stool disposal can be measured in terms of observable fecal
contamination and the use of potties for small children. Household water treatment can also be measured at baseline and followed up, if it becomes one of the foci of one of the communications phases. Willingness to pay for sanitation and waste collection can be measured in terms of actual payment rates. Since many issues are being targeted, we propose to create a full time data assistant role, to ensure the timely collection, analysis and feedback of the relevant data, using mini-surveys if needed. If logistically possible, the post can be shared between the three cities.

6. Estimated Budget

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<td>9,900</td>
<td>10,400</td>
<td>38,800</td>
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<td>Establishment costs</td>
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<td>Formative research</td>
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<td>10,000</td>
<td>0</td>
<td>25,000</td>
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<tr>
<td>Communications agency</td>
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<td>10,000</td>
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<td>Launch events</td>
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<td>12,000</td>
<td>12,000</td>
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<td>50,000</td>
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<tr>
<td>Campaign materials, workshops, training</td>
<td>3 x 70,000</td>
<td>141,000</td>
<td>110,000</td>
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<td>461,000</td>
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<tr>
<td>Schools programme</td>
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<td>64,000</td>
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<td>20,000</td>
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<td>Project data monitor</td>
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<td>15,700</td>
<td>16,500</td>
<td>17,400</td>
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<td>Evaluation</td>
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<td>10,000</td>
<td>20,000</td>
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<tr>
<td>International TA</td>
<td>12 d x 700</td>
<td>8,400</td>
<td>8,800</td>
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<td>0</td>
<td>17,200</td>
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<tr>
<td>International TA travel</td>
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<td>5,000</td>
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<tr>
<td>Grand total</td>
<td>381,400</td>
<td>284,000</td>
<td>274,400</td>
<td>260,200</td>
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</tr>
</tbody>
</table>

Notes:
Sums in US dollars, 5% allowed for inflation & advancement
Total is about $150k per year, per city
### Clean Healthy Cities Partnership, Gantt chart

| Item /year.quarter | 1.1 | 1.2 | 1.3 | 1.4 | 2.1 | 2.2 | 2.3 | 2.4 | 3.1 | 3.2 | 3.3 | 3.4 | 4.1 | 4.2 | 4.3 | 4.4 |
|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Hire coordinators  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Partner mapping    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Inception workshop |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Develop TOR for FR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Hire Research agency | | | | | | | | | | | | | | | |
| FR reports,        |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Develop phase 1 campaign | | | | | | | | | | | | | | | |
| Roll out phase 1   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Develop schools prog | | | | | | | | | | | | | | | |
| Roll out schools prog | | | | | | | | | | | | | | | |
| Prepare phase 2    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Roll out phase 2   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Evaluate phases 1 and 2 | | | | | | | | | | | | | | | |
| Prepare phase 3    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Roll out phase 3   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Prepare phase 4    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Roll out phase 4   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Prepare phase 5    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Roll out phase 5   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Prepare phase 6    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Roll out phase 6   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Final evaluation   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

Phasing: depending on local choices and circumstances Phase 1 may = Hand washing, Phase 2 = stools, Phase 3 = Clean City, Phase 4 = User fees
Vietnam Water and Sanitation Sector
Strategy Development for Hygiene Promotion Program –
International Consultant

Background
Vietnam is just starting to build its public sanitation infrastructure. There are no operational wastewater treatment plants in the country at the current time, and whilst there are some combined sewers in urban areas, they are relatively limited in extent. The Government recognizes the need to address this issue and a number of donor funded projects are underway to expand sewerage systems, install interceptor sewers, and provide wastewater treatment.

Unfortunately simply building infrastructure does not deliver the public health benefits that can flow from access to improved sanitation facilities. These benefits will only accrue through improved hygiene behavior, the most critical of which is washing hands at key times including after defecation and prior to preparing/eating food.

Given that the Government will need to spend some $4 billion over the next 20 years to upgrade the nation’s sanitation facilities, it is vital that the complementary, and relatively low cost, behavioral change programs are implemented to maximize the benefits from such investments (and indeed to provide benefits of their own, irrespective of the investments in infrastructure).

Objective of Assignment
To develop a project level costed strategy for improving household hygiene practices in communities that will benefit from the planned World Bank financed rural water supply project and, separately, for meeting the hygiene promotion requirements for the World Bank financed coastal cities environmental sanitation projects.

These strategies will be used to solicit support from bilateral donors for their subsequent implementation.

Proposed Activities
An individual international consultant will visit Vietnam and will undertake the following activities:

5. Three weeks prior to the visit, prepare a list of information requirements which the Bank team will endeavor to compile for arrival
6. Visit Quy Nhon City and one Province in the Red River Delta to inspect the project sites, meet with communities, health professionals, and the various line ministries.
7. Visit relevant line ministries in Hanoi, and other organizations active in sanitation behavioral change (e.g. IDE, WSP, soap manufacturers, bi-laterals and other UN organizations as appropriate)
8. Make an assessment of the current challenge, identify capacity gaps, map out possible solutions for enhancing hygiene promotion in the project areas. This will
include a review of key hygiene behaviors (hand washing, child faeces disposal, and safe water management) and identifying those most amenable to improvement through promotional work.

9. Present findings to, and seek feedback from, a workshop to be held in Hanoi towards the end of the visit. The workshop will comprise officials and bi lateral donors.

10. Prepare a draft report summarizing the findings and costed recommendations for hygiene promotion programs in each of the two projects, and follow-up activities to strengthen hygiene and sanitation promotion more broadly in Vietnam.

11. Prepare a final report incorporating comments received on the draft report.

**Timescale and Deliverables**
The work will take be completed over the period May 9th 2005 to May 30th 2005

The key deliverables comprise:

- Workshop to present findings and initial recommendations – in third week of country visit
- Draft final report on a Strategy for Hygiene Promotion in the two projects by end of country visit.
- The report should cover the following points:
  - Definitions, objectives, and perspectives for hygiene promotion
  - Existing GOV policies related to hygiene and sanitation
  - Existing situation in terms of sanitation coverage and hygiene behaviors
  - Existing strategies and programs by Government of Vietnam, bi-laterals, NGOs, etc.
  - Proposed strategy for hygiene behavior change in each projects
  - Institutional roles and responsibilities for implementation of strategy in each project
  - Recommendations for any policy reform required for strengthening the enabling environment for hygiene and sanitation promotion
  - Detailed Estimated level of effort
  - Detailed estimated budget
  - Recommendations for monitoring and improvements
  - Recommendations for Plan of action and next steps (including roles and responsibilities) for getting funding and implementing the hygiene promotion program
  - Next steps to support hygiene and sanitation services more broadly in VN
- Final report within one month of completion of country visit

**Desired Outcomes**
The desired outcomes are as follows:

- **Coastal Cities Project**: To mobilize bilateral funding to undertake comprehensive hygiene behavioral change programs in the project cities in parallel with, and complementary to, the World Bank funded investments.

- **Rural Water Supply and Sanitation Project**: To provide a clear direction for the hygiene component of the project for its later implementation after credit effectiveness
• **Vietnam**: To influence government policy on hygiene behavior change. The government is open to good ideas but prefers to see them work in practice before committing to any large scale initiative. Successful project outcomes will support such an approach.

**Reporting Arrangements and Project Organization**

The international consultant will report to Bill Kingdom (EASUR), based in Washington. Whilst working in Vietnam the consultant will work with Hoa Thi Hoang, Urban Social Specialist in the Hanoi office.

The international consultant will be supported by a national consultant who will act as translator and assist in securing any additional Vietnamese material required by the international consultant.
**Annex 5 - Mission itinerary / persons met**

**Hygiene Promotion for Rural Water Supply Project and Coastal Cities Environmental Sanitation Project**

Mission Team: Ms. Val Curtis, Hoàng Thị Hoa (0903430174), Ms. Nguyễn Thị Thanh Tam (0912067134)

<table>
<thead>
<tr>
<th>Sunday, May 8</th>
<th>Action</th>
<th>Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.15</td>
<td>Arrive Hanoi on TG682, Booked Hilton Opera Hotel for May 8-10 and hotel airport pick-up</td>
<td>Hilton Opera Hanoi Hotel 1 Le Thanh Tong, Hanoi</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Monday, May 9</th>
<th>Action</th>
<th>Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>08.30</td>
<td>Internal Meeting with Hoa, Tam, Mike</td>
<td>Sapa room, 7th floor, WB 63 Ly Thai To, Hanoi</td>
</tr>
<tr>
<td>10.30</td>
<td>Meet Mr. Nguyễn Huy Nga, Deputy Director general Tran Thị Bich Tra Dept of Environmental Health MOH (0903413572) Do Manh Cuong</td>
<td>138A, Giang Vo, Hanoi</td>
</tr>
<tr>
<td>13.30</td>
<td>Meet Ms. Hong Women’s Union (0983604461)</td>
<td>39 Hang Chuoi, Hanoi</td>
</tr>
<tr>
<td>15.30</td>
<td>Meet Mr. Samuel Lieberman, World Bank health team</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Tuesday, May 10</th>
<th>Action</th>
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<tbody>
<tr>
<td>6.00</td>
<td>Go by car to visit Hatinh province</td>
<td>Rent Car to Hatinh</td>
</tr>
<tr>
<td>14.00</td>
<td>Meet Helle Stolz (0913239410), Team Leader and Community Devl and IEC Specialist of Carl Bro Intl, Hatinh visit coordinator at Ngan Ha hotel</td>
<td>Booked Ngan Ha Hotel (039854931) 158 Tran Phu Road, Hatinh</td>
</tr>
<tr>
<td>14.30</td>
<td>Brief meeting with pCERWASS Director and/or Sub-component Director Meeting with the provincial IEC group, consisting of representatives from different departments and mass organisations Sub-component IEC staff will also participate in the meeting</td>
<td></td>
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<thead>
<tr>
<th>Wednesday, May 11</th>
<th>Action</th>
<th>Venue</th>
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<tbody>
<tr>
<td>7.00</td>
<td>Travel to Huong Khe district (or another district)</td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>Activity</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>pm</td>
<td>Return to Hanoi.</td>
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**Thursday, May 12**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.30</td>
<td>Leave for HCMC on VN 217: 11.30 – 13.30 Booked New World Hotel for May 12-14</td>
</tr>
<tr>
<td>15.30</td>
<td>Meet Jaime Frias (091235 6903) IDE Country Director – coordinator for visit in HCMC</td>
</tr>
<tr>
<td></td>
<td>Meet Aus Aid</td>
</tr>
<tr>
<td></td>
<td>Nguyen Thi Quynh Nhi</td>
</tr>
<tr>
<td></td>
<td>Mark Palu</td>
</tr>
<tr>
<td>16.00</td>
<td>Meet Unilever</td>
</tr>
<tr>
<td></td>
<td>Nguyen Hai, brand manager</td>
</tr>
<tr>
<td></td>
<td>Le Van Quoc Hung-Lifebuoy</td>
</tr>
<tr>
<td></td>
<td>Ly Truong Chien Professional marketing director</td>
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**Friday, May 13**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td></td>
<td>Meet AC Nielsen Ho Dieu Van</td>
</tr>
<tr>
<td></td>
<td>Phan Thi Thuy Duong</td>
</tr>
<tr>
<td></td>
<td>Anna Spence</td>
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**Saturday, May 14**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.30</td>
<td>Meet Duc (0914403008), coordinator for Quang nam visit</td>
</tr>
<tr>
<td>16.00</td>
<td>Meet the members of Project District Steering committee (from District Health centre and District Woment Union) at Tam Ky Health centre.</td>
</tr>
</tbody>
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### Sunday, May 15

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.00</td>
<td>Leave Tam Ky hotel to one of the projected commune (40 minutes by car from Tam Ky hotel). - Interview District health centre representative on the way to the commune. - Interview the commune steering committee, Motivators (such as Health worker, member of Women Union) - Visit HH's who purchased latrine Interview masons (the members of the private sector network) Lunch in the commune</td>
</tr>
<tr>
<td>15.00</td>
<td>Go by car to Quy Nhon Book Hoang Anh Resort Hotel in Quy Nhon for May 15-18 Hoang Anh Resort Hotel (056 747100) 1 Han Mac Tu Street, Quy Nhon, Binh Dinh Province</td>
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### Monday, May 16

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<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>8.30</td>
<td>Meeting with PPU Quy Nhon Thai Ngoc Bich URENCO and team 68B Nguyen Du, Quy Nhon city, Binh Dinh province</td>
</tr>
<tr>
<td>9.30</td>
<td>Project site visit</td>
</tr>
<tr>
<td>14.00</td>
<td>Meeting with Quy Nhon Women Union Chi Chung-Chair and team</td>
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### Tuesday, May 17

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.00</td>
<td>Meeting with URENCO Quynhon 40 Phan Boi Chau, Quy nhon</td>
</tr>
<tr>
<td>10.00</td>
<td>Meeting with city health authorities</td>
</tr>
<tr>
<td>12.00</td>
<td>City radio station Vu Hoa Thien director and team</td>
</tr>
<tr>
<td>pm</td>
<td>Prepare draft report/missing data/catch up visits</td>
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### Wednesday, May 18

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<tr>
<td></td>
<td>Airport pick-up ? Booked Hilton Hotel for May 18-22</td>
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### Thursday, May 19

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<tr>
<td>9.30</td>
<td>Mr. Chander Bandloe (0913247891)/Ms. Hien UNICEF (tbc) 72 Ly Thuong Kiet, Hanoi</td>
</tr>
<tr>
<td>10.30</td>
<td>Mr. Jenss Rydder DANIDA (0913238310) 19 Dien Bien Phu, Hanoi</td>
</tr>
<tr>
<td>14.00</td>
<td>Mr. Son deputy, Director CERWASS and full IEC team(0913209051) (tbc) C10, Nguyen Hong, Nam Thanh Cong,</td>
</tr>
<tr>
<td>Date</td>
<td>Activity</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td><strong>Friday, May 20</strong></td>
<td>Workshop 8.30 - 12.00 25 participants</td>
</tr>
<tr>
<td><strong>Saturday, May 21</strong></td>
<td>Debrief with team</td>
</tr>
<tr>
<td><strong>Sunday, May 22</strong></td>
<td>18.45 Leave for London TG 685 for Bangkok 20.45 – 22.35</td>
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