Discussion Paper

»» Integrated Urban Sanitation at Scale

Hygiene Promotion

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Introduction

Integrated Urban Sanitation

Development cooperation projects in urban sanitation aim to create adequate living conditions, to protect public health and the environment as well as to foster economic and social development. Inappropriately treated sewerage and faeces can pollute drinking water and pose an acute danger for humans and the environment.

Functioning, area-wide sanitation systems still represent an unsolved problem for many developing countries. The poor living in the fast and unregulated growing outskirts of urban agglomerations are effected the most: Often not enough sanitation facilities are available and the existing facilities are not sufficiently maintained and cleaned. Furthermore, the appropriate disposal of faeces in areas that are not connected to sewers was until recently insufficiently organized.

As outlined by the WHO, investments in developing countries in water and sewerage systems are highly beneficial from an economic perspective. However, in practice there is a lack of technical and financial viable solutions.

Current experiences and observations by KfW show the following challenges during design and implementation of sanitation projects:

- In the past, public financing focused mostly on sewer-based sanitation. For this reason, many poor urban areas were neglected due to the high costs involved. More economic on-site sanitation concepts were not systematically considered and were often limited to demonstration latrines related to water supply projects.
- During project planning, the entire sanitation chain was often not considered appropriately. The outcomes were the financing of latrines not integrated into a sanitation concept and the financing of waste water treatment plants without an adequate treatment of fecal sludge in place.
- Hygiene promotion and sanitation marketing were often not properly integrated into sanitation projects, not adjusted to the specific local challenges and not designed to foster verifiable behavioral change. Unprofessional information campaigns had frequently little impact.
- Economies of scale and potential for scaling up were often not sufficiently exploited due to the application of diverse technologies in the jurisdiction of an operator and due to the fragmented and unclear institutional responsibilities.

Future sanitation interventions in peri-urban areas should therefore more strongly focus on integrated sanitation concepts connecting sanitation chains from an institutional, technical and financial perspective in order to allow for adequate sanitation with affordable capital and operational costs.

Different districts with different population densities and infrastructures have to be provided with different sewer and non-sewer based on-site and off-site concepts. The respective sanitation chains have to be carefully planned and organized up to the final products to avoid health and environmental hazards.

A sustainable improvement of sanitation in poor urban areas is only possible, if the following crucial aspects are considered along the sanitation chain and are adapted to the specific local conditions:

- Differentiated technical solutions
- Regulated institutional responsibilities
- Cost-covering models for operations and financing
- Evidence-based hygiene promotion

Integrated sanitation in this publication does neither refer to vertical or horizontal integration of utilities, nor the integration of waste management related aspects into sanitation systems.

This trilogy of working papers covers the topics of technology, finance and hygiene and gives specific recommendations for the integration of non-sewer-based sanitation in urban sanitation systems as well as recommendations for the conceptual and institutional design of hygiene promotion.

The three working papers build on each other and give an introduction into the respective topics, providing further information and relevant practical knowledge in the respective annexes. The following aspects are addressed:

- TECHNOLOGY: definitions, basic information, planning, operation and design alternatives.
- FINANCING: institutional aspects, market failures, financing instruments and economic assessment.
- HYGIENE PROMOTION: basic information, behavioral change, programme design and institutional set-up.

The working papers address practitioners and project managers in development cooperation and purposely do not choose a scientific representation of content. Selective reading is recommended.

Hygiene Promotion within the Context of Integrated Sanitation

Competence Centre Water and Waste Management

KfW Sanitation Task Force 2013

Author: Waltraud Keipp

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1. Introduction

Development policy measures regarding water supply and sanitation draw their legitimation from numerous sources, including positive contributions toward improving the health situation of the local population. In the past, Development Cooperation (DC) has often focused on investments intended to provide infrastructure in the form of toilets, sewers and sewage treatment plants. In many cases, though, the anticipated **health effects** either remained below expectations or were of only limited duration. While the contributing factors are numerous, the users' unhygienic handling of drinking water and toilets has been identified as one of the main causes of inadequate health effects.

In addition to investments in water supply and sanitation, the promotion of correct **hygiene behaviour** can thus serve as an inexpensive means of preventing infectious diseases while contributing significantly toward reduced child mortality. The funding and success of past hygiene campaigns have in majority been rather limited. For purposes of development cooperation, the root causes of the problem are investigated below along with options for making future sanitary hygiene promotion more effective. The recommendations regarding integrated hygiene promotion are equally applicable to water supply and sanitation projects.

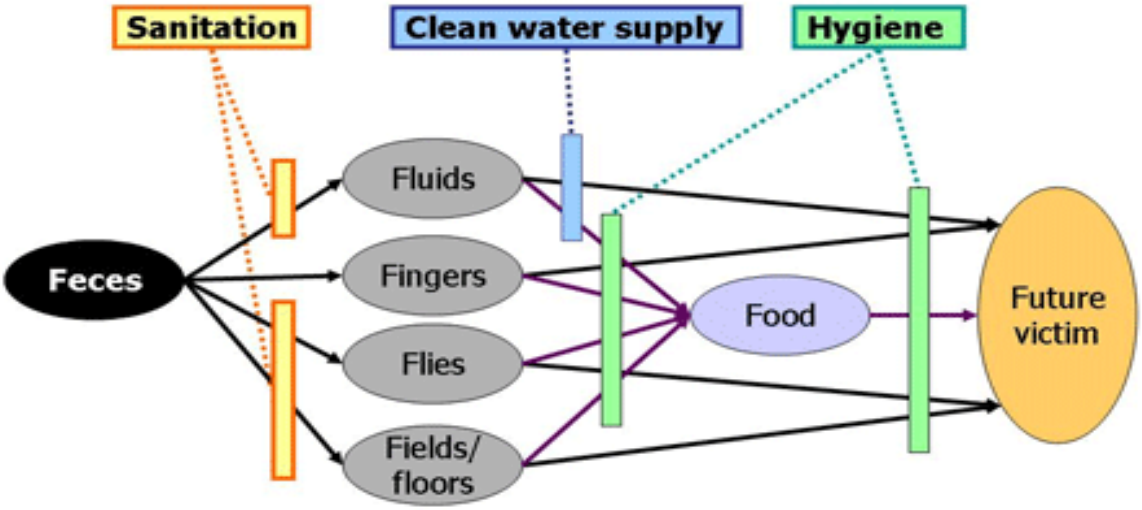
Health statistics can serve as a good indicator to demonstrate the **relevance of hygiene promotion**. Should hygiene-related diseases count among the ten most widely prevalent diseases in a country, these should be given more investigative attention during the project design phase. In Sub-Saharan Africa, nearly all drinking water and sanitation projects include hygiene campaigns. In other regions, it is often – incorrectly – assumed that unhygienic behaviour is not a major concern.

2. Hygiene-related infectious diseases: transmission modes and barriers

The term hygiene covers a broad range of topics. For the present purposes, "hygiene" refers to the **reduction of infectious diseases caused by contact with faeces**. Such diseases are transmitted from person to person either directly or indirectly via mosquitoes, flies, rats, mice and other intermediate hosts. Human excreta in particular, but animal excrements as well, play an important role. Faecal sludge offers ideal living conditions for pathogenic organisms like worms, protozoa, bacteria and viruses and attracts animals that act as intermediate hosts for transmitting infectious diseases.

People unknowingly transmit **pathogens** to their fellow human beings by way of physical contact, mainly by shaking hands. The pathogens are able to indirectly enter other people's bodies via shared dishes, water, food (prepared under unhygienic conditions) and the air. This transmission of pathogens is the cause of numerous diseases. Those of particular relevance include diarrheal illnesses caused by enterobacteria, enteroviruses, giardia, cryptosporidium, dysentery (amoebae/ bacteria), cholera, typhus/ paratyphus and parasitic worms (helminths).

The following diagram (Source: World Bank) illustrates the various **routes of disease transmission due to human faecal bacteria** and calls attention to potential protective **barriers** to be achieved by means of **drinking water, sanitation and hygiene measures**. The person-to-person transmission cycle caused by faecal bacteria can be disrupted at several points. Adequate hygiene behaviour, the adequately hygienic disposal of excreta and access to sufficiently clean drinking water pose crucial protective barriers. Key behaviours include **hand washing** with soap and water, point-of-use handling of drinking water and the use of toilets.



In the interest of an integrated **multi-barrier approach**, a combination of measures from all three principal areas of intervention (water supply, sanitation and hygiene) should be incorporated into the planning and design of pertinent measures. The ultimate selection of measures should be made dependent on the respective specific terms of reference and behaviour.

Typical **examples** of projects with hygiene campaigns could include:

- Drinking water projects serving not only to provide drinking water (of adequate quality in sufficient quantities) but also to promote adequate point-of-use behaviour, accompanied by hand-washing campaigns;
- Sanitation projects that go beyond the installation of latrines, to also teach all members of the household how to use them exclusively, in a proper manner, keep them clean and to wash their hands.

3. Hygiene promotion in the water sector

In the past, hygiene promotion within the context of development cooperation has often been treated as a **subordinate part** of the "accompanying measures" component within the drinking water or sanitation supply projects and, as such, so meagrely funded that their effectiveness remained rather limited. The status of hygiene promotion within the projects and the complexity of hygiene promotion have often led to room for improvement with regard to project design, implementation and institutional structuring.

Along with technology dissemination, the design of sustainably financed operating models and the creation of an enabling environment, hygiene promotion is **one of four success factors** for water supply and sanitation projects. Hygiene promotion is of particular relevance in sanitation projects with a high level of user participation. In particular the timing of hygiene promotion is of utmost importance. These should generally be programmed following finalisation of the infrastructure measures. To propagate the use of clean water or toilets without providing appropriate access not only leads to frustration, but is also counterproductive. The investment itself and the accompanying hygiene promotion therefore belong together.

Impact evaluations of water projects indicate that, while the water supply situation is often significantly improved in numerous communities, the water gets recontaminated at the household level. This suggests both that it takes **a change in behaviour to improve the health situation** and that changes in behaviour do not come automatically.

A **fundamental problem** affecting the promotion of hygiene measures is that **no prioritisation of the most critical behaviours takes place**. The entire spectrum of behavioural aspects to be derived from the barrier model may be of relevance (point-of-use handling of drinking water, hand washing with soap cleaning of toilets, bodily hygiene, cleanliness of surroundings, food preparation, etc.), but in actual practice, such a broad non-selective range of hygiene measures is ill-targeted. The erratic implementation of a broad set of hygiene measures is not constructive in practise. Given the variety of themes, these are hardly addressed in an appropriate manner and overstrain not only the population concerned but also the animation teams.

Often, more priority is “subconsciously” attached to the transfer of knowledge than to the achievement of **verifiable changes in behaviour**. In order to avoid this, every project should be requested to demonstrate how and to which extent it has contributed to evidence-based behavioural changes.

In many cases, largely **unquestioned assumptions have led to suboptimal results of hygiene promotion**. For example, the propositions that hygiene information has a universal character and that the design of communication campaigns therefore requires no preliminary studies have proven false. Likewise, changes in human behaviour cannot be achieved solely through the provision of information, nor do well-conceived and implemented health campaigns automatically yield significant changes in behaviour. At the same time, it has also become obvious, that not all achieved changes in behaviour are equally useful, and that poorly executed campaigns easily can do more harm than good. Recent studies even show that campaigns conducted through wrongly chosen communication channels and contents can just as easily reinforce negative behaviour patterns.

Health sector projects with behavioural change as their objective are generally complex to begin with, and **different social and cultural systems** tend to amplify their complexity. The people's behavioural mechanisms, convictions, values and experience, as well as their overall socio-economic environment, are major determinants for the acceptance and sustainability of measures. Disease prevention is more than a topic of interest to everyone. It is also a social-group issue. People have "group answers" to disease prevention. Group behaviour (culture) and individual behaviour are therefore mutually dependent. At the group level, hygiene behaviour is influenced by imitation and other forms of social learning. While hygiene promotion is intended to reach individuals, it must also be geared to helping correct hygiene behaviour become the social norm (cultural rules).

The fact that this complexity has often been overlooked in the past explains why many hygiene campaigns, in comparison with other measures such as investments in hardware and vaccination campaigns, have had low priority despite their ability to achieve low-cost reductions in the incidence of hygiene-related diseases. Recent findings lead to the conclusion that a lack of systematic **attention to psychological behaviour factors** is one of the main reasons why hygiene promotion has been partly unsuccessful. In addition, there is often an absence of systematic evaluations and, hence, the accurate identification of success –or –failure factors.

Recent discussions and studies emphasize the finding that intervention strategies should consider not only a more **stringent approach and knowledge management**, but also **psychological factors** of relevance to **"behaviour"**. In other words, the systematic, efficient conduct of projects concerning behavioural change requires that measures be planned and executed in a focused manner. That is why all projects should leave room for systematic implementation and reporting. For hygiene measures to be successful, it is of central importance that they be professionally designed and appropriately tailored to both the cultural circumstances and the target group, and that they communicate a limited number of clearly formulated messages. The measures must be designed to stay within the available budget and, if necessary, made subject to constriction by prioritisation instead of trying to cover the entire spectrum of hygiene-relevant topics according to the "something for everyone" principle.

The attempt to achieve behaviour change via **rules and regulation** is only to a limited extend a suitable mean for hygiene promotion as the following systematisation shows:

Hygiene behaviour in the public space and the **presence of relevant hygiene infrastructure at household level** can in general be influenced through rules, regulation and control mechanisms. Hygiene behaviour in the public space is generally addressed in hygiene, environmental and water by-laws, but also in building legislation. Through these by-laws, the legislative requirements are met to influence the behaviour of individuals and enterprises through law enforcement. In many cases, these by-laws are outdated and need to be revised to better address recent challenges. These includes connecting construction permits and the sufficient construction of latrines, professional emptying services for latrines, the disposal at official land fills as well as banning defecation in public spaces, etc.

Cleanliness and Maintenance of infrastructure and property can theoretically be influenced through bans and controls which are most often to expensive and time consuming during implementation and mostly not accepted by the population. Even though plenty of experience exists with this kind of control mechanisms in authoritarian states and in Africa during colonial times these experiences have also shown that these mechanisms do collapse after controls are not performed any more and behavioural change has not become intrinsic. For this reason, controls should be limited to highly problematic hygiene problems and single households and should be incorporated into participatory approaches promoting the understanding of the matter.

Individual and household hygiene like hand washing, drinking clean water, preparing food, etc. can rarely be influenced through by-laws, legislation and controls. On the one hand, controlling behaviour routines that are repeated several times per days is hardly possible. On the other hand this would lead to contra-productive behaviour since nobody would be anymore willing to talk about its own non-compliance with hygiene practises

4. Design of effective hygiene programmes

Building on a catalogue of essential methods and recent findings on success factors for "health communication" and potential communication media, this chapter attempts to formulate a blue print methodology geared to improving the effectiveness of hygiene programs. Appendix 1 offers some practical tips on the implementation of hygiene measures.

4.1 Catalogue of existing methods

Popular methods of hygiene promotion are:

- SARAR/PHAST (Self-esteem, Associative strengths, Resourcefulness, Action-planning, Responsibility/Participatory Hygiene and Sanitation Transformation),
- IEC (Information, Education, Communication),
- BCC (Behavioural Change Communication),
- WASH (Water, Sanitation and Health),
- CLTS (Community Led Total Sanitation),
- Social Marketing (marketing tools adopted for the promotion of behavioural change).

While this discussion paper is not intended to expand on the individual methods, it should, however, be emphasized that there exist two major tendencies, with classic approaches to health (disease prevention) at one end and communication approaches based on the "drivers for behaviour" at the other. A second distinction is the level of participation. The **classic approaches** rely on factual information and education, while the "driver"-based methods attach more

importance to the "propagation" of correct behaviour. Appendix 2 includes a catalogue of methods and their respective areas of application.

A critical evaluation of essential approaches by Mosler (2012), on whose work major parts of the following chapter are based, comes to the conclusion that all approaches lack (a) a systematic model for psychological behaviour factors, (b) a methodology for measuring such behaviour-related factors, (c) a procedure for analysing and reviewing the effects of those factors on target-group behaviour, and (d) instructions for ascertaining the requisite behaviour-change techniques on the basis of preceding analyses. There is, therefore, no lack of interesting ideas and valuable approaches, but of systematic application.

4.2 Behaviour-forming psychological factors and drivers

There is now general consensus that behavioural change cannot be achieved solely by the transfer of knowledge and that it does not depend on purely rational decisions on the part of those concerned. Behaviour is the result of how individuals process **psychological factors** which, in the case of each hygiene campaign, need to be known and taken into account. Above all else, factors that make people cling to hygienically inadequate behaviour patterns must be identified, as well as factors that are conducive to behavioural change. Behaviour factors can be assigned to any of five different categories: (i) risk assessment, (ii) personal attitudes, (iii) norms, (iv) skills and competences, and (v) self-regulation.

The **communication strategy** must be constructed on the basis of these factors. The following list indicates the most important behaviourally relevant interventions, as per behaviour factor:

- **Risk**: The risks of ”problematic” behaviours must be pointed out and the consequences explained. Another option is to employ the "fear driver", i.e., scary (anxiety-inducing) arguments. People with the most diverse cultural backgrounds tend to substantially underestimate the risks that stem from false health-related behaviour.
- **Attitudes**: In this connection, it should be stressed how pleasant it can be to adopt a certain manner of hygiene behaviour that makes one more attractive, that good parents do so, or that it is disgusting not to practice such behaviour.
- **Norms**: Attention should be called explicitly to the neighbours', etc. favourable opinion of good hygiene behaviour, and it is very advisable to include the names of some successful, well-respected people in that same connection.
- **Skills and competences** in dealing with hygiene on a day-to-day basis need to be promoted, for example by showing how easy it is to be hygienic, by teaching behavioural strategies for overcoming obstacles, by helping the people realize that hygiene protects them, and by promoting practical implementation.
- **Self-regulation**: This includes introducing stimuli and daily routines to help keep hygiene in mind and learn to cope with forgetting and backsliding.

As known from advertising, emotional feelings/**drivers** play an important role in influencing people's behaviour. Motivational research findings have pinpointed the drivers with the greatest potential for successful behavioural change such as shame, "group identity", comfort, status and "taking care of someone". By comparison, preventive health promotion plays only a very minor role in motivating changes in behaviour. Practical experience substantiates this in many ways.

Health arguments and rational explanations have proven fairly ineffective for motivating people to change their behaviour. As mentioned above, the health hazards are often underestimated, while other (non-health-related) aims like comfort and social recognition enjoy greater priority.

Aside from the issue of motivation, it is also known that, above all else, repetitive behaviour patterns must turn into **routines**. Routines are automatic reactions to certain signals. Projects should help incorporate "good" behaviour into the "daily routine" by analysing the families' daily

action patterns and offering pertinent suggestions. Ideally, a collective code of conduct can be developed and passed on to the children as "good behaviour" in the course of parenting. The better a project is at promoting routine behaviour, the more sustainable the change in behaviour will be.

4.3 Communication media and channels

Apart from all the substantive considerations, there is also the question of which **communication media and channels** are most suitable. There are few hard facts to substantiate the assumption that any particular communication medium or channel would yield the greater success for reasons whatsoever. The communication media spectrum includes radios, televisions, mobile phones, theatres, schools, etc. The extent to which the target group (children, women, occupation groups) feels addressed by the message and by the way it was delivered is an important aspect, of course. A message that either goes unnoticed or is even rejected by those to whom it was addressed literally misses its target from the very start. It is crucial for the project to impressively and sustainably communicate to as much of the target group as possible, that certain modes of behaviour are useful.

Communication can and should take place in the communities, the families, at work and in school. Indeed, **schools** are a particularly good place to introduce hygiene routines, though this does require the cooperation and simultaneous training of school teachers and parents. A number of simple but effective programs like WASH (WHO) and "Fit for School" (GIZ) have been developed for that purpose. The latter, for example, works to accustom school children to washing their hands before every meal, brushing their teeth every day and being de-wormed every two months.

This also requires that the behavioural factors pertinent to the aimed-for behaviour of the target group be analysed and specifically addressed in the communication strategy. **Instruments of communication must be chosen and appointed with care.** Addressing emotional drivers is a promising approach. It is also expedient to actively involve respected figures (e.g., religious leaders, teachers and health workers, but also nationally known actors and performers) both as communication media and as local partners. However, it is never a question of simply implementing blueprints but of designing individual, context-specific hygiene projects.

Ultimately, **communication** should constitute a good blend of "light" impulses and intensive argumentation. The trick is to select the right tool for the right purpose and then to combine it with other instruments such that, in the end, the overall effect is convincing. Synergies can be achieved and both efficiency and effectiveness improved by systematically applying well-harmonised means and instruments of communication. If the communicative means and instruments are uniformly oriented, they can communicate to the target groups a clear and consistent impression of how important it is for them to change their behaviour. Proper selection of communicative means and instruments presumes a clear definition of what is supposed to be achieved.

One good example of **mixed methods** consists of general awareness-raising in combination with the dissemination of information by radio, television and other media (general impulses), intensive backstopping of the change process by small groups or home visits, underpinning of the message by recognized authorities, and mobilising broad sections of the population through exhibitions or organised contests.

4.4 Conclusions and recommendations for successful hygiene promotion

Successful hygiene projects should, ideally, meet the following standards of development cooperation objectives:

- Water-induced **diseases** are verifiably reduced. This, however, requires time-consuming (baseline) studies (OUTCOME).
- Verifiable **changes in target-group behaviour** are achieved (OUTPUT).
- Potential **synergies** between hygiene promotion and investment projects or other projects implemented within the project region have been exploited (COORDINATION).
- The **findings** of the project should be known at the national level and available for other projects (KNOWLEDGE MANAGEMENT).

The **social marketing approach** is particularly well suited for fulfilling the requirements of DC in communicating with families and communities, because it deals systematically with the "behavioural change" issue, plans per se an analysis of the target groups, and aims for "tangible" results. Thus, social marketing campaigns designed and implemented with orientation on classic marketing principles can make preventive efforts more effective and better embrace the quality management approach than could preventive measures of conventional design. The contributing factors include better orientation on the target groups, a more convincing delineation of health risks, and continuous parallel analysis and evaluation.

Social marketing (SM) aims to achieve sustainable change in the behaviour of a given group. The **"marketing/dissemination"** of **"behavioural change"** is often part of the strategy and lends support to the employed methods of communication. In doing so, social marketing makes use of commercial marketing methods. Communication campaigns on health and preventive issues, e.g., HIV/AIDS, have done very well in the health sector and now constitute an integral part of health promotion. It should be noted, however, that social marketing must not be equated solely with communication campaigns or "social advertising". The term social marketing represents a much more comprehensive concept.

The main task of marketing is to develop the right "product" (product / service / information package) and, with the help of good promotion, to get it properly positioned and sold at the right price. These **key variables**, referred to as the **"4Ps"** (product, price, promotion, place), determine the basic strategic lines of action (instruments) of marketing: product, communication, price and distribution policy.

The term **"product"** is used here in the figurative sense, i.e., as the "sale" of a certain type of behaviour. In contrast to the marketing of consumer goods, social marketing has no material products to offer. Here, the product is a certain mode or pattern of behaviour (e.g. hand washing at critical moments or the systematic use of toilets by everyone).

The difficult part of product policy is that, while the offered "product" does offer a core benefit (long-term reduction in health risks), that benefit is often difficult to communicate, because achieving the behaviour either takes time and effort (repeated hand washing every day, etc.) or runs counter to the cultural and social attitudes of the target group. Hence, the intended change in behaviour must go hand in hand with an **additional benefit in the sense of symbolic assets** like recognition, self-esteem or better bodily perception. For a social marketing campaign to be successful, it is essential that the personal benefits of healthy behaviour be underscored. The additional benefit considered most attractive by the target group has to be investigated separately for each product.

As a rule, the term **price** has no monetary value in the social marketing context. Instead, it stands for the "sacrifices" and inconveniences that an individual will have to accept in order to achieve a change in behaviour: overcoming anxiety (What will the neighbours say?) is just as much a part of the deal as the extra effort it takes to achieve long-term changes in behaviour, e.g., to change certain habits.

The concrete approach is defined by the **promotion strategy**. To communicate preventive issues, taking into account informational and motivational objectives, information and persuasion strategies must be elaborated. Their purpose is to familiarise the people with the product and

make it look desirable. Both the message itself and the choice of communication channels and/or media (e.g., home-to-home visits, markets, sermons, radio, exhibitions, stage plays) are of decisive importance, for it is only through them that the target group can be reached best and convinced. As far as the health sector is concerned, it should be kept in mind that, unlike commercial marketing, the content to be communicated is often quite complex. The Communication of preventive goals also harbours risks, since campaigns relying on a false choice of emotions and motives aiming to persuade people to adopt certain behaviours could, in the end, make the social marketing approach appear as something akin to manipulation. Consequently, social marketing campaigns must strike a balance between the use of short, catchy statements that do not neglect the information aspect and exploiting the potential benefits of getting the target groups actively involved.

Distribution strategy is the fourth cornerstone element. Its aim is to identify how and where such sub-groups as for example girls and public employees can be reached and convinced in the most economically efficient and effective manner.

Knowledge gleaned from analyses of behaviour-relevant factors and motivations are helpful instruments in designing campaigns. The distinctive aspect, that some hygiene behaviours should be trained by way of routines and information of relevance can be integrated into the communication strategy. This approach has the added **advantage** that many countries already have competent social marketing agencies that could, with some appropriate assistance, be familiarised with the thematic area "hygiene".

The elaboration of social marketing strategies and materials is relatively **complex, time consuming and cost intensive** and is therefore primarily suitable for large projects and campaigns.

For communicating with children and their parents, the **complementary use** of **kindergartens/pre-schools and primary schools** as relevant communication channels in combination with "WASH" and "Fit for School" approaches can work well. However, this does necessitate comprehensive involvement of the ministry of education and/or school boards in order to secure the requisite support for the day-to-day integration of hygiene activities into the school day routine or to ensure sustainability. Schools could promote certain hygiene practices as generally recognized social norms.

5. Institutional set up and scaling up

Basically, hygiene promotion should be understood **as a multi-sectoral task**. The institutional set up of hygiene promotion plays a crucial role in achieving sustainable behavioural change and, hence, for improving the health situation. The pre-requisites are:

- evidence-based hygiene campaigns with verifiably positive effects on the health of the people affected
- the active assistance of local authorities and decision-makers and
- the integration of hygiene issues into the task spectrum of health centres and school curricula

Often, the **institutional responsibilities** for hygiene promotion are fragmented and vary from one country to another, but some general statements still apply: The ministry of health is usually responsible for the overall concept and general coordination of hygiene measures within the water-supply and sanitation context. However, these responsibilities are often delegated to the national water utility, which usually also is responsible for the procurement of equipment and sensitisation material. In general, it is the role of the ministry of health to create national and regional capacities for the hygiene sector.

The responsibilities may also be carried by such **other ministries** as the ministry of water, the ministry of the environment, the ministry of the interior and, under certain circumstances, the ministry of nutrition. The ministry of education and its downstream educational institutions are, as a rule, responsible for hygiene education in schools. In addition, local authorities and local government units are often tasked with implementing the measures. A schematic diagram of potential institutional responsibilities for hygiene is shown in Appendix 3.

It is generally evident that the development-policy orientation of donors and the presence or absence of **national hygiene strategies** have a decisive influence on the structure of sensitisation components.

Ideally, hygiene campaigns should be designed and supported by a **superior authority** like the ministry of health, which should also create the general framework conditions, set the priorities, formulate the objectives, bundle the communication materials, coordinate the various measures and attend to the monitoring of impacts.

In the past, hygiene promotion has almost always been implemented in a project-specific manner, often only with marginally differentiated sensitisation material that could have been standardised and improved. This means that the **preparation of communication materials and strategies** needs to be better **coordinated**. Synergy potentials can be found both in projects with different donors and in different projects with a single donor, even if they do not necessarily pertain to one and the same sector. The saved resources can be employed both for the monitoring of results and for knowledge-management purposes.

Multi-sectorial hygiene promotion focuses not only on the design of professional hygiene campaigns, but also on the need to identify **synergies and cooperation potentials** between them and other current or planned programs. It can be very time-consuming and difficult to get a diverse range of actors involved. Experience shows that the dissemination of hygiene topics via other projects and the gradual involvement of local and national interest groups can yield innovative possibilities for reaching the target groups.

Sustainable changes in behaviour do not come from sporadic communication campaigns. They require **long-term, systematic, sustainable multi-channel communication** based on a broad, varied network of well-trained change agents.

It takes **continuous impulses** to make people's hygiene behaviour sustainable, optimally lasting beyond the normal duration of projects. Pertinent solution strategies could include longer project durations, appropriate budget reserves for subsequent project phase, and parallel training programs. Moreover, measures intended to change behaviour should always address a critical mass of people in order to achieve such change on a general scale.

The relevance of institutional affiliation and scaling up is reflected by such questions as (a) how can **synergies** be achieved between national and regional programs and/or between different projects within a region, and (b) how can the required/achieved behaviour be **sustainably** maintained for the long run following termination of the project?

In addition to the concrete sensitisation measures, this also calls for **public discourse** in society. The media to be employed, as well as the planning of the program itself, play a major role in raising the general level of awareness (agenda-setting function). Ultimately, public discourse can lead to changes in social norms or even to legislative amendments.

As far as possible, it can be useful **to incorporate hygiene-promotion projects into existing structures**. At the local level (district, municipalities, etc.) there is usually a professional network of hygiene officers who could or should assume the task of hygiene promotion.

The institutional affiliation must be conceived as a function of the respective **terms of reference** and **spatial conditions**, with appropriate distinctions drawn between the urban and rural setting

and between drinking water and sanitation projects. The competences and resources of the respective authorities are crucial aspects. No generally valid recommendations can be made, but the possibility of cooperating with schools and kindergartens/pre-schools should always be considered.

The **essential elements** of successful hygiene promotion measures integrated within the institutional context are briefly summarized below:

- national-level management of hygiene measures
- coordination between relevant ministries
- planning of concrete activities at the regional and local levels
- clarification of tasks and responsibilities at the regional/local level
- establishment/promotion of regular hygiene services for monitoring adherence to hygiene regulations and measures and of hygiene promotion in general
- conduct of specific measures/campaigns by competent communication agencies
- implementation of practice-oriented hygiene programme in schools
- parallel involvement of the civil society in the measures

Annex 1: Practical tips for the implementation of hygiene measures

The following table outlines the essential phases of hygiene measures and provides relevant recommendations.

Program design and target-group analysis

Phase / Step	Explanations / Examples
Process-oriented, long-term design of projects	• project steering, including reflection loops and adjustment to new insights • hygiene promotion as a long-term programme • prioritisation and selection of topics and themes • professional design and required critical mass • coordination of hygiene topics, finances and time frames
Integrated planning of investment projects and hygiene promotion	• effective blending of infrastructure and hygiene measures, project environment and financing • flexible design of hygiene components with dependence on infrastructural progress
Problem analysis and target-group analysis	• problem analysis (supply coverage rate, hygiene behaviour, hygiene awareness, environment) • identification of targeted goals and target groups (with attention to gender aspects) • analysis of social and cultural environment, external circumstances and framework conditions • restriction to issues of relevance verified by research hypotheses • choosing priority topics
Requisite expertise for the planning of hygiene projects within the scope of feasibility studies	• empirical social research, target-group analysis, interest-group mobilisation, knowledge of infectious diseases and the health sector in general and physiological factors of relevance to behaviour
Important hygiene practices	• hand washing before meals, after using the toilet and after contact with children's faeces; provision of soap and water • proper use, maintenance and cleaning of latrines, disposal of infant's faeces in latrines • menstrual hygiene for women and girls • storage of water and food • clean dwellings and surroundings
Cost components for hygiene campaigns	• campaign planning (formative studies, conception) • campaign implementation (production of materials, hygiene promoters, training, number of locations / population, etc.) • impact monitoring • institution building • school sponsorship and similar special programs

Program implementation

Phase / Step	Explanations / Examples
Design of hygiene projects	• studies for identifying (a) the psychological factors, (b) the channels of communication and (c) the most promising drivers of behavioural change
Communication / intervention strategy	• possible selection of a communication agency from the social marketing sector • formulation of messages and selection of communication media • design of communication materials • pre-testing of communication materials • involvement of target groups and local decision-makers
Quality characteristics of communication contents	• messages clearly oriented on behavioural-change objectives • communication media well mixed to guarantee dissemination and to secure a repetitive effect • everyday relevance of the communication content • practising of routines
"Communicator" qualifications	• beyond expert knowledge, demonstrable competence in social communication required • it should be avoided that communication agents do (a) adopt an instructive approach with respect to the target group, (b) exhibit a negative attitude toward the poorer, less educated sections of the population. (c) During selection of the communicators, qualification should have the highest priority over any other factor, like e.g. tribal quotas
Reporting and periodic adaptation of the project to the recent findinds	• process-oriented programme implementation • preparation of implementation records • analysis of records and adjustment of procedures
Inclusion of project executing organisations and other local actors as "dissemination agents"	• hygiene promotion is a long-term task that should continue after the end of the project • the role-model / dissemination capacities of local actors should be utilized • involvement of the project executing organization and other local actors via systematic training and active involvement in the projects and by establishing local coordination structures • agenda setting: public/social discourse can help the targeted changes gain a generally accepted social character • definition of the roles and responsibilities of the various actors during and after the project
Supervision of the implementation consultant	• criteria for the selection of a social marketing agency • model questionnaire for studies of psychological and other factors • list of suitable communication media for selection • additional guidelines for the selection of communication methods (range, depth of impact, etc.) • model of an implementation report • model questionnaire for project evaluation

Annex 2: Profile of established WASH methods and planning approaches

The following profile of established methods and approaches in the sanitation and hygiene-promotion sector is intended to provide an overview with no claim to completeness. The approaches / methods can be grouped as follows:

1) participatory planning instruments
2) hygiene promotion and behavioural change
3) promotion of sanitation demand and supply chains
4) programme design

While the category-1 approaches include a conglomeration of participatory instruments, each of the category-2 and -3 methods define a single, clear-cut approach. Finally, category 4 tends more toward claiming to provide comprehensive concepts.

a) Participatory planning instruments

- **Participatory Rural Appraisal/ Methodology for Participatory Assessments**
  PRA/MPA was not developed specifically for the water, sanitation and hygiene sector but rather constitutes a collection of methods for analysing situations with the active participation of the people, the idea being to raise their awareness and encourage them to develop their own initiatives. PRA/MPA can provide valuable tools for designing programmes and for purposes of evaluation.

- **KAP studies (Knowledge, Attitude, Practice)**
  KAP studies are quantitative, representative surveys. KAP surveys are not restricted to but frequently encountered in the health sector and wherever else the goal is to provide insights and improve knowledge and attitudes with regard to a particular behaviour.

- **Community Action Planning (CAP)**
  This method is based on an interdisciplinary, collaborative approach to planning which proceeds on the assumption that local change can be achieved through the targeted involvement of local forces. CAP was not developed specifically for the water, sanitation and hygiene sector but has proved to work well for the participative planning of sanitation projects.

- **Self-esteem, Associative strengths, Resourcefulness, Action-planning und Responsibility (SARAR)**
  SARAR is a collection of methods for liberating/developing creative capacities for planning, problem solving (self-solution approaches) and self-evaluation. The compiled methods help develop motivators' communicative abilities and to set thought and action processes in motion. The method is based on the assumption that the target groups will actively plan and implement the desired changes. Since, however, human behaviour is not dictated solely by rational insight, this approach has its limits. Selected instruments can, though, be put to good use in connection with diverse situation analyses and awareness-raising measures.

2) Hygiene promotion and behavioural change

- **Participatory Hygiene and Sanitation Transformation (PHAST)**
  PHAST is regarded as a further evolvement of SARAR. Based on 7 steps of planning and implementation, this method is intended to stimulate decision-making processes in the community. Communication with the people of the community is essentially image-based.

  Like SARAR, this method is based on the assumption, that the target groups are able to plan and implement the desired changes. Regarding the method's usefulness for behavioural-change processes, the same limitations apply as for SARAR. In addition, this method harbours the risk of third party effects, i.e., when problems are perceived as being important for others but not for oneself.

- **Community Health Clubs (CHC) and Young Mothers' Clubs**
  These are clusters of groups that hold regular meetings to discuss and learn about hygiene and health problems, the goal being to achieve, after each meeting, a change in behaviour by practicing it at home.

  This approach is quite comprehensive. It can include the exchange of views and experience and presumes adequate resources and a permanent local structure. The positive effects of peer-to-peer approaches to behavioural change are sufficiently well known.

  To the extent that the requisite resources and competences are available, this approach can be adopted as one component of a comprehensive communication strategy. This, however, is dependent on the specific psychological factors that have been targeted for change.

- **WASH in Schools/CHAST (Child Hygiene and Sanitation Training)**
  The purpose of WASH is to improve both the hardware and the software side in schools. Its catalogue of measures extends from the training of trainers to the mobilisation of all those involved in infrastructural measures, integration of the subject into scholastic curricula, extra-curricular activities, etc. This approach presumes very effective multi-sectorial coordination and can have positive effects on household hygiene behaviour, because one of its main components is broad-based participation.

  CHAST, which is based on PHAST, is a pilot approach in schools that aims to teach pupils the connection between hygienic behaviour and health. Employing diverse exercises and educational games, this approach is very time intensive and accordingly difficult to incorporate into large projects. Nevertheless, many of its instruments are quite promising and can/should be selectively employed.

- **Child-to-Child Approach (CTC)**
  CTC is not a self-contained approach but can/should be seen as a component for integration into a comprehensive programme. CTC's main merit is that the children not only learn about hygiene and sanitation but also actively participate in solving relevant problems. This approach relies on one or more strongly charismatic individuals. The available data does not yet suffice for evaluating the success of this approach.

- **Marketing of a Single Intervention (Saniya, PPPHW, HWTS)**
  These three approaches, which concentrate on changing one specific aspect of behaviour at a time, are well suited for countrywide programs.

Saniya focuses on reducing diarrheal disease in children. This approach relies on formative research. Saniya was the first approach to concentrate on "washing hands with soap".

PPPHW (Public-Private Partnerships for Hand washing with soap) is characterised by a combination of user-oriented marketing competence on the part of the soap industry and the institutional strengths and resources of participating governments. This very sophisticated approach requires a long preparatory phase and is therefore only worthwhile for long-term programmes.

HWTS (Household Water Treatment and Safe Storage) adopts an approach similar to that of PPPHW, but focuses more on providing “hygienically safe” drinking water at household level in localities with no other source of potable water.

- Fit for School
  This approach hinges on the development of simple, low-cost, modular, evidence-based interventions that focus on practicing daily skills instead of just learning about health. The active participation of non-health experts (teachers) is a prerequisite.

3) Promotion of sanitation demand and supply chains

- Community-Led Total Sanitation (CLTS)
  The main objective here is to stop open defecation. The employed methods are based on participatory planning approaches in order to raise people's awareness of the problem and to trigger disgust as motivation for the community to decide to change things for the better. This approach is not based on the transfer of knowledge but on "propelling" a process. Notable success has been achieved in localities where open defecation or the use of unhygienic toilets is a central problem. The choice of toilet technologies is left to the individual families.

  It goes to the credit of CLTS, that the "shit" problem is attracting more attention, that people are realizing that they themselves must solve the problem, and that behavioural changes cannot be achieved solely by planned, knowledge-transferring approaches.

  CLTS is very strongly "community based", and as such, very well suited for application in rural areas. In urban/peri-urban settlements, where prevailing conditions like less social cohesion, higher population density and the fact that many families own neither the homes they live in nor the property they are built on, it takes a much more complex approach to propel processes of change.

- School-Led Total Sanitation (SLTS)
  This approach builds on CLTS but focuses on schools, where pupils are encouraged to help improve hygiene conditions and behaviour in their own schools. Then, the pupils can act as chain agents at home in their own families. The experience gained to date is restricted to the pilot level. This very idealistic approach presumes a candid parent-child relationship, though precisely that is rarely encountered in most communities.

- Sanitation Marketing
  This is the use of marketing techniques to sell sanitary products or services on the basis of consumer analyses, product development and branding.

- **Support to Small-Scale Independent Providers (SSIP)**
  This approach attempts to bundle support for small and micro-scale service providers, most of whom operate in the informal sector. Examples include the formalisation of services, formation of networks, regulation, training and financing.

- **Sanimarts**
  These are points of sale for sanitary products and services. Proactively established to fill specific market gaps, Sanimarts provide initial equipment, cut-rate products, training for service providers and marketing campaigns. This approach appears to work better for families wishing to improve their sanitary facilities than for families who are still doing without basic equipment.

4) Programme design

- **Strategic Sanitation Approach / Strategic Sanitation Planning**
  This citywide approach engages all aspects of urban water and sanitation management. It is based on strategic planning and the gradual introduction of measures and service arrangements for the respective components and problems. Well suited for strategic planning in the sanitation sector, this approach presupposes good planning competence, well-functioning financing mechanisms and a community/authorities responsible for all relevant tasks.

- **Sanitation 21**
  This approach is geared to the definition of framework conditions and the analysis of soft technical measures and management requirements. No analysed evaluations are yet available.

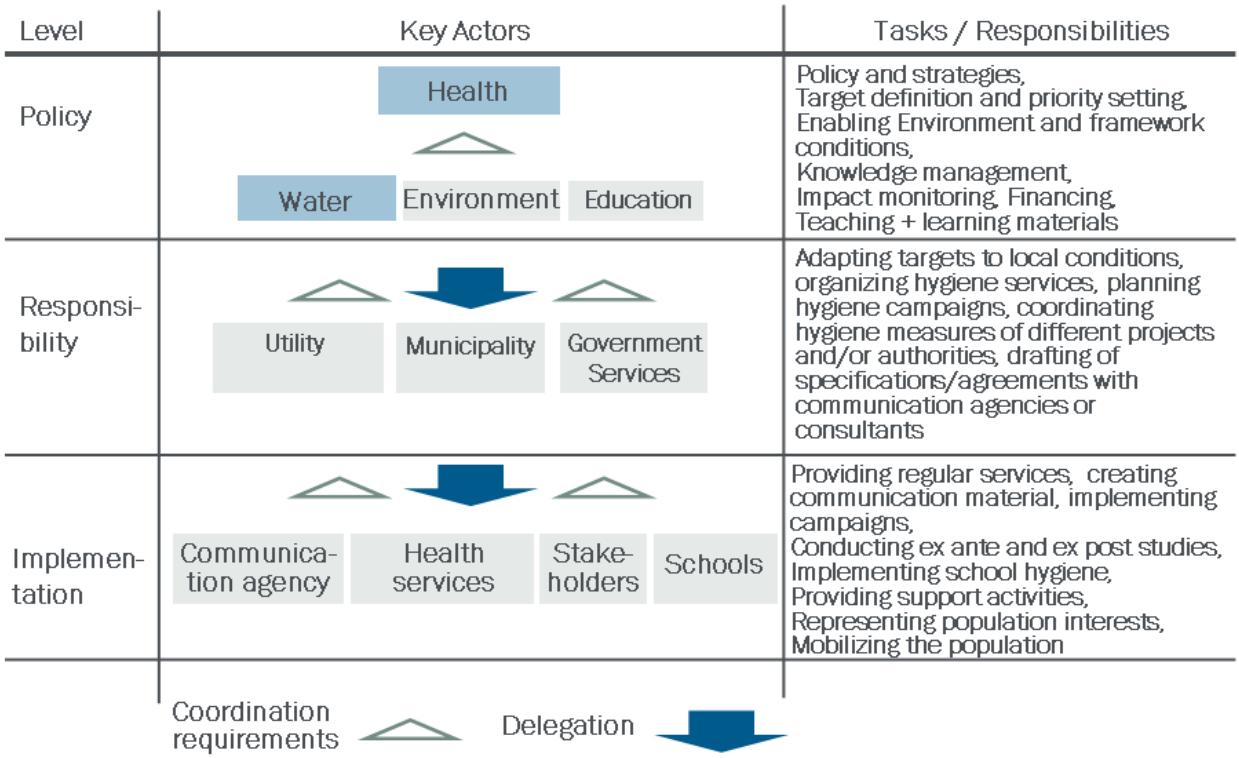
- **Household-Centred Environmental Sanitation (HCES)**
  HCES is an integrated approach that simultaneously addresses safe water supply, environmental sanitation and hygiene promotion. It places household and neighbourhood at the core of the planning and implementation process. In this holistic planning process, the key participants are local stakeholders and household members. This approach requires good planning abilities, extensive technical and financial autonomy on the city's part, and ample political commitment.

- **Hygiene Improvement Framework (HIF)**
  This approach tries to provide a framework within which hardware, hygiene-conscious behaviour and a supportive environment all come together. The various methods described above can be employed here.

  This approach claims to promote maximum health benefits by setting up appropriate framework conditions. HIF has been adapted by various organizations and employed in diverse programs. This approach can provide some useful stimulation in the project planning phase.

- **Focus, Opportunity, Ability and Motivation (FOAM) and SANIFOAM**
  Focused analysis is employed here as a means of identifying and classifying such behaviour-related factors as opportunities, abilities and motivations. This approach enables analysis of complex behaviour and offers a focused procedure.

Annex 3: Schematic illustration of institutional hygiene responsibilities



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