CUVE integrated water resources management waters

Participatory sanitation marketing approaches for altering hygiene behaviour

A review of Community Health Club and community-led total sanitation

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Abbreviations

CARE	Cooperative for Assistance and Relief Everywhere
CBM	Community Based Management
CCS	Community Cleaning Services
CHC	Community Health Club
CLIP	Community Land Information
CLTS	Community-Led Total Sanitation
COS	Communal Observation Survey
DAPP	Development Aid from People to People in Namibia
DESWOS	Deutsche Entwicklungshilfe für soziales Wohnungs- und Siedlungswesen (German development work for social housing and settlement)
DFID	Department for International Development
DR	Demand Responsive
HIS	Household Interview Survey
HOS	Household Observation Survey
HRDC	Habitat Research and Development Centre
HW	Hand Washing
IDP	Internally Displaced Persons
IDS	Institute of Development Studies
IRC	International Water and Sanitation Centre
ISOE	Institute for Social-Ecological Research
ITN	International Training Network for Water and Waste Management
IWRM	Integrated Water Resources Management
KWAHO	Kenya Water for Health Organisation
LSHDP	Local Sanitation and Hygiene Development Plan
MAWF	Ministry of Agriculture, Water and Forestry Namibia
MDG	Millennium Development Goals
MOPHS	Ministry of Public Health and Sanitation
NEED	Namibian Environmental Education Network
NGO	Non-governmental organisation
NHAG	Namibia Housing Action Group
NIED	National Institute for Educational Development
NNSS	Namibian National Sanitation Strategy
NRCS	Namibian Red Cross Society
NSSAR	Namibia Sanitation Situational Analysis Report

ODF	Open Defecation Free
OTC	Outapi Town Council
PHAST	Participatory Hygiene and Sanitation Transformation
PLA	Participatory Learning and Action
PRA	Participatory Rural Appraisal
PROWWESS	Promotion of the Role of Women in Water and Environmental Sanitation Services
REH	Rural Environmental Health
RWSG-EA	Regional Water and Sanitation Group – East Africa
SAKNSS	Southern Africa knowledge node on sustainable sanitation
SARAR	Self-esteem, Associative strengths, Resourcefulness, Action-planning Responsibility
SDFN	Shack Dwellers Federation of Namibia
SDI	Shack Dwellers International
SSS	sugar-salt-solution
SuSanA	Sustainable Sanitation Alliance
TUD	Technische Universität Darmstadt
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNICEF	United Nations International Children's Emergency Fund
VERC	Village Education Research Centre
VIP latrines	Ventilated Improved Pit Latrine
WASP/WSASP	Water Supply and Sanitation Policy
WHO	World Health Organization
WSLIC	Water and Sanitation for Low Income Communities
WSSCC	Water Supply and Sanitation Collaborative Council
ZOD	Zero Open Defecation

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1 Background

1.1 Project framework and objectives of the review

Environmental change, population growth and urbanisation are putting increasing pressure on the scarce water resources in the Cuvelai-Etosha basin in central northern Namibia. Fresh water is provided by a water pipeline which originates from the Kunene River which marks the border to Angola. Within the integrated water resources management concept (IWRM), the CuveWaters project investigates demand-responsive (DR) and adapted water supply, sanitation and waste water treatment technologies. The central goal is to strengthen the potential of the region's resources by combining new and adapted technologies in a multi-resource mix for water supply and sanitation (Kluge et al. 2008a and b). Technical sections of the project are framed by societal and scientific components. Furthermore, IWRM is embedded in existing processes and adapted to the specific political, social and economic conditions.

In Namibia's urban areas, approximately 60 per cent of the population have access to improved sanitation, while in informal settlements the situation is still far worse (MAWF 2009). The latest Namibian National Sanitation Strategy (NNSS) notes that "benefits of the provision of sanitation are promoted as a public good, and include health, environment, energy generation (biogas) and food production (waste water re-use and treated excreta re-use)" (MAWF 2010). CuveWaters is taking the major recommendations of the NNSS into account. The concept combines wastewater management with water re-use, fertiliser recovery, energy generation, and a community-based approach. Special attention is paid to altering hygiene behaviour thus including the improvement of health conditions.

The CuveWaters sub-project on sanitation and water re-use is implemented by ISOE and TUD-IWAR in Outapi in collaboration with the local Town Council (OTC) and Roediger Vacuum as the German industrial partner. It involves putting in place different sanitation-enhancing options to allow infrastructure to adapt to urban transformations and to improve basic sanitation conditions in general. The options in question are sanitary installations in private houses (individual solution), sanitary facilities for small neighbourhoods in informal settlements (cluster solution), and the concept of a communal sanitation house in a densely populated older settlement (community solution).

Finding ways to improve sanitation calls for a good grasp of the local situation regarding water utilisation, financial constraints as well as hygiene and social-cultural behaviour. Technologically sophisticated concepts can easily clash with users' needs as well as with the local understanding of planning, maintenance and affordability. In addition, municipalities have very little experience in introducing a sanitation infrastructure to settlements in the midst of a dynamic transition between informal and formal status.

At the beginning of the project, the team therefore defined some basic work principles: one is to constantly focus on strengthening the participatory approach in order to include beneficiaries and other stakeholders. Another is that we need to understand private water use, sanitation, and the existing patterns and socio cultural implications of water supply and water use in private households. This calls for a continuity of activities with a focus on sanitation promotion (e.g. Deffner et al. 2012, 2010, 2008). The paper presented here, reviews different approaches with the aim of finding out which one fits best to the given socio-cultural and socio-technological frame.

1.2 Improvement of sanitary conditions in the context of the Namibian goals

The *Namibian National Sanitation Strategy* (NNSS)[1] is aiming for a transfer of responsibility for the operation, administration and maintenance of water and sanitation infrastructure to local authorities. To achieve an adequate water supply and level of sanitation for the entire population (taking the MDGs[2] as a guide), explicit reference is made to the involvement and support of the existing actors and activities within the *Shack Dwellers Federation of Namibia* network[3] (MAWF 2009: 24). According to the NNSS, the structures of this network offer a good basis for empowering local residents to participate in the development of their community. These structures also offer the chance to connect the local, regional and national institutions operating in the water and sanitation sector. Furthermore, the NNSS (MAWF 2009: 29) emphasises the importance attached to using the *Community Health Club* for the realisation of water, sanitation and hygiene programmes.

Since the CHC approach is in Namibia's national interest (MAWF 2009: 25, 29–23) and is among renowned methods of recent participatory development research alongside the Community-Led Total Sanitation approach (CLTS), we explicitly review and compare the two in this paper. However, the predecessor approach PHAST is also described, as it is a basic method of CHC. The focus is nonetheless on CHC, to show the theoretical foundation and empirical findings of the approach.

Taking western planning approaches as a starting point, the challenge here is to establish sustainable use of water and access to sanitation systems. This includes the provision of equipment (technology), construction materials, and financial resources, and canvassing to increase awareness of the need for suitable sanitary installations. However, the task of improving hygiene and sanitation also brings up an entirely different challenge: far more important than logistical and infrastructural support is taking into account the social-psychological patterns of behaviour. After all, these patterns need to be changed if the MDGs are to be reached. Given this background, Waterkeyn et al. (2009) argue that the success of the MDGs depends in principle on being able to mobilise and involve the communities and settlements affected. In their view, very few approaches in recent decades have managed to mobilise residents into changing their hygiene habits of their own accord. Instead, it is fair to say that *top-down* initiatives to introduce water and sanitation installations serve to divide community residents as they compete for limited financial resources.

"Health and hygiene promotion is therefore an ideal entry point with which to mobilise a village to not only to participate in this challenge, but to lead their own process of development and contribute through self-supply, particularly of safe sanitation, safe water and improve hygiene, food security as well as ultimately poverty reduction through income generating initiatives." (Waterkeyn et al. 2009: 2)

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1 See appendix for further information

2 MDG: Millennium Development Goals of the United Nations – eight development goals for the year 2015. They were drawn up in 2000 by a working group comprised of representatives from UNO, the World Bank, the OECD and several non-government organisations. They were agreed by the United Nations at the Millennium Summit. Goals 4 to 7 are of particular significance in the context of water, sanitation and hygiene.

3 The *Shack Dwellers Federation of Namibia* is a network of community-oriented savings groups for low-income households whose goal it is to acquire free land step by step, build houses and secure infrastructural services. The SDFN exists in all 13 regions of Namibia. There are currently 22,894 families taking part in the initiative in 597 groups.

2 Overview on development models on behavioural change

2.1 Commonly known methodologies to promote change of hygiene behaviour

There are various development approaches, which are based on different theories of behavioural change. Below we are giving a short summary of them.

1. Social Planning
   The core idea behind this approach is that it takes institutional authority to get people to change their conduct. This means that it is up to institutional or official representatives of the health system to identify problems, work out solutions, and implement them by constitutional means (Waterkeyn 2010). This represents a classic top-down procedure.
2. Health Belief Model
   This model, originating in the 1950s, is based on the idea that people must understand why they should change their behaviour. The basic assumption is that health-related behaviour is co-determined by conscious and rational cost-benefit considerations. If given the appropriate information, people can understand the problems in question and change their behaviour accordingly (cf. Schwarzer 2004).
3. Demonstration Model Approach
   This approach is based on the assumption that those affected by a problem need visual evidence in order to change their behaviour. It involves a practice-oriented procedure, building on the Diffusion of Innovation model (Rogers 1983) and based on the trickle-down theory. The latter means that good ideas will always prevail and will be copied and used by others (cf. Ministry of Health Zimbabwe 2010: 7).
4. SARAR (Self-esteem, Associative strengths, Resourcefulness, Action-planning, and Responsibility)
   The method was developed in the 1970s by Dr. Lyra Sirinivasa. The basic principle of this approach focuses on recognising and highlighting the inherent capabilities of those affected. The SARAR approach is designed to help them identify their strengths so that they are able to solve their own problems within a participatory group process (cf. Simpson-Hébert et al. 1997: 4).
5. PHAST (Participatory Hygiene and Sanitation Transformation)
   The key idea behind this method is to include those affected in the problem-solving process and get them to participate in order to bring about lasting change to their behaviour. They are given responsibility and play a recognised part in the problem-solving process "[…] so that they own the process, not only the outcome of their actions." (cf. Ministry of Health Zimbabwe 2010: 7)
6. Sanitation Marketing as Social Marketing
   The basic idea behind Social Marketing is that of adapting commercial marketing techniques to projects designed to bring about a change in social awareness as well as to influence, maintain or create awareness of socially relevant values, attitudes and types of behaviour (cf. Andreasen 1994). The key objective is to influence conduct through different marketing measures. In the context presented here, marketing plays an important role when it comes to community-related ideas and objectives (cf. Scheibe-Jaeger 2002). Other contexts are for example marketing activities for non-profit organisations or marketing that includes social components.

7. CLTS (Community-Led Total Sanitation)
   Here, the aim is to get people to change their behaviour by using a personal sense of embarrassment in combination with group dynamics. Proper hygiene behaviour can be encouraged via the constructive use of moments of disgust and a personal sense of shame (eye-opener: I risk eating my own faeces if I don't adopt proper hygiene practices.) (Chambers 2009: 11).
8. CHC (Community Health Club)
   The basic assumption of this approach is that people can best change their behavioural patterns as a group. The aim of the method is to achieve group consensus through a process of joint decision-making based on hard facts. This should then lead to a culture of health acting as a long-term guiding principle for hygienic behaviour in all contexts (Waterkeyn 2010: 130 ff.).
9. WASH
   The Global WASH campaign is not a method. It is a worldwide movement and a conjunction of diverse institutions and organisations. "Its aim is to raise public and political awareness of adequate sanitation services, healthy hygiene practices, and safe water supplies. Integral to the campaign is its people-centred approach – focusing on unserved poor, women, children, and youth" (WSSCC 2011).

The following chapter presents in greater detail the set-up and functioning of PHAST. In order to be able to draw comparisons CLTS and CHC will be presented each in an own chapter (3 and 4).

In all chapters there will occur specific wordings from the PLA context (Participatory Learning and Action). Therefore we would like to explain one keyword to which most of the methodologies refer to:

"Participatory Learning and Action (PLA) is an approach for learning about and engaging with communities. It combines an ever-growing toolkit of participatory and visual methods with natural interviewing techniques and is intended to facilitate a process of collective analysis and learning. The approach can be used in identifying needs, planning, monitoring or evaluating projects and programmes. Whilst a powerful consultation tool, it offers the opportunity to go beyond mere consultation and promote the active participation of communities in the issues and interventions that shape their lives." (Thomas 2004: 1)

2.2 Participatory Hygiene and Sanitation Transformation (PHAST)

2.2.1 Background

In the early 1990s, many international development organisations came to the conclusion that a large number of the development programmes carried out in the field of hygiene and sanitation had failed. In the course of collaboration between the United Nations and WHO, a new approach was to be developed. The key institutions involved were the United Nations Development Programme, the World Bank Regional Water and Sanitation Group – East Africa (RWSG-EA) as part of the PROWWESS[4] project, and the Rural Environmental Health Unit (REH) of the World Health Organisation. The organisations reached a common basic agreement to acknowledge a participatory learning process during the test phase of the African PHAST initiative. The approach was developed according to the following basic principles:

[4] PROWWESS – Promotion of the Role of Women in Water and Environmental Sanitation Services (cf. Simpson-Hébert et al. 1997: 7)

1. Local adaptation and local innovations were to be strongly encouraged.
2. The PHAST initiatives were to use an approach that allowed a flexible learning process.
3. Methods developed by the initiative were to be common property.
4. The experiences of the pilot projects were to be freely exchanged amongst all participants and sponsors of the initiative (*lessons learned*).
5. Each participating country was to set up a core group to co-ordinate the activities, financing and experiences of the pilot projects.

Pilot countries selected for the initial application of the PHAST approach were Botswana, Kenya, Uganda and Zimbabwe. The regional pilot programmes with a scheduled duration of 18 months were implemented in collaboration with governments, UNICEF, regional NGOs (CARE, KWAHO, WaterAid) and the *The World Bank International Training Network*[5] (ITN). In September 1993 the PHAST programme was officially launched with a one-week preparatory workshop in Nyeri (Kenya), in which a total of twelve regional and international specialists took part.

2.2.2 PHAST

PHAST is an approach for promoting educated hygiene behaviour and the autonomous management of water supply and sanitation installations. Participatory learning is put into practice via the so-called SARAR method. The approach is basically designed to give members of a community (settlement, neighbourhood, village) the chance to become aware of issues affecting them and to solve these problems themselves. The goal for communities is to be in a position where they can take responsibility for hygiene and sanitation. The PHAST approach allows communities to learn how to manage their water resources autonomously. Another main focus is to control the outbreak of diseases resulting from inadequate sanitation facilities. Both help to establish improved health awareness and an understanding of the processes by which diseases occur. In workshops with residents/members of the community attempts are made to convey the connection between hygiene practices and people's state of health. The idea is to use a group-oriented learning process to bring about changes in individual behaviour. This approach will also heighten participants' self-esteem and self-confidence by involving them in the process of planning water and sanitation installations.

The *community planning* procedure is divided into seven steps (Fig. 1). Each one of them consists of one to four activities that the group must tackle in order to improve their joint planning of sanitation facilities and hygiene management (cf. Simpson-Hébert et al. 1997: 2 ff.).

As in the CHC approach described later on (see Chapter 5), the intention is to enable participating members of the community to analyse the problem themselves. Any decisions to make changes are legitimised via group consensus.

The advantage of the approach is that the residents involved develop a sense of trust in and responsibility for their own projects. Furthermore, they are able to express the changes they would like to see and those that they find undesirable. PHAST also ensures that water supply and sanitation programmes are implemented in a way that meets residents' needs. The procedure allows for direct feedback during the actual implementation so that any adjustments can be carried out

[5] The International Training Network for Water and Waste Management (ITN) is part of the UNDP/ World Bank Water and Sanitation Program. (See: Simpson-Hébert et al. 1997: 8).

in due time. One disadvantage of the approach is that it is relatively time and cost intensive. Before it can be used in a community, so-called health social workers have to acquire the PHAST approach[6] and take regular refresher courses. This calls for strong organisational and administrative structures (government, NGOs).

Fig. 1: Seven steps of community planning in PHAST (Wood et al. 1998: 30)

[6] Cf. Simpson-Hébert et al. 1997: 30 ff. This gives a list of institutions and organisations that fund PHAST, along with further lists showing countries and contacts involved in the pilot phase of PHAST

3 Community-Led Total Sanitation (CLTS)

3.1 Background

Since 1999, Kamal Kar, an employee of WaterAid Bangladesh, has been developing the Community-Led Total Sanitation approach (CLTS) in collaboration with the local partner organisation VERC (Village Education Research Centre). In 2000, the first project was launched in a Bangladesh village. During the same period, WaterAid Bangladesh has been running workshops for so-called health workers (facilitators) in Asia. From 2007, the organisation stepped up its workshops and training courses for facilitators in Africa and the Middle East. The organisers received funding and financing from banks, foundations and Unicef.[7] The research project 'Going on Scale' has been running almost from the very beginning at the Institute of Development Studies (IDS), University of Sussex in Brighton. Headed by Lyla Mehta, the CLTS approach is undergoing scientific analysis and further development. The project is funded by the Department for International Development (DFID). In Great Britain, the CLTS approach was developed with a particular focus on rural regions. Chambers (2009: 10) works on the basis that of the approximately 2.2 million people dying each year from diseases caused by a lack of hygiene and access to sanitation facilities, around 80% live in rural areas. Representatives of this approach thus consider rural regions extremely important for the transformation: "If […] all rural areas could be ODF[8] and all rural people were to adopt hygienic behaviours, the impact could be massively transformative." (Chambers 2009: 11)

There are currently projects using the CLTS approach in 20 countries worldwide.

3.2 Process of the approach

The key objective is to use autonomous analysis and evaluation of the hygiene situation to get residents to decide independently to become an ODF (Open Defecation Free) zone. There should be no 'lectures' from external parties. Instead, social workers/facilitators (from government, NGOs and also traditional authorities from other communities) should act merely as an impetus for community self-organisation. CLTS is based on Participatory Rural Appraisal[9], the key to which is the 'they can do it' principle (Chambers 2009: 11). Communities should develop and implement their own courses of action to overcome their problems. CLTS uses embarrassment ('shock and shame' moments) in order to mobilise the communities. These are provoked through joint mapping of the settlement and joint inspections of the sites where the residents go to defecate. At the 'scene of the event', the total amount of faeces[10] produced by each family is calculated. Furthermore, the residents work together to find the routes via which excrement can come into contact with the mouth.

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7 WSP World Bank, CARE, Concern, WSLIC II (Water and Sanitation for Low Income Communities in Indonesia), The Bill and Melinda Gates Foundation, Social Fund for Development in Yemen, Vita Refugee Trust International, Plan International

8 ODF = Open Defecation Free

9 PRA: The intention with this approach is to incorporate the knowledge and views of the rural population into the planning and management of development projects. It entails various techniques such as *participatory mapping, transect walks, interviews, visualisation* etc.

10 Care is taken in the mobilisation workshops to always use idiomatic terms for defecation and faeces in order to avoid abstraction and avoid losing the direct reference to excrement and development of disease.

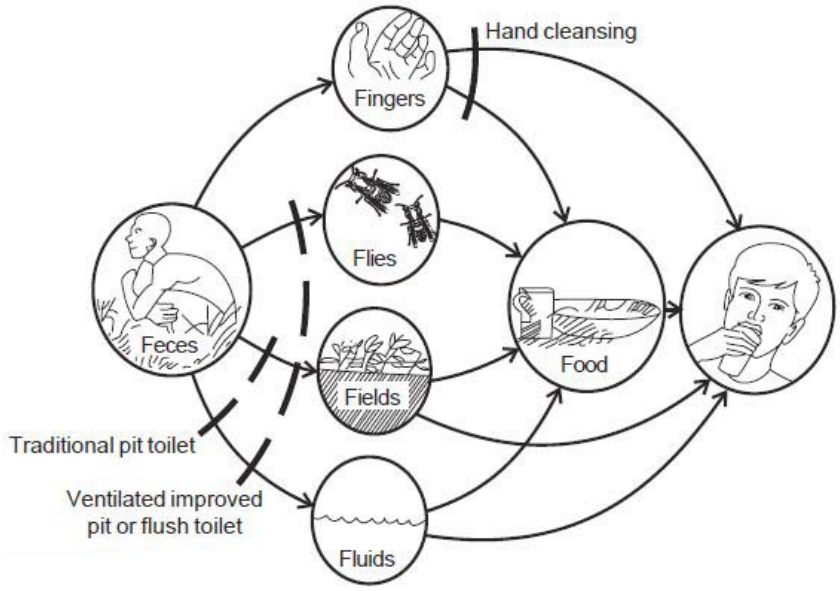

Fig. 2: Illustration of the anal-oral transmission path (Government of Uganda)

People are made aware of how transmission works and are thus presented with the shocking moment of realisation "[…] *we are eating one another's shit* […]" (Chambers 2009: 11). This knowledge is then used as the core impetus for implementing group decisions and changing behaviour to put an end to open defecation (cf. Fig. 2). If the impetus proves successful, participants in the CLTS workshop then set to digging pit toilets and latrines themselves. Ideally, this should take place with regional materials and without external subsidies.

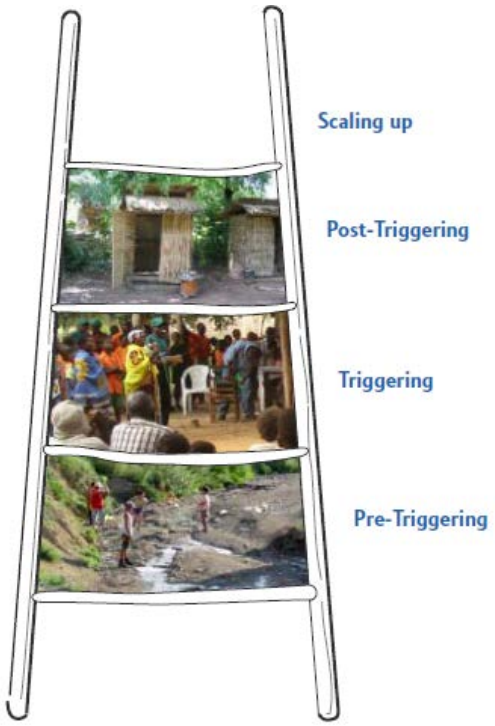

Fig. 3: CLTS steps as a ladder (Source: Kar/Chamber 2008:11)

3.3 Training the facilitators

A key element in implementing CLTS is the training of facilitators who will later apply the method within the communities. In Bangladesh, for example, international and regional workshops[11] are held for this purpose. Many of them are supervised by WaterAid Bangladesh. The approach is so widespread that workshops nowadays are also being run by other CLTS specialists. In Kenya, CLTS has now become part of the official National Sanitation Strategy, and facilitators are being trained in collaboration with the Ministry of Public Health and Sanitation (MOPHS) and several NGOs.

Table 1 shows the differences between conventional training measures and workshops on Sanitation Marketing, and CLTS measures. It emphasises the participatory approach of CLTS but also notes some restrictions for a social-culturally adequate use.

	Conventional training	**CLTS training**
Training is focused towards	Output in the form of capacity building of the participants	Outcome through emergence of ODF villages while building capacity of the participants
Final output/ outcome	• Trained facilitators/trainers • Shape, form and the kind of output is generally known	• More than trained trainers and facilitators, it initiates collective local action towards sustainable ODF status as an outcome from every training workshop • Final outcome is not known. It could be positive as hoped by the outside facilitators or unexpectedly negative
Mode of instruction	Could be participatory but emphasises learning what has been predetermined	Participatory and with emphasis on experiential self-learning, keeping options open for new learning.
Distribution of training time between classroom learning and community interactions	• More in classroom • More time is spent in further analysing outputs from community interactions	• More with the communities than in classroom • Community members are invited back to share their own analysis and present their plans for immediate action
Learning from Whom?	Learning from experts and specialists	Learning from local communities and Natural Leaders
PRA tools used to	Generate information, local analysis and participatory planning. If facilitated well, gradual local actions might begin as a result of PRA exercises	Community embarks on immediate collective local actions. Learning from their own analysis is put to use with immediate effect by setting a deadline to accomplish

[11] Cf. International Institute for Environment and Development 2010: 221 ff.: current list of all CLTS workshops planned for 2011.

Major focus	Facilitating participatory analysis and learning from insiders and outsiders	Facilitating analysis, learning to generate “disgust”, “shame”, “fear”, “self-respect”, and “solidarity” to change practice rapidly
Time to see the impact/ outcome of training	From few months to years. Often the time needed reflects the capacity building of the participants	Radical change within 3–4 weeks to 3–4 months
Style of facilitation	Polite and very decent (no unconventional words are used that might agitate people)	Provocative and straightforward (commonly spoken local terms and language are used, not trying to please anyone)

Tab. 1: Difference between conventional and CLTS training measures to promote sanitation. (Source: adapted from Kar 2010: 37)

3.4 Potential of CLTS

An evaluation of the approach reveals five core benefits (Chambers 2009):

- Speed: the CLTS representatives reckon that it takes from four weeks to four months to achieve a totally ODF zone. The primary objective of setting up an ODF zone is often accompanied by further measures. Other approaches require much more time to be implemented.
- Totality: the ODF is seen as a communal commodity since individual hygiene and sanitation behaviour are closely related to community health and the health of neighbours. The entire community benefits from the ODF.
- Social solidarity leading to other actions: by the end of a successful CLTS process, solidarity within the community will have greatly increased. The residents will also have become more self-confident thanks to the common sense of achievement. This can be a starting point for other social development initiatives.
- Local leadership: in a context of social solidarity within the community and new-found communal confidence, it becomes possible for new local natural leaders to emerge with the ability to oppose to the old-established bodies of authority. Moreover, the natural leaders can earn their livelihood as facilitators.
- Application in other contexts: the more recent history of the CLTS approach includes its application in urban areas (cf. next section).

The benefits show the strong focus on establishing an ODF zone and the natural leadership. Especially the benefit of speed is a cost-relevant factor which can play a crucial role when applying an approach within a time restricted project. On the other hand the optimistic aim, that natural leaders can make a living by being a facilitators is not applicable in all cultural and economic contexts.

3.5 CLTS in urban areas

Even though CLTS focuses on rural regions, initial experiences with the approach are already being made in informal urban settlements in Africa (cf. Bongartz et al. 2010: 47 ff.). Take for example its implementation in Egypt, managed by Plan Egypt for urban waste management. In Zambia, too, the CLTS approach was used in several projects to improve sanitation in urban areas. In the city of Rosso in Mauretania, eight districts have been declared ODF zones.

The brief case study from Kenya is describing experiences in urban areas as well. Here, it was possible to end open defecation in a coastal and an inland region. A major role was played by youth groups who built public toilets:

In July 2007, Plan Kenya launched a CLTS pilot project in three districts (Kilifi, Homa Bay, Machakos). The facilitators who carried out the *triggering*[12] had taken part in a CLTS training course in Tanzania some months earlier. Kilifi was the first district in which triggering was carried out. The first ODF celebration was held as early as November 2007. In introducing this approach, recourse was taken to experienced facilitators who had conducted a Child Survival project in the same district between 2002 and 2009. The intention was that these existing structures be used to introduce the CLTS method. During discussions with the settlers after triggering, it also emerged that hygiene practices of indigenous groups existed, which were then tied into the subsequent CLTS process. (see Bwire 2010: 92). In June 2010, a new project was launched under the supervision of Plan Kenya. In four formal settlements, young residents founded non-profit ventures, so-called Community Cleaning Services (CCS) (cf. Bongartz et al. 2010: 47 ff.).

4 Community Health Club

4.1 Background

The CHC approach took over 10 years to develop until it was eventually applied in a pilot project in Zimbabwe. Community Health Clubs are community-based organisations. Membership is voluntary, free of charge, and irrespective of gender and religious orientation. Community health in this context is always seen in terms of physical, mental and spiritual well-being. CHCs offer opportunities to gain information and education that enable the residents of villages and informal urban settlements to learn practices for promoting family health.

Two fundamentally distinct strands stand out when it comes to health promotion theories: individual-driven models like the Health Belief Model, the Theory of Reasoned Action and Planned Behaviour, the Stages of Change Model or the Social Cognitive Model[13]. They are based on the premise that behavioural change depends solely on the individual. This is why they focus their analyses of behavioural patterns and prospective courses of action for change very much on the individual. Contrasting with these are society-driven approaches, like the Diffusion of Innovation, Theories of Rural Development, Community Development or Social Planning and Action. Here it is assumed that behavioural changes can only be explained in terms of social mechanisms.

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[12] The process with a ‘shock and shame’ moment in which residents of the settlement realise that they are eating their own faeces due to inadequate levels of hygiene.

[13] Key literature on these models: e.g. Ajzen (1985), Prochaska (1992)

The CHC approach uses a social-psychological perspective that draws on both strands. It highlights the relevance of social pressure for behavioural change (cf. Waterkeyn 2009a:14 ff.). The CHC approach can be seen as a horizontal or bottom-up means of intervention to promote good health. Unlike top-down approaches, diseases are not taken individually but are always viewed in their social context. Diseases are seen as social problems. Although it is experts who identify them, in implementing CHC it is necessary to actively involve the population affected, thus enabling them to change their behaviour of their own accord. The approach is termed 'horizontal' because it attempts to increase demand for measures to prevent diseases via participatory activities and by strengthening assertiveness within communities/groups. On the other hand, representatives of vertical (or top-down) interventions consider this procedure too laborious and time-consuming, because it takes around six months to train so-called *facilitators* and engage in the close collaboration with residents.

4.2 Goals and mechanisms of CHC

The CHCs are set up to enable residents to gain some understanding of regional diseases. The intention is for this understanding to come about through the mutual exchange of ideas between members of the community. The CHC approach assumes that inhabitants of rural areas in Africa, but also those in urban settlements (who usually originate from rural regions), are more inclined to seek orientation from the cultural norms, group dynamics and behavioural norms of their immediate direct social environment. This is why group dynamics are at the heart of this method. Elements such as social pressure and group conformity are understood as an 'engine' for processes of behaviour change. New norms and values that allow inhabitants better control over their health are established via group dynamics. This leads to the development of a culture of health in the long term. The new norms rely on consensual decisions by CHC members and on continuous repetition of the key content. The members of the CHC can be seen as the critical mass of the community, changing their behaviour on the basis of informed decisions. During a six months period they are regularly involved in health promotion sessions. By participating, exchanging views and experiences on a regular basis within the club, and carrying out practical 'homework' (e.g. cleaning toilets, washing hands before meals, getting each member of the family to drink from their own glass), the CHC members consciously develop new hygiene habits. As soon as a certain number of residents join a CHC, an emulation process begins. Community members begin to reproduce the conduct of CHC members, driven by the need to behave in the same way as the group.

4.3 Process of behavioural change

Waterkeyn (2010) assumes that social-psychological values and phenomena (conservatism, consensus) can have an immediate effect on how the members of the community behave. Such phenomena are capable of blocking or enabling new developments, and the innovative feature of the CHC approach is its use of such forces to set developments in motion. Waterkeyn resumes that in past years, *many health promotion* campaigns failed because they over-propagated modernisation as individual progress instead of paying attention to mechanisms such as group dynamics. The fact that people are addressed on an individual basis, is according to Waterkeyn often the reason why new developments or norms are not accepted. Focusing on the individual leads to ideas and concepts for development being blocked.

Societal norms are based on internalised world views. If one wants to establish new norms, the challenge is to influence or even change people's world view. In an attempt to describe the processes and mechanisms behind the behavioural change targeted in the CHC approach, Waterkeyn developed the cyclical-linear model (see Fig. 4).

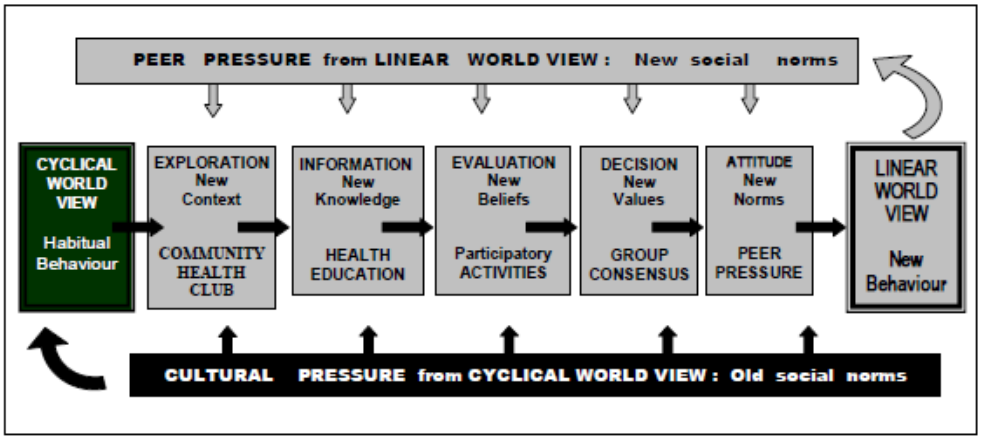

Fig. 4: Cyclical-linear model of changing habitual behaviour (Waterkeyn 2010: 131)

"Personal belief and self-efficacy are carefully manufactured within the Health Club, and reinforced because everyone ascribes to the same thing at the same time, so the group elevates itself together. Personal doubt is overcome because of the group belief; personal control is credible because others achieve it" (Waterkeyn 2010: 130 ff.).

The CHC offers a new context within which to acquire new knowledge with the help of health education. Participatory learning methods that offer members to become directly involved in a process consisting of debate and self-discovery allow them to open up to new ideas. If the core issues make a strong impression here, this can then trigger the development of new beliefs (opinions, ideas, and convictions). As people work together to find solutions to local problems, a certain group consensus arises, which in turn helps individual members to take over new convictions without having to fear social censorship. *"If a decision is taken by the leader or endorsed as a group, then the individual within the group can make the change, and need have no personal fear. Group consensus is achieved and the individual members feel they must conform"* (Waterkeyn 2010: 135). Consensus within the group brings about acceptance and recognition of new values deemed suitable by the group for tackling the hygiene situation (absence of hygiene = disease). Members are introduced to new topics week after week, and in the course of several months these develop into a series of new beliefs to form the framework of norms (culture of health) behind the new behavioural patterns. Furthermore, unlike in other approaches, no external support (like for instance material donations such as T-shirts, soap) is used during the first six months. The members are first encouraged to develop a sense of group solidarity via which any competition for scarce resources can be avoided.

As explained in Section 5.2, the long-term goal is to establish new sets of norms in order to achieve sustainable changes in behaviour. The core elements via which to achieve this are the weekly health sessions (lasting 2 hours). Members determine the regular meeting place and time. During the health sessions, around 20 topic areas are explained by a moderator[14]. These

[14] A kind of health and social worker trained and paid by the government or an NGO.

topic areas are printed on member cards (see Figs. 5 and 6), having been specifically developed for the context in question prior to the first session. The goal for health club members is to learn about the 20 topic areas within a period of 6 months. Furthermore, each meeting is also attended by the democratically elected chairperson of the respective CHC along with a village community worker (a facilitator from the community itself).

No.	TOPIC	DATE	SIGNATURE
1	Mapping of Village		
2	Disease Identification		
3	Balanced Diet		
4	Nutrition Plans		
5	Diarrhoea		
6	Salt Sugar Solution		
7	Home Hygiene		
8	Water Sources		
9	Drinking Water		
10	Water Storage		
11	Hand Washing		
12	Bilharzia		
13	Skin and Eye Diseases		
14	Worms		
15	Sanitation Ladder		
16	Sanitation Story : Plans		
17	Malaria		
18	Respiratory Diseases		
19	Tuberculosis		
20	AIDs and STDs		

Fig. 5: Example of a CHC membership card showing the topics of the health sessions (Waterkeyn 2010: 151)

4.4 Training and motivation

The first phase of the health promotion stage involves training the health social workers. This is based on the PHAST method (cf. Section 3.2). Here, use is made of a standardised module (seminar material), consisting of illustrated DIN A4 index cards. Each card shows a topic area. The content of the picture cards was developed for the respective context, adapted to the cultural context and then tested. Each health social worker receives three sets of picture cards and undertakes a 1-week intensive course on how to apply the PHAST method.

After this preparatory phase, the campaign proper gets underway. Once a regular time and venue (the future 'club location') has been agreed upon by interested community members, the facilitator invites people to attend the first official health session. The facilitators attempt to draw attention and publicise the initial session by making home visits and chatting to residents.

4.4.1 Activities of a health session

In order to reach as many participants as possible, the PHAST approach was developed to cater for the illiterate. It does not, however, exclude literate inhabitants. Each session begins with an explanation of the activity planned for that day. The participants are then split into three smaller groups. Each group receives a set of picture cards. They then have half an hour to carry out the following core activities.

1. *Three-pile sorting:* cards are sorted into three piles corresponding to GOOD, AVERAGE, and BAD.
2. *Blocking the route:* cards are placed in a row to represent the course of disease transmission. A further set of cards is then distributed, showing methods of preventing disease transmission. Participants now insert these into the first set of cards, at those points where they suspect high-risk behaviour, thus blocking disease transmission in a game scenario.
3. *Ranking:* cards are sorted from bad to good.
4. *Story with a gap:* two cards are given out. One illustrates an undesirable situation (e.g. a soiled toilet), while the other shows the improved or ideal situation (e.g. a clean toilet). Participants are asked to work out how to get from Situation 1 to Situation 2 (cf. Waterkeyn 2010: 152).

When the time is up, the groups come together again, and each group presents its activity. An extended discussion is encouraged so that different topic areas can be discussed. The facilitator merely leads the discussion here, as it is up to the group to drawn its own conclusions from the activities. Once the problem has been identified, the facilitator gets the group to agree on a mutual piece of homework. The work must be completed by the next session for the members to receive confirmation that they have successfully 'passed' this health session.

4.4.2 Homework – putting the lessons learned into practice

The homework comprises practical tasks aimed at changing hygiene practices at home like for example placing covers over vessels containing water, building a rack for hanging up saucepans and spoons (pot rack), or sweeping the yard. These tasks need to be adapted to the members' respective skills and should cost little or nothing at all. The list of homework assignments is written on the back of the membership card. Each week a new assignment is completed, meaning that after six months the causes of poor hygiene at home have been eliminated (cf. Fig. 6). As individuals take their cue from the group consensus as a result of a certain 'group pressure' (members' desire to conform to the group's behaviour, i.e. in line with the CHC health ethos), it becomes obligatory for them to change their personal behaviour within the CHC. Behavioural change can also be traced back to a new group awareness of disease: the health of each individual depends not just on their own efforts but also on those of their neighbours. Homework assignments are controlled via irregular and unannounced home visits amongst the members. *"Home visits take place between all homes and members offer advice to each other or encourage changes. Competitions and rewards for the best homestead are sometimes a feature of club activities."* (Waterkeyn 2010: 153)

No.	TOPIC
1	Village Map
2	Health Drama and songs
3	Nutrition Garden
4	Orchard
5	Protected water source
6	Covered drinking water
7	ladle to take water
8	Individual cups
9	Individual plates
10	Individual blankets
11	Mosquito nets
12	Pot rack
13	Rubbish pit
14	Hand washing facility
15	Safe sanitation
16	Clean yard
17	Disease Monitoring
18	Soap making
19	Immunisation
20	Wood Lot

A.H.E.A.D. MEMBERSHIP CARD

Name: .....

Club Name: .....

Ward: .....

District: .....

EHT: .....

Date started: .....

Date finished: .....

Graduation date: .....

Fig. 6: Example of a CHC membership card: list of homework assignments and member data (Waterkeyn 2010: 154)

4.4.3 Motivation to take part

The motivation to join a CHC does not come from material incentives. This represents a fundamental difference to other health promotion programmes, where common use is made of material inducements (donations of food parcels, soap, or T-shirts) to encourage participation in the workshops. Such a procedure is rejected by representatives of the CHC approach as a matter of principle as it is not deemed sustainable and merely creates a dependence on donations.

So what is the CHC's secret to success, and what prompts inhabitants to join a health club and commit to it?

According to Waterkeyn, the pulling power of the CHC has to do with universal human needs. It particularly ties in with the theories of David C. McClelland, who, in the 1980s, focused his research largely on the human need for power, affiliation and achievement. These three needs can be seen as basic motivations to get inhabitants to join a CHC, since the initiators of the CHC approach offer a real opportunity to satisfy these needs (cf. Waterkeyn 2010: 68, 81). The incentive to participate regularly in health sessions lies in the chance to obtain a certified qualification (education – award – success). In many cases, the CHCs provide the only opportunity for inhabitants of rural areas and informal settlements to educate themselves further, i.e. to enjoy a sense of achievement outside their domestic setting. This applies particularly to women, who make up 80% of the membership in most CHCs (cf. Waterkeyn 2010: 88). The certificates are awarded publically and often by local authorities. Graduation is celebrated as a major social event, with music, dance and theatre. This allows many members of the community to attend the award ceremony, where graduates receive praise and social recognition. Moreover, the membership card can be seen as an incentive, as it gives members the feeling of being part of something important and being in possession of an official document under their own name to prove it. Regardless of the sense of achievement created, CHCs hold yet another attraction for the inhabitants: they represent a social or common space where family problems can be exchanged outside the domestic setting. The activities of the health sessions also provide scope for creative

self-development; since the subject matter is often imparted via songs and paintings (CHCs design their own logos, slogans and songs). These activities create a sense of identity and belonging[15].

4.5 Link-up with water supply and sanitation programmes

4.5.1 Implementation phase

Once Phase I has proved to be successful and brought about a change in awareness and behaviour, it acts as the launch for programmes to improve sanitation and the supply of drinking water. Phase I induces a strong need within the community for healthy hygiene habits and hence a stronger need for safe drinking water and sanitation facilities. When a collective demand for better hygiene conditions arises within the community, it sparks the desired demand-led introduction and installation of drinking water and sanitation installations (demand-led sanitation, cf. Waterkeyn 2010: 8) (Phase II).

After the first phase, the community has become so self-organised as to be capable of tackling the issue of water supply. Ideally, according to Waterkeyn, a clean spring (protected spring, water point, borehole) should be assigned to each CHC so that its members can take over management of the water point. All certified members can now take part in the advanced training course, Community Based Management (CBM). Those who complete the course successfully are awarded a second certificate and receive the CBM card. As the holder of the CBM card, they are able to become part of a Water Point Committee.

"Many water and sanitation programmes in developing countries have started implementation without adequate preparation of the community, and, therefore, facilities which have been provided are sometimes abused by the beneficiaries, as they are not perceived as being owned by the community. This lack of ownership affects future sustainability and maintenance those systems." (Waterkeyn 2010: 158)

Where sanitation installations are implemented, proceedings follow a similar course to those for water supply. In Sierra Leone and Zimbabwe, the 6-month period of training undergone by CHC members puts them in a position to comprehend the benefits of safe sanitation facilities (cf. Waterkeyn 2010: 158 ff.). An important aspect here is that the CHC members are able to cooperate on the construction of the installations. The CHC structures and assembly locations can be used to organise sanitation programmes. For instance, data, files and reports by the CHC chairpersons and secretariats can be administered here.[16]

4.5.2 Sustainable livelihoods and social development – CHC as a community centre

Besides the methods to improve hygiene habits and implement water supply and sanitation programmes, the CHC structures also offer even broader development perspectives when it comes to developing sustainable livelihoods[17] and other initiatives for social development[18]. In Phases

[15] A survey of CHC members on the reasons behind their membership and the incentives offered by CHCs can be found in Waterkeyn 2010: 265 ff.

[16] Case studies on the construction of sanitation facilities under the supervision of CHCs (Waterkeyn 2010: 192 ff.)

[17] Horticulture, subsistence production of oil, soap, insect protection, etc.

III and IV they can be equipped to serve as a form of community centre. This also concerns topics such as the special position of the woman within the CHC (cf. Waterkeyn 2010: 136, 149).

4.6 Use of CHC in urban and informal settlements

The CHC approach, like the CLTS approach, was initially devised for rural areas. With growing urbanisation, the number of informal settlements in Africa swelled to such an extent that the CHC approach has also been in use in these urban spaces since 2005. In Zimbabwe, for example, 2008 saw a serious cholera epidemic in which around 13,000 fell ill and 420 died. The main reasons for the outbreak were the collapse of the urban water supply and wastewater disposal, along with the waste disposal system, due to years of mismanagement. On the outskirts of Sakubava/Mutara (Zimbabwe), there were only four cases of infection and just one fatality throughout the entire epidemic. It emerged that this was down to the existence of 36 community health clubs in the district, with a total of 5,400 members (cf. Waterkeyn et al. 2009: 1 ff.).

Another example can be found in Uganda. In the course of the civil war, mass exoduses took place, as a consequence of which 1.6 million people fled to the IDP camps in Gulu. In 2004 there was an outbreak of cholera in one of the largest reception areas (68,000 refugees). The lack of sanitation facilities and proper hygiene practices was largely responsible for the epidemic. Within a few months, a tool kit comprised of training material was put together under the supervision of AfricaAhead in collaboration with a local NGO (Health Integrated Development Organisation); facilitators were trained and stationed in 15 camps. Seven months later, 14,282 refugees (38% of all 'households' in the 15 camps) belonged to a CHC. One hundred and sixteen CHCs were founded in all. In seven months, these CHC members built 11,932 latrines, installed 8,342 pot racks (for hanging up kitchen utensils), and constructed around 6,192 washhouses. The costs amounted to approx. 76 US$ per member. Thanks to these measures, it was possible to considerably confine the cholera epidemic and improve the hygiene practices of the refugees. (cf. Waterkeyn et al. 2009: 1 ff.)

4.7 Evaluation of CHC in urban areas – The case of eThekwini

This section looks in detail at the South African eThekwini – Johanna Road pilot project (informal settlement in periurban space) in Kwa Zulu Natal, Durban. The project was launched by AfricaAhead in order to examine the applicability of the CHC approach in urban areas.

The Johanna Road settlement receives relatively strong support from the city council and is equipped with two ablution blocks, a public water point, free refuse bags, and special refuse collection points. Despite this material and infrastructural support, the situation surrounding water supply, sanitation hygiene and land pollution at the settlement was rated problematic. For this reason, it was agreed that the project should aim at improving the living standard of the inhabitants at Johanna Road. In concrete terms, the project seeks to improve community management, especially with regard to establishing a ZOD[19] zone.

In May 2009, AfricaAhead launched the Johanna Road pilot project with a preparatory status-quo analysis. A household interview survey (HIS) relating to social and hygiene indicators was

[18] Psychological care, education programmes on drug misuse, human rights, assertiveness, emancipation, voter education, literacy, AIDS prevention

[19] zero open defecation

carried out using a mobile researcher platform. Respondents from 104 households took part in the survey, the majority of whom were female and single parents. Almost half were unemployed. The majority were educated to a relatively good level. Most had already been living in the settlement for some time (> 6 years). Of interest was the people's strong willingness to change the community situation: over the previous 12 months 99% of the respondents had taken part in meetings dealing with communal circumstances. (cf. Waterkeyn 2010: 3). Following the baseline survey, the first CHC was set up in July 2009 and another in August 2009. At the time of writing there were 52 registered members (cf. Maksimoski/Waterkeyn 2010: 3). Six months later, the picture at Johanna Road had visibly changed. The difference to the neighbouring settlement of Sakimplioyethu becomes clear in Fig. 7.

Fig. 7: Left: Johanna Road with a CHC, right: Sakimplioyethu with no CHC (Maksimoski/ Waterkeyn 2010: 3)

In these six months since the start of the project, extensive social empirical data were collected. From the onset, the so-called Household Observation Survey (HOS) had been carried out in order to evaluate CHC members' change in behaviour. In unannounced home visits to residents, the facilitators gathered information on changes inside the households. The HOS encompassed the household facilities and features shown in Figure 8.

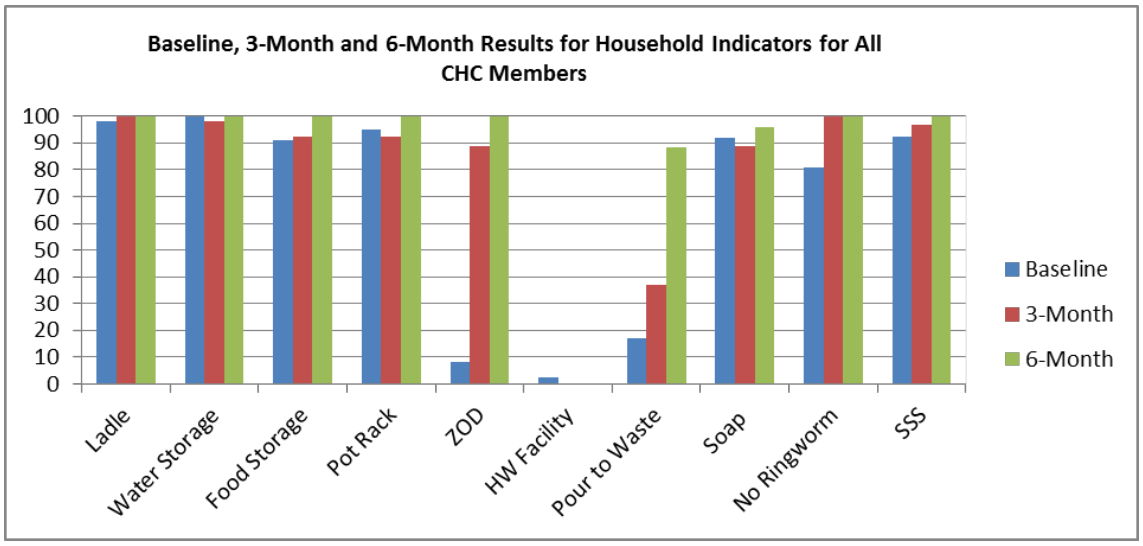

Fig. 8: Results of HOS from the baseline, after 3 and 6 months (Africa Ahead Project Report 2010).[20]

Figure 8 clearly shows that measurable changes could be seen in households after a mere 3 months. Particularly impressive is the fact that zero open defecation could be observed in over 85% of households within 3 months. Also, HOS is designed to allow changes in hygiene habits to be measured and compared to those of the non-CHC members (see Fig. 9).

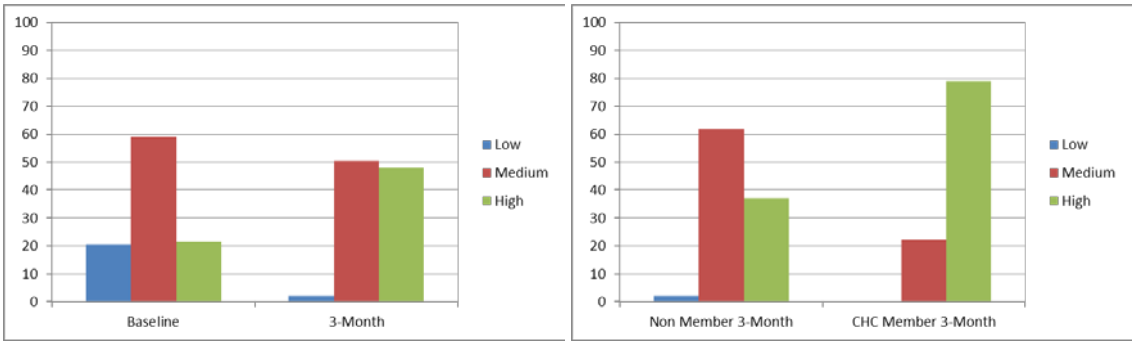

Fig. 9: Left: hygiene practices at the start of project vs. 3 months later. Right: hygiene practices after 3 months: non-member vs. CHC members. Classification see footnote (Maksimoski/Waterkeyn 2010: 5)[21]

[20] Explanations in the order of appearance in the graph: use of ladles, practicing safe water storage, use of food storage, use of pot racks, zero open defecation, hand washing facility, practising pour-to-waste when hand washing, using soap for hand washing, ring worm appearances in household, know how to make sugar salt solution.

[21] A household was categorised by the number of recommended practices it observed and labelled as low (0–2 practices: baseline, 0–3 practices: 3-month), medium (3–5 practices: baseline, 4–6 practices: 3-month), or high (6–8 practices: baseline, 7–10 practices: 3-month), with high indicating best hygiene behaviour and low the worst hygiene behaviour

A further element of standardised data collection is the Communal Observation Survey (COS), which allows changes within settlements as a whole to be registered. The COS is carried out in the same time intervals as the HOS and is likewise based on observations made by the facilitators. The COS was especially adapted to the problems prevailing at the Johanna Road settlement (soiling of ablution blocks, communal water connection, refuse collection, etc.). The changes are apparent from Tables 2 and 3.

	Ablution Block 1				Ablution Block 2			
Date	Free of Rubbish	Free of Grey Water	ZOD	# Toilets Blocked/Not Working	Free of Rubbish	Free of Grey Water	ZOD	# Toilets Blocked/Not Working
Baseline	No	No	No	2	No	Yes	Yes	1
3-Month	Yes	No	Yes	0	Yes	Yes	Yes	3

Tab. 2: State of ablution blocks (Maksimoski/Waterkeyn 2010: 5)

Date	Number of Non-Sanctioned Rubbish Sites	Number of Communal Gardens
Baseline	4	0
3-Month	2	2

Tab. 3: Waste disposal (Maksimoski/Waterkeyn 2010: 5)

In September 2009, the CHC organised a clean-up exercise in the settlement involving 100 residents in order to tackle the waste disposal situation. On one of the waste disposal sites the CHC created a vegetable garden to avoid any recurrence of illegal waste disposal. Recently, the Ministry of Agriculture began to support the project with donations of seeds.

4.8 Changes in the implementation process and new challenges facing it

Based on the results of Maksimoski/Waterkeyn (2010), it is fair to say that the CHC approach can also be applied successfully in urban areas. However, the implementation of the Johanna Road pilot programme was not without problems. The different circumstances meant that AfricaAhead found itself confronted by new challenges. For example, underemployment and unemployment (43%) are not as much an issue as in rural districts. From this lower instance of unemployment coupled with a high number of single parents arose a new problem: many residents are very pressed for time and unable to participate regularly in the health promotion sessions. Another problem lay in the time of day set for the weekly gatherings. They were deliberately held in the evening (5.30 p.m. – 7.30 p.m.) with the intention of giving working residents an opportunity to attend as well. The organisers desisted from choosing a later time so that participants could return home safely. The designated time slot, however, posed a problem in that this is when the evening meal is prepared and eaten. On average, the members were only able to take part in the health promotion sessions once every two weeks. Suggestions for improving future projects include plans to hold two health promotion sessions in a subsequent repetition or to offer each session a second time, once the first round is finished. It is also considered to lower graduation requirements from 100% of modules completed.

Besides the problem of participation, problems were also encountered with government and local authority authorisation prior to the launch of the project. A facilitator from Kwa Zulu Na-

tal who spoke the local language of isiZulu was employed to improve communication between project coordinators and the local authorities. This ultimately led to the project receiving the desired authorisation and broad recognition from the local authorities (in fact a local leader joined the second CHC). Despite this, mobilising the community proved to be a more sluggish process than in the rural areas. After engaging two CHC members as permanent mobilisation and education facilitators, it became easier for the CHC to establish itself, and the weekly gatherings were far better attended (cf. Maksimoski/Waterkeyn 2010: 7).

One unforeseen challenge was the above-average alcohol consumption within the community. Given this background, communal activities (waste clean-up exercises) had to be scheduled for 6 a.m. on Saturday morning, because later in the day many inhabitants were too drunk to join in.

5 Synthesis – thoughts on adaptation for CuveWaters

Even though experience with the application of these approaches in urban space remains limited as yet, community-led total sanitation and community health clubs still endow to the CuveWaters project from a conceptual perspective. The requirement to participate is particularly suitable for the idea behind the CuveWaters project. The two approaches, however, use different procedures and processes.

The advantage of the CLTS approach is the minimal amount of time it takes and its capacity for wider application worldwide and in African countries. Nonetheless, its methods, based largely on emotionalisation – namely the shock and shame moments – do not seem to be adaptable to the cultural context of central northern Namibia. In addition, the strong focus on the various paths of infection and the high health risk presented by coming into contact with (one's own) faeces could cause irritation and misunderstandings, as could communication of the fact that the treated and sanitised water from the re-use plant is clean enough to be used for gardening/farming (see Deffner et al. 2012). TheseCLTS elements might therefore have a negative impact on the project. Sensitive means of getting the communities themselves to analyse the status quo need to be found.

In contrast, the CHC approach appears adaptable to the context of CuveWaters, above all due to its emphasis on changing the notion of norms and values and community based learning. This sustainable way of promoting health that slots in easily with the aspirations of the project would support a user-managed structure for maintaining the installations in future. The 'health session' element included in the CHC approach would be ideal for introducing new topics to the inhabitants of the settlements in Outapi. For example, it could be used to impart the use and care of the new sanitation infrastructure/washhouses, or the self-organisation strategies for the community. Especially for the cluster wash houses at Tobias Hainyeko and Shack Dwellers settlements. The 'homework' element would also be suitable, especially for conveying proper use of the sanitation facilities installed for the households of Tobias Hainyeko und Shack Dwellers. Furthermore, the continuing institutionalisation of the CHC approach, as described in Chapter 4.5, provides realistic prospects of implementing the planned farming project and the ongoing education measures for the communal washing house. Additionally, the CHC approach could possibly benefit from the use of certain CLTS methods such as community mapping.

In South Africa and Zimbabwe many experiences with the CHC approach have already been gained. Namibia's geographical proximity to these countries also points to a promising applica-

tion. It enables an exchange of experiences and views with the projects in the prospective countries within a similar cultural context.

Therefore, crucial aspects of adapting and implementing the CHC approach in Outapi will be:

- A good supervision of the facilitator training and the community health club sessions. It will be necessary to monitor the process and identify situations where adaptations for the Namibian and/or the urban context will be necessary.
- Ensuring sustainable use of sanitary infrastructure by collaborative learning
- Integration of the existing applications in informal urban areas and including the lessons learnt for the Outapi case.

This could ultimately help the Outapi application to be used as a research case for the further development of CHC in Namibian urban contexts.

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Appendices

Appendix 1: Namibia's national concept for sanitation

NNSS-Namibia National Sanitation Strategy (2010)

The NNSS is a strategy paper passed by the Namibian government, which deals with practical approaches and proposals for implementing sanitation measures in Namibia. It constitutes the most current official document to date that presents the experiences gained thus far as well as setting out the further development of previous guidelines (Water Supply and Sanitation Policy-WASP from 1993 on, Water Supply and Sanitation Policy-WSASP up from 2008). The NNSS was drawn up as 5-year plan. It is backed by a budget of 1.64 billion N$, of which an annual sum of 329 N$ is intended for the sanitation sector. The goal here is to provide affordable, acceptable and sustainable sanitation for the Namibian households at minimal cost to the environment. It is hoped that the population's quality of life can be improved in the long term through sustainable development of the rural and urban sanitation systems.

The NNSS focuses on the following key topics (cf. MAWF 2009: 6):

- Theme A: Watsan Sector Coordination
- Theme B: Institutional Capacity Building
- Theme C: Community Education & Participation
- Theme D: Construction
- Theme E: Operation & Maintenance, Performance Management & Enforcement
- Theme F: Socio-Economic-Environmental Outputs & Outcomes

1.39 billion NAD (85%) of the budget have been set aside to expand the infrastructure (*Theme D*), whereas only 69 million NAD have been planned for Community Education & Participation (*Theme C*).

NSSAR-Namibia Sanitation Situational Analysis Report (April 2009)

The NNSS is based on the Situational Analysis Report (2009), in which the following core problems are formulated:

- In 2007, 67% of the population had no access to an adequate sanitation system. Geographical locations: rural areas, informal settlements in urban districts
- According to WHO/UNICEF, around 18% of the population use inadequate *shared-toilets*.
- The budget made available for the *sanitation sub-sector* is significantly inadequate, with NGOs being involved only to a limited extent.
- Flawed co-ordination of the *sub-sector*. A lack of ministerial interest in sanitation issues and little participation in important meetings have been observed.
- Lack of knowledge at various levels: local authorities have problems managing their sanitation system. Moreover, there is scant development and/or knowledge of *on-site sanitation* and wastewater recycling.
- User involvement: only a limited number of sanitation systems is available, and there are also certain limitations regarding their construction, functioning and maintenance. This often

leads to such installations neither being used by the intended target group, nor kept in good working order. Charges that have not been tailored to the users result in residents not using the modern sanitation facilities, so that bush toilets and open defecation are (or continue to be) widespread. Again and again, one finds blocked drains caused by inappropriate use of new water toilets (flush toilets operated with insufficient water; toilets as a substitute for dustbins).

- Sanitation charges: there are strong discrepancies between prices. These often depend on regional subsidy mechanisms that are not always transparent and frequently fail to cover the cost of the sanitation system.
- Advertising or education on safe hygiene practices are often absent in sanitation projects. To date there is no national approach designed to change behaviour, nor are any educational campaigns being run. Access to user information is very limited (cf. MAWF 2009: 9).

The NSSAR can be seen as an inventory of the sanitation situation in Namibia. The report was compiled by the NNSS and published by the Namibian government and the European Commission. When read with an eye on behavioural change and user participation, the result is very sobering. Despite repeated emphasis being placed on the importance of user participation for bringing about changes in behaviour, there appears to be hardly any experience with educational campaigns to promote involvement of this kind.

Section 3.3, 'Hygiene Promotion' draws attention to PHAST, SARAR, PRA, and CLTS as internationally recognised methods of putting user participation into practice.

In Section 9.2.2, the following conclusion is reached vis-à-vis equipping households with individual toilets:

"*When households are relocated on individual plots, the construction of individual toilets is promoted. The City of Windhoek is implementing a pilot project with the construction of Orji Toilets in the Oshitenda Community, Havanna Ext 6. Otji toilets are being built in Outjo and in Otjiwarongo. In Eenhana town, the local authority is installing individual VIP latrines in informal areas with the support of NRCS*" (MAWF 2010: 44).

All the above-mentioned toilet projects feature dry, single toilets. The authors conclude that the users have not so far been included in project cycle management and in selecting the type of technology to be installed. In their view, this lack of user participation has led to the new infrastructure being little used and poorly maintained. The next paragraph on 'Hygiene Education/ Promotion' again reveals Namibia's limited experience when it comes to changing people's behaviour and increasing user participation in the field of sanitation installations. The PHAST approach that is already standard in other regions has only just been introduced here by the Namibian Red Cross Society. Although health social workers are being trained (cf. 3.2), there is a general lack of trained personnel in this field. No information or teaching material has so far been developed.

Approaches for action in urban settlements

The responsibility for providing sanitation installations lies with local authorities. All municipalities and towns are to develop a 'Local Sanitation and Hygiene Development Plan' (LSHDP). It represents the local 5-year strategy and covers formal and informal settlements (cf. MAWF 2009: 23).

Chapter 4.4. Urban Approach of the NNSS, refers to the CLIP programme (Community Land Information Programme) of the nationwide Shack Dwellers Federation of Namibia (see Appendix 1). This movement is officially recognised by the government, which assumes that the SDFN structures are excellently suited to educate people about hygiene and sanitation, as well as for project planning.

"In this way communities can play active roles in their own development while their own capacities are being built in collaboration with local, regional and national authorities and other support organisations. Communities are in this way involved in establishing/defining their own baselines, including their hygiene and sanitation needs/gaps Clip involves the following main activities:

- *Complete enumeration and mapping of all informal settlements*
- *determine socio-economic status, including ability to pay sanitation*
- *participatory planning with professionals, authorities and communities – based on actual surveyed data, discussing development options based on local conditions such as affordability, physical planning based on socio-economic situation, local resource mobilisation"* (cf. MAWF 2009: 23).

Sanitation installations in schools and public facilities

Namibia has undertaken to build around 370 new sanitation installations in schools by 2015. Over and above their physical construction, these sanitation projects should also cover the following points:

- Renovation of existing sanitation installations
- Preservation of a clean environment
- Separate toilets for girls and boys
- Provision of hand basins, with water and soap
- Provision of toilet paper
- Ensuring that the 'students' develop an understanding of the national health and hygiene standards (cf. MAWF 2009: 29)

This chapter makes explicit reference to the Health Club approach, to which those responsible wish to take recourse in implementing this project (cf. MAWF 2009: 29).

However, it remains unclear whether this refers to the Community Health Club approach or something else. Neither is it apparent why health clubs should only be used in schools and the public sector.

Appendix 2: Contacts in Namibia

- National Institute for Educational Development (NIED): http://www.nied.edu.na
- Namibian Environmental Education Network (NEED): http://www.nnf.org.na/ENVDIR/index.htm
- Habitat Research and Development Centre (HRDC): 209.88.21.36/opencms/opencms/grnnet/MRLGH/HRDC/
- Namibian Red Cross Society (NRCS): http://www.redcross.org.na/about_nrcs.aspx
- Shack Dwellers Federation of Namibia/Namibia Housing Action Group
- DESWOS e.V. Deutsche Entwicklungshilfe für soziales Wohnungs- und Siedlungswesen e.V. http://www.deswos.de
- NGO contacts in Namibia that acknowledge PHAST:
  - Unicef: http://www.unicef.org/infobycountry/namibia_contact.html (09.05.2011)
  - WHO: http://www.who.int/countries/nam/en/ (09.05.2011)
  - UNDP: http://www.undp.org.na/contact-us1.aspx (09.05.2011)