# THE COMMUNITY HEALTH CLUB APPROACH IN INFORMAL SETTLEMENTS: CASE STUDY FROM ETHEKWINI MUNICIPALITY, KZN, SOUTH AFRICA

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## ABSTRACT

*The Community Health Club (CHC) Approach promotes sustainable and holistic community development by providing a structured learning environment for health promotion and water and sanitation activities. Although research has shown the CHC approach to be cost-effective in achieving continued behaviour change in numerous locations in Africa, most projects to date have been implemented in a rural context. Most recently, there has been interest to apply this methodology to informal settlements in South Africa. To determine if it is possible to translate the success of CHCs to this setting, Africa AHEAD, under the eThekwini Municipality's Department of Water and Sanitation, implemented a pilot project in the peri-urban informal settlement of Johanna Road. Although only at mid-point**, tangible results such as a 75.6% increase in zero open defecation among CHC members, a 50% reduction of non-sanctioned dumping sites in the settlement, and increased health, hygiene, and sanitation knowledge in the community suggest that the CHC Approach is appropriate for informal settlements. While change has occurred in a remarkably short time, alterations to the implementation strategy proved necessary in order to adapt the methodology to this context.*

**Latest results were not ready in time for paper submission, and will be presented at the conference

## INTRODUCTION

Created by Zimbabwe AHEAD (Applied Health Education and Development), sister NGO to Africa AHEAD, in 1995, the Community Health Club (CHC) Approach has emerged as one of the most effective hygiene promotion interventions currently being used in Africa (1). In Zimbabwe's Makoni District, in one year of CHC sessions, an estimated 68,700 persons (11,450 CHC members plus household) benefitted at an estimated US$0.21 per person (1). Since its inception, the CHC approach has been successfully implemented in rural communities in Zimbabwe (1995), post-conflict villages in Sierra Leone (2003), internal displacement camps in Uganda (2003), isolated rural Muslim villages in Guinea-Bissau (2006), and most recently, rural villages in South Africa (2009) (2).

Divided into four stages (Health Promotion, Water and Sanitation, Sustainable Livelihoods, Social Capital), underlying the CHC approach is the concept that a lack of "common-unity" within communities causes a deficit of development (Figure 1). By increasing the social capital within these areas and empowering its residents by promoting self-efficacy,

sustainable development can be achieved. The CHC approach realises this by using Participatory Health and Hygiene Education (PHHE) activities to stimulate discussion during weekly health promotion sessions carried out during the first stage. These meetings, typically taking place over a period of six months, help to establish a "culture of health" and an ethos of self-help, as members are able to gain a greater comprehension of water, sanitation, and hygiene (WASH) issues and are encouraged to work together to solve problems at both the household and community levels. Historically, those who have completed all the health promotion modules graduate and have the opportunity to move to the second stage, where club members act to fill the greater demand for water and sanitation resources and hygiene practices created by the sessions, by such activities as latrine creation, maintaining a safe water source, and ensuring safe solid waste disposal. Non-club members are encouraged to participate in these activities and trainings, thus causing the WASH knowledge to spread throughout the community. Stages 1 and 2 lay the foundations for poverty alleviation projects (Stage 3), such as income generating projects or skills/financial training. After the community has generated some income and reached this level of organisation, they can begin to explore how to solve deeper social issues (alcoholism, HIV/AIDS orphans, domestic violence).

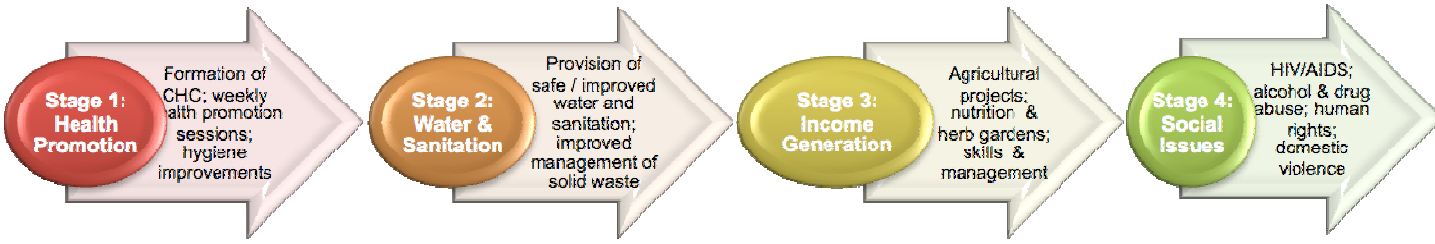


Figure 1: The AHEAD Methodology

**JOHANNA ROAD: SITUATIONAL ANALYSIS**

AfricaAHEAD was approached by the eThekwini Municipality to implement the first two phases of the AHEAD methodology under a pilot project in one of the municipality's peri-urban informal settlements. As this project was chosen to determine the appropriateness of the CHC Approach in informal settlements in South Africa and is being executed on a very small scale, it is in no way cost effective. Cost-effectiveness can only be achieved with considerable upscaling.

After a situational analysis, Johanna Road, part of the larger Kenville informal settlement located outside of Durban near the Northern Water Treatment Works, was chosen. Despite being well supplied by the municipality in terms of public services and facilities (two ablution facilities, communal taps with safe water, free refuse bags and collection of refuse at specified points), it is classified as an especially problematic area, in terms of hygiene, water, sanitation and solid waste practices and behaviours. Africa AHEAD and the eThekwini Municipality identified that the main goal of the project was to achieve a higher standard of living for Johanna Road residents. This would be measured by improved community management of water and sanitation facilities, grey water, and solid waste, as well as achieving zero open defecation within the settlement.

According to local leadership, there are about 200-250 households in the settlement, which is located on the side of a steep hill. Residents have access to two communal ablution facilities,

one located at the top of the settlement and a second located on the bottom. Both have a history of blockages, which adds to its current grey water problem. Many houses have also taken action to build their own unhygienic and unsafe pit latrines (due to blocked toilets and dangers in descending the hillside at night) or to openly defecate in the bush by the river. In all, there is likely high faecal contamination throughout this settlement. Although the municipality provides refuse bags free of charge and weekly solid waste collection, there are a number of illegal dumping sites within the settlement. There are also issues of standing grey water and grey water channels throughout the community.

**CHCS IN JOHANNA ROAD**

In May 2009, Africa AHEAD began the process of starting a CHC in Johanna Road. At baseline, 104 households were randomly sampled and an in-depth survey was conducted on hygiene and social indicators using the Household Interview Survey (HIS) via the Mobile Researcher platform, in order to provide a measure of the overall impact of this pilot project.

An analysis of basic demographics of those surveyed showed a median age of 30, a majority female (64.4%) and single parents (66.4%), high unemployment (43.3%), relatively high education (77.9% completed senior school), and that most were long-time residents of Johanna Road (61.6% have lived in Johanna Road for at least 6 years). While most (92.3%) have never volunteered, almost all (99.0%) have attended a meeting for community improvements in the past 12 months – suggesting that desire for change is present in the community, but the structures and social cohesion to help achieve development are absent.

After this assessment, the first CHC, *Impiloyethu* ("Our Health"), was formed in July 2009, with the second, *Sakimpiloyethu* ("Building Our Health"), formed the following month. Since the creation of the clubs, 8 new members have joined, for a total of 52 registered health club members. Since their formation, the CHCs have acted to improve the lives of their families and their community, causing the current Johanna Road Settlement (Figure 2) to not only look drastically different than it did six months ago, but also very different from the neighbouring Siyathuthuka settlement (Figure 3). These changes can be measured with Africa AHEAD's survey data, as well as observed by comparison photographs and the current momentum within the community.

Figure 2: Johanna Road, with CHCs

Figure 3: Siyathuthuka, no CHCs

## DATA ANALYSIS

CHC Members

To measure the behaviour change amongst health club members, Africa AHEAD's Household Observation Survey (HOS) is applied at baseline, 3-months (mid-point of sessions), 6-months (end of sessions), and 12-months (6-months post sessions). Adapted for Johanna Road, the HOS measures 10 indicators of health, sanitation, and hygiene: use of a ladle to take drinking water, safe water storage, safe food storage, use of a pot rack, zero open defecation (ZOD), use of a hand washing facility, use of soap when washing hands, absence of ringworm, and knowledge of sugar-salt-solution (SSS) to treat dehydration.

From the HOS administered to health club members at baseline (Figure 4), members scored very high (90+%) on several indicators (use of ladle, safe food storage, use of pot rack, use of soap for hand washing, and knowledge of SSS), with 100% of CHC members safely storing their water. However, the Observation Survey also revealed that only 7% of club members practiced ZOD, 2% used a hand washing facility, 16.3% practiced pour-to-waste when washing hands, and 18.6% of households had ringworm infections.

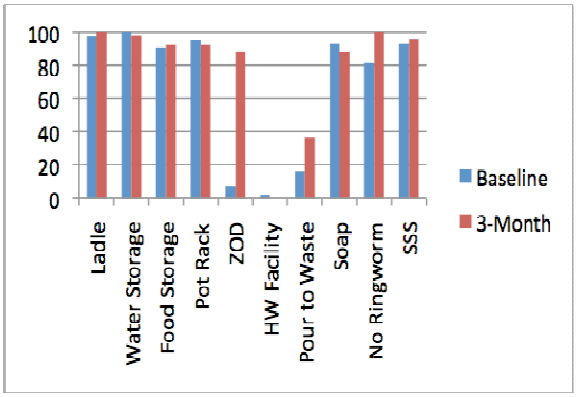


Figure 4: Behaviour Change After 3 Months

After 2 to 3 months of attending health sessions, impressive changes on a household level were evident (Figure 3). The 3-month surveys (including 8 new CHC members who joined since baseline) measured all 52 registered members. Most impressively, ZOD increased by 75.6% to 85.3% of households. Also noteworthy were a 21.8% increase in pour-to-waste method and 16.1% increase in households with no ringworm to make 100% of CHC households ringworm-free (at time of survey). While the number of households with hand washing facilities is very disappointing (0%), high increases are expected at the 6-month survey after the Municipality provides hand washing facilities to all active CHC members. The Africa AHEAD facilitator plans to further emphasize the pour-to-waste method in the upcoming sessions, as well as stress previous sessions to new members. It is Africa AHEAD's belief that the CHCs will reach 100% for all indicators at the 6-month mark.

Diffusion of Practices Beyond CHC Members

While the CHC members are improving greatly, a knock-on effect is occurring within the community. Africa AHEAD successfully returned to 89 of the 104 households surveyed at baseline with the HIS (15 lost-to-follow up due to unwillingness to participate, not being home, etc) to administer its 3-month HOS to measure behaviour change. Due to differences between HIS and HOS, at baseline there were 8 indicators, compared to the 10 at 3-month. A household was categorised by the number of recommended practices it observed and labeled 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.

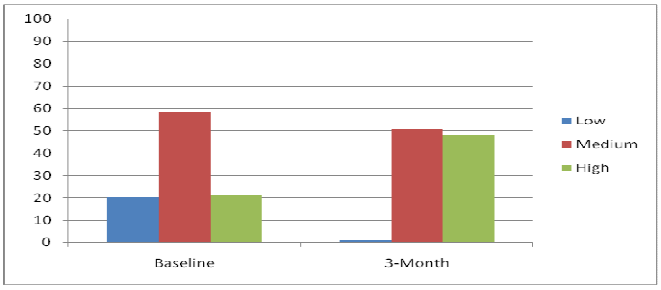

Figure 5: Hygiene Behaviour, Baseline vs. 3-Month

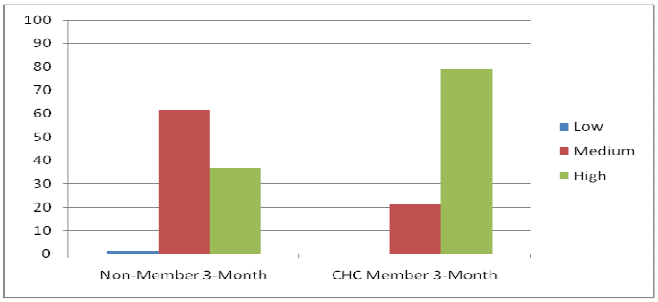

Figure: Hygiene Behaviour at 3-Months, by CHC Status

At baseline, 18 (20.2%) households were classified as low, 52 (58.4%) as medium and 19 (21.3%) as high. After the CHCs had been active in the community for 3 months, 1 (1.1%) household was classified as low, 45 (50.6%) as medium and 43 (48.3%) as high (Figure 6). For those who joined health clubs, the results were striking: 5 (20.8%) were in the medium group and 19 (79.2%) were in the high group (Figure 7). However, change in the non-members occurred as well, but to a slightly lesser degree: 1 (1.5%) household was classified as low, 40 (61.5%) as medium and 24 (36.9%) as high.

Observed Communal Changes

To measure change on a community level, the Communal Observation Survey (COS) designed for Johanna Road and to be administered at the same intervals as the HOS, captures data on ablution blocks, communal taps, rubbish dumps, and other communal entities.

At baseline (Table 1), the bottom ablution block had problems of rubbish, grey water, open defecation, and blocked toilets, as mentioned in the situational analysis. The top ablution facility was in a comparatively better state, with only problems of rubbish and one blocked toilet. Since baseline, progress has been made as the bottom ablution block no longer has any rubbish, open defecation, or blocked toilets. The top ablution facility is now also free of rubbish. The three toilets that are "blocked" at the top facility have broken toilet seats – so the caretaker has closed them off from public use.

Table 1: Ablution Facility Observations

| | Bottom Ablution Block | | | | Top Ablution Block | | | |
|---|---|---|---|---|---|---|---|---|
| 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 |

In terms of rubbish, the number of non-sanctioned rubbish dumps (informal dumping site where rubbish is not collected by the municipality) has reduced by 50 percent, from four sites at baseline to two sites at the 3-month mark (Table 2). At baseline, there were no communal gardens in the Johanna Road Settlement (Table 2). There are currently two communal

gardens (not including personal gardens) and both are growing three or more varieties of vegetables.

Table 2: Community Observations

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

One of the strengths of the CHC Approach is that those in the community not participating in health club sessions benefit from the presence of CHCs. Not only does the entire community benefit from clean-ups and better management of communal facilities, but they often adopt the habits of health club members through observation or peer pressure.

**OBSERVED CHANGES**

One of the strong points of the AHEAD methodology is that even before the WASH modules are completed, a demand for safe water, sanitation, and a higher standard of living is created. In terms of the Johanna Road Project, this demand set in early on. Although the municipality provides safe water (communal taps) and solid waste disposal (refuse bags and pickup), these areas were still problematic. On 27 September, the clubs organised a community wide clean-up, in which nearly 100 residents participated and approximately 120 bags of refuse were collected. The CHCs plan to hold these cleanups on a regular basis.

After one CHC member took initiative to clean up an illegal dumping site by her house and turn it into a vegetable these gardens – they are replacing unhygienic rubbish strewn eyesores, as well as providing their caretakers with a nutritious and inexpensive food source (lettuce, spinach, beetroot, pumpkin, mealies). The Department of Agriculture within the eThekwini Municipality has also lent its support to the project, by agreeing to provide seedlings to the group. Following the CHC graduation tentatively scheduled for January 2010, Africa AHEAD plans to implement agri-tube gardens on behalf of the Department of Water and Sanitation, with support from Khanyisa Projects, to address space issues present within the community.

Figure 7: Pioneering CHC Gardener

Figure 8: Flourishing CHC Garden

**CHANGES IN IMPLEMENTATION STRATEGY**

Although Africa AHEAD, the eThekwini Municipality, and Johanna Road Community are pleased with the amount of progress that has occurred in a remarkably short time, project

implementation was not without complications and future CHC interventions in South African informal settlements will require modification from the original implementation scheme.
Although there is a high level of unemployment in the community (43.3% among 104 households surveyed), it was lower than that of previous CHC project sites in rural areas. This, combined with the large proportion of single parents, made it difficult for CHC members to attend every weekly health promotion session. In order to accommodate those with employment, these sessions are held in the evening (1730-1930). As they must not be held too late, as travel within the settlement can be unsafe after dark, the chosen time slot is also problematic, insofar as it interferes with dinner preparations. For these reasons, Africa AHEAD observed that the average member's attendance pattern is every other week, for completion of approximately 50% of the modules. Those who are missing sessions most often consult with attending club members to obtain the information from the missed meeting. Even after creating a second health club that met on the weekends to cater for those unable to attend during the week, attendance tended to be bi-monthly. In order to mange this problem, Africa AHEAD plans to offer each session a second time, once the first round is finished. For future projects, it may be more appropriate to lower graduation requirements from 100 % of modules completed.

During the beginning of project implementation, Africa AHEAD was faced with numerous political issues. Although the project proposal was submitted to eThekwini in late 2008, implementation did not begin until May 2009, as the municipality wanted to wait until after elections – as the event would have greatly disrupted the sessions. Africa AHEAD encountered "Gatekeeper" politics, notorious in South African informal settlements (3). Before the project could begin, permission was not only needed from the appropriate governmental figures, but local leadership. To overcome this obstacle, Africa AHEAD employed a "streetwise" facilitator from KZN, fluent in isiZulu, as a project officer. Although a considerable amount of time was needed to gain approval from this group, one member of the local leadership later joined *Sakhimpiloyethu*. Even after winning over the local leadership and community mobilization efforts, the project still encountered a slight bit of resistance and lack of enthusiasm. Africa AHEAD addressed this by employing two of the health club members of a part-time basis (12 hours per month) to help mobilize and educate the community, to drastic results, as seen with CHC activities and behaviour change.

Finally, one of the social obstacles of this project is high prevalence of alcoholism in the community. Community events (such as cleanups) and meetings scheduled for weekends need to take place very early in the morning – 6.00 a.m. A later start time will most likely result in many community members being too intoxicated to participate. Even this early time can be problematic, as seen when a community meeting to discuss the creation of a new management plan of the ablution blocks, slated for 6.30 a.m. on a Sunday morning, had to be rescheduled due to intoxication of the leader presiding over the meeting. Once the CHCs progress to Stage 4, the alcoholism in Johanna Road would be an appropriate issue to address.

## CONCLUSION

Although the Johanna Road pilot project is only at its mid-point, significant improvements have occurred in terms of behaviour change and community management of communal facilities, suggesting that the CHC Approach is appropriate for informal settlements in South

Africa. However, in order for CHCs to be successful in this context, changes to the implementation strategy are necessary.

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