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**36th WEDC International Conference, Nakuru, Kenya, 2013****DELIVERING WATER, SANITATION AND HYGIENE SERVICES  
IN AN UNCERTAIN ENVIRONMENT****Increasing access to sanitation and hygiene through the  
community hygiene clubs approach in Rwanda***T. Nkurunziza, M. N. Ugabinema, A. U. Muhimpundu & R. Dlamini, Rwanda***REFEREED PAPER 1762**

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*The national averages for access to safe water supply, improved sanitation and hygiene practice in Rwanda are 74.2%, 74.5% and 34% respectively. The government of Rwanda has established a roadmap, known as the "Community Based Environmental Health Promotion Program", CBEHPP, which is a model followed by the communities to find solutions to their own problems in the area of safe water, sanitation and hygiene (WASH). The results obtained by World Vision after one year of implementing CBEHPP, reveal full potential of communities to solve their problems with limited assistance. Because of this important progress, World Vision Rwanda (WVR) is investing a lot of efforts in strengthening the Community Hygiene Clubs (CHCs) as well as increasing their skills to respond efficiently to sanitation problems in their villages.*

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**Introduction**

Rwanda is a small country having a surface area of 26,338km<sup>2</sup> and located in East Africa. The recent census (2012 Population and Housing Census, 2012) revealed that the total population of Rwanda is 10,537,222 and that the average annual growth is 2.6%. These statistics qualify Rwanda as one of the highly densely populated countries in Africa.

Rwanda is recognized as one of the African countries which have made a substantial progress towards achieving the millennium development goals (MDGs). The recent MDG progress report by the UN indicates that Rwanda has done a lot towards the accomplishment of the MDG provisions (United Nations, 2011). Despite this remarkable progress, Rwanda is yet to be on track of achieving the MDGs in water supply and sanitation. In fact, while the country is required to meet 82% coverage in water supply and sanitation by 2015 (Abbott and Rwirahira, 2012), the current status indicates that the overall coverage is 74.2% and 74.5% for water supply and sanitation respectively (Abbott and Rwirahira, 2012; National Institute of Statistics of Rwanda, 2012). As far as hand washing with soap is concerned, the country stands at 34% (Ministry of Health, 2010). In Rwanda, there is still a big gap between the urban and the rural area in terms of WASH coverage. As revealed by a recent survey conducted in remote and very poor areas covered by WVR, the access to safe water is 51.9% while the access to improved sanitation and the practice of hand washing with soap are 58.5% and 13.4% respectively (World Vision Rwanda, 2012). Rwanda suffers from the consequences of lack of adequate water, sanitation and hygiene facilities. It is reported that the top ten leading causes of morbidity and mortality in Rwanda are caused by infectious diseases, many of which are waterborne (Ministry of Health, 2010). It is also worth mentioning that Rwanda loses \$54 million per year as a consequence of poor sanitation (WSP, 2012).

Being a poor country with low access to safe water supply, improved sanitation and hygiene, Rwanda biggest challenge was to ensure that the MDGs are met using cost effective strategy (Ministry of Health, 2011). It is within that context that the Government of Rwanda thought about CBEHPP as a participatory and cheap approach. The implementation of CBEHPP is based on strengthening the capacity of 45,000 community health workers (CHWs) under close mentoring and supervision of Environmental Health Officers (EHOs) based in health centres. The CHWs facilitate the creation of CHCs in their every homestead (Ministry of Health, 2010). The purpose of CBEHPP extends beyond WASH, the program intends to

alleviate poverty by placing the community at the centre of integrated development which address various socio-economic and environmental health problems. The CHC Approach addresses a wide range of preventable diseases within a holistic framework of development that understands health promotion as an entry point into a long term process of transformation of social norms and values that ultimately lead to poverty reduction outcomes.

The program is intended to cover 80% of the total population of Rwanda with a budget of \$5,945,000 (Ministry of Health, 2010). This budget is to be contributed by different Governmental partners, mainly Non Governmental Organizations, which intervene in the area of public health. It is important to note that the budget is used mainly in the sensitization of both the leaders and the communities, printing out training materials and support the supervision and monitoring process.

The purpose of this paper is to highlight the importance of CBEHPP as one of the participatory models which has proved the potentials of the communities to address sanitation and hygiene problems with little investment.

## **Methodology**

CHCs methodology is based on the theory of development. It considers that knowledge, understanding combined with willing are the key factors for change. In a positive peer pressure framework, CHC try to change people's values, which are based on their knowledge and culture. Those change push people to change their behavior (Ministry of Health, 2011). The CBEHPP model is conducted in 8 key steps which are the training of trainers (ToT), orientation of local leaders, training of CHWs by EHOs, formation of the CHCs, household inventory, monitoring of the CHCs sessions, graduation ceremonies, sustaining the CHCs activities.

### **Training of trainers**

The first step of CBEHPP model is the training of EHOs who are government employees based at health centres. EHOs oversee the implementation of CBEHPP in the catchment area of the health centre. They ensure that CHWs are sufficiently skilled to implement CBEHPP in the CHCs. A training manual for EHOs has been designed and it is covered within 5 days. The training is facilitated by a core team which was trained by the Ministry of Health and it covers all the aspects of CHCs formation and training of CHWs.

### **Orientation session of local leaders**

A one day orientation session for the local leaders is conducted by EHOs soon after the ToT training. The leaders are exposed to the benefits of the CBEHPP. Since public health promotion is part of the performance agreement of local leaders, they adopt the program very easily and get committed to implement it in the villages.

### **Training of CHWs by EHOs**

The orientation session is followed by the training of CHWs by EHOs. The training takes 5 days during which the CHWs are trained on how to create CHCs and on various topics to be covered during the CHCs session. The visual materials designed for CHCs cover twenty topics which are: safe water chain, safe food chain, sanitation ladder, sanitation planning, diarrhea ORS, hand washing, cholera/typhoid, skin/eye disease, worms, nutrition, hygiene kitchen, drama and songs, environment, malaria, coughs and colds, bilharzia, tuberculosis, HIV/AIDS, home based care and family planning.

### **Formation of CHCs**

With the support from the local leaders, CHWs explain the benefits of CHCs to the village members. After the village meeting, everyone who is willing gets registered into the club and gets a membership card bearing the identification of the club member and the titles of the twenty topics to be covered during the CHC sessions. Each CHC is composed of about 50 to 150 households. This is the approximate size of a village in the Rwandan administrative context.

During the first village meeting, the members agree on the day, the time and the venue of meeting. Each weekly session lasts 2 hours. During the subsequent meetings club members decide to elect an executive committee which comprises a chairperson, a secretary and a treasurer.

Expecting that some club members do not know how to read and write, the 20 topics have been visually illustrated on pictures in order to avoid any discrimination. The discussions are participatory and the use of

fun is intentionally promoted. At the end of each session, members make a group decision to adopt certain hygiene standards (installation of tippy tap, having improved latrine construction, etc). Every member is challenged to adopt a set of recommended practice as homework. Finally the chair of club signs off the card members against each topic covered.

The time required to complete the 20 topics of the CHC training module is 60 days.

### **Household inventory**

The household inventory is a spot observation of the facilities that indicate the hygiene behaviour of each household. A household inventory data form that has 30 hygiene observation questions developed for this purpose is used.

The household inventory is a participatory monitoring which is done by CHC members and the CHWs. At the end of a household inventory, a report is prepared by the CHWs and submitted to the EHOs.

### **Monitoring of CHCs sessions by EHOs**

The EHOs has the plan of all CHC sessions and he/she has to visit them in order to make proper mentoring and provide advices on how to move forward. The EHOs will further participate in the evaluation of the CHC achievements based on the household inventory report.

### **Graduation sessions**

After every health topic and related 'homework' have been completed by the CHC members. They are eligible to receive a CHC graduation certificate at a ceremony to be officiated by high-ranking district and provincial dignitaries. After the graduation they move to the next topic. The graduation session may be one of the motivating factor of the CHC members.

### **Sustaining the CHC activities**

At the end of 6 months training, CHCs are encouraged to continue to improve their living standards by addressing other development issues through the involvement in agricultural projects, kitchen gardens, bee-keeping, reforestation, soap making, etc.

### **Choice of districts and data collection**

The districts chosen for this study represent a sample of where WVR has started implementing CBEHPP and where it has started producing results. The data presented in this paper have been collected from the household inventory reports collected by EHOs. They were confirmed by field visits and observation of the existence of the facilities.

## **Results and discussions**

### **Results**

The results presented have been achieved within a period of one year from October 2011 till September 2012. Table 1 shows the number of community hygiene clubs created in 4 districts and what has been achieved during that specific period of time.

The results presented in table 1 gather household inventory data from 4 districts in which CHEPP has started producing results. The table shows that 12% of the population covered have engaged in CHCs and that 54% of them are women. The baseline indicates that the access to improved sanitation and to hand washing facilities is 63.6% and 13.8% respectively in those 4 districts (World Vision Rwanda, 2012).

On average 27 improved latrines and 7 hand washing facilities were constructed by each CHC. Since the CBEHPP was rolled out at different time, higher results were achieved where it started some months earlier; this is the case of Gatsibo District in which, on average, 49 latrines were constructed by each CHC.

District	Total Population covered by WVR	% access to improved sanitation	% access to hand washing facilities	# of CHC	CHC members	# latrines constructed	# hand washing facilities	Ratio latrines/ CHC	Ratio hand washing/CHC	District
Bugesera	93,707	55.1	8	17	2,613	2,134	61	285	4	17
Karongi	17,649	66.9	17.3	4	36	95	47	42	12	11
Gatsibo	109,818	73	21.3	66	9,030	10,895	3,256	300	49	5
Gicumbi	68,857	59.3	8.6	49	4,555	6,102	275	257	6	5
<b>Total</b>	<b>290,031</b>	<b>63.6</b>	<b>13.8</b>	<b>136</b>	<b>16,234</b>	<b>19,226</b>	<b>3,639</b>	<b>884</b>	<b>27</b>	<b>7</b>



**Photograph 1. Members of CHC Umucyo, Gicumbi District, constructing an improved latrine for the poorest of the community**



**Photograph 2. One of the improved latrines constructed by a CHCs, in Gatsibo District**

## Discussion and lessons learnt

From the recent past experience in Rwanda, it is very clear that the communities have potential to solve their own WASH related problems. The CBEHPP model has produce encouraging results towards increasing access to sanitation and hygiene. It also important to note the high involvement of women in the community hygiene clubs. In fact women represent 54% of the total number of CHC members.

Given that the average size of a Rwandan family is 4.4 (National Institute of Statistics of Rwanda (NISR) [Rwanda], Ministry of Health (MOH) [Rwanda], and ICF International, 2010), it can be estimated that the number of latrines constructed serve 16,000. This represent an increase in sanitation coverage from 63.6% to 69.1%, thus 2.5% increase in one year. Likewise, the access to hand washing facilities has increased by 1.3% passing from 13.8% to 15.1%. It is important to note that this change is brought about by 12% of the total served population.

Testimonies collected in the CHCs indicate that women were the first to adopt the idea of creating the CHCs. It is when men realized the potential of CHCs to solve the problems that they started joining.

It is also worth mentioning that all the agents involved in running the CHCs at the lowest level (CHWs and CHCs committees) are doing voluntary work.

The following are some of the lessons learnt during one year of CBEHPP implementation.

- The communities did not respond to construction of hand washing facilities as rapidly as they did for improved latrines. This low response has not been documented yet; however, the models of hand

washing facilities (tippy taps) being promoted are not familiar in Rwandan culture. That would be one of the reasons why people did not adopt them rapidly.

- CHCs were an entry point for the communities to address socio-economic problems. In some places, the communities members moved into the village saving and loans associations (VSLAs). The members of the clubs contribute a certain amount of money every time that they meet and on a rotational basis, a portion of the collected amount is given to one person while the remaining is deposited on a bank account. Through the VSLAs, CHC members have been able to buy household items like mattresses and buckets. They are also able to pay the medical insurance for their family members. As an example, one CHC decided that each member would contribute 200 Rwandan francs (RWFs) every week. After 3 months they were able to collect up to 126, 000 RWFs (approximately \$200) and this helped them to support 21 families with iron sheets to build appropriate latrines and support 5 poorest families to pay the health insurance.
- CHCs members have also been involved in fighting against malnutrition. In this regards, in collective work, CHCs members construct kitchen gardens for their respective families. The kitchen gardens help families grow various vegetables which are a rich source of nutrients.
- The mutual help is embedded in Rwanda social and cultural values. The CHCs members enthusiastically help one another and help the poor family using existing means.
- The initiative of buying mattresses is an innovation thought of by women in what they call “fight against grass on bed”. In rural Rwanda, the grass is commonly used as bedding material because people cannot afford mattresses. Women participating in CHCs and who have already bought mattresses testify that this has increased the level of esteem by their husbands.

## Conclusion

The CBEHPP model has proved to be an efficient tool to rapidly solve the problems facing the communities in the area of WASH. More importantly, the implementation of CBEHPP through the creation of CHCs unveiled the potentials of the communities to solve their own problems with little assistance. As Rwanda is aspiring to reach 100% coverage in sanitation by 2017, the CBEHPP is a good model to help achieve that high target.

It was observed that positive peer pressure is instrumental in making the community change. Once one member has changed, that becomes a normal behaviour at the same time a peer pressure because everyone will avoid remaining alone out of the established normal. After a while, everyone follows and a new culture is established.

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