An Evaluation of the Piloting of the RWSS Community Health Club Model in Vietnam March 2011

Dr. J. Waterkeyn

Contents

FREQUENTLY USED ACRONYMS:

CHC: Community Health Club
CLTS: Community Led Total Sanitation
IEC: Information Education and Communication
MDGs: Millenium Development Goals
MoH: Ministry of Health
NTP3: National Target Programme 3
PHAST: Participatory Hygiene and Sanitation Transformation
RWSS: Rural Water Siupply and Sanitation
VHW: Village Health Worker

Front Cover : Children perform a drama about hygiene for their parents in the Thach Luyen Community Health Club in Phu Tho Province. All photographs by Juliet Waterkeyn

EXECUTIVE SUMMARY

Vietnam is the first country in Asia to pioneer the Community Health Club (CHC) Model of development to bring about hygiene behaviour change and improve sanitation coverage, adapting it to suit local cultures. If sucessful, Vietnam could lead the way as a powerful change agent for sound development in Asia ensuring that CHCs are as cost-effective as they have been in Africa for the past 15 years. Out of 48 CHCs established since 2009, six were assessed in the three Provinces of Son La, Phu Tho and Ha Tinh over a 10 day period. In each district a structured interview of provincial, district and commune MoH officials was conducted by the consultant to verify the CHC report for 2010. Existing MoH data from a pre and post intervention household inventory of all CHC members were used to measure knowledge and levels of behaviour change. Standard monthly reported cases in each Commune Health Centre Changes were examined to see if there was a pattern of disease reduction. The findings of this evaluation should provide lessons inform more effective replication and scaling up through the National Target Programme, now entering its 3rd phase.

There is clear evidence that the training in the CHCs, in 24 sessions spread out over the past two years has improved knowledge of health issues and that peer pressure within the CHCs is leading to very significent levels of behaviour change. For example there was a 42% increase in Ha Tinh and a 59% increase in Son La in good knowledge of how to make Sugar Salt Solution. Changes in hygiene behaviour are highly significant with a 58% increase in hand washing with soap in Ha Tinh (p.28). There has been a great effort at improving sanitation in the CHC areas, as demonstrated in Son La where 387 households (70% of the CHC members) improved their sanitation facilites, ***without any subsidy, and the household inventory showed that*** only 4 families out of 1,036 were found to still practice open defecation (p.30). Phu Tho Health Centres in CHC communes have recorded a sharp decrease in diarrhoeal disease since the CHCs started, by 90%, 93% and 59% (p.38). Although all communes in Thach Ha district (Ha Tinh Province) were targeted with the same IEC materials, diarrhoeal disease cases decreased by 35% in two CHC Communes but actually ***increased*** 18% and 31% in two non-CHC Communes. The CHC programme can be measured for cost per beneficiary at only **US$1.30** for one year (p.42). This is remarkably cost–effective by any standards and compares well with similar projects in Africa. As one MoH official from Ha Tinh remarked the CHC Model is ***'low cost- high impact'***.

Achievements in all three provinces were made despite the fact that the CHCs were started without using membership cards, an incentive which has always been a draw card for joining CHC. With the training material complete, there is little doubt that the CHC Model will be replicated easily, scaling-up by using recommendations and lessons learnt. The Pilot Project has demonstrated that the CHC model can improve sanitation coverage and with very little subsidy, significantly reduced diarrhoea within two years, simply by harnessing the power of peer pressure to ensure safe hygiene standards. Within an emphasis on group consensus, the CHC Model resonates with cultural norms in Vietnam, whilst the training enables Village Health Workers to run CHCs at very little extra cost within their duties. This pilot project should provide the NTP3 with a sound methodology that can be predicted to achieve the Millennium Development Goals in CHC districts.

KEY RECOMMENDATIONS FOR SCALING UP

1. **EVALUATION:** A similar evaluation should be done by consultant in Ninh Thuan in order to understand why it was not successful in completing the Pilot Project (P.15)

2. **WORKSHOP:** A workshop should be held as soon as possible to discuss the findings of this evaluation and provide provinces with the opportunity to discuss the lessons learnt and how to plan for the next stage (P.22) to scale up.

3. **APPROVAL:** Design and content of manuals, membership cards, and certificates should be approved as soon as possible by Central and all Provinces notified to go ahead.(p.21)

4. **TOOLKIT:** Each Province should adapt the Standard Toolkit to be culturally appropriate for their own ethnic minorities, but it is critical that the same artist make these adaptations (p.14) in order save costs, and to maintain consistent high standard of ethnographic illustration. Wrong numbering, and gaps in printed Toolkit should be changed (Annex 3).

5. **TRAINING OF TRAINERS**: a core team of young, and charismatic trainers (2 per province) trained *directly by Consultant* to scale up the CHC training in the next 5 years (p.41).

6. **TRAINING OF VHWs:** Training of existing and future VHWs should be done using the printed Manuals and Toolkit to ensure that the cards are properly used in a participatory way (p.16).

7. **MEMBERSHIP CARDS:** Each District should print their own membership cards in readiness for the start up in March each year, distribute them to all members and use them to monitor attendance and compliance to recommended practices (p.20).

8. **GRADUATIONS:** All existing CHCs should hold Graduation days to honour those who have completed all 24 sessions before the next mobilisation takes place (p.22).

9. **TIMING OF TRAINING:** CHC sessions should be held weekly in one solid six month period every year, from March to September with efficient budgeting for the year (p.22).

10. **DATA COLLECTION:** VHWs should collect data using their mobile phone using latest 'mobile research' technology which eliminates human error. If not data should be analysed on SPSS rather than Excel, and to do this training is needed in each province (p.24-26)
11. **HOUSEHOLD INVENTORY:** Questions must be standardised for all Provinces, with multiple choice answers to accommodate variables (p.25)
12. **COST-EFFECTIVENESS:** Most of the running costs should suppport VHWs to be more mobile and facilitate effectively, so one facilitator can covering up to 5 CHCs with increased membership for each CHC, aimed for 90% coverage of all households (p.43)

1. BACKGROUND

1.1. Water and Sanitation Sector in Vietnam

The second phase of the National Target Program for Rural Water Supply and Sanitation (NTP2-RWSS) placed emphasis on increasing sanitation coverage and improving hygiene practices among rural populations in Vietnam. Both rates of sanitation and hygiene practices are low in rural Vietnam. A 2006 MOH/UNICEF rural sanitation survey found that while 75% of rural households had access to some form of latrine, only 18% of rural households have latrines that meet MOH hygienic standards.[1] In terms of hygiene, only 15.6% of surveyed householders and 11.5% of school students wash hands with soap after defecation. These results were even lower for ethnic minorities with less than 4% having access to hygienic latrines and less than 6% washing hands with soap after defecation.

During the program's first phase (2000-2005), activities and funding under the NTP-RWSS were disproportionally focused on the delivery of water supply to rural communities. In its implementation of the second phase of the NTP2, the Government of Vietnam (GoV) wishes to redress this imbalance. A stronger emphasis on sanitation and hygiene behaviors, in turn, calls for a stronger emphasis on infromation, education and communication (IEC) activities. A number of new and promising ways of doing RWSS and hygiene communication have seen the light in recent years. The new approaches comprise, among others, the Community Health Club approach, Community-Led Total Sanitation, and Social Marketing to promote sanitation and hygiene. These three new approaches seek to change RWSS and hygiene behaviors, in very different ways but all seek to create a demand for, among other things, improved sanitation and hygiene. This report summarises the outcomes of a pilot project to test out the Community Health Club Model that has been undertaken in four provinces, and if it works, to integrate this model into the 3rd phase of the NTP program as a means of aand scaling up the CHC Approach. The findings and recommendations at the end of this report will address this in more detail.

1.2. The Community Health Club Approach

For the past few decades many approaches have been tried to encourage people to adopt more hygienic behavior and it has been a very real challenge in the sector to find a methodology that does produce hygiene improvement. During the 1990's, the Participatory Hygiene and Sanitation Transformation (PHAST) methodology was widely used within RWSS, and although there were many positive aspects in terms of empowering a community, many concluded that it had largely failed to produce any

[1] According to Decision 08/2005/QD-BYT (this Decision defined four types of hygienic latrines including double-vault, ventilated improved pit (VIP), pour-flush and septic tank latrines).

substantial rate of hygiene behavior change. This was confirmed in an extensive Tanzanian Study in 2007 which reviewed four districts where PHAST training had been carried out and concluded that there was no significant difference in the PHAST and non PHAST areas on handwashing practices and other simple hygiene behaviours.[2]

However, the strength of PHAST was the use of the 'participatory approach' to problem solve and raise debate at village level. This required a skilled facilitator to take the community through a seven stage process to identify, analyze and plan water and sanitation improvements. However, as was found in an evaluation in PHAST in Sri Lanka[3], communities could manage the first few sessions but got stuck on the more complicated actions planning. PHAST could not translate ***community analysis*** into ***community action***: in our opinion it failed because it did not target a specific group of people, but rather the village in general. The aspect of PHAST that did succeed however, were some of the activities in PHAST training, such as 'Three Pile sorting' and 'Blocking the Route'. The use of an extensive 'Tool kit' of visual aids consisting of card sets on a number of topics, depicting a variety of local hygiene behaviour and technologies allowed participants to ***recognize*** their water, sanitation and hygiene situation and ***visualise*** how to improve their facilities and behavior.

Using the participatory activities of PHAST, ***but within the framework of a structure*** (a Community Health Club), this innovation was field tested in Zimbabwe between 1997-2000. To the surprise of many cynics, the CHC did provide the missing link showing the power of peer-pressure induced by a regular group of people. CHCs were shown to stimulate hygiene behavior change at impressive rates, not only in Zimbabwe but wherever the Model was tried subsequently[4]. Between 2001 and 2010 the CHC Model was replicated in other countries in Africa with diverse settings: Moslem communities in West Africa, in post conflict resettlement villages in Sierra Leone and in a clinical trial to reduce child mortality in Guinea Bissau. In refugee camps in war-torn Northern Uganda where sanitation had been shunned despite the best efforts of UNICEF and other NGOs, within 8 months, 11,000 latrines had been built by the community, in response to 20 sessions of health promotion within Community Health Clubs.[5] Even in the aggressive peri-urban slums of South Africa[6], with very different issues such as unemployment and HIV/AIDS, changes in behavior have been beneficial in building social capital and enabling coping mechanisms by the Community Health Clubs members.

---

[2] Mlaebo, H et al. (2007) Evaluation of PHAST in Tanzania focusing on the Effectiveness and Sustainability of Water, Sanitation and Hygiene Activities in four districts of Mainland Tanzania(Report by WaterAid/Unicef/WSP/ National Institute for Medical Research in Tanzania)

[3] Waterkeyn J. (2010) Report for Canadian Red Cross

[4] http://www.africaahead.org/publications/2005_SS&M.pdf Waterkeyn, J. and Cairncross S (2006)

[5] http://www.africaahead.org/publications/2005_%20IDP.pdf.pdf. Waterkeyn et al (2005) 31st WEDC Conference

[6] http://www.africaahead.org/publications/2010_WISA_eThek.pdf.pdf Maksimovski & Waterkeyn (2009) WISA

However, until now, CHCs have not been tried in an Asian context and it is this innovation that makes this Pilot Project of international interest. It is thus with an open mind that the CHC approach is being piloted in Vietnam to see if it can succeed at the same rate as in Africa, and if not, how to adapt the methodology. The assumption is that there are some universal principles that are tapped into by the CHC approach, because it is assumed that women worldwide want their children to survive and prosper and that people in Vietnam will respond with the same enthusiasm to the opportunity to learn and change their life through simple but effective hygiene habits that have been proven to prevent most communicable diseases. Thus the power to manage diarrhoea, dysentery, cholera, intestinal parasites, acute respiratory infections, skin (scabies, ringworm), eye diseases (trachoma), and mosquito borne disease should all been within reach of a common household, no matter how poor, as all these diseases can be prevented by safe hygiene. Thus if the CHC approach works, it will be judged not only by the change in behavior of the majority of the members, but also if the burden of disease should necessarily decrease significantly in areas that are saturated with Health Clubs.

The CHC Approach aims to develop a strong structure, a Club, of committed people in every village who have the mandate to manage community health, hygiene and environmental aspects that can be controlled locally. Regular weekly meetings are held which aim to attract at least 80% of the households in a consistent group effort to improve standard of living. Within the Club a sense of identity combined with a dedication to standards and norms of behavior is developed and endorsed by the group. Vietnam is pioneering the use of this model, a powerful change agent in Asia and thus has a responsibility not only to the country but internationally to make sure the project is adapted to local conditions and yields the same high results, and that the lessons learnt are disseminated in the region.

1.3. Appropriateness of the CHC Approach to Vietnam

The CHC approach holds special promise in the Vietnamese context. Unlike many other developing countries, Vietnam has a strong public sector and mass organization network at community level. Every village has a Village Health Worker, who has often received several months of primary health care training, and most are mobile with a motor bike. Similarly, every commune has two or more commune health staff, and a 'Cultural House' (Meeting Hall), equipped with a public address system that can be used for meetings and can broadcast meetings to the whole village. In addition to a proactive and well organised Ministry of Health, the National Target Program gives overall coordination in the Water Sanitation and Hygiene sector. It is to be hoped that NTP3 programme planners will recognise the now proven ability of the CHC approach to stimulate a demand for sanitation to enable targets to be met, and enable communities to plan and manage their own water

supply. This bottom-up approach is exactly what is being called for in NTP2 recommendations as shown in the 2nd lesson learnt from report below[7]:

> *'The development of plans, especially annual plans, must originate from people's demand and follow bottom-up approach. It is important to carry out IEC activities to raise awareness, behavior change before, during and after planning process and implementation of investment projects for construction of WSS facilities so that local people could fully engage in this process.'*

1.4. Piloting the CHC Model in Vietnam

Following the recommendations of the 2008 Joint Annual Review of the RWSS-NTP2, the MOH decided to pilot the CHC Model in Vietnam to ascertain whether it was indeed appropriate for Vietnam, with an ability to stimulate a demand for sanitation and behaviour change, being as cost-effective in Asia, as it is in Africa.

The MOH-led pilot activity sought to:

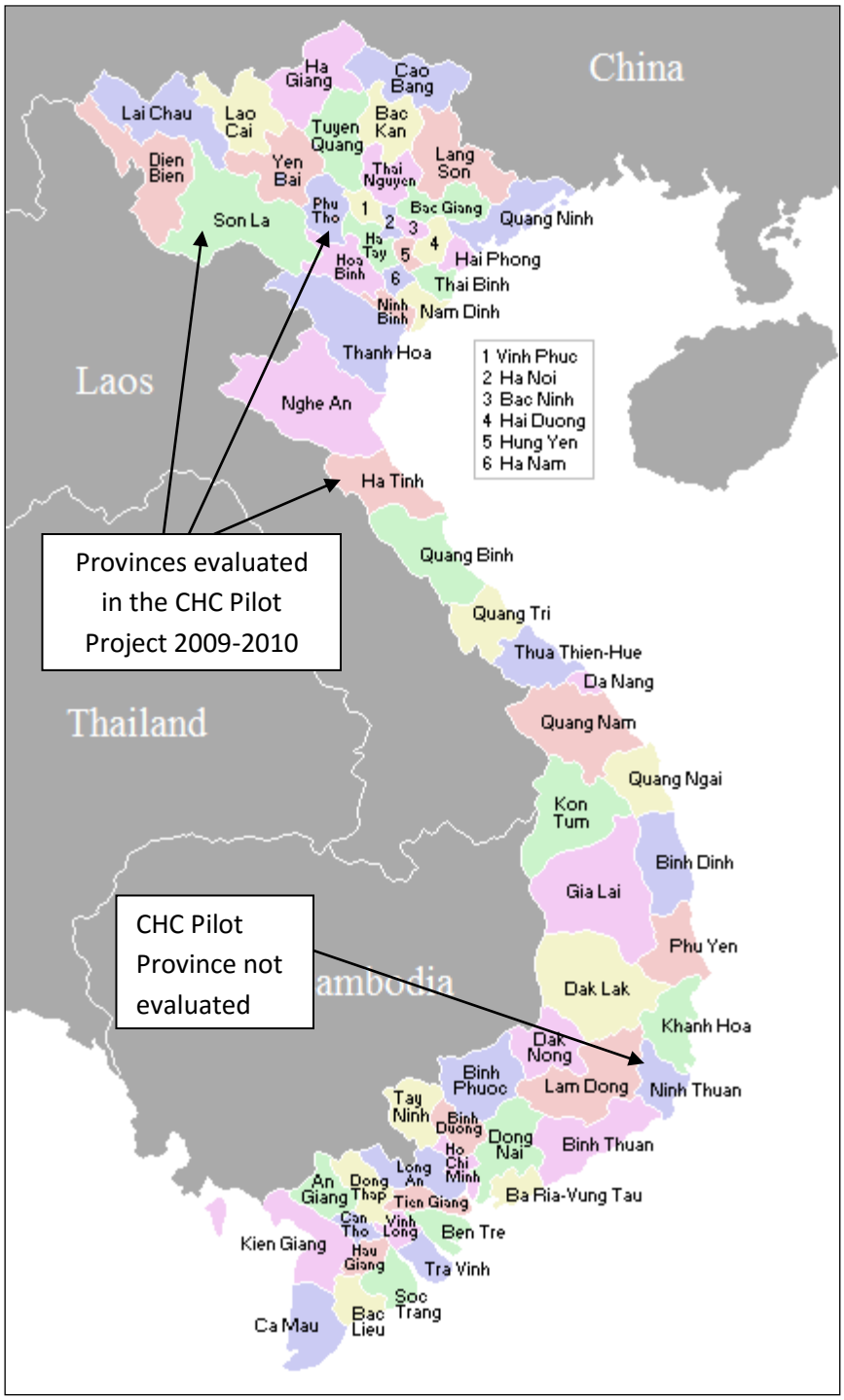
- Adapt the Community Health Club approach to water, sanitation and hygiene promotion to the Vietnamese context
- Test the effectiveness and impact of the CHC approach in Vietnam by piloting it in selected areas in Four Provinces
- Derive lessons learned to enable a scale up of the approach to the remaining RWSS-NTP2 roll out provinces.

1.5. Consultancy to support the start up of the CHC Model

The Department of Preventive Medicine and Environmental Health, Ministry of Health of Vietnam (DPMEH-MOH) and National Target Program II for Rural Water Supply and Sanitation (RWSS-NTP2) requested Danida to support an International Consultant, Dr Juliet Waterkeyn (who is in fact the initiator of this approach), to assist Ministry of Health to start up a pilot project in four province of Vietnam. She was to complete the training materials and training of MoH staff to enable trainning in the four selected Provinces to take place. This was begun in 2009, and CHCs were started in 2009-10. Ater the implementation had taken place, the same consultant was to evaluate the outcomes with a view to replication and scaling up.

[7] Ministry of Agriculture and Rural Development (Feb, 2011) Completion Report for the RWSS National Target Program 2006-2010 and Major Contents of Rwss NTP 2011-2015

Fig 1: Map of Vietnam showing Pilot Project Provinces that were evaluated



1.6. Main Objectives of the Evaluation

As requested by the Ministry of Health the main objectives of the evaluation are as follows:

- Evaluate the cost-effectiveness of the CHC pilot model
- Evaluate the advantages, disadvantages and the ability to scale up in each province.
- Provide practical recommendations for the VIHEMA-MOH for the roll out of the CHC program to other provinces.

1.7. Method of Evaluation

The evaluation was conducted using a combination of following methods:

1. Structured interview with MoH staff and stakeholders in each Province. Meetings were held with all relevent MoH staff in Provincial, District and Commune level as shown in Annex 1.
2. Spot observation: a visit to 6 Community Health Clubs, two in each Province, to see how the members have responded, and to observe the facilitation and the level of community response and participation in the sessions.
3. Spot observation of a typical home and informal interview of house owners in each Province: this was purely to provide context to the consultant and is not being used to inform the findins as it is too small a sample upon which to base any opinions.
4. Analysis of the results from each Province of the base line and post line survey which was conducted and collated by MoH.
5. Review of the annual report from each Province on the CHC Project.
6. Review of the Manuals by back translation
7. Check on the quality and content of the Toolkit.

1.8. Sources of Bias and Confounding

It is important to declare any conflict of interest or protential sources of bias and confounding:

- One of the main difficulties in the transfer of ideas and concepts was the need to work through interpretation and this has been a constraint, but by 'back translation we hope that not much has been lost or changed in translation, particularly in the manuals.
- The consultant doing this evaluation is also the originator of the CHC approach and having started up this project may be tempted to look for signs of the success of this

approach, rather than the challenges. Having said this, a scientific approach is being used which may be verified by other objective evaluation. Every attempt has been made to record fact rather than make suppositions.

- The data from in the household survey was collected by the same Village Health Workers who have facilitated the project, so there may be some interviewer bias, although most were observations rather than theoretical questions, thus verifiable.
- The project reports are written by the MoH staff who would have an interest in creating a positive impression, but this was countered by the interviews with stakeholders from different levels, National Provincial, District and Commune by the consultant.
- The statistics collected from the Health Centres are more impartial in that they simple record reported cases, and therefore may present the most objective results.
- The MoH had arranged which of CHCs to visit so there was no possibility of sampling as it was necessary to make plans in advance in order to meet them.
- Confounding of the results may be as a result of other water, sanitation and hygiene programmes such as NTP2 running concurrently in the same areas. In Son la and Phu Tho there were no other competing programmes in the CHC Communes. In Ha Tinh, a one year social marketing Unilever Programme was running concurrently in 2010 in all communes, including the CHC communes, promoting handwashing with soap, and this will have had an impact.To measure the impact of ***only*** the CHC, we have to find topics were not included in Unilever IEC material and measure response to these messages.

Fig 2: IEC Materisals already in use through Unilever: (left) A dirty poster trying to show clean hands; (right) A Flip chart, a top-down teaching tool, tends to be kept by the teacher .

2. IMPLEMENTATION OF THE PILOT PROJECT

In the four selected Provinces, Son La, Phu Tho, Ha Thinh and Ninh Thuan, communities were mobilised and CHCs were started in one district of each province, with 12 CHCs, six in 2 communes. The implementation was reliant on the Village Health Workers (VHWs) as the primary CHC facilitator with strong support and supervision from the Commune Health Workers (CHWs). The Departments of Preventive Medicine was the lead implementing agency at Province and District level. At Commune level, the Commune People's Committee was the lead implementing partner. The training schedule of the community varied in each of the provinces but by the time of the assessment three out of the four provinces showed that they had carried out the recommended activities more-or-less as planned. Only Ninh Thuan in South Vietnam had not completed the programme which was apparantly due to being overburdened with other programmes, although the exact reason was not verified by the consultant. The consultant's schedule was worked out by MoH and due to lack of time no assessment took place in this Province.

2.1. DEVELOPMENT OF THE TRAINING MATERIAL

The training material that goes with this programme consists of:

- **Module 1**: Manual - an introductory training to the CHC Approach for project managers, which provides guidelines of why and how to start up CHCs, register members using the membership card, select the most suitable areas and conduct a base line survey.
- **Module 2:** Manual - a set of 24 one page instructions for each of the 24 health sessions, which guides the facilitators how to do the participatory activities using the Toolkit.
- **The Tookit** consists of 24 card sets each with between 10-20 A4 illustrations in each set which are used for participatory activities in each health session.

Module 1 had been completed by November 2009 by the consultant, Dr. Juliet Waterkeyn in the previous contract. This first draft was then reviewed and adapted by the local consultants (Dr Ky Anh and Dr Dan) and translated in Vietnamese and used in training in the provinces. The final draft has being back-translated into English and the consultant has checked it and found that nothing fundamental has been changed or lost in translation. It has not been printed as yet. Now that there are existing CHCs, some photographs of activities have been added to provide a more lively presentation to the manual and insire readers by visual images.

Module 2 was completed by June 2010 as part of this contract and pretested in the workshop in July 2010. It was given to MoH who have made many revisiions to the general sequence but have

not detracted from the content, and it has been back-translated and checked by the consultant and found to be very suitable for finalisation. It was found that many pictures from the Toolkit were not printed, but as long as the pictures are printed soon, the text does not needed to be adjusted. *(See Annex 3)* It has not yet been printed pending this evaluation.

In order to save costs, the pages of Module 2 could be printed as cards rather than bound in a manual. In this way there could be an instruction page (printed onA4 card like the pictures) to be included in theenvelope for each Topic, or simply printed on the A4 envelope as a prompt for the trainer. The thumbnails of the pictures could be printed on the back of this instruction page or on the front of the A4 envelop.

Fig: 3. List of illustrations that have been printed or not printed within each Topic.

# Topic	TOPIC	# Pictures	# printed	not printed
3	Personal Hygiene	31	20	11
4	Handwashing	21	12	9
5	Diarrhoea	19	13	6
6	Dehydration	13	11	2
7	Defecation	23	14	9
9	Sanitation	10	9	1
10	Solid Waste	20	10	10
12	Fly control	21	12	9
13	Water source	19	11	8
14	Safe Water Chain	22	13	9
15	Worms	24	18	6
16	Food Safety	21	10	11
19	ARI	27	11	16
20	Avian Flu	22	11	11
21	Mosquito Borne	19	14	5
15		312	189	123

The Toolkit was delayed for four months due to contractual delays with the artist and although the key messages had been developed by Nov 2009, drawing of the pictures did not start until the following year and it was a challenge to have them completed by until July 2010. The black and white line drawings were pretested at a workshop in July 2010 by the consultant, after which some final adaptions were made to changes were made and the final list of 321 illustrations were coloured and completed. At this point the international consultant had no further involvement and the Toolkit was handed over to MoH to approve. After some further editing by MoH, 15 Topics printed in December 2010 and 300 sets were printed in colour and distributed to the Provinces in Feb-March 2011. However upon close examination of the Toolkit,

the consultant finds that only 189 out of the 312 illustrations were finally printed so there has been some very heavy editing.

According to MoH the reason the Toolkit was virtually halved was a limited budget and these will be printed in the next year. Hopefully this will be done as the 123 missing pictures all had a specific reason to be there, so some of the activities cannot be done properly until this ithe Toolkit is complete. At present there are gaps in the numbering which will cause confusion, until the missing pictures are added. See Annex 3 for a full list of pictures not printed (highlighted in yellow).

Although it has taken time, and been cut down in size, the actual quality of this Toolkit is outstanding, largely thanks to the talent of the artist. The standard Toolkit was designed as a template, with the assumption that in the next phase the Toolkit may be adapted for local condition wherever the CHCs are formed. Whilst the illustrations were culturally suitable for Phu Tho and Ha Tinh it was clear ***that most of the illustrations did not reflect the Thai culture in Son La***, and there were only 3 pictures showing Thai women. The Province have asked to be responsible for printing the Toolkits needed in their area to minimize delays as this has impacted on their projects locally. They should also be free to adapt the Toolkit, ***using the same artist*** (Mr Ly), to make sure that the pictures reflect the people within their Province. Accordingly the international consultant has arranged for 70 pictures to be adapted within the current Danida budget, so that at least one Ethnic Minority has a culture specific set Toolkit. The same 70 pictures should also be changed for each of the Provinces to reflect different ethnic groups, and thi should be done by the same artist as he has the template and therefore the changes should be lests costly and the style will remain the same.

Recommendation: APPROVAL AND PRINTING

- ***Provinces should be responsible adapting and for printing the Toolkit for their own Province, in order to scale up easily.***
- ***Manuals should be approved by Central and printed as soon as possible by each Province.***
- ***Tool Kit should be printed in full as designed with no gaps.***
- ***Module 2 could be printed as instruction cards and inserted into Toolkit***

Recommendation : USE OF NEW MATERIAL

- ***Training of facilitators should be redone properly using the Toolkit and manuals***
- ***Follow up in Ninh Thuan with a similar evaluation to find out what were the challenges***

2.2. TRAINING

Despite the fact the training manuals were not ready, such was the 'enthusiam' for this project (pressure to spend the allocated budget within the financial year) that the training for start up of the CHC went ahead in November 2009 . This meant that CHCs were being started up in the Provinces although the Facilitators did not have the correct 'tools' to do the training, rather like a plumber without his spanner. Obviously ***the training materials should have been completed first***, and then the training of facilitators could have been done easily. By the end of 2009 the pilot provinces had been trained by the local consultants in how to start up Community Health Clubs, and clubs were being formed up rapidly in all districts.

- **Son La:** Provincial training was done in November 2009 when 10 district staff were trained. District training of 40 facilitators was done in October 2010. Between April and July 2010, the 389 CHC members in two communes had done 12 of the sessions in each CHC. Between September and December 2010 the next 12 topics were done.
- **Phu Tho:** Two District level training for 60 participants and a further four three day wokshops were done for 40 participants, making a total of 160 Village health workers trained. An average of 27 sessions were done per CHC making a total of 648 sessions. This was split into two periods: September - December 2009, July-December 2010.
- **Ha Tinh:** Provincial Training was done in December 2009, when 74 participants were trained, including 24 CHC facilitators. All 24 sessions were held in all 12 CHCs in two periods: April – July 2010, and September – December 2010.
- **Ningh Thuan:** although this was not included in the evaluation, there needs to be follow up to understand why CHCs were not continued as by July 2010 the team had appeared to be keen on the CHC approach

By the time the International Consultant ran the workshop in July 2010, which had been designed as the start up training in the use of the Toolkit, most of the provinces were already well on their way with CHCs, improvising as best they could with existing training materials, so

the training was too late! However this anomaly has a positive spin off: ***CHCs have flourished despite the fact no visual aids were available*** to interest and attract the members.

2.3. METHOD OF TRAINING:

The toolkit was only distributed to the provinces in March 2011, which meant that none of the facilitators had the correct material to be able to do their training as it should be done according to the CHC Model which uses the participatory style. Some Facilitators used the old PHAST Tool Kits which were appropriate when focusing on diarrhoea and sanitation as they were also illustrated cards, which could be used in a participatory way. However the wide range visual aids for all of topics as in the final Toolkit was missing. In Ha Tinh, the IEC material from Unilever was useful to reinforce messages on handwashing. This consisted of posters, billboards and a flip chart on diarrhoea (See Fig.2) above. The top-down style of teaching using a flip chart which the teacher holds up before the audience is an old fashioned method which is not as empowering as the participatory approach, where people hold the cards themselves and describe the illustrations. Ha Tinh was the most pro-active of the Provinces and did actually print the draft Tool kit in colour on good board, which was very commendable. Based on the six health clubs visited, it could be observed that although the facilitators did try and use the participatory approach by dishing out the cards, there was still a strong didactic tendency to lecture the audience and be the teacher. It is highly commendable that the facilitators have managed without the right training materials, but they still need confidence building and more demonstration of the correct method to make their facilitation ***real*** facilitation rather than the usual teaching.

> ***Recommendation: TRAINING OF TRAINERS***
> ***More refesher training for all existing Facilitators is needed to ensure that the cards are used as they were designed*.**

2.4. MOBILISATION

In order to fully test the CHC approach the Provinces had been asked to choose their most challenging areas, where hygiene levels were the lowest. In the North West, in Son La Province, the CHC consisted of mainly Thai Ethnic group who lived in mountainous terrain having to walk far to CHC Meetings, therefore the size of club tended to be smaller, but no less enthusiastic than in the other two Provinces where access by road, usually by motor bike, made gathering the community much easier. However in the lower farming areas, people were busy all day and CHC

meeting tended to be at night. This was made easier by the facility of the Culture House in each village, with electricity and indoor seating which was made all the more interesting because a public address system was used, and meeting were also an opportunity for communities to socialise and sing, as well as learn. The meetings attracted non CHC members who were drawn by the music and convivial atmosphere.

Propaganda messages were broadcast on the speaker system at each Culture House, to encourage people to join and the weekly meeting were also often relayed over the village by the loud speaker system which should affect non-members and have a ripple effect of the knowledge being provided in the CHC meeting. There were also IEC materials such as large billboards erected in each of the communes, showing key messages. Each Province was proud to display these massive advertisments which must have eaten into the budget quite significently. According to the CHC Model, money is better spent on providing incentives to the facilitator, and printing Toolkits rather than using it for printing open ended messaging through billboards. All provinces requested funds to support the fuel and costs borne by the facilitators themselves, as well as tea and biscuits to attract the CHC members to a meeting. As budgets are limited and cost-effectiveness is an issue, it would be money better spent to stimulate more real participation at the grass roots by small incentives than paying the large cost of mounting a billboard, which some may say also destroys the natural beauty of the rural villages. One billboard in Son La actually depicted people sneezing over each other at a meeting. It was mistakenly chosen because it was perceived as a good message, 'Meet and solve problems together', and also because ti was one of the few pictures that showed some ethnic costume.

The Mobilisation Strategy that was used to get CHCs going, was to go through the existing 'Mass Organisations' as they were the main implementing partner on the ground. The proposal for starting a CHC in the village was taken to the commune committee and approved at commune level. They then organised a community meeting in the village and informed people of the objectives and formed an action plan as to how to proceed. An Executive Board was established in each village, with the Chairman being the Head of Commune, and the Board consisting of the Vice Chairman of the People Communes, and Chairpersons from each of the mass organisation (youth, women, farmers etc). All the CHC Meetings are therefore arranged and monitored by the Executive Board. They are the ones who registered the members and as they explained they give *'instruction, guidance and monitoring.'*

The Head of Commune, and Heads of Mass Organisations were very pro-active, in all three Provinces and it is clear that the strategy of working through these existing structures has ensured the full participation of the community who are used to social control through normal

communist demands for patriotic behaviour. In this way the leadership has been fully supportive and set a good example, but as the CHC Model promotes community empowerment through self expression, the old style leaders need more encouragement to promote the participatory approach, whereby leaders take a back seat. This is particularly relevant in terms of gender sensitivity, as it was clear that women are still finding it difficult to speak out in public, for fear of making mistakes in front of male village leaders who are very dominant. It is recommended that the Commune Leadership do not attend all the CHC sessions but empower the CHC Chairperson (preferably a women) to control the weekly meetings, assisted by the facilitator. The village leaders should not have to monitor the attendance of the CHCs, but rather support the CHC at public events such as Graduations, where they take a lead role in congratulating those who have gained certificates, and plan for the ongoing activities of the CHC, so that the CHC becomes the key in all village activities.

2.5. COMMUNITY RESPONSE

When asked to judge the popularity of the CHCs on a scale from 1-10, Son La rated the response from the Community in joining the project as very good with 8, Phu Tho rated response at 7 (with ability to get to 10 eventually), and Ha Tinh rated it highly at 8-9.

Ha Tinh officials reported that the community '*have better relationships with each other, and exchange information, do village clean ups, have better coordination and help improve knowledge and awareness.'*

Phu Tho officials said, '*the CHCs are very popular because people do it voluntarily, they vote for the committee and they organise it all themselves…more focus on the practical and more participation. They don't rely on the facilitator so it is a two-way team work and promotes a good spirit.'*

Fig 3 Participatory activities using the Visual Aids developed for the CHC Pilot Project

SON LA: Muong Bu Community Health Club *SON LA: Muong Chum CHC*

PHU THO: Thuc Luyen Community Health Club *HA TINH: Thach Thang CHC*

Table 1: Demographic Information of Community Health Club Pilot project in 3 Provinces of Vietnam

PROVINCE	Son La	Phu Tho	Ha Tinh	TOTAL
Total population of Province	1,083,800	1,316,700	1,230,300	3,630,800
Total number of Districts	11	13	11	35
DISTRICT				
Selected CHC District	Muong La	Thanh Son	Thach Ha	3
Area of District	543.6m2	1309km2	399km2	
Population of selected District*	74,668	187,700	182,120	
Person per km2 (density)	76	373	204	
COMMUNE				
Number of communes in selected district	16 out of 206	23	31	70
Selected CHC communes	Muong Bu Muong Chum	Thuc Luyen Dich Qua Thach Khoan	Thach Hoi Thach Thang	7
Total population of CHC Communes	15,932	17,779	15,000**	48,711
VILLAGE				
Number of CHC villages in CHC communes	12 out of 55	24	12 out of 18	48
Main Ethnic group	85% Thai	59% Muong	90% Kinh	
Total population of CHC villages	15,932	17,779	10,812	44,523
Total number of households	3,459	3,918	2,360	7607
Average number per household	4.6	4.5	4.5	4.5
COMMUNITY HEALTH CLUBS				
Total number of CHCs	12	24	12	48
Number of CHC members	780	1,320	829	2,929
Number of beneficiaries	3,588	5,940	3,730	13,258
Average number members per CHC	65	55	69	63

*GSO Vietnam (2009) ** info not available: to be verified (average guess)

2.6. SIZE OF CHC AND COVERAGE OF HOUSEHOLDS IN THE VILLAGE

By the time of this assessment in March 2011, there were a total of 48 CHCs in the three provinces, with 2,929 members, with an average of 63 members per club. Taking an average of 4.5 people per family, this amounts to an estimated 12,784 beneficiaries from this Pilot Project.

The largest project was in Phu Tho with 24 CHCs with 1,320 members, followed by Ha Tinh with 12 CHCs with 829 members, and Son La with 12 CHCs with 780 members. Based on Club size in Africa, the size of the CHC in Vietnam were targeted at around 100 members per CHC but in some places especially in the mountains of Son La, the population density is low and there were not that many households in the area. However, where population was dense it is surmised that

one of the reasons for smaller groups may be because the membership card was not used, as advised in mobilisation process (See below).

However in terms of impact on public health, the size of the CHC is not critical as long as it represents as many households as posssible in the village.

- In Son La, with low density, smaller and more villages it is estimated that 80-90% of all household in the village are in the CHC but out of 55 villages in the 2 CHC commune only 12 are CHC villages. CHCs cover 25% and 17% villages in each commune
- In Ha Tinh the six health clubs covered 46% of the households in one commune and 26% in another commune, with 12 out of 18 villages covered in Ha Tinh.
- In Phu Tho, three out of 23 three communes were covered but exact figures for % coverage were not available.

The objective should be to cover all villages in the commune so that communicable diseases are reduced more effectively.

2.7. ATTENDANCE RATES

The consultant visited six Community Health Clubs, (two out of 12 in each Province) and in every case the health club members gathered easily and were clearly well versed in the key health messages. It was clear even from this small sample of CHCs that the people had been well mobilised and although this may have been a challenge in the beginning, when people began to see what went on in the clubs, the numbers swelled, and the popularity of the programme was clearly visible. They also had great enthusiam for learning, and were very creative, producing poems, drama, dance and songs to reinforce the health messages. Levels of knowledge appeared high with no hesitation when asked to explain disease transmission.

Normally it is easy to check attendence when visiting CHCs by asking to see the membership cards. However as members had not been given membership cards, it was not possible to verify the average attendence with any accuracy. It would be unrealistic to gauge normal attendance based on my visit as they were obviously more people, who were not regular CHC members assembled out of curiosity for a foreign visitor, however there were an average of 63 members present between the 6 CHCs.

2.8. MEMBERSHIP CARD

None of the Provinces were using the membership card, and this was apparantly because it had not been approved by Central or printed.

Fig 4: MEMBERSHIP CARD (Side A) showing Topics of Health Sessions

Number	TOPICS	Date of Session	VHW Signature
1	INTRODUCTION		
2	COMMON DISEASES		
3	PERSONAL HYGIENE		
4	HANDWASHING		
5	DIARRHOEA		
6	DEHYDRATION		
7	OPEN DEFECATION		
8	SANITATION LADDER		
9	HYGIENIC LATRINES		
10	WASTE COLLECTION		
11	ASSESSMENT		
12	FLY CONTROL		
13	WATER SOURCE		
14	WATER STORAGE		
15	INTESTINAL PARASITES		
16	FOOD HYGIENE		
17	HOME HYGIENE		
18	COMPETITION		
19	RESPIRATORY DISEASE		
20	AVIAN FLU		
21	MOSQUITO DISEASE		
22	REVIEW		
23	PLANNING		
24	GRADUATION		

There appears to be no resistence to using the membership carrd if it were printed but there was ***no official go ahead to use it from Central***. In Phu Tho, they improvised a system, with the the membership card printed as a Register Book, where details of attendence and recommended practices by each household were kept one page per household. Although this was a very good attempt to maintain records it misses the main point which is ***to allow self monitoring by members who keep their own cards***. MoH has reveiwed the order of the topics and it would appear that the membership card content has been finalised as shown above (Fig 5).

Fig 5: MEMBERSHIP CARD: (Side B) showing recommended practices

No	Recommended Practices	VHW	Community Health Club Membership Card
1	Register as a member		Number:
2	Form a hygine cluster		
3	Use of soap		Name
4	No skin disease in family		
5	Correct handwashing		ID
6	Make SSS correctly		
7	Zero open defecation		Village
8	A clean covered latrine		
9	A hygienic latrine		Commune
10	Waste management		
11	No littering around home		Facilitator
12	Fly control measures		
13	Protected Water Source		Date started
14	Safe drinking water		
15	De-worm children		Date finished
16	Clean organised kitchen		
17	Rat control measures		Date of Graduation
18	Tidy home and yard		
19	Fuel efficient stove		Household survey Dates
20	Improve livestock pens		
21	No mosquito breeding ground		Household visits
22	Home visit and assessment		
23	Future plans		
24	Certificate full attendance		

The recommended practices are linked to each of the topics and are given as homework at the end of each session.

2.9. GRADUATIONS

None of the Provinces had as yet 'got around' to the Graduations which are public events held in each commune at the end of the 6 month training. In all countries where the CHC model has operated, giving certificates has been proven to increase membership. There is little reason why this should be any different in Asia, where a strong work ethic and respect for education the reward of a certificate should be a strong incentive for semi-literate people who may never have gained a qualification before. On Graduation day there may also be prizes for model homes who have met all the recommended practices. This public recognition of the compliant members is another key aspect of the CHC Model, (with the membership card,) which makes it distinctive and accounts for its success in changing people's behaviour. As was stressed repeatedly by the International Consultant in the National Training, ***these two small incentives contribute a great deal to making the CHC approach successful.***

The excuse for not having done Graduations was that the certificates had not been approved or printed. If this is the case, it is a small and cheap task to be completed, and Provinces have requested that they are given the go-ahead to print their own certificates and only need the design and approval of Central. In the interest of attracting new members for the scaling up this should be done in all existing CHCs before the next round of mobilisation, so that future members will be inspired to join in order to have this honor at a Graduation Ceremony. Experience in many projects has shown that it is best to have an absolute criteria for receiving a certificate, as if it is only 2/3rds then there is always the danger that this may shift to accommodate those who have neally comleted 2/3rds, and this becomes a source of friction in the group and open to abuse. So it is strongly recommended that only those who complete all sessions be given the certificate, and that if some have not finished they continue to attend repeat sessions until they too meet the criteria.

Recommendation: CERTIFICATES:

- ***Central should approve a certificate design and give the go ahead for Graduations in all exisiting Communes before the next phase.***
- ***Only those who have compled all sessions gain a certificate.***

2.10. TIMING OF THE PROJECT

As described above, the timing of the Pilot Project was completely out – stretching over two (half) years because of budgetry constraints. Because the programme demands that the health club members meet regularly once a week for six months, it is obviously important that the 24 health sessions are arranged so as not to coincide with any agricultural demands of the season. Therefore according to key informants interviewed during this evaluation, the best period to hold weekly health club meetings is from March to October, with a regular meeting once a week until August, and Graduations in September, before the typhoon season. This means that funding for the programme should be allocated well in advance so that the project is not dictated by delays in budget allocation as it was in the Pilot. All Provinces noted that the timing had not been optimal and requested better planning when scaling up. This means training the facilitators and the training materials should be done before the beginning of each year in readiness for the start up.

Recommendations: TIMING OF TRAINING

- ***CHC sessions should be held weekly in one solid six month period every year, from March to September.***
- ***A workshop held as soon as possibile to discuss the findings of this evaluation and provide provinces with the opportunity to discuss the lessons learnt and how to plan for the next stage.***

2.11. DATA COLLECTION

Data which represents every household is collected in order to give ***accurate*** picture of the entire project, rather than a spot observation that may not be representative of the true situation. It was very commendable that the household survey had been carried out twice (pre and post) in each of the three Pilot Projects, and that data had been entered, analysed and presented in the annual reports for each Province. However although the results were presented, they were confusing to read, and did not paint a picture for the reader (or rather this reader), but perhaps they got lost in transaltion? One gets a general impression that everything is improving ***but no real insights as to the relative impact*** in broad terms, as the three surveys were different and therefore the results were not comparable. A standard Survey Tool should be used, with enough scope for each Province to adapt the survey by adding different possible answers rather than ask different questions. Both Son La and Ha Tinh were able to produce the summary of the findings, but not the original raw data, which apparantly in the case of Ha Tinh had got lost on a corrupt computer and was having to be redone again by hand! Phu Tho sent the base-line raw data but not the post survey so no analysis could be done, and we did not receive the full findings but only the summary in the report, which like the other two provinces was not easy to verify without the original data. For this reason it is not included in this report.

In all Provinces the data had been entered into Excel, a very basic computer programme, which does not allow much in-depth analysis. However, it does enable graphs to be generated. As presented in this report, it is much easier for the reader to understand graphs than a line of figures, so more of this sort of presentation would make sense - perhaps a standard graph with the same indicators every three months as part of the reporting system?

There were also a few problems with the data. Sticking to the letter of the instructions, ennumerators were expected to interview 100 respondents. However, where there were not enough CHC households, so they also took non-CHC househholds. This defeated the point of monitoring CHC behaviour change, as the respondents could not be differentiated in the data. For this reason it is likely that the rate of within the CHC is actually higher than it appears from

these statistics provided. If the respondents could be re-classified into CHC and non CHC by going back to the raw data, it would be useful and some new analysis done.comparing the two. On the positive side, the fact that all households have been ennumerated and there is no sampling means that the result if correctly observed, will have a very strong statistical validity ($p>0.001$) as there is no chance that the sample could have been non-representative of the population, since the whole population was taken.

If the survey is to be done in every new CHC area, the survey should be properly standardised between Provinces so that data can be put into SPSS for a national data base, which would be very impressive if done properly. Although this was done by the international consultant for the programme each Province has taken the liberty to adapt it to their area. The adaption is important but it should be done differently by changing the number of options for each answer, not changing the questions themselves.

Table 2: Extract from the Son La Survey showing non discreet categories and too many respondents

17	**Reuse of Human Faeces**	**2010 Dec**		**2010 Dec**	
		Number	**% Before**	**Number**	**% After 1 year**
	Do not re-use human faeces	756	72.97	756	72.97
	Compost less than 6 months	108	10.42	64	6.18
	Compost 7 months or more	172	16.60	216	20.85
	Use faeces after one year	0	0.00	0	0.00
		1036	100.00	1036	100.00

Thus we have Son La with 25 questions, and the sort of problem which is occurring is that there are not discreet categories in each answer so the total number of responses is more than the number of respondents, as some respondents have more than one answer for the question. As shown in Table 2 below: there are 2,114 and 2,658 respondents instead of the standard number of respondents which was 1,036 and no way of knowing who has answered more than one option. Of the 24 questions in the Son La Survey, only 9 questions actually had discreet categories.

If there is the possibility that people can choose more than one answer, then one of the categories should be '5= more than one answer', or maybe '6= all of the above'. As shown in Table 3 below, the total must obviously add up to 100% of the respondents.

The data was not properly 'cleaned', i.e. it has to be checked through first to identify any human mistakes, double entries or missed cases, and those cases either deleted otr checked. These anolmalies indicates that more training needs to be given in each Province for the capture and analysis of data.

A much better method for this difficult task, would be to do the data collection using the new survey methods on a cell phone. This is a new technology which enables the survey to be uploaded on the cell phone of the VHW and for very little cost each survey can be sent to a main server (like an SMS), where all the results are instantly collated and are without human error. The technology was fiedl tested in south Africa and was found to be highly cost-effective and appropriate for Village health Workers to use.[8] This would enable Central MoH to have a full overview of all the CHCs in the country and their level of compliance with recommended hygiene practices. Paper based survey will soon be a thing of the past as they invariable get lost, are spoilt or the data entry is full of mistakes.

Table 3: Extract from the Son La Survey showing discreet categories with correct number of respondents

		Dec 2009		Dec 2010	
	FLY PROTECTION	**#**	**%**	**#**	**%**
9	How does the family protect itself from flies?				
	0= Not relevant	26	2.51	23	2.22
	1= Flies are common but no protection	43	4.15	0	0.00
	2= Fly spray used	35	3.38	31	2.99
	3= Fly swatter	629	60.71	765	73.84
	4= Keep food protected in cupboard	804	77.61	977	94.31
	5= Keep food in food-cover	543	52.41	746	72.01
	6= Cover the pit in latrine to prevent flies from breeding	34	3.28	116	11.20
		2,114		2,658	

[8] http://www.africaahead.org/publications/2009_WEDC_mobile.pdf (Rosenfeld & Waterkeyn, 2009)

Recommendations: DATA COLLECTION AND ANALYSIS

A workshop to train a national team of IT specialists in the use of the mobile phone data collection.

Alternatively use paper surveys but analyse data on SPSS rather than Excel.

It is highly recommended that the survey is standardised

The ideal would be to use the new web-based technology to enable all VHWs to collect data using their mobile phone.

3. Evaluation of the Impact

This section of the evaluation measures the impact that the Community Health Clubs have had on the lives of the CHC members and their family who are the direct beneficiaries of the improved hygiene in the home. The indirect beneficiaries are all those in the village who did not join CHCs, because with improved hygiene in the majority of the homes, there will be less communicable disease. Normally it is difficult to measure the decrease in diseases in a community where the number of cases are fairly low (Feachem, 1984)[9]. Therefore to begin with, we look at whether behaviour has changed in the community as we know that if there is good kitchen hygiene, safe usage of food water and sanitation, the level of diarrhoeal diseases such as dysentry and food poisoning should fall. In turn, the improvement in hygiene is dependent on improved information and knowledge. However, it is also true that understanding does not always mean that people will change.[10]

The secret of the CHC is that through group consensus and peer pressure to conform to recognised standards, the whole community will improve at the same time, rather than the indivualistic approach of house to house instruction. However the CHCs are not the only intervention and statistics from the NTP2 show that there is a gradual trend in improvement of most commmunities in Vietnam over the past five years, due to a large investment in IEC materials. Therefore to be convinced that the CHCs are responsible for the changes we have to compare CHC areas with non CHCs. If there is any significent change, we can safetly attribute this to activities in the CHC. Finally to be useful, a Model must not only be effective, but also due to budgetry constraints it has to be cost-effective. For this reason we divide the overall expenditure by the number of beneficiaries to get a standard we can apply to all projects: a cost per beneficiary. However it must be borne in mind that although some programmes may be cost-effective but like all good buyers we have to ask how much do you get for your Dong? The nature of Social Marketing is to focus narrowly on one issue and broadcast simple messages, repeatedly known in Vietnam as 'properganda'. If a Programme only targets a few messages

[9] Feachem R (1984) Interventions for the control of diarrhoeal diseases among young children: promotion of personal and domestic hygiene. Bulletin of the World Health Organisation 62 (3) 467-475

[10] Curtis,V. (!((%) Potties, pits and pipes:explaining hygiene behavior in Burkino Faso. Social Science and Medicine. 41.(3):383-393

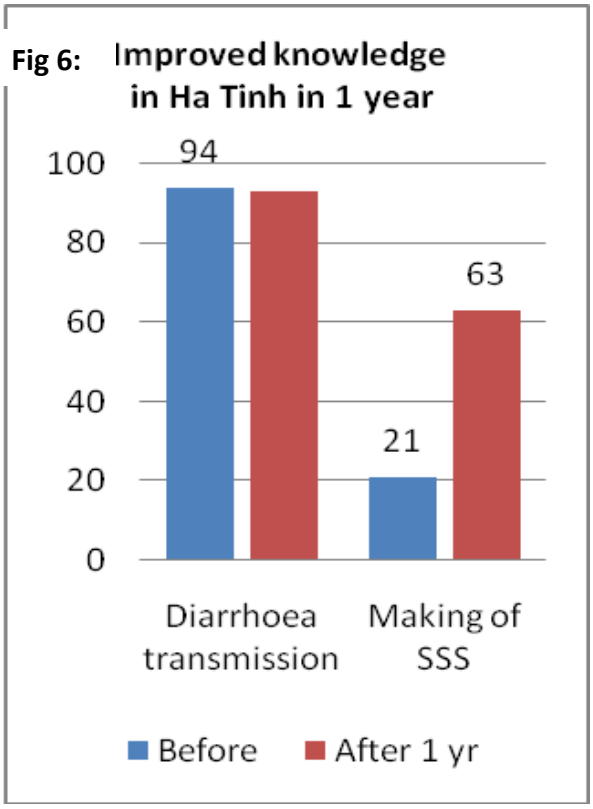
related to prevention of ***one*** disease this cannot be as cost-***effective*** as a programme that addresses 50 messages relating to ***all*** preventable diseases.

So in summary, this evaluation asked five key questions:

1. Have CHC member's knowledge improved?
2. Have people improved their hygiene behaviour?
3. Have communicable diseases in the CHC area decreased?
4. Is the project Cost-Effective?
5. How can we scale it up?

3.1. Improved Knowledge

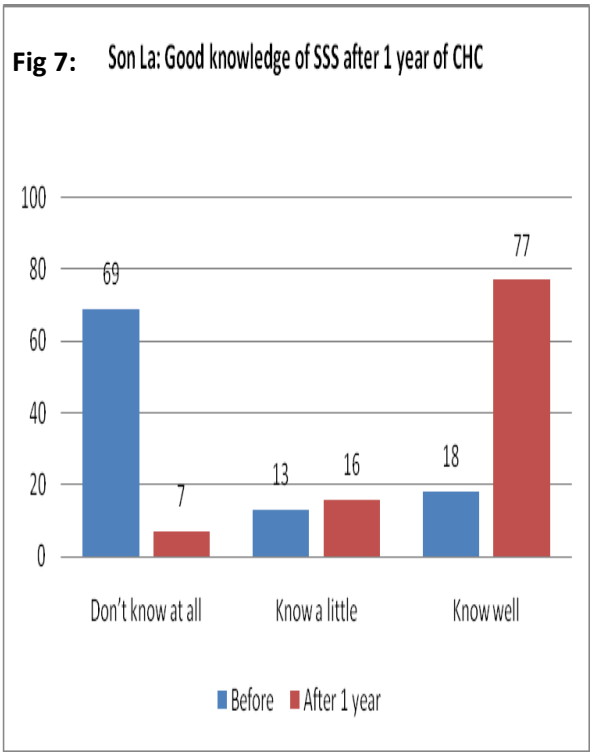
Fig 6: Improved knowledge in Ha Tinh in 1 year



Ha Tinh provided the full base line and post survey results immediately which is the reason we have selected this Province as an example of how there has been an impact

Between November 2009 and December 2009, the chart (left) shows there has been little or no change in the knowledge of diarrhoea transmission as can be seen the knowledge of this topic was already 94% before the programme. This unexpected finding helps us to unpick the effects of both programmes as it shows that most people already know the cause of diarrhoea, without the help of either the Unilever project (which stressed handwashing with soap to revent diarrhoea) or the CHC project.

However there has been a significant change (42% increase) in the knowledge of how to make Sugar Salt Solution (SSS) which is a home made way to treat dehydration that has obviously not been commonly know before the CHCs. This was not part of the IEC content in the Unilever programme.

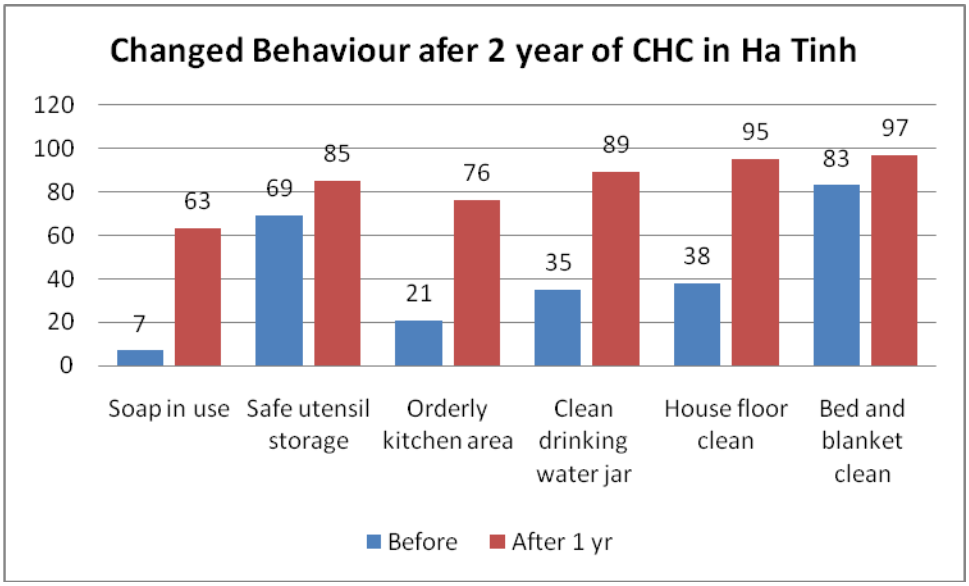


If we look at Son La, we have an equally strong indication of improved knowledge: Before the project only 18% knew how to make SSS, but by the end of the programme 77% could recite the correct quantities for making SSS. In addition 94% knew the importance of keeping food covered from flies.

3.2. Behaviour Change

There is no doubt that behaviour has changed significently in the CHC areas, but is it due **only** to the CHC meetings?

In all areas there were a combination of strategies used: IEC material, posters, billboards, and propaganda over the village speaker every evening for half an hour, as well as home visits and a weekly CHC meeting, therefore it is not surprising that behaviour has improved.



The most significent is a rise of 53% in the use of soap for handwashing, which is a real achievement.

This can be appreciated more easily when comparing this result with other international studies.

Fig 8: Changed Behaviour after 2 years of CHC in 2 communes in Ha Tinh Province

When we look at what the CHC areas have changed in one year in Ha Tinh we find an unmistakable improvement:

- 16% more safe storge of utensils
- 55% improvement in kitchen order from 21% to 76% showing how house pride is starting
- 54% improvement in clean drinking container from 38% to 95% which we know will have an important effect on reducing dirrhoea (Esrey, 1990)[11].
- 60% have cleaner floors, a chore that has improved from 38% to 95% - impressive!
- 83% bedding was fairly clean at the start of the project but still improved by 14% to get up to 97% of all CHC members.

With so much extra cleaning evident inside the houses it could be asked whether these hard working CHC members had time to clean up their environment.

The same pattern emerges: 97% of the houses had no garbage around them compared to 36% in the base line: an impressive 59% change, and 30% more people (30% - 60%) now use a fly swot, thanks to one of the pictures that has inspired emulation. The survey shows that 38% more people now practice some form of rat control (23% to 61%). As every CHC members was surveyed, it is not a sample and therefore is no margins of error. This means that statistical significance will be at p>0.001 for all observations. These are impressive claims and we need to see if other Districts have the same high level of response.

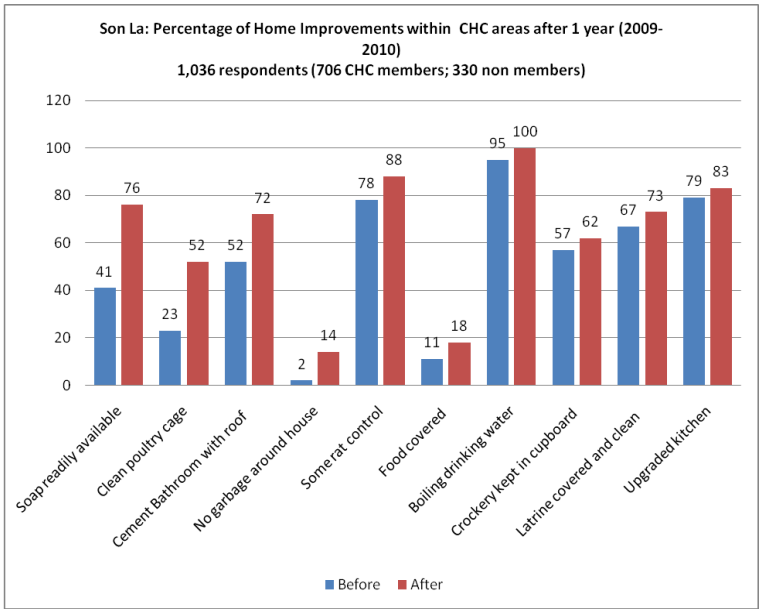


Fig. 9: Son La: % of home improvments within CHC areas after 1 year

SON LA DISTRICT

In Son La, the same pattern of effort to change is seen in the CHC villages as in Ha Tinh.

The total number of CHC members is 706, whilst there are 1036 respondents in both the pre and post survey. This means that in order to meet the target of 1000 respondents per CHC, Non CHC memberswere also interviewed. Therefore ***the rate of change would be expected to***

[11] Esrey S et al (1991) Effects of improved water supply and sanitation on ascariasis, diarrhoea, drunculiasis, hookworm infection, schistosomiasis control: A Review. Bulletin of the World Health Organization 69 (5) 609-621.

lessthan if all respondents were CHC members. It appears that the data cannot be disagregated because there was no initial question to ask if the respondent was a member or non member. So when looking at the following data ***we are looking at the whole population in the villages not just the CHC members, and this makes it all the more impressive***.

We find that during the one year in the two CHC Communes out of 1,036 respondents:

- 359 more people (35% more) have soap readily available in their homes
- 309 more people (30% more) now clean poultry cages daily
- 192 more (19%) people have made a permenant bathroom
- 99 more people (10% more) have some form of rat control
- 88 less people (8%) store their rainwater in an open container (i.e. they cover it)
- 73 more people (7%) cover their food properly
- 120 more people (12%) in clearing garbage from around the house
- 49 more people (5%) now boil their drinking water, bringing up to ***100% for this practice***
- 44 more families (4%) keep their feacal compost for more than 6 months
- 49 more (5%) store crockery kept in the cupboard
- 5% more have clean and covered latrines (with the total being 73%)
- 35 people (3%) have upgraded their kitchen with a table and cupboards to make 83%.

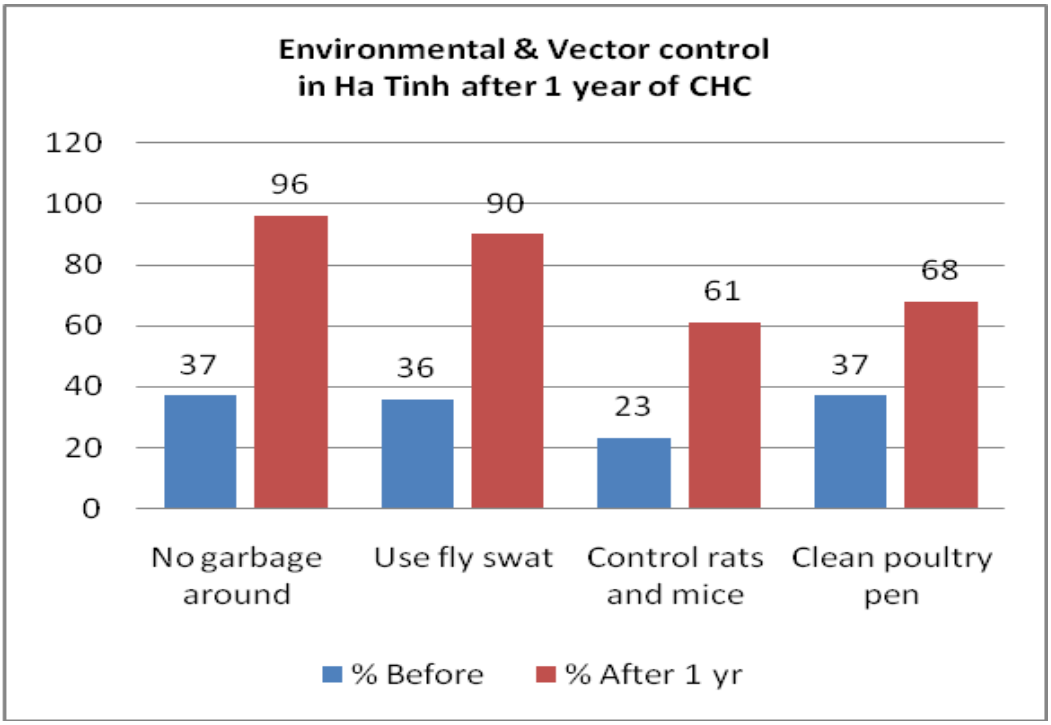


Fig. 10: Environmental and Vector control in Ha Tinh after 1 year of CHC **(2009-2010)**

However the most exciting information we get from these statistics is that there has been a great effort at improving sanitation in the area, especially at the lower end of the sanitation ladder. The following have been upgraded:

- 265 new simple latrines
- 71 new composting latrines
- 41 Septic Tank toilets,
- 7 simple latrine with a lid.

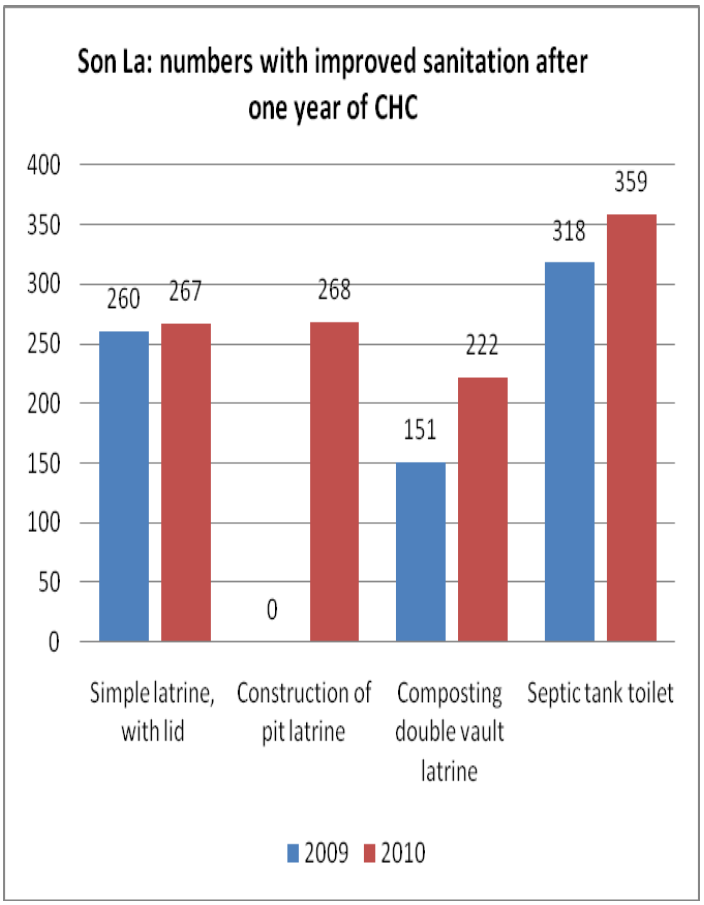


***Fig. 11: Son La: Numbers with improved sanitation after one year of CHC* (2009-2010)**

In total this makes 387 improved households, which is 70% of the CHC members (706).

Open defecation has dropped from 49 to only 4 families out of 1036 that still use this method.

In 759 households the latrines are clean and covered and there is no open defecation. We would like to believe that most of these are the 706 CHC members with a few of their neighbours. To ascertain this the raw data needs to be re-examined and the data entered into a more sophisticated statistical programme (like SPSS). However, there is no doubt that a demand for sanitation has been created by the CHC activities, both within membership and their non CHC neighbours.

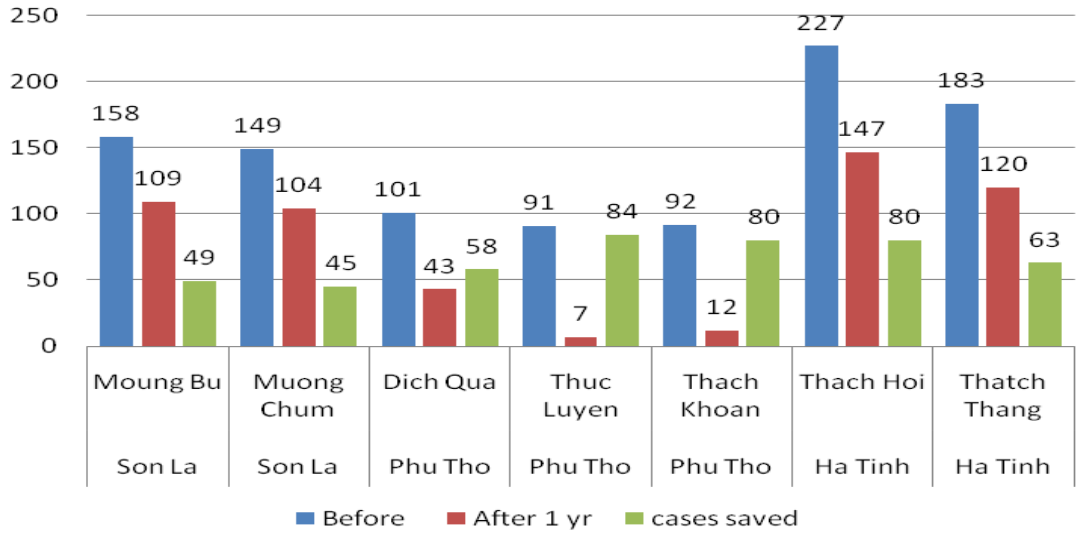
Of course the objective of collecting this information is so as to see which areas need more attention. After this initial pilot project we need to assess which are the main gaps in knowledge and behaviour and target these in particular. Looking at the chart above we see that although great improvement has been made in having soap readily available in the home, this needs to increase to 100%, as has already been achieved with the practice of boiling water. Although there is a steady improvement, ***the weakest practices are keeping litter from around the house, and keeping food covered.***

3.3. DISEASE PREVENTION

The following data was extracted from Commune Health Centre Records that itemise every case that has been reported in the past year. This is non specific to CHC areas, and can not differentiate between those who were CHC or non CHC. However for the purpose of demonstrating that 'there is defintiely some impact of reducing desease in these areas, we have made the following graphs, which illustrate a two year report of diarrhoea, dysentry and Food Poisoning, all disease that can be effectively prevented by safe hygiene and saniation. As we said earlier, if there are enough people practising safe hygiene in an area, the rate of these diseases should fall. Sure enough looking at the data from all three provinces, Son La, Phu Tho and Ha Tinh, the same pattern emerges: there is less diarrhoea, dystentry and food poisoning in all CHC communes, regardless of Province.

For the sake of brevity we have combined the reported cases of diarrhoea, dysentery and food poinsoning (DD&FP) into one total for each commune. To get the number of reported cases that can be attributed to poor hygiene we simply subtracted the number of cases in 2009 from the number of cases in 2010. This gives us a total of 459 cases that have been saved in the 7 CHC communes in one year. Some may say that to make this sort of claim we should get an average of the five previous years to be certain there is a change that is attributable to the CHCs, as one year may be due to another fluctuation that we cannot attribute to the CHCs (like a freak cholera outbreak). Although it was not possible within the limited time of the tour to get all this data, it is to be recommended that each Commune provide these statstics for analysis to verify if these preliminary findings are true to life

Fig. 12: **Reduction of reported cases of diarrhoea, dysentery, and food poisoning in 7 Community Health Club Communes communes after one year, Vietnam 2010. (source MoH)**



If we look at all CHC communes each Province we can see that

- Phu Tho saved approximately 222 cases, reduced by 22% from 284 to 62
- Ha Tinh saved approximately 143 cases, reduced 35% from 410 to 267
- Son La saved approximately 94 cases, reduced by 3% from 307 to 213

As Phu Tho, with a lower baseline of reported cases, it made the biggest saving across three communes, and in two years has practically eradicated dystentery diarrhoea & food poisoning in the two CHC communes, wheras Son La and Ha Tinh still have a sizeable challenge to reduce to below 10%.

Although diarrhoea, dysentery, cholera and food poisoning are all diseases that are the first to be targeted in a health promotion programme associated with water and sanitation, we find that the 'added value' provided by the CHC (which is not apparant in other methodologies) is that other diseases also show a pattern of reduction. For example there is a sharp reduction in ARI in Son La, where the cooler mountains mean that people suffer more from respiratory disease than from diarrhoea which is more common in the hot lowlands. The Province reports that ARI decreased Muong Bu 78 to 46 cases (41%), and in Muong Chum 37 to 15 cases (22%). Whilst it is not generally known that handwashing with soap decreases the transmission of ARI this is now an established fact[12] because germs spread through contact as well as through the air. Thus CHC members are taught to sneeze into their shoulder because if they sneeze into their hands they may shake another persons hand and spread the infections by touch.

Recommendation: The lesson to be learnt from these statistics is that if we want to show a trend in the reduction of disease we should target all the villages within the catchment of a health centre, rather than target a few isolated villages spread out across a larger area.

More research is needed to verify the last 10 years in order to be certain of this pattern of change.

This reduction can be attributed to the CHC activity as there were no other health promotion programmes being conducted in the same areas, apart from routine instruction at school and in health centres.

[12] Curtis V & Cairncross S. (2003) Effect of handwashing with soap on diarrhoea risk in the community: a systematic review. Lancet Infectious Diseases 3 (5) 275-81.

What is not clear from these statistics is whether the reduction of reported cases is due to the fact that:

1. diarrhoea is less prevalent, or
2. that is is being successfully treated at home as CHC members have the knowledge now.

		Cases per commune Before CHC	Total per District before	Cases per Commune after 1 yr	Total per district after	Cases saved	Commune total
Son La	Moung Bu	158	307	109	213	49	
Son La	Muong Chum	149		104		45	94
Phu Tho	Dich Qua	101	284	43	62	58	
Phu Tho	Thuc Luyen	91		7		84	
Phu Tho	Thach Khoan	92		12		80	222
Ha Tinh	Thach Hoi	227	410	147	267	80	
Ha Tinh	Thatch Thang	183		120		63	143

Table 4: Number of reported cases saved after one year of CHC in seven communes

Staff from Health Centre expressed the opinon that people are now able to distinguish between when it is necessary to come to the clinic and are able to prevent and treat communicable

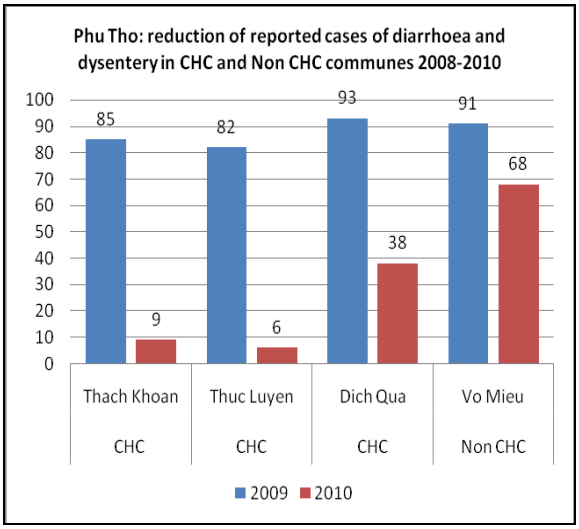
diseases at home and they attribute this to the CHC training. As there are 80-90% of the homes constitute the catchment for the commune health centre it would appear that in son La at least the CHC is responsible for this impressive reduction in diarrhoea and ARIs.

However, to answer the sceptics (before they pose the question):

How do disease patterns in CHC areas relate to non CHC areas? - there may be a general reduction nationwide, due to the National Target programme, or improved levels of water and sanitation could have had an impact on the reduction of disease?

It is a reasonable academic question and so to further substantiate our claims we gathered data from similar communes where there are no CHCs so see if there is a difference. Here we are pleasantly surprised, as although there is a certain reduction from year to year in both CHC and Non CHC areas ***there is a much greater decline of diarrhoea and dystentery in the CHC Communes.***

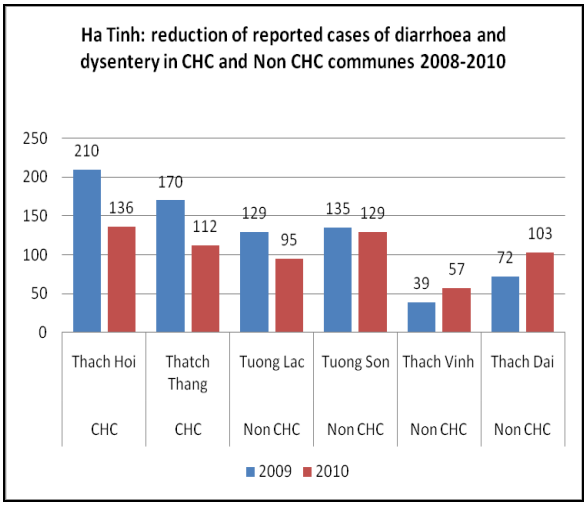
Fig. 13. Reduction of reported cases of diarrhoea and dysentery in CHC and non CHC communes in Phu Tho, Ha Tinh and Son La.



Phu Tho:

The 3 CHC communes were on roughly the same level of reported cases of diarrhoea as non CHC commune Vo Mieu (with between 82 and 93 cases per year in 2009). The CHC communes dropped by 90%, **93% and 59%** to 9, 6 and 38 cases respectively, making a total of 44 cases less than 2009.

By contrast the non CHC commune Vo Mieu dropped by **only 25%** to 68 cases.

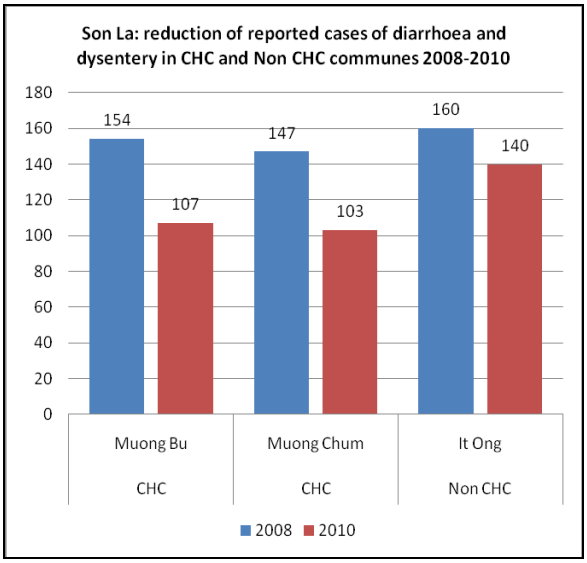


Ha Tinh:

In 2009 there were a total of 380 cases in the two CHC communes (Thach Hoi and Thatch Thang), which dropped to 248 in 2010. This is a 35% decrease.

Two similar Non CHC communes (Tuong Lac and Tuong Son) had a total of 264 cases in 2009 and they reduced to 224 in one year, which is a **15% decrease.**

In Thach Vinh and in Thach Dai there was actually an increase of 18% and 31%.



Son La:

Looking at 3 similar CHC communes in Son La, each with over 140 diarrhoea cases, we can clearly see that the two CHC communes have had a **reduction of 31%** (Muong Bu) **and 30%** (Muong Chum).

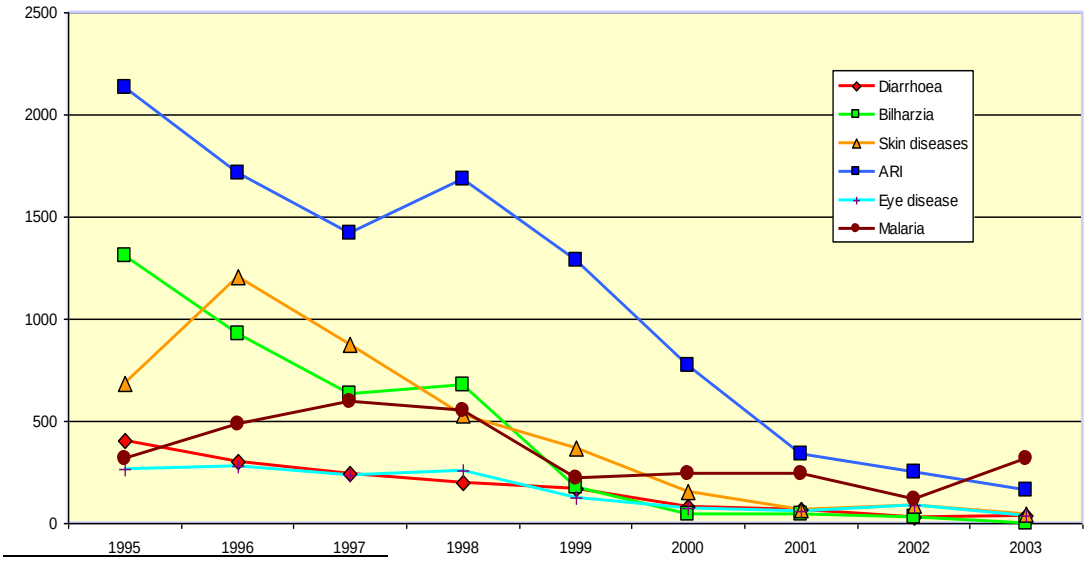
In the non CHC commune diarrhoea has only reduced by **13%** which means the difference of 37 cases.

4. FUTURE PLANNING

The reported cases from the Health Centres give an indication that 'something is changing' in terms of the usual pattern of disease in all the areas where there are functional health clubs. However it must be rembembered that these are preliminary findings and more research is needed to ascertain if this is really related to the CHC activity or if it is part of a general trend in all areas. As shown above there is substantially more cases reduced in CHC areas than non CHC areas, and therefore if the CHCs continue to expand to include all the household in the catchment area of the Health Centre we would expect these cases to continue to diminish. However to fully saturate an area takes a few years and it is a long term strategy rather than a quick fix. Previous experience in Zimbabwe shows that where the CHCs continue for over 4 years the trend continues downward until there are almost no cases. However in areas where CHCs were only in operation for two years, the trend starts to rise again when the CHC activities stop. This shows us that it is very important to sustain the activities in the CHC until it becomes instutionalised and part of the fabric of daily life.

Research in Africa shows that in Ruombwe Ward, Makoni District, Zimbabwe, between 1995 and 2003 there were 18 health clubs with 1,777 members (with an average of 99 members per CHC), which represented 80% of the household in the catchment area of the Health Centre. The reported cases of Diarrhoea,Bilharzia (Shistosomiasis), skin diseases, ARI, eye disease and even malaria, all slowly decreased over the eight years until 2001, when the projects ceased having external support from the NGO Zimbabwe AHEAD. However the trend continued with very few cases although the support for the CHCs had stopped.

Fig. 14: Ruombwe Ward, Makoni District: Reported cases of diarrhoea, bilharzia, skin diseases, ARI, eye disease and malaria, between 1995 – 2001. Zimbabwe (Waterkeyn, 2005)[13]

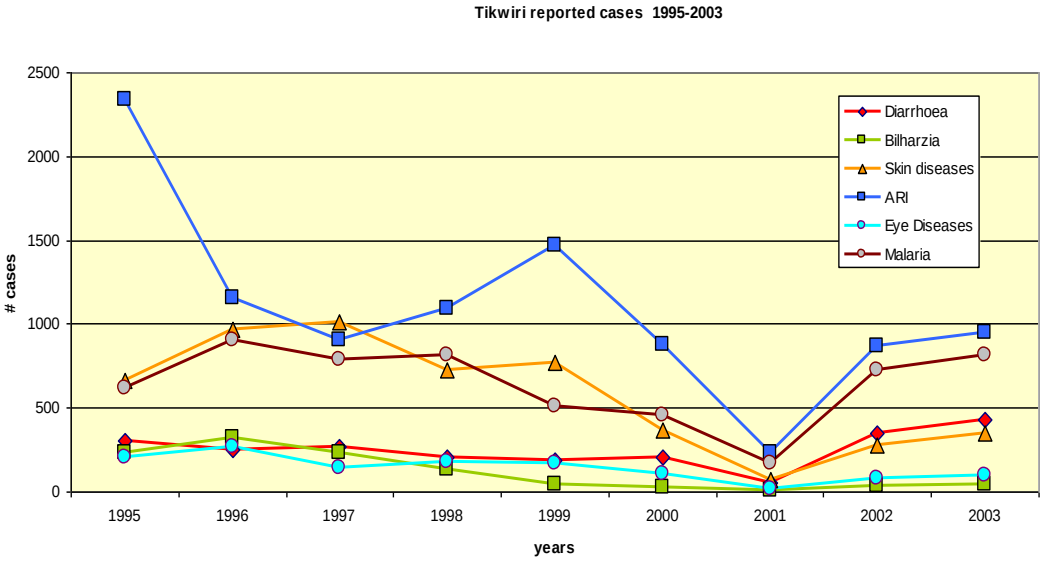


[13] http://www.africaahead.org/publications/2005%20_WEDC_JW.pdf.pdf
(Waterkeyn , 2005. 31st WEDC conference)

By contrast in Tikwiri Ward, where there were only 6 CHCs in the three years from 1998 – 2001, with 516 households representing only 68% coverage of the whole ward (commune), the pattern of reported cases shows an immediate sharp upward turn the same year that the support of CHC stopped in 2001. From these two graphs we can see that whereas diseases decreased and was sustained in Ruombwe it was not sustained in Tikwiri. From this we learn two lessons:

1. there must be a high density of CHC members throughout the catchment area (at least 80%)
2. The CHC must be supported for at least four years to ensure that behaviours are sustained.

Fig 15: Tikwiri Ward, Makoni District: Reported cases of diarrhoea, bilharzia, skin diseases, ARI, eye disease and malaria, between 1995 – 2001. Zimbabwe (Waterkeyn, 2005)



4.1. Different Types of Sustainability

Sustainability comes in two forms:

1. The sustaining of the behaviour change
2. The sustaining of the actual CHC Structure

Ministry of Health is concerned to see that the population is healthy and therefore the ultimate objective may be to ensure that diseases are not only reduced but stay reduced to the absolute minimum. In order to do this the CHCs need to become part of the fabric of the Health Service, so that the Village Health Worker is linked to all the households in the catchment area by virtue of being the main facilitator of the CHC, perhaps even the Chairperson. It is important that all individual members remain at a high standard of hygiene behaviour and the best way to reinforce this is through the peer pressure which comes in strong doses every week through the CHC. However, if the stucture of the CHC falls away and the behaviours remain ingrained there is still sustained behaviour change, which is the ultimate objective.

4.2. The AHEAD Model: Applied Health Education and Development

The sustainability of the CHC is important as once such a structure is formed it can become a useful vehicle for much development in the area. However to sustain a club of people, the members have to have something concrete to do, and this leads us onto the full AHEAD Model – Applied Health Education and Development, which involves at least three more stages in the development of the community. The first stage (Year 1) is the introduction of hygiene issues through a campaign of health promotion. This has just been completed in most of the Pilot CHC areas, and needs no more description.

Stage 2: Improved Water and Sanitation

The 1st year of knowledge transfer through the 24 health promiton sessions should lead to the 2nd Stage: ***applying*** this knowledge ***practically*** by making changes to the facilities that affect health: water sanitation, kitchen and food hygiene, as well as vector and livestock control. Therefore the 2nd year of the CHC should consentrate on reinforcing the simple messages of the previous year and converting them to action. Safe water and sanitation facilities are therefore most important, and all members should endeavour to upgrade their own latrines/toilets in some way at whatever level they have reached. It is also very feasible to let CHC iniatiate their own water supply projects (self supply), and with Village Level Operation, Management and Maintenance (VLOMM) these facilities should and can be managed through the CHC. This is not just speculation, as shown already people are naturally improving their living standards without any subsidy and with technical assistance also improve their water supply.

Target should be set in all CHCs and Communes to achieve certain standards. These can be reached by a strong campaign which may include a Model Home/village competition launched at the beginning of the year. This can also include a section for the best health song, drama, poem as well as healthy child/baby competition. It can be flexible according to the interests of each commune. The guiding factor is the fulfillment of the recommended practices on the CHC Membership card. Thus to enter the competition all members must have completed all the 24 sessions, and gained a certificiate. All members must then concentrate on upgrading their facilities to meet the CHC standard. This in turn will contribute towards rating each CHC, and within the commune there can be group prizes for the best CHC. The prize may consist of start up funds for an income generation project for the CHC, such as a communal nutrition garden, poultry, pig breeding, any number of projects that the CHC can come up with.

Stage 3: Reduction of Poverty

This leads onto the 3rd stage, the Income Generating stage, where club members get together on their own to plan and carry out their projects. This may be the stage where the Ministry of Health hands over the 'care' of the CHC to the Ministry of Agriculture, or Culture or whatever is appropriate. With small micro credit, the spiral out of poverty can develop. With added income, the CHC can provide revolving funds to assist those who need it, to construct toilets, or improve water supply. With small scale revolving funds, CHCs can remain critical structures in the village for water and saniation project and be sustained for many years as slowly every member of the CHC is improving their own living standards.

Stage 4: Social Responsibility

This 3rd stage of Income Generation merges without a break into the 4th stage: Social Responsibility. When families are physically safe and secure financially, and have fewer personal concerns, they can afford to be more altruistic. It is said sometimes that altruism is a luxury only the rich can afford. However past projects in Africa have shown that rural communties are also highly motivated to help their own vulnerable: the frail, disabled, elderly and terminally ill. The CHC is the structure that should adopt a proactive stance, taking responsibility for those within the community who need support. In Africa this leads to the identification of people living with AIDS and the distribution of food and clothing to these families, which were often child headed housholds, as well as projects to enable them to support themselves, such as the growing and use of medicinal herbs to combat opportunistic diseases. Some CHC started play schools so that mothers and grandmothers could have a break from child care and occuply themselves with income generating activities. The elderly were asked to come to play schools and teach the children the traditional songs and dances so that the children were socialised according to their culture, even if they were orphans. The CHC has infinite possibilities and plans should be developed by each CHC, so that they take control of their own projects. 'Community Health' means the mental, physical and emotional wellbeing of all the members of the community, thus the name 'Community Health Club' is broadening to include any activity that may lead to this end. The reduction of poverty through income generation will have a positive impact on physical health, as families eat better, and children are less malnourished. The social support provided by the network of friends developed in the CHC provides emotional support which in turn decreases stress and anxiety, both known causes of heart disease. Social responsibility enables the level of Scoial Capital in a community to rise, which benefits everyone, not only the CHC members. The Manual explains the CHC Model in full.

4.3. Integration with Mass Organisations and Government Ministries

Because the CHC is a holistic institution, it deals with many cross cutting issues that are not always the responsibility of only one Ministry. Therefore the CHC has to have links with all Ministries and Mass Organisations. It is clear the the Womens League and the Farmers Union will all be linked into the CHC, as most of the members will be members of the other mass organisations. After the first year, when the CHC had a specific training to do, there is no need to segregate activities as these will all be coordinated by the Commune Leader. In short, the sustainability of the CHCs lies in the hands of the local Commune Leaders, and CHCs will take on a life of their own if they are integrated into the existing commune activities. It is for each Commune to find ways to sustain the CHC and bring out its maximum value. Control of the CHC should be devolved from the Ministry of Health so that the CHC is owned by the Commune and the people of each village. They should come up with their own ideas as to how to sustain their CHC. However, the CHC should not loose its identity but rather form overlapping linkages with other mass organisations as shown in the Venn diagramme below.

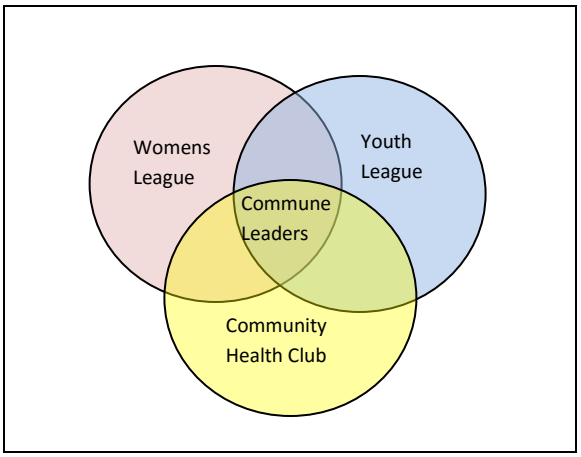


Fig 16: Venne Diagramme showing the overlap at grass roots level of different mass organisations

4.4. Scaling up

The ultimate objective is of course to spread the CHC Model of development throughout Vietnam so that every village has this systematic approach to management of preventable diseases. Although this may sound ambitious, it is not impossible. The ability to do this has already been demonstrated by the fact that other mass organisations have been long been established in every village in Vietnam. This cellular network is one of the strengths of Vietnam that will enable the rapid instiutionalisation of CHC at grass roots level. With strong political will and directives from the top of the Ministry of Health this can become a reality within 5 years. An inspiring example of this is Rwanda where the President has given a directive demandings that CHCs be set up in every village in Rwanda which amounts to 15,000 CHCs within the next few years. Although the training to meet this daunting task is a challenge, like Vietnam they have developed the Manual and the Toolkit within the past year and are now poised to scale up.

The training materials are the key to scaling up: once the Toolkit is printed in sufficient quantities, and a core team of trainers are able to disperse into their own Provinces, they should be able to replicate the training fairly easily. This has already been demonstrated in the Pilot Project, where within a year the CHCs were established with relative ease. However, there is definitely need for fresh young minds that have not become set in their ways, and the level of energy needed to effect this training throughout Vietnam requires a highly motiviated and charistmatic team. It is therefore strongly recommended that Masters Graduates with a passion for training are recruited and trained as full time trainers, at least two per Province to train all districts, so that a standardised level of training is provided throuout Vietnam. This team of at least ***30 Core Trainers should be trained directly by the international consultant*** so that many of the key aspects of the CHC Approach are transferred directly from the source to the trainers without anything being lost by another generation of intepretation. This will be the key to effective Trainers of Trainers, as has been proved repeatedly in other countries. Training is the key to the CHC Programme and if it is of a high standard the CHC Model will live up to expectations. If however, some of the key ingredients (such as the membership card) are missed out, the yeast will be missing and the cake may not rise as expected!

RECOMMENDATION: A Team of young, charistmatic, well qualified (Masters) trainers should be trained by International Consultant to roll out the CHC Approach to scale.

4.5. National Target Programme III

It should not be too difficult to integrate the CHC Model into existing NTP3 planning which has set **targets and plans to use the CHC Model, amongst others, to effect improved levels of water and** sanitation. All the objectivies of NTP3 resonate strongly with the CHC Approach, which should become the main mechanism for sustained and holistic development in all areas where the NTP3 is operational.

There are of course, other methodologies being used in Vietnam, such as CLTS and Social Marketing through IEC, and these can easily dovetail into CHC activities. Although there is much debate on which methodology to use, they are not mutual excluding. It is clear that Social Marketing is effective in spreading key messages far and wide, and tranferring information to the general public, but it does not target a specific group and therefore has no means of measuring behaviour change even if it does occur. In CHC areas it is clear the IEC activities have reinforced the CHC activities, but in areas where there is IEC but no CHC, there has been much less impact on disease reduction.

CLTS has been very successful in other Asian countries in eliminating open defecation, and producing a demand for sanitation, which is one of the many objectives the CHC, but it does not have a holistic approach to disease reduction, and focus is purely on sanitation. Therefore, the village transect walk with the triggering of saniation can easily be included as one of the activites when the CHC does the sanitation topic.

The approaches used by CLTS and Social Marketing are ***strategies*** to achieve behaviour change for certain targetted outcomes (sanitation /handwashing with soap). ***The CHC is an approach which provides a Model of Development that provides a means of solving the full spectrum of challenges needed to produce a self sustaining community***. Therefore for the sake of coorodination between NGO and other development Agencies the Ministry of Health should adopt a clear policy on how to take forward NTP3 ***clarifying the roles of the different strategies***, and when and how they should be used in a coordinated fashion. This brings in the important aspect of cost-effectiveness. With the usual budgetry limitation it is obvious that each strategy has to be measured in terms of cost-effectiveness, overall impact and long term sustainability i.e. How much 'bong' do you get for your Dong?!

5.COST-EFFECTIVENESS

In Vietnam, the Provinces were each given a budget for two years to start up and run the CHC Programme.

5.1.Core Budget from Central

Due to lack of detailed information available at such short notice, a simple assessment has been made to estimate the cost of the CHC Pilot Project, calculated using only the budget provided by Central Authority to the Provinces. This budget did not include

- the cost of training the core team at National and Provincial level,
- the cost of developing and printing the training materials and manual, and

- cost of evalution associated with the start up of a Pilot Project.

The Districts all noted that the budget was not sufficient and they had to subsidize the facilitators out of District funds. In some cases facilitators were expected to contribute their own petrol and sometimes their time without reimbursement. Therefore the figures do not represent the exact cost of the Programme. The Table below is included so as to provide an example of how the Pilot Project should be costed out in more detail, which should be done by each District and presented at a national workshop for comparative analysis

Table 5: COST PER BENEFICIARY: three provinces of Vietnam in a pilot CHC project for two years

Province	2009	2010	Total	CHCs	Number of CHC members	Number of beneficiaries	Cost per beneficiary
Son La	145, million VD (US$7,631)*	180 million VD (US$9,000)**	VD 325 million (US$16,645)	12	780	3,588	US$5.01
Phu Tho	180,000,000 (US$9,000)***	180,000,000 (US$9,000)	VD 360,000,000 (US$ 18,000)	24	1320	5,940	US$3.03
Ha Thinh	180,000,000 VD (US$9,474)	190,000,000 (US$9,500)	208,000,000 US$10,400)	12	829	3,730	US$2.78
TOTAL	335,000,000 US$ 26,102	550,000,000 (US$27,500)	893,000,000 US$ 45,045	48	2,929	13,258	US$3.60

*2009: RoE = VD 19,000: US$1 and ** 2010: RoE = VD. 20,000: US$1 ***This is a guess as the amount was not available

5.2.Comparative Analysis of Cost-effectiveness

The CHC Model as used in Africa has demonstrated its cost-effectiveness by measuring a cost per beneficiary per year. For example in Makoni District, (2000) there were 72 community health clubs with a membership of 3,856, (with an average of 53 members per club) and an estimated 23,136 beneficiaries (multiplying 6 per family for every member). There were 14 MoH facilitators (doing 5 clubs or more each) who were paid a nominal allowance, as well as a fuel allowance for 1,200 kms per month. These were the only local costs for the programme. Excluding the initial training costs and the cost of equipping each facilitator with a motor bike, the running costs for the second year amounted to US$ 24,395.The exact number of health sessions in the District was 3,731. This averages out at a cost per CHC member of US$2.13 per year for the training; per beneficiary it is only **US$0.35**. This is a benchmark for Vietnam to make comparisons in the Pilot Project.

The CHC Model in the Pilot Project in Vietnam is a smaller size to the Makoni Project in Zimbabwe, with roughly half the number of 48 CHC, with a membership of 2,929 members and consequently 13,258 beneficiaries (taking an averge family of 4.5 in Phu Tho and Ha Tinh, and 4.6 in Son La). There were 48 CHC facilitators (running one club each), who were paid a nominal allowance but no motorbike was provided and fuel costs were not remunerated, so the facilitators were effectively subsidizing the project. The budget received from Central was used for the local training in the District, and the running costs for two years. This worked out at an average between the three areas at US$ 3.60 for two years, and only **US$1.30** for one year. This is remarkably cost–effective by any standards and compares well with similar projects. As one official from Ha Tinh remarked the CHC Model is ***'low cost- high impact'***.

Lessons Learnt

However having said that, there is always room for savings and some of the lessons learnt (Budget only) are as follows:

1. 24 sessions for CHC should be completed in each financial year (to save a double budget)
2. The larger the CHC membership, the lower the cost per beneficiary
3. If one facilitator is responsible for more CHCs the cost will be lower (5 per facilitator is optimal)
4. Providing transport allowance for facilitators will allow them to run more than one CHC
5. Providing incentives such as teas increase attendance and encourage more members which is more cost effective because there are more beneficiaries per facilitator.
6. For realistic analysis of cost-effectiveness all expenses should be included within the National budget (teas, allowances, currently casrried by the District)
7. Printed IEC materials (billboards, posters and handouts) are not cost-effective as they are expensive to print and the impact cannot be directly measured (too open ended)
8. Money is better spent on printing more Toolkits to enable more facilitators to increase members
9. Printing of Toolkits, Manuals, membership cards, certificates should be within the budget in each District
10. Apart from the cost of training and training materials at the start up, the main running costs should be used ensure facilitators are productive as they are the key to the whole project.

5.3.Template for 5 year programme in one province

If, for example there are 10 districts in one Province.

If each District has 15 communes

If each commune has 10 villages

There would be 150 villages in each district

If two districts were done per year there would be 300 villages with 300 CHCs per Province

If each Province did 300 CHCs per year there would be 1500 CHCs in each Province after 5 years.

If each CHC had 60 members there would be 18,000 members per year in 5 years = 90,000 members

90,000 members each with an average family of 4.5, would make 405,000 beneficiaries in five years

At a cost of US$1.50 per beneficiary the cost in five years would be only US$ 607,500 (US$121,500 per year) (according to the calculation of US$1.30 in the pilot project, plus additional inputs to round off at US$ 1.5)

If three Provinces did this same programme there would be 1,215,000 beneficiaries in five years at a cost of US$ 3,037,500 to achieve safe sanitation and hygiene and reduction of all preventable disease, meeting.

Table 6: Template for a 5 year Programme in one Province

PROVINCE	Total	2011	2012	2013	2014	2015
Total population of Province	**1,500,000**					
Total number of households in province	**333,333**					
Total Districts	**10**	2	2	2	2	2
Communes in 2 districts	**150**	30	30	30	30	30
Villages in 2 districts	**1,500**	300	300	300	300	300
Number of CHC villages in two districts	**1,500**	300	300	300	300	300
Number of CHC (x60) members x 2 districts	**90,000**	18,000	18,000	18,000	18,000	18,000
Number of beneficiaries (4.5 per member)	**405,000**	81,000	81,000	81,000	81,000	81,000
Total Cost (x US$ 1.50)	**607,500**	364,500	364,500	364,500	364,500	364,500

If the 90,000 CHC members are 27% of the households in the Province, and if the Province has an estimated 60% sanitation coverage, this will effectively bring up the level of sanitation to 87% coverage if all CHC members improve their hygiene in the five years, which is a likely prediction. Therefore the Millennium Development Goals will be met on time at least in three Provinces ! However with a bit more support this Model could be extended to all Provinces in Vietnam scaling up using the same calculation.

This scale of expansion will be demanding and should not be a stand alone project but be integrated into the National Target Programme. The CHC model can effectively achieve zero open defecation and reduction of diarrhoea with very little subsidy by enabling Village Health Workers to their duty at very little extra cost.

CONCLUSION

The Pilot Project to field test Community Health Clubs has been successful and with very little adaptation is ready to be used throughout Vietnam. The constraint to scaling up has been the lack of printed training materials, but now that the Toolkit and Manual are completed there is no reason why the CHC Model cannot be approved so that all Provinces have the option of using a methodology that has been shown by this pilot to increase health knowledge, improve hygiene behaviour and safe infrastructure, and decrease communicable diseases. The challenge of scaling up will rely on a core team of effective young trainers, who within the next five years should be able to introduce the CHC approach into every Province. If this were the case the water and saniation targets for halving the number without safe sanitation will be met in Vietnam. The National Target Programme should be informed on this evaluation and take appropriate steps to include the CHC approach into mainstream development and to lead the way in Asia in the large scale use of the CHC Model. The consultant wishes to thank all those both in the field and at Central MoH who have made this Pilot Project a success and have assisted in the evaluation.

ANNEX 1: Programme of Tour of CHC Pilot Project:

March	Time	Place	Activity	People
19th	13.3	leave CT-Singapore	flight	n/a
20th	1pm	Arrive Hanoi	flight	n/a
21st	9am	Hanoi	Meeting MoH	Dr Phu, Deputy General Director; Mr. Nam, Head of Community Health Division; Mr. Cuong, Health Environment Management Agency
22nd	8am -5pm 5-8pm	Hanoi -Son La	drive social evening	Mr Dzung Director Prof Nga (Director General VIHEMA); Prof Long (Vice Director of the Center for Support Social development Programs)
23rd	8-11am	Son La	Meeting Provincial Preventative Health Department	Dr Dzung: Director Ms Huong, Head of Community Health Mr Hung Community Health
	2-3pm	Muong Bu commune	Meeting District Health Station	Mr. Lien, Head of Health station; Mr. Han, Health station, Ms. Phuong, Head of Disease control, District PMC
	3-5pm	Muong Chum	Attend CHC Meeting Topic: Avian Flu	23 members
			Visit household	Thai couple
			Ethnic meal at Thai household	Dr. Dzung, Director; Dr. Huong, Head of Community Health
24th	8 - 12am	Son La	Attend CHC Meeting	22 members present
	2-3pm	Commune	Preventative Health Centre	two officials
	4-5pm	Son La MoH	Provincial PMC debriefing	Mr. Trung, Vice Director PMC; Ms. Binh, Head of Community Health Dr Dzung, Director
25th	8-12am	Son La – Phu Tho	Drive	n/a
	12-3pm	Thuc Luyen Phu Tho	Commune Visit household	Muong couple
	4-5pm	Phu Tho	Meeting with Provincial PMC	Dr Hien, Director; Dr Tam, Vice Director; Dr Dai, Head of CH;
	7-9pm	Thach Khoan Phu Tho	Attend CHC Meeting Topic: Fly control	81 members
26th	8-11am	Dong Lao Phu Tho	Attend CHC Meeting Topic: Diarrhoea	60 members
	12-3pm	Phu Tho	Meeting of Provincial	Dr Hien, Director;

			/ district staff	Dr Tam, Vice Director; Dr Dai, Head of CH; Mr. Sinh, Director of district PMC; Mr. Tuan, district PMC
	3-7pm		Drive PT-HN	Thach Hoi commune
27th	3-6pm	Hanoi - Vinh City	flight	Thach Thang commune
		Ha Tinh	drive	Mr. Long, Vice Chairman CPC; Mr. Khoai, Vice General Secretary CPC; Ms. Phuong, Woman Union, Mr. Tuyet, Chairman CPC, Mr. Nam, CPC; Mr. Tu, head of health station
28th	8-11am	Ha Tinh	Meeting with Provincial PMC	Mr. Hanh, Chairman CPC, Mr. Vinh, Head of Health Station; Ms Tuyet, Health Station; Ms Linh, Ms Anh, Ms. Anh, Mr. Thoai
	6-8pm	Bac Thai	Visit CHC Meeting Topic: Handwashing	48 members
	8-10pm	Thach Thach	Visit CHC Meeting General Hygiene	30 members
29th	8-10am	Thach Hoi	Meeting 1st commune	Dr Hien, Director Dr Tom, Vice Director Mr Dai, Head Environmental Officer Dr Sinh, Director Medical centre Dr Tua, Head Environmental Division
	10-12am	Thach Thang	Meeting with 2nd commune	8 officials including those above
	3-5pm	Vinh airport	drive	Cuong MoH; Phuong Bui (translator)
	6-7pm	Hanoi	flight	
30th	3.3	Hanoi	Meeting Danida	Kim Quy (Danida) , Mark Harvey (Sanitation Advisor, MoH (DFID)
31st	8am	Hanoi	debriefing MoH cancelled	
1st April	10am	airport	leave for C .Town	

ANNEX 2: Inputs by International Consultant

A total of 53 person days was required for this consultancy. The level of effort by main activity and the estimated timing for each activity for this consultancy was as follows

	Activities/Outputs	**Level of Effort (days)**	**Deliverable due** (*estimate*)
1	Lead finalization of CHC Training Materials and guideline for adaptation to each local context	18	Early June 2010
2	Plan and deliver one CHC training workshop at provincial level in collaboration with the national CHC consultants	11	July 2010
3	Prepare tools and protocols for a CHC baseline and endline	5	May 2010
4	Pre-test and adapt monitoring and survey tools	3	July 2010
	Train CHC baseline data collectors	*Included in training*	
	Train CHC endline data collectors	3	January 2011
5	Analyze baseline data and prepare a short report on the results	3	August 2010
	Analyze endline data and prepare a short report in the results of the pilot	5	March 2011
6	Prepare a short report and presentation that summarize the lessons learned in the pilot and provides practical recommendations for the GDPM&EH-MOH for the roll out of the CHC program to other provinces.	5	March 2011
	Total	53	