International Federation of Red Cross and Red Crescent societies

(Regional Delegation Nairobi) and

Kenya Red Cross Society

PROGRESS REPORT FOR SAFE HOUSEHOLD WATER TREATMENT PROJECT

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ACRONYMS

AIDS	**Acquired Immunodeficiency Syndrome**
ART	**Anti-retroviral Therapy**
ARVs	**Anti-retroviral drugs**
BMC	**Branch Management Committee**
CBFA	**Community-Based First Aid**
CDA	**Community Development Assistant**
CDC	**Centres for Disease Control**
CHW	**Community Health Worker**
DACC	**District AIDS Control Committee**
DASCOP	**District AIDS and STIs Control Programme**
DHMT	**District Health Management Team**
DSDO	**District Social Development Officer**
DTC	**Diagnostic Testing and Counseling**
FHHBC	**Family Health and Home-based Care**
HBC	**Home-based Care**
HIV	**Human Immunodeficiency Virus**
ICRC	**International Committee of Red Cross**
IEC	**Information, Education and Communication**
IFRC	**International Federation of Red Cross and Red Crescent Societies**
KAPC	**Kenya Association of Professional Counselors**
KESPA	**Kenya Society of People with AIDS**
KORERE	**Kolwa Red Cross and RECA Development Group**
KRCS	**Kenya Red Cross Society**
MOE	**Ministry of Education**
MOH	**Ministry of Health**
MSF	**Medicines Sans Frontieres**
NHIF	**National Hospital Insurance Fund**
NORCROSS	**Norwegian Red Cross**
OI	**Opportunistic infection**
OVCs	**Orphans and other children made vulnerable by HIV and AIDS**
PCC	**Primary Care Clinic**
PLWHA	**People Living with HIV and AIDS**
PLAK	**People Living with AIDS in Kisumu**
PMC	**Project Management Committee**
PMTCT	**Prevention of Mother to Child Transmission**
PPTCT	**Prevention of Parent to Child Transmission**
PSC	**Project Steering Committee**
RECA	**Relief and Environmental Care Africa**
RTI	**Respiratory Tract Infections**
STIs	**Sexually Transmitted Infections**
SWAK	**Society of Women with AIDS in Kenya**
TB	**Tuberculosis**
TBA	**Traditional Birth Attendant**
TOT	**Trainers of trainers**

1.0 BACKGROUND

The KRCS was established in 1965 through the Kenya Red Cross Society Act . KRCS subsequently became a member of the International Federation of Red Cross and Red Cross Societies (Federation) following recognition by the International Committee of Red Cross (ICRC) in 1966.

The vision of the Kenya Red Cross Society is to be the leading humanitarian organization in Kenya, delivering services of excellent quality to prevent and alleviate human suffering among the most vulnerable people in the community.

In pursuit of its vision of preventing and alleviating human suffering, the KRCS's mission is to build capacity and respond with vigour, compassion, and empathy to the victims of disaster and those at risk in the most effective and efficient manner.

KRCS has a total of 57 branches covering most of the districts in the country. Twenty-one of these branches have full-time branch coordinators while the rest are manned by volunteers. Most of the branches mobilize resources for their work locally with minimum support from the headquarters. At the national level, a Governor leads a council consisting of elected members. The KRCS executive committee is made up of elected national council members.[1]

The programmes covered by the KRCS are managed through the following three departments:

a) **The Health and Social Services department which includes: Community and corporate first-aid training and services, HIV and AIDS programmes (Family Health and Home Based Care, Peer Education for youth in and out of school, and Workplace interventions – targeting KRCS staff and volunteers as well as the private and corporate sector on a commercial basis); Water and Sanitation; and Blood Donor recruitment.**

b) **The Disaster preparedness and Response department includes: Preparedness; Response; and Tracing.**
c) **The Organizational Development department includes: Branch development; Dissemination; and Youth Programmes.**

[1] www.ifrc.org

2.0 Kenya Red Cross Society HIV and AIDS Programme

KRCS elaborated the HIV/AIDS Strategic Plan 2003 – 2007, to guide the work within the headquarters and the branches. A National HIV and AIDS Coordinator and two HIV and AIDS Programme Officers were employed with responsibilities for seven branches each in Eastern and Western Kenya respectively. Presently, 14 branches get support from the headquarters to carry out HIV and AIDS activities with a focus on prevention, home based care and advocacy. The present programme branches were selected due to the high HIV prevalence rate in the areas, satisfactory capacity, and commitment to manage HIV and AIDS projects. These branches are spread all over the country.

The Kisumu HIV and AIDS programme is run by the Health and Services department and has been supported financially by the Norwegian Red Cross (NORCROSS) since 1996.

2.1 Components of the HIV and AIDS Programme

The KRCS HIV and AIDS programme has two key components that are currently being implemented in some the 14 out of the 57 branches countrywide. These are:

(a) Home-Based Care

Home-based care is a process of taking care of the chronically ill in their home environments. Trained community-health workers take charge of a number of clients, varying from 2 to 20 clients and train caregivers at the family level.

The components of home-based care include: caring for the chronically ill, continuing with basic care at home, referring clients for clinical care, diagnosing and giving appropriate care. Nursing comprises of – bed baths, mouth care, turning the patient, food preparation and feeding, decontamination of soiled linen, cleaning the environment, counselling care, spiritual care, and referring clients for specialised treatment. Providing social support by referring clients to organised groups is also considered part of home-based care.

Home –based care is performed by trained Red Cross volunteers who are equipped with a home-based care kit that comprises of – tablets (paracetamol, ferrous sulphate, folic acid, and multi-vitamins), jik, soap, cotton wool, gloves, a pair of scissors, referral forms, notebooks, pens, a monthly summary form, an HBC manual, and a mackintosh.

(b) Peer Education

The Peer Education programme is a HIV and AIDS preventive programme aimed at reaching the young children in primary schools and the youth in secondary school, higher education institutions and out-of-school youth.In accordance with directions from the Ministry of Education, the HIV and AIDS topic is integrated into the school curricula such that it is not a subject on its own to avoid teachers being referred to as 'AIDS teachers'. The curriculum is infused from standard one and all teachers, especially the science teachers, are expected to teach students on HIV and AIDS. The schools have formed Red Cross Clubs in which students enroll and pay a membership fee. The members have a patron and meet once a week on the club days set aside by the school. The patrons work closely with the KRCS peer educators. The peer educators have a kit that contains a PACOYEK[2] manual, dissemination flip charts, pictures, penal and vaginal models among other items.

3.0 Project Areas- Kisumu and Siaya Districts

Kisumu District

Kisumu District is one of the 12 districts of Nyanza Province. Kisumu is the third largest city in Kenya after Nairobi (the capital) and Mombasa. Kisumu is the headquarters of Kisumu District, as well as Nyanza Province and a harbour on Lake Victoria. The city has developed progressively from a railway terminus and internal port in 1901, to become the leading commercial, trading, industrial, communication and administrative centre in the Lake Victoria basin, an area that traverses three provinces of Nyanza, Western and Western Rift Valley. In addition, Kisumu serves as the communication and trading confluence for the Great Lakes region - Tanzania, Uganda, Rwanda and Burundi.[3] Kisumu has a population of 600,000 with a HIV prevalence rate of 24% (180,000 HIV+ and 300,000 people affected).

A few facts about Kisumu:[4]

- **It is the 4th most densely populated district in the province**
- **Has one of the least primary school enrolment rates in the province (69.7%)**
- **A 20.6% malnourishment rate in children under 5 years of age**
- **129/1000 of its live babies die before the 1st birthday**
- **Life expectancy is 38.1 years**
- **Has an absolute poverty level of 65.44% and a 54.99% food poverty level**

[2] PACOYEK is a manual developed through the collaborative effort of KRCS and other organizations
[3] www.unhabitat.org
[4] www.kisumurural.org

- **The monthly average income is Ksh.6, 493 ($86.50 per month), a figure lower than Kenya's urban average**
- **62.8% of its residents have access to clean drinking water; and 81.2% of its residents have safe sanitation**
- **The main diseases affecting the people are: malaria, respiratory tract infections, diarrhoea, skin diseases, urinary tract infections, and HIV and AIDS**

The main factors that contribute to the high HIV and AIDS prevalence rate in Kisumu are:

- **Kisumu town lies on a Trans-African highway connecting Kenya and Uganda and is frequently visited by long distance truck drivers on their way to and from Uganda, Burundi, Rwanda and Tanzania**
- **The majority of the inhabitants are still attached to their cultural practices such as polygamy and wife inheritance and the adults have large numbers of sexual partners**
- **Along the shoreline of Lake Victoria, there are migrant fishermen who visit the town frequently**

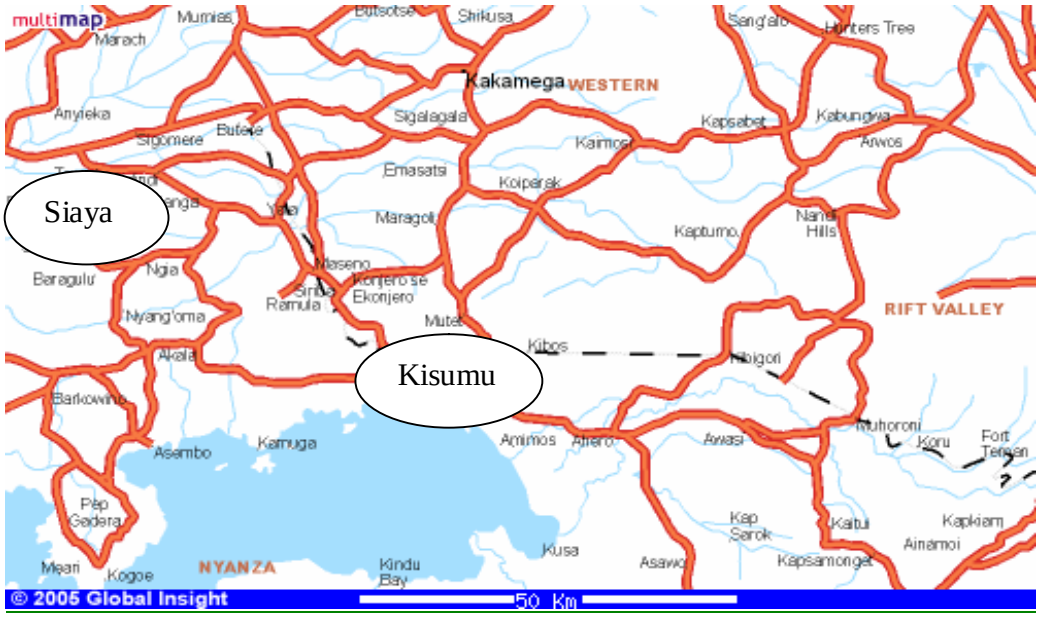
Siaya District

Siaya district is one of 12 districts in the Nyanza Province of Western Kenya. Siaya district covers an area of 1520 sq. km, a total population of 558, 989 with a growth rate of 3.9%. The population of children less than 1 year is 21,801, those under 5 are 22,360 and women in reproductive age are 134,158. The population of pregnant women is 22,360 and the population of post-partum mothers is 21,801. The district HIV and AIDS prevalence rate is 24% according to a sentinel study done by NASCOP in 2003.

Siaya district is one of the poorest districts in Kenya, with the vast majority of households having incomes below the poverty line (50-60% of the population live on less than one dollar a day). In addition to being one of the poorest districts in Kenya, Siaya district also has one of the highest rates of morbidity and mortality in the country due to infectious diseases. The top ten diseases with high morbidity in Siaya include: malaria, respiratory tract infections (RTIs), diseases of the skin, diarrhoeral diseases, intestinal worms, pneumonia, urinary tract infections (UTIs), accidents, anemia and rheumatoid arthritis. In Siaya, agricultural productivity is low because of poor soil and a hot and dry climate.[5]

[5] http://www.tropicaldiseases.pitt.edu/siaya.php

Map indicating Siaya And Kisumu Towns



Source: http://www.multimap.com

3.1 Kenya Red Cross Society (KRCS) Kisumu and Siaya Branches

Kisumu and Siaya branch governance is undertaken by the Branch Management Committee (BMC), which comprises of an average of 8 members - a chairperson, treasurer, the branch coordinator and five members. All the staff are usually present at the BMC meetings. The Branch Coordinator is the Secretary of the BMC and the BMC has co-opted the project officer. The BMC currently met once a month but the new Kenya Red Cross Society Constitution has recommended that the BMC meet quarterly.
A work plan is created monthly by the staff and the BMC discusses and approves the work plan and signs the reports.

3.1.1 The Branch Coordinator

The Branch Coordinator is the overall manager in the branch. The branch coordinator manages the day-to-day financial procedures, as there is no accountant. He plays the role of the secretary to the BMC in the new constitution.In both branches the Branch Coordinator attends the BMC meetings and reports on the activities of the Project Management Committee. The branch coordinator also serves as the link between the BMC

and the PMC. The main responsibility of the Branch Coordinator is to coordinate all the programmes at the branch, which include HIV and AIDS, first aid, blood donor, the youth, and disaster preparedness (DP). The branch coordinator is also in charge of documenting programme activities as well as the accounts and finances of the branch

3.1.2 Project Management Committee (PMC)

The project management committee (PMC) is the local governing committee and is directly responsible for supervising the FHHBC programme at the branch level. The community, which comprises of the Trainers of Trainers (TOTS), People Living with HIV and AIDS (PLWHAs), and the KRCS staff elect the project management committee. The committee meets once a month and on a need basis.There are regular meetings at the branch and at the community with PLWHAs and the community leaders involved. The community selects the members for trainings.

The main responsibilities/functions of the PMC are to:

- **Organize bi-monthly meetings**
- **Supervise various activities of the support groups such as People Living with AIDS in Kisumu (PLAK) and Sega Community Health Workers (CHWs), and Trainers of Trainers (TOTs)**
- **Prepare monthly plans with the branch**
- **Review referrals**
- **Record total number of clients**
- **Plan for trainings/refresher courses for CHWs and TOTs**
- **Represent the CHWs, TOTs, IGEs e.g. KORERE, PLAK, and other support groups**

3.1.3 HIV and AIDS project staff and volunteers

The project officers are in charge of the Family Health Home Base Care and Peer Education programmes. The project officer is assisted by the Home-based Care Officer .The HBC officer is the supervisor of the TOTs.
The peer education programme in Kisumu municipality was started in 2004.

The youth cut across all programmes and serve all departments. The youth collaborate with the health department on community awareness, peer education, and the distribution of nutritional items. The youth have a work plan for every month and rapidly respond to ongoing situations but their activities are often lagging due to lack of transport and the late transfer of funds.

4.0 OVER VIEW OF THE SAFE HOUSEHOLD WATER TREATMENT SYSTEM PROJECT

The Safe Household water Treatment Project is based on the ARCHI [6]framework whose focus is addressing community health care needs in a holistic manner using locally available resources. This includes capacity building of the volunteers so that they are able to address health and care needs in their communities in an integrated manner.

For the last two years the Regional Delegation Health and Care unit was involved in the development and implementation of ARCHI pilots which are basically integrated projects addressing community Health and Care needs. Currently there are two ARCHI pilots, one in Kajiado and the other in Djibouti. Masasi integrated health and care project in Tanzania was completed in 2005. What has emerged from the pilots is that is in instances where there are funding limitations and it is not possible to have all the components of health and care funded then avenues could be explored to have other components as add-ons to existing interventions .In this case WatSan component is going to be an add-on to the on going Home base care program.

The Household safe water treatment project is a 1 year and 3 months pilot project which was initially supposed to be piloted in Eastern and Southern Africa and was later initiated in due to logistical reasons.

The main objective is to contribute to reduction in water borne diseases in HBC program clients and affected persons in target population by the end of the project. While the specific objectives are to:

- **S.O1. Establish an appropriate method of delivering household water treatment systems (HWTS) for target communities.**
- **S.O2. Improve knowledge and skills of volunteers of CHBC programs in HWTS and WASH [7]**
- **S.O3. Establish the level of acceptance and adherence of HWTS by the targeted population.**
- **S.O4 Improve hygienic behaviors related to water use at household level.**
- **S.05 Establish simple monitoring and evaluation system for HWTS**
- **S.06 Identify and strengthen possible partnerships in HWTS**

It is also expected that the lessons generated from this project can be documented and shared for replication to other similar programs within the region.

[6] African Red Cross Health Initiative
[7] Wash –water sanitation and hygiene

4.1 Central Kolwa, Kisumu

The Safe Household Water Treatment project is situated in Central Kolwa is one of the four locations in Winam Division in Kisumu district. It is situated on the South East part of Kisumu, about 5km from the town centre. Central Kolwa has an estimated radius of 10-12 Km. The location's dirt roads are rough and there is no public transportation, electricity or telephones. The population is estimated to be 28,000 inhabitants but there is a steady increase due to the rapid growth of urbanization. The location has 2 sub-locations - Nyarunya and Kasule with a total of 29 villages, each one headed by a chief. One village may have a population of 600 – 3,000 people.

The area lies in the Kano plains and is disadvantaged by floods during the rainy season. The soil is clay in nature and is suitable for horticulture and tree growing. Due to the harsh weather conditions that strike the plains during drought, people revert to coping mechanisms, which include watering their farms with water from the permanent rivers in the area. They also undertake small-scale businesses in the small market centres within the location to further meet their economic demands. Majority of the farmers are subsistence farmers.

4.1.1 The Central Kolwa FHHBC Programme

The KRCS presence in Central Kolwa started in 1994.8 The criteria used for the selection of Central Kolwa included a high prevalence rate of HIV and AIDS, the community's beliefs in "chira"9 and the belief that HIV and AIDS was not a real disease. The impact of the changed social life from rural villages to the sub-urban area has contributed to an increase in the incidences of alcohol and substance abuse with young people spending little time on productive work. The new lifestyle made the young differ with the older generation on issues of marriage and other traditional cultural practices.

The FHHBC programme in Central Kolwa, Kisumu was started in 1996 with the support of the Norwegian Red Cross (NORCROSS) and has been supported by the organization to date. A baseline study was carried out that showed that the major problems in the area were unsafe water from the river, poverty and health problems. There was a cholera outbreak in 1997 and malaria was frequent. There was a need for awareness creation about the health hazards and prevention. The increase in the number of HIV cases in the area and overcrowded hospitals had reached alarming proportions and the implementation of a home-based care programme became relevant.

[8] Central Kolwa has a population of about 20,000 and 287 clients as at August 2005

[9] Among the people in the community in Central Kolwa, there are beliefs that those who get sick and die do so because they are being punished for not honouring certain community obligations and/or have done things that are considered taboo in the community

To reduce the prevalence of water borne diseases due to unsafe water, the Kenya Red Cross Society gave 13 schools water tanks for harvesting rain water. The tanks are maintained by the KRCS, which provides chlorine. These tanks are said to have reduced the number of typhoid and other diarrhea diseases cases. The tanks are very visible within the community and are also used to display HIV and AIDS awareness messages.

The home-based care programme covers less than 50% of the clients in the area. The programme presently has 358 registered clients of whom 20 are bedridden. There are currently over 600 identified HIV and AIDS clients in Central Kolwa. The programme caters not only for HIV and AIDS clients but also includes other persons with chronic diseases. Safe water and malaria prevention in collaboration with World Vision is included in the programme. There are currently no pediatric cases registered. St Monica hospital is the closest Anti Retroviral Therapy (ART) partner and 25 of the clients are on ART. Currently there are 68 community health workers and TOT's.

The main features of the FHHBC programme include home-based care, anti-retroviral therapy, income generating activities/enterprises and institutional support. Peer education is however undertaken at the Kisumu municipality.

The overall goal of the programme (2003) was stated as follows:

To reduce the spread of HIV and AIDS, sexually transmitted infections and to develop further the community capacity to provide enhancement in Home Based Care by provision of the physical and psychological care to mitigate the consequences of HIV and AIDS for those infected and affected.

4.2.0 The Siaya Branch KRCS HIV and AIDS Project

The Siaya branch covers Siaya and Bondo districts. The branch came into existence in early 1997 and became fully operational in September 1999 when a group of four volunteers came together with the aim of having an organization where they could mobilize the youth and sensitise them on behaviour change. The Siaya branch covers the geographical and administrative area of Siaya district which is further sub-divided into seven administrative divisions namely: Wangai, Yala, Ugunja, Boro, Karemo, Uranga, and Ukwala. The branch has more than 400 members of whom 13 are life members.The branch office is situated in an office building in Siaya town. The branch has bought a plot with the help of NORCROSS and will raise funds to construct an office building on it. The Siaya branch undertakes various activities such as:

- **Red Cross Dissemination, First Aid ,Youth Program and Blood Donor mobilization**

Training and services incorporates

- **Blood donor recruitment**

- **Environmental protection – tree planting**
- **A drug abuse prevention programme**
- **Stock piling of relief supplies**
- **Civic education**

The Siaya branch began implementing some activities on HIV and AIDS in 2002. Baseline surveys were conducted and situation analyses of the communities to be targeted. The branches that were already undertaking some activities in HIV and AIDS were selected for strengthening and were to be among the first branches to undertake the programme. Siaya was one such branch. Others were - Nairobi, Mombasa, Kisumu, Nakuru, Machakos and Malindi.Due to the results of the baseline studies, Sega sub-location in Ukwala division was chosen as the project site.

The Siaya branch has implemented an integrated project that includes health activities to fight HIV and AIDS through the financial support of the Norwegian Red Cross (NORCROSS) and technical support from the Ministry of Health. The goal of the project is to enhance the capacity of the Sega community in HIV and AIDS prevention through education, care and support. The project has six HIV and AIDS support centers in - Siaya district hospital, Yala sub-district hospital, Rwambwa, Kadenge, Rera and Rangala.

4.2.1 Project Site – Sega Sub-location in Ukwala Division

The Family Health Home Based Care (FHHBC) project is being piloted among the Sega community in Ugenya North location – Ukwala Division. The sub-location has a population of 9,000 people. Information from the Area Education Officer, Ukwala Division indicated that there were a total of 1,705 children who had lost a mother, 3,209 children who had lost a father, and 1,769 who had lost both parents (total orphans). This gives a total of 6,683 orphans enrolled in schools in Ukwala Division.

Unique Characteristics of Sega Sub-location

Sega is on the main highway from Kisumu to Busia (Kenya-Uganda border town) and is a stopping point for long-distance truck drivers going to Uganda, Rwanda and Burundi. This has led to high rates of casual sex and hence the high prevalence rate of HIV and AIDS. Other factors that have led Sega to have a high HIV and AIDS prevalence rate are :

- **The high HIV and AIDS prevalence rate among the youth**
- **The high poverty levels**
- **People tend to leave the rural villages and invade the township**
- **No major HIV and AIDS interventions were taking place**

4.3 Trainers of Trainers (TOTs) and Community Health Workers (CHWs)

The volunteer community health workers (CHWs) are the backbone of the home-based care activities. The communities in which they live select them. Some of the CHWs are trained to be tuberculosis ambassadors (TBAs). Most of the CHWs are middle-aged women.

Trainers of Trainers (TOTs) are the overall supervisors of the CHWs daily activities and report to the home-based care officer. They organize local trainings as well as look for resources locally. TOTs undergo three-week trainings on monitoring and evaluation and report writing. One TOT supervises two to three CHWs.

Active CHWs get satisfactory basic training. All volunteers are trained in community-based first aid for 5 days, community health home based care for 3 weeks, basic counselling for 5 days and tuberculosis prevention and treatment and ART for 1 week. After the trainings, the CHWs are then conversant with the care of bed-ridden clients, feeding, hygiene, and first aid basics such as in caring for diarrhea, coughs, nausea and general pain as well as preventive measures of malaria, TB, HIV and other infections. The training in TB teaches them on the monitoring of DOTS, side effects and the identification of defaulters. Normally, an eight-month TB regimen is applied for adults. The CHWs are trained in basic counselling to make them ready to give psychological support before the HIV test is administered to pregnant mothers, the bereaved, depression cases and other psychological conditions. They are also trained to know when to refer their clients to a nurse or hospitals for further clinical care. CHWs carry out home visits, monitor drugs, refer persons to VCT, PMTCT and other health centres, train family care givers and PLWHAs on care and infection prevention and supervise their activities at home. The TOTs and CHWs also visit the 14 schools in Central Kolwa for preventive work. They talk about HIV and AIDS, hygiene and disease prevention.

The family caregivers are trained at home in the context of the sick family members. Additionally, they provide home nursing care for chronically ill persons, conduct basic counselling to their clients, encourage safer sex through condom demonstration and distribution. The caregivers have clients on TB, DOT, and ARVs. They refer mothers to the chiefs to obtain birth certificates for their children and are also responsible for record keeping and reporting.
St Monica hospital is the closest Anti Retroviral Therapy (ART) partner and 25 of the clients are on ART.

The CHWs each cater for 5 – 6 clients of whom 2 clients are bedridden on average. The TOTs and CHWs are equipped with a home based care kit which is supposed to contain simple items like jik (chlorine), gloves, soap, dressing material, a mackintosh, condoms, and ORS. They can sometimes access

paracetamol, vitamins and deworming treatment through the HBC Officer. The replenishment of these kits is however irregular and material is rarely sufficient. The last replenishment was 6 months ago. The program has 241 clients of whom 12 are bedridden .and 68 community health workers and 12 Tot's.

There is a Memorandum of Understanding (MOU) between CHWs and the KRCS. The volunteers are usually given incentives for their work which include: training by KRCS and other organizations, tee-shirts with HIV and AIDS messages, bags, recognition during national days and transport. HIV positive volunteers are given farm inputs and have a support group.

Psychosocial support for volunteers is available but they are unaware of the KRCS workplace programme. The TOTs and CHWs feel that they get all the necessary support from the HBC Officer and are able to discuss and solve problems between themselves in their own group. CHWs and TOTs also feel that they are well respected in their communities and are proud of being called "doctors", and "love and care mothers".

5.0 PROGRESS SO FAR:-

5.1.1 Review Of Project Documents

The project undertook the revision of project documents which was informed by planning and preparatory sessions with KRCS HIV and WatSan officers.

This included a review of the Log-frame, project budget and the concept paper. Different forms of criterias were developed for use at the project level

(a) Volunteer Criteria

For volunteers to be involved in the program a criteria was developed

- **Must be already working within the home base care program**
- **Active and willing to volunteer in the Household safe water treatment project**
- **Willingness to collect data and give feedback for the next 12 months (project duration)**
- **Volunteer able to read and write in local language though English would be preferred**
- **Able to mobilize community groups and disseminate messages on Household safe water treatment, hygiene and health in general**

(b) Household Targeting

Since the key targets of the project are clients of Family Health Home Base Care program, affected family members and clustered neighbors, a criteria was developed to simplify the household targeting process.

- **Must be a home base care client or living in close proximity to the client of home base care program**
- **Household must be willing to be involved in the Household safe water treatment project for 12 months (project duration)**
- **Wiling to give information /feedback in relation to water use and treatment and hygiene practices**

If HBC clients are already using water treatment option, discussions will be held on how to in cooperate them in the health and hygiene promotion messages as well as in safe water handling and storage

***The approach is client focused and random clustering around the client**

c) Criteria for Preferred Household Water Treatment Option

OPTION	OPTION PACKAGE	1st PRIORITY WATER SOURCE	OTHER WATER SOURCE	REMARKS
Filter and Aqua Tablets	-Two-20-liter jerricans	Tap water Borehole/shallow well Springs	River Dam Lake	This option is suitable for all types of water sources but those listed under 1st Priority are meant to minimize cleaning and servicing of filter elements and ensure longer life span (50 000 liters per element) 3-4 years . The filter alone does not provide post treatment (filtration) protection against recontamination hence the use aquatab.
Aqua Tablets	-Two-20-liter jerricans	Tap water Borehole/shallow well Springs	River Dam Lake	Use on other water sources is highly discouraged as turbid water requires more than double the normal dosage and efficacy of the Aqua tab cannot be guaranteed. *(May lead to under or over dose)
PUR	-10-liter bucket -20 –liter bucket -20 –liter jerrican -1 meter white cotton cloth	River Dam Lake	Tap water Borehole/shallow well Springs	Its primary roles are to remove turbidity and provide disinfection in addition works in other water sources (in the latter case no optimal use of the chemical)
Water Marker	-Two -20 –liter buckets -One 20-liter jerrican -1 meter white cotton cloth	River Dam Lake	Tap water Borehole/shallow well Springs	Its primary roles are to remove turbidity and provide disinfection in addition works in other water sources (in the latter case no optimal use of the chemical)

***The distribution will be also informed by the water tests undertaken**

(d) Training materials review

The project team also embanked on a review of the training materials used by the FHHBC program. It was agreed since the volunteers undergo a very comprehensive HIV/AIDS related training; the project training would only then focus on Safe Household Water methods and Water, Sanitation and Hygiene promotion related topics. In this regards a 4 -day bloc training will be conducted targeting all the volunteers since they will be in turn expected to conduct similar household and community centered sessions on safe water, and hygiene promotion.

5.1.2) Review of IEC Materials

Initial Information Education Communication IEC materials focusing on the four water treatment products were developed and pre-tested during the introductory meetings and revised .A further session focusing on IEC promotional materials to be used at the community level will be held and local artists will be engaged for the exercise. A series of IEC materials to be used during the training for the volunteers has also been produced.

5.1.3) Project introductory Meetings

The project team comprised of RDN WatSan staff and KRCS HIV and WatSan staff undertook a project introductory visit which was to build consensus and awareness on the project objectives to the Branch management committee, stakeholders and Community health workers.
During the meetings in both project areas expectations were clarified and an overview of the project objectives was done. A demonstration was done on all the four project household water treatment products.

5.1.4) Water Tests

The project conducted physic chemical and biological tests on the main water sources utilized by the community members from the two project areas.

Water Sample Analysis Table

KISUMU

Source	Biological Faecal Coliform Count	Physic Chemical	Remarks
Kogere Borehole	0 Coli forms	low mineral & acceptable organic quality	Potable Water
Githae Water Works	0 Coli forms	low mineral & good organic quality	Potable Water
Nyamasari River	15 Coli forms	Raw turbid water of low mineral & fair organic quality	Contaminated Water
Nyamasari PUR	0 Coli forms	low mineral & good organic quality	Potable Water

SIAYA

Source	Biological Faecal Coliform Count	Physico Chemical	Remarks
Yenga Dam WS	0 Coli forms	low mineral & good organic quality	Potable Water
Sega Airport Pond	11 Coli forms	Fairly turbid,low mineral & doubtful organic quality	Not Potable Water
Sega Water Supply	0 Coli forms	High PH low mineral & good organic quality	Potable Water
Sega Stream	7 Coli forms	Raw water of low mineral & doubtful organic quality	Not Potable Water
Ragumo Health Center	0 Coli forms	moderate mineral & acceptable organic quality	Potable Water
Ulukwe Spring	0 Coli forms	low mineral & good organic quality	Potable Water

5.1.5) Baseline Survey

The project team undertook one day training for volunteers from both Kisumu and Siaya branch. For objectivity purposes these were volunteers not directly involved in the Family Health Home Base Care programs. A total of 172 out of originally intended 175 questionnaires were sampled which is over 10% of the total target population.[10] This was through selective clustering. The questionnaires were translated into the local Dluo dialect for ease of communication with the target interviewees. The survey was conducted for three days simultaneously in both project areas and the data analyzed by a consultant using Statistical Package for Social sciences SPSS.

The key findings of the baseline survey were presented to the project team as follows :-.

Key findings:-

- **Indicates a high risk to disease posed by contamination of water sources[11] a risk manifested by the high prevalence of water borne diseases.**
- **Poor sanitation contributes in a large way to pollution of water sources**
- **Lack of community systems to control pollution around water points, mainly rivers has allowed pollution of water points to continue.**
- **Hygiene status of the community is an issue of concern which is attributed s to poor environmental mental hygiene conditions and practices in both project sites.**

Key recommendation of the survey:-

- **There is need for simple water treatment methods to be introduced.**
- **Need for an aggressive plan for community awareness on the need for safe water and proper environmental and personal hygiene trainings and campaigns.**

(The final baseline survey report will be submitted by Mid May 2006 after consultants in cop orates inputs from the presentation).

Based on the quantities of the four products received the table below show their distribution by family and quantity all for one year.

[10] Out of the 172 interviewees 100 are clients of the FHHC Program

[11] **main water sources includes water pans ,boreholes streams piped tap water from hand pump and from municipal water supply**

Summary Sheet

Chemical	No. Families per year	Quantity	Unit
Water maker	96	70,000	Sachets
Water Filters[12]	72	72	Filters
PUR	753	1,100,000	Sachets
Aquatabs	479	350,000	Tablets

***NB a family size of 8 has been adopted to cover as our safety margin**
***Daily water Consumption has been estimated at 40 ltrs which includes water for drinking, washing foodstuff and cooking.**

5.1.6) Partners Consultations

The project has also undertaken consultations with partners as a follow-up to the introductory meetings held earlier. Key possible partners met were Safe Water and Aids Project and Care -Kenya Kisumu Office. Others Include; Society for Women with HIV/AIDS in Kenya (SWAK), Population Services International (PSI) and Public Health Department of the Ministry of Health and Ministry of Water

Society for Women wit HIV/AIDS in Kenya (SWAK)

SWAK initially worked together with Rotary until Rotary took up the safe water component as part of their main activities SWAK is still doing HIV/AIDS Campaigns and Memory books for the OVC. They promote safe water storage through the use clay pot that has a tap at its bottom. Early April SWAK in-conjunction with PSI Kenya did an official Launch for PUR at Nyanza Province, where Video shooting for the same was done.

Safe Water and Aids Project- Rotary

Initially this organisation was doing the same activities as SWAK. Later Rotary took onboard House hold Safe Water as part of its major activities. Working with Centers for Disease Control (CDC) Rotary continues working with women group in promotion of the use of house hold water systems especially with Water guard and recently PuR^{R} which are being distributed by PSI Kenya. Distribution for PUR began in April 2006 with supplies from PSI Uganda. After receiving supplies (Water Guard and PUR) , Rotary resell them to women groups at the wholesale prices who then sell them to household members and others at a small profit margin. With the help of local artisans clay pots with a narrow opening at the top are modified and a tap and iron stand fitted at the bottom, these are later sold to communities through the promotion by Rotary.

[12] **Out of 75 Filters one is in 1 Kisumu branch another at Siaya branch and the other at RDN for training and demonstration purposes**

In training, Rotary undertakes 5 day trainings to women groups. 3 days are spend on simple book keeping skills while the other 2 days are spend on safe water handling processes that need be practised at the House hold level.

CARE -Kenya

Care-Kenya has been involved in house hold safe water handling in Kisumu and Siaya region for the last 5 years. They have been mainly involved in promoting Water guard and traditional clay pots for water storage which are modified with a narrow top, a lead and a tap at the bottom.

After developing the current water guard, Care handed over to PSI Kenya to handle the distribution and marketing. This was inline with their Mission statement which does not allow them be involved in income generating activities.

CARE has also have been very much involved in training community women groups on safe water handling. This has been replicated in some schools where they have been involved in donating hand washing facilities especially near toilets.
Some of the obstacles encountered while introducing Water guard to the community was the concern of the product affecting people's health. Also of concern was the smell and odour left on water after using water guard.

Population Service International (PSI)

PSI Kenya is the main distributors for Water Guard and PUR. Nationwide distribution of PuR started in March 2006. PSI engages in promotion activities as well through roadside shows and demonstrations.

Ministry of Health -Public Health

All the women groups that are involved in hygiene related activities are registered by Public Health department. The department offers training mostly along side NGOs by offering technical input to the workshops. During disease outbreaks such as cholera, IEC messages to be send out are designed by this department. It also manages the implementation of such Hygiene related campaigns.

Ministry of Water and Resource Management

The Ministry of Water and Resource management -Government chemist unit undertook the water tests for the project at a fee. The Ministry confirmed they are involved in water treatment at the municipal level and accepted there is risk of water contamination during reticulation process.

Centers for Decease Control (CDC)

CDC is currently involved in the provision of VCT services in Siaya and Through request there is now possibility of extending similar services in Kolwa Location. CDC has collaborated with Proctor and Gramble to develop Water systems. In Nyanza CDC is collaborating with Rotary and has held a series of training workshops on Safe hold water treatment systems. Several case studies done by CDC were shared.

Emerging Issues from the Consultations

- **All the stakeholders consulted are interested in partnership, are keen to sharing of progress reports and participating in any workshop or activity to be conducted by the project.**

- **Rotary indicated that PUR does not work effectively in the case of high turbidity, soapy water or oil contaminated water.**

- **Lottery and SWAK indicated there was need for aggressive promotion campaigns for the products due to ignorance.**

- **The off take of the project may be easier since the other partners sell the products though the challenge for this particular project will be the issue of sustaining the process once the project phases out after 12 months of free supply. This issue was of concern to all the partners consulted, however the other feeling is that they also see this as an opportunity for creating demand and a future market for the products in household safe water treatment.**

- **Given that the project is being built on an already existing Home based care Programme coupled with the volunteer engagement aspect most stakeholders foresaw the project being a success.**

6.0 Constraints

The delayed distribution of some of the products has affected the start up of the key project activities.

7.0 Proposed Work Plan

Activity	Proposed Dates
1. Dissemination of Baseline survey results to community members and stakeholders	2/5/2006
2. Bloc training of 120 community health officer sand volunteers -Stakeholder analysis -Review of IEC materials -	3-6/5/2006
3. Project launch	7/5/2006
4. Briefing with the Tot's on the -monitoring and evaluation sheets -formulation of initial indicators	8/5/2006
5. Distribution of products to the beneficiaries	9-12/5/2006
6. Water tests	Periodic
7. IEC materials distribution	First week of June
8. Monitoring visits	Monthly based on needs
9. Documentation	Continuous
10. Coordinated Donor visits	First week of July
11. End of project evaluation	May 2007

Conclusion

The project is on course despite time delays and re-doubled efforts are being made to achieve the expected results.