REPORT

CHEPLASKEI SECONDARY SCHOOL, KENYA

THEME; WATER AND SANITATION

OBJECTIVE; JOINT PROJECT AIMING TO DEVELOP CHEPLASKEI COMMUNITY

Mr. Juma Teacher-In-Charge 12th March, 2010

ABSTRACT

Sanitation is the hygienic means of preventing human contact from the hazards of wastes to promote health. Hazards can be physical, microbiological, biological or chemical agents of disease.

Wastes that can cause health problems are human and animal feces, solid wastes, domestic wastewater (sewage, sullage, greywater), industrial wastes and agricultural wastes. Hygienic means of prevention can be by using engineering solutions (e.g. Sewerage and wastewater treatment), simple technologies (e.g. latrines, septic tanks) or even, by personal hygiene practices (e.g. simple hand washing with soap).

This noble project is seen as a Godsend opportunity because it is viewed as a viable effort to prevent water and sanitation related diseases, which afflicts both the school and the community as a result of inadequate sanitation and hygiene practices.

The school and rural community households lack access to improved sanitation; are not connected to sewers, use simple pit latrines and obtain water from rain and wells which frequently dry up during dry seasons.

Heavy rainfall during wet seasons and the undulating terrain, further complicates the misery because surface run-off washes human feces and agricultural wastes down stream contaminating stream water and sometimes the wells. Most households occupy small plots of land where pit latrines and wells are dug side by side such that surging of water table during this season results into overflowing of pit latrines. This outcome presents substantial public health risks, as the contaminated drinking water cause life threatening forms of water-borne diseases.

The project has provided an opportunity for Cheplaskei students, through the WATSAN Club, to actively engage in sanitation and hygiene promotion in school and its environs, with both short and long-term objectives being:

- To reduce the health risks related to sanitation, contaminated water and waste.
- To prevent the pollution of surface and ground water.
- To prevent the degradation of soil fertility thus improved and sustainable agricultural production and food security.

• To optimize the management of nutrients and water resources.

The school, in partnership with the community based organizations aim to reach the entire District in its sensitization campaign through the local church, public 'barazas' and the media- SAYARE Radio and TV and Kass FM, a vernacular radio station.

In addition to health and hygiene promotion, the Club has incorporated Environmental sanitation, with water and wastewater treatment, as a subset of interest and Ecological sanitation, Ecosan, which is a new paradigm in sanitation, based on the systematic implementation of reuse and recycling of nutrients and water as a hygienically safe for purposes such as household consumption, aquaculture and agriculture, to assure household sanitation, food security and also minimize water pollution.

Knowledge on research and demonstration projects in Netherlands, Norway, Germany and Zimbabwe, which placed emphasis on the hygenization of the contaminated flow streams, led to Cheplaskei project to identify, as an addition, **Rainwater Harvesting** concept for resource conservation and safe reuse. They have suggested the use of centralized and decentralized collection and treatment methods for school and community respectively.

Due to the long term benefits of this noble project to the community and the complexity in its implementation, it is prudent that adequate time period, infrastructure, expertise for capacity building and resources are dedicated to this project for it to realize its goal, that is, poverty reduction, health and other benefits that flow from better hygiene, household sanitation and wastewater treatment.

Thanking you and looking forward to working together in this first of its kind project in this community.

Juma,

Cheplaskei Secondary School.

WATER AND SANITATION

Preamble.

This is a joint project between Forssan Yhteislyseo, Finland and Cheplaskei Secondary School, Kenya. Cheplaskei students were to get deeper information on the theme of the project through the internet, media and books, interviewing local authorities, parents etc.

Thereafter, the students were to prepare presentations on the theme and send them to Forssan yhteislyseo, for acquaintance and response on the same.

Goals of the Project.

- To learn to use the internet and new learning methods in acquiring and applying information.
- To link school education to the development of the community.
- To foster intercultural exchange of information and ideas on the theme.

Background.

A group of 15 students, who formed the WATSAN CLUB, was sampled out of 40 picked from the entire student population. Their consideration was based on their proficiency in computer applications, interest and self-motivation in the theme. Through **problem-based learning** strategy, the students were introduced to initial analysis of the problem (Water and Sanitation) and activation of prior knowledge on the theme. Through small-group discussions, they analyzed information in the handouts left by Kaija and Tero on sanitation; unfortunately, due to unavoidable technicalities they could not access the internet nor facilitated to visit a public library to get books on the theme in time.

However, with scanty information sourced from books available in the school library, the teacher's input and the installation of internet in March this year (2010), after the visit of Mr. Pentti, students moved with speed and it is envisaged that they will elaborate on prior knowledge gained from handouts, books, and interviews from parents and local authorities and the new information from the internet to be able to restructure and construct knowledge on the theme of the project.

Initially, prior to the internet access, the knowledge they gained from the handouts and community participation had stimulated their curiosity in relation to the theme. All this was evidenced through lively educative discussions conducted for submission of individual's findings.

When the school reopens next term, students will be in a position to compile and submit their thoughts and findings in a 'reflection journal' format which will be sent on line to their Finnish colleagues by mid-May 2010.

Scope of the Project

Initially, students familiarized themselves with concepts of sanitation and definitions of aspects such as sanitation, basic sanitation, on-site sanitation, food sanitation, environmental sanitation and Ecological sanitation.

They also, with the guidance of the teacher, identified new terms such as storm drains, vermicomposting, composting toilets, closed-loop, black water, grey water, ground water recharge among many others, which they looked for their meaning from the dictionary and contextual use. This made them understand the content better and it actually stimulated their curiosity in relation to the theme.

Particularly, they were fascinated by concepts of Environmental and Ecological sanitation, especially the KfW, Frankfurt, Germany-vacuum toilets and grey water treatment. More so, they were motivated by the success of Ecosan project in Zimbabwe, a developing country just Kenya.

They went a head to identify grey water treatment and rainwater harvesting as panacea for the myriad of water and sanitation problems affecting the Cheplaskei Community.

Challenges

The project has a number of challenges in its inception and subsequent implementation, such as:

- Delay in installation of internet services.
- Insufficient resources needed in printing and dissemination of sanitation and hygiene awareness campaign's leaflets and payment of media fee.
- Infrastructure essential for capacity building.

Achievements.

- Positive perception among students on sanitation and personal hygiene e.g. hand washing practices, proper disposal of wastes and economical use of water.
- A sensitized community, though to a small scale, evidenced by the formation of community based water-users organization to further the awareness campaign.

The Way Forward.

- Small group discussions.
- Preparation of reflection journal.
- Engagement of student population in personal hygiene practices.
- Championing the formation of water and sanitation -WATSAN Clubs in other neighbouring schools.
- Initiate inter-schools debates and essay writing competition on the theme.
- Dissemination of sanitation and hygiene promotion through public barazas, the church and leaflets.
- Actively involving parents to ensure household sanitation and hygiene.
- Involve local media houses to reach wider population catchment.
- Networking with other like-minded organizations and institutions, both private and public in their sanitation and hygiene campaign.

Conclusion

For this short period, the project has stimulated the urge to source for more information on sanitation and hygiene and inculcated the importance of simple hygiene, proper waste disposal and environmental conservation practices among the student population.

The community has reciprocated by joining in the sensitization campaign and the quest to look for long-term solutions to sanitation and hygiene related problems afflicting the Cheplaskei community. This enthusiasm confirms the viability of this project, that is, this is the right project, brought at the right time, to the right community.

Mr. Juma
TEACHER-IN-CHARGE