

WORLD VISION/KENYA

TESCO CHILD SURVIVAL PROJECT

IMPLEMENTATION PLAN

2002

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LIST OF ABBREVIATIONS AND ACRONYMS

ADP	Area Development Program
AFRIAFYA	Network of health based national NGOs
AIMI	Africa Integrated Malaria Initiative
ARI	Acute Respiratory Infection
AMKENI	Consortium of FHI, Path, EngenderHealth, and INTRAH
AMREF	African Medical and Research Foundation
BDI	Bamako Development Initiative
BHR/PVC	Bureau for Humanitarian Response/Office of Private and Voluntary Cooperation
CBD	Community Based Distributor
CBO	Community Based Organization
CDD	Control of Diarrheal Diseases
CHW	Community Health Worker
CIF	Community Initiative Fund (Community controlled)
CIMCI	Community Integrated Management of Childhood Illness
COPE	Client Oriented Patient Efficiency
CORE	Child Survival Collaborations and Resources Group
CS	Child Survival
CSP	Child Survival Project
CSGP	Child Survival Grants Program
CSTS	Child Survival Technical Support Project
DC	District Commissioner
DCHA/PVC	Democracy, Conflict and Humanitarian Assistance/Office of Private and Voluntary Cooperation
DHMT	District Health Management Team
DHMB	District Health Management Boards
DHS	Demographic and Health Survey
DIP	Detailed Implementation Plan
DMO	District Medical Officer
DO	District Officer
DPHO	District Public Health Officer
EPI	Expanded Program on Immunizations
FIF	Facility Improvement Fund (MOH controlled)
FP	Family Planning
FTE	Full-Time Equivalent
FY	Fiscal Year
GAVI	Global Vaccine Initiative
GOK	Government of Kenya
HCDC	Health Care Development Committee
HCW	Health Care Worker
HH/CIMCI	Household/Community Integrated Management of Child Illness
HMIS	Health, Management, Information System
HIV/AIDS	Human-Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
HQ	Head Quarters
IEC	Information, Education and Communication
IMCI	Integrated Management of Childhood Illnesses
IPT	Intermittent Presumptive Treatment for Malaria

ITM	Insecticide Treated Material
JHPIEGO	Johns Hopkins Program for International Education in Gynecology and Obstetrics
KEPI	Kenya Expanded Program on Immunizations
KNACP	Kenya National AIDS Control Program
KPC	Knowledge, Practice and Coverage
LBW	Low Birth Weight
LQAS	Lot Quality Assurance
MCH	Maternal and Child Health
MCM	Malaria Case Management
MMR	Maternal Mortality Ratio
MOH	Ministry of Health
NASCOP	National AIDS and STDs Control Programme
NCPD	National Council for Population and Development
NGO	Non-Governmental Organization
NHC	National Health Coordinator
NO	National Office
OCG	Organized Community Group
PCM	Pneumonia Case Management
PHC	Primary Health Care
PLA	Participatory, Learning and Action
PLWA	People Living with AIDS
PM	Project Manager
PSI	Population Services International
PVO	Private Voluntary Organization
QA	Quality Assurance
QI	Quality Improvement
RBM	Roll Back Malaria
RPA	Rapid Participatory Appraisal
SCM	Standard Case Management
SP	Sulfadoxine and Pyrimethamine
STI	Sexually Transmitted Infections
TA	Technical Assistance
TT	Tetanus Toxoid
USAID	United Agency for International Development
UNICEF	United Nations International Children's Emergency Fund
VCT	Voluntary Counseling and Testing
VHC	Village Health Committee
WHO	World Health Organization
WRA	Women of Reproductive Age
WV	World Vision
WVI	World Vision International
WVK	World Vision Kenya
WVUS	World Vision United States

SECTION I: PROGRAM DESCRIPTION

A. Executive Summary

The overall goal of the Teso CSP is to reduce infant and child morbidity and mortality and to improve maternal health. Partnering with the District MOH and other organizations and communities, the Teso CSP will address the leading causes of childhood illness and death and poor maternal outcomes by providing creative channels for change that have been proven effective in other WVUS CSP programs over the past 15 years. Operating within and strengthening the existing health care structure, emphasis will be placed on improving quality of health care services and on fostering sustainable partnerships between communities and the MOH for the delivery of effective CS interventions. The Teso CSP is in the "new" program category of PVC CS grants. The program started in October 2001 and will be completed in September 2006.

The World Vision/Kenya Child Survival project is located in the Teso District of western Kenya on the Ugandan border. Teso District, one of the eight districts in the Western Province, covers approximately 527 sq. km. The district is divided into 4 administrative divisions: Amagoro, Amukura, Angurai, and Chakol. The divisions are then subdivided into 9 locations, 87 sub-locations and 1,200 villages. The total population of the District is 192,656, with a project direct beneficiary population of 75,760, including 36,988 children under five, and 39,988 women of reproductive age.

Since late 2000, when the CSP proposal was developed, Kenyan national IMCI, HIV/AIDS, EPI and Malaria Control efforts have been strengthened through infusions of donor support and concentrated efforts at the Kenyan Ministry of Health. In addition, the Household-Community IMCI Framework was developed and sanctioned at a CORE meeting in January 2001, providing a conceptual basis for integration into CSP project elements at the operational level. Program interventions have been reconfigured to reflect these developments.

For the past four years, USAID has supported the Bungoma District Initiative (BDI) through the Africa Integrated Malaria Initiative (AIMI). Extensive operational research was performed by many partners, including the U.S. Centers for Disease Control, BASICS, and AMREF. Bungoma is adjacent to the Teso District and most issues pertaining to malaria and maternal child health care services are comparable between the two districts. The Teso CSP does not have the resources to replicate the studies done in Bungoma, but will benefit from the wealth of information and experienced obtained in the BDI. AMREF is one of the project's technical partners and during its remaining months of implementation, the BDI will serve as a learning laboratory for Teso CSP staff. In addition, findings from the BDI research will be tested and validated with Teso district project partners and communities to evaluate their applicability in a different setting.

The scale up of the Kenyan Roll Back Malaria program presented opportunities for the World Vision CSP to organize the steering committee for the first observance of Africa Malaria Day in Teso district. The Teso District Public Health officer cited this organizing of an "on the ground" activity as the basis for a proposal to the National Malaria Control Program for further resources and participation in the Roll Back Malaria initiative.

Since declaring HIV/AIDS a national emergency in 1999, Kenya has made great strides to catch up with recent technical developments and programs in fighting the disease. In 2001, the Ministry of Health produced a packet of HIV/AIDS information called "Caring for our Nation" containing data and guidelines on the extent of the Kenyan AIDS problem and guidelines on antiretroviral

treatment, condom policy, Voluntary Testing and Counseling (VCT) and blood programs. These guidelines have been widely circulated to health care organizations and NGOs. Starting with discussions during development of the DIP, the National AIDS and STDs Control Program has been instrumental in directing World Vision Kenya towards training and technical assistance opportunities supported by several donors, including USAID and the World Bank. World Vision Kenya has recently hired an experienced Kenyan HIV/AIDS program specialist. She will bring to the CSP a wealth of experience addressing the socio-cultural aspects of raising AIDS awareness and participatory community problem solving.

World Vision is the first NGO to initiate health development capacity building activities in Teso. The local Member of Parliament (MP) was instrumental in securing an invitation for World Vision to come to the Teso District. He has participated in each stage of the program development. He was an active participant in the DIP development workshop.

Major strategies of the CSP include:

- Through Participatory, Learning and Action (PLA) exercises enabling communities to identify their own strengths and constraints to better health, to utilize local resources, and to actively participate in outreach services and take action for health promotion and health management activities.
- Introduction of Quality Assurance (QA) tools at all levels of project operation to facilitate the process of decentralization by allowing those affected by decisions to participate in them and better address the complexities of their work environments. Quality Improvement (QI) principles and methodologies will be applied in all training sessions to improve services, to increase productivity and to implement a mentoring program for health staff along the referral and counter-referral chain.
- Partnering with local Ministries of Health (MOH), institutions and non-governmental organizations (NGOs), including schools and religious institutions to conduct household and health facilities assessments that lead to joint work plans, targeted training exercises and support visit tools.
- Strengthening of Health Management Information System (HMIS) focusing on use of data for decision making to lead to better targeting of interventions in the context of Kenya's Health Sector Reform.
- Training of MOH and project health staff and partnering communities and organizations in gender awareness leading to improved collaboration for child spacing and maternal care activities.
- Training and support/follow-up for community-based providers for the mobilization and delivery of health promotion and primary health activities along with the strengthening of linkages between these providers.

Moreover, the Teso CSP will have a “multiplier effect” that will spread the investment of the Teso CSP to five World Vision ADPs in Kenya. Together 290,000 beneficiaries will be impacted by this CSP. The ADPs are Bunyala (which includes Teso District), Marich Pass, Kabarnet, Pokot and MPP. With the initial set of five, the Teso CSP will serve as a “model” for eventual incorporation into all existing WVK ADPs. World Vision is the largest international NGO working in Kenya, reaching a population of over 1.2 million people. This strategic use of USAID support will go a long way toward WVK's capacity-building and scaling-up objectives. Furthermore, the long-term

multi-sectional commitment of the ADP strategy enhances the sustainability of these efforts well beyond the life of the CSP

The overall approach of the Teso CSP will be Household-Community IMCI as articulated by the participants at the Workshop "Reaching Communities for Child Health: Advancing PVO/NGO Technical Capacity and Leadership" held in Baltimore, MD in January 2001. Within the context of HH/CIMCI, the CSP will address the following components:

- Control of Malaria (25% of effort) seeks to reduce malaria-associated morbidity and mortality in children and pregnant women through improved malaria case management at health facilities and households, Intermittent Presumptive Treatment with SP and malaria and anemia treatment in pregnant women, and the promotion of ITM bednets and their re-treatment.
- Pneumonia Case Management (20% of effort) seeks to reduce pneumonia associated infant and child mortality through strategies that address prompt and appropriate pneumonia case management (PCM) at the health center and community levels, household recognition of danger signs, timely care-seeking behavior, and treatment compliance. Special attention will be given to very young infants and neonates for prompt care seeking. Opportunistic respiratory infections in HIV positive children will be included. The project will address the overlapping clinical presentation of pneumonia and malaria in both components as part of IMCI training.
- Immunization/vitamin A (10% of effort) To reduce infant and child morbidity and mortality through strategies that will increase full immunization and coverage for children before their first birthday, tetanus toxoid immunization for pregnant women, and increase coverage of vitamin A to children vulnerable to infectious diseases.
- Diarrheal Disease Control (20% of effort) While not included in the original proposal, KPC findings, health facilities data, DHMT interviews and community assessments revealed diarrhea an the resulting malnutrition to be a major cause of infant and child mortality and morbidity. The objective will be to reduce diarrhea-associated morbidity and mortality through effective household preventive behaviors and case management.
- HIV/AIDS/STI (25% of effort) seeks to reduce HIV transmission in WRA and their infants through strategies for behavior change that will include increasing women's confidence and skill to negotiate risk reduction, surveillance and treatment of sexually transmitted infections (STI), strategies to reduce risks of STI transmission and ensuring that a reliable, low-cost supply of quality condoms is readily available. Mother to child transmission will be addressed through breastfeeding counseling and providing Voluntary Counseling and Testing so women may know their HIV status. If antiretroviral therapeutic agents become available, the project will assist in health worker training and community mobilization to create demand for treatment.

The project will also seek to destigmatize AIDS, by facilitating the introduction of AIDS care and support activities, and programs to address the needs of AIDS orphans.

Mr. Victor Masbayi, USAID/Kenya PHN office has been involved in the development of the CSP since the proposal was written. He has strongly supported the objectives of the CS project and supported the proposal submitted to USAID Washington. The main authors of the Detailed

Implementation Plan are Winifred Mutsotso, WV CSP manager, Thomas Hall, WVUS Child Survival backstop, and Jean Meyer Capps, RN MPH Child Survival consultant. The WVUS headquarters contact is Thomas Hall, email contact: thall@worldvision.org, telephone contact: 202 608 1897.

B. CSGP Data Form

See Attachment C.

C. Description of DIP Preparation Process

The DIP was developed with widespread participation from program partners including consultation with MOH officials, USAID/Kenya staff, World Vision/ Kenya National Headquarters staff, District Development Officials, and DHMT staff. TCSP staff participation included the project manager, training coordinator, 2 division field coordinators and the accountant. After initial planning and sensitization, the Knowledge, Practice, and Coverage 2000+ survey was conducted and including extensive briefing and involvement of participants representing several sectors in the community. Focus group discussions were undertaken in several communities and included men, women, health care workers, and members of the health boards. Key informant interviews were undertaken with DHMT staff and the Teso Member of Parliament. A health facilities assessment involving additional focus groups and key informant interviews completed the participatory data collection. Health and vital statistics data were collected from Teso registries and national HMIS sources.

Results of surveys, focus groups and interviews were presented to a wide array of stakeholders in Amogoro, Teso District for three days in February 2002. In addition to the sectors represented earlier in the project, representatives of religious health care organizations were also present, including the Anglican Bishop, the Salvation Army staff, and a Catholic Nun. Additional representation included participants from the National Association of Women Lawyers, teachers, and members of the district government outside of the health sector.

Participants were divided into intervention working groups and asked to discuss open-ended questions involving needed behavior change to improve health status in each of the areas. Results were shared and discussed with the entire group. Finally, issues of measuring impact and definitions of sustainability were adapted to the Teso context.

A CSP steering committee and intervention working groups evolved from this process, along with a commitment to meet on a quarterly basis for ongoing program planning and sharing of results. Additional information on these follow up actions can be found in the Program Management section of the DIP.

D. Program Site Analysis

The Teso Child Survival project will be implemented in the recently formed Teso District; formerly part of Busia District and one of six districts that comprise Western Province. The district is divided into 4 administrative divisions: Amagoro, Amukura, Angora and Chapel. The division is further subdivided into 9 locations, 87 sub-locations and 1,200 villages. Due to its recent formation, the infrastructure in Teso is rudimentary and the district is a low priority for national MOH health development efforts. See Attachment D to review a map of the project area.

The population of Teso District is 192,656, with the project directly targeting children under five years of age and women of reproductive age. See table below for a breakout of the District's population according to age group, as well as estimated number of births during the project period.

Table 1. Teso District Demographic Data¹

Demographic Indicator	2001²	2006
Total Population	192,656	216,183
Total Beneficiary Population	75,760	88,803
Population, WRA	39,988	44,871
Population, Children <5	36,988	43,932
Pregnancies	9,632	11,745
Annual growth rate	3.5%	3.2%

- Estimates were probably high because they were based on projections from the 1990 census. The 2006 estimates are based on a more recent, 2000 census.

The northern and central part of the District feature granite outcrops that are part of the Pere Plain. Marshes and swamps are common features in the lowland portion. In most parts, land is highly suitable for food production and cash crops. There are two main rivers--the Malaba and the Malakisi with numerous seasonal and permanent streams. The hilly topography and large numbers of streams have constrained road development. There is only one paved road in the entire district, which traverses a 14km stretch from the Uganda border at Malaba to the eastern border. Mean annual rainfall varies from 1270mm to 2000mm. Most rainfall occurs during the months of April and May. Small-scale farmers grow most of the crops in Teso district. These include maize, beans, millet, sorghum, and cassava as well as tobacco and sunflower seeds.

Sixty percent of the Teso population is under the Kenyan poverty line of \$365 per year. Cattle farming, once central to Teso food and economic production, was decimated approximately 5 years ago by Tsetse fly, and has still not recovered. The resulting loss of income from the cattle plunged the Teso population deeper into poverty. Tobacco and cotton were recently introduced as cash crops, but bringing products to market has lagged due to insufficient marketing expertise. Several areas of the district are waterlogged during the rainy season. Combined with heavily polluted rivers and undeveloped water systems, this contributes to outbreaks of typhoid, dysentery and occasionally cholera.

Approximately 60% of the population is Catholic, 30% Protestant, 5% Muslim and 5% other. The Teso culture is different from the Bantu cultures of the Luhyo speaking neighboring districts. Polygamy is still common, though the average number of wives has significantly decreased. Polygamy affects childcare when women leave their children in the care of grandmothers or older siblings when they leave to stay with the husband. Wife inheritance (the widowed woman marries the husband's brother) is still practiced and is recognized by communities as contributing to the spread of HIV/AIDS. Women are severely marginalized, unable to own property or businesses and are not the decision-makers in the families in the allocation of family resources for food and health care seeking. Women sometimes resort to prostitution to feed themselves and their children. Alcoholism among men is common and frequently leads to domestic violence. Extramarital affairs

¹ KMIS - District Population Projections, 2000

² Teso District data, 2000 from 1999 census projections

are common, contributing to the spread of the HIV virus. Condom use between extramarital partners is reported, while intramarital use of condoms is considered absurd. Women who have asked their husbands to use condoms have been severely beaten. Fifty percent of the mothers of children under 24 months of age interviewed in the KPC reported involvement in an extramarital affairs and this was confirmed in focus group discussions.

The district has 11 health facilities: two hospitals, four health centers (three government, one mission), and five dispensaries (4 government, 1 NGO and 1 mission). One of the health centers was partially upgraded to become the future district hospital. It has neither a maternity ward nor blood bank. Since separation of Teso into a new district, the referral center has changed from Busia District hospital, to Bungoma District Hospital, XX km away from the Teso district hospital. No district health plan currently exists. The 11 health facilities are somewhat difficult to reach, but most respondents to the KPC survey stated it took 1 hour or less to reach them. While some residents near the Uganda border cross into Uganda for health services, they are expected to pay for the services they receive.

HIV/AIDS is rampant in Teso. The official seroprevalence rate of 24.5% is derived from STD clinics and considered by most health personnel to be an underestimate. According to one source at the Amagoro hospital, more than 40% of the patients had AIDS related illnesses. There is a severe stigma attached to HIV positive individuals, to the point village members will deny there are people living with AIDS (PLWA) in their village, but acknowledging they are present in neighboring villages.

Teso is a written language, but only a small percentage of the population is thought to be literate in any language. Most health education materials posted in the district are in English, with occasional materials in Swahili. Health workers and other educated persons understand English. Girls have significantly less education than boys, often dropping out after approximately four years of education for early marriage, pregnancy, or after contracting AIDS.

Teso is a new district, carved out of Busia district. Politicians are attempting to add additional territory, and additional Parliament seat. Jockeying for additional territory and political power may result in increased tensions between Teso and the neighboring districts during the life of the project. The project is strongly supported by the existing Member of Parliament from Teso. He attended most of the DIP workshop and strongly encouraged community members to be involved. Elections will be held in later 2002 and political support may change if this individual is not reelected.

Changes in the DIP

Two major changes have been made in the Teso CSP since the time the proposal was submitted. The KPC and focus group discussions revealed diarrheal diseases, including dysentery and cholera, as well as typhoid are significant causes of morbidity and mortality in the district. Sanitary conditions and practices are poor and amenable to the preventive measures in HH/CIMCI. Kenya has adopted IMCI as national policy and it is expected to be implemented in all districts within the life of the project. Meanwhile, immunization conditions, including additional cold chain and vaccine support from GAVI and new vaccine campaigns, have contributed to improvement in immunization coverage within the district. Therefore, diarrheal disease control will be added to the Teso CSP with the combined IMCI intervention measures equaling 75% of the project.

The baseline studies and follow-up DIP workshop have clearly demonstrated the need for close contact with the Teso communities. The majority of health facility staff above the level of enrolled nurse, and the World Vision professional staff do not come from Teso. Staff from Teso, with strong connections with the community as well as ability to relate with World Vision, will be developed. This new category of worker is the equivalent of an ADP "Motivator", sometimes called "Animator" in other CSPs. It is anticipated that four will be hired, two men and two women and will be assigned to work under the supervision of the Division Coordinators. Their major responsibility will be community mobilization working with major sectors of the community, including men's groups, women's groups, reactivating the village health committees and acting as the direct liaison with project professional staff.

E. Baseline Studies

A copy of the KPC 2000+ survey report, along with reports of the qualitative and health facilities assessments, can be found in Attachment E. The KPC survey was undertaken using guidance from the recently completed CORE/CSTS Field Survey Guide. Surveyors were selected largely from the Teso community which served to publicize the CSP and provide for wide spread participation in the process. WV Teso CSP staff are very experienced using PLA and other focus group techniques. In depth discussions were conducted with several sectors of communities. The Health Facilities Assessment was conducted by the WV CSP training specialist, a former employee of the central MOH, who is very familiar with MOH facility standards. All three types of baseline assessments were analyzed and presented to participants at the three-day DIP workshop held in Amogoro, Teso in February 2002.

Data collected on the 26 Rapid CATCH questions were included in the Teso KPC baseline survey and can be found in the survey report in Attachment F.

Data from the KPC showed strong evidence that diarrheal diseases are a significant contributor to infant and child morbidity and mortality, so the CSP decided to add CDD to the CIMCI activities. Immunization coverage was not as low as expected, and these results were validated by DHMT figures. Child feeding practices and household hygiene behaviors were particularly poor in the catchment population. The high percentages for children with "fever" and "rapid, difficult breathing" indicate a high burden of disease among small children. Qualitative discussions about AIDS were chilling in regards to the high levels of denial coinciding with high-risk behaviors. The seeming lack of women's empowerment to influence what happens to her health and that of her children will be an especially important element to address throughout the life of the project.

F. Program Approach

The overall goal of the Teso CSP is to reduce infant and child morbidity and mortality and improve maternal health. Additional goals include reducing the transmission of HIV/AIDS and destigmatizing people living with AIDS. WVK will achieve this by collaborating with the District MOH, local communities, church organizations, other health NGOs, USAID Cooperating Agencies and Kenyan social service organizations. Operating within the existing health care structure and community organization, emphasis will be placed on updating and improving quality of health care services and on supporting sustainable partnerships between communities, the MOH, and other health service organizations in Teso District. As is common in many countries, poor drug supplies and logistics plague health programs in Teso. The CSP will address this by improving the Health Information Systems and technical training in health planning to project drug and vaccine requirements as demand increases with effective community mobilization. The Teso CSP has

already performed a significant service in advocacy with the national government for training resource services. The DIP development process has brought project staff from WV/K in direct contact with the national MOH offices involved in each of the CSP interventions. Therefore, Teso District is slated to be included in training activities in IMCI and HIV/AIDS where they were not included as of early 2002. WVK has also already leveraged the resources of the CSP to collaborate with the national PSI DFID-funded Insecticide Treated Net program whose time frame corresponds with the CSP project.

Community Integrated Management of Childhood Illness

While not initially a priority district for implementation of the national IMCI strategy, WVK has successfully negotiated with the national MOH and AMKENI, a consortium of PATH, FHI, and INTRAH, for a cost sharing arrangement to provide training in the third quarter of the first year to the DHMT and other CSP partners in the Teso district. The MOU specifying this arrangement has been completed.

The framework of Teso CSP will be HH/CIMCI. Generic elements of the approach are discussed here, with intervention specific aspects discussed in the intervention section. The DIP workshop participants used the CORE/BASICS/CSTS/USAID manual "Reaching Communities for Child Health and Nutrition: A Framework for Household and Community IMCI" as the basis for design of the Teso CSP. Program strategies organized around this framework are as follows:

1. *Increasing appropriate accessible care and information from community-based providers*

- ❑ Broad participation in intervention working groups and their activities include members from the DHMT, religious organizations, community leaders, health boards social service organizations and traditional leaders.
- ❑ The DIP design was derived from participatory learning in action and wide spread participation in conducting the KPC and contribution to focus group discussion.
- ❑ New staff positions have been added to include employees from Teso communities with strong relations in the community as well as the ability to work with Teso health staff.
- ❑ Follow-on formative research will continue use of focus group discussions and community feedback sessions to continue the strong community involvement experienced in the DIP development.

2. *Increasing appropriate and accessible care and information from community-based providers*

- ❑ The CSP will work with shopkeepers and pharmacists to increase provision of appropriate drugs to treat important child illnesses, such as piloting home based malaria treatment.
- ❑ The project will seek to replicate successful aspects of the existing Bamako Initiative community pharmacy to other areas of the district.
- ❑ Increase promotion of preventive practices by community-based providers, such as promoting handwashing to prevent diarrhea, or use of ITNs to prevent malaria.
- ❑ Decrease harmful practices of community-based providers, such as the practice of pulling the teeth of children with diarrhea.

3. *Integrated promotion of key family practices critical for child health and nutrition*

- ❑ Engage communities in choosing the most important behaviors to change to decrease child mortality.

- Develop and implement behavior change communication activities suitable to the Teso environment, with special emphasis on techniques to engage men in developing the behavior change strategy.

Project Partners

At the national level, the TSP has formed several technical partnerships as follows:

- WVK has formulated a working partnership between the DHMT, private health providers, religious organizations, social service organizations and community leaders.
- WVK has developed a working collaboration with the Kenyan MOH, especially NASCOP, the national AIDS program, the National Malaria Program, and the National Immunization Program (KEPI).
- WVK has formed technical partnerships with other NGOs, Aga Kahn, CARE, AMREF, PSI and cooperating agencies JHPEIGO and AMKENI (a consortium of PATH, FHI, INTRAH) to bring technical

WVK is now participating in national HIV/AIDS discussions with the MOH and their request to be included in the RBM discussions has been granted. WVK is one of the founding members of AFYA a program communication and dissemination between Kenya health NGOs.

The principle project-implementing partner is the Teso DHMT. Partners for technical assistance in specific areas include JHPEIGO (malaria in pregnancy), Aga Kahn (Health Information Systems), CARE (Community IMCI and Drug Supplies) and AMKENI (IMCI training). The national AIDS program will assist with AIDS VCT and KEPI will provide IEC materials for the immunization component. At the district level, religious based health providers such as the Salvation Army, the Anglican diocese, and a Catholic Mission participated in the design of the program and have generously offered their facilities for training and implementation of the project activities. MOUs with the technical partnerships have been completed. Agreements with the local DHMT is provided in the form of signed meeting minutes, the customary practice in Kenya.

The Bungamo Malaria Project, located in the adjacent district presents a superb opportunity for the Teso CSP to build upon the formative research and lessons learned over the last 5 years. CSP and DHMT will make field visits and meet with AMREF personnel. While the population in the two districts is from different ethnic groups, many of the same cultural and logistical difficulties in malaria programs are present. PSI has just kicked off a DFID funded nation-wide 5-year ITN project with special provisions for working with NGOs. In addition, the PSI program can provide training and IEC materials to support NGO programs. A community group, formed as a part of the Bamako Development program in 1989, has experience with sale of ITNs from involvement with a Finnish government funded program that ended a few years ago. This group requested ITN's during focus group discussions during development of the DIP.

HIV/AIDS

The first AIDS case in Kenya was observed in the mid-1980s; by 1995, 179 cases had been reported. Presently, it is estimated that about 2.2 million Kenyans are infected with HIV/AIDS while 1.5 million Kenyans have already died from the virus. In Kenya, most HIV transmission is through heterosexual contact, while a significant proportion of mothers pass the virus to the child during pregnancy, labor and delivery or through breastfeeding. About 5 to 10% of infections in Kenya are thought to come from blood transfusions.

In 1999 the President of Kenya declared AIDS a national disaster. Subsequently the government mobilized additional resources and established a National AIDS Control Council to advocate and to strengthen and coordinate the multisectoral response to contain the spread of the HIV virus and mitigate the impact of AIDS. In light of the considerable cost of antiretroviral drugs, many interventions in Kenya will continue to focus on behavior change as well as promoting VCT services.³ The CSP will assist with the development and expansion of behavior change strategies and VCT services in Teso district. The CSP staff can play a major role in sensitizing communities about VCT because there are currently many misconceptions about safety and confidentiality. The Teso CSP HIV/AIDS working group is currently discussing the need to support early recognition and prompt treatment of STIs and tuberculosis, assist with provision of services to prevent mother-to-child transmission, quality home-based care, and appropriate support for those affected by the virus. Partners have already committed to participating in these activities in many ways.

HIV and AIDS stigma is a serious problem in Teso. While acknowledging that AIDS orphans exist in Teso District, respondents in focus groups would not admit to anyone that orphans are present in their own village, or family. People Living with AIDS were identified as living in the "next village." This is similar to findings in other districts of Kenya. Addressing the stigma of AIDS and developing compassionate support programs will be a complementary activity provided by WVK Teso. The Anglican Diocese will provide support and facilities to conduct activities. The WVK HIV/AIDS specialist will provide technical support for development of this component of the program.

Challenges to Program Implementation

The major constraint to successful implementation of the program is the new formation of Teso District. The district lacks several basic services available in other districts, including the ability to perform surgery in the newly designated district hospital. As a new district, Teso is usually not on the priority list for implementation of new MOH health initiatives, such as IMCI and VCT program implementation. WVK will address this by advocating for including Teso with the national MOH and providing additional resources for participation.

The extremely low status of women in Teso culture was identified in focus groups and in the DIP workshop as an impediment to household level decision making in behavior change and resource allocation. Polygamy is still common. Women have very little independent decision making authority within the family and few if any resources of their own. Women are still viewed as property and are inherited by their husband's brothers when their husbands die. Refusal to participate in wife inheritance dooms the woman and her children to indigence and frequently leads the woman into to prostitution with resultant high HIV transmission risk. Even some married women reportedly resort to prostitution to provide food and medical care for their children. Women have little opportunity for negotiation about sexual practices with their husbands, making behavior change to reduce HIV transmission risk very unlikely. High levels of alcoholism contribute to high levels of domestic violence and high-risk sexual activity. The Teso CSP will address this by involving men in participatory decision-making in the design of program activities. Focus group discussions undertaken during the development of the DIP initiated this involvement. Behavior change communication activities will be taken to where men are likely to gather, including community drinking places and sports events. In focus groups, men expressed high levels of interest in addressing the AIDS epidemic. The CSP sees this as a window of opportunity to engage men in

³ AIDS in Kenya, Sixth Edition, Ministry of Health, 2001.

problem solving activities to address a wide range of child survival and HIV/AIDS prevention activities.

Since WV is a PVO organized as a federation, project staff are employees of WVK, not WVUS. WVUS will need to provide ongoing support to WVK in aspects of USAID funding and Cooperative Agreement requirements. WVK has the particular challenge of integrating grant-funded staff with sponsorship and other types of funding. The additional professional requirements of implementing grants and responding to grant requirements will require close and frequent communication between WVUS and WVK. However, several staff within WVK have been gone through the grants management training course and can also serve as points of reference for the TCSP. Telecommunications are rapidly improving in Kenya, but Teso lags behind in many respects. The major road connecting Kampala with Nairobi traverses the district. The District's border town, is a major truck stop and focus of prostitution. The project will have a major challenge in engaging at risk individuals in the area in program interventions.

G. Organizational Development

WVUS

Strengthening WVUS Capacity

1. *Development orientation for its private donors.* It has become increasingly apparent in recent years that WV's public donors, such as USAID, and our private donors often have differing expectations of the nature of international development work and the ultimate goal of foreign aid, which is self-sufficiency. The challenge is to align these expectations, and provide adequate information to the private donor about WV's mandate to foster sustainability of services in the areas served through building capacity, and how that is accomplished. WV's recent reorganization has afforded it the perfect opportunity to re-design its marketing strategies and match budget procedures to reflect the need for better private donor orientation. These issues are currently being examined.
2. *Incorporating USAID Standards into all WVI Programming.* WVUS's CS activities have been raised to a high, technical standard by its involvement with USAID's CSGP during the last 15 years. As more countries in the WV partnership participate in the CSGP, there is an increasing desire to incorporate its technical standards into the overall program of WVI. There are also recent efforts to improve integration of USAID standards in WVUS sponsorship programming. The process has begun with the formation of the WVI Task Force on Quality Standards that are currently being pilot tested. The recent addition of Dr, Chalya Lar as the WVUS AIDS/HIV Advisor will enhance the quality of our work in this new endeavor.
3. *Documentation and Dissemination of Lessons Learned.* Many of WV's projects have had remarkable achievements. Efforts are made to broadly disseminate and incorporate the resulting lessons learned and best practices into future programming. More coordination is necessary between national offices and headquarters to capture the "gems" of project successes and ensure that valuable lessons learned are shared with partners and other organizations.
4. *Discovering the keys to sustainability.* Sustainability of program benefits is of paramount importance to WV, as it is to USAID. Over the last 13 years the CSGP has assisted WV in studying the factors that increase the chances of sustainability. WV's challenge is to incorporate the lessons learned from these programs and to develop model health programs that can be adapted to current and future programming in ways that are appropriate for each individual country context. WVUS will develop model health programs for adaptation into all ADPs.

Capacity Building Objectives for WVK

ADPs Partnering in the CSP Project

Teso CSP will be modeled into a learning center for WVK ADPs, starting with an initial number of five and progressively impacting on other ADPs. ADPs that have accepted to participate in the capacity building process of the CSP are Masai Peoples Project (MPP), Marich Pass, Pokot, Kabarnet and Bunyala, all supported by WVUS. Program staff and partners from these ADPs will be given the opportunity to enhance their capacities through on-going participation in the various stages of project implementation and training. Teso CSP's broad based capacity building serves as a basis for a long-term multiplier effect, ensuring replication of the project benefits across WVK programs.

Participating ADPs will benefit from the CSP in the following key capacity building areas:

- Participatory Learning and Action Techniques
- Quality Assurance
- Program Monitoring and Evaluation
- KPC survey techniques
- USAID standards in CS project program design, overall project implementation
- HMIS design and tools
- Designing HIV/AIDS care and support programs for PLWA and Orphans
- Participatory health program planning with stakeholders

The five ADPs that will be targeted for skills transfer and scaling up of activities include the following population numbers:

Distribution of Beneficiaries by ADP

ADP	No. of Beneficiaries
Bunyala	40,000
MPP	90,000
Marich Pass	50,000
Kabarnet	80,000
Pokot	30,000
TOTAL	290,000

WVK anticipates that through the Teso CSP, it will address the following objectives:

- To increase communities' capacity to deal effectively with their own health challenges sustainable through targeted training, skills enhancement, community leadership development, resource mobilization, civic awareness and gender equity initiatives.
- To increase the professional skills of the two health project managers, five ADP managers, two Regional Managers, five ADP development coordinators, the National Health team (consists of the National Health Coordinator, Health program Officer, Nutrition and Gender program officer) in QA, KPC survey implementation and analysis, CSP implementation, HMIS development, through their attendance at recognized courses and participation in the relevant technical assistance from WVUS technical staff and consultants.
- To increase the professional skills of the two health project managers, three ADP managers, two Regional Managers, three ADP development coordinators, the National Health team in

conducting and analyzing KPC surveys, Health Facility assessments (both joint efforts with the MOH) through their participation in such activities in other WV ADPs.

- To increase the technical capacity of the two health project managers, five ADP managers, two Regional Managers, five ADP development coordinators, and the National Health team in developing a HMIS through collaboration with experts in the field.
- To increase the administrative capacity of WVK's accounting staff in managing, auditing, and adhering to USAID standards for CS grant funds through technical assistance from WVUS or other WV technical accounting experts in Africa.
- WVK is already a member of *AfriAfya*, a network of health-based national NGOs that share information and collaborate in training and evaluation activities. This is modeled after the CORE Group that has met with considerable success as a network of PVO's at the US Headquarters level. WVK will share information through its membership in *AfriAfya* and through its regular contact with WVUS. WVUS is building its capacity to disseminate lessons learned more effectively and rapidly, through its membership in groups such as CORE and through workshops, USAID and PVO contacts, seminars and informal PVO to PVO contacts.
- WVK will share lessons learned at multiple levels, beginning with the communities with which they will partner. Built into the PLA approach is the provision for ongoing dialogue and discussions with the communities. This venue will be used to share lessons learned and best practices that apply to their setting; included in this process are the CHWs and the VHCs. This will have a multiplying and reinforcing effects and will ensure that the messages reach the entire population.
- WVK will work with health staff at the health center and dispensary levels. The staff will be involved in all aspects of project planning, implementation and evaluation and will also be the beneficiaries of lessons learned and best practices. Through ongoing supervision and feed-back and their participation in meetings, information will flow smoothly vertically and laterally, especially as the intent is to have one QI mentor in each facility.
- At the district level, the DHMT and the project staff will jointly carry out all project activities, sharing information and data, planning, implementing and evaluating the program. Lessons learned and best practices will be generated from the information gathered in the field by the two partners and will move upwards to the MOH and WVK offices in Nairobi.
- At the national level, WVK holds regular meetings with staff from all its ADP projects in Kenya. Such meetings are forums for sharing information from the field, including lessons learned. WVK has already applied lessons learned from the Loitokitok CSP to other development programs. Currently, the privately funded Bunyala PHC ADP follows the same adherence to standards as do USAID funded projects through its partnering with CARE's ongoing Siaya District CSP.

Strengthening the Capacity of Local Partners

A training needs assessment was conducted with the DHMT and health facility staff. The objective of the assessment was to determine to what extent staff had participated in training courses or seminars during the past five years and how they perceived their own skill enhancement and training needs in relation to their roles and responsibilities. Many of the staff were trained ten or more years ago and hold senior positions. Overwhelmingly, staff expressed a need to upgrade their skills in technical and management areas. Very few had been trained in SCM for pneumonia and fever. A few had attended seminars on malaria control, family planning, micronutrients and HIV/AIDS. Several staff mentioned that they had heard about COPE – Client Oriented Provider Efficiency – an approach to increase client satisfaction, but none had been trained in QI. None had

trained CHWs and VHCs; furthermore, no CHW or VHC has been trained since 1984. None of the MOH staff has participated in any USAID-funded CS projects. There is, therefore, a great need to enhance the capacity of the DHMT and health facility staff, so that they, in turn, can train and support CHWs and VHCs to carry out activities with families, local schools and other institutions. The WV Bergville CSP in South Africa has confirmed this strategy and identified several useful management skills needed to produce this sustainable function. These have already been shared with WVK staff.

At the community level, the project will use the PLA approach, also used successfully in the Bergville (South Africa) CSP and other WV programs, to work with families. A combination of teaching/learning approaches will be used with CHWs and VHCs. These will include information sharing through variety of media, practical hands on demonstrations and return demonstrations, role modeling, role-play, and practicums in health facilities and reinforcement as part of the process of building community's capacity to implement and manage the project in a most participatory way. Supervision/support skills will be shared at all levels as a way to reinforce learned skills, update skills, evaluate performance and problem solving, and evaluate any training program. WVK will not be directly responsible for supervision, but will support the partnering process in a way to strengthen the sustainability of this critical element. Also at the community level, women's groups will be trained in marketing and managing an ITM bednet and condom distribution program, including the financial aspects and implication of receiving a loan. Capacity building at the community level will begin after capacity assessments have been conducted with each potential group. Special attention will be given to management and financial systems for groups intending to participate in net or condom sales.

At the health center level, staff will be involved in training sessions that include Community IMCI training that incorporates pneumonia and fever, malaria control, immunizations, diarrheal disease control, HIV/AIDS/STIs, cost-recovery schemes and QI. Both WV and DHMT will participate in VCT training and workshops on HIV/AIDS care and support from the WVK HIV/AIDS specialist.

In health centers with laboratories, technicians' skills will be enhanced for STI surveillance. In addition to updating the knowledge of the staff on the technical aspects of the four interventions, focus will also be placed on information collecting and sharing, community mobilization and participation, supervision and evaluation within the context of QI. A variety of teaching/learning techniques will be used, as described above.

Staff at the District level will participate in the same programs, as appropriate, as staff from the rural health facility level. In addition, the DHMT will be targeted for special information sessions with WVK on planning, implementing and evaluating a USAID funded CSP on the funding requirements and on the standards that have to be maintained.

Constraints to Capacity Building

Constraints to capacity building with project partner's includes:

- Retrenchment of health workers due to over-staffed civil service system. In spite of the current reduction in MOH staff, most health facilities were not under-staffed given the numbers of clients who utilize them. Thus, staff shortages may be more of a perceived rather than a real problem. In addition, DHMT personnel are shifted in and out of their posts, often with little notice or rationale.

- Dearth of highly qualified personnel to carry out training programs for the CSP in the District. WVK has already formed a technical steering committee consisting of representatives from CARE, Aga Khan Foundation, AMREF and JHPEIGO and has received their commitment to participate in various aspects of training and evaluation for the project.
- Dearth of available teaching/learning materials and supplies in the District. The project will use appropriate materials available from UNICEF, WHO, JHPEIGO, other NGOs and the government; others will be developed as needed.
- Lack of supervisory infrastructure and transport necessary to supervise facility health workers and communities. WVK and its partners will adapt available or develop new, appropriate supervisory tools, such as Lot Quality Assurance (LQAS) and will, through its matching funds, improve transport through the purchase of bicycles for health facility workers. Project vehicles will assist with initial supervisory DHMT visits while the CSP explores activities that the DHMT will be able to continue after the project ends.

Training

The primary tasks of this project are to strengthen the skill and knowledge of MOH personnel so that they can carry out their functions more effectively, and to identify, enlist and enhance community-based resources to partner with MOH to address the identified problems in a sustainable manner. The community will also be targeted for capacity development for problem solving and action planning utilizing PLA techniques. Community providers will receive training, supervision and follow-up to promote key household messages, mobilize community members to utilize preventive and promotive services, as well as serve as the first line providers and referral for management of common childhood illnesses.

Training elements will be woven into supervision tools so that supervisors will see their role as facilitating the professional development of those they supervise. While the DHMT is supposed to carry out supervisory visits, the approach remains hierarchical and training curricula are not reflected in the support visit tool. The DHMT will be assisted to develop mentoring tools for every level of health worker reflective of the training they have received. The TCSP will assist the DHMT to adapt a support visit guide to include standards and skills promoted through training efforts. Additional training will be provided to supervisors on how to listen, observe and provide feedback and support.

Core topics around which training will be delivered are mentioned below and are included in the workplan found in Section II.J.

DHMT Management Training: Quality Assurance

Apply a Quality Improvement/Client Centered Approach: Quality Improvement (QI) principles and methodology will be applied in all training sessions to improve services, increase productivity and implement a mentoring program for health staff along the referral and counter-referral chain. Using the QI cycle in a solution-oriented approach, the Teso CSP will improve management skills and empower people at all levels of health service delivery. The QI principles of avoiding blame, but rather to strengthen processes and teamwork through client-centered approaches and use of data for decision-making will be used. Health facility staff will be trained on basic principles of QI and guided in their application to current problems confronting them within their work place and in communities. Coaches/mentors will be chosen at each facility to provide leadership in using QI to facilitate participatory decision-making and to ensure that care standards are known and followed.

This training targets improvement in client-provider interaction leading to appropriate delivery of information to mothers for home management and prevention of childhood illnesses

Participatory Learning and Action

Apply Participatory Learning and Action: True community ownership of CS programs requires that the program is based on the community's prioritization of its health needs, as discussed in behavioral approaches above. This implies development of adequate community structures for community representation in the District as supported by the National Health Sector Reform. PLA exercises will be held in communities throughout the District before detailed program-design takes place. There will be regular feedback sessions with communities and representatives from all levels of health workers to determine the community's satisfaction with joint plans and current quality of care. PLA sessions with health workers and communities will foster health workers' understanding of community needs and perspectives. Inter-sectoral collaboration will be encouraged by including service providers from other sectors working in the District during the PLAs and particularly in follow-on action plans. Follow-up by the health committees, CHWs and health facility staff will focus on how local resources and positive traditional practices are being applied to better manage and prevent disease at the household level.

IMCI Training

The national IMCI unit will facilitate the introduction of IMCI in Teso by the CSP. WV/K will share training costs with the USAID supported AMKENI consortium (consisting of Path, EngenderHealth, FHI and INTRAH). Training will include facilitation skills, case management skills and, after one month's practice supervisory skills. AMREF will also participate in the IMCI training because they are developing and improving Community IMCI in their district. Introduction of IMCI is a component of the Bungoma District Initiative. AMKENI have current working experience with IMCI in the Coast Province where they are currently facilitating implementation. The national IMCI materials will be used in the training. Training is scheduled to take place from June 24, 2002 to August 8, 2002 in a staggered schedule so as not to hamper function of the health facilities. Supervisory skills training will take place for 5 days at the end of September 2002.

Voluntary Counseling and Testing

The CSP will not establish the VCT centers in the district. This is part of the national plan. VCT training within the context of the CSP will focus on community education and mobilization to encourage clients with concerns about their HIV status, particularly pregnant women, or women who are likely to become pregnant. Both NASCOP and FHI are willing and ready to provide the appropriate training when the VCT sites are operational.

ITNs

The project has identified several community groups who can potentially be trained in marketing ITNs. These groups are currently undergoing capacity assessments. The WV Bunyala project developed a set of criteria for evaluating group readiness to engage in ITN sales, which the Teso CSP will use. The groups will then be trained in micro-enterprise by KADET - World Vision's micro-credit agency. The training is scheduled to begin in June to position the first groups to buy nets starting in July/August 2002 to coincide with the high malaria season. World Vision will provide the seed money for the groups to purchase the wholesale nets from PSI.

At the District level the DHMT, primarily the DPHO and his team trained in malaria prevention strategies. Training will be facilitated by the National Malaria Control Program. The DPHO and his

team will in turn train the CHWs and Communities in use of ITNs. PSI will provide complementary training, especially for the community groups. This training is tentatively scheduled for June 2002.

The Bamako Initiative (BI) group in the district is already experienced in community marketing of ITN's and has good financial systems in place. The BI will be invited to become a learning laboratory for the district in ITN marketing.

Community Drug Sales

The CSP staff and DHMT counterparts will make site visits to the CARE Siaya project site with the objective of learning about CHW drug sales. If the DHMT is willing to consider piloting this activity, CARE staff will be invited to train Teso CSP staff.

H. Sustainability

Definition

The project accepts Dr. Stan Foster's definition of developmentally sound sustainability as, "the maintenance of individual, community, NGO, health system, private sector, and governmental capacity to continue essential promotive, preventive and case management services necessary to achieve locally established targets with minimal amount of external inputs." There is no translation for "sustainability" in the local language. After the concept was explained communities defined it as being able to plan, develop themselves and their families, and to be able to carry on the project after sponsors have stopped support.

Sustainability Objectives

The focus of organizational support at community level for this project is the sub-location; it is a smallest government administrative entity complete with an administrative and political leadership structure.

By the end of five years:

- 90% of selected sub-locations will have 2 trained CHWS and one VHC in place and functioning (definition for functioning is that they have carried out at least ten health activities in the last year)
- 90% of sub-locations with trained CHWs and VHCs will have a community development action plan elaborated and initiated in the implementation phase and will have been involved in evaluating aspects of the program
- 80% of mothers with a child <24 months will have participated in at least four PLA sessions during the past year
- 60% of sub-locations will have trained community groups actively engaged in ITM bednet and condom distribution and marketing (definition for actively engaged is that they have been able to repay their bed-net loan and have sold and retreated nets and sold condoms in the past month)
- 80% of health facilities will report an increase in their CIF over the past year
- 80% of health facilities will have a QI mentor in place
- 90% of health facility staff trained in SCM for pneumonia, malaria control, HIV/AIDS/STIs, immunizations and QI
- 80% of CHWs and VHCs report to have received at least ten supervisory visits during past year
- 80% of health facility staff report to have received at least ten supervisory visits during past year
- 90% of DHMT involved in the project trained in USAID CSP requirements and reporting, management, evaluation, supervision and QI, and technical aspects of the four interventions:

SCM for pneumonia, malaria control, HIV/AIDS/STIs, immunizations and diarrhea disease control

- 90% of laboratory technicians trained in quality STI surveillance and laboratory techniques
- 90% of DHMT involved in the project have participated in project planning and implementation activities, in generating reports, collecting data, sharing information and evaluating results
- 80% of localities will have remunerated their CHWs at least ten times during the past year.

Strategies for Achieving Sustainability at the Community Level

Through PLA, communities will be involved in determining their own health needs and priorities, and will participate in determining which actions to take to implementation. Quality health care will be more accessible for them through the training of the health boards, CHWs, VHCs, and health center staff and through trained women's groups.

One of the criteria for selecting localities will be a commitment by the communities to develop and maintain a remuneration system for the CHWs. During discussion with communities, it appears that they accept cost sharing of health care services as an essential component to bring those services closer to them. They appeared very willing to identify means to remunerate CHWs.

Community health services will further be sustained through a well-functioning supervisory system that follows all levels of health care services and that is based on QI principles. Communities will also have the opportunity to evaluate the quality of health care services, through focus group discussions and exit interviews and make suggestions for improvement. Furthermore, communities will be represented on the health center development committee, where decisions regarding the disbursement of CIF are made. (See section below for further details)

Trained women's groups will market the distribution of ITM bednets and condoms, an approach that has been started at the Bunyala ADP PHC project. A feasibility study was carried out to determine the communities' willingness to use nets and make them available locally at a cost the community can afford. As the Busia District population in Bunyala PHC has similar demographic and socio-cultural characteristics, it seems appropriate to bring a similar effort to neighboring Teso District.

Powerful factors contributing to sustainability at the community level include: community generated remuneration of CHWS, adequate training and supervision of CHWs and VHCs, clear lines of communication, participatory decision-making, income generating opportunities, and the communities' awareness that their health status has improved.

Strategies for Achieving Sustainability at the Health Facility Level

The technical and administrative capacity of health personnel staff will be enhanced through training. QI will be used as a springboard to sustain momentum. Linkages between the three levels of health services (hospital, health center, and health post) will be strengthened through clear lines of communication, participatory decision-making and supervision, information sharing, and improved quality performance. The project will improve health facility performance by providing client focused high standard quality services including the availability of drugs.

Income generated through CIF will increase as will the availability of essential drugs and supplies. The CIF is a community driven government approved program that generates income for a health

facility by charging each client < 5 years who enters a small fee for service, Ksh 10. All income is used for the facility and is based on needs as decided upon by the health center development committee. This committee is made up of a representative from each sub-location in the center's catchment.

In addition, the Facility Improvement Fund (FIF), only applicable to health center level facilities, charges persons <5 years, Ksh 10 for each drug given and for each laboratory test performed. This fund is not directly used by the health facility; rather all the money is deposited in a local commercial bank with bank slips sent to the central MOH for verification. The health facility can request for only 75% of the collected money based on a proposal prepared by the facility staff showing how the money will be used. For example, health center A has generated Ksh 5000 in September. It will deposit this money in a local commercial bank, send bank slips to Nairobi and write a proposal, for example, for a new stretcher needed in the clinic costing Ksh 3750. If granted, the MOH will send an approval (Authority to Incur Expenditure, AIE) for expenditure of the money on a new stretcher, which will be purchased locally through the DMO. But, the process often breaks down and the health center may not get the stretcher or will receive a sub-standard one from the district.

Other factors supporting sustainability at the health facility level include: QI mentor in each facility, standardized use of protocols and health messages, collecting and using data for decision-making, and increasing the morale of staff through QI, support services and new opportunities to learn.

Strategies for Achieving Sustainability at the District Level

One of the central components of this project is to strengthen the DHMT and the other designated management bodies to improve their capacity to deliver quality health services throughout all branches of the health care system in the District. By addressing needs identified by the DHMT and incorporating them in the development of this CSP proposal, close partnership with the DHMT is assured, and prospects for sustainability enhanced. The project will focus on major problems identified by the communities, by health facility personnel and by the DHMT. The DHMT already attempts to address these problems, but has neither the technical capacity nor the resources to do so in an effective way. Through the project, the DHMT and other management bodies will learn new and creative ways to tackle problems, utilize resources, generate new resources, build partnerships and linkages that will not only improve the health conditions in the district, but also their personal accomplishments. This transformation of the DHMT will be one of the strongest factors contributing to sustainability.

The Teso CSP will serve as a platform for the DHMT and the District Development Committee to apply for additional resources in the intervention areas. The National Malaria Control Program has already solicited proposals from the DPHO based on CSP activities on Africa Malaria Day. The CSP has attracted interest from the national AIDS control program as well. WV's HIV/AIDS specialist is drafting proposals to several international donors for complementary funding to support AIDS community support activities.

Constraints to continued sustainability of commodity based interventions, especially those requiring consistent drug supplies will be the availability of these drugs in the communities. For this reason, the CSP will work with private sources, i.e. pharmacies, drug sellers, and perhaps CHWs, as well as strengthen the public health sector.

Innovations introduced in the country, such as LQAS, BEHAVE model, Positive Deviance analysis, will be shared with other PVOs through the technical partners group. There is discussion in Kenya of starting a country level group similar to CORE. This idea evolved after the "Fresh Air" international NGO malaria conference held in Nairobi in November 2001. WV will discuss this idea with the CSP partners and contact other CORE PVOs represented in Kenya. Such a group could do much to take to "scale" CS activities since most CORE members work in partnership with local DHMTs.

Contributions to the AfriAfya, a network of health-based national NGOs that share information and collaborate in training and evaluation activities will be a major dissemination activity that will help spread the influence of the program

I. Behavior Change Strategies

The project will combine health communication with empowering health education approaches aimed at changing the health status of the population. Using a variety of techniques to reach non-literate populations that are culturally acceptable, the project will reinforce health messages from other programs (i.e. ITN programs) as well as develop IEC materials to complement the new IMCI approach to child health in the district.

The first steps for incorporating a behavior change approach into the Teso CSP occurred during development of the DIP. Extensive community and DHMT level discussions, focus groups, surveys and interviews were conducted. Open ended questions to identify what the problem behaviors were, whose behavior needed to change, whether change is possible, and what the project could do to promote these changes, were the focus of the intervention working group sessions during the DIP workshop. Action plans began to evolve naturally during these discussions as participants began to brainstorm and discuss possible behavior changes.

The project working groups identified topics requiring additional focused formative research, which along with findings from the KPC will provide the basis for project messages. The process of identification and negotiation of methods to use within the communities will take place during the second and third quarter of the first project year. Teso and Kiswahili language messages will be developed to complement the English language materials used in much of the country. Mass media, including radio will be used where possible. Radio is still nationalized in Kenya and community based broadcasting has not developed in Western Kenya to the extent it has in other countries.

The project will also make use of mass gatherings, such as sports events and chief's barazas where large numbers of the target audience gather. Schools will be used for child to child messages on household behaviors: hand washing, promoting immunization of young children, prompt care seeking for sick children, etc. as well as AIDS prevention messages. Studies have shown high dropout rates of young girls due to pregnancy and HIV exposure. Positioned along a major truck route, young school girls are frequently picked up by truck drivers, only to be abandoned in another part of the country after high risk sexual exposure.

The behavior change approach will be a dynamic process occurring throughout the life of the project with feedback to the project partners, staff and communities occurring during regular meetings. Behavior change strategies will be a special focus of the mid-term evaluation, with focus groups discussing the effectiveness of the approaches up until that time. Trials of improved

practices, such as Home Management of Malaria (HMM) will be conducted in limited areas, with the working groups involved throughout the implementation of the trials.

Much attention has already been paid to target audiences, resulting in the conclusion that targeting men is essential to any health behavior change in the target area. Additional potential targets will be chiefs, traditional healers, and other influential members of the community. From the studies prior to the DIP workshop, it became clear that targeting mothers of children alone would have very little impact on improved health care seeking and treatment behaviors.

Special focus on providing a safe place for PLWA to gather and receive support will promote destigmatization of the disease in the community. The CSP will also participate in community events, using puppetry, songs, and socio-drama to attract attention. These techniques have been used successfully elsewhere in Kenya to promote AIDS messages. Contests with AIDS message competitions will be explored to encourage open discussion of AIDs and provide information on VCT.

After additional formative research is performed, the BEHAVE framework for planning the specific intervention program components will be completed. This will also incorporate the IMCI target behaviors, which will be introduced in the third quarter of the first year. It is premature to begin promotion of these behaviors since the DHMT and the communities have not yet been exposed to IMCI.

Strengthening the DHMT to Promote Change

The Health Facilities Assessment revealed problems in drug supplies and staff training, but it also revealed under-utilization of many facilities. Clients expressed confusion about what services to expect when attending health clinics, such as prenatal care. Missed opportunities due to scheduling or reluctance to open a vial for only one vaccination were cited. Some respondents cited rude treatment as a reason they didn't like the care at the clinic. Surveyors cited the need to do training in interpersonal communication as a way of improving quality. On the other hand, DHMT officials cited poor morale in health facilities due to being blamed for things, such as poor drug supply or poor facilities, over which they had little control. The CSP will continue the process started during the DIP development to dialogue between the DHMT and communities about measures under their control to improve services and provider morale.

To promote true community ownership of CS programs, Participatory Learning and Action techniques are already employed, involving participants from the social sector, teachers, health board members, district officials as well as members from all sectors of the community. In some cases, groups were separated by gender to encourage the women to be more vocal.

To the greatest extent possible, the project will try to avoid predetermined behavior change activities. The working group participants, and community groups have already demonstrated the ability to think through possible measures to address existing health programs. Feedback to the District Development Planning Office expressed the Teso CSP is the first development activity in the district that has extensively involved Teso citizens in the planning and development of the program. There already exists a strong correlation with the perceived needs of the communities and the public health problems identified with technical assessments. Through this process, participants in the DIP workshop came to consensus that diarrheal diseases could not be left out of the CSP.

Fortunately, the technical ability to use HH-CIMI as the framework of the project allows this element to be easily incorporated into the program.

Formative Research

The Teso CSP is privileged to be located adjacent to the USAID Bungoma Malaria Project, a five-year research and implementation project. Extensive Operations Research studies were undertaken by organizations such as the Centers for Disease Control, BASICS, and AMREF. Most of the research is relevant to the design of the Teso CSP. The Teso CSP does not have the funding to replicate these studies in Teso District, but many of the circumstances and operational issues are similar, if not identical. The issues and recommendations from the Bungoma Research will need to be validated in Teso, with specific focus group discussions and key informant interviews. Specific issues to be addressed are described in the intervention, supervision, and quality assurance sections of the DIP.

Teso CSP staff have extensive experience conducting focus group discussions with many different sectors of the health care system and the community. One behavior change technique to be used to determine key behavior determinants will come from the BEHAVE technique investigating "doers" from "non-doers" in desired behaviors, such as prompt care seeking, compliance with IMCI guidelines, ITN usage, IPT provision, etc. These investigations will be used to triangulate information from the KPC, health facilities discussions, baseline focus group discussions, PLA exercises, and findings of the Bungoma Operations Research.

Additional research needs to be done on raising women's status, especially within the family, for decision making about resources and care seeking. Early investigation pointed to men, primarily husbands, in polygamous relationships wielding the power in decision-making. This power was adversely affected by high levels of unemployment, poverty, and alcoholism. Questions to be answered through focus group discussions, held in the community where men gather will revolve on what are the determinants in their support of health behaviors at the household level, and careseeking for sick children and prenatal care for pregnant mothers. What factors could be influenced by CSP interventions to assist in positive behaviors at these levels?

The intervention working groups in the DIP workshop extensively discussed the four key decisions in taking a comprehensive behavior change approach:

- Whose behavior needs to change to bring about the desired health outcomes?
- Why aren't they doing it now?
- What activities address those factors?
- What do you want to help them to do?

Slow progress in bureaucratic change at the DHMT level have hampered the speed with which the CSP has moved forward with the additional questions in each area, but plans are underway toward more in depth analysis of the feasibility and effectiveness of planned behavior change interventions.

Policy Level

As part of the DIP development, MOH existing priorities and policies, as well as future plans were assessed and how they would impact on recommended behaviors, national level availability of essential IMCI drugs and changes in HIV/AIDS policy and VCT availability. IMCI national implementation plans were assessed. USAID and MOH support for HIV/AIDS, malaria and IMCI were reviewed and discussed at the national level. These dialogues resulted in recognition of the

role of the WV TCSP as a catalyst for upgrading the Teso district health services. Within a short time, the MOH began offering assistance to the CSP in assessing training programs and resources for VCT, IMCI training, and involvement in the National Malaria Control Program.

Institutional Level

The TCSP is already involved in behavior change at all levels, especially at the institutional systems level (DHMT). Assessments have been undertaken about current counseling attitudes, skills and practice, quality of care, product availability and acceptability and organizational and management factors. The leadership of the CSP in initiating the first Teso observance of International Malaria Day resulted in the District Public Health Officer citing this leadership as the basis of on the ground activity for a proposal to the National Malaria Control Program. The CSP demonstrated ITNs and mobilized the community for the Malaria Day Observance.

Institutional analysis undertaken in the baseline assessments and subsequent DIP workshop discussions identified institutional barriers to progress with the CSP workplan. The CSP facilitated training from the MOH Headquarters Deputy Head/ Division of Planning and Finance responsible for training health teams to come to Teso and review the DHMT roles and responsibilities for team building, management training and policy review. The CSP also invited the Provincial Health Team to assist the DHMT with the aim of strengthening the structural functions of the DHMT to support and integrate the CSP interventions and activities with their programs.

To support DHMT behavior change at the health center level, the project will engage satisfied users as allies, train health workers to conduct small group discussions and provide one on one counseling and support.

Community Level

Through PLA, the KPC process and results, focus group discussions, and key informant interviews the community social hierarchy and networks, social norms and sources of social support/social pressure were reviewed. The CSP staff are all Kenyan nationals, though not from Teso, but are familiar with broader Kenyan cultural norms having worked in community health and development activities in the past. In order to further develop strategies to improve the enabling environment for change, additional focus group discussions and interviews with chiefs and other leaders will be completed. As a first step in raising the status of women in the community, the CSP will form women's groups where they do not already exist. These groups will serve as a venue for delivery of health messages and discussion, as well as provide social support for desired behavior change. Special attention will be paid to forming HIV/AIDS support activities, community mobilization and information about VCT and where to obtain it, men's support for household IMCI behaviors and appropriate careseeking and community support for desired change. The project staff will undertake surveys of 20 "doers" and 20 "non-doers" to understand community norms in desired behaviors. The project is fortunate to have the benefit of the rich research reports from the Bungoma Malaria project, much of which has cross cutting implications for most of the interventions.

Family/household

Abundant useful information about perceived family roles and responsibilities was gathered during extensive focus group and PLA exercises completed as a part of the baseline surveys. Discussions around HIV/AIDS revealed multi-layered factors influencing male-female relationships and traditional patterns of responsibility for widows. Men's recognition of wife inheritance as a major practice needing change is seen as an important opportunity for negotiated behavior change. For this

reason, critical thinking exercises and involving men as partners in planning household behavior change activities is essential. More discussion is needed on specific areas. Negotiated men's behaviors as well as support for an enabling environment for caretaker behavior changes are the major potential BC interventions for the CSP at this level.

Individual

The Teso KPC provided abundant information about knowledge of mothers of children 0-23 months old. Some focus group discussions revealed men had great concerns about their perceived risk of acquiring HIV/AIDS from wife inheritance. Focus group and KPC questions revealed significant HIV/AIDS stigma to the point of denying PLWA were present in the respondent's village. Other questions indicated fear of carrying for HIV positive relatives or children playing with infected children. Much of the IEC strategy focuses on individual behavior. Community mobilization provides social support to participate in CS interventions, such as the upcoming measles/Vitamin A vaccination campaign or Teso Districts International Malaria Day observation. Improving health worker counseling skills should increase effective face-to-face counseling which is severely lacking now.

The CSP recognizes the deeply entrenched cultural practices in Teso which have evolved over centuries which most of the population recognizes must change in the face of threatened extinction from AIDS. Deaths from AIDs are now so high that for the first time, in 2001, deaths equaled births in the district. Change in the intense relationships involving kinship and male-female familial roles must be approached sensitively and not rushed. The Teso population has demonstrated remarkable willingness to put behaviors on the table for discussion. The participatory process of deciding behavior change interventions will continue over the next several months and will be revisited throughout the entire project.

J. Quality Assurance

The Teso CSP will approach QA based on the four principles as a fundamental set of beliefs and values that become a "way of doing things" in any organization. These include:

Client Perspective and Needs

Using the QI cycle in a solution-oriented approach, the Teso CSP will improve management skills and empower people at all levels of health service delivery. QI principles of avoiding blame, but rather to strengthen processes and teamwork through client-centered approaches and use of data for decision-making will be used. The CSP will computerize the HMIS and provide technical assistance, through its partner Aga Kahn, in strengthening the community based information systems to provide useable data. Health facility staff will be trained on basic principles of QI and guided in their application to current problems confronting them within their work place and in communities. Part of this process will be designating coaches/mentors at each facility to provide leadership in using QI to facilitate participatory decision making and to ensure that care standards, particularly IMCI guidelines, are known and followed.

Systems and processes

The Teso CSP comes at an opportune time since IMCI has been recently adopted as the national strategy, Kenya has declared HIV/AIDS a national emergency, and the Roll Back Malaria initiative is stimulating new action in the National Malaria Control Programme. Knowledge of pending change requires DHMT personnel to be prepared to change protocols and practices. Currently unclear, redundant and incomplete guidance and processes contribute to poor quality of care.

DHMT personnel feel blamed by District Government officials for things they feel are out of their control. QA activities in the CSP will work on identifying problems with processes or systems and provide a participatory process on implementing desired change.

Data-based decisions

Lack of complete and accurate information has hampered decision-making at all levels of the DHMT. Reporting from the community level broke down several years ago, though community based providers remember providing regular reports at one time. Relying on paper ledgers and hand tabulation have made it difficult to manipulate the data to answer a variety of questions. Strengthening the HMIS, and training DHMT personnel on how to make decisions using the data and monitor and evaluate implementation of these decisions will improve the basis for these decisions.

Teamwork

The DHMT is designed on the antiquated hierarchical bureaucracy left by the British from colonial times. In reality, the DHMT members collaborate with each other and outside partners in a variety of activities supporting health care in the district. QI activities will be strengthened by the contribution of the participation, experience and knowledge of major participants and stakeholders.

Quality Dimensions in the CSP

The QI program of the CSP will focus on the following dimensions of care delivery:

- ❑ Technical performance: this will include adherence to guidelines such as IMCI algorithms, compliance with case management protocols, providing health education to clients, etc.
- ❑ Effectiveness of care:
- ❑ Efficiency of service delivery
- ❑ Safety - both for the client and the health care provider
- ❑ Access to services: making it easier to get to services or bringing the services to the client
- ❑ Interpersonal relations: this is an especially important issue in Teso. Listening and counseling skills, explaining treatment regimens to clients, accurate history taking, confidentiality, courtesy, trust and respect need to be taught and reinforced at all levels.
- ❑ Continuity of services: appropriate and timely referral, counseling clients to return if treatment is ineffective, case followup at the community level, etc.
- ❑ Physical infrastructure and comfort: CSP staff have discussed minimal structural rehabilitation of the Amagoro Hospital building to meet basic hygiene and aesthetic standards.
- ❑ Choice: assuring clients that compliance with treatment recommendations is a choice and they have the right to refuse service or answer any questions they choose.

The CSP desires to achieve the maximum achievable level of quality in all areas mentioned above. While desiring the optimal level, the project recognizes the extreme resource limitations and the impossibility of addressing all factors that influence the quality of health care in the district. QA activities will address several parts of the system from inputs, process and outcome.

While QI/QA has been accepted as a fundamental focus of the CSP, the necessary analysis and processes have just started. WVUS has identified some professional consultants to travel to Teso to assist in the development of the QI/QA component. The WV/South Africa project and the WV/Philippines project have extensive experience in employing QA techniques in Child Survival programming. This activity will take place early in FY2003, after the IMCI training has been completed.

SECTION II: PROGRAM MANAGEMENT

A. Management Approach

One of the characteristics of HH/CIMCI is participatory management at all levels of the program. The WV/K CSP staff and the DHMT provide members to a project steering committee at the field level, which has scheduled quarterly meetings to make decisions on the CSP implementation. The technical partners have formed a "technical working group" which consists of representatives of WVK, CARE, Aga-Kahn, AMREF, and JHPEIGO. Their meetings are also held quarterly. They provide technical oversight and advice to the CSP. Future meetings will incorporate USAID, IMCI National Level representatives, and the National Malaria Control Program. These meetings are held in Nairobi.

World Vision US will provide the project with technical advice and up to date materials on all interventions, plus cross cutting issues such as behavior change communication, monitoring and evaluation, quality assurance and program management. World Vision US technical and managerial staff are in telephone and e-mail contact on a regular basis. The World Vision US Child Survival Headquarters backstop is Tom Hall. He has extensive fieldwork experience in East Africa with specific expertise in field based malaria programs. Additional members of the health team, Larry Casazza, Anne Henderson, and Fe Garcia collectively have decades of Child Survival implementation experience and have all contributed technical expertise in the development of the DIP. World Vision US can also arrange for trained professionals working in other WV programs to visit the project and provide specialized technical assistance. Quality Assurance and possibly LQAS sampling techniques are two technical areas under discussion for the first quarter of the second project year. As described in the technical assistance plan WVUS staff is in close contact with World Vision Kenya via e-mail, telephone, fax and high-speed mail delivery services. Several field visits by WVUS staff are scheduled throughout the life of the project.

World Vision US will also provide grants, financial management, and budget expertise to WV/K, especially about compliance with the terms of USAID cooperative agreement reporting requirements.

See Attachment G for organizational charts delineating key personnel relationships to WVUS headquarters, WVK and Teso CSP.

B. Human Resources

B.1. Key Positions at WV Kenya level

- **Project Manager** (1FTE) is responsible for the overall management of the project: planning, organization and implementation of project activities. She provides supervision to the divisional field coordinators (DFC), being a member of the project steering committee. She gets technical support and supervision from the WVK national office health team, regional health advisor and the WVUS technical support team. Administrative concerns will be supported by WVK National Office particularly Operations and Finance and Administration departments. She is a nurse with graduate level public health training from the United Kingdom. She has extensive experience working in NGO health programs in Kenya and Sudan. She is fluent in English and Ki-Swahili and has excellent written and oral

English skills. She supervises all the divisional field coordinators, whose responsibilities include coordination community level activities and CHWs performance

- **Divisional Field Coordinators (2FTE)** will be paid staff of the project reporting directly to the PM. One of the Divisional Field Coordinators has training and experience in conducting PRA's and holds a BA in Sociology. He also has experience in community water and sanitation activities in the project area. The other DFC has extensive experience working and living in community health programs and conducting in-qualitative assessments probing sensitive cultural topics
- **Training Coordinator (1FTE)** The training coordinator is responsible for coordinating all training activities. He is a university graduate with extensive experience in facilitating and conducting community and MOH facility health training and supervision programs. He is a former MOH employee who had responsibility for training DHMT staff in districts throughout Kenya.
- **HIS Coordinator (1FTE)** The HIS coordinator will be responsible for setting up a joint and agreed upon information system with MOH that links both community-based and facility based information system levels. S/he will be a university graduate with experience in HMIS, data base management, and statistical expertise. A master's degree in information technology and medical statistics would be an added advantage for this position.
- **Field Motivators (2-4 FTE)** These positions were created as a result of the DIP development process. The recruitment process has just begun. These are individuals; both men and women will come from Teso district and demonstrate strong community mobilization skills as well as the ability to relate well with the WV CSP staff. They will live in the community and be the major liaison with community leaders and community based health providers
- **Accountant (1 FTE)** The project has hired a highly qualified and certified public accountant to provide financial management.
- **Drivers (2 FTE)** Two drivers will be hired to provide full time driving services to the project and will be reporting to the project administrator. The CSP anticipates filling these positions with Teso residents, but has detailed drivers from another part of Kenya until the recruitment is concluded.
- **Project Administrator (1 FTE).** The project Administrator will be hired by the project and will be responsible for coordinating administrative functions of the project office: office logistics, drivers, recurrent costs (postage, telephone etc) communications etc. S/he will have experience in office management at an administrative level. Every effort will be made to hire from the Teso district.

B.2. Human Resource Management

The table below lists the personnel associated with the CSP.

Affiliation	Type Worker	#	Responsibilities	% Effort	Remuneration
WVK Staff	National Director	1	Overall responsible	5%	WVK
	Operations Director	1	Operational backstop	5%	CSP
	HRD	1	Recruitment	5%	WVK
	CB Assoc. Director	1	TA Capacity building	10%	WVK
	Grant's Manager	1	Financial Management	10%	WVK
	TA Staff	2	Technical Support	25%	CSP
	HIV/AIDS Spec.	1	Nutrition Support	10%	WVK
	Comm. CB	1	Community PLA	10%	WVK
WVK/CSP	Project Manager	1	Onsite overall Responsible	100%	CSP
	DFC	2	Support, QI, PLA	100%	CSP
	Training Coordinator	1	Training/Supervision	100%	CSP
	HMIS Coordinator	1	HMIS development	100%	CSP
	Field Motivators	2-4	Community Liaison	100%	CSP
	Administrator	1	Coordinating Admin.	100%	CSP
	Accountant Drivers	2	Financial Management Driving	100%	CSP
DHMT	DMO	1	Partner in overall Operation of project	30%	MOH
	DPHN	1	Training/Supervision	25%	MOH
	DNO	1	Vit A, CDD	25%	MOH
	DIO	1	Coordination HMS	10%	MOH
	DCO (pediatrics)	1	Case Management Malaria/pneumonia	10%	MOH
Health Facility Staff	CO	10	Health Services	60%	MOH
	KEN	60	Health Services	60%	MOH
	PHO	5	Health Services	25%	MOH
	RN	16	Health Services	60%	MOH
	PHT	27	Health Services	60%	MOH
	Lab. techs	4	Laboratory Services	60%	MOH
Community	CHWs	158	Community Services	80%	Communities
	VHCs	11	Community Services	20%	Communities
	Women' groups	tbd	Marketing	80%	Communities
	Health Boards	14	Community support for health services	50%	Communities

Through monthly steering committee meetings with representatives from all partners and the community, information and decision-making will be transparent and participatory. This is different from the usual top down hierarchical decision making practiced in most government organizations. At the community level, community members will develop their own plan of action that is in synchrony with project plans and objectives. Monthly site support visits will strengthen this process.

The baseline surveys revealed that many CHWs, TBAs, and Village Health Committees are inactive. The TSP proposes to reactivate four village health committees per quarter and work with 158 CHWs, 289 TBAs, 49 CBDs and 16 Growth Monitors over the life of the program. The CHW/Beneficiary ratio is estimated a one for every thirty families per month.

Health Boards consist of two Hospital Management Boards, one District Health Management Board, one DHMT Board, four Health Center Committees and seven Dispensary Committees. They are the direct link of the communities with the formal health system. Additional formative research

will be conducted in the last two quarters of Fy2002 to determine training and support activities for the boards and village health committees to find the best ways to involve them in the three tiers of HH/CIMCI.

The anthropologist position in the original proposal has been deleted. Current staff members have significant experience in conducting qualitative assessments and sensitively assessing community cultural values. World Vision Kenya has had difficulty filling technical and administrative positions from Teso district resident. DHMT physicians come from outside of the district and are frequently rotated. The establishment of the community motivator position is one attempt to formalize representation of both men and women from Teso in the project staff.

Technical assistance from the PVO CSGP will be essential particularly for the implementation of KPC surveys, QI programs and loan and cost-recovery schemes. The type of TA most useful to the project will be for expert staff to conduct orientation sessions or workshops with the field staff and partners and through sharing materials and supplies that have already been developed.

Direct managerial responsibility for the CSP Teso staff lies with the project manager. The Divisional Field Coordinators will coordinate activities of the motivators, and act as the project liaison to communities. DHMT health facility staff supervision is the responsibility of DHMT employees, but World Vision will lend technical and logistical support to improve the quality of supervision. Supervision will include site visits, client exit interviews, job description check sheets, IMCI clinic registers, and review of HMIS reports. Where possible, the DHMT will be encouraged to pair up good performing HCWs with those whose performance needs improvement. This strategy has served to improve health worker performance in other child survival projects. Health worker performance is one major factor that will be addressed in project QI technical assistance.

C. Contingency and Security Plan

Teso is an isolated district with very little crime. The major hazard for staff will be road accidents, although even this is not a serious problem in Teso since all the roads, except for one, are not paved and poorly maintained; speed necessarily is kept to a minimum. The major security threat is from disagreements over extension of the Teso district borders and possibly unruly behavior from men who imbibe too much of the local alcoholic beverage. CSP staff have requested WV/K to investigate the feasibility of providing the Divisional Field Coordinators with radios to maintain communication with the main CSP office. This would facilitate communication with CSP staff members in case of any problems. Teso is on the border with Uganda, but relations with Uganda are good, and Teso residents frequently cross into Uganda to visit relatives.

The project director is responsible for security measures at the project level in consultation with World Vision Kenya headquarters in Nairobi. There are no immediate concerns about personal safety in the Teso area.

Teso community is relatively homogeneous and therefore, ethnic equity and representation will not pose a problem. However, low status of women in decision-making will need to be addressed in the formation of community groups. CSP activities will actively seek a balance of genders in all participating groups.

D. Technical Assistance Plan

World Vision US provides technical assistance by yearly project site visits, assistance with technical training materials and advice obtained from participation in CORE and collaboration with multiple USAID and international technical assistance projects such as the Environmental Health Project, BASICS, NGO Networks for Health, WHO Roll Back Malaria Program, the IMCI partnerships at WHO. World Vision US employees several experienced Child Survival Specialists who contribute technical advice to all CSPs. The World Vision technical backstop visited the project in early 2002 to assist in development of the baseline studies. He will participate in the review of the DIP and arrange opportunities for the project manager to visit several health technical programs and meetings while she is in Washington. He will also select the outside evaluation team leaders for the mid-term and final evaluations for USAID approval and participate in those evaluations.

World Vision US has a strong history of promoting field program participation in regional technical meetings such as the Maternal Newborn Meeting, the Micronutrient Meeting, and the recent Fresh Air Malaria Workshop. Where national and regional workshops are available, World Vision will facilitate project staff participation wherever possible.

The CSP has funds provided for technical consultants in Quality Improvement, Voluntary Counseling and Testing, IMCI training, DIP development, strengthening HMIS systems, and monitoring and evaluation. Partnership arrangements with Aga Kahn will assist with HMIS training, with CARE on community drug sales and working with CHWs in CIMCI, with JHPEIGO on malaria in pregnancy, and AMREF in ITN programs.

E. Information Management

When electrical and phone connections are established at the WV Teso office in the near future, the CSP will provide internet connections and eventual access to the World Wide Web which is a rich source of current CSP guidance. Until that time, the World Vision office in Nairobi has Web connectivity and can access CORE, CSTS, RBM and WHO documents as needed to support the project. Commercial fax and e-mail connections are available in Bungoma, approximately 30 minutes from the project office. The project will purchase a high-speed photocopier to duplicate technical documents. DHMT especially appreciate access to updated technical materials. The Teso CSP office is located on the grounds of the Teso District hospital. A library consisting of CSP and health management materials will be available to DHMT partners for their use. The library and materials will remain in the district at the end of the project. By that time, the computer connectivity should be strong enough to allow the DHMT to access the World Wide Web directly. The professional language in Kenya is English, only community level materials will need translation. This will be primarily oral translation, as Ateso is not widely read.

The project manager is able to use cell telephone connections to contact WV/Kenya's national office regularly. Through e-mail, phone, fax, and fast mail delivery, WVUS keeps in close contact with WV/K and Teso to advise on project implementation, monitoring and evaluation. When

F. Financial Management

World Vision will ensure that project staff are trained in USAID financial guidelines and grant management. In addition, project staff will also study World Vision's 13 self-study modules on grant compliance and financial management. These training will enhance project staff

understanding of grant financial processes and, in turn, facilitate accurate reporting. Paid project staff will fill out monthly time allocation sheets, enabling easy tracking of their effort. Financial transactions will be monitored monthly by the project accountant, and all purchases and payments will be documented with receipts. In addition, equipment purchased will have inventory number, thus allowing for documentation of the condition of equipment each quarter. A disbursement book will be kept purposely for recording daily and monthly balance of supplies.

World Vision will request monthly SUN system reports from the project manager to enable the Finance and Administration Director to monitor spending against objectives of the project. Furthermore, the project accountant will carry out quarterly and mid-year reviews of the budget. The mid-term evaluation will also include financial audit by World Vision's regional auditor.

G. Logistical Management

Very few commodities will be procured directly by World Vision. Procurement of two project vehicles is still in process due to registration red tape in Nairobi. They should be in place by the third quarter. Program procurement of ITNs and insecticide will be coordinated with PSI who has DFID funding for a nationwide program. Primary logistical assistance will be through upgrading the DHMT HMIS and Quality Improvement technical assistance that will look very closely at drug, bednet, and condom procurement issues. The CSP has no direct role in DHMT drug commodity procurement, but will assist in problem identification and advocacy with other parts of the MOH to ensure essential drugs are available to support the CSP at the health facility and community levels.

Bicycles for CHWs are included in the budget, but the number will be reduced from the proposal. When they are purchased, it will be locally. No bicycles will be purchased until a thorough determination of which CHWs are active, how many will need to be trained, and a plan developed for sustainable maintenance and spare parts replacement.

The major weakness in commodity logistics is lack of information. Baseline assessments of causes of stock-outs and delays revealed conflicting explanations of reasons. Additional information-seeking exercises will be conducted by CSP staff and the DHMT to see where the system can be supported.

H. Monitoring and Evaluation Plan.

Approximately one-half way through the CSP life of project, the project will hire an external evaluation team leader to coordinate a participatory evaluation of the project at all levels from the WVUS backstop to the household level. Key informant interviews will also be conducted with national level contacts at the National Malaria Control Program, the national IMCI program, NASCOP, and KEPI. This evaluation will be used to assess progress to program goals and utilize participatory decision-making techniques through the steering committees and intervention working groups to make adjustments to the program implementation plan. The project phase out plan will be established at the time of the midterm. If follow-on activities are anticipated, the group will determine what additional steps need to be taken during the final years of the project. Small surveys, such as "doer" "nondoer" analysis, or LQAS may be employed to focus in on key evaluation questions the team wishes to address. Focus group discussions and health facility exit interviews will be used to solicit community perspectives on project performance and progress.

The final KPC survey will take place at approximately the same time of the year as the original survey. This will allow survey findings to be comparable. Malaria and diarrheal disease prevalence

varies widely by season in Teso. Additional qualitative surveys will follow on the findings of the quantitative studies and culminate in end of project lessons learned workshop in approximately June-July of 2006. All levels of project implementation will be involved in analyzing the end of project results and develop consensus on lessons learned and next steps. World Vision US will assist WV/K in selecting an outside evaluation team leader. The helps provide objectivity and fresh perspectives for the project. The last months of the project will be devoted to wide dissemination of project results with a lessons learned workshop. Participants from every level of the MOH will be invited as well as the private sector, the District Development Committee, Provincial MOU representatives and WV/K national staff. World Vision ADP staff will be invited to attend.

The current paper-based ledger HMIS is cumbersome and difficult to use for data analysis. Records are stored in a musty room in the district hospital. District vital statistics are kept in another government office. Community based providers have a history of record keeping at the community level, but the system has broken down in many areas when CHWs dropped out due to lack of incentives. There is no provision for private provider, such as drug sellers, input into the HMIS. The HMIS will be designed in consultation with Aga Kahn's successful community-health system HMIS system. The CSP HMIS coordinator will travel to visit the program with the DHMT HMIS specialist. The CSP will also sponsor the DHMT HMIS staff person to attend computer classes in order to automate and maintain the system.

Locating WV/K CSP staff in communities and frequent PLA exercises with communities will encourage frequent input and feedback from the communities to the project. These same sessions are opportunities to share program results with the community. LQAS will be introduced to the project as a means of small sampling surveys and "doer" "non-doer" positive deviance analysis will be used to compare the effect of project efforts over time. Facility based records and clinic rosters will be used to determine if significant shifts in disease patterns and severity occur, as well as any increases in clinic attendance. Drug stocks will be compared with population estimates and clinic attendance to see if clients are offered drugs in appropriate amounts for complete treatment. Eligible women will enter the formal health system primarily through antenatal clinics. Newborns' mothers will be advised to take their child as soon after birth as possible for the first immunizations, thus receiving a Road to Health card. In reality, however, women and children enter the CSP as soon as they hear a project generated message, or participate in a community health activity.

One major contribution to the high drop out rate among community health workers was the high expectation of the use of their time without remuneration in areas with close to 60% of the population living under the Kenyan poverty line. Either time requirements need to be very small, or the project will need to provide some sort of incentives to participation. Data collection at the community level needs to be kept to a minimum and provide essential information that will impact on decision-making. CHWs will be involved in the development of the HMIS system. The CSP will include them at the time of the design. The design effort will also include data quality cross checks. The project staff became intimately familiar with this process in the data cleaning required for the KPC EPIINFO statistics. Data analysis and healthy skepticism of aberrant findings and follow through investigation is as important as the data collection process itself. The CSP HMIS and DHMT HMIS specialist will devise the supervision plan with check lists and data sampling to see if data is collected and entered properly. Working groups and the Steering Committee will be given periodic printouts of project data for assessment and feedback to the HMIS coordinator. KPC, HFA and FGD findings from the baseline have already drawn attention from the national MOH resulting in assistance in project training activities, including providing trainers. Data will be

used to share with communities the extent of the serious health problems in the area and measures that can be taken at the household and community levels to decrease illness and death.

The project is using multiple tools available from CSTS, CORE, WHO and USAID CA's, in addition to those developed by other CS PVOs to assess and design the program. The USAID Technical reference materials, the CSTS checklist and KPC 2000+ are all in use in the project area. BEHAVE behavior change tools will be adapted for use in the Teso area. The IMCI register for quality control recommended in the Bungoma OR study will be piloted for adoption in Teso after the IMCI training. Many of these tools are ways of assessing performance. Additional checklists need to be developed to capture specific health worker behavior change, especially in Antenatal clinics and IMCI intervention areas. Research has shown that there are multiple factors influencing and maintaining standards in health worker performance in these areas. National MOH guidelines for HIV/AIDS, EPI, Malaria control and IMCI will be adopted by the CSP. The national IMCI algorithm is in development, but should be available early in the project.

WHO SCM guidelines will be used until the algorithm is available. The guidelines already represent approved MOH policy. Adherence to technical policy standards will be one measurement the project will use to assess and improve performance. Minimum standards of service availability, drug stocks and other essential items will be added to supervision checklists and entered into the data base to determine which HFs are performing to the standard and which are not. LQAS can be used to determine priority project areas and behaviors need attention first.

In the Bungoma "Assessment of Non-Technical Barriers to Supervision at District, Facility and Community Levels" in 1998, At the Bungoma DHMT level the study concluded that lack of workplans, targets, supervisory guidelines and schedules to Rural Health Facilities negatively impacted supervision. Staff operate without written job descriptions and the DHMT hardly monitors and evaluates activities at health facilities. It makes infrequent visits to RHF's to give support and solve problems, most of which relate to disease outbreak control. Two supervisors of IMCI activities identified inadequate space, limited support from health facility in-charges and inadequate staff training as major constraints to effective supervision. Lack of transport was cited by every level as hampering effective supervision. Communities identified the absence of incentives to Community Own Resource Persons (CORPs) and lack of transport for health personnel as critical barriers to supervision.

The study methodology used both quantitative and qualitative supervision assessment methods. Three members of the study team were from AMREF, a CSP partner. WV/K will consult with AMREF in Bungoma to review the sources and methods used in the study to see which ones might be appropriate for the Teso project, including the use of dBASE IIIplus and SPSS for HMIS data processing. Selected methods and tools used by the study will facilitate assessing the M&E skills of local staff and partners and where they need to be strengthened.

Recommendations from the Bungoma study most likely to be applicable to Teso include:

- ❑ Sustainable ways for providing subsistence allowances for staff when they go to the field (meals and transportation costs)
- ❑ The DHMT should develop operational plans and a supervision schedule for all RHF's
- ❑ The DHMT should use some of the cost sharing funds to purchase stationary and other data collection essential items. [Lack of stationary has hampered timely submission of reports]
- ❑ The DHMT needs to organize and conduct management training for facility exchanges.

- The issue of CHW incentives and DHMT transport to visit communities (with bicycles or motorcycles was cited as the major issues needed in improving supervision of health activities in the communities.⁴

Once the HMIS coordinator is in place, and cross visits with Aga Kahn are completed, the HMIS officer will identify key activities and elements that need to be in place. He/she will do this in consultation with the CSP steering committee and the intervention working groups. It is not possible to determine what those recommendations will be at this time. On the other hand, as key elements are identified, the HMIS coordinator will be responsible for recommending additions to the M&E plan to include reporting on completion of key activities, or progress towards completions.

I. Budget

The WVUS headquarters portion of the budget has not changed at this time, however, the field portion has and is included in Attachment H along with the narrative explaining the new changes.

J. Workplan

The following is a description of major project activities over the first two years of program implementation:

First Year Key Activities:

Second quarter:

After an initial delay of about 3 months, project staff were hired and placed near Teso. The first half of Project Year 1 has involved extensive negotiation and delays in opening an appropriate office within Teso district. The project was managed from Bungoma, a thirty-minute drive from the Teso CSP office site due to lack of electricity, telephone connections and security in the office space provided by the DHMT. The baseline KPC, health facility, and qualitative community assessments were completed after training and sensitization sessions in February 2002.

Third quarter:

Community RPA/PLA and HMIS preparation will be completed. Data from the baseline surveys was used for the preparation of the DIP, as well as for partner and community feedback. Staff selection and training will be completed.

WVK and its partners – MOH, CARE, JHPEIGO, AMREF, and Aga Khan met to review the complete training/supervision/QI program, and have started the process to determine the specific training/supervision needs, appropriate training materials available. In meetings over the third and fourth quarters, they will elaborate the details of training/supervision/QI program, including the identification of expert trainers, facilitators, evaluators and technical experts. World Vision US is assisting them in this process. During the baseline assessment, DHMT management weaknesses were identified that posed a threat to project implementation. This is likely due to the relatively recent formation of Teso as a district, and relative inattention it has received from the central MOH. The CSP facilitated obtaining a trainer from the national MOH - Ministry of Health Headquarters, Division of Planning and Finance, the office responsible for training health teams. He is the Deputy Head of the Office and provided training to the DHMT on their roles and functions. Feedback from

⁴ Ong'ayo, S, Makuna, S, Kamau, A, and Kariuki, M, "Assessment of Non-technical Barriers to Supervision at District, Facility and Community Levels" Bungoma District Malaria Initiative Programme, July 1998.

the DHMT staff who participated in the training is good and the CSP is optimistic it will lead to smooth collaboration in the future.

The Division Field Coordinators are working with communities on the identification of CHWs, VHCs and women's groups, and started the RPA process in preparation for the DIP, and will continue throughout the rest of the year. Training plans from these groups will be derived from analysis of their current capacities. This process will identify candidates for community-based provider training. CSP staff will visit the CARE Siaya project to observe CHW drug programs in practice. The CSP HMIS staff person and his/her DHMT counterpart will travel to the Aga Kahn project site to observe their community based health information system and find out how to adapt it to the Teso environment. The project will purchase a computer and software and provide computer user training to the DHMT HMIS manager.

At the District level, the project will begin training the DHMT in Community IMCI with technical assistance from AMKENI. The CSP steering committee will assess the essential drug management and CIF systems, as well as outreach services. Necessary supplies and equipment will be procured and put in place for the demanding training and support program. WVK and its partners will identify community-based organizations and capacity assessments will begin in preparation for the first round of ITN sales.

Division Field Coordinators and community motivators will start men's information and discussion groups and do qualitative analysis on ways to include them in project activities. Division Field Coordinators will also make school and teacher contacts to begin establishment of school based anti-AIDS clubs. District level technical working groups: malaria, HIV/AIDS, pneumonia, EPI will continue to meet quarterly to provide input in project implementation.

CSP staff training and site visits for VCT, HIV/AIDS, CHW drug programs, and HMIS systems.

Two major community events are scheduled in the third quarter--Africa Malaria Day, which took place April 25, and the Measles/Vitamin A campaign in June. The CSP has participated in district level planning for the campaign and has started their community mobilization efforts.

The CSP project manager will travel to Washington D.C. for the USAID DIP technical review and to meet with WVUS staff. She will also be introduced to other USAID and International technical programs, CORE and CSTS offices.

Fourth quarter:

DHMT IMCI training will take place over the third and fourth quarters of the first year. Supervision is the last training element. The project supervision plan will be derived from this training started in this quarter, and carrying into Quarter 1 of the second year. CSP staff will write the Annual Report and respond to recommendations from the USAID DIP technical review. BCC strategy presented to CSP partners for feedback and approval.

Second Year Key Activities

First Quarter:

- Begin implementation of district level IMCI activities
- Preparation of Annual Report

- ❑ Quarterly meeting of District technical working groups- plan year 2 activities
- ❑ Quarterly meeting of CSP partners technical group - plan training activities for second and third year
- ❑ Planning begins for Africa Malaria Day
- ❑ Community group capacity assessments continue. Training of first groups begins.
- ❑ DHMT-CSP joint supervision plan for second year developed with Steering Committee

Second Quarter:

- ❑ Joint CSP-DHMT supervisory visits begin.
- ❑ HMIS database completed. Training for DHMT staff responsible for using it.
- ❑ PLA in communities
- ❑ Community based provider training
- ❑ Quarterly meeting of CSP technical partners group
- ❑ Quarterly meeting of district level working groups: evaluation of training activities to date
- ❑ CSP partners and communities participate in Africa Malaria Day RBM activities
- ❑ Quality Improvement Technical Assistance
- ❑ LQAS training

Third Quarter

- ❑ CSP-DHMT-Community Based Providers-Community participate in Tetanus Toxoid campaign.
- ❑ CSP technical group and district working groups meet. Evaluate participation
- ❑ Training programs initiated for CHWs, TBAs, Health Boards, pharmacists and shopkeepers.
- ❑ Planning for Community Based Drug Distribution program (if pilot approved by the DHMT.
- ❑ Establishment of anti-AIDs clubs in schools.
- ❑ Quality Improvement/Quality Assurance Training
- ❑ Implementation of IMCI supervision plan.

Fourth quarter

- ❑ Routine quarterly meetings continue
- ❑ PLA sessions on complementary activities on the HH/CIMCI platform. CSP staff discuss findings with WV/K national staff for complementary funding recommendations
- ❑ Second Annual report preparation. Planning for date and consultant identification for mid-term evaluation.

As part of the Annual Report process, an inventory of planned activities and accomplishments will be compared with the actuality. Included in this analysis will be training goals and objectives and assessment of the impact of training activities on program performance. This will be undertaken using training records, the HMIS, steering committee and working group meetings and community feedback sessions conducted by the community motivators and Division Field Coordinators (DFC).

See Attachment I for a matrix with LOP activities and implementing organizations.

Workplan for life of the project (see Attachment I): Monthly steering committee meetings will be held to review project implementation plan, assess progress made, re-plan if necessary and solve-problems. Training will start at the district level to increase DHMT's stakeholder involvement and commitment to the project through their increased awareness of how new approaches and techniques improve morale of staff and quality of services. As training proceeds to include all

relevant health facility staff, communities will already have been involved in PLA to identify their own strengths and constraints and notion on how to improve on these. Thus, when CHWs, VHCs, and women's group are in place and begin their activities, communities will be in a better position to support the services. Through monthly supervisory support visits and QI approaches that are reinforced continuously at the community, facility and district level services, health services including outreach services will improve. Communication vertically and laterally will be open and inclusive so that all stakeholders will feel an investment in the services. Data from the surveys and assessments will be used to keep the stakeholders informed of progress made, and of difficulties in meeting objectives. Stakeholder input will be sought through monthly site visits, and elaboration of community plans.

As the District is quite small, the intent is to start the program in all four divisions at the same time, thus geographic phasing-in is not anticipated. On the other hand, the absorptive capacity of some communities is much stronger than in others. CS activities will start in those communities with the strongest enabling environment as determined by the baseline studies and additional formative research. In terms of devolution, the project will attempt to work with the MOH resources. If this is not possible, the project will have an increased staff for the first three years of the project to ensure that all systems are in place and functioning, and will slowly transfer all responsibilities to the DHMT by the end of the fourth year. Thus during the fifth year, only a small contingent of WVK should be in place with the DHMT managing most major aspects of the program.

SECTION III: DETAILED PLANS BY INTERVENTION

The Teso CSP is based in the HH/CIMCI Framework developed at the Community IMCI workshop in January 2001. With the exception of HIV/AIDs, all interventions in the CSP are included in the IMCI protocols.

IMCI

The Kenyan MOH has just adopted IMCI as the national policy. Copies of the adopted algorithm are not yet available. Community IMCI has been implemented in one district by AMKENI. IMCI protocols have been implemented in Bungoma as part of the Bungoma District Malaria Initiative.

In Teso, no IMCI-related activities have been conducted to date, including staff training. The MOH schedule for IMCI implementation was not originally planned for implementation in the project site in the first phase of the MOH rollout of IMCI. Discussions between World Vision and the national IMCI office resulted in MOH recommendations that AMKENI provide training to Teso in 2002 and share the costs with the Teso CSP. Supervisory support systems are included in the IMCI training schedule as follows:

Role of the Teso CSP in IMCI

The Teso CSP has facilitated and expedited the introduction of IMCI to the DHMT and will mobilize communities and train community based health providers in improving household case management of child illness, particularly malaria, pneumonia and diarrheal disease. Detailed information in each disease intervention is included under that intervention. The CSP will assist the DHMT through introduction of the national training program in CIMCI, along with practice time and a supervision-training component.

Community IMCI includes the three programmatic elements of the HH/C IMCI framework:

- Element 1: Improving partnerships between health facilities (and services) and the communities they serve.

The CSP will:

Form partnerships between DHMT facilities and communities through working groups and support of community-based workers

Increase utilization of services by collaborating with communities to decrease barriers to care whether physical or personal

Establish mechanisms for community feedback on and/or management of health facilities/services by reactivating village health committees, strengthening the health boards and participating in community focus group discussions and client exit interviews.

- Element 2: Increasing appropriate and accessible care and information from community-based providers.

The CSP will:

Undertake an in-depth assessment of active and inactive existing Community Health Workers and TBAs to determine interest in participation and incentives for sustainable participation. Participating CHWs and TBAs will receive training in health behavior promotion, and possibly distribution of some treatments, such as for ARI and malaria case management, depending on DHMT approval.

Increase promotion of preventive practices by community-based providers through training CHWs, TBAs, women's groups, teachers and village health committees in preventive behaviors such as use of ITN's and handwashing.

Decrease harmful practices of community-based providers by discouraging dangerous practices such as traditional healers extracting the teeth of children with diarrhea, or treating enlarged spleens without referral to a health center.

- Element 3: Integrated promotion of key family practices critical for child health and nutrition. The Teso CSP will:

Increase adoption of key family practices for health, nutrition and development by engaging men, as well as women in discussions on preventive household behaviors.

Engage communities in the selection of behaviors to be promoted and identification of actions to be taken such as "doers" and "non-doers" surveys to identify key positive behaviors to be emphasized and identification of positive deviant community members to serve as examples in appropriate behaviors.

The context of HH/C IMCI framework resting on the Multisectoral Platform will form the basis for continued PLA activities in communities. The Teso CSP will serve as a referral source for projects from other donors and government programs working in those sectors.

Training and Supervision

Community IMCI training will be conducted by AMKENI (Consortium of Path, Engender Health, FHI and INTRAH) and includes supervisory skills training. WV/K staff will devise a plan with shopkeepers for support and in-service training. Supervision will consist primarily of this support. The project will explore forming a shopkeepers association for group encouragement for quality services. Training aids and visual reminders in the form of charts, or calendars (which have been used in Uganda) will also be provided. The Teso CSP will seek to be a resource to shopkeepers, rather than a regulating authority.

As part of the IMCI site supervision, DHMT health care staff will rotate to Amagoro District Hospital to observe serious child illness in order to recognize and appropriately treat such cases when they present at Teso health facilities.

Malaria

Malaria is the most serious cause of child mortality in Teso District. Malaria transmission occurs in high rates year-round, but is most serious in the months following the rainy seasons. Plasmodium falciparum malaria is the dominant type, the majority of which is chloroquine resistant, with some anecdotal reports of SP resistant cases. The vectors are *Anopheles funestus* and *Anopheles gambiae*. Both are night biters.

Fansidar, or SP, is the first line drug of treatment in Kenya. Pharmacies are no longer allowed to sell chloroquine, though there are still some supplies left in communities. Second line of treatment is amadioquine, followed by quinine. There are anecdotal accounts of SP resistance. The Government of Kenya has introduced Intermittent Presumptive Treatment of pregnant women, especially primigravidae, with SP with two treatment doses given in the second and third trimester respectively. The third area of emphasis in reducing malaria mortality and morbidity in Kenya is promotion of the use of Insecticide Treated Nets (ITN's)

Following the three programmatic Elements in the HH/C IMCI Framework, the Teso CSP will approach the malaria component at all three levels.

Improving partnerships between health facilities (and services) and the communities they serve

- ❑ Formation of a malaria working group for Teso District will be comprised of representatives of the DHMT, Health Board members, representatives of the community, and private sector health care providers. This malaria working group will receive specialized technical assistance from experienced professionals working in malaria, such as AMREF Bungoma project staff, PSI technical representatives, and consultants introducing IPT for pregnant women
- ❑ Strengthening DHMT technical and managerial skills in malaria case management and IPT through IMCI training and special training in integrating IPT in prenatal services. Addition of health education about ITNs and their proper use at health centers, hospitals, and outreach activities with net demonstrations and the opportunity for community members to ask questions will be provided.
- ❑ Community level information dissemination and community mobilization about what services community members should expect to receive at health care facilities, and how to access them.
- ❑ Establishment of feedback mechanism through the community motivators, reactivated village health committees, and health boards on services and management of health facility services.
- ❑ Mobilization of community volunteer services, some of which are already in place, to support health facilities.

Increasing appropriate and accessible care and information from community-based providers

- ❑ Improve quality of care of community based providers through additional formative research to understand more about the existing traditional healers and the "quacks" so disdained by the formal health care sector.
- ❑ Inclusion of shopkeepers and drug sellers in problem solving meetings to help design ways appropriate malaria treatment drugs can be made available at the household level in a timely manner.
- ❑ Active participation in the marketing and selling of ITNs to the community levels, by working with local community groups, such as the Bamako Initiative organization in one area of the District. Members of this group will be invited to become trainers of other groups to increase ITN coverage in areas without access to the formal shops. At the same time, project members may provide information to community members, especially in towns, with means to purchase nets at market rates where these nets are available.
- ❑ Training net providers to instruct customers on proper ITN use to prevent child and maternal malaria, as well as care and re-treatment of nets.
- ❑ Active community education through mobilizers, community volunteers, chiefs, and religious leaders about avoiding harmful and useless practices that delay appropriate treatment. Activities

will include traditional healers in the discussion to find alternative helpful services they can provide for their clients.

- The key preventative targeted behaviors are promotion ITN purchase and assurance that pregnant women and small children consistently sleep under the nets. This will include frank discussions with men about the importance of ITN. In addition, both men and women will be targeted for messages about women seeking prenatal care and asking for IPT in the second and third trimesters
- The key curative targeted behavior is early recognition and appropriate early treatment for children with fever.

The 2002 KPC findings showed 71.9% of children had experienced fever within the two weeks preceding the survey, and 50% reportedly had a fever at the time of the interview. Of the children with fever in the last two weeks, 65.9% sought treatment. Over 58% of sought treatment at a health facility, while 26% went to a pharmacy or chemist. Overall, if drug sellers are included together with health facility personnel in project quality assurance technical assistance, 84% of providers can potentially be reached. In a small 1999 study in the coastal area of Kenya, including shopkeepers, resulted in an increase in the appropriate use of over-the-counter anti-malarial by at least 62%. In addition, shop keepers and community members strongly supported the aims and outcome of the program. In another study in rural Tigray, Ethiopia, a randomized trial in two districts with holoendemic to hyper-endemic malaria teaching mothers to provide antimalarials to their sick children at home and compared it to the existing community health worker approach. The study concluded a major reduction in under-5 mortality can be achieved in holoendemic malaria areas through training local mother coordinators to teach other mothers to give under-5 children antimalarial drugs for the fever symptom.

The project will undertake formative research through the malaria working group and project personnel to determine if similar approaches to shop keepers and mother coordinators, using Fansidar can produce comparable results. One constraint will be the skepticism of the local DHMT to community-based distribution of drugs. This appears to come largely from the illegal and unregulated "quacks" already in the communities.

While almost 86% of mothers saw high fever as an indication of illness serious enough for treatment, less than half mentioned "looks unwell, not playing", and only a little over half said "not eating or drinking" was a reason to seek care. Only 16.6% of mothers mentioned lethargy or difficulty waking a child as a reason, suggesting mothers do not recognize the most dangerous signs of malaria or other illnesses. Additional formative research will be done to focus on mother's perceptions of fever to understand the factors that contribute to delay in care seeking.

An important social, economic and cultural barrier to management and prevention of illness lies in the difficulties women experience in obtaining sufficient support and resources from husbands when they must leave the household and pay for outside health services. Women's focus group discussions alluded to severe difficulties with alcoholism and domestic violence when women try to get money and permission to go to the health centers. Many families are polygamous and the husband is often not present in the household to grant permission. Without resources of her own,

women have reported they have turned to prostitution to obtain resources to feed and provide medical care for their children, thus contributing to high risk behavior for HIV/AIDS.

Only 44.4%, however, sought this treatment within the 48 hours treatment window. Since the indicator presumably does not include pharmacists in the definition of health providers, it is possible the percentage seeking care within 48 hours is higher. Nevertheless, shortening the time from onset of fever to treatment will be a major focus of community and household BCC messages. Additional formative discussions with mothers will need to focus on the time the mother recognizes the need for care, and how long does it take afterwards to act upon this decision. Positive deviant, or doer/non-doer, analysis will help to understand the factors in households and communities that contribute positively to those who manage to take their child for care. This will be accomplished by interviews with clinic attendees.

Far more children were given Panadol, alone or in combination with other drugs, than antimalarials for fever, indicating insufficient treatment with effective drugs to combat malaria mortality. Approximately one-third of children with fever were given injections. Less than 20% of children were treated during the last two weeks with an effective anti-malaria drug (SP or amodiaquine) within 48 hours after the fever began. Addressing this deficit will be a major focus of the malaria intervention.

Access to Health Facilities

Approximately 2/3 of mothers report that they live one hour or less walking distance to the nearest health facility. This figure does not explain why 80% of children are not receiving the appropriate malaria treatment in an area where malaria is the most serious disease affecting children. The health facilities survey indicates serious concerns about the quality of services delivered at the health facilities. Focus group discussions both in Teso and Bungoma revealed caretakers often don't know what to expect from the health services and health workers in facilities often do not explain what drug they are giving the child, or what it is supposed to do. An important check and balance system for the child to receive the right drug for the right illness is missing. The survey report indicates the need for additional formative research in this area to understand the reasons behind the lack of care-seeking behavior.

Information not included in the surveys, but important to addressing the problem, relates to location and quality of pharmacies and drugs sellers. Involving these important private sector providers can help the CSP's malaria working group develop appropriate targets for training and health messages.

Quality of Case Management at Health Care Facilities

Analysis of children treated for fever within the last two weeks indicated poor compliance with recommended first and second line antimalarials, even when the child was treated at a health facility. Quality of malaria case management is poor. Formative research conducted Bungoma District in 1998 found some factors, which will need to be validated in formative research in the Teso District.

The English word "malaria" is widely used, but local concepts of malaria overlap in many ways with clinical definitions. When asked what symptoms are associated with malaria, they always include fever, vomiting, and diarrhea and often include cough. This supports international findings of the overlapping presentation of malaria and pneumonia, among other illnesses. This is further supported when the study found "fast breathing" with fever is also considered malaria. On the other

hand, there are conditions that are not always locally classified as malaria that actually are. These include a disease described as “a hard mass on the left side of the abdomen”, clinically corresponding with the enlarged spleen that results from repeated malarial attacks. Another is a disease described as "hot body with cold feet" accompanied by diarrhea of a particular color. The significance of this disease is it should only be treated with herbs, thereby denying the opportunity for malaria effective treatment. The study recommended:

- ❑ Using the IMCI orientation around danger signs, rather than disease names, is well suited to local concepts of illness.
- ❑ HCWs should ask their patients about specific symptoms, rather than illness names, since local use of the word, *malaria*, as well as local translations differ somewhat from clinical definitions.
- ❑ Community IEC messages, using Teso language terms, should be derived from local diseases which are not commonly considered as malaria, such as enlarged spleen, to raise awareness that these diseases should be treated like malaria.

In addition, the Bungoma Formative Research study found some HCW's ask few questions and do not adequately capture the treatment history. In one case, the researchers observed a HCW refusing to look at a card she had brought which documented treatment in another facility that had failed. In addition, researchers found little communication given by HCWs about drugs given and dosages. Where SP was given, mothers were rarely told about the features of the medication, such as that only one dose is required, or that it may take time to work and will not by itself reduce fever such as chloroquine does. Caretakers are not usually given written instructions and bottled liquid medicine is not labeled. Caretakers bring in their own bottles, often containing the instructions for the former medication it contained. Exit interviews in the Bungoma study found about 20% of mothers could not name the anti-malarial they were given, and 25% could not cite the correct dose. "A significant proportion of mothers leave the facility with a hazy idea of how medications should be given."

In order for malaria to be treated in a timely manner, the caretaker must recognize signs of illness as soon as they appear. There is some evidence that some caretakers may not be defining a child as ill soon enough. The Bungoma Formative Study questioned mothers about how the child was the day *before* becoming ill. Most named expected warning signs, such as diminished activity, loss of appetite, and crying/irritability. Identification of these symptoms as signs of illness in the Teso KPC were also very low. About 25% of the respondents in the Bungoma study did not see any warning signs, and a small minority can name symptoms, such as fever or vomiting that should have led them to suspect the child was ill. There is concern some mothers may be accepting some of these signs as normal, thereby delaying care seeking. The Teso CSP will conduct extensive community and facility based focus group discussion around the subject of febrile illness and signs to take the child for treatment to try to understand more about this important decision making process. IEC messages will be derived from these findings and communicated through community discussions, drama, and song.

Both the Teso KPC and the Bungoma Formative research found that mothers first treat fever at home and the treatment is primarily with drugs. Treatment with antipyretics was the most common. Only 19.5% of children were given SP or amodiaquine within 48 hours. The Bungoma study found that some mothers said they would have preferred to give SP, but it was too expensive. Kenyan law has changed recently and chloroquine is not supposed to be available in pharmacies. Yet its appearance in the Teso 2002 KPC indicates some chloroquine is still available. The same study found waiting time and poor treatment as reasons mothers were reluctant to take a sick child to the health facility. The Teso CSP will explore in depth both users and non-users of health facilities'

perceptions of reasons to go or not go to the health centers. This is a cross cutting issue for all interventions, but especially malaria and pneumonia.

The Bungoma study also found pharmacies were acting as *de facto* health facilities, some either formally or informally diagnosing illness. In some of the home treatment cases, the child was brought in to the pharmacy for examination and diagnosis, some even have their own separate "treatment" room. Some pharmacies give injections (illegally). Injection was probed in the KPC for pneumonia, but not malaria. Further formative research is needed on caregiver drug administration to derive IEC messages and serve as the basis of CSP discussions with pharmacists and drug sellers. There are obvious advantages of seeking drug treatments at pharmacies over health facilities. They are less costly and rarely have waiting times. Health facilities tend to recommend a fairly standard set of drugs that caretakers can get at a pharmacy; thus, no added advantage of going to a health facility is appreciated.

Small shops also sell a wide assortment of commonly needed items, including pharmaceuticals. They provide a convenient source of basic drugs, especially for rural residents who do not have ready access to pharmacies. Prices tend to be higher than pharmacies because they cannot buy in bulk. Shops tend to carry a limited number of antimalarials and a wider variety of antipyretics. Shop vendors do not have training regarding the use of these drugs. In addition, they tend to get their stock from unofficial suppliers who may not have stored the drugs properly, and their own storage areas are often inadequate.⁵ The Teso CSP will draw upon the following Bungoma study recommendations after adaptation to the Teso District:

- ❑ Work with pharmacies to develop an intervention strategy in malaria case management
- ❑ Prescription regulations should be enforced to curb easy access to legally-restricted drugs such as antibiotics and quinine
- ❑ Specific home-care guidelines need to be developed and appropriately communicated to mothers.

The effective management of malaria in year-round high transmission areas such as Western Kenya, requires prompt access to effective anti-malarial treatment. This means having treatment available as near the home as possible - either in the community or in the home. The project hopes to draw upon the home management of malaria (HMM) lessons collected at the joint Roll Back Malaria/WHO Tropical Disease Research meeting in Ghana in January 2002. In addition to strategies leading to overall strengthening of HH-CIMCI programs, the promotion of pre-packaged antimalarial tablets available at a reasonable price, and promoting the use of tablets, rather than the anti-malarial syrups commonly used in Africa results in significantly higher compliance with effective malaria treatment.

While viewed with considerable skepticism and some opposition in the DHMT, the Teso CSP will explore options of community based malaria and pneumonia treatment in Teso communities without reasonable access to health care facilities that provide appropriate case management. This has been done successfully in the CARE Siaya CSP in pneumonia case management with CHW's

⁵ Baume, C.A., "Formative Research on Care-Seeking for Febrile Illness: Kenya. BASICS Technical Directive: 00-KN-01-014. USAID Contract Number: HRN-C-00-03-00031-00.

selling treatment in communities. No significant abuses of this system have occurred. CARE is a partner in the Teso CSP and cross visitation with the project has already been arranged for May 2002.

Several new HMM studies are scheduled to start in the next few years. Using lessons learned by CARE in the Siaya project where SP was introduced at the community level using community drug sellers, the project will seek to negotiate agreements with the DHMT to pilot Community/Household malaria treatment schemes where access to health services within 48 hours is not feasible.

Community Based Providers

Neither the Teso KPC nor the Bungoma studies found Community Health Workers (CHWs) or traditional healers playing a significant role in malaria case management. Traditional healers are generally consulted only after other options have failed. In a few other cases, the traditional healer was asked to treat conditions such as enlarged spleen that may not be recognized as malaria related. The study found that traditional healers cooperate with the modern health sector, and advise patients to seek care at a health facility. The Bungoma study recommended:

- Consideration of Community Health Workers playing a greater role in community case management of febrile illness by giving them the ability to distribute and monitor drug doses. The CSP will pilot-test using CHWs in a particular geographical area to test the feasibility of this strategy.

As explained in other areas of the DIP, initial discussions of community distribution of drugs by CHWs has met with considerable resistance from the DHMT, largely due to the presence of unregulated "quacks." The Teso CSP will undertake additional discussions with the DHMT to further understand the source of this concern. In addition, CSP personnel, including DHMT representatives, will visit the CARE Siaya project to see first hand how concerns about CHW involvement with drug distribution has been successful. CHWs in Teso are largely inactive, citing lack of remuneration for their services as a disincentive to participation. Turnover in the CARE Siaya project CHWs is very low, and drug sales are cited as a powerful incentive to continued participation.

Promotion of ITNs

The Government of Kenya has stated that NGOs will play a critical role in the government's strategy of providing and enabling environment for ITN commercial market growth. The government seeks collaboration in three main areas of activity that is consistent with the Teso CSP program plan.

- Promotion and IEC.

Starting with the very first year of the project, the CSP has taken a leadership role in Teso District's participation in Roll Back Malaria (RBM). Using International Malaria Day, April 25, as a rallying point, the CSP has established a steering committee to plan activities for the day, organized DHMT personnel, sensitized the MP and District Development Committee, organized ITN demonstrations and provided IEC materials developed through the National Malaria Control Programme. Through these activities, the CSP has established the first direct linkage between the Teso DHMT and the National Malarial Control Programme. As a result, the District Public Health Officer wrote a proposal for future activities to the National Malaria Control

Programme, citing the CSP's establishment of the steering committee as a basis for future malaria activities in the District.

The CSP will contribute to RBM scaling-up activities in Kenya by expanding partnerships with women's groups, health boards, pharmacies and drug shopkeepers and the District Development Committee. Participants in the Malaria Working group represent a wide array of individuals from Teso District. As needed, the group will be expanded, possibly to include drug sellers and traditional healers to develop consensus on tackling the most prominent, recognized threat to children's health in the district.

The CSP will use song, socio-drama, community meetings, Chief's *barazas* to provide information about malaria in general, and use of nets.

- Targeted distribution and supply of ITNs to vulnerable groups
The CSP will purchase nets at wholesale prices through the PSI program and provide them for cost-recovery programs to existing community groups. (see specifics below)
- Demand creation through subsidized delivery of nets and specifically, insecticide treatments through targeted projects and social marketing.
(see description below.)

Over 75% of respondents recognize mosquito bites as the cause of malaria. Curiously, sharing razors or blades and blood transfusion was mentioned by over 23% suggesting some confusion with HIV/AIDS transmission. Over 21% of KPC respondents indicated there was a mosquito net in the household, indicating net use is acceptable in the communities. According to AMREF, this is a higher figure than the Bungoma Malaria Project baseline study. More interesting, almost 7% of children 0-23 months slept under an ITN the night before, indicating ITN's have already taken hold in Teso. There is speculation that this figure represents nets provided by a Finnish project, now ended, to the Bamako initiative group in the district. If additional investigation proves this to be true, the Bamako initiative group is in a position to sell additional nets and serve as a resource for training other community based groups in ITN programs.

The GOK recognizes that NGOs set up systems to sell nets and insecticide for various reasons. The Teso CSP seeks to complement the market, and/or stimulate market growth with the aim of increasing coverage to vulnerable populations in a sustainable manner. The aim of the Teso CSP approach is to create a permanent system for making ITNs available at the community-level, similar to a Bamako Initiative approach. Starting with "seed" nets and insecticide purchased through the DFID-funded PSI ITN project, costs are recovered through the community sale of nets by existing community organizations. One such group, a Bamako Initiative organization, already has experience selling nets at a price above the subsidized price and will obtain them from PSI. In the third and fourth quarters of 2002, the CSP will be assessing other community organizations' capacity to provide nets, and manage a cost-recovery financial system. Where there are promising organizations lacking managerial and financial systems to sustain a cost-recovery effort, the Teso CSP will provide training before nets are provided. Afterward, the CSP will provide oversight throughout the project so that funds are appropriately accounted for, and teaching is provided to clients in addition to provision of the nets. The CSP will work with the Bamako Initiative group to develop training opportunities and a learning laboratory in the Teso context for new groups to learn

from this experienced group. The project can include the Bamako Initiative Group in CSP C-IMCI training activities over the life of the program.

At the community level, the motivators will work with the health committees, chief-talks with the communities, and CHW's to provide reinforcement for children and mothers sleeping under the nets and timely net re-treatment. In addition, the community motivators will maintain contact with village leaders about "leakage" of the cheaper community nets (green) to the towns or over the border to Uganda, emphasizing the sustainability of the program depends on the nets staying with the vulnerable population.

In September 1998, a multi-stage stratified cluster sampling was used to study 600 households for a KAP survey on ITNs in neighboring Bungoma District. The incidence of "malaria" in the past two weeks was 32% out of 3,840 residents in surveyed households. Out of 1,710 school children, 25.8% had missed school for at least one day in the immediate past term because of malaria. The average cost of treatment of a malaria case (irrespective of the severity) was Kshs 1,243 (US\$20.7). Of the surveyed households, 8.9% experienced at least one death of a child under five years of age in the past 12 months. Bednet coverage (untreated) was 12.2% (Teso 2002 figure is 21.5%) at an average cost of US\$6.0. Out of the respondents in Bungoma with bednets, 54.7% reported to have slept under a net the previous night, but only 32% reported that they slept under the net all the nights in the past seven days. Net owners were aware that nets prevent mosquito bites, however, few (6.7%) stated that nets prevent malaria. Awareness of treatment of mosquito nets with insecticides was reported by 25.3% of the net owners. Of the respondents aware of re-treatment, 21.4% had re-treated the nets at least once since acquiring them.

Out of the respondents from household that did not own the nets, only 14.3% were aware of a place within their sub-location where mosquito nets were being sold. The most frequent reason for not owning at least one net was "I cannot afford/it is too expensive" cited by 71.3% of the non-users of nets. On the other hand, 70.2% of the non-users were willing to pay. Of the non-users, 79.8% were willing to purchase nets on credit.

According to the time in and out of sleeping places, over 80% of the households had members who were at risk for mosquito bites in the evenings, assuming that vector mosquitoes bite mainly between the hours of 10 p.m. and 6 a.m.

Since the Bungoma study, the price of nets has come down to under \$4.0 per ITN, with the new PSI program attempting to help bring the price even lower to the rural poor by charging slightly over \$5.0 to people living in towns.

The study had several recommendations that will be used to develop the specific approaches of the Teso CSP. Some can be acted on immediately, others will take time to develop and seek complementary funding. One of these has to do with selling ITN's on credit. While the MP has identified the extreme need for microfinance activities in Teso district, none currently exists on any scale. Other US based PVOs, most notably Freedom from Hunger, are working very diligently to adapt their microfinance model to increasing ITN coverage in endemic malarial countries.

In the meantime, recommendations from the Bungoma study will be implemented in Teso to:

- ❑ Target IEC messages promoting ITNs at the household level, schools, and workplaces (to reach men.)
- ❑ Mosquito nets will be sold at minimum cost with enough to cover direct costs of procurement and distribution plus a modest profit margin of 10-20%.
- ❑ Timing bednet and insecticide sales to coincide with periods when cash income is available, with credit available for the poorest household. (Experience has shown low percentage of defaulters in ITN credit programs.)
- ❑ Shops, supermarkets, pharmacies, community pharmacies and community groups will all be encouraged to sell ITNs.
- ❑ ITNs should be made available within ten kilometers of most households within Teso District.
- ❑ Additional IEC messages will encourage screened houses against mosquitoes, use of repellents and wearing clothing that adequately covers hands and legs to supplement ITNs.
- ❑ IEC messages will promote regular and correct sleeping under ITNs (compliance) to at least 70% in the past 7 days among individuals at risk of malaria.
- ❑ Aggressive IEC promotion of re-treatment of nets (with individual insecticide sachets wherever possible) and net care to prolong effectiveness of insecticides. Community re-dipping schemes have not been sustainable in Kenya. All insecticides meet international standards for safety. Safety measures for safe disposal of insecticide disposal will be included in re-treatment training.
- ❑ Community IEC messages of how the protective effect of ITNs extend beyond the individual households to promote a sense of community solidarity in the struggle to combat malaria.

Social Marketing of ITNs

PSI is already providing high quality social marketing of ITN's modeled on the "Trust" brand of condoms, which were already available in 40% of kiosks and dukas throughout Kenya as of early 2001. This will allow the Teso CSP project to focus on rural areas away from the main roads and towns. Radio messages are likely to be national in scope, as there is no local radio available. As such, PSI's ITN national social marketing will reach Teso communities with radios.

Malaria in Pregnancy (Intermittent Presumptive Treatment IPT)

In areas of high *Plasmodium falciparum* transmission, such as Teso District, malaria infection during pregnancy contributes to low birth weight (LBW), the single greatest risk factor for neonatal and a major contributor to infant mortality. In addition, malaria during pregnancy is one of the few contributors to LBW, which is amenable to intervention once a woman becomes pregnant.⁶ In 1998, the Kenyan MOH changed the national malaria treatment policy to include intermittent presumptive treatment (IPT) with sulfadoxine-pyrimethamine (SP), otherwise known as Fansidar for pregnant women living in endemic areas. One dose is to be given in the second trimester, the other in the third. Findings in the study suggested women were reluctant to take drugs during pregnancy, but trust health facilities to know if drugs were safe for them.

Most women in the Bungoma Study started prenatal care in their second trimester, both with the health facilities and TBAs. There was little understanding of the benefit of IPT in preventing malaria in the mother or its effect on the fetus. There was wider variability in the quality of prenatal services.

⁶ Williams, H.A. and Mungai, M., "Rapid Assessment of District-Based Malaria Prevention During Pregnancy: Evaluating the problem and the Opportunities for Intervention - Bungoma District, Kenya Malaria Epidemiology Section, Centers for Disease Control, 1999.

The Bungoma study found lower than anticipated prevalences of parasitemia (peripheral 20%, placental 9%) but cautioned that transmission is seasonal in Bungoma and the survey was not conducted during high transmission season. In areas where malaria transmission is fairly seasonal, relatively large differences in rates of parasitemia and LBW have been noted in the rainy/post-rainy seasons compared with the dry season.

Less than one-third of women who attend ANC reported receiving health education. Less than one-third of the 37% of women attending prenatal care who were found to be anemic received the WHO recommended iron or folate. Poor attitudes, long distances and long waits are barriers to women receiving this service. Health Care Workers (HCWs) had little understanding of malaria prophylaxis and how prophylaxis differed from treatment. Many did not know whether prophylaxis was offered within their own facility. There was a lack of understanding of the IPT policy. A large number of different malaria treatments were used by HCWs, even within the same facility. Women who complained of fever were not evaluated properly (no temperature or blood smears taken.) While the Teso Health Care facility study did not specifically address IPT, the findings of the Bungoma Study coincide with several factors identified in the Teso study as affecting quality of care in health facilities in Teso in 2002.

TBA's were perceived as having an important role in pre-natal care, yet lacked community and facility support in the Bungoma study. The same was true in the Teso focus group discussions. Unlike many African countries, Teso women do not feel obliged to remunerate the TBA for her services. Over 31% of respondents in the Teso KPC identified a TBA as the person who assisted with delivery. The Bungoma study found the TBAs strongly encourage women to go to health care facilities for prenatal care. Most participants recognized that prenatal care could be improved with better collaborative practices between HCWs and TBAs.

Recommendations from the Bungoma Study for IPT will be incorporated in IEC development in Teso including:

- ❑ Community mobilization for earlier prenatal services, with an expectation of receiving IPT twice during pregnancy in the second and third trimesters.
- ❑ Provide in-service training to TBAs, focusing on general prenatal care in information specifically related to the prevention/management of malaria during pregnancy. Sensitize communities to the service the TBA's provide and need for community/household remuneration for their services.
- ❑ Update facilities on WHO guidelines for prevention/treatment of anemia including iron/folate.

Surveillance

Currently malaria and fever are included in the MOH facility-based HMIS at the district level. Calculations are done by hand. There is no way to determine the number of malaria cases in child not seen in the health center. The district hospital has the capability to provide malaria smears. IMCI does not require slide positive diagnosis for malaria treatment.

Case Management

Case management will follow the national IMCI protocol for the child with fever. When IMCI algorithms are followed, the overlapping presentation of malaria and pneumonia are addressed through the use of co-trimoxizole, but this regimen is under some question by WHO. These algorithms are not yet available to the districts, but will follow national policy with SP as the first

line drug of choice in uncomplicated malaria, with amodiaquine and quinine the second and third line drugs. See the IMCI section for additional information.

Training and Supervision

Community IMCI training will be conducted by AMKENI (Consortium of Path, Engender Health, FHI and INTRAH) and includes supervisory skills training. WV/K staff will devise a plan with shopkeepers for support and in-service training. Supervision will consist primarily of this support. The project will explore forming a shopkeepers association for group encouragement for quality services. Training aids and visual reminders in the form of charts, or calendars (which have been used in Uganda) will also be provided. The Teso CSP will seek to be a resource to shop keepers, rather than a regulating authority.

Quality Assurance (See this section under IMCI)

Specific to malaria, however, will be focus group discussions, exit interviews, direct observation of health personnel and community based project staff in the teaching and encouragement of appropriate care seeking and treatment of malaria using the correct protocols.

Drug Supply and Availability

See IMCI section. Studies in Bungoma and other districts in Kenya have shown that health facility personnel are reluctant to release SP for IPT, and prefer to keep supplies for treatment. Weaknesses in the HMIS do not provide for timely assessment and ordering of drug supplies. The lack of HMIS hampers the ability to use population projections to forecast drug supply needs. The district officials cite distribution difficulties at the Provincial level as a leading cause of drug stock-outs.

At the DHMT, computerization of the HMIS, plus quality assurance program activities will be specifically targeted at drug supply for all C-IMCI interventions. (See Monitoring and Evaluation for more specific details.) Including the pharmacists and drug shopkeepers in the program will help the CSP map out the public and private drug supplies and issues regarding household access to appropriate timely treatment of malaria. Using a Positive Deviant or "doer/non-doer" analysis, the CSP will engage in the formative research required to better understand more about care seeking and care providing behavior. Care providers, both public and private, will be assessed for positive and negative factors regarding appropriate drug treatment and counseling. From this analysis, the CSP will develop approaches to strengthen factors leading to appropriate care, and avoid factors inhibiting it.

Policy Development and National Planning

Through meetings undertaken as part of the DIP process, World Vision Kenya has developed a relationship with the National Malaria Control Program. The National Office provides the CSP with district level data and copies of MOH approved Malaria IEC materials. World Vision has offered to be involved at the national level for NGO input to the Malaria Program. Through the CSP, the Teso District Public Health Officer has already developed a proposal to the national program.

Case Study: Teso CSP Roll Back Malaria Kickoff April 2002

The Teso CSP partnership (WV/K, Teso CSP, Teso District DHMT, and community members) quickly jumped into action to celebrate the Africa Malaria Day 2002 for the first time by launching "Kokare Malaria Koteso" or "Remove/Roll Back Malaria from Teso." The celebration was hosted by a local primary school with the District Commissioner as the chief guest. Key activities included:

- ❑ Presentations on vector control, especially use of ITNs (including a demonstration by the District Public Health Officer),
- ❑ Presentation of information on malaria prevention in pregnancy (IPT),
- ❑ Presentation of the Roll Back Malaria Africa and the Kenya GOK-initiative by the District Commissioner, and
- ❑ Introduction of the role of community health care providers and households as active participants (C-IMCI framework Element Two) by the WV/K project manager.

Baseline Studies

A study in Bungoma District, a district neighboring to Teso with comparable health problems, the results of three evaluations of health worker performance showed a consistent pattern. Although health workers performed fairly well in classifying (diagnosing) and treating moderate illnesses (as defined by IMCI guidelines), they correctly classified only one third and correctly treated about half of severe illnesses. This pattern was present immediately after IMCI training, as well as months to years after training. Even after supervisory visits showed some improvement, the data indicated that HCWs only referred 36% of children that they themselves identified as having a severe classification.

The study documented that the HCWs performed from 92% to 98% of the assessment tasks (history and physical exam components) needed to identify children with severe illnesses. Thus, assessment skills were not considered to be a problem. The study could not determine from the data whether the health workers made errors in interpreting the assessment tasks (e.g. not recognizing chest in-drawing when present), or in processing the assessment findings to arrive at a classification, or both. Neither could it determine to what extent health workers may have arrived at the correct classifications, but made conscious decisions not to follow IMCI guidelines when assigning classifications and treating the children.⁷

These findings are particularly troubling because Bungoma District Hospital is the referral point for severely ill children for most of Teso District. Thus, lack of a suitable referral point is presumably not a factor in the Bungoma District HCW performance.

IMCI Quality Assurance

Recommendations of the study will be incorporated into the Teso CSP, specifically:

- ❑ Providing an IMCI register/job aid. All health facilities already use registers (some even have designated under-5 registers and health workers are in the habit of using them. This should address the reluctance of some health workers to refer to the IMCI flip chart for assessment and classification guidelines during a patient encounter. It is assumed that it may not be as time consuming as regularly consulting the flip chart, since it only expands on a task that is already routinely performed. HCWs in Bungoma responded positively to the idea and design. HCWs in Teso will be introduced in focus group discussions after the IMCI training to see if they have the same attitude about adopting it. IMCI registers would also make it possible to monitor some quality of care aspects when supervisors or survey teams are not present. Teso CSP staff will consult with AMREF Bungoma staff about their recommendations regarding implementation of the IMCI register.

⁷ Herman, E. "A Rapid Assessment of Health Worker Perceptions and Knowledge Regarding the Classification and Treatment of Severe Illness in Children Under Five Years of Age, CDC-Atlanta, 2000.

- Central supervision. This would introduce bringing an IMCI trained HCW to one of the referral facilities, either Amagoro Hospital, or Bungoma District Hospital two or three times a year to increase the exposure of health workers to children with assessment findings of severe illness, thus increasing their knowledge and skills in classifying and treating severe illness. Emphasizing the importance of recognition and appropriate treatment of severe illness may motivate health workers to improve their case management. Also this would address the problem of ‘missing’ some health workers during facility-based IMCI supervision. Before implementation, Teso CSP staff will consult with AMREF regarding their experience in implementing this recommendation. The CSP will support this activity with transport and expenses for the time the worker is participating in central supervision. CSP staff will also consult with the in-charges about the idea. In Bungoma, the in-charges expressed no objection to the idea of central supervision.

- IMCI site visits, including DHMT and the DEMO if possible, to promote IMCI-friendly facilities. All health workers and support staff of the facility would be requested to attend. A question and answer session would follow a brief presentation on the advantages of implementing IMCI (to patients, health workers and the facility). DHMT representatives can address any disagreements with the guidelines and discuss the reasons behind the design of the guidelines. The question and answer sessions would be followed by a problem-solving discussion to address facility-specific barriers to implementing IMCI. The Teso CSP will consider incentives, or recognition (certificates, plaques, etc.) to facilities that demonstrate significant commitment to IMCI.

National Planning and Policy Development

A direct relationship between World Vision Kenya and the National IMCI evolved from discussions about the DIP and IMCI training plans. District level training in IMCI is just beginning and originally Teso was not included as a priority district. But through engagement with the national MOH, the CSP and Teso District were approved to participate in C-IMCI training provided by AMKENI on a cost-sharing basis. This positions the Teso CSP to participate in a synergistic relationship with another USAID-funded program in promoting the MOH’s IMCI national program.

One delicate area the CSP will engage in involves community based health worker selling malaria treatment. Initial discussions on the issue were not well received, largely due to the presence of unlicensed health practitioners, commonly called "quacks", who provide poor quality and even dangerous care at the community level.

HIV/AIDS

The Teso CSP will address HIV/AIDS at the WV/K staff level, health facility level, the community level and the household level, by:

World Vision/Kenya

- The new WV/K HIV/AIDS specialist has organized a workshop for WV/K staff for May 2002, WV Teso CSP staff will attend. WV staff from five different ADPs attended the DIP workshop and participated in stakeholder problem analysis to learn to how to address AIDS in their ADPs.

Health Facility Level

Update DHMT staff on current therapies and approaches to HIV/AIDS, including:

- ❑ Maternal to Child Transmission and diagnosis and treatment of opportunistic infections.
- ❑ Issues impacting IMCI such as HIV and diarrheal disease, pneumonia and malaria in sick children
- ❑ Introduction of HIV/AIDS testing to centers meeting national VCT standards in two sites
- ❑ Quality Improvement activities aimed at compliance with standards on diagnosis and treatment of STDs, including screening pregnant women at antenatal clinics. Lab technicians skills will be updated, especially for pre-natal screening and treatment for syphilis
- ❑ Workshops about compassionate care for AIDS patients and patient confidentiality
- ❑ Participation in various activities in observance of International AIDS day
- ❑ Awareness raising exercises with both professional and non-professional staff on AIDS and introducing the "red ribbon" campaign
- ❑ In-service training on standard precautions to protect health workers from occupational exposure.

Community Level

De-stigmatize HIV/AIDS by open discussions on AIDS and debunking myths about caring for PLWA by:

- ❑ Workshops and question/answer sessions with health boards, village health committees, TBA groups, CHWs, chiefs *barazas*, school teachers, women's groups and newly formed men's groups, and prevention and treatment options of HIV/AIDS
- ❑ Training teachers on HIV/AIDS information and counseling for dissemination in schools. Teachers have already expressed interest in raising greater awareness about promoting safer sexual practices with students. The WV Zambian and South African experience with school-based "Anti-AIDS" clubs will be used to develop the Teso program. The program will include promotion of compassion and care for families, including providing community support for AIDS orphans.
- ❑ Community partners will mobilize the community to raise awareness of the purpose of VCT and how testing can help individuals and families make informed choices about behaviors.
- ❑ Opening care and support centers for families living with AIDS, including discussion groups referred by VCT centers, whether or not the results are positive. [This is dependent on WV acquiring supplemental funds for this component.] The CSP is collaborating with the private sector, primarily the religious community. There has already been commitment for support group meeting space from the Anglican Archdiocese.
- ❑ Adaptation of socio-drama, puppetry and song programs from other areas to the Teso area, including school programs aimed at reducing high risk activities in adolescents.
- ❑ Providing opportunities for adults caring for AIDS orphans, most often the elderly to express their support needs and assist the community in mobilizing community support for them.
- ❑ IEC activities designed to increase knowledge about signs and symptoms of STD's and where treatment can be obtained.
- ❑ Quality Improvement exercises with CBD's to assess current behavior regarding condom sales. [Approximately 10 per cent of all condom distribution countrywide is by CBDs. The MOH and NCPD intend to continue to encourage the training and recruitment of more CBDs by as many stakeholder organizations as possible. While CBDs will continue to supply some condoms free of charge to users at high risk who cannot afford them, sale of condoms by CBDs will be

supported and encouraged. Revenues generated from this source will be used primarily for motivating/supporting the CBDs themselves in the early implementation of the strategy.⁸ The CSP will expand CBD functions to CHWs and TBAs as one way of increasing access to condoms and providing for remuneration for volunteer community based providers.

- ❑ Once AIDS has been de-stigmatized sufficiently, the project will involve people living with AIDS (either affected or infected) in the community in behavioral change communication activities.
- ❑ Involving shopkeepers and drug sellers in HIV/AIDS training activities to encourage them to educate their customers about condoms and AID prevention.

Household Level

- ❑ Positive deviant analysis of families and individuals who practice measures to minimize risk of acquiring HIV/AIDS
- ❑ Positive deviant analysis of families currently successfully caring for PLWA and AIDS orphans
- ❑ Applying BEHAVE techniques to assess key behavior determinants and use this information in designing IEC activities.
- ❑ Formative research beyond knowledge of condom availability to other access issues.

National Level Policy

World Vision Kenya national staff have established a relationship with NASCOP, the national AIDS and STDs Control Program. Teso district was not originally selected as a priority district for VCT training in the large new training program. Through discussions in the DIP design, the NASCOP is assisting WV/K and the Teso DHMT to obtain training for DHMT and WV personnel in VCT.

The "State of the Art" in AIDS treatment is evolving rapidly in African developing countries. Through the newly established relationship between the Teso CSP and NASCOP, new approaches can be incorporated into the program. One important new approach promoted in the AIDS technical consultation held in Geneva in October, 2000 recommended prevention of mother-to-child transmission should be included in the minimum standard package of care for HIV-positive women and their children."

⁸ Republic of Kenya Ministry of Health, "National Condom Policy and Strategy" September, 2001.

The GOK MOH Guidelines to Antiretroviral Drug Therapy in Kenya recommends the following for antenatal care of identified HIV positive pregnant women:

Category	Diseases	Treatment
HIV seropositive	Well and Asymptomatic	Usual ANC care, VCT, MTCM-AZT. Nutritional support. Treatment of STI.
HIV infected with opportunistic infections	e.g. Pneumonia	Usual ANC, VCT, MTCT-AZT, Treatment of STI. Specific treatment of opportunistic infections.
Immune suppression	e.g. Kaposi's sarcoma, CNS manifestations, miliary TBc	Usual ANC, VCT MTCT-AZT. Treatment of infections. Multivitamins

MOH guidelines recommend Zidovudine to reduce mother to child transmission, citing a 68% reduction (infection status at 18 months) if both mother and baby are treated. A 50% reduction (infection status at 6 months) is possible if mother alone is treated. For the Breastfeeding mother, Nevirapine during labor and to the baby can result in 47% reduction (infection status at 6 months.)⁹

Designing program components addressing the needs of AIDS orphans proved to be more problematic than originally anticipated. During focus group discussions, community members were reluctant to admit the presence AIDS orphans in their community, but readily admitted they were present in neighboring communities. Studies funded by the Ford Foundation in districts throughout Kenya have validated that the stigma of AIDS causes orphans and infect individuals to be almost invisible. Orphans are left to care for themselves or their care is relegated almost exclusively to the elderly¹⁰ who are more likely to live in extremely impoverished homes. The same study found that as a result of having many dependents and responsibilities, the elderly caretakers nutritional status deteriorates. Children are malnourished because of lack of food and even when it is available it has to be shared amongst orphans from several families all under the care of one elderly "granny." Even when orphans are taken in by an elderly person, stigmatization affects children's performance in school and contributes to high drop out rates and many enter criminal gangs or engage in prostitution. The study supports formation of village committees to train a core group of older persons who will in turn form committees to train other older persons to understand what AIDS is and how it can be slowed down. The establishment of IGAs for people caring for AIDS orphans was seen as one way of addressing the poverty common amongst them.

Diarrheal Diseases

⁹ Republic of Kenya, Ministry of Health, "Guidelines to Antiretroviral Drug Therapy in Kenya," 2001.

¹⁰ Kenyan Orphans Rural Development Programme, "The Burden of Care-Giving Placed on Older Persons as a Result of the HIV/AIDs Scourge in Selected Areas of Kenya, June 2000.

In the interest of limiting the number of interventions, diarrheal diseases were not included in the original proposal. But the KPC results, identifying the poor quality of hygiene practices and water supply, as well as discussion with DHMT personnel and community members highlighted the importance of diarrheal diseases to child morbidity and mortality. Data on child illness in the previous two weeks collected in the KPC showed that almost 50% of children had diarrhea and almost 10% had signs of dysentery. DHMT official's state child diarrhea deaths are common in Teso and cases of dysentery are reported. Over 1/2 of mothers did not recognize "looks unwell/not playing normally" and only 16.6% cited "lethargic/difficult to wake", both potential effects of severe dehydrating diarrhea, as signs of illness requiring treatment. More troubling is the finding that only 2.8% of children received increased fluids and continued feeding during an illness. Over 80% cited giving the child less food and fluids during illness. The extent of child malnutrition would support the assumption that feeding during diarrhea is a problem, an assumption supported by the anthropometric measurements taken during the KPC survey.

Diarrhea is most serious during and just after the rainy season where the flooding and poor drainage wash fecal material on the surface into the water supply. The major river running through the district is heavily contaminated and planned government water supply improvements are delayed indefinitely due to lack of funding. A very small percentage of the project population has access to clean drinking water.

Underlying causes that are important factors with diarrhea include poor disposal of child feces and poor hand-washing habits of caretakers. Less than 2% of mothers in the KPC survey practiced all four of the hand-washing behaviors listed. Only 10.2% of infants 0-5 months were exclusively breastfed, indicating the majority of even very young infants are at risk for diarrhea. Almost 48% of these infants were given plain water, an extremely significant finding given the poor water quality in the district. Almost 71% of infants under five months received solid, mashed, or semi-solid foods. Recent research has demonstrated such foods predispose the child to diarrhea and possibly maternal to child transmission of HIV from breast milk.

Since diarrhea was added to the project after baseline surveys were conducted, much of the details about diarrheal diseases were not included in the investigations. One harmful practice known to exist is tooth extraction by traditional healers as a treatment for child diarrhea. Healers are known to surgically open the gums to extract developing teeth below the gum line. KPC findings would suggest that diarrhea and associated complications are not viewed as serious enough illnesses to require treatment. One possible explanation is the magnitude of disease in the community makes diarrhea seem "normal." Additional formative research is needed to understand community beliefs with regard to diarrhea before appropriate BCC messages can be developed. This will take place during the third quarter of FY 2002.

Diarrheal disease is including in IMCI and the Teso CSP will integrate this component as part of IMCI training. In addition, the CSP will:

- ❑ Provide training to community based providers, shopkeepers, pharmacists, and village health committees on causes, prevention, and treatment of acute watery diarrhea and recognition of signs of dysentery.
- ❑ Provide community training through IEC messages on hand-washing procedures, disposal of feces, treatment and protection of household water sources, and child feeding and hydration during diarrhea.

- ❑ Emphasize the importance of exclusive breastfeeding and continued feeding and home based fluids during illness. Catch-up feeding when the child recovers will be promoted.
- ❑ Home-based fluids as well as ORS, when available will be the household level intervention to prevent dehydration
- ❑ Community based providers will be taught to instruct children with bloody or prolonged diarrhea should be taken to the health center.
- ❑ All diarrhea related policies, including vitamin A administration and selection of antibiotics for dysentery will be taught according to the national IMCI guidelines.

The national IMCI treatment algorithm is not yet available. WHO guidelines for treatment of diarrheal diseases, including dysentery and prolonged diarrhea will remain the standard until the algorithm is available.

Recent research presented by USAID's Environmental Health Project (EHP) strongly suggests that household hygiene behaviors are far more important determinants of child illness than water quality. Even in the presence of contaminated water, hand-washing, proper disposal of fecal material, and protection of water sources impact heavily child behavior. The project will emphasize these behaviors with messages derived from additional focus groups.

Pneumonia Case Management (formerly ARI)

There remains some confusion with the term ARI and the essential actions needed to focus on the very young infant who is most vulnerable to dying from pneumonia very soon after onset of the disease. Data at the health facility level combines ARI from various causes and is not very helpful in determining the extent of problems in the district related to pneumonia. Febrile illness with cough is very common. The overlapping clinical presentation with acute malaria is problematic because some children with malaria are treated with antibiotics and some children with pneumonia receive antimalarials. What is more troubling is the number of children who receive only antipyretics. Case reporting at the community is almost non-existent.

In discussions with health care staff and community members, pneumonia is recognized as a serious problem in the district, but no special emphasis is placed on the small infant. Delay in care seeking in this age group can frequently be fatal. MOH protocol states oral Co-trimoxazole is the first line drug for pneumonia. Serious cases, requiring oxygen and antibiotics can be treated at the district hospital, but many caretakers are not willing to travel the distance, especially if they have other children at home.

Household management of pneumonia presents many of the same problems associated with malaria case management. Home management of pneumonia is poor quality with little evidence of compliance with recommended antibiotic doses. Focus groups indicate health workers rarely explain the treatment they are prescribing and fail to explain the importance of completing the entire antibiotic regimen. There is little evidence that traditional healers are consulted in the treatment of pneumonia.

Prevention

The CSP will promote two pneumonia preventive behaviors through health worker training and community mobilization:

- ❑ Complete immunization coverage, including Hib and measles. Hib is a leading cause of acute lower respiratory infection in young children in developing country. Measles can also

- include pneumonia.
- Promotion of exclusive breastfeeding, maintaining vitamin A status and effective complementary feeding Within the context of IMCI and the EPI The project does not have a separate nutrition component, but it is woven into most of the interventions, including pneumonia.

Case Management

Health Facilities

The IMCI standard materials provide case management for first level health workers. The CSP will also be included for training in pneumonia case management (PCM). Counseling skills on case management compliance will also be included in the training. One key determinant behavior is counting respirations on ill children and recognizing abnormal respiratory rates. This is a behavior which is often dropped in the hectic settings of busy clinics.

On-site supervision was one recommendation emerging from the Bungoma project implementation of IMCI. Health workers often have little experience recognizing severe illness. Workers will rotate twice a year through the district hospital to participate in the care of severely ill children and practice appropriate case management under the supervision of the District Clinical Officer pediatrician.

Communities

Community-based providers and village health committees will be taught the importance of prompt care-seeking especially in very young infants. TBA's will be included in the training and advised to teach their clients how to recognize that difficulty in breastfeeding can be an important sign of pneumonia and completely immunizing their children can help to prevent it. All community providers and groups will be taught about signs and symptoms of the seriously ill child needing treatment. Health worker training will cover all of the key actions listed in the CSTS checklist for key child survival behaviors. The IMCI register mentioned in another section of the DIP can be a job aid to health workers to help them to remember all of the assessments and actions required in PCM.

Community groups, especially men's groups, will hold problem-solving meetings to develop ways the community can assist a family with a sick child reach treatment within the necessary timeframe.

The CSP staff will continue to dialogue with the DHMT in order to pilot community based drug distribution through CHWs, similar to CARE's Siaya program design. At the moment, there is strong opposition to this idea. The CSP will sponsor a few DHMT staff to visit the Siaya project and see how concerns about safety and drug control were addressed in that project.

Household

In addition to promoting the known preventive behaviors, community based providers, village health committees and IEC messages will target mothers and fathers to teach them how to recognize the danger signs of pneumonia (rapid difficult breathing and/or chest indrawing) CSP staff will conduct additional formative research to understand local terminology for

danger signs and incorporate these terms in the training.

Immunizations

When the CSP proposal was written in 2000, the national EPI program had deteriorated in quality and coverage of services. Old refrigerators ceased functioning, those that were functioning did not have the temperatures checked vaccine stock-outs were common and myths about associations of childhood vaccines and the spread of AIDS were increasing.

In 2001, the Kenyan Expanded Program on Immunizations (KEPI) received funds from the Global Vaccine Initiative (GAVI). Since that time, cold chain equipment has been upgraded, vaccine stock-outs are rare, and vaccine coverage for measles remains about the level necessary to prevent periodic outbreaks. With the possible exception of whooping cough, there have been no recent outbreaks of vaccine preventable diseases. Therefore, the CSP level of effort for EPI has been decreased and activities will be integrated with IMCI and community mobilization efforts for HH/CIMCI.

Health Facility Level

Part of the IMCI program at the health facility level includes assessing a child's immunization status at each contact. Quality Improvement activities will address "missed opportunities" as well formative research regarding issues contributing to drop outs. Community based providers will be mobilized to locate defaulters and encourage them to come in for vaccinations. Counseling skills will be upgraded so HCWs will explain what each immunization is for and the importance of completing the series.

Tetanus toxoid vaccination will be linked with Intermittent Presumptive Treatment for Malaria and Iron/folate tablets for anemia as a package for the focussed antenatal visit during the second and third trimesters. Community education will tell women what they should expect to receive during antenatal visits and why they are important. Through the HMIS strengthening efforts, tracking maternal vaccines will be enhanced with a record the mother keeps with her about her vaccination and IPT record.

Community level

One major activity in EPI will consist of providing community mobilization and facilitating training in vaccination campaigns. The national measles/vitaminA campaign is scheduled for June 2002. A maternal tetanus toxoid campaign is scheduled for 2003. World Vision CSP staff will participate to help achieve the widest coverage through community IEC and mobilization efforts; the CSP project manager will serve as one of the district level training facilitators. The project will also assist in community level surveillance efforts through training community based providers and health committees on reporting mechanisms during disease outbreaks.

Attachment A

Program GOAL: Sustained Reduction in Under 5 and Child Mortality

Objective	Indicator (baseline findings)	Measurement Methods	Activities
Malaria Prevention To prevent malaria in children and pregnant women	<ul style="list-style-type: none"> • Household bed net possession (21%) • Child ITN use 6.9% 	KPC ITN Sales Records Community ITN surveys Insecticide retreatment sales records	<ul style="list-style-type: none"> • Orientation of PHOs (including PHTs) on ITN-care, use, treatment, • IEC and training of CORPS on ITN • Training of Community groups on ITN marketing • IEC and training of community on ITN - • Community/families/households to purchase and use ITN
Malaria Prevention	<ul style="list-style-type: none"> • IPT in last pregnancy (Baseline not established Except “mothers who took SP drug for prevention during pregnancy (16.3%) 	KPC, Clinic Records, SP drug stock records	<ul style="list-style-type: none"> • Orientation of DHMT and Health Facility staff on IPT. • Adapt IPT guidelines in ANCs in health Facilities (3 health facilities per quarter) • Establish level IPT • Training of CORPS in IPT for advocacy, referral. • PRA sessions with the community and households on IPT
Malaria Case Management Decreased malaria mortality and morbidity in children	<ul style="list-style-type: none"> • Health Care Facility seeking behavior for fever(within 48 hours) 44.4% • Percentage of children with fever treated with SP anti malarial (19.5%) 	KPC, Clinic Records, Focus group discussions CHW and CORPs referral records, HMIS, pharmacy drug sales records, drug stock records	<ul style="list-style-type: none"> • Orientation/training of DHMT on IMCI that includes malaria case management, pneumonia case management ,diarrhea management and other child care practices • Orientation and training of Health Facility staff on IMCI • Support supervision on implementation of IMCI in all health facilities. • Orientation and training of CORPS on IMCI, special emphasis on teaching danger signs requiring prompt care seeking to households • Orientation of leaders in the district (both formal and informal) on IMCI • PRA and PLA sessions with households/community on IMCI • Establish District Committee on IMCI • Adapt the 16 health practice for the district • Establish district strategy to support families to adapt/strengthen the key practices • Curriculum development on IMCI Household Case Management

<p>Pneumonia Case Management</p> <p>Decreased pneumonia mortality and morbidity.</p>	<ul style="list-style-type: none"> Percentage of children with history of cough and difficulty in breathing who were taken to health facility or received appropriate antibiotic within 48 hours of onset of illness (45.5%). 	<p>KPC, Clinic records, DHMT drug stocks, pharmacy drug sales, focus group discussions, exit interviews</p>	<p>See Malaria case management above</p>
<p>Child care During Illness</p> <p>Prompt Care Seeking by Caretakers for child having danger signs of illness</p>	<p>Mother's knowledge on danger signs during illness (21%)</p>	<p>KPC, Clinic records, exit interviews, focus group discussions</p>	<p>As Above.</p>
	<ul style="list-style-type: none"> Proportion of children who received increased fluids and continued feeding during illness (2.8%) 		
<p>Control of Diarrheal Diseases</p> <p>Decreased diarrhea morbidity and mortality in children</p>	<ul style="list-style-type: none"> Mother's hand washing practice (1.7%) Increased fluid intake during diarrhea episode (7.6%) Increased food intake during diarrhea episode (17.1%) 		<p>As above, plus community sanitation IEC campaigns, demonstrations, model households, positive deviant studies, BCC formative research for message development</p>

<p>Immunizations</p> <p>Decreased mortality and morbidity from vaccine and Vitamin A preventable diseases</p>	<p>EPI coverage rate (68.7%)</p> <p>Measles coverage rate (70.%)</p> <p>TT coverage (57%)</p>	<p>Campaign records, immunization cards, clinic records, focus group discussions, KEPI statistics</p>	<ul style="list-style-type: none"> • Strengthen EPI Health Management Information System (include card retention, record keeping, tracking of drop out etc) • Training of Health Facility staff on missed opportunity, referral for immunization, conducting immunization sessions including outreach clinics • Target health workers from ANC, Child Welfare clinics, Curative dept, FP (ALL) • IEC and PLA/PRA sessions with Community leaders, CORPs and Community/households on immunization-dispel fears, share positive outcomes and experiences, explore cultural and religious beliefs that affect immunization. • Strengthen the Cold Chain system • Establish logistics/management system to ensure vaccine availability.
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Objectives	Indicators	Measurement Methods	Major Activities
<p>HIV/AIDS/STI</p> <p>Increased treatment of sexually transmitted infections</p>	<ul style="list-style-type: none"> • Percentage of mother's knowledge of at least two signs of STI (34.9%) 	<p>KPC, clinic records, focus group discussions</p>	<ul style="list-style-type: none"> • Facilitate district to strengthen STI case management and HIV/AIDS prevention and care strategy (will include element of surveillance). • PLA/PRA sessions with community for IEC on HIV/AIDS prevention and care strategies. • Collaborate with district on designing community response to HIV/AIDS (Home Based Care, Care of Orphans, Set up Community Support groups)
<p>Increased knowledge of protective</p>	<ul style="list-style-type: none"> • Proportion of mothers who at least cite two known ways of 	<p>KPC, focus group discussions,</p>	<p>Anti-AIDs school clubs Community discussion groups</p>

measures for HIV/AIDs	HIV prevention (41.5%)		
Decreased Stigma for PLWA	<ul style="list-style-type: none"> Percentage of mothers who indicate willingness to allow own child to continue playing with HIV Infected child (47.1) 	KPC, focus group discussions	Anti-AIDs school clubs Community discussions Positive deviant analysis of families with desired behavior BCC on AIDs transmission and PLWA needs
Increased use of condoms to prevent STI/HIV/AIDs	<ul style="list-style-type: none"> Condom availability/ accessibility (percentage of mothers who indicate knowledge of where to get condom) (66.4%) 	KPC, pharmacy and shop sales surveys, CBD records, clinic condom distribution records, focus group discussions	Social marketing of condoms CBD, CHWs, TBAs and other CORPS sell condoms Pharmacy and drug sellers focus groups
DHMT Management Capacity Increased ability of Teso DHMT to plan, manage and evaluate IMCI and STI/HIV/AIDs programs	<ul style="list-style-type: none"> District annual workplan in place # applications/requests for national/provincial technical assistance # supervision visits to health care visits HMIS provides data for management decisions Adequate IMCI and STI drug stores in place 	DHMT management documents, CSP steering committee meeting notes, clinic records, HMIS, KPC, focus group discussions, HF studies, client exit interviews	DHMT management training IMCI Training HMIS supervision AIDS Job AIDS DHMT cross visits with other CSP programs DHMT training on CORP supervision
Increased ability of private sector providers to provide drugs for IMCI case management	% of pharmacists and drug sellers selling appropriate IMCI case management drugs	KPC, pharmacy and drug seller surveys	Training for pharmacists and drug sellers in IMCI case management drugs Establish pharmacist and/or drug sellers association Pharmacist representation on CSP working groups
Increased Capacity of WV/K to apply CSP lessons learned to other health programs (scale up)	Number of CSP strategies and techniques adopted by other WV/K programs	WV/K reports, WVUS program visits, WVUS site visits	WV/K Capacity assessment and plan (self-assessment) Joint WVUS-WV/K technical and management capacity needs

			<p>assessment.</p> <p>ADP staff from other WV programs participate in CSP design, implementation and evaluation</p> <p>CSP staff share experiences and lessons learned at WV/K conferences</p> <p>CSP staff provide technical assistance to other WV/K programs in CSP strategies</p> <p>WV/K presents results/findings to national MOH offices</p>
<p>Increased Capacity of WVUS to apply CSP and HIV/AIDS lessons learned to other WV/K programs in Africa</p>	<p>Number of Africa WV programs using CSP lessons learned in health programming</p>	<p>WV reports, WVUS survey of WV health programs, WV national and regional meeting minutes, national RBM statistics</p>	<p>Continued capacity assessment with CSTS</p> <p>WV shares lessons learned in communications with country offices</p> <p>WV solicits contributions to documentation of influence of CSP on country programs (Zambian experience)</p>

Matrix for Four Year Work Plan Teso CSP FY2002-2006

Activity	Implementing Organization	Year 1				Year 2				Year 3				Year 4				Year 5				
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
Establish Office	WVK	x	x	x																		
Steering Committee Meeting	WVK, Partners	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Staff selection/training	WVK	x	x	x	x																	
DHMT appraisal	WVK, DHMT		x																			
KPC	WVK, DHMT		x								x											x
Essential Drug Assessment	WVK, DHMT			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			
DIP Preparation	WVK, DHMT	x	x																			
Community RPAs	WVK, partners		x	x	x																	
DHMT training	WVK, partners			x	x																	
Health facility & staff appraisal	WVK, DHMT			x																		
Africa Malaria Day celebration	WVK, DHMT		x																			
Feedback from baseline	WVK, DHMT		x																			
Measles/Vit A campaign	WVK, DHMT		x	x																		
Monitoring/Support visits	MOH, DHMT				x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
HMIS design & implementation	WVK, DHMT		x	x	x	x	x															
Training coordination	WVK, partners			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x				
Staff training	WVK			x	x		x	x		x	x			x		x			x			
Curriculum development	WVK, partners		x	x	x	x	x	x														
LQAS training	consultant						x															
Health facility staff training & follow-up with QI & mentor	WVK, partners				x	x	x				x	x			x	x				x	x	
Lab. tech training	WVK, partners					x																
Women's & mens's groups training	WVK, partners					x	x	x		x	x	x		x	x		x	x				
CHWs training & refreshers	WVK, partners				x	x	x	x			x					x					x	
VCT Counselor training	WVK, partners						x	x	x													
VHCs training	WVK, partners				x	x	x	x			x			x						x		
Procurement ITN	WG, WVK			x	x				x				x							x		
PLA communities	CHWs				x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Outreach services	DHMT				x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Drop out tracking	DHMT					x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Dispensary Comt. training	WVK, partners				x	x					x				x					x		
Health Center Comt training	WVK, partners					x	x			x				x		x					x	
DHMB training	WVK, partners				x			x			x			x						x		

Sustainability planning	WVK, partners				x			x				x			x		x		X	X	X
Annual Report	WVK				x			x													
Midterm Evaluation	WVK partners										x										
Final KPC, HFA, qualitative	WVK, partners																			X	
Community Feedback Sessions	WVK, DHMT			x			x			x			x		x		x		X	X	X
Partnership self assessment	WVK, partners				x			x			x				x						X
Results dissemination activities	WVK, partners				x				x				x			x					X

Teso CSP KPC 2002.

Teso Child Survival Project KPC SURVEY
Feb 2002

World Vision Kenya

Compiled by: Okoyo W. Mutsotso
Teso CSP project Manager.

Contributors: Dr. Florence Ghamunga-Consultant WV Tanzania
Joseph Ngugi (Teso CSP Training Coordinator)
Florence Odek(Teso CSP Divisional Field Coordinator)
Benedict Abwao(Teso CSP Divisional Field Coordinator)

ACRONYMS

ARI	Acute Respiratory Infections
AIDS	Acquired Immune Disease Syndrome
DHMT	District Health Management Team
FIC	Full Immunization Coverage
HIV	Human Immune Deficiency Virus
HMIS	Health Management Information System
IMCI	Integrated Management of Childhood Illness
KEPI	Kenya Expanded Program on Immunization
MOH	Ministry of Health
NMCP	National Malaria Control Program
STI	Sexually Transmitted Infection
SP	Sulfur based anti-malarial drug
TT	Tetanus Toxoid
CSP	Child Survival Project

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EXECUTIVE SUMMARY

The Teso CSP is located in Teso District, one of the 6 districts in Western Province, Kenya. This is a five-year project being implemented in the whole of the district, with a start date of October 1, 2001 and an end date of September 30, 2006.

The overall goal of the CSP is to contribute to the reduction of infant and child mortality and morbidity and improved maternal health in the District, which has been recording poor health outcome indicators. The intervention activities include Malaria Control, HIV/AIDS STI control, Increased Immunization coverage and improved case management of ARI (specifically pneumonia) in the target population, implemented within the HH/Community IMCI framework.

In line with this, a KPC baseline survey was conducted from the 11th - 17th February, 2002 in order to establish baseline information on critical child health indicators in the District and provide information for design, monitoring and evaluation framework of the project.

The specific survey objectives were to analyze and document:

- Prevention, management and care-seeking practice for Malaria and ARI (cough with difficulty in breathing) in the target population
- Establish the immunization coverage rate
- Key Critical Child health indicators (CORE, CSTS)
- HIV/AIDS prevention and Care practices

The Teso CSP has as one of its key strategies the component of building and maintaining partnerships and linkages with the stakeholders for sustainability and impact. The DHMT and the WVK staff jointly participated in the planning and administration of the survey.

All questions and methodologies were based on the survey methodology developed by the CSTS CORE working group, the 30-cluster sampling methodology was used. There were a total of 80 questions. Data analysis was done using Epi-Info software.

A total of 300 mothers/caretakers of children were interviewed. The eligible number of respondents was 289, as 11 of the 300 children were aged 24m and over.

There were 61 (21.3%) mothers aged 20 years and below. Findings on maternal literacy rates (defined as the number of years a mother attended formal school)

indicate that 14.7% of mothers had not attended any schooling. 45.5% of mothers indicated Ateso language as the most comfortable for communication. The majority of the households (89.6%) were headed by husbands/partners.

The underweight (low weight for age) prevalence rate was 14.7% with 12 of these children (4.3%) recording weight <-3 SD (WHO/NCHS reference population).

On the status of maternal and newborn care, TT coverage rate was 57.09%, while Skilled Delivery assistance was only 29.4%. TBAs conduct 31.5% of all deliveries. 32.6% (91) of mothers did not have assistance from anyone during delivery.

The child feeding practices recorded very low rates, with exclusive breastfeeding rate at 10.2%, while complementary feeding rate was at 1.6%. Emerging from the child feeding practices is that children are not given more to eat or drink during illness - only 2.8% with history of illness episode were given increased fluid and continued feeding during illness. On diarrhea management, only 7.6% (8/105) of children with history of diarrhea were given increased fluid during the episode.

The Full Immunization coverage rate for the 12-23 m age group was 68.7%, with a measles coverage rate of 70.1% and a drop out rate of 12.3%. EPI access using DPT was 97.1%. However these rates represent only 64.4% of children who had immunization cards during the survey.

Malaria prevention practices recorded low coverage rates. Malaria prophylaxis use during pregnancy was only 16.3%, while child bed-net use (ITN) was only 6.9%. The household bed net possession rate was 21.5%.

Health Facility Care seeking behavior for both Malaria and Cough with difficulty/fast breathing was 44.8% and 32.1%. On case management of these illnesses, only 14.5% of children received SP anti-malarial, while 45.5% of children with cough and fast, difficult breathing received antibiotics or were taken to a health facility.

Mother's knowledge of danger signs of child's illness is critical in appropriate care seeking behavior. Only 21.1% of mothers indicated knowledge of at least two danger signs of childhood illness that indicate a need for treatment.

HIV/AIDS presents key challenges to overall societal development. There is an urgent need to put in place prevention and care programs in order to address the threats created by the epidemic.

Only 41.2% mothers of children aged 0-23 m indicated knowledge of at least two known ways of prevention of HIV/AIDS. Community condom accessibility was rated at 66.6% as assessed by the mother stating the place of obtaining a condom.

HIV/AIDS Stigma:

This was assessed using the mother’s willingness to care for a sick (suffering from HIV/AIDS) relative, allowing a teacher who is HIV+ to continue teaching or allowing her child to continue playing with an HIV+ child.

The majority of mothers (65.7%), indicated willingness to care for a sick relative, but the responses for the other indicators were 49.1% and 47.1% respectively.

The findings demonstrate low coverage rates for the critical child health indicators. The proposed HH/C IMCI framework provides a suitable operational approach in implementing the CSP interventions, in order to contribute to improved child health in the district.

BACKGROUND

Project location

The Teso CSP is located in Teso District, one of the 6 districts in Western Province, Kenya. The district covers approximately 527 sq km. The district is further subdivided into the four administrative divisions of Amukura, Amagoro, Chakol and Angurai. These are further subdivided into locations down to the smaller unit of village.

ADMINISTRATIVE UNITS, TESO DISTRICT

Type/level of administrative Unit	Number
Divisions	4
Locations	9
Sublocations	87
Villages	1,200
County Councils	1
Town Councils	1

The Teso District was established in 1995, hence the infrastructure is still rudimentary in comparison to other Districts in Kenya. The climatic features in the District vary from granite outcrops (that is a continuation of the Pere Plain), to marshes and swamps in the lowlands.

There is only one paved road in the district that traverses a stretch of 14 km. Access to most parts of the district is via murrum and earth roads. Small-scale

farming is the main source of household food as well as income. Crops grown include maize, beans, sorghum, sugarcane, cotton and tobacco (the last three are cash crops).

Teso District has one of the highest levels of poverty in the country and is among the districts currently being targeted for poverty reduction through the Poverty Reduction Strategies Program (PRSP). Poverty in Kenya is defined as living on 1 USD per day. Statistics in Teso District show the following: 56% of the population lives in absolute poverty; 46% of the population suffers food poverty (inadequate food level); 42% of the population suffers hardcore poverty (not sure of next meal). This gives the district poverty rate of 48 %

The main economic activities in the district include farming and commercial enterprising, though on a small scale. There is no large industry in Teso District. From the 1999 census, the total population of Teso District was 181,481. With a population growth rate of 3.2%, the population is projected to rise to 226,265 by the year 2006. Currently, the population for 2002 is estimated at 199,478. Children below 5 years age comprise 18.9% of the population while women of reproductive age make up for 20.6% of the total population. The target beneficiaries of the project are WRA and children aged below five years.

The health infrastructure comprises 13 health facilities: 2 hospitals, 4 health centers (3 government, one mission) and 7 dispensaries (4 government mission, 1 NGO, 1 Kenya Army).

Health indicators in the district rank among the poorest in the nation. The Infant Mortality Rate stands at 111 per1000 live births surpassing the national average of 74 per 1000 live births¹¹. District data for under five mortality is not available.

According to the 2001 National Preliminary Immunization Coverage report, the FIC for children for Teso District was 43%, while the TT 2 immunization coverage for pregnant women stood at 27 %² in the District (2001). The maternal mortality ratio is recorded at 590 maternal deaths per 100,000 live births³.

The top 4 diseases affecting children in the district are given as Malaria, ARI, Skin Infections and Diarrhea.

The HIV prevalence rate in the district is given at 24 %, however this may not be representative due to a small sample size and underreporting. HIV/AIDS

¹ Teso DMO report

² Ministry of Health, Kenya Expanded Program on Immunization-Preliminary Immunization Coverage Report , KEPI MIS Feb 2002

³ Ministry of Health, Kenya Expanded Program on Immunization-Preliminary Immunization Coverage Report , KEPI MIS Feb 2002

accounts for 20% bed occupancy at the district hospital. The HMIS in Teso district is not well developed.

The high priority packages identified by the MOH that have cost effective interventions include a malaria prevention and treatment package, an IMCI package, an EPI program and an HIV/AIDS/TB prevention and management package⁴. Further, the GOK has issued guidelines and strategies for operationalizing the packages. These include the National Strategic Plan for HIV/AIDS/STD Control⁵, the National Malaria Strategy⁶, The Kenya Expanded Program on Immunization as well as the National IMCI program spearheaded by the Division of Child health⁷. These interventions should significantly contribute to reduction in child mortality and morbidity as they address diseases that contribute to poor child health outcomes.

Teso CSP Project Goals, Objectives and Intervention Activities

The overall goal of the Teso CSP is to reduce infant and child morbidity and mortality and to improve maternal health.

The objectives and intervention activities are:

- To reduce malaria-associated morbidity and mortality in children and pregnant women through improved case management of malaria and pneumonia, malaria treatment and antenatal chemoprophylaxis, and the promotion of ITN and their re-treatment.
- To reduce HIV transmission in WRA and their infants through strategies for behavior change that will include increasing women's confidence and skill to negotiate risk reduction, surveillance and treatment of sexually transmitted infections (STI), strategies to reduce risk of STI transmission, and ensuring that a low cost supply of condoms is readily available.
- To reduce infant and child morbidity and mortality through strategies that will increase full immunization coverage for children before their first birthday, tetanus toxoid immunization for pregnant women and distribution of Vitamin A.
- To reduce pneumonia associated infant and child mortality through strategies that address prompt and appropriate ARI and pneumonia case management (PCM) at the health center and community levels, as well as household recognition of danger signs, and timely care-seeking behavior and treatment compliance.

⁴ Republic of Kenya: Ministry of Health- The National Health Sector Strategic Plan for 1999-2004. Health Sector Reform Secretariat, July 1999.

⁵ Republic of Kenya: Ministry of Health- Strategic Plan for the Kenya National HIV/AIDS & STDs Control Program for 1999-2004. Nairobi June 1999.

⁶ Republic of Kenya: Ministry of Health- National Malaria Strategy 2001-20010. Division of Malaria Control 2001

⁷ The Concept of the IMCI Strategy- Division of Child Health, Ministry of Health, Nairobi (A Concept

Objectives of the KPC survey

The overall objective of the KPC survey was to establish baseline information on critical child health indicators in Teso District and provide information for the design of a monitoring and evaluation framework of the project.

The study population comprised the target population, i.e., children aged 0-23 M and women of reproductive age. The specific survey objectives were to analyze and document:

Malaria prevention practices among pregnant women and children aged 0-23months

Treatment, management and care seeking practices for children suffering from malaria and ARI (defined as cough with difficulty in breathing)

Antigen specific immunization coverage rate among the target population

Mother/caretaker ability to recognize key signs of child illness that indicate need for treatment

Child feeding practices during illness

Behavior patterns in the community (women of reproductive age) that contribute to HIV/AIDS STI transmission

Mother's attitude towards HIV+ members of the community

Mother's knowledge on mother to child transmission of HIV

An overview of the status of child health in the district (as defined by CORE and CSTS)

PROCESS OF PARTENRSHIP BUILDING

The Teso CSP has as one of it's key strategies the component of building and maintaining partnerships and linkages with the stake holders for sustainability and impact .The Teso District Health Management Team is the main implementing partner for the CSP.

The survey period coincided with the project implementation activities.

As a first step, both WVK and DHMT held a planning meeting and committed themselves to work as a team in all project implementation initiatives including the planning and administration of the baseline survey. The DHMT and the WVK

staff jointly identified the level and type of personnel that were to be involved in the survey activities, namely personnel drawn from the various sectors represented at the district. These sectors were:

- Ministry of Health
- World Vision (K)
- The District Commissioner's office (Provincial Administration)
- Ministry of Agriculture
- Ministry of Water
- District Development Office
- Ministry of Education
- Ministry of Culture and Social Services
- District Statistical Office

The joint DHMT/WVK team conducted sensitization meetings with the departmental heads and identified the planning/coordination team. The secretary to the team was the Teso CSP Manager while the chairperson was a representative of the Medical Officer of Teso District. This team had the responsibility of planning for all aspects of the survey. Some of the key outputs from this team were:

- Identified criteria for supervisors and enumerators
- Recruitment of enumerators
- List of discussants for the focus Group Discussion (FGD)
- A plan for the logistics
- Prepared survey timetable/schedule

Members from both the survey coordination team and supervisors participated in the training program for the KPC and questionnaire development. The data collection process gave opportunity to the health workers, administrators and individuals from the other sectors an opportunity to see for themselves the health conditions in the community and household level, and appreciate the type of services they had been providing.

Further, by including sectors that had not been directly involved in health care delivery (e.g. Agriculture, Education, Culture and Social Services) the team members appreciated the fact that each sector has a role to contribute to health care as all the sectors influence or are affected by the level of population health. Most importantly, they appreciated the importance of inter-sector planning and implementation of activities in the district as this would contribute to better performance of the other's sector.

Constraints in making the KPC process more participatory

Inadequate time for training and preparation of the stakeholders to understand their role and contribution and ownership of the survey was the major constraint to greater participation.

METHODS

The KPC 2000+ (CSTS, CORE) and the KPC 2000+ Field Guide were referred to extensively in the preparation, design and analysis exercise.

The method used was the WHO EPI 30 cluster survey methodology.

A team comprising the District Development Officer, District Statistician, WVUS Program Officer and WVK Teso CSP project Manager randomly picked 30 clusters for the survey. The sampling frame work used were the enumeration areas (EA) used for the population census of 1999, obtained from the district statistician's office Teso District, thus the EA was the sampling unit.

The EA were numbered 1-400. Similarly, numbers 1-400 were written on separate pieces of papers, which were folded and placed in a basket. One of the members was blindfolded and randomly picked out one piece of paper at a time up to a total of 30 giving the 30 clusters (See Appendix 2 for the clusters.) The EA are made up of about 2 villages on average, however they do not strictly confine to the village boundary lines.

Thirty clusters of ten households (N=300) comprised the survey population. Mothers with a child under twenty-four months of age were interviewed.

Planning and Training for the KPC Survey

The planning and Training for the KPC survey took place in two phases. The planning was carried out in a workshop held from 29th Jan –1st Feb 2002. The first two days of the workshop were devoted to project orientation of the stakeholders. The remaining period was devoted to the details of the KPC survey as well as training of the supervisors. Activities conducted here included reviewing and revising the questionnaires, translating the questions into Iteso language, Kiswahili and back to English, discussing project indicators, the role of the supervisors, identification of the 30 clusters and mapping them out, logistics for data collection and preparing for recruitment and training of data collectors.

The training of data collectors was carried out from 5th Feb –8th Feb 2002. The trainers were identified by the survey coordination/planning team, and comprised of staff from WV, Ministry of Health and Ministry of Agriculture as well as some of the supervisors who had been participants in the planning and training in the KPC survey workshop held earlier.

The training activities were carried out using a combination of group and plenary sessions. The groups were led by four team leaders (the same group composition were used for the data collection exercise).

The training focused on understanding the purpose and scope of the baseline survey, understanding the tool, community or household entry techniques, communication and interviewing skills. The groups used role-plays to enhance their understanding and the plenary sessions provided an opportunity for further discussion/clarification.

The last day of the training was used for pre-testing the tool in one of the EA that was not included in the survey clusters. The field pre-testing provided additional opportunities for the interviewers and supervisors to practice the identification of a reference point within the cluster and practice random selection of households using the reference point.

This was followed by an afternoon session that provided an opportunity to reinforce training on the issues (e.g. how to randomly select the first house and further techniques for asking the "sensitive" questions.)

Mapping of Clusters

This exercise was carried out on the day after the field pre-testing of the tool on 9th Feb 2002. The purpose was to identify the physical location of the survey. All the enumerators, supervisors and survey coordination team were involved in this exercise. This exercise facilitated the understanding of the areas of operation. During this exercise, the team scheduled the dates for data collection from the different clusters.

Conduct of the Interviews

The household interviews were conducted by four survey teams over a period of 7 days, from February 11-17, 2002.

The teams were allocated to the clusters according to their geographical proximity. This method was preferred to minimize the transport difficulties given the size of the district and the logistical problems experienced by the project during that period (the operational structures were not fully established and so there were financial and other logistical constraints to getting more vehicles).

Each morning, the survey teams met at the Kocholia District Hospital for a short briefing before dispersing to their respective clusters.

The teams (supervisors and data collectors) met in the field at the end of the day where the supervisor checked the questionnaires for completeness and then collected the questionnaires. These were to be handed over to the coordination team the following day in the morning. The supervisors were responsible for the random selection of the starting household and the direction of each cluster.

Due to logistical difficulties, some of the teams started the work very late in the day, as there were very few vehicles to move the teams to the field. On average, there were only 3 vehicles available instead of the planned 6. This also affected the supervision and coordination of the exercise.

Tools

The tool covered the following areas in sequence and different sections:

1. Qst. 1-8 General questions
2. Qst. 8-13 Maternal and newborn care including child feeding practices
3. Qst. 14-17 Immunization
4. Qst. 18 Hand washing
5. Qst. 19-41 Malaria Control
6. Qst. 42-45 Sick Child
7. Qst. 46-55 ARI
8. Qst. 56-81 HIV/AIDS STI

All the Rapid Catch questions were included in the relevant sections listed above. The questions were adapted to reflect the local context in the response categories, while retaining the broad categories. The tool was also weighed against other parameters (e.g. relevance, applicability and simplicity.) Each questionnaire was designed to be administered within a time period of 30-45 minutes. The development of the tool was a joint decision of the supervisors and WVK staff. The questionnaire was translated into Iteso and Kiswahili and back to English only verbally due to inadequate time. The tool was pre-tested in the field as part of the training for data collectors, following which minor adjustments were made. The final printouts were then prepared.

Data analysis

The initial plan was to involve all the stakeholders as identified by the survey coordination team in the analysis exercise. The proposed process was to get a consultant to train and facilitate the team in the exercise. However given the limited time, the analysis was undertaken by a consultant who worked with the WVK Teso CSP team.

Working with a team of 6 data operators, an EPI INFO 2000 database was developed to accept the responses on the questionnaires. Skip-rules were included in the database to make entries simple and avoid data being entered in the wrong fields. Check-codes were also included in the database to restrict the values that could be entered in the fields. The purpose of these was to reduce the amount of errors due to the data entry.

Data entry was done by 6 data operators. The fields/variables generated by EPI INFO 2000 were approximately 300. Once the data had been entered, a validation process was done. All the six data operators went through each questionnaire to ensure that indeed what was in the questionnaire was the

correct value in the database. The process was designed to eliminate data entry errors.

Data analysis was done using EPI INFO 2000, Excel and SAS software. The use of other software was necessitated by the fact that EPI INFO 2000 still has some kinks and could not categorize age groups several times for various indicators that required different age groupings.

There were some errors in calculation of 95% confidence interval values. This was corrected by inserting the Fleiss formulae for computing 95% confidence intervals for proportions in the Micro Soft Excel spread sheet. The process of data entry, validation, analysis and generation of report tables took approximately 20 days working full time.

Some major weaknesses noted with the data were that some questions had inappropriate answers while some information was missing altogether. It also appears that some enumerators were not observing skip pattern rules. These factors may be attributed to lack of supervisors checking the questionnaires before handing them in as planned, and lack of adequate transport arrangements that led to the delay in supervisors handing in questionnaires to the survey coordination team. In some instances the questionnaires were received about 3 or 4 days after the interview making it difficult to go back to the interviewers in case of missing data.

Total number of respondents recruited for the survey was 300. The respondents were mothers/caretakers of children below 24 months. The children recruited were supposed to be below 24 months. However due to field error (supervisors not checking to ensure that only eligible children were enrolled), 11 children aged 24 m and over were recruited.

The analysis was done for children aged 0-23 M (as per the CSTS guidelines), giving a total of sample size of 289. Results presented are for children in this age category alone.

Efforts were made to ensure that all parts of the questionnaires were filled, however respondents had an option of not answering some part of the question(s). The response rate varied between 94%-100% hence for some of the questions the denominator is less than the 289. Where the denominator is different, it means that the response for that variable was not indicated or missing in the questionnaire hence the database.

Some data analysis (about 50%) was performed at the project site while the completion was carried out in the head office. This delayed and affected the data analysis and processing, as there was no constant and effective communication for consultation/clarification between the consultant and the project staff.

Feedback

Preliminary results were given to stakeholders at district level during the DIP workshop conducted in March 2002. Other dissemination sessions to both the Ministry of Health, the communities and stakeholders are planned for April 2002.

FINDINGS AND DISCUSSION

These are presented under the following sections/categories:

1. Mother's and Child's background information

The questionnaire was addressed to the mother or caretaker of the child. Majority (99.7 %) of the respondents were the biological mothers of the children.

The mothers/caretakers age was grouped into two broad age categories. Majority of the mothers (78.8%) were in the age group over 20 years while 21.3% of respondents were aged 20 years and below. Age range of the mothers was 15-45 years.

On maternal literacy defined as the number of years mother attended school, 14.7% had not attended any formal school. The median number of years of schooling was 7, with a mean of 6.4 years.

LANGUAGES MOTHERS FIND MOST COMFORTABLE IN COMMUNICATION

Language	Frequency	Percentage
Ateso	130	45.8
Kiswahili	131	46.1
Others	23	8.1
Denominator	284	

IEC for sharing information with mothers plays a central role in the BCC strategy for improving maternal and child health. During design of the IEC sessions, language of communication will be an important factor to consider.

Household Head

Majority of the household heads were husbands 89.6 %, while female-headed households (headed by mother) were 4.5 %. The project must encompass strategies for reaching both mothers and fathers, to be able to influence household practices.

Child Information

DISTRIBUTION OF CHILDREN BY AGE AND SEX

Sex	Frequency	Percentage	95 % CI
Male	151	52.2	(46.3,57.8)
Female	138	47.8	(41.9,53.3)
Denominator	289		

On child spacing, 11.9 % of households have more than two children aged under five years, while 74.9 % of children were born at least 24 m after the previous surviving child.

CHILD SPACING INTERVAL

Birth space interval	Frequency	Percentage	95%CI
Born before 24 M age of surviving sibling	44	25.1	(19.0,31.8)
Born at least 24 M after surviving sibling	128	74.9	(67.6,80.4)
Denominator (number of children with older siblings)	172		
KPC Indicator: <u>Adequate Birth Interval Between Youngest Surviving Children</u> Numerator: Number of children age 0-23 m who were born at least 24 m after the birth of the previous surviving child =128 Denominator: Number of children aged 0-23 m with older sibling=172			$128/172 \times 100$ =74.9% 95 % CI (67.6,80.4)

Child Nutritional Status

The underweight (-2 z score WHO/NCHS ref) prevalence rate was 14.7%, with 4.3 % of these falling under 3 z scores.

DISTRIBUTION OF CHILD NUTRITIONAL STATUS

Weight for Age Range N=282	Frequency	Proportion (%)	95% CI
<-3 Z score	12	4.3	(2.2,7.3)
<-2 and >=-3 ZScore	30	10.6	(7.3-14.8)

<-1 and >=-2	52	18.4	(14.1,23.5)
<0 and >=-1 Z-score	73	25.9	(20.9,31.4)
>0 Z-score	115	40.8	(35.0,46.8)
KPC Indicator: <u>Underweight(low weight-for age) prevalence</u> Numerator: Number of children age 0-23 m whose weight is –2 SD or Z scores from the median weight of WHO/NCHS reference population for their age (12+ 30= 42) Denominator: Number of children age 0-23 m in the survey who were weighed = 282			42/282 =14.7% 95 % CI (11.1,19.3)

Health Facility Access

TIME TAKEN TO REACH NEAREST HEALTH FACILITY (walking distance)

Time (Minutes/hours)	Frequency	Percentage	95% CI
< 30 Minutes	90	31.3	(25.9, 36.9)
30 min-1 hour	107	37.2	(31.6, 43.0)
> 1 Hour	83	28.8	(23.7, 34.4)
Don't know	8	2.8	(1.2, 5.4)
Denominator	288		

Walking is the main mode of getting to a health facility given that most of the rural access roads in the district are not well developed or maintained and some bridges get washed away during the rainy season.

It is estimated that a mother carrying a child to the health facility, or if the mother is pregnant, may take 30 minutes to cover 1 km. Walking distance may be a contributing factor to mothers failing to take children to health facility for preventive or treatment health interventions. There is need for formative research to establish and monitor health facility utilization as this has direct impact on care seeking practices for sick children as well as immunization.

2. Maternal and Newborn Care including Child Feeding Practices

Antenatal care that includes administration of TT as well as delivery conducted by skilled health personnel are some of the factors singled out that contribute significantly to child health. It has also been shown that immediate breast-feeding following delivery (at least within the first hour) contributes to the infant's health and development as the colostrum is nutritious and contains protective antibodies.

a) Tetanus Toxoid Vaccination

From the study, it was established that the majority of women (89.6%) received at least one dose of TT vaccination. However only 57.09% received the appropriate dose for prevention.

DISTRIBUTION OF NUMBER OF TIMES OF TT ADMINISTRATION TO WRA

Number times mothers given tetanus toxoid injection N=258	Frequency	Percentage	95% CI
1= Once	92	35.7	(29.8,41.8)
2= Twice	105	40.7	(34.6,47.0)
3=More than twice	60	23.3	(18.2,28.9)
4=DK	1	0.4	(0.0,2.1)
KPC Indicator: Tetanus Toxoid Coverage Numerator: Number of mothers given tetanus toxoid injection twice + more than twice (105+60) Denominator: Number of mothers of children age 0-23 m (289)			$165/289 \times 100$ =57.09 95 % CI (51.5,62.2)

b) Delivery Practices

Only 29.4% of deliveries were attended to by skilled health personnel, while TBAs attended to 31.5% of deliveries. 32.2 % of mothers did not receive assistance from any body during delivery.

DELIVERY PRACTICES

Person assisted with delivery (N=279)	Frequency	Percentage
Doctor	15	5.4
Nurse/Midwife	70	25.1
Traditional Birth attendant	88	31.5
Community Health Worker	3	1.1
Family Member	10	3.6
Other	12	4.3

No One	91	32.6
KPC Indicator: Skilled delivery assistance Numerator: Number of children aged 0-23 M whose births were attended by doctor=15 + nurse or midwife =70 (Total 85) Denominator: number of children aged 0-23 m in the survey (289)		85/289x100 =29.4 % 95 % CI (24.5,34.9)

c) Child Feeding Practices

Only 31.7% of mothers initiated breastfeeding during the 1st hour following delivery though the majority of mothers (97.8%) breastfed their children.

The Ministry of Health advocates that infants aged 0-5m should be exclusively breastfed and that infants aged 6-9m should be given complementary foods to breastfeeding.

The WHO and UNICEF list of family practices also include and identify infant and child feeding practices as some of the factors that have a role in child physical growth and mental development as well as disease prevention.

In the survey, only 10.2 % of infants aged 0-5m were exclusively breastfed, while even a smaller percentage 1.6% of infants aged 6-9m were breastfed and given complementary food.

CHILD FEEDING PRACTICES WITHIN THE LAST 24 HOURS

Type of food consumed within last 24 hours (N=289)	Frequency	Percentage	95% CI
A= Breast milk	237	84.9	(77.2,86.0)
B= Plain water	138	47.8	(42.1,53.5)
C= Other liquids	112	38.8	(33.3,44.5)
D= Solid, mashed, semi-solid foods	205	70.9	(65.4,75.9)
E= Anything else	6	20.8	(1.0,4.4)
KPC Indicator: <u>Exclusive Breast feeding</u> Denominator: Infants age 0-5m exclusively breast fed within last 24 hours (9) Denominator: Number of children aged 0-5m		9/88 x 100 =10.2% 95% CI (4.8,18.5)	

CHILD COMPLEMENTARY FEEDING PRACTICES WITHIN THE LAST 24 HOURS (INFANTS AGED 6-9M)

Type of food consumed within last 24 hours infants	Frequency	%	95% CI
A= Breast milk	55	90.2	(79.1,94.9)
B= Plain water	28	45.9	(33.3,57.5)
C= Other liquids	26	29.5	(30.3,54.3)
D= Solid, mashed, semi-solid foods	49	55.7	(67.8,87.7)
E= Anything else	2	2.3	(0.6,10.0)
Denominator (infants age 6-9m)	61		
KPC Indicator: <u>Complementary feeding rate</u> Numerator: Infants age 6-9m receiving breast milk and complementary foods within last 24 hours (1) Denominator: Number of infants aged 6-9m (61)			1/61x100 = 1.6% 95% CI (0.6,5.8)

Based on the data presented under this section, there is evidence of some contact between pregnant women and health workers, given the 89.6 % of TT coverage. This should provide an opportunity to strengthen the information component on integrated promotion of key family practices critical for child health and nutrition in conjunction with improving partnerships between health facilities and the communities they serve.

Given that the TBAs conduct 31.1% of deliveries, they should also be given knowledge to share with the mothers in addressing these practices-hence the importance and need of increasing appropriate, accessible care and information from community based providers (Element #2 IMCI framework).

It is also important to address some of the socio-cultural factors and beliefs that affect women utilizing the antenatal care services as these contribute to low TT coverage. Qualitative information from the FGD revealed that factors which prevent women from attending ante-natal care clinics include:

- Fear that vaccination transmits other diseases and general lack of knowledge on importance of vaccination
- Financial constraints
- Overcrowding during clinic hours, harassment by health workers and distance of health facilities.

In addition, provision of outreach services coupled with strengthening partnerships between health care workers will also contribute to increased TT immunization coverage.

d) Hand washing Practice

The survey set out to establish when mothers wash their hands with soap as this as this is one of the key family practices critical for child health. The results are presented in the table below.

MOTHERS HAND WASHING PRACTICE WITH SOAP

Occasions when mother Washes hands with soap	0-23 n=289	Percentage	95% CI
A= Never	72	24.9	(20.1,30.0)
B= Before food preparation	131	45.3	(39.5,50.9)
C= Before feeding children	98	33.9	(28.5,39.4)
D= After defecation	192	66.9	(60.6,71.5)
E= After attending to a child who has defecated	89	30.8	(25.6,36.2)
* Multiple responses possible			

Emerging from multivariate analysis here is the fact that only 1.7% of mothers wash their hands with soap before food preparation, feeding children, after defecation and after attending to a child who has defecated.

<p>KPC Indicator: Percentage of mothers who wash their hand with soap before food preparation, before feeding children, after defecation, and after attending to a child who has defecated</p>	<p>$5/289 \times 100$ = 1.7% 95%CI=(0,4.0)</p>
<p>Numerator: Number of mothers of children age 0-23m who mention responses B through E above- hand washing practices (5) Denominator: Number of mothers of children age 0-23m in the survey (289)</p>	

3. Immunization: Antigen specific coverage rate among children aged 0-23m

Immunization is one of the proven cost-effective interventions that contribute to improved child health. The current target set by KEPI is to achieve 80% coverage for the immunizable diseases as well as increase the coverage for Vitamin A among children.

Assessment of the immunization status for the survey was based on child card possession (card seen by interviewer). The results are presented according to child age categories of 0=11 months and 12-23 months.

a) Card availability

Card possession was recorded at 64.4%.

CARD POSSESSION

Have immunization Card	0-11 months (n=172)	12-23 months (n=115)
1=Yes (Seen by Interviewer)	119, 69.6%(62.1,76.4)	67, 58.3%(48.7,66.5)
2=Not available (lost, misplaced, not in home)	28, 16.4%(11.2,22.8)	28, 24.3% (17.0,32.5)
3=Never had a card	24, 14.0%(9.2,20.2)	10, 8.7% (4.5,14.7)
4=DK	1	1
Indicator: <u>Possession of Vaccination card</u>		186/289 x100
Numerator: Number of children with vaccination cards=186		64.4%
Denominator: Number of children aged 0-23m=289		(58.5,69.5)

EPI access measured by proportion of children who received DPT/Hep B/HiB 1. There is good EPI access at 97.0% (CI 89.6, 99.9%).

DISTRIBUTION OF CHILD DPT/HEP B/HIB 1 IMMUNIZATION STATUS BY AGE

Age category	Yes	No	TOTAL	95%CI (Immunized)
0-11 months	114(95.8)	5(4.2)	119	(90.5,98.6)
12-23 months	65(97.0)	2(3.0)	67	(89.6,99.6)
KPC Indicator: <u>Access to immunization using DPT/HEB/Hib 1 coverage rate</u>			65/67x100 = 97.0%	

Numerator: Proportion of children aged 12-23m who have received DPT/HeB/Hib 1(65) Denominator: Number of children aged 12-23m in the survey with immunization cards –seen by interviewer (67)	95% CI (89.6,99.6)
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b) Immunization coverage rates

Results of the immunization coverage rates for the 12-23 months age category are presented in the table below

Antigen	N=67	95% CI
BCG	64(95.5)	(87.5,99.1)
OPV 3	58(86.6)	(76.0,93.7)
DPT/Hep B/HiB (Pentavalent) 3	65(97.0)	(89.6,99.6)
Measles	47(70.1)	(57.7,80.7)
KPC Indicator: <u>Full immunization coverage rate</u>		$46/67 \times 100 =$ 68.7%
Numerator: Proportion of children aged 12-23m who received (DPT/HEB /Hib 3, Polio 3 and Measles before their first birthday (46) Denominator: Number of children aged 12-23m. In the survey with cards-seen by the interviewer (67)		95%CI= (56.0,77.9)

These findings indicate higher coverage rates in comparison to the 2001 Teso District EPI coverage report which were:

- BCG 71 %
- DPT 3 54 %
- OPV 3 54 %
- MEASLES 44 %
- FIC 43 %

This may be related to the fact that the assessment for the survey was based on information recorded on cards only. The process of data management at district level may also be another factor (this was pointed out as one of the areas by KEPI).

It is important that for the Teso CSP, there should be an element of continuous collection of other data for monitoring the progress on Immunization coverage including monitoring of disease outbreaks of any of the immunizable diseases. In addition the CSP should also address the aspect of children having and retaining immunization cards for quality monitoring of immunization status, as well as the supporting the EPI Health Management Information System in the District, in line with KEPI objectives.

c) Vitamin A

The Vitamin A coverage among children was less than 50% with the 0-11 months age category recording 23.5%, while the 12-23m age category coverage rate was at 43.3%.

There is no data available for comparison with previous coverage rates either at district level or national level. The current MOH policy is to integrate the administration of Vitamin A with the immunization program. This is another area where the CSP should make a contribution for the district.

4. Malaria Prevention practices among pregnant women and children

a) Malaria Prophylaxis in pregnancy

Malaria is a major cause of anemia in pregnant women increasing the risk of maternal morbidity and mortality. It also contributes to the birth of LBW babies. Prevention of malaria in pregnancy therefore significantly contributes to improved health of both mother and child. The NMC advocates for pregnant women to receive two SP treatment doses (one dose each during the second and third trimester) referred to as Intermittent Presumptive Treatment (IPT).

In the study, 48% of the mothers indicated having taken some malaria prevention drug during pregnancy. Further evaluation revealed that only 16.3% took the nationally recommended drug. The survey did not seek further to establish the number of times during pregnancy the drug was taken-this information should be obtained during implementation of the project (formative research). This information will be required in order to set the indicator of IPT.

DISTRIBUTION SHOWING TYPE OF MALARAI PROPHYLAXIS DURING PREGNANCY

Type of drug taken N=137			
	Frequency	Percentage	95% CI
Fansidar	47	34.3	(26.5,42.2)
Chloroquin	13	9.5	(5.4,15.1)
Metakelfin	4	2.9	(0.9,6.8)
Other	3	2.2	(0.6,5.7)
Unknown drug	42	30.7	(23.2,38.4)
KPC Indicator: Malaria prophylaxis during pregnancy.			
Numerator: Women of children aged 0-23m who took appropriate recommended malaria prophylaxis (Fansidar) during pregnancy (47)			47/289x100
Denominator: Total number of mothers of children aged 0-23m In survey (289)			16.3%
			95%CI=(12.3,20.8)

b) Malaria prevention practice among children

The National Malaria Control Program recommends the use of ITN as one of the ways of preventing malaria especially for the vulnerable groups such as pregnant women and children aged below five years.

Only 21.5% households have bed nets, while the proportion of children who slept under ITN was only 6.9%.

The national target is that 60% vulnerable population will sleep under nets by 2006, and that at least 50% of these nets will be treated with insecticide.

HOUSEHOLD NET POSSESSION

House hold has bed net N=277	Frequency	Percentage	95% CI
1=Yes	62	22.4	(17.7, 27.5)
2=NO	215	77.6	(72.2, 82.0)
3=DK	0	0	

Denominator	277		
Missing Responses	11		
KPC Indicator: <u>Household Bed net possession</u>		$62/289 \times 100$ = 21.5%	
Numerator: Number of children with response 1=Yes (62)		95% CI (17.0, 26.4)	
Denominator: Total number of children aged 0-23 months (289)			

DISTRIBUTION OF CHILDREN WHO SLEPT UNDER ITN

Slept under ITN previous night N=55	Frequency	Percentage	95% CI
1= Yes	20	36.4	(24.1,48.7)
2= No	34	61.8	(47.7,72.7)
3=DK	1	1.8	(0.1,8.1)
Missing Responses	7		
KPC Indicator: <u>Child Bed net Use</u>		$20/289 \times 100$ 6.9%	
Numerator: Number of children age 0-23m who slept under ITN the previous night (20).		95% CI (4.4,10.2)	
Denominator: Number of children aged 0-23m in the survey (289)			

5. Treatment, management and care seeking practices for children suffering from malaria.

The GOK policy guidelines on the clinical management of malaria stress the importance of having fevers treated early and with appropriate first line drugs – sulfur based drugs. Some targets set in line with this are:

- Appropriate management by family/caretakers for cases of fever (that includes timely care seeking)
- Use of nationally recommended treatment/management regimens for cases of fever/malaria by CHW and outpatient facilities

The findings indicate low health facility care seeking practices for children with fever at 44.4 % of the children who had an episode of fever that ended in the last two weeks.

TIME TAKEN TO SEEK TREATMENT FOR CHILD'S FEVER

Time taken (Days)	Frequency	Percentage, 95%CI
0=Same day	32	24.2 (17.4,31.8)
1= Next day	31	23.5 (16.7,31.0)
2=Two days	28	21.2 (14.8,28.5)
3= Three or more days	41	31.1 (23.5,39.0)
Denominator	132	
Missing Responses	3	
KPC Indicator: Health Facility Care- seeking for fever		91/205 x 100
Numerator: Children aged 0-23m with febrile episode that ended during the last two weeks who were taken to health facility within 48 hours after the fever began (91)		=44.4%
Denominator: Total number of children aged 0-23m who had history of fever within last two weeks (205)		95% CI (37.5,51.0)

The decision to seek care for a child's illness was made by the mother in 60.6% of cases, while husbands made the decision in 29.5% of the cases. The IEC for malaria case management as well as malaria prevention should be targeted to both men (husband) and women (mothers) for timely decision making and care seeking at the home level.

Appropriate malaria case management leads to more favorable health outcomes.

Out of the 205 children who reported a fever episode that ended in the last two weeks, only 19.5% were treated with an effective anti -malarial drug within the 48 hours time period.

TYPE OF MEDICINE GIVEN FOR CHILD'S FEVER

Type of medication given and time given in relation to onset of fever	Same day	Next day	Within two days	> 3 days
Chloroquin	8(12.9)	2(3.2)	3(4.8)	0
Fansidar	14(22.5)	4(6.4)	3(4.8)	5(8.6)
Amodiaquine	6(9.6)	2(3.2)	1(1.6)	0
Quinine	3(4.8)	2(3.2)	3(4.8)	2
Brufen	3(4.8)			
Panadol	62(100)			
Co-Trimoxazole	10(16)			
Amoxil	12(19.3)			
Other	32(51.6)			
Unknown	6			
Denominator = 62 (Child given medication)				

KPC Indicator: <u>Malaria case management</u>	40/205 x 100
Numerator: Percentage of children age 0-23m with febrile episode that ended during the last two weeks who were treated with an effective anti-malaria drug (Fansidar or amodiaquine) within 48 hours after the fever began (40)	=19.5%
Denominator: Number of children who report history of febrile episode that ended during the last two weeksx100	95% CI (14.5, 25.5)

6. Child hood Illnesses

Majority of the children suffered some form of illness in the previous two weeks as shown on table below.

Did child experience any of the following in past two weeks	Frequency	Percentage	95% CI
A= Diarrhea	125	49.4	(43.1,55.3)
B= Blood in stool	25	9.9	(6.6,14.0)
C= Cough	155	61.3	(54.9,66.9)
D= Difficult breathing	56	22.1	(17.3,27.4)
E= Fast breathing/short, quick breaths	66	26.1	(20.9,31.6)
F= Fever	183	72.3	(66.3,77.3)
G= Malaria	82	32.4	(26.8,38.2)
H= Convulsions	38	15.0	(11.0,19.7)
I= Other	32	12.6	(7.9,15.2)

a) Maternal knowledge on danger signs

Recognition of child's illness by the mother or caretaker is the basis for timely care seeking practices. Mother's knowledge on at least two danger signs was only 21.1 %. High fever was the most common sign of child illness identified while only 16.6 % identified lethargy or difficulty to wake as a danger sign.

Signs of illness that indicate need for treatment (n= 289)	Frequency	Percentage	95% CI
A= Don't Know	4	1.4	(0.4,3.3)
B= Looks unwell/not playing normally	142	49.1	(43.3,54.7)
C= Not eating/drinking	160	55.4	(49.4,60.8)
D= Lethargic/difficult to wake	48	16.6	(12.6,21.1)

E= High fever	248	85.8	(81.1,89.2)
F= Fast/difficult breathing	61	21.1	(16.6,26.0)
H= Vomits	84	29.1	(24.0,34.4)
I= Other	150	51.9	
* Multiple responses possible			
KPC Indicator: <u>Maternal knowledge of child danger signs</u>			61/289 x100
Numerator: Number of mothers of children aged 0-23m who indicate at least two known signs of childhood illness that indicate need for treatment (289)			=21.1%
Denominator: Number of children aged 0-23m in the survey (289)			95% CI (16.6,26.0)

b) Child feeding practice during illness

When a mother increases the amount of fluid and food she gives her child while he is sick the recovery is much faster, and the child is not as negatively affected by the illness in the long run. The survey shows that the majority of children were given less than a usual amount of food and fluid respectively (83.8% and 84.6%) during illness. The percentage of those who received more to eat and drink was only 2.8% as indicated below. This was cross-tabulated for diarrhea and the results remained within the same range (below 20 %).

Child feeding practice during illness (Fluid and Food intake)

Amount child given to drink during illness	Amount Child Given to drink during illness	Amount child given to drink during illness
1=Less than usual	214(84.6%) 95%CI (79.4,88.3))	212(83.8%) 95%CI (78.5,87.7)
2=Same amount	31(12.3%) 95%CI (8.6,16.6)	32(12.6) 95%CI (8.9,17.1)
3=More than usual	8(3.2%) 95%CI (1.5,5.9)	9(3.6) 95%CI (1.7,6.4)

Denominator (Children with history of illness in the past two weeks) = 253	
KPC Indicator: <u>Care/ Management of child during illness (Food and fluid intake)</u>	7/253 x 100 =2.8%
Numerator: Proportion of children age 0-23m who received increased fluids and continued feeding during an illness in the past two weeks (7) Denominator: Number of children who report episode of illness that ended during the last two weeks (253)	95%CI (1.2,5.3)

KPC Indicator: <u>Increased fluid intake during a diarrhea episode</u>	8/105 x 100 =7.6%
Numerator: Percentage of children aged 0-23m with diarrhea in the last two weeks who were offered more fluids during the illness (8) Denominator: Number of children had diarrhea episode that ended in the last two weeks (105)	95% CI (3.6,13.7)
KPC Indicator: <u>Increased food intake during a diarrhea episode</u>	18/105 x 100 =17.1%
Numerator: Percentage of children aged 0-23m with diarrhea in the last two weeks who were offered same amount or more food during the illness (18) Denominator: Number of children had diarrhea episode that ended in the last two weeks (105)	95%CI (10.7,24.9)

7. Acute Respiratory Infections

ARI is one of the leading causes of child morbidity and mortality. Timely and appropriate care and treatment does significantly reduce the burden of associated mortality and morbidity. The severe form of ARI that must be addresses is Pneumonia, defined here as "cough with fast/difficulty breathing).

Under the section on Childhood illness, only 21.1% of the mothers identified “fast/difficult breathing” as danger signs that indicate need for treatment.

66.3% of the children in the survey gave a history of cough with difficult breathing. Only 32.1% of the mothers of these children sought advice within 48 hours from when the child first presented these signs. Almost 50 % received antibiotics from either a health facility or from an alternative source.

CARE-SEEKING BEHAVIOUR FOR CHILD SUFFERING FROM COUGH WITH FAST/DIFFICULT BREATHING

Time taken to seek treatment (n=57)	Frequency	Percentage	95% CI
0=Same day	9	15.8	7.9,26.3
1=Next day	16	28.1	17.4,39.9
2=Two days	11	19.3	10.5,30.4
3=Three or more days	21	36.8	24.8,48.9
Missing Responses	3		

MEDICINES GIVEN FOR CHILD’S ILLNESS (COUGH WITH DIFFICULT BREATHING)

Type of medication given	Frequency N=14	%	95% CI
A=Nothing	5	35.7	
B=Aspirin	5	35.7	
C=Panadol	0	0	
D=Amoxicillin	5	35.7	
E=Erythromycin	5	35.7	
F=Azithromycin	5	35.7	
X=Other	0	0	
Z=DK	1	7.1	

<p>KPC Indicator: <u>ARI care seeking behavior</u></p> <p>Numerator: Number of children age 0-23m with history cough and difficulty in breathing and fast breathing who were taken to a health facility or received antibiotics from an alternative source treatment within 48 hours onset (36)</p> <p>Denominator: Number of children age 0-23m in survey with history of cough and difficulty and fast breathing (112)</p>	<p>36/112 x100</p> <p>= 32.1%</p> <p>95%CI=(23.8,40.8)</p>
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8. HIV/AIDS

a) Maternal knowledge on HIV/AIDS prevention

55.7 % mothers cited the use of a condom as one of the prevention methods of HIV/AIDS, while 14.9% thought that limiting the number of sexual partners is a prevention method. Only 41.5% of the mothers were able to cite at least two known ways of prevention of HIV/AIDS. Community condom accessibility was rated at 66.4% with mothers stating knowledge of the places to get condoms; these were given as Government Hospital (43.6%), Shop (35.6%) and Government Health Center (24.6%).

MOTHER'S KNOWLEDGE OF HIV/AIDS PREVENTION

Knowledge of AIDS prevention method (n=289)	Frequency	Percentage
A=Abstain from sex	53	18.3
B=Use condoms	161	55.7(49.8,61.2)
C=Limit sex to one partner	158	54.7(48.7,60.1)
D=Limit number of sexual partners	43	14.9
E=Avoid sex with prostitutes	14	4.8
F=Avoid sex with persons who have many sexual partners	18	6.2
G=Avoid intercourse with persons of the same sex	1	0.3
H=Avoid sex with people who inject drugs intravenously	0	

I=Avoid blood transfusion	7	2.4
J=Avoid injections	13	4.5
K=Avoid kissing	4	1.4
L=Avoid mosquito bites	2	0.7
M=Seek protection from traditional healer	58	20.1(15.7,24.9)
N=Avoid sharing razors/Blades	40	13.8(10.2,18.1)
W=Other	18	6.2
KPC Indicator: <u>Maternal Knowledge of at least 2 known ways of HIV/AIDS prevention</u>		
Numerator: Number of mothers of children age 0-23m who know at least two known ways of HIV/AIDS prevention (120)		120/289x 100 =41.5%
Denominator: Total number of mothers of children aged 0-23m in the survey (289)		95% CI (35.7,47.3)

PMTCT Transmission

Mother's knowledge on PMTCT was established to be over 60 % as shown in the table below.

N=289

Category	Description	Percentage and 95% CI
Mother aware that transmission of HIV/AIDS from mother to child can be prevented during pregnancy	Number of mothers of children aged 0-23m who report that HIV/AIDS transmission from mother to child can be prevented during pregnancy/Number of mothers of children aged 0-23m in the survey x 100	217/289 x 100 = 75.1% 95% CI (69.6,79.6)
Mother aware that transmission of HIV/AIDS from mother to child can be prevented	Number of mothers of children aged 0-23m who report that HIV/AIDS transmission from mother to child can be	189/289 x 100 = 65.4%

Prevention during delivery	prevented during delivery/Number of mothers of children aged 0-23m in the survey x 100	95% CI (59.6,70.5)
Mother aware that transmission of HIV/AIDS from mother to child can be prevented during breast feeding	Number of mothers of children aged 0-23m who report that HIV/AIDS transmission from mother to child can be prevented during breast feeding/Number of mothers of children aged 0-23m in the survey x 100	208/289 x 100 =72% 95% CI (66.4,76.7)

b) HIV/AIDS Stigma

This was assessed using mothers willingness to care for a sick (suffering from HIV/AIDS) relative, allowing a teacher who is HIV+ to continue teaching or allowing her child to continue playing with an HIV+ child.

Dealing with stigma is one of the requirements for establishing an effective HIV/AIDS prevention/care/mitigation program. Over 50 % indicated a willingness to care for a sick relative, but the responses for the other indicators were below 50%.

MOTHER'S ATTITUDE TO HIV POSITIVE PERSONS

Are you willing to:	Care for sick relative (HIV/AIDS) n=281	Allow teacher with HIV/AIDS to continue teaching n=282	Allow your child to play with HIV/AIDS child N=271
1=Yes	190 (67.6%) (61.8,73.1)	142 (50.4%) (44.4,56.3)	136 (50.2)(44.1,56.3)
2=No	91 (32.4%) (26.9,38.2)	133(47.2%) (41.2,53.2)	1 (0.4) (0.0,2.0)
8=DK	0(0)	7 (2.5%) (1.0,5.0)	132 (48.7) (42.6,54.8)

<p>KPC Indicator: <u>Mother's willingness to care for HIV/AIDS relative</u></p>	<p>190/289 x 100</p>
<p>Numerator: Number of mothers of children who indicate willingness to care for HIV/AIDS relative (190)</p> <p>Denominator: Number of mothers of children aged 0-23m in the survey (289)</p>	<p>= 65.7%</p> <p>95% CI (59.9, 70.8)</p>
<p>KPC Indicator: <u>Proportion of mothers who indicate willingness to allow HIV+ve teacher to continue teaching child</u></p>	<p>142/289x100</p>
<p>Numerator: Number of mothers of children age 0-23m who indicate willingness for teacher with HIV/AIDS to continue teaching (142)</p> <p>Denominator: Total Number of mothers of children aged 0-23m in the survey (289)</p>	<p>=49.1%</p> <p>95% CI (59.9,70.8)</p>
<p>KPC Indicator: <u>Proportion of mothers who indicate willingness to allow own child to play with child suffering form HIV/AIDS</u></p>	<p>136/289x100</p>
<p>Numerator: Number of mothers of children aged 0-23 m who indicate willingness to allow own child to play with child suffering from HIV/AIDS (136)</p> <p>Denominator: Total Number of mothers of children aged 0-23m in the survey (289)</p>	<p>=47.1%</p> <p>95% CI (41.2,52.6)</p>

c) Sexually Transmitted Infections

Appropriate management of STI is one of the strategies in the control of HIV/AIDS. Appropriate care seeking for treatment stems from the recognition of signs and symptoms of STI.

In the survey, the knowledge level of mothers on signs of STI in a woman, only 12.0% indicated that genital sores is one of the signs of STI and yet, genital sores is one of the conditions that increases the risk factors exposing women to HIV infection. Abdominal pain was the highest sighted sign.

46.7 % of respondents indicated lack of knowledge of signs of STI, however given that this was an open ended question, some respondents may have responded that they do not know any more signs, giving room for erroneous recording.

MOTHER'S KNOWLEDGE OF SIGNS OF STI IN A WOMAN

What are the signs of STI in a woman (n=289)	Frequency; (Percentage); (95% CI)
A= Abdominal pain	101(34.9)(29.5,40.5)
B= Genital discharge	47(16.3)(12.3,20.8)
C= Foul smelling discharge	60(20.8)(16.3,25.6)
D= Burning pain on urination	85(29.4)(24.3,34.7)
E= Redness/inflammation in genital area	16(5.5)(3.3,8.6)
F= Swelling in the genital area	31(10.7)(7.5,14.6)
G= Genital sores/ulcers	46(15.9)(12.0,20.4)
H= Genital warts	1(0.3)
I= Blood in urine	33(11.4)(8.1,15.4)
J= Loss of weight	58(20.1)(15.7,24.9)
K= Inability to give birth	14(4.8)(2.8,7.8)
L= No symptoms	2(0.7)
W= Other	66(22.8)(18.2,27.8)
Z=DK	135 (46.7)(40.9,52.3)
*Multiple responses possible	

<p>KPC Indicator: <u>Mother's Knowledge of at least two signs of STI</u></p> <p><u>Numerator:</u> Percentage of mothers of children age 0-23m who report knowledge of at least 2 signs of STI in a woman(101)</p> <p><u>Denominator:</u> Number of mothers of children aged 0-23m (289)</p>	<p>101/289 x100 =34.9% (29.5,40.4)</p>
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Mother's Care seeking behavior for STI

During the survey, 6.7%(19) women gave a history of having suffered an STI in the last 12 months, and the majority of them (94.7%) went to seek advice from health workers. This percentage is not comparable to the information obtained from the ante-natal clinic (Kocholya District Hospital) which records monthly prevalence rates of over 10% (figures from the other health facilities were not available). It is possible that some respondents felt awkward about the question and so did not give all the information.

DISTRIBUTION OF HISTROY OF STI AMONG WOMEN IN LAST 12 MONTHS

Mother suffered from sexually Transmitted infection in last 12 months	Frequency; (Percentage); (95 % CI)
1=Yes	19 (6.7) (4.1,10.3)
2=No	256 (90.1) (86.1,93.3)
8=DK	5 (1.8) (0.6,4.1)
9=Refused to answer	4 (0.4,3.6)
Total (Missing value 5)	284
Action taken last time had STI	N=19
1=Seek advice from health worker	18 (94.7%)
2=Seek advice/buy medicine from Traditional Healer	3 (15.8%)
3=Seek advice/buy medicine from shop/pharmacy	5 (26.3%)
4=Seek advice from friends/relatives	2 (10.5%)

APPENDIX ONE: SUMMARY OF BASELINE KPC INDICATORS

INDICATOR	NUMERATOR	DENOMINATOR	%	95% CI
1. Adequate Birth Interval Between Youngest Surviving Children	Number of children age 0-23m who were born at least 24m after the birth of the previous surviving child =128	Total number of children aged 0-23m with older sibling=172	74.9%	67.6,80.4
2. Under-weight (low weight-for-age) prevalence	Number of children age 0-23m whose weight is -2 SD or Z scores from the median weight of WHO/NCHS reference population for their age (12+ 30= 42)	Number of children age 0-23m in the survey who were weighed = 282	14.7%	(11.1,19.3)
3.) Tetanus Toxoid Coverage	Number of mothers given tetanus toxoid injection twice + more than twice (105+60)	Number of mothers of children age 0-23 m (289)	57.09%	(51.5,62.2)
4.) Skilled delivery assistance	Number of children aged 0-23m whose births were attended by doctor=15 + nurse or midwife =70 (Total 85)	Number of children aged 0-23m in the survey (289)	29.4%	(24.5,34.9)
5.) Breast Feeding Initiation	Percentage of children who were breast fed within the 1 st hour after birth=88	Total number of children aged 0-23m in the survey=289	30.4%	(25.3,35.8)
6.) Exclusive Breast feeding	Infants age 0-5m exclusively breast fed within last 24 hours=9	Number of children aged 0-5m in the survey=88	10.2%	(4.8,18.5)
7.) Complementary Feeding Rate	Percentage of infants aged 6-9m who received breast milk and solid foods in the last 24 hours=1	Total number of children aged 6-9m=61	1.6%	(0.6,5.8)
8.) Possesion of	Percent of children	Total number of	64.4%	(58.5,69.5)

vaccination Card: Percent of children aged 0-23m who have vaccination card	aged 0-23m who have vaccination card=186	children aged 0-23m=289		
9.) BCG Vaccine coverage rate	Proportion of children aged 12-23m with cards immunized = 64	Number of children aged 12-23m in the survey with cards= 67	95.5%	(87.5,99.1)
10. EPI Access: Percent of children aged 12-23m who received DPT/Hep B/HiB 1	Percent of children aged 12-23m who received DPT/Hep B/HiB 1 (recorded on card)= 65	Total number of children aged 12-23m with cards = 67	97.0%	(89.6,99.6)
11.Measles Vaccination coverage	Number of children aged 12-23m who received measles vaccine (card record) =47	Total number of children aged 12-23m with cards =67	70.1%	(57.7,80.7)
12.Drop out rate: Percent of drop out between DPT/Hep B/Hib 1 and DPT/Hep B/Hib 3	No children who received DPT/HepB/HiB 1- No children who received DPT/HepB/HiB 3	Total no.children who received DPT/Hep B/HiB 1	12.3%	(5.8,21.5)
13. EPI coverage rate: Percentage of children who received BCG, OPV and DPT/HepB/HiB 3 before their first birthday	Number of children aged 12-23m who received BCG, OPV and DPT/HepB/HiB 3 before their first birthday=46	Total number of children aged 12-23m with cards =67	68.7%	(56.0,77.9)
14. Percentage of mothers who wash their hand with soap before food preparation, before feeding children, after defecation, and after attending to a child who has defecated	Number of mothers of children age 0-23m who mention responses B through E in Q 18- hand washing practices (5)	Total number of mothers of children age 0-23m in the survey (289)	1.7%	(0,4.0)
15.Malaria	Mothers in the survey	Total number of		

prophylaxis during pregnancy	who indicated that they took a SP drug for prophylaxis during pregnancy=47	mothers of children aged 0-23m in the survey =289	16.3%	(12.3,20.8)
16. House hold bed net possession: Percentage of children whose mother reports the presence of bed nets in the home	Number of children who have bed nets =62	Total number of mothers of children aged 0-23m in the survey =289	21.5%	(17.0,26.4)
17.Proportion of children who slept under ITN	Number of children age 0-23m in the survey who slept under ITN the previous night=20	Total number of mothers of children aged 0-23m in the survey =289	6.9%	(4.4,10.2)
18.Health Care Facility Seeking practice for fever	Percentage of children age 0-23m with febrile episode that ended during the last two weeks who were taken to health facility within 48 hours after the fever began=91	Total number of children aged 0-23m who had history of fever within last two weeks =205	44.4%	(37.5,51.0)
19.Malaria Case Management	Percentage of children age 0-23m with febrile episode that ended during the last two weeks who were treated with an effective anti-malaria drug (Fansidar or Amodiaquine) within 48 hours after the fever began=40	Total number of children aged 0-23m who had history of fever within last two weeks =205	19.5%	(14.5,25.5)
20.Mother's knowledge on danger signs of child illness	Number of mothers of children aged 0-23m who indicate at least two known signs of childhood illness that indicate need for treatment=61	Total number of mothers of children aged 0-23 m in the survey=289	21.1%	(16.6,26.0)
21. Care/management	Proportion of children aged 0-23m who	Number of children who		

of child during illness	received increased fluids and continued feeding during an illness in the last two weeks=7	report episode of illness in the last two weeks=253	2.8%	(1.2,5.3)
22.Increased fluid intake during a diarrhea episode	Percentage of children aged 0-23m with diarrhea in the last two weeks who were offered more fluids during the illness=8	Number of children who had diarrhea episode that ended in the last two weeks =105	7.6%	(3.6,13.7)
23.Increased food intake during a diarrhea episode	Percentage of children aged 0-23m with diarrhea in the last two weeks who were offered more same amount or more food during the illness=18	Number of children who had diarrhea episode that ended in the last two weeks =105	17.1%	(10.7,24.9)
24.Care Seeking Practice (1) for children with cough and fast/difficulty in breathing	Number of children aged 0-23m with a history of cough and difficulty breathing in the last two weeks who sought treatment within 48 hours of onset=36	Number of children aged 0-23m in survey with history of cough and fast/difficult breathing=112	32.1%	(23.8,40.8)
25. Care Seeking Practice (2) for children with cough and fast/difficulty in breathing	Number of children aged 0-23m with a history of cough and difficulty breathing in the last two weeks who were taken to a health facility or received antibiotics from an alternative source within 48 hours of onset=51	Number of children aged 0-23m in survey with history of cough and fast/difficult breathing=112	45.5%	(36.2,54.3)
26.Mother's knowledge of at least two known ways of HIV/AIDS prevention	Number of mothers of children aged 0-23m who cite at least two known ways of HIV/AIDS prevention =120	Total number of mothers of children aged 0-23 m in the survey =289	41.5%	(35.7,47.3)
27.HIV/AIDS	Number of mothers of	Number of		

Stigma:(1) Mother's willingness to care for HIV/AIDS relative	children who indicate willingness to care for HIV/AIDS relative =190	mothers of children aged 0-23 M in the survey =289	65.7%	(59.9,70.8)
28.HIV/AIDS Stigma:(2) Mother's willingness to allow HIV+ teacher to continue teaching child.	Number of mothers of children age 0-23m who indicate willingness for teacher with HIV/AIDS to continue teaching =142	Total Number of mothers of children aged 0-23 m in the survey =289	49.1%	(59.9,70.8)
29. HIV/AIDS Stigma (3) Proportion of mothers who indicate willingness to allow own child to play with child suffering form HIV/AIDS	Number of mothers of children aged 0-23m who indicate willingness to allow own child to play with child suffering from HIV/AIDS =136	Total Number of mothers of children aged 0-23m in the survey=289	47.1%	(41.2,52.2)
30.Community Condom accessibility or availability	Number of mothers of children aged 0-23m who indicate knowledge of where to get condom=192	Total Number of mothers of children aged 0-23m in the survey=289	66.4%	(60.6,71.5)
31.Mother's knowledge of at least two signs of STI	Percentage of mothers of children aged 0-23m who report knowledge of at least 2 signs of STI in a woman=101	Total Number of mothers of children aged 0-23m in the survey=289	34.9%	(29.5,40.4)

**APPENDIX 2: SURVEY PLANNING AND COORDINATION TEAM,
SUPERVISORS, FOCUS GROUP DISCUSSANTS AND ENUMERATORS.**

1. Survey Planning and Coordination Team

Name	Title	Department
A Yaite	District Public Health Nurse	MOH
M Oduya	District Personnel Officer	Provincial Administration- Office of the President
P Agutu	District Public Health Officer	MOH
O M Otieno	District Development Officer	Min. Planning and Finance
T Odhiambo	District Statistician	Min. Planning and Finance
F Ghamunga	Consultant	WV Tanzania
W Mutsotso	Project Manager	WVK, Teso CSP
J Ngugi	Training Coordinator	WVK, Teso CSP
F Odek	Divisional Field Coordinator	WVK, Teso CSP
B Abwao	Divisional Field Coordinator	WVK, Teso CSP

2. Supervisors

B Orod	Clinical Officer	MOH
J Ochieng	Public Health Officer	MOH
R Epalaat	Public Health Nurse	MOH
T Ementon	District Education Officer	Ministry of Education

3. Data Collectors

Maximilla Amwatok	Evelyne Oswaat
Jane Kagea	Albert Atelu
Phiona Abelu	Esnas Okuna
Stephen Inene	Rael Odeke
Emmanuel Inagae	Sara Abwaku
Maximilla Isharak	
Berita Bwakau	
Michael Wasike	
Robert Otit	
Mwaura Wanjau	
Zakayo Orupto	
Mike Ijaka	
Esther Yusto	

APPENDIX 3: BASELINE SURVEY KPC CLUSTERS

DIVISION	LOCATION	SUB-LOCATION	CLUSTER (EA)	CLUSTER NO.
AMAGORO	AMONI	KAJEI	DIP	110
	AMONI	KAJEI	KAJEI A	113
	AMAGORO	IKAPOLOK	APOKOR	179
	AKADETAWAI	KOMINAYE	AGOLOTO E	118
	AKEDTAWAI	ALOBAYI	KAMONGOLO	132
	KOKARE	KIRIKO	AMONI B	172
	OKULEU	KAKOLE	KAKOLI	156
TOTAL NUMBER OF CLUSTERS FROM DIVISION				7
ANGURAI	ANGURAI	ADANYA	MORUKENERAN A	26
	KOLANYA	KOLANYA	AKAODOTO	79
	ANGURAI	ADANYA	MORUKENERAN B	27
	CHANGARA	ATERAIT	KAMUNYONGOLE	68
	KAKAPEL	KAKAPEL	AKIBILI	11
	CHEAMASIRI	CHEMASIRI	CHEMASIRI TOWN	60
	KOLANYA	KOLANYA	APOKOR	75
	MODING	APOKOR	APOKOR B	53
	CHANGARA	AKOBWAIT	ATEOKUTU	63
TOTAL NUMBER OF CLUSTERS FROM DIVISION				9
AMUKURA	AMUKURA	KOCHEK	KACHILAMERI	210
	AKORET	AKORET	OKWATA	190
	KAUJAKITO	APOKOR	ATAPARA	273
	KAUJAKITO	APOKOR	KAMARINYANG	267
	KAUJAKITO	KAMUNWEIT	AMUKURA TOWN B	262
	AKORET	AKURET	ABURI	194
TOTAL NUMBER CLUSTERS FROM DIVISION				6
CHAKOL	ANGOROM	AMEREKWAI	AIRSTRIP A	376
	ANGOROM	AGOLOTO	MILIMANI A	398
	ANGOROM	AMERKWAI	AIRSTRIP C	378
	ANGOROM	AMERKWAI	AMERKWAI A	373
	ASINGE	ALIDEKA	KASILO	310
	AMUNGURA	ONGARIAMA	BUTEBA	302
	ACHUDE	OLEPITO	OLEPITO	366
	ASINGE	ALUDEKA	AKIPORO B	307
TOTAL NUMBER OF CLUSTERS FROM DIVISION				8
TOTAL NUMBER SURVEY CLUSTERS				30

QUALITATIVE ASSESSMENT SURVEY:

Introduction:

This section deals with the result of Qualitative Assessment Survey, which was done in the six villages of the Teso District between 11th February –17th February 2002.

The villages covered by the survey were selected by random sampling out of 30 clusters covered by the KPC Survey.

Table 1: Survey villages

Division	Village	Groups covered				
		Men	Women	Youth	COR PS	Mixed
Amagoro	Kajei	1	1	2(M+F)	0	1
Amagoro	Kamongoto	1	1	1(M)	1	1
Angurai	Kamnyongole	1	1	1(M)	0	1
Angurai	Chamasiri	1	1	2(M+F)	1	1
Amukura	Kachilameri	1	1	1(M)	0	1
Amukura	Aburi	1	1	1(M)	1	1

The purpose of the Qualitative Assessment Survey was to generate information on the perceptions of the community about their needs, opportunities, problems and solutions to their health situation, based on the four main interventions of the Child Survival Project.

1.1 Methodology

Respondents of the survey were selected from all the categories of the community including men, women, female youth, male youth, community resource persons and a mixed community groups, which included men and women of different age groups. These groups formed community focus group discussions.

Participatory Rural Appraisal (PRA) process was used to enable different groups to interact among the members and generate qualitative information about the four project interventions; namely Malaria, Acute Respiratory Infections (ARI), HIV/AIDS/STIs and Immunization / Vitamin A.

Institutional analysis process was done by discussing with a mixed community group about the organizations/groups available in the village, roles and importance of each organization, and how the community in general collaborates with different organizations for development. Venn diagrams for each village

were drawn by the community members to illustrate how each community networks with the organizations in the village. The aim of the institutional analysis was to identify and document the community's capacity to participate in resource mobilization, organization and management of Child Survival Project.

Although it was initially planned to have six focus groups per each village, it was difficult to get a group of female youth and community resource persons in some of the villages. Female youth of age fourteen and above, had either been married or were in secondary schools outside their villages. On the other hand, half of the surveyed villages did not have community health workers (CHWs) or traditional birth attendants (TBAs).

Gender representation was essential in order to analyze gender dynamics, which are likely to influence different areas of project interventions. This was achieved by having separate focus groups of men and women, female and male youth and a mixed community group composed of men and women of different age groups. In addition, the community resource persons were comprised of men and women whereby the majority of the community health workers were men and traditional birth attendants were all women.

2. RESULTS:

2.1

Main diseases:

The main diseases that affect children under five years were mentioned as:

- Malaria,
- Diarrhea
- Measles,
- Pneumonia,
- Typhoid

Other diseases include:

- Skin diseases
- Cough
- Eye Infections
- Worms
- Malnutrition
- Chicken pox

According to three groups of community resource persons and six youth groups, the trend of diseases in the area has been rising for the last three years. The

indicators which show the rise in diseases includes the number of people dying and those that are suffering from various diseases.

Reasons for disease and deaths occurrence were mentioned as:

- Water shortage,
- Poor sanitation,
- Lack of awareness on prevention of diseases,
- Pollution of water sources,
- shortage of drugs,
- Long distances to health facilities,
- Non attendance of MCH clinics by mothers,
- Prevalence of mosquitoes in the area.

2.2. What mothers do when the child is suffering from the following diseases:

a) Malaria:

- Buy drugs from shops
- Take child to health facility
- Give herbs
- Take child to traditional healers
- Give first aid.

b) Acute Respiratory Infections:

- Buy drugs from shops
- Take child to traditional healers
- Cut epiglottis
- Take as normal in early stages.

c) HIV/AIDS/STIs:

- Not easy to know if it is HIV/AIDS
- Give child balanced diet
- Show love and concern
- Leave the matter to God.

Symptoms that show that a child is suffering from:

a) Malaria:

- Fever
- Vomiting
- Loss of appetite
- Restlessness

- Crying
- Dullness/ Inactive

b) Acute Respiratory Infections:

- Difficulty in breathing
- Rapid breathing
- Noisy coughing
- Increased heart beat
- Rising chest

c) HIV/AIDS/STIs:

- Constant Coughing
- Rashes
- Anaemia
- Discoloured hair
- Underweight
- General body weakness.

The responses from the last two questions above were drawn from 6 women groups and 3 groups of community resource persons.

According to the responses, it is evident that the first action taken by the majority of the households when there is an illness, is to buy drugs from the shops or pharmacies within their local areas. Thus, self-treatment without disease diagnosis or prescription from a certified health worker appears to be the practice in the area. Probably, long distances to a health facility as mentioned earlier in this report could be a factor influencing such a situation.

2.4 What fathers do when a child is suffering from:

a) Malaria:

- Give money to take child to hospital
- Buy drugs
- Take child to hospital
- Take child to traditional healers.

b) Acute Respiratory Infections:

- Take child to traditional healers.
- Buy medicine
- Buy traditional herbs.

c) HIV/AIDS/STIs:

- Have had no cases
- Give a balanced diet
- Fear to take child to hospital
- Give child traditional herbs.
- Advise mothers to take child to hospital

The question to this response was directed to the six groups of men in the selected villages with the purpose of trying to understand the role which fathers play to the health of their children.

The response of fathers are somehow similar to those of mothers, showing that men are equally concerned about the welfare of their children. Sometimes the role of the father is supportive to that of the mother, as it is the father who gives money to the mother so that she can take the child to hospital. Like mothers, fathers also result into buying drugs from the shops without any advice from the health personnel.

Both fathers and mothers are not clear about what to do with a child who is suffering from HIV/AIDS.

2.5. How mothers prevent children from being affected by the following diseases:

a) Malaria:

- Have no information how to prevent
- Buy nets that are treated
- Keep child warm during cold weather
- Burn traditional herbs as repellants.

b) Acute Respiratory Infections:

- Do not know what to do.
- Keep child warm during cold weather
- Avoid contact with other children.

3.1 HIV/AIDS/STIs:

The issue of HIV/AIDS/STIs as one of the project interventions was investigated further by discussing its different aspects with various community groups. Most of the questions were thrown to the youth while men, women and resource persons, discussed others.

3.2 **Prevention of HIV/AIDS**

On how different groups try to prevent the infection and spread of HIV/AIDS, the following were the responses.

a) Women:

- Keep to one partner
- Try to be faithful to one partner
- Convince partner to use condom.
- Do not know what to do because husband does not want to use condom
- Talk with husband about faithfulness.
- Avoid sharing razors and needles.

b) Men:

- Use condom
- to have one partner
- By living a moral life through religious beliefs.
- By reducing alcoholism
- By avoiding wife inheritance.

b) Youth:

- Self control and respect
- Abstain from sex
- Stick to one partner
- Avoid leisure places
- Avoid alcoholism
- Use condom

3.3 **Risk behavior that contribute to the spread of HIV/AIDS/STIs:**

- Wife inheritance.
- Alcoholism.
- Sex with many partners.
- Adultery.
- Lack of publicity for those who die of the disease.
- Night discos.
- Separation.
- Divorce.
- Indecent dressing.

From the responses of different categories of the community, it is clear that the perceptions of each group on the mode of HIV/AIDS/STIs prevention are

determined by their social status and practices. Where as, men and youth males can use condoms for prevention of HIV/AIDS/STI, women (though there are now condoms for women) have not mentioned use of condoms. They even do not even have specific ways of preventing themselves when it comes to having sex with their spouses.

During group discussions all the women indicated that their spouses would not accept use of condoms. The men on the other hand, mentioned that they would prefer using condoms when they make sex with other partners but not with their spouses. This factor makes married women quite vulnerable to HIV/AIDS/STIs infection since sex decisions are made solely by men.

3.4 Measures which should be taken by the general community in prevention of the spread of HIV/AIDS/STIs:

- Provision of credit facilities to keep the youth busy.
- Family Life Education.
- Emphasis on moral values through religious beliefs.
- Discourage local brews
- Wife inheritance to be discouraged.
- Awareness creation on HIV/AIDS.
- Publicity of people dying of HIV/AIDS.

3.5. Knowledge of the youth on HIV/AIDS/STIs:

In response to whether the youth have enough knowledge to teach others on HIV/AIDS/STIs, three out of eight youth groups, indicated that they had some knowledge to teach others on HIV/AIDS/STIs. They had also been involved in awareness creation to others.

Their areas of emphasis had been:

- Use of condoms
- Importance of having one lover
- Early medication
- Dangers of HIV/AIDS/STIs
- Reduction of alcoholism

Five out of the eight groups indicated that they did not have capacity to teach others on HIV/AIDS/STIs.

Their training needs were:

- Importance of HIV/AIDS test.
- How a child of an infected mother can be negative
- Symptoms of HIV/AIDS/.
- Prevention measures of HIV/AIDS/STIs:

- How to live with the infected.
- How HIV/AIDS is transmitted.

The youth, being most sexually active category of the community, need to be empowered with knowledge and skills on prevention of the spread of HIV/AIDS for their own change of behavior and to be change agents of the behavior of their peers. The survey results, show that the majority of the youth do not have adequate knowledge and hence their training is very important in the control and prevention of the disease. Drama groups for youth could be formed to sensitize the villagers on HIV/AIDS and STIs.

3.6. Orphans as a result of HIV/AIDS/STIs:

Although the question of orphans whose parents have died of AIDS was directed to the men and youth groups, only two groups admitted the presence of orphans in the villages. Although there are orphans of such nature, the community does not want to reveal or even to acknowledge the fact.

Such behavior reveals the extent to which HIV/AIDS is stigmatized within the community.

Normally, the orphans whether due to HIV/AIDS or other causes, are taken care of by the close relatives of the deceased such as brothers, parents, sisters, cousins or even uncles. However, the difficult economic situation prevalent among most households may strain such households to an extent that they are unable to meet properly the basic needs of the extended family.

On how to improve the welfare of orphans, the groups suggested the following:

- Government to support the education of orphans
- Government to come up with the feeding programs
- Establishment of community centers where orphans can be taken care of.
- Relatives to be provided with credit facilities so as to increase their income
- Government to build orphanages
- Harambee programs for care and education of orphans.
- Free treatment of the orphans

The suggestions show that though relatives are presently taking care of the orphans, concerted efforts from different actors are needed for proper planning of the welfare of the orphans.

4.1 Immunization/ Vitamin A:

All the groups discussed about immunization of children in the area. It was revealed that about fifty percent of mothers take children for immunization while others do not take them at all or do not complete the full course.

Reasons given for failure to take children for immunization were:

- Fear that vaccination transmits other diseases.
- Vaccination brings fever and illness.
- Fear of harassment by medical personnel
- Long distances to health facility
- Over crowding during clinics.
- Financial problems
- Negligence by mothers.
- Ignorance about its importance
- Women are afraid of being tested of HIV/AIDS.
- High demand from health personnel on the cost to be met by expectant mothers in form of syringes, cards, books and gloves.

Solutions to improve the situation:

- Training of community health workers.
- Provision of mobile clinics
- Education of mothers on the importance of immunization
- Each village should have a community health facility
- The government should regulate the prices of drugs.
- Fathers to encourage mothers to take children for MCH clinics.
- Health personnel should be concerned about the health of clients.

The immunization program needs proper planning and consideration of many factors. For example, the cost which a pregnant mother is supposed to pay for the services and the fear of being harassed by the health personnel can be enough reasons to prevent mothers from joining immunization programs.

Reasons given on what motivates other mothers to take their children for immunization were:

- Prevention of infections.
- Short distance to a health facility
- Awareness creation by health workers
- Mother's knowledge about immunization
- Father's financial support

- Fear of harassment by medical personnel if immunization course is not completed
- Prevention and control of diseases
- Acquire health knowledge given by health workers.

The motivation factors on immunization should be taken as opportunities which can be used by project staff and health personnel in promotion and strengthening of immunization programs in the area. However, collaboration with the community on the best strategies for health services will be an added advantage to the effectiveness and efficiency of the programs.

5.0 Health problems of girls and women (15-49 yrs).

The responses to this aspect was drawn from all the community groups. The purpose was to gauge the concern of the general community on the welfare of women who are actually the backbone of the care of children and the community in general.

All the groups were aware of the health problems of women and girls and they mentioned the main problems to be:

- Heavy menstrual bleeding and pain
- Anaemia
- Backache due to overwork
- Miscarriage
- Gonorrhoea and syphilis
- Insufficient food intake
- Those under pills suffer weight loss and head ache
- Wife beating
- Malaria
- Chest pain

On where women seek help for their problems it was mentioned that they seek help from:

- Health facility
- Use of traditional healers
- Seek advice from friends
- Buy drugs
- Consult TBAs
- Use traditional family planning methods

The problems of women are varied and some are specific to women while others are to girls. Health programs should incorporate specialized services for women with qualified personnel who are specially trained for treatment and counselling of women. Traditional Birth Attendants (TBA) need to be trained on basic skills to offer services to women since they are already available in the community.

5.1 Community Capacity in Management and Sustainability of Development Projects:

5.2 Division of labour:

All community groups discussed the roles of men and women at various levels.

a) At household level:

The role of men and women at household level were:

Role of Men:

- Provide household security.
- Farming.
- Construction of houses.
- Education of children.
- Making household decisions.
- Provide food for the family.
- Buy clothes for the children.
- Meet health expenses.

Role of women:

- Prepare food
- Do all household chores
- Take care of children
- Cultivation
- Cut grass for thatching
- Maintaining union of the family
- Take children to health facility.

b) At community level.

Roles of men and women at community level were discussed as:

Men

- Construction of buildings e.g. churches and schools.
- Clearing access roads
- Contribute money to educational fund
- Make decisions at community level
- Attend village meetings
- Mobilize community groups.

Women:

- Provide water and food during construction of buildings
- Form women groups
- Contribute to education fund
- Attend meetings when invited by men
- Prepare food during ceremonies.

5.3 Decision-making.

According to the responses from all the groups all decisions at household and community level are made by men. Women only make decisions at women group level. Sometimes men can decide to involve women as in case of marriage of children or sale of property, but the man's decision will be final.

In relation to the division of, labor at household level and the community's process of decision making, It is important for any development agency to identify the gender dynamics, which may influence the project process. For instance, when introducing any intervention to the village, the first step would be to work through men and involve women gradually through the process. By so doing, men will eventually see the importance of women's involvement.

In general the community has clearly stipulated roles of men and women and this can be taken as the community's capacity to implement project activities in line with the gender roles. As the development process grows and reaches its maturity, men will automatically see the need of working together with women in various activities. On the other hand, roles of both men and women are supplementary and complementary and this opportunity can be used for effective implementation of the Child Survival Project.

5.4 Socio-cultural factors

Roles of men and women have been determined by socialization process within a given community over time. To change this, it needs another socialization learning process

Thus, for the Teso community the socio-cultural factors to consider are:

- Men value large number of children
- Men are not allowed to cook
- Women are not allowed to build houses.
- Wife inheritance
- Belief in witchcraft
- House chores must be done by women
- Decisions must be made by men

Since the roles of men and women are culturally determined, the change must involve a learning process whereby the community will learn better ways of doing things. Thus, awareness creation on negative cultural beliefs and practices should be one of the strategies in the project implementation.

5.5. **Community collaboration with development agencies:**

The main organizations working in Teso District are:

a) Government Agencies:

- Ministry of Education
- Ministry of Health
- Provincial administration
- Ministry of water
- Ministry of Agriculture
- Ministry of Culture and social services
- CDTF
- IFAD

b) NGOs:

- AMREF
- ICS
- FITCA
- Churches

c) Private Companies:

- BAT
- TACOMA

d) Community Groups:

Community Resource Persons:

- Community Health Workers
 - Traditional Birth Attendance
 - Village Health Workers
 - Government Extension Services Workers
 - Teachers
 - Opinion Leaders
-
- Women groups
 - Youth groups
 - Men groups

5.6 Areas of collaboration:

- a) The government agencies are sectoral departments representing various ministries at district level. Each department concentrates on sectoral services such as education, water, agriculture, health, social services and administration.

In activities which are implemented on sectoral basis the community contributes its labor, participation in planning through village meetings and sometimes contribution in money and materials. For example, the community has been involved in the construction of classrooms, contribution to education fund, construction of bore holes, pit latrines, soil conservation and in any other activity where their contribution has been required.

In relation to the cost- sharing of health services the community has been contributing the following:

- Pay admission fee
- Buy syringes, injections, cotton wool and gloves
- Buy drugs when prescribed
- Pay for laboratory services
- Pay for family planning services
- Pay for bed on admission
- Attend to admitted patients
- Care takers help in cleaning patients' room.

The complaint of the community on health services is that sometimes the payment of the services does not guarantee reception of the services. There is general complaint that the health services are expensive considering the level of

poverty in the community. Such issues need to be considered during the implementation of the Child Survival Project.

The level of participation of the community is high when a development project is brought in the village. However, the community's constraints in working with government agencies were mentioned as:

- Poor extension systems
- Lack of commitment
- False promises
- Incomplete work
- Harassment by health personnel

In most cases, these factors discourage the community from participating in development work and sometimes they are skeptical when a new intervention is being introduced.

b) NGOs:

There are a few NGOs in Teso District and most of them have recently come in the district. Some are working through the government departments, like FITCA which is involved in control of tsetse flies. Others are working with the Anglican church. AMREF seem to be working with the community through the Ministry of Health. The community appears to appreciate the efforts of these NGOs and are ready to work with them.

C) Private companies:

The two companies operating in the district are agricultural promotion companies like BAT which is promoting production of tobacco and TACOMA is promoting production and marketing of cotton. The community appreciates the work of BAT in raising their income which has enabled them to build houses and send children to school. Cotton Company has yet to implement its activities which are mainly promotion of cotton production and marketing.

d) Community Groups:

Most of the villages lack community health workers (CHWs) and traditional birth attendants. Few villages have village health committees (VHCs) which are said to be dormant.

The few community health workers interviewed mentioned their training needs to be:

- Training and administration of antibiotics and injections
- Refresher courses in Primary Health Care

- Environmental Sanitation
- Update on drug administration(Bamako Initiatives)

Other needs of CHWs were:

- Provision of thermometers for measuring children's temperature
- Provision of drug kits
- Close supervision and linkages with MOH
- Renumeration.

Some of the villages have TBAs while some do not have. The TBAs need training in:

- Safe delivery
- Refresher course on pre-natal, ante-natal care

Other needs of the TBAs include:

- Provision of delivery Kits
- Appreciation by the clients
- Security during night delivery.

The Village Health Committees are dormant and efforts are needed to revive them.

Some villages have organized community groups while others do not. Four out of six villages have women groups and some others have youth and men groups. These groups work on self- help basis in activities such as cultivating their farms together and setting revolving funds.

The main constraints reported by women groups are:

- Husbands refuse their wives to join women groups
- Lack of capital to start activities
- Lack of co-operation from some of the members
- Heavy work load

Overall, at the community level there are different types of human resources which can be mobilized for development.

In certain areas, capacity building strategies will be needed in order to fill the gaps which might be existing.

6. RECOMMENDATIONS:

6.1 Prevention and treatment of Malaria and ARI:

The survey reveals that majority of the community lack knowledge on prevention and proper treatment of diseases especially Malaria, Acute Respiratory Infections and HIV/AIDS/STIs.

Most of the people in the community result to buying drugs when there is an illness instead of taking a patient to hospital for diagnosis and proper treatment of the disease.

The Child Survival Project should design awareness creation sessions to educate the community on proper use of drugs and the necessity for disease diagnosis by a certified health worker.

Awareness creation messages should emphasize the need for preventing diseases before cure. Preventive measures especially on malaria can be done in collaboration with other departments for example to clear bushes, cover swampy areas and to dig drainage systems.

Awareness creation campaigns on use of bed nets, especially the treated ones, should be an important component of malaria preventive measures.

6.2 Prevention of the spread of HIV/AIDS/STIs.

The community appears to be silent about the impact of HIV/AIDS on the wellbeing of the whole community. HIV/AIDS is treated as a secret disease which does not need to be mentioned. Deliberate efforts are needed to break this silence by conducting awareness creation sessions at community level which should target different groups in the community. Each group should have different messages targeting on behavior change. For example adult men could have messages addressing to problems of wife inheritance, alcoholism and reluctance in using condoms with their spouses.

Youth groups should be trained in developing different messages and channels of communications like puppet shows, drama and role-plays can be used. Youth groups can be very effective in influencing behavior change among the peers and school children.

Village Health Committees should be revived and trained on educating the community on HIV/AIDS and methods of preventing its spread.

Community Health Workers and Traditional Birth Attendants should be trained on prevention of HIV/AIDS and these can be important change agents among mothers and youth groups.

6.3 Immunization/ Vitamin A:

The immunization program has different aspects that need to be strengthened. From the community's point of view, the MOH need to plan the services to be nearer to the people. Bearing in mind the heavy workload of a village woman, immunization program may be viewed as another extra burden and this may discourage a mother from walking long distances for immunization of the child. There is a need to strengthen the existing MCH clinics to offer quality services to mothers. Use of mobile clinics where distances to a health facility is more than two kilometers should be introduced in order to bring services nearer to the mothers. More campaigns should be conducted to educate mothers on importance of immunization to the children. Use of videos can be effective especially during clinics and women group activities

MOH personnel should be trained on counseling skills. This will make them to be close to the mothers, an aspect which can attract mothers to the clinics.

6.4 Improvement of Health Services at all levels:

There is general complaint among the community that health services are poor and unnecessarily expensive. Improving health services by renovating building, equipping health facilities with essential drugs and equipment, retraining of medical personnel and providing them with necessary facilities will create an enabling environment for effective implementation of the Child Survival Project. Prevention and treatment of diseases will need a conducive atmosphere in terms of buildings, facilities, effective staff, and transport for easy movement. It should be the role of MOH to revisit the health facilities at all levels and ensure that they are in acceptable standards and conducive to the health services.

6.5 Community capacity in management and sustainability of the Child survival project:

The community has experience in working with different organizations and it has already established linkage with these organizations. The Child Survival Project under the World Vision in partnership with MOH will be part of that system of organizations working at the community level. These organizations can be important resources in terms of personnel, expertise and experience for the Child Survival Project. The project staff should take the opportunity of networking with the different organizations right at the initial stages of the project.

Community groups can be motivated to participate at various stages of the project. Involvement of the local community will ensure sustainability of the project when donors phase out. One of sustainability strategies could be establishment of a health services fund. This fund can be used in cases of emergencies such as transporting a patient to a referral facility or assisting the needy people in the community.

List of Acronyms:

AMREF	African Medical Research Foundation
ARI	Acute Respiratory Infections
BAT	British American Tobacco
CDTF	Community Development Trust Fund
CHW	Community Health Worker
CORPS	Community Resource Person
F	Female
FGD	Focus Group Discussion
FITCA	Farming in Tsetse Controlled Area
HIV/AIDS	Human Immuno Deficiency Syndrome/Acquired Immune Deficiency Syndrome
ICS	International Christian Center
IFAD	International Food and Agricultural Development
KPC	Knowledge Practice and Coverage
M	Male
MCH	Maternal Child Health
PRA	Participatory Rural Appraisal
STIs	Sexually Transmitted Infections

**TESO CSP-KPC BASELINE SURVEY RESULTS-PRIORITY HEALTH INDICATORS
MARCH 2002**

	INDICATOR	DEFINITION	NUMERATOR	DENOMINATOR	PERCENT	CONFIDENCE LIMITS (95%)
1	Percentage of children age 0-23m who are underweight (-2 SD from the median weight-for-age, according to the WHO/NCHS reference population)	<u>Numerator:</u> Number of children age 0-23m whose weight is -2 SD from the median weight of the WHO/NCHS reference population for their age <u>Denominator:</u> Number of children age 0-23m in the survey who were weighed	=42	=282	=14.7%	(11.1,19.3)
2	Percentage of children age 0-23m who were born at least 24m after the previous surviving child.	<u>Numerator:</u> Number of children age 0-23m whose date of birth is at least 24m after the previous sibling's date of birth <u>Denominator:</u> Number of children age 0-23m in the survey who have an older sibling	= 128	= 172	=74.9	(67.6,80.4)
3	Percentage of children age 0-23m whose births were attended by skilled health personnel	<u>Numerator:</u> Number of children age 0-23m whose birth was attended by skilled health personnel (i.e., doctor, clinical officer, nurse/midwife) <u>Denominator:</u> Number of children age 0-23m in the survey	= 85	=289	=29.4%	(24.5,34.9)

4	Percentage of mothers of children age 0-23m who received at least two tetanus toxoid injections before the birth of their youngest child.	<u>Numerator:</u> Number of mothers with children age 0-23m who have received at least two tetanus toxoid injections before the birth of the youngest child <u>Denominator:</u> Number of mothers of children age 0-23m in the survey	= 165	=289	=57.09	(51.5, 62.9)
5	Percentage of infants age 0-5m who were exclusively breastfed in the last 24 hours	<u>Numerator:</u> Number of infants age 0-5m who received only breast milk in the last 24 hours <u>Denominator:</u> Number of infants age 0-5m in the survey.	=9	=88	=10.2 %	(4.8,8.5)
6	Percentage of infants aged 6-9m receiving breast milk and complementary foods during the last 24 hours.	<u>Numerator:</u> Number of infants age 6-9m who received breast milk and solid, mashed, semi-solid foods during the last 24 hours. <u>Denominator:</u> Number of infants age 6-9m in the survey	=1	=61	=1.6 %	(0.6,5.8)

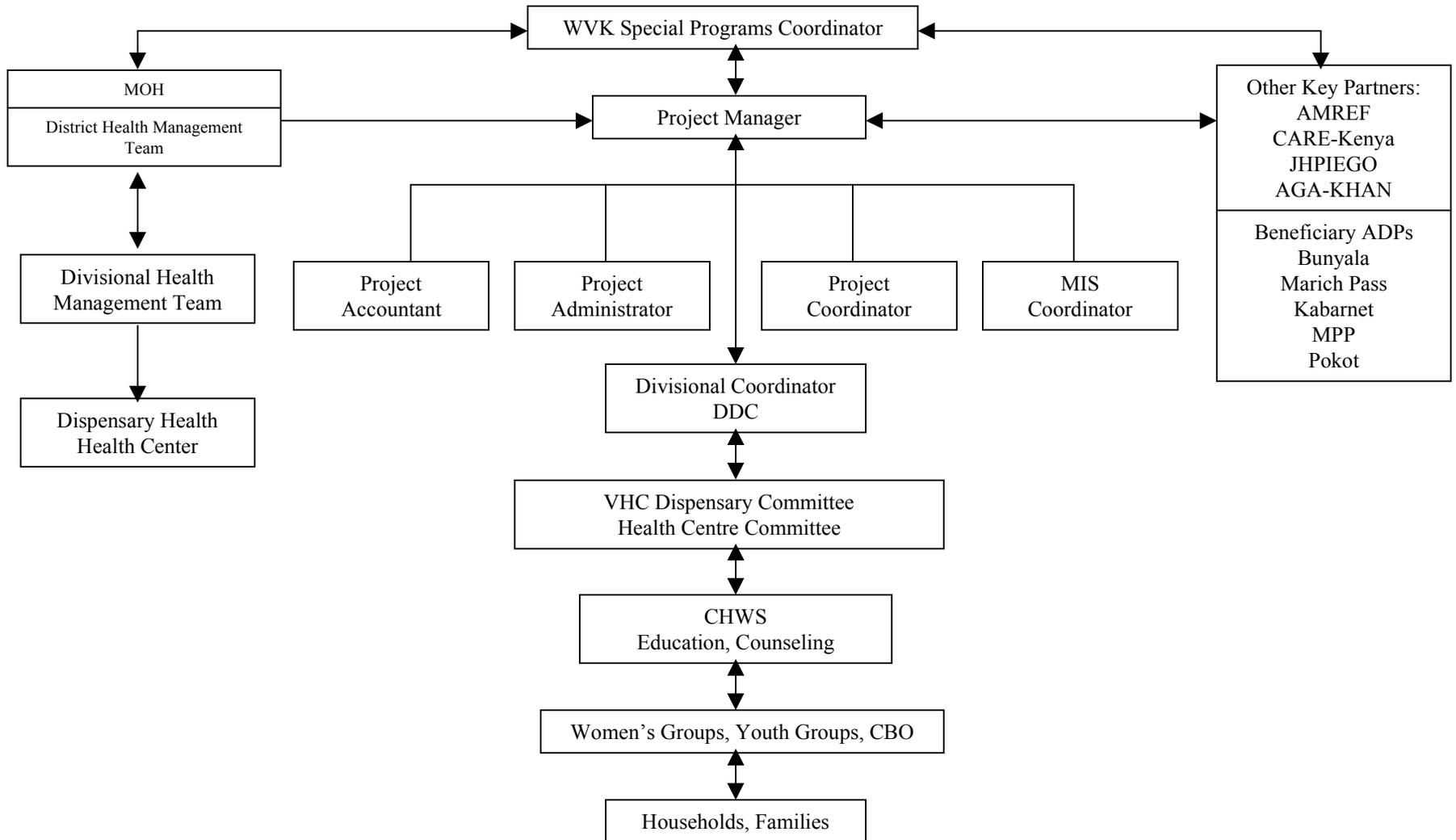
7	Percentage of children age 12-23m who are fully vaccinated (against the 5 plus 2 vaccine preventable diseases) before the first birthday	<u>Numerator:</u> Number of children age 12-23m who received Polio 3 (OPV3), DPT/HEP/HIB 3, and measles vaccines before the first birthday, according to the child's immunization card. <u>Denominator:</u> Number of children age 12-23m in the survey who have a vaccination card that was seen by interviewer	=46	=67	=68.7	(56.0,77.9)
8	Percentage of children age 12-23m who have received a measles vaccine.	<u>Numerator:</u> Number of children age 12-23m who received measles vaccination before the first birthday according to the child's immunization record card <u>Denominator:</u> Number of children age 12-23m in the survey who have a vaccination card that was seen by interviewer	=47	=67	=70.1%	(57.7,80.7)

9	Percentage of children age 0-23m who slept under an Insecticide Treated Net the previous evening.	<u>Numerator:</u> Number of children age 0-23m who slept under insecticide treated net. <u>Denominator:</u> Number of children age 0-23m in the survey	=20	=289	=6.9%	(4.4,10.2)
10	Percentage of mothers with children age 0-23m who know at least two signs of child hood illness that indicate the need for treatment.	<u>Numerator:</u> Number of mothers with children age 0-23m who report at least two of the signs that indicate the need for treatment (B-H) Q 42. <u>Denominator:</u> Number of mothers of children age 0-23m in the survey.	= 61	=289	=21.1	(16.6,26.0)

11	Percentage of sick children age 0-23m who received increased fluids and continued feeding during an illness in the past two weeks.	<u>Numerator:</u> Number of children age 0-23m with response = 3('more than usual') for Q 44 AND response=2('same amount') or 3 ('more than usual') for Q 45 <u>Denominator:</u> Number of children surveyed who were reportedly sick in the past two weeks	=7	=253	=2.8 %	(1.2,5.3)
12	Percentage of mothers of children age 0-23m who cite at least two known ways of reducing the risk of HIV infection.	<u>Numerator:</u> Number of mothers of children age 0-23m who mention at least two of the responses that relate to safer sex or practices involving blood for Q 58 <u>Denominator:</u> Number of mothers of children age 0-23m in the survey.	= 120	=289	=41.5 %	(35.7,47.3)

13	Percentage of mothers of children age 0-23m who wash their hands with soap before food preparation, before feeding children, after defecation, and after attending to a child who has defecated.	<p><u>Numerator:</u> Number of mothers of children age 0-23m who wash their hands with soap before food preparation, before feeding children, after defecation, and after attending to a child who has defecated.</p> <p><u>Denominator:</u> Number of mothers of children age 0-23m in the survey.</p>	=5	=289	1.7%	(0, 4.0)
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Teso Child Survival Project Management Organogram



Kenya in Harmony!

World Vision

**WV Kenya:
Organizing Ourselves for
Community Capacity Building**

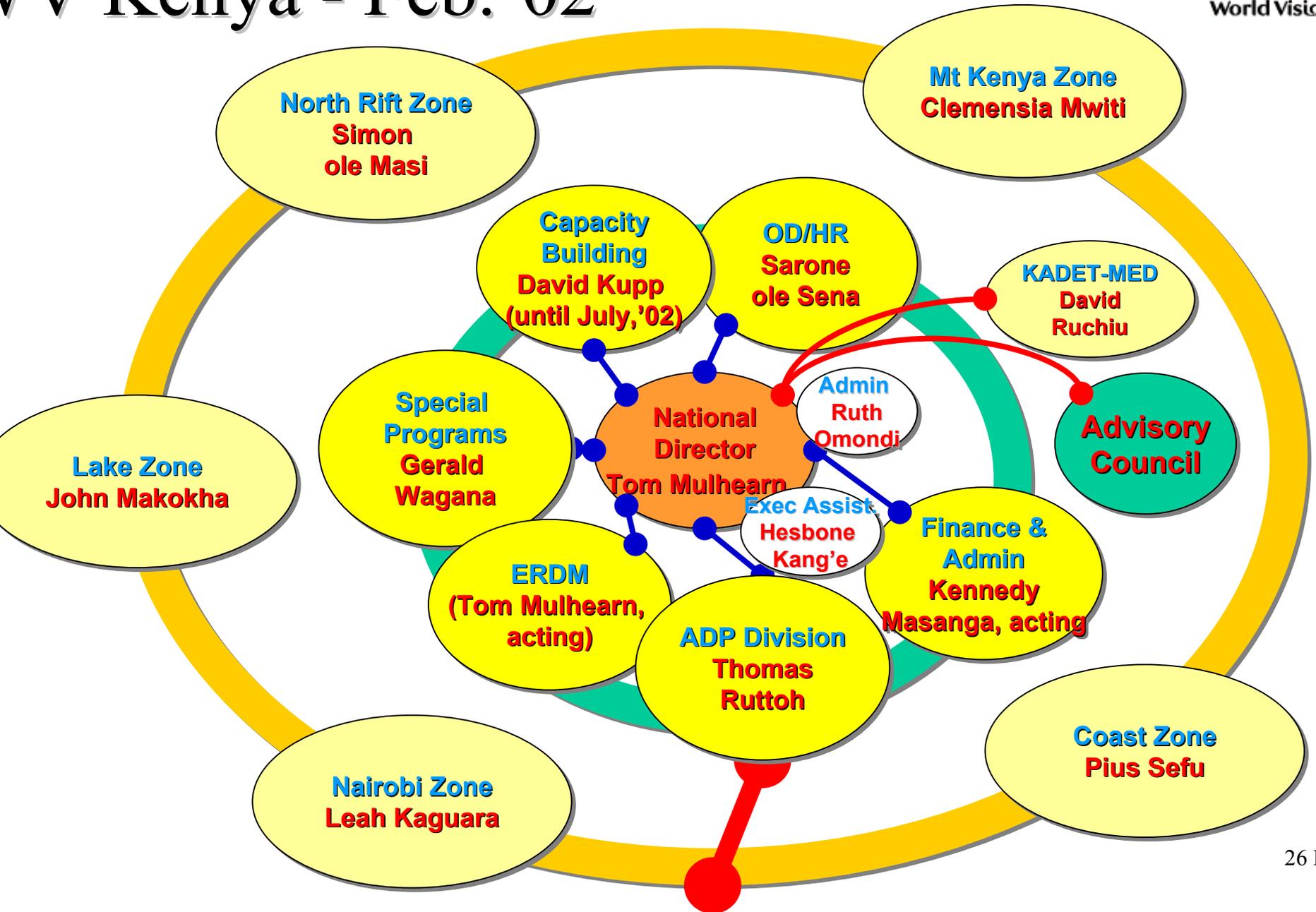
ORGANIZATION STRUCTURE, FY'02

26 February, 2002

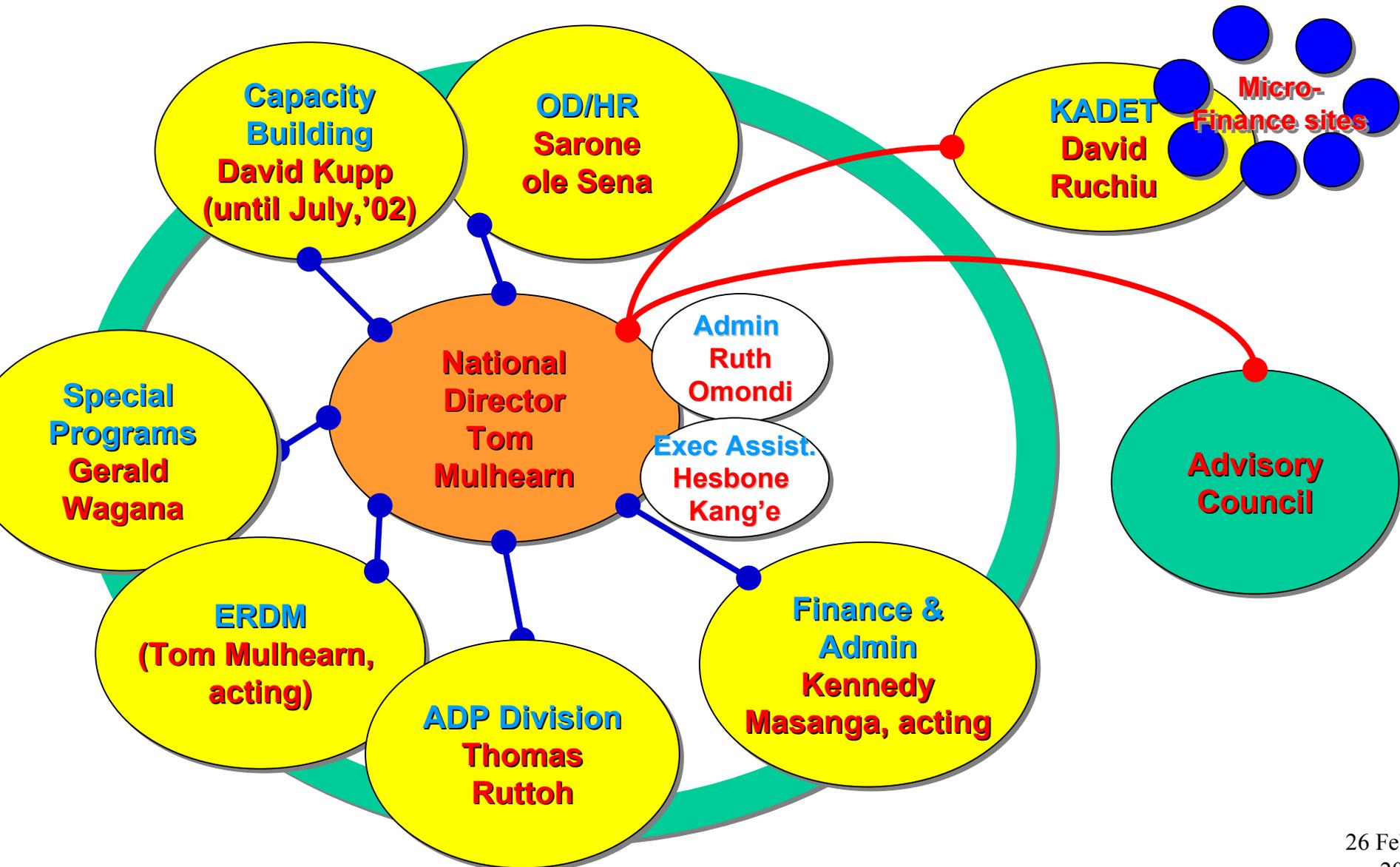
Introduction

- Structures: Flexible and Dynamic: This is not the final structure for WV Kenya. We will continue to adapt how we work and interact, in order to create the highest impact for sustainable, community-based transformation.
- Participation: These new structures here are the shared findings from several broadly participative reviews. We are moving towards the best structure to implement WV Kenya's Vision and Strategy for Community Capacity Building.
- Implementation: This new WV Kenya Structure is being implemented in phases throughout FY'02, including the move to five Zonal Offices.
- The Role of the N.O. WV Kenya is creating a more efficient National Office, focused on strategic leadership, capacity building, management oversight and technical support to the Zones, ADPs and projects, and communities. Operational decisions and actions will be decentralized as close as possible to the results. Every N.O. position will be justified on grounds of its strategic contribution to the WVK Vision, Mission and Strategy, and to organizational accountability.
- Cost Pressure: WV Kenya is launching this bold restructuring in the midst of considerable FY'02 funding pressures.

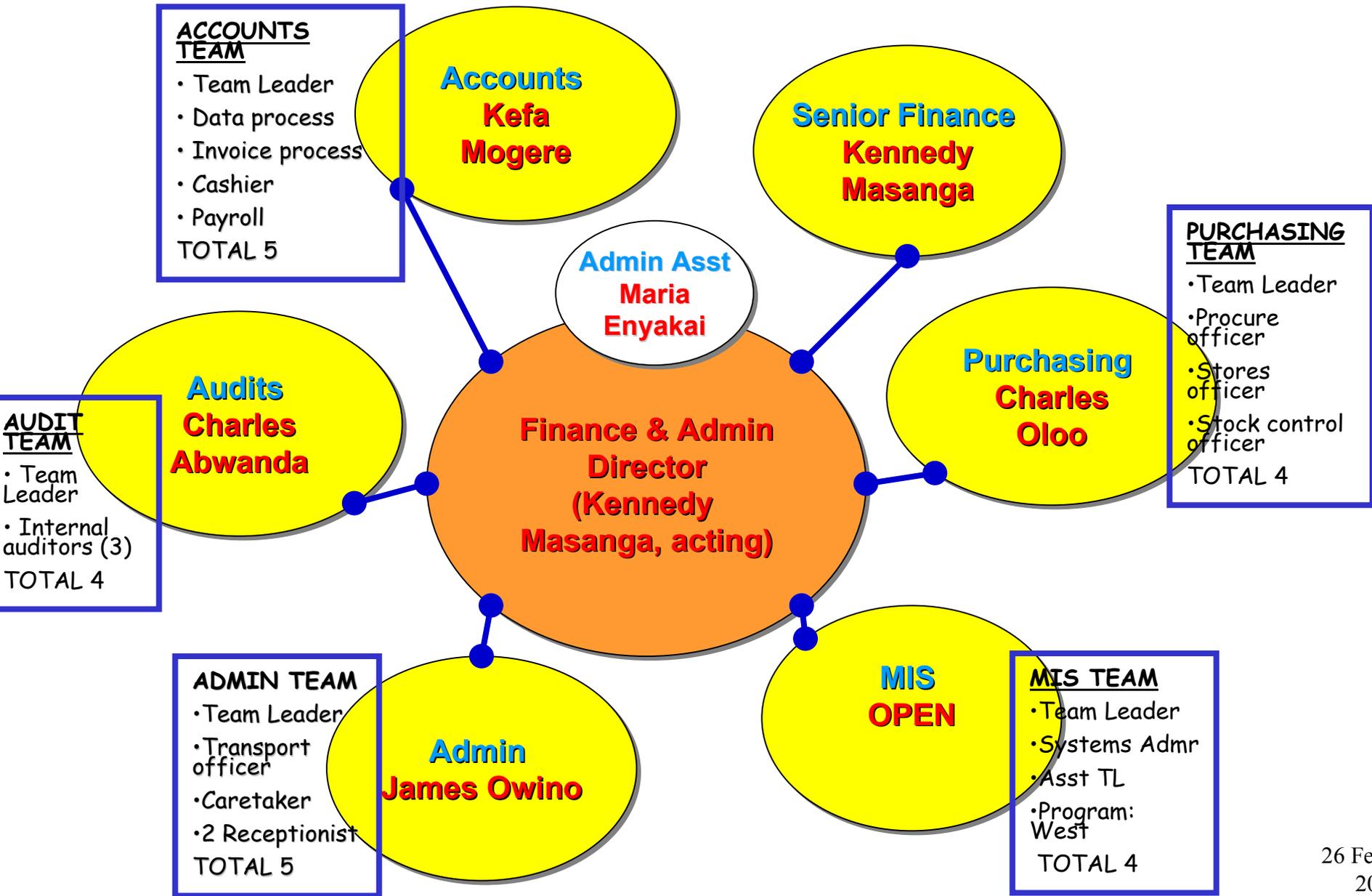
WV Kenya - Feb.'02



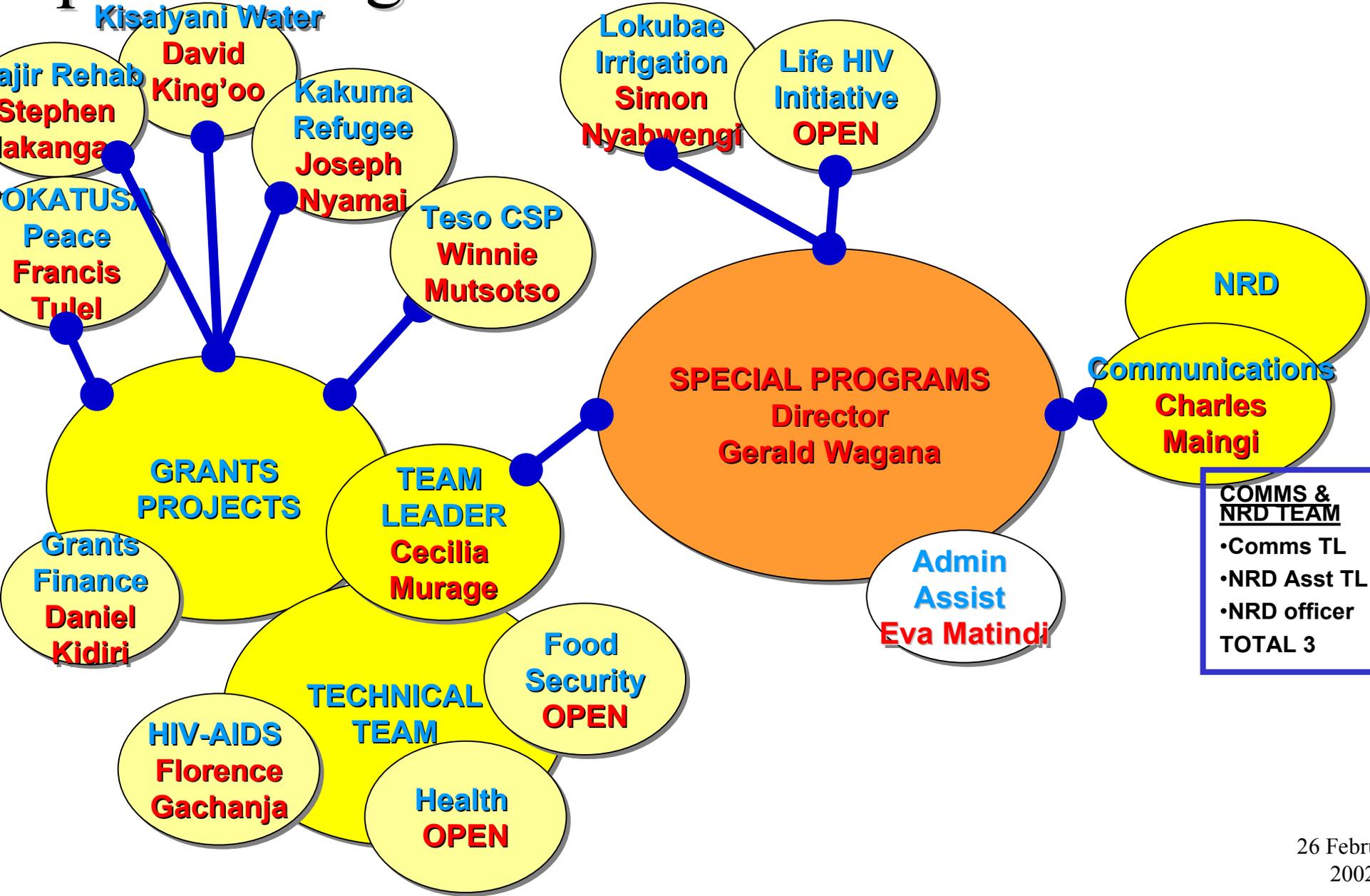
WV Kenya Leadership Team-Feb.'02



Finance & Admin Division - Feb'02



Special Programs Division - Feb'02



- COMMS & NRD TEAM**
- Comms TL
 - NRD Asst TL
 - NRD officer
- TOTAL 3

ERDM - Feb.'02

- SUPPORT SERVICES TEAM**
- Procurement: Kennedy Zowe
 - IT: Antony Maina
 - Logistics: Abel Mboo
 - Admin: Lorna Omondi
 - Driver: Jackson Kipkulei
 - Driver: Gabriel Nganga
 - Purchaser/Driver: Patrick Karani

- FINANCE TEAM:**
- Acct II: Nancy Amayo
 - Grants: Alina Mutua
 - Acct: Richard Lang'at
 - Acct: Joseph Okang'a

- COMMODITIES TEAM**
- CTS Corom: Simon Wanderi
 - Senior Comm Off: Yonathan Kiros
 - Clerk: Mary Myaboke
 - Comm Off: Boniface Mungai
 - Clerk: Christine Oryango

SUPPORT SERVICES Manager Edward Balungu

FINANCE Manager Mekonnen Sisaye

EMERGENCY RELIEF & DISASTER MITIGATION Tom Mulhearn, Acting

PROGRAM Manager Margaret Chilcott

COMMODITIES Manager Mario Rodrigues

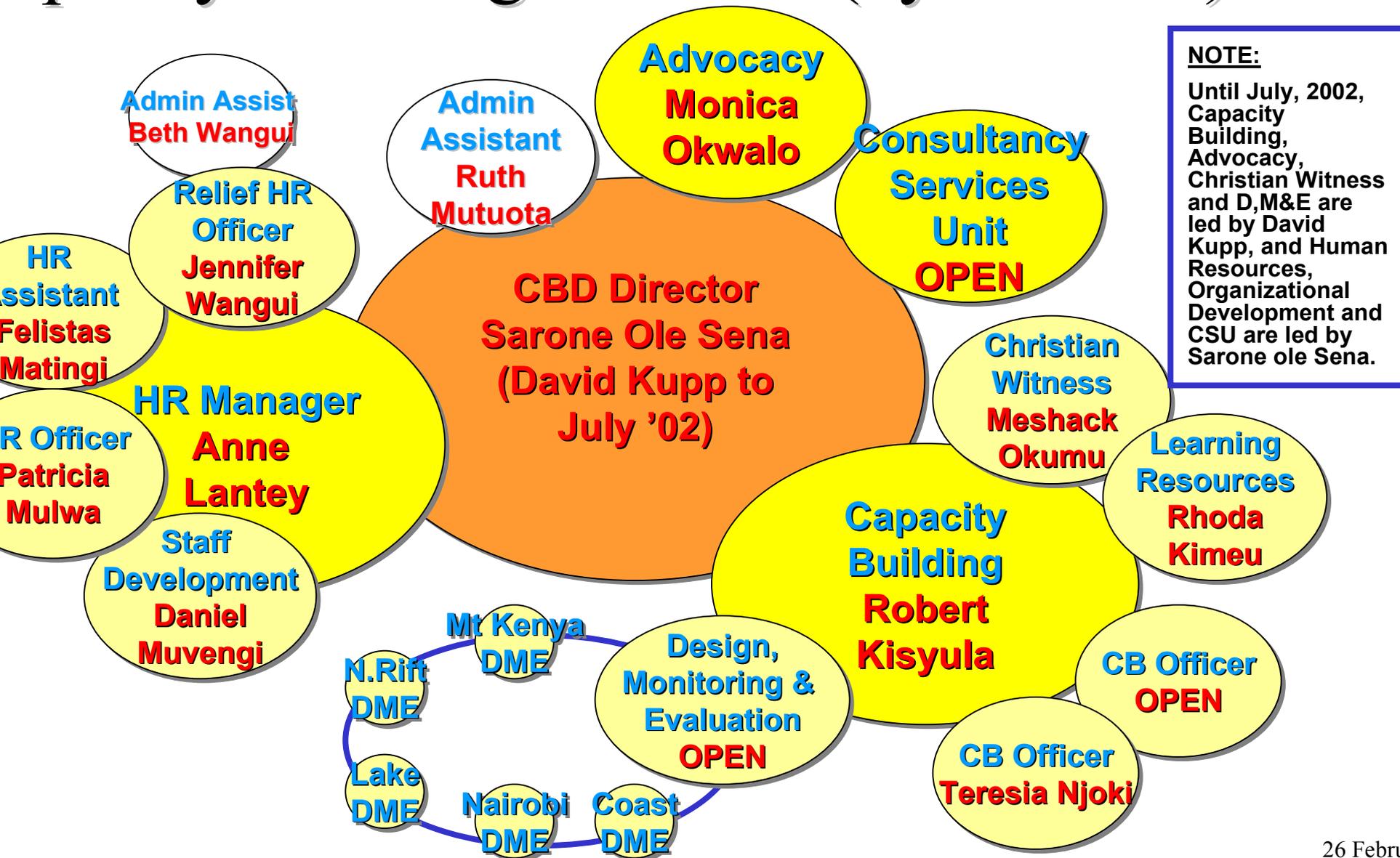
Moyale Zakayo Lolpejalai

Turkana Daniel Wang'ang'a

Koibatek Moses Chepkonga

- PROGRAM TEAM:**
- Water: James Thuku
 - Prog Off: Cecilia Mesopir

Capacity Building Division (by June '02)



NOTE:

Until July, 2002, Capacity Building, Advocacy, Christian Witness and D,M&E are led by David Kupp, and Human Resources, Organizational Development and CSU are led by Sarone ole Sena.

WORLD VISION
TESO CHILD SURVIVAL PROJECT.
(FIELD BUDGET)
 (Budget in US \$)

	Year 1		Year 2		Year 3		Year 4		Year 5		Total		Grand	
	USAID	WVUS	USAID	WVUS	USAID	WVUS	USAID	WVUS	USAID	WVUS	USAID	WVUS	Total	
1 Salaries / Benefits														
	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
Project Manager (1FTE)	\$ 12,145	-	18,107	-	20,823	-	23,946	-	27,538	-	102,559	0	\$ 102,559	
DFC (2FTE)	\$ 15,401	-	23,023	-	26,477	-	30,448	-	0	-	95,349	0	\$ 95,349	
Training Coordinator (1FTE)	\$ 10,993	-	16,359	-	18,813	-	21,634	-	0	-	67,799	0	\$ 67,799	
HMI Specialist (1FTE)	\$ 7,500	-	19,260	-	20,608	-	22,051	-	23,595	-	93,014	0	\$ 93,014	
Accountant (1FTE)	\$ 10,402	-	12,133	-	13,953	-	16,046	-	18,452	-	70,986	0	\$ 70,986	
Administrator (1FTE)	\$ 3,250	-	8,346	-	8,930	-	9,555	-	10,224	-	40,305	0	\$ 40,305	
Drivers (2FTE)	\$ 5,152	-	7,210	-	8,293	-	9,536	-	10,966	-	41,157	0	\$ 41,157	
Operations Director (5%)	\$ -	1,200	0	1,300	0	1,400	0	1,500	0	1,600	0	7,000	\$ 7,000	
CB Associate Director (5%)	\$ -	1,200	0	1,200	0	1,200	0	1,200	0	1,200	0	6,000	\$ 6,000	
National Health team (2 @10%)	\$ 1,200	3,000	1,200	3,100	1,200	3,200	1,200	3,300	0	4,600	4,800	17,200	\$ 22,000	
Community Capacity Building (5%)	\$ -	600	0	650	0	700	0	750	0	800	0	3,500	\$ 3,500	
N.O. Finance support (10%)	\$ -	1,450	0	1,550	0	1,650	0	1,750	0	1,850	0	8,250	\$ 8,250	
Nutritionist (5%)	\$ -	600	0	650	0	700	0	750	0	800	0	3,500	\$ 3,500	
Motivators (2)	\$ 3,095	-	8,542	-	9,824	-	11,297	-	12,992	0	45,750	0	\$ 45,750	
Subtotal Salaries / Benefits	\$ 69,138	8,050	114,180	8,450	128,921	8,850	145,713	9,250	103,767	10,850	561,719	45,450	\$ 607,169	
2 Travel														
<u>Local Travel</u>														
Consultation Travel	\$ 814	-	0	-	900	-	0	-	1,000	-		2,714	\$ 2,714	
Monthly Project Meetings	\$ 6,793	-	1,850	-	1,850	-	1,900	-	2,000	-	14,393	0	\$ 14,393	
Quarterly Project Meetings	\$ 1,070	-	1,100	-	1,150	-	1,200	-	1,250	-	5,770	0	\$ 5,770	
<u>International Travel</u>														
Consultative Meetings	\$ 4,000	-	0	-	4,000	-	0	-	4,000	-	12,000	0	\$ 12,000	
Subtotal Travel	\$ 12,677		2,950		7,900		3,100		8,250		32,163	0	\$ 32,163	
3 Training														
Project Staff (12 Staff X14 days)	\$ 3,500	-	375	-	400	-	375	-	375	-	5,025	0	\$ 5,025	
DHMT (9 staffX5days)	\$ 4,100	-	0	-	0	-	0	-	0	-	4,100	0	\$ 4,100	
Health Facility Staff (122 staff x10days)	\$ 8,400	-	4,200	-	4,200	-	4,200	-	4,200	-	25,200	0	\$ 25,200	
Women's Groups (87persons X5 days)	\$ 4,350	-	4,350	-	0	-	0	-	0	-	8,700	0	\$ 8,700	
Community Health Workers (174x15 days)	\$ 9,313	-	15,838	-	6,525	-	6,525	-	6,525	-	44,726	0	\$ 44,726	
Village Health Committees	\$ 8,900	-	8,900	-	0	-	0	-	0	-	17,800	0	\$ 17,800	
HIV Counsellors (40X3days)	\$ 2,400	-	0	-	0	-	0	-	0	-	2,400	0	\$ 2,400	
Dispensary Committee	\$ -	-	450	-	0	-	0	-	0	-	450	0	\$ 450	
Health Center Committee	\$ -	-	1,050	-	0	-	0	-	0	-	1,050	0	\$ 1,050	
District Health Mgmt Boards	\$ 4,360	-	0	-	0	-	0	-	0	-	4,360	0	\$ 4,360	
Follow-up Training/supervision	\$ -	-	0	-	10,000	-	10,000	-	10,000	-	30,000	0	\$ 30,000	
Subtotal Training	\$ 45,323		35,163		21,125		21,100		21,100		143,811	0	\$ 143,811	
4 Supplies														
Office Supplies	\$ 1,000	-	1,000	-	1,000	-	1,000	-	1,000	-	5,000	0	\$ 5,000	
Printing / IEC supplies	\$ 5,000	-	5,000	-	5,000	-	5,000	-	5,000	-	25,000	0	\$ 25,000	
Computers/Monitors/Printers/Ups	\$ 12,600	-	0	-	0	-	0	-	0	-	12,600	0	\$ 12,600	

Microscope (7)	-	-	2,500	-	0	-	0	-	0	-	2,500	0	\$ 2,500
Nets	\$ -	3,000	0	-	0	-	0	-	0	-	0	3,000	\$ 3,000
Insecticide	\$ -	2,000	0	-	0	-	0	-	0	-	0	2,000	\$ 2,000
Office Furniture	\$ 3,500	-	0	-	0	-	0	-	0	-	3,500	0	\$ 3,500
Bicycles (174)	-	-	7,000	-	0	-	0	-	0	-	7,000	0	\$ 7,000
Total Supplies	\$ 22,100	5,000	15,500		6,000		6,000		6,000		55,600	5,000	\$ 60,600
5 Capital Equipment													
Vehicles (2)	\$ -	70,000	0	0	0	0	0	0	0	0	0	70,000	\$ 70,000
Motor Cycles (2)	\$ -	7,600	0	-	0	-	0	-	0	-	0	7,600	\$ 7,600
Subtotal Capital Equipment	\$ -	77,600	0		0		0		0		0	77,600	\$ 77,600
6 Consultant/Professional Fees													
KPC Surveys/ Evaluation	\$ 8,000	-	0	-	8,500	-	0	-	9,000	-	25,500	0	\$ 25,500
Grant Start-up/DIP workshop	\$ 2,500	-	0	-	0	-	0	-	0	-	2,500	0	\$ 2,500
Facility Appraisal	\$ 900	-	0	-	0	-	0	-	0	-	900	0	\$ 900
Training Appraisal	\$ 900	-	0	-	0	-	0	-	0	-	900	0	\$ 900
Community RPAs	\$ 500	-	500	-	500	-	500	-	500	-	2,500	0	\$ 2,500
Partner Appraisal	\$ 1,000	-	0	-	1,000	-	0	-	1,000	-	3,000	0	\$ 3,000
Cold Chain Appraisal	\$ 1,000	-	1,000	-	1,000	-	1,000	-	1,000	-	5,000	0	\$ 5,000
Curriculum Development	\$ 2,500	-	0	-	0	-	0	-	0	-	2,500	0	\$ 2,500
International Consultants	\$ 7,000	-	0	-	7,000	-	0	-	7,000	-	21,000	0	\$ 21,000
Drop-out Tracking	\$ 1,500	-	0	-	1,500	-	0	-	1,500	-	4,500	0	\$ 4,500
Essential Drugs Appraisal	\$ 1,000	-	0	-	1,000	-	0	-	0	-	2,000	0	\$ 2,000
ITN / Condom Marketing	\$ 2,000	-	0	-	2,000	-	0	-	2,000	-	6,000	0	\$ 6,000
Quality Assurance/ Improvement	\$ 3,500	-	4,500	-	4,500	-	4,500	-	5,000	-	22,000	0	\$ 22,000
HMIS Development	\$ 4,345	-	0	-	0	-	0	-	0	-	4,345	0	\$ 4,345
PHMT consultative meetings	\$ 1,000	-	0	-	0	-	0	-	0	-	1,000	0	\$ 1,000
Subtotal consultant / professional fees	\$ 37,645	0	6,000	0	27,000	0	6,000	0	27,000	0	103,645	0	\$ 103,645
7 Other Direct													
Evaluation Support and audits	\$ 2,800	0	1,000	0	3,600	0	1,000	0	3,600	0	12,000	0	\$ 12,000
Fuel (2vehicles)	\$ -	15,000	0	20,000	0	20,000	0	20,000	0	20,000	0	95,000	\$ 95,000
<u>Maintanance ,Insurance,Taxes</u>													
Vehicles Insurance and Licences		3,000		2,565		2,565		2,565		2,565		13,260	\$ 13,260
Bank Charges,Cheque books etc		920		920		920		920		920		4,600	\$ 4,600
Tyres for 2 Vehicles and 2 Motorbikes				2,560		2,560		2,565		2,565		10,250	\$ 10,250
Vehicles Repairs,Maintance and Services		2,000		3,000		3,500		4,000		5,000		17,500	\$ 17,500
Office Utilities - Electricity, Water etc		1,150		1,150		1,150		1,150		1,150		5,750	\$ 5,750
Watchman and Office cleaner		2,308		2,308		2,308		2,308		2,308		11,540	\$ 11,540
Hospitality e.g 10 oclock tea		1,800		1,800		1,800		1,800		1,800		9,000	\$ 9,000
Sub Total		11,178		14,303		14,803		15,308		16,308		71,900	\$ 71,900
<u>WVK DDC Activities</u>													
Office renovation		8,270		2,182							0	10,452	\$ 10,452
Other DDC Activities		2,346		2,346		2,346		2,346		2,346	0	11,730	\$ 11,730

Telephone,Fax,Internet ,Postage,Radio etc	\$	4,882	618	5,000	500	5,000	500	5,000	500	5,000	500	24,882	2,618	\$	27,500
Subtotal other Direct	\$	7,682	\$ 37,412	\$ 6,000	\$ 39,331	\$ 8,600	\$ 37,649	\$ 6,000	\$ 38,154	\$ 8,600	\$ 39,154	\$ 36,882	\$ 191,700	\$	228,582
Total Direct project Costs	\$	194,565	\$ 128,062	\$ 179,793	\$ 47,781	\$ 199,546	\$ 46,499	\$ 187,913	\$ 47,404	\$ 174,717	\$ 50,004	\$ 933,820	\$ 319,750	\$	1,253,570
Indirect at 24.2%		\$47,085	\$30,991	\$43,510	\$11,563	\$48,290	\$11,253	\$45,475	\$11,472	\$42,282	\$12,101	226,641	77,380	\$	304,021
Grand Total	\$	241,650	\$ 159,053	\$ 223,303	\$ 59,344	\$ 247,836	\$ 57,752	\$ 233,388	\$ 58,876	\$ 216,999	\$ 62,105	\$ 1,160,461	\$ 397,130	\$	1,557,591

BUDGET NOTES

1. SALARIES AND BENEFITS

We have revised the salaries budget to provide for the motivators and also adjust the Divisional Field Co-ordinators (DFCs) salaries to bring them in line with the actual figures.

For this purpose the current actual salaries figures for the employees already on board are projected to increase at 15% annually to the end of the DAP activities.

With the realized savings plus the unspent salaries for the first three months, (October, November and December of year 1), We have provided for two motivators.

- DFCs salaries were also adjusted upward to reflect the actual position, now that they are in-board.
- The salaries for yr1 have also been adjusted to reflect the portion for the remaining months of the current year (yr. 1).
- The gross salary figures include gratuities, insurance, leave and medical allowances.
- Grants manager is replaced with National Office Finance Support Staff to cover all finance support provided by the National Office as long as it does not exceed the budgeted figure.
- For HMI specialist and the Office Administrator the only adjustment made is for the unspent salaries to date because they are yet to come on board.

2. TRAVEL

- An adjustment has been made to provide for the costs of staff relocation and transport costs, in year 1.

3. TRAINING

- The following changes have been made.
- The budget for DHMT was adjusted upward, from \$900 to \$4,100, while that of women's groups was adjusted downward from \$52,200 to 44,726.

- During the Training appraisal it was also felt that there was need to revive the District Health Management Board and we therefore increased the budget from the previous \$360 to 4,360.
- The budget for project staff of \$3,500 is increased to \$5,025 and spread across the whole period. This is necessary to cater for any future staff changes.
- Community health workers training and health facility staff training was considered as a continuous exercise and its budget was therefore spread across the period.
- There is also an urgent need to train the HIV counselors and this activity was brought forward to yr1 from yr2.

4. SUPPLIES

- To provide for a photocopier and computer stabilizer the budget for computer monitors and a printer was increased by \$ 3,600 from 9,000 to 12,600.
- Apart from this the only other change was to re-schedule the purchase of microscopes and bicycles from yr. 1 to yr. 2.

5. CAPITAL EQUIPMENTS

There were two items under this category; two motor cycles and two vehicles. The motor cycles are already procured at a cost lower than the initial budget provision. The budget has been adjusted from \$12,000 to \$7,600.

6. CONSULTANT / PROFESSIONAL FEES

- The original budget provision for facility Appraisal, Training Appraisal and community RPAs was reduced from \$2500 to \$900, \$900 and \$500 respectively.
- This reduction was necessitated by the fact that, these three activities were done concurrently with KPC surveys and this ended up reducing their costs drastically.
- Quality Assurance was reduced by \$3000 from \$25000 to \$22000 over the period while HMIS development was increased from \$2100 to \$4345. This is necessary to provide for HMIS desktop computer and a printer.

- Provision is also made for Provincial Health Management Team meeting at \$1000 in Yr 1.

7. OTHER DIRECT

- The overall budget for Evaluation support remained the same at \$12,000 for the whole period. However re-distribution was done across the whole period. This was necessary to provide for the annual audit costs.
- Fuel budget is reduced by \$5,000 during yr. 1. The project used one vehicle during quarter one and quarter two in year1 and this account for the reduction.
- For maintenance, Insurance and Taxes, the figure has been broken down into various components. These include motor vehicles insurance and licences, bank charges, tyres for the vehicles, vehicle repairs and maintenance etc.
- A budget of \$ 10,452 is provided for office renovation and fencing under WVK DDC Activities. The Ministry of health provided a three rooms staff house which need renovation before it can be used as an office. The office compound need to be fenced for security reasons
- For communication with field co-ordinators on the field the project plan to buy radio handsets .This costs will be comfortably absorbed under telephone, fax, and postage budget.

P.O Box 16094
00100-Nairobi GPO
Kenya

Phone + 254 2 883652
Fax + 254 2 883669
E-mail winfred_mutsotso@wvi.org

Winfred Okoyo Mutsotso

QUALIFICATIONS

1999-2000 MSc. Health Services Management, London School of Hygiene and Tropical Medicine (University of London).

Policy Report Title: Developing an integrated policy for HIV/AIDS prevention and care programme at District level, in Kenya: Managing the balance between regulation and collaboration by Government and implementing NGOs.

1990-1992 Diploma in Advanced Nursing, University of Nairobi, Kenya.
Project: Community Based Health Care: What does it involve?

1986-1987 School of Midwifery, Mater Hospital, Nairobi, Kenya
Diploma in Midwifery

1983-1986 School of Nursing, Nairobi, Kenya
Diploma in General Nursing

1978-1981 Butere Girls High School, Kenya
Kenya Certificate of High School Education
Score: Division 1

PROFESSIONAL EXPERIENCE

Jan 2001- Present **WORLD VISION KENYA, Nairobi, Kenya**

Project Manager, Teso Child Survival Project

- Provide leadership and technical oversights during the implementation of the Teso CSP project
- Develop and manage the implementation of the project DIP
- Manage and oversee quality control on all aspects of project implementation
- Develop effective linkages with all key stakeholders in the district
- Develop monitoring and evaluation guidelines in line with donor requirements
- Develop monitoring and evaluation guidelines in line with donor requirements
- Produce all project related reports according to donor requirements
- Build community and staff capacity to handle project activities effectively
- Develop a network of advocates on Child Survival Programmes in the region
- Undertake strategic planning with the community and other stakeholders on key CSP issues

- 1994-1999 NAIROBI HOSPITAL SCHOOL OF NURSING**
Nurse Educator
- Design ,implementation and evaluation of Public Health Nurse Nursing curriculum.
 - Member, Nursing Education National committee
 - Design and implementation of programmes for continuing Education
 - Facilitating Hospital quality assurance programme.
- 1996-1997 MINISTRY OF HEALTH, UGANDA**
Consultant Public Health Trainer
- Design and facilitate process of evaluating relevance and effectiveness of training programmes by stakeholders.
 - Facilitate and conduct workshops for strategic planning and management
 - Report writing and dissemination of findings
- 1993-1994 FEED THE CHILDREN (K)**
Primary Health Care Manager
- Design and implementation of health activities through strengthening existing ongoing health care programmes (Busia District) in collaboration with the District Health Management Team.
 - Co-ordination of activities in establishing community based health care Programme in rural area (Busia District) and slum area in Nairobi
 - Team member, Nairobi Area committee on design and implementation of Programmes for Children in Especially Difficult Circumstances.
 - Supervision of programme supported Child Care Institutions on health related issues
 - Report writing and maintaining communication with relevant actors
- 1993 AFRICAN MEDICAL AND RESEARCH FOUNDATION (AMREF)**
Public Health Nurse, Refugee Health Services
- Team leader in co-ordination, planning and delivery of inpatient health care in Refugee camp, and activities for improving child health.
- 1987-1989 NAIROBI HOSPITAL, KENYA**
Registered Nurse
 Planning, implementation and evaluation of nursing care for adult medical/surgical patients.
- Volunteer work*
- 1997-1999 Kenya Voluntary Development Agency**
 Technical advisor and supervisor for the planning and implementation of health care and related activities for the agency.
- 1997-1999 Congregation of Assumption Sisters of Nairobi**
 Advisor in health service programme management

CURRICULUM VITAE - FLORENCE GACHANJA

Personal Details

Name: Florence Gachanja
Nationality: Kenyan
Address: World Vision International—Kenya Office
Po Box 50816, Nairobi
Personal address: P.O. Box 34382, Nairobi.
Tel: 883652-5 or mobile 0733-891773
Fax: 254-2-883669
E-mail: florence_gachanja@wvi.org

Summary qualifications

Responsible positions in Reproductive Health Programme: Project Planning, Management, research, training, monitoring and evaluation; needs assessment skills; training organization and coordination skills which include: Training of Trainers (TOTs), Managers orientation workshops, peer educators/counselors courses and Community Health Workers (CHWs) workshops. Developing HIV/AIDS strategy. Proposal development for fund-raising, conducting case studies, Consultant for International Organizations and local NGOs. Working well under pressure. Adaptable and responsible.

Academic Qualifications

- M.A. Population Studies, University of Nairobi, Population Studies Research Institute (1989).
- One-year internship offered by Jessie Smith Foundations (U.S.A.) through FPPS 1989/90. The aim of the internship was to provide practical experience in planning, implementation, management and evaluation of reproductive health projects/activities.
- B.Ed. Home Economics, University of Nairobi (1983).

Short Courses:

- 2002: Attended Epi Info 2000 workshop
- 2001: 5-week Women in Management workshop in Washington DC, sponsored by Ford Foundation and organized by CEDPA
- 2001: Attended Microsoft Excel course at Cyber Networks Limited, Hurlingham, and Nairobi.
- 1998: A five (5) day HIV/AIDS counseling course
- 1996: Gender Sensitization Course organized by Collaborative Centre for Gender and Development and Family Health International (FHI).
- 1996: Total Quality Management (TQM) organized by Consultants for Effective Training Ltd. (CET).
- 1995: HIV/AIDS Policy Development organized by Family Health International (FHI).
- 1992: Participatory Research for Communication and Development at Cornell University, U.S.A. The course explored the need and benefits for involving local communities in their own development programmes.
- 1992: Attended Word Perfect course at ARMACO Computer Centre.

CONFERENCES ATTENDED

- Jan 14-18, 2002, Attended HIV/AIDS Hope Initiative: High prevalence country workshop organized by World Vision in Johannesburg --South Africa
- 2-day African Women Researchers dissemination workshop (November, 2001)

WORKING EXPERIENCE

February 2002 to date:

National HIV/AIDS Coordinator—World Vision International—Kenya

Responsibilities include:

- Developing concept papers/proposals for fund raising
- Developing HIV/AIDS strategy
- Building the capacity of Zonal/ADPs staff to be able to integrate HIV/AIDS

- Conducting HIV/AIDS sensitization talks for National Office staff
- Coordinating and giving technical advise on conducting HIV/AIDS baseline surveys and evaluations
- Visited World Vision Uganda to learn their HIV/AIDS best practices (March 2002)

1997 to January 2002: Programme Coordinator FPPS (K)

- Coordinator in community awareness on reproductive health, gender and women's rights project funded by CORD AID through FPPS. The aim of the project is to mobilize communities to address issues on reproductive health, gender inequality and women's rights. The project aims at changing the negative attitudes, harmful cultural beliefs and practices which lead to underdevelopment and finally to poverty (on-going).
- Developed a proposal on puppets on reproductive health for pastor lists. A proposal for training of puppeteers in Kajiado and Narok Districts in the Rift Valley Province (May 2001).
- Conducted case studies of families with one or more persons living with HIV/AIDS in various communities. The aim of the study was to find out how families cope with the ravages of the disease financially, socially and emotionally, support systems within the community (A research funded by the Ford Foundation through FPPS) (2000-2001).
- Developed a proposal on "Integrated approach for community care for grandparents, people living with AIDS and AIDS orphans at the community level". A proposal submitted to the Ford Foundation for funding (May 2001).
- A member of an evaluation team to evaluate the Integrated Health Care Programme implemented by International Rescue Committee (IRC) in Kakuma Refugee Camp (March/April 2001).
- Collected information on health issues in Nairobi especially focusing on the poor, the effectiveness of the urban health system in reaching the poor, and how the poverty focus can be sharpened via the organization of the health system to be able to deliver services such as immunization, curative and other child and maternal health services (December 2000).
- Facilitator in HIV/AIDS peer educators' workshop for Magadi Soda (2001).
- Facilitator in Home-based Care courses for Brooke Bond employees (1999-2000).
- Needs assessments to Search for Potential Partners in Primary Health Care focusing mainly on immunization coverage, malnutrition among other issues and

Basic Education in Nyanza and Western Kenya (1998/1999).

- Capacity building for partners/organizations. For example, GTZ collaborators who include government officers from various ministries and programme staff from NGOs. I have also trained teachers from vocational training colleges as focal persons in prevention and control of STIs, HIV/AIDS activities (1999 - 2000).
- Participated in the development of the National Curriculum manual for community-based distributors of contraceptives (CBDs).
- Facilitated in the six-week MCH/Family Planning courses organized by FPPS (K) in collaboration with Division of Family Health.
- Assisted in the implementation and management of HIV/AIDS prevention intervention project funded by Family Health International. During this period I facilitated in training of peer educators in workplaces, managers orientation workshops, leadership and management for university students.
- During the same time, continued monitoring CHWs' activities in the field.
- Assessment to find out the extent to which Health link Worldwide contributes to capacity building (Networking, collaboration and sharing information focusing on HIV/ADS and human rights) (1999).
- Facilitator of Youth Reproductive Health workshops organized by Center for African Studies (CAFS) (1997 - 1998).
- Member of United Nations office of Project Services (UNOPS) supervision mission to review implementation approach to health, water and sanitation project in respect to health and nutrition in the marginal areas of Tanzania (1997). A project funded by IFAD and BSF.

Oct. 1990 – 1997: A programme officer with FPPS

- Coordinated a MCH/Child Survival project funded by UNICEF through FPPS. The aim of the project was to mobilise communities to participate in their own health, nutrition and development needs so as to improve their health status and alleviate poverty. MCH/FP nurses from clinics in different communities were selected and trained as Trainers (TOTs) and also trained village health committees (VHCs) on health issues of concern to them such as importance of immunisation, good nutrition, diarrhoea diseases, malaria, environmental sanitation among other issues to enable them reach the other members of their communities. By the end of the project, all the village health committees had made efforts to educate other members of their communities especially on importance of taking their children for immunisation, had started sustainable income generating projects and had formed

folk media groups to reach the communities with health messages through song, dance and plays (1991-1994).

- Developed appropriate linkages necessary to facilitate training of nurses and support from the Division of primary health care, Ministry of health. The support included getting vaccine carriers for mobile clinics and coldchain for the MCH/family planning clinics we worked with (1991-1994).
- Coordinated the implementation of "Reaching mothers and older girls with critical maternal and child health messages". Community-based health workers from Nairobi slums were trained in simple material development which they would use to disseminate health messages. A booklet "Let's talk health" was developed for community health workers in two slum areas of Nairobi. The issues covered included: immunisation, nutrition, common ailments, family planning, and HIV/AIDS and safe motherhood. The project was funded by UNESCO through World Education (1993).
- Coordinator of the community-based health workers project. I facilitated the CHWs courses, developed checklists and forms and monitored their activities in the field. I was also involved in the evaluation of the project. The CHWs disseminated health messages to their communities (1993-1995).
- Coordinated Adolescent Health Management project funded by Ford Foundation through FPPS. The aim of the project was to help young people acquire knowledge and skills, which would contribute healthy lives and responsible behaviour. 15 youth groups were formed and the members were trained on peer counseling and management of income generating projects. The groups were given seed money to start income generating projects. By the end of the project period, all the groups had started their own income generating projects and had reached in-school and out-of-school youth with information on youth (1990-1993).
- Editor "Youth Forum" magazine for young people (1991) and a member of the Youth Initiative project committee coordinated by NCPD.
- Member of midterm UNOPS mission to review women participation in identification, planning and implementation of the Coast ASAL Development project funded by IFAD (1994).
- Member of Youth Needs Assessment organised by John Hopkins University and coordinated by NCPD (1992).
- Member of youth initiative project committee coordinated by NCPD (1993 - 1997).
- **Sept. 1989 – Sept. 1990:** Internship offered by Jessie Smith Foundation, U.S.A. through FPPS. The internship provided practical experience in planning,

implementation, monitoring and evaluation of health projects.

- **1983 – 1987: Graduate teacher** – taught Nutrition and Home management and for 2 years I was the head of the Home Science department.

Publications

- Editor, "Youth Forum".
- University Systems Analysis Report.
- Midterm review report "Women in Development".
- Supervision Mission Report "Integration of Household Food and Nutrition in the health component.
- Training of Trainers (TOTs) Curriculum Manual.
- "Let's Talk Health", a booklet for Community Health Workers.
- Search for NOVIB partners in Nyanza Region Report.
- Kenyan families coping with HIV/AIDS
- Search for NOVIB partners in Western Kenya report.

Research Undertaken

- Case studies of Kenyan families living with or affected by HIV/AIDS; how these families cope financially, socially and emotionally and what support groups are within their communities (2000).
- University Systems Analysis at Moi, Nairobi and Maseno Universities. The study was to review various aspects of knowledge, attitudes, practices and health behaviors as well as review of the services offered (1992 - 1993).
- Baseline survey on knowledge, attitudes and practices on Family Planning, Child Survival, Nutrition and HIV/AIDS in Mathare and Mukuru slums (1993).
- Case study of contraceptive prevalence at Sulmac Flower Company, Naivasha (1992 - 1993).
- Baseline Survey on Child-Survival Practices (1991).

- M.A. thesis "Health and Demography": A case study of two Antenatal clinics in Nairobi (1989).

Referees:

1. Eric Krystall,
FPPS (K) Advisor,
P.O. Box 46042,
Nairobi.
Tel: 715002, 710705
Fax: 715115
E-mail: fpps_k@net2000ke.com
2. Prof. Edward Kairu,
Consultants in Development Programmes - ETC,
P.O. Box 76378,
Nairobi.
Tel: 445421/2/3
Fax: 445424
E-mail: etc@africaonline.co.ke

HEALTH FACILITY / DISTRICT HEALTH SYSTEM APPRAISAL

INTRODUCTION

Teso District was created from Busia in 1995 and inherited an underserved area in terms of static healthy facilities. It has 13 health facilities considering that the ministry of health aimed at providing facilities within a 4-5 km radius from beneficiaries the district is quite underserved and residents have to travel approximately 15km to the nearest facility. The district has some of the worst health indicators, which exceed the national averages in some instances. The facilities are distributed as follows:

DIVISION	FACILITY	ORGANISATION
Amagoro	Kocholya District Hospital	GOK
Amukura	Amukura Health Centre	GOK
	Amukura Mission Health Centre/Orphanage	Catholic
	Kukolis Dispensary	GOK
	Obekai Dispensary	GOK
Chakol	Alupe Hospital	GOK
Angurai	Angurai Health Centre	GOK
	Amondong Health Centre	GOK
	St. Mary`s Chelelemuk Dispensary	Catholic
	Kolanya Dispensary	Salvation Army
	Akichelesity Dispensary	GOK
	Chamasim Dispensary	Anglican church
	Aboloi Dispensary	GOK
	Changara Bamako Initiative Site	Community

Even when undeserved as a district the distribution of facilities is unevenly distributed and some locations don't have a single health facility. For instance, in Changara, Angurai division, there is no facility at all. However in 1993, they did establish a community pharmacy through the assistance of UNICEF and is one of the most successful Bamako Initiative sites.

COMPONENTS OF THE APPRAISAL

The health facility appraisal was composed of various facets that were designed to assess:

- Physical facility status
- Staffing
- The cold chain (EPI)
- Equipment status and availability
- Clinical practice in the management of children
- Sick-children caretakers' health knowledge
- Staff child-health related training frequency
- Health center/dispensary development committees
- Alupe Hospital management board
- Alupe Hospital management team
- The district health management board
- The district health management team
- The health information system
- The availability of IEC materials

METHODOLOGY

1. FACILITIES

This involved the administration of five numbered questionnaires developed by BASICS. Where appropriate the questionnaires were adopted to fit the local situation. The set of five questionnaires were administered to 10 facilities between February 18 –21, 2002. However, before the actual survey, January 20-31, 2002, all the 13 facilities had been visited by two teams, which recorded observations. This was done during mobilization/sensitization that included meetings with the provincial administration and all stakeholders. The questionnaires were designed to assess the components listed above, and were labeled:

- Observation checklist - sick
- Healthy worker interview
- Exit interview - sick child caretaker
- Cold chain appraisal

2. BOARD/COMMITTEES/HEALTH TEAMS

Focus group discussions were held with the district health management board members and the Alupe Hospital management board. Equally, discussions were held with health center/dispensary

development committees for 8 health facilities. The discussion centered on specific lead questions, which set out to establish:

- The composition of the boards/committees?
- Whether the teams have written operational guidelines to direct their activities?
- The perceived roles and functions in the absence of guidelines?
- Whether orientation/induction or training sessions have been carried out?
- What were the contents of the training?
- The relationship between the boards/committees and the health system; The extent of linkages and mix?
- Whether they are aware of government health policies and development against which background they should operate?
- The constraints encountered in the discharge of their duties?
- How they have tried to cope and deal with the problems?
- What support and training is required to enhance operations?
- To what extent they identify local needs and recommend actions?
- To what extent the district health management team coordinates health services in the district including other providers apart from the government?
- What systems are in place to identify funds, generate a budget, and control the expenditure of financial resources?
- What kind of reports are generated and how frequently?
- What linkages exist between health providers?
- Whether health teams are able to enforce standards for health care and ensure their maintenance?
- Whether there are operational sub-committees that are charged with specific functions?
- Whether there are intersectoral activities for primary health care in existence?
- The extent of skills mixture that contribute to the execution of duties effectively?

The extent of short falls:

- The extent of authority for decision making in resource allocation and other issues?
- The team's response to invoke greater participation of the community in running health services?
- Appropriate structural, financial and organizational reforms needed in the district?
- Whether budgets are adjusted to local conditions on the basis of historical workload data, local disease burden and prevalence rates?
- Whether there are established norms that define an appropriate mix of personnel, operations and maintenance inputs at all levels in order to obtain optimal performance and efficiency?
- Capacity levels to collect, analyze, interpret and make use of data at the source to monitor and evaluate the impact of efforts to reduce the burden of disease?
- The existing information systems that establish health services utilization patterns and their determinants as a means of improving service, coverage, accessibility and availability?

APPRAISAL FINDINGS

Physical Facilities

Except for Moding and Amukura GOK health facilities, all other facilities are old structures with inadequate operational room for health workers. Maternity units and laboratories were the most affected. The district hospital has no mortuary and is actually a health center, which was upgraded into a district hospital without attendant facilities such as an operation theater. However, Kolanya Dispensary, which is run by the Salvation Army, is a large complex, which is completely underutilized.

Moding and Amukura were upgraded as part of donor programs, hence the availability of operation theaters. However, one notices a lack of preventive maintenance. In certain areas the community, through cooperative actions, has attempted to put up dispensaries, which are 3/4 complete. Two were observed during the survey. One is partly being financed by the community development trust fund (CDTF), which is a European Union/GOK development fund.

Staff

Staff shortages for all cadres were found. This leads to a situation where dispensaries do not operate over weekends despite being the first line contact with patients from the community. This aggravates the already deplorable state of health facilities. There is only one medical officer for health. However, he does get assistance from another doctor who is in charge of TB/Leprosy in the province and hence not specifically assigned to the district. However, the greatest shortfall is in the area of enrolled nurses. There are 80 in place against the required 130.

Cold Chain

Ten health facilities were assessed. All (100%) had a functional refrigerator. Of the ten, four used both electricity and gas while six used gas only. Five (50%) did not have extra gas in reserve. This indicates that there are gaps between gas refills, potentially causing the refrigerator to be non-operational. Only two were not standing on level ground due to uneven floor. All the refrigerators have never been serviced. If records were available, data for the next servicing was not identifiable. The issue of servicing was confused with general cleaning of the refrigerator.

A schedule for the supply of vaccines was not in place and reordering systems were completely non-existent. Vaccines are delivered to the facilities from the district level intermittently, and the facilities struggle to collect them with no available transport. Overall there are no criteria for when to restock or for determining what is an adequate supply. Except at the district hospital where there are four cold boxes, the other facilities do not have any. However, vaccine carriers are in ample supply but not in good condition. Most of them are disposable cartons that were for specific campaigns. For the ten health facilities, only three have staff who had been trained in cold chain maintenance in the last 12 months.

The Kenya expanded program on immunization (KEPI) was for many years supported by DANIDA as a vertical program, to the extent that it looked like a success story. However, from this assessment, one notices that sustainability of the DANIDA support was lacking. The refrigerators are no longer serviced, and the staff involved in immunization activities has not

been trained on the cold chain and have no idea what servicing involves and that service records are supposed to be kept.

Management of stocks is a problem. Records are not based on any recorded data but on physical observations. The KEPI program is the only area where medical stationery is available. If a retraining program is not undertaken immediately the immunization program will collapse like previous ones. Moreover, due to the absence of a central reordering system, expired vaccines were found in one health facility. However, due to concerted efforts the health worker is quite conversant with the immunization schedule and feels confident in that sphere.

Equipment

Six facilities had vehicles, but only four were in good condition, while two had no vehicles. Patient referral is an enormous problem. Considering the distances between facilities, deaths, especially maternal, are not infrequent.

Going through an equipment and supplies checklist it was apparent that some equipment works while others do not. Inadequate supplies exist hand in hand with shortages for many days in the month. Due to the erratic nature of supplies the development of a proper supply support and monitoring system becomes impossible.

The project should focus on equipping the laboratories with a microscope and all attendant reagents. An otoscope does not appear in any of the facilities.

The most severe shortages relate to medical stationery. Relevant reporting forms are not available in any of the facilities.

A clean and adequate water supply does not exist in any health facility in the district. The district has a major water problem and typhoid is quite prevalent. All facilities had functional latrines but their maintenance and cleanliness were below standard.

IEC Materials

Except for scant HIV/AIDS and immunization messages, there were no other educational materials and none in the local language.

Oral Rehydration Therapy

Six facilities reported having an ORS corner. However, the corners are underutilized or not utilized at all.

Utilization

Despite the district being underserved utilization of health facilities is very low. In two facilities no sick children appeared for observation for two days straight. In two other facilities, there were absolutely no patients at all on two occasions.

Weight Scales

All facilities visited had baby weight scales of different varieties.

Thermometers and Others

All facilities had thermometers and timing devices, while two had no steam sterilizers but were using cookers/stoves to sterilize instruments.

Reporting Forms

This is the most affected area. Most of the health facilities had no basic reporting forms and other documentation instruments. This presents a weak or non-existent health information system.

Supervision

While eight health workers acknowledged the presence of a supervisor there was no schedule for visits. Two did not know who their supervisors were, hence their response was that they don't have a regular supervisor. Only one acknowledged the existence of a regular schedule for visits.

The conclusion is the supervision is *ad hoc*, irregular and uncoordinated. When it happens it is negative in nature, relying on fault-finding and not capacity building. From discussions, the line of reporting and supervision for health facilities was not very clear to workers. There does not exist a supervisory visit checklist.

Clinical Practice

Only five questionnaires were administered in observing the treatment of a sick child. Sick children were not always available, indicating health services are not necessarily being sought for in health facilities. Most sick children that come to facilities are brought because of fever, diarrhea, vomiting and cough.

Due to various reasons such as inadequate or lack of supplies and low worker morale, the observation for a sick child is hurried and doesn't assess all danger signs, symptoms and screening procedures to properly diagnose the child. A hurried procedure that does not include communication to and education of the caretaker is undertaken.

An intensive child health related training program for health workers should be undertaken.

Caretakers Health Knowledge

Generally, the sick child caretaker has rudimentary, disjointed knowledge on medicine, sick child management signs of sickness and immunizations. This could be enhanced by focused training as planned in the project.

Health Committees and Boards

Boards and committees were created to oversee the proper provision of health services in their respective jurisdictions. Further, as they are nominated from the community, they are supposed to provide the link between the formal health system and the community. However, during the appraisal the following was noted:

- That board/committees have no documents outlining their functions and roles
- Where some have seen the document, but is in fact not readily in hand, no orientation/induction has ever been carried out by health workers

- The boards/committees see their roles as that of tackling problems associated to facility shortages
- Composition of the boards/committees is not standard
- The board/committees have never been trained to perform their roles as managers effectively
- The linkage with the formal system is unclear and not harmonious. There is suspicion and sometimes outright resistance from the formal health workers to be managed
- They are not aware of the government health policies that are released now and then
- Their meetings are irregular
- No committee has any regular meetings with health management teams

District Health Management Board

The current DHMB was constituted in September 2001. It has only two active members. Most of them are busy persons while some live outside the district. Generally there is no commitment.

The board has no written rules and regulations or functions, and it has deliberately been left so constituted to superintend district health services. The formal health system has resisted such a function for the board. The board meets on a quarterly basis, otherwise the board is not functional.

There is absolutely no link between the board and the DMMT. The chairlady of the finance committee has no information on the funds available from either the GOK yearly allocations or from FIF. The board needs to be revitalized or deregistered to pave way for a functional board. Twice the CSP team called for a meeting of the board and only the two active members attended.

The District Health Management Team

The team, which is led by the MOH, has no written document enumerating the roles expected or the composition of the team. This presents a situation that can lead to ineffectiveness.

Although the various professionals are competent in their respective areas and know what to do, team spirit is not evident, and the functions of the team as an entity are non-existent. Due to lack of a coherent entity titled DHMT it follows that linkages with other sectors and bodies such as the DDC is weak.

The team needs training in all aspects of management and team building. Apart from the purely inadequate management and interpersonal relationships the lack of a team entity is influenced by external factors such as ethnicity and professional autonomy for different cadres.

However, in theory the DHMT knows its functions, roles and expected linkages. But functionally the team doesn't move forward.

SUMMARY FINDINGS and RECOMMENDATIONS

A. General

At all levels of the health service system, from the district level through to the health unit, there are many constraints. Most of these constraints are resource or managerial nature.

Recommendation

Project activities relating to training should be designed to remove or at least reduce the level of managerial problems and their underlying causes. The expected results should be knowledge of and skills in health management and changed behaviors on the job. However, training activities in health management would have little impact on existing weak health management support systems such as drugs and other supplies, and on lack of transport and the poor health information system. As such, the project should aim at strengthening management support systems while at the same time strengthening the managerial performance of health management teams.

Shortages

Health staff and management committees identified constraints as the three SOS: Shortages of Staff, Shortages of Space and Shortage of Supplies. Admittedly, constraints of a resource nature do exist and must be tackled. Along with these resource constraints other non- resource aspects are attendant:

- Inadequate managerial approaches
- Inappropriate staff attitudes
- Little attention to staff orientation and development
- Lack of skills in preventing and solving problems
- Cumbersome administrative procedures

Constraints could be classified according to the area to which they relate:

Technology (medical and health techniques)

Staff (numbers, training, expertise and attitudes)

Facilities (number, design, adequacy, equipment, vehicles, scheduling, assignment, referral, supplies and budgeting)

Policy (government and health)

Constraints were most often experienced in the facility category. However, staff difficulties resulting from inadequate training, poor attitudes and the absence of guidance and supervision out number the problems caused by staff shortages. Causes of difficulties in the technical area (clinical practice) were of a non-resource variety. The very large number of non-resource problems contributes to the conclusion that much can be done to improve rural health services with existing resources.

THE DISTRICT HEALTH MANAGEMENT TEAM

In an attempt to do a constant analysis relating to the DHMT given the functions, and what hampers the team from the effective execution of duties, constraints were found to be of a resource/non-resource mixed nature. Here again an important conclusion is that many constraints

are of a non-resource aspect and may be removed by more efficient management and a minimum of resource inputs.

The traditional, remedial intervention would be training in health management, which aims at providing knowledge, changed attitudes and skills to permit health workers to perform their managerial and administrative duties more efficiently. Their approach, however, does not address the problem of inefficient health management support systems and puts too little emphasis on teamwork.

Recommendation

A long range, step-by-step process of health service management development is proposed. Management development is concerned with establishing the concept that management is not only the responsibility of individuals but, necessarily, a team process. It is, therefore, concerned with helping health teams and their members at all levels, to improve their management skills and to strengthen the health management support systems. This is a complex long-term process.

From experience in Kenya and elsewhere, we know that it is not feasible to plan and implement a comprehensive strategy, which aims at improving the managerial skills of health management support systems in one single effort.

A good entry point to health services management development is a series of problem preventing /solving activities supported by selected training activities in health management. The experience to be gained from both the problem solving and training activities will then help to design a countrywide strategy for health service management development.

The entry strategy is on district and sub-district teams. They and their members are the main actors in problem preventing/solving activities with back up from the provincial team.

A structured training program should be put in place. Preferably the training would be done in three sessions starting with a workshop in problem preventing/solving, followed later by a longer workshop on health management and planning. The third workshop would be to assess results achieved and shortcomings experienced from the field.

HEALTH FACILITY SERVICES

Out patient services, for most people, are the first point contact they have with the health system. To all patients, the hope is that their health problem can be solved there and that they need not to go further. The government has committed itself to provide these services. It has established policies, provided staff, funds and supplies. It is up to the local staff to organize the services and to provide care to patients. Normally, the staff does an enormous job under difficult circumstances for themselves and their patients.

Recommendation

The project should now take it as its concern to train and assist the staff to deal with scarce resources and to strengthen support systems where possible. On a technical level, the staff know

what to do and how to do it. On a managerial level, however, they are often uncertain. The CSP should attempt to bridge this gap, to assist senior staff in translating policies into practice, to help them decide what to do and how to do it. That is to detect problems, identify their underlying causes and decide what to do overcome or at least reduce those problems.

Times have changed and more people make use of health services. Moreover they are more sophisticated and more demanding. New kinds of services have been introduced. Even the designs of buildings have had to be changed.

With these changes in circumstances we hear of shortages of space, shortages of staff and shortages of supplies. There is real concern that those who need care most do not get it.

The conventional approach is to ask for more staff, drugs and equipment. We ask from and rely upon others, usually with little or no success because resources are limited. The Teso CSP should try to approach problems from a different point of view. The major approach will be one of helping staff to adopt and change to the new circumstances. Doing more and better with the resources at hand. This is a major challenge. There are no easy solutions to problems, however common they are. Moreover, though the patterns of the problems may be the same each facility is unique in its particular difficulties. The project should aim at helping the manager to recognize and analyze his or her own problems and to design solutions.

Recommendations

- That all board/committees should be trained on roles /functions and in management
- That boards/committees should meet regularly with respective health teams to plan together and discuss health issues
- That specific activities to be monitored and supervised by boards/committees should be clearly spelt out to avoid conflict
- To establish a chain of command, accountability and communication
- To define roles of HMB vs. HMT and DHMB vs. DHMT
- To develop operational guidelines and/or make them available
- To define guidelines for rural health committees
- To empower boards/committees to undertake their roles and functions