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Food and nutrition security in households affected by HIV/AIDS Molo District, Kenya

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Abbreviations

AIDS	Acquired immune deficiency syndrome
ART	Antiretroviral treatment
ARV	Antiretroviral
BCC	Behavior change communication
CACC	Constituency AIDS control committee
CBO	Community-based organization
CCC	Comprehensive care center
CHW	Community health worker
CSO	Civil society organization
CSW	Commercial sex workers
FBO	Faith-based Organization
HBC	Home-based care
HIV	Human immunodeficiency virus
IDU	Injecting drug user
JAPR	Joint HIV/AIDS program review
KNASP 2005-2010	Kenya's national HIV and AIDS strategic plan
MoA	Ministry of Agriculture
MoH	Ministry of health
MSM	Men who have sex with men
NACC	National AIDS control council
NASCOP	National AIDS and STD control program
NGO	Non-governmental organization
OVC	Orphans and vulnerable children
PMTCT	Prevention of mother to child transmission
PWHA	People living with HIV/AIDS
STD	Sexually transmitted infection
VCT	Voluntary counseling and testing

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Introduction

Empowering Kenyan communities to achieve **food and nutrition security** in a sustainable way and with social dignity is one of the key missions of Necofa (Network for Ecofarming in Africa, community-based NGO). Household food security requires that a household has access to enough quality and culturally acceptable food for all people in the home throughout the year. The right to quality food is a human right.

While many Kenyan families are struggling with challenges of poverty, food and nutrition insecurity, **families affected by HIV/AIDS are more prone and vulnerable**. They are faced with extra responsibility of taking care and feeding the infected person(s) who also require even more nutritional attention. Malnutrition and HIV/AIDS are synergetic and together create vicious cycle that additively weakens the immune system.

Necofa and Slow Food Central Rift Convivium thus decided to conduct a **survey in Molo district** to better understand the food and nutrition security situation of families affected by HIV/AIDS, and identify ways to improve their current situation.

We first studied the **national policies** on HIV/AIDS in place, as summarized in the first two sections of this report. We completed this first phase by **interviews with health professionals and other stakeholders** throughout Molo district, to understand their view of the actual implementations of the policies, as well as their perception on the food and nutrition security of the affected families.

A **workshop** with all the stakeholders was then organized on September, 26th where we shared the conclusions from the first phase, and prepared together the second one: interviews of HIV/AIDS affected families. Among other things, the workshop helped improve the proposed questionnaire for these interviews (see annex 1). The stakeholders were also asked to help us identify families to be interviewed.

We **interviewed 39 families** from September 29th until October 8th. The findings of these interviews are detailed in the third section of this report.

Finally, based on the data collected the whole survey, we recommend **ways to improve** the food and nutrition security, and as a consequence livelihood, of affected families. This constitutes the last part of this report.

HIV/AIDS status in Kenya

Note: the following information is taken from the study on HIV/AIDS situation in Kenya performed by the United Nations in 2008[1].

National actors and policies

Kenya's government declared HIV/AIDS a national disaster in 1999, and launched the Total War on AIDS (TOWA) in 2002.

The national response to AIDS epidemic is detailed in the Kenya's National HIV and AIDS Strategic Plan (KNASP 2005-2010). **KNASP 2005-2010** provides guidelines that are an action framework within which public and private sectors, CSOs and FBOs can work together to achieve the same set of goals and targets.

The priorities identified in KNASP are the following: preventing new infections, improving the quality of life for infected and affected (care treatment and human rights) and mitigating the socio-economic impact of HIV/AIDS.

To ensure the long-term sustainability of HIV/AIDS programs, Kenyan government tied the implementation of KNASP to the government budgetary cycle. Ministries have to commit and spend a part of their budgets to these programs. Unfortunately, ministries so far tend to rely on donor funding disbursed through NACC and did not use the resources raised through government planning and budgetary procedures. Furthermore, the ACUs are challenged because their level in ministries is low and the officers in charge are junior.

Within the frame of KNASP priorities, Kenya operates on the **Three Ones principle** agreed by African nations at the 2003 International Conference on AIDS and Sexually Transmitted Infections in Africa (ICASA). The aim of the Three Ones principle is to improve harmonization and leveraging of resources with and among development partners. The Three Ones are:

One national AIDS coordinating authority, with a broad-based multi-sector mandate
One AIDS action framework, to coordinate the work of all partners
One national monitoring and evaluation system

Created in 1999, **NACC** (National AIDS Control Council) operates as the national AIDS coordinating authority. Its role is to provide effective leadership in coordinating the HIV/AIDS stakeholders: government, CSOs, FBOs, PWHAs, private sector and development partners like the Department for International Development (UK) or the World Bank. NACC coordinates programs, policies and interventions, and focuses on making effective interventions.

Its board is composed of permanent secretaries coming from a range of ministries, as well as representatives from a wide range of CSOs, PWHAs and private sector. NACC doesn't have a budget on its own, but rather a financial framework developed by the main stakeholders. With

[1] UNGASS, 2008

the support of partners like the Ministry of Planning and Development, the Ministry of Finance and the DfID, NACC allowed HIV/AIDS issues to be now incorporated into sectoral and line ministry policy, as well as planning documents. The resource allocation to HIV/AID interventions increased by +100% in 2006-07 budget vs. 2005-06, and by +32.5% in 2007-08 vs. 2006-07.

In order to attune the national response to the experience on the ground, NACC's structures were created at constituency level in 2003. There is a **CACC** (Constituency AIDS control committee) in each of Kenya's 210 constituencies. This allows to reach stakeholders of all levels, and to invite broad-based community participation. CSOs are the backbone of the national response to HIV/AIDS and NACC encourages them to assume a greater role in the delivery of services and programs through its CACCs. CACCs also ensure that interventions are being implemented.

For NACC to monitor and coordinate the diverse spectrum of budgetary and programmatic planning is extremely challenging. As a consequence, since 2002 the annual **JAPR** (Joint HIV and AIDS Program Review) allows stakeholders to assess the achievements, shortfalls, challenges and emerging issues. An action plan and recommendations in every sector result from this consultative process.

Since 2006, JAPR is decentralized to Kenya's 9 regions and to 38 of its 71 districts. Delegates from CACCs, DTCs, local government, private sector and CSOs take part in it. This allows more Kenyans to express themselves about the challenges, gaps and priority issues in their communities. District JAPRs are then aggregated at national level.

Despite this very elaborate network of organizations, there are still **shortcomings** in the harmonization and alignment of donors' activities and resources with the priorities outlined in the national response.

The funding to strengthen CACCs and grassroots communities is inadequate. **CSOs** need more training to be fully empowered. The bureaucratic procedures are discouraging, and for instance the requirements for calls for proposals and reporting need to be simplified so that applicants are able to meet them. Some CSOs also report that it is hard to assess their effectiveness because they are tied to the donors' target.

Local government is still participating little in the implementation of the plans and processes. There is a need to build their capacity, and provide them with a standardized HIV/AIDS training curriculum.

The JAPR relies heavily on information coming from the ground. A national monitoring and evaluation system (**M&E**) is in place made of 13 performance and effectiveness subsystems that allow to assess the progress in implementing KNASP.

But the system needs to be strengthened, as still too many **discrepancies** exist. The data from VCT sites are not used. The M&E infrastructure in rural areas is poor (management is manual). CACCs should be connected to NACC systems. Also, the link with the Health Management Information System (HMIS) of the MoH is not clear. There are M&E systems parallel to M&E framework, and the data they collect are not integrated in the national M&E. Overall, the awareness of the importance of M&E in the war against HIV/AIDS is still low.

There has to be a much better **information flow** between communities, national planners and policy makers. More transparency in funding allocations is demanded by CSOs. More consistency is required in reporting to donors; failing to do so brings confusion and mistrust.

HIV prevalence

Efforts lead by Kenyan government over the past years resulted in encouraging results on **prevalence rate**. From 10% in 1997/98, it declined to 5.1% at the end of 2006. This should all the more be recognized as such a progression has rarely been seen elsewhere in Africa.

This decrease is attributed to the efforts in terms of **prevention and education on HIV**, and in creating a greater **awareness on HIV**. In 2003, 47% of men and 34% of women aged 15-24 who were surveyed correctly described the ways HIV infection is spread and rejected popular misconceptions about transmission[2].

There is strong evidence that this resulted in **behavioral change** (increased condom use, delay in sexual debut and fewer partners), which lowers the risk of new infections. A lot of work remains to be done though as in 2006 only 24% of women and 46% of men aged 15-24 who had had sex with more than one partner in the previous 12 months reported using a condom in their last sexual encounter. Sex without condom with casual partners or sex workers is prevalent. High-risk groups have the lowest rating for condom use, e.g. 17% for CSWs.

Higher deaths rate explains also the prevalence decrease. With new infections having peaked at 200 000 in 1993, the mortality rate doubled since 1998 and peaked at 120 000 in 2003 reflecting the rise in new infections of the mid 90s. It now exceeds the rate of new infections. The term of "death phase of the epidemic" is used.

Despite this encouraging – yet to be better understood – decreasing in global prevalence rate, some phenomena are worrying.

The prevalence shows huge **gender differences**. Women aged 15-49 are twice more susceptible to get infected than men the same age (prevalence at 6.7% vs. 3.5%). This results from a combination of social and biological factors: earlier start in sexual activity and higher prevalence of sexually transmitted infections. But the deep-rooted gender inequalities in Kenya also play a role, as women are commonly victims of violent sexual contact. 49% of Kenyan women reported experiencing violence and one in four had experienced violence in the previous 12 months. In Kenya, 25% of 12-24 years old lost their virginity by force[3].

Most-at-risk populations (commercial sex workers, same-sex partners, injecting drug users, truckers, cross-border mobile populations, negative partner in a discordant couple) face a greater risk of infection.

Due to the **criminalization** of homosexuality, commercial sex and drug use, there is insufficient or non-existent base line data. These populations need to be taken care of, as they

[2] KDHS, 2003
[3] Ibid

drive the HIV/AIDS epidemic. A study done in 2007 on MSMs in Mombasa showed that their prevalence rate is 43%.

There is an urgent need for client-friendly VCT services for CSWs, MSMs and IDUs. Health professionals should be sensitized to treat all without being judgmental.

60% of the couples affected by HIV/AIDS **are discordant couples**. The retention rate after disclosure is estimated at more than 90%. It is therefore a challenge to tailor specific intervention measures for them, for instance BCC programs as well as rights' awareness.

More and more **children** get infected, almost always through mother-to-child transmission. This reality is rapidly reversing the gains in child survival that had been won over the past decades. Under-5 mortality rate was 97 per 1000 in 1990, it was 121 per 1000 in 2006[4].

More Kenyans know their status thanks to wider availability of VCTs (from 3 VCTs in 2000 to almost 1000 in 2007). However, **a too great number still don't know their status**; only 2 millions Kenyans (cumulative in 2007) have been tested, over a national population of approx. 38 millions. This is partly due to stigma, and partly to testing facilities that are not adapted (60% of the sites are urban or peri-urban).

Condoms are more used. 10 millions of them were distributed in 2004, 144 millions in 2006. Behavior change campaigns helped reduce the stigma attached to its use, as well as increase faith in its efficiency. But condom shortages throughout the country are frequent. Their availability needs to be demand driven, and they should be distributed in appropriate places (not public). This has to be completed by continued education on systematic and correct use.

The prevalence rate shows differences between urban and rural areas. Though **rural areas** show a lower prevalence rate (4% vs. 8.3%) than urban ones, they lack behind in the pace at which the infection rate drops. Understanding this phenomenon and addressing it is key as approximately 80% of the Kenyan population lives in rural areas.

Furthermore, as they almost entirely subsist on agricultural production, it threatens Kenya's long-term ability to provide infrastructure and services essential for a robust economic growth. The loss of labor due to illness and caring for sick family members generates **delays in agricultural production**[5]. Commercial agriculture, a major source of foreign exchange earnings and of employment, has been affected by rising health costs, absenteeism, frequent sick leave and funeral attendance of workers[6]. Areas where traditionally food production has been high have experienced **major shortfalls**, even with favorable weather conditions[7]. Over 70% of the people work in the informal sector, and they are thus more affected than the employed sector where health and other benefits lighten the costs of HIV/AIDS treatment.

[4] UNICEF 2007
[5] NACC 2006
[6] NACC 2005
[7] TMIH 2004

HIV treatment

The scale-up of ART has been rapid and is on course. **Free delivery of ART** changed the HIV/AIDS epidemic by slowing down the mortality rate. The adherence is high. A review of records conducted by NASCOP for a 20-month period showed that only 3% patients stopped ART voluntarily.

However, the free delivery of ART only reached 35% of the people requiring the treatment in 2007. Furthermore, ARV treatment is a challenge for some patients because of the cost of transport to access the health facility, as well as the cost of food and lab fees. Client adherence is frequently constrained by poverty.

Free ARV program is expensive, the demand for it is increasing, and the cost is almost entirely supported by development partners. Even if the government allocation for it in 2007-08 is at USD 7.7 millions, the deficit is projected to exceed USD 75 millions by 2010. This situation is **not sustainable**. External assistance is crucial for the medium term, but Kenyan government must take measures to close the projected long-term funding gap. There is an urgent need to find a predictable and sustainable HIV/AIDS financing.

The focus on free ART delivery has **taken precedence over prevention** in the donors' world, whose funding underwrites by far the largest portion of HIV/AIDS expenditure in Kenya. Some patients are put on ARVs prematurely to help reach donor targets.

The target of **PMTCT** programs presence in 80% of the antenatal care facilities by 2007 has been met. 1,5 million women need it each year. Even though more and more seek for this advice (42% counseled and tested in 2006 vs. 28% in 2005), this number is still too low. The availability of treatment by Nevirapine of pregnant women is progressing (39% of women needing the treatment received it in 2006; 52% in 2007), but there is still room for improvement.

Some social and cultural aspects interfere with PMTCT programs, and need to be addressed. The CSOs pointed out that traditional birth attendants who play a big role in traditional communities have to be included in PMTCT. Male involvement in PMTCT activities is very low. The society expects a mother to breastfeed regardless of her status.

National guidelines on **HBC** exist, but there is no funding for the delivery of kits, food and nutritional supplements. There is a great shortfall of health workers trained in HBC. Therefore, the enrolment in HBC is low.

Livelihood of infected and affected people

79% of affected households heads working in the informal sector have an **annual income of less than KES 15,000**[8].

On top of difficulties accessing health care, shelter, education and food, PWHAs are frequently subject to **rights abuse** (e.g. violation of women's and orphan's inheritance rights). Awareness of their rights is low. Information should be posted at health facilities and other pertinent sites, and counseling should be included in comprehensive care package. According the Human Right Watch 2003, the women living with AIDS, virtually all of whom were infected by their husband or regular male partner, were essentially condemned to an early death when their homes, land, and other property were taken if they became widows. Men and the boy child need to be strongly targeted for public education and advocacy as they play a crucial male role as decision makers and owners of family and community resources.

High death rates have generated **vulnerable populations**: orphans, vulnerable children, widows, and elderly. It is estimated that Kenya counts 2.4 millions orphans, half of which because of the AIDS pandemic.

The number of **OVC** is growing at a rapid rate, and many are HIV-positive. A cash transfer program providing about USD 15 a month to OVC households for health, school enrolment and retention, and food security is in place. It has been scaled up from 500 families in 2004-2005 to 12,500 in 37 districts by the end of 2007. But it is still too limited and needs to include a comprehensive approach, addressing not only the physical needs but also providing social and psychological support, and protection of children's rights.

The epidemic has affected **education**. The increase in morbidity & mortality among education officials combined to the free primary education as of 2003 has caused decline in education quality. Gender disparities emerged. Girl children are expected to stay home to take care of the infected or to work on the farm. Children from affected households are most likely to drop out of school (36%) because of education-related costs than ones from unaffected households (25%)[9].

The only mention to **food & nutrition** in the UNGASS report is the following:
"Food insecurity is a serious threat to gains made in AIDS treatment and care. The National Food Security and Nutrition Policy, which is at draft stage, must include food delivery to orphans and vulnerable children and affected families. Local government is expected to take leadership in addressing food insecurity issues (NACC JAPR 2007)."

[8] NACC 2006
[9] Ibid

What is done in terms of nutrition and HIV/AIDS

Nutrition and HIV/AIDS is not only about the impoverishment of affected families resulting in the decline in food security. **Food and nutrition interventions are critical components of a comprehensive response to the HIV pandemic**. HIV compromises the nutritional status of infected individuals, and malnutrition in turn can worsen the effects of the disease. Nutrition interventions can help break this cycle by helping people living with HIV manage symptoms, reduce susceptibility to opportunistic infections, improve nutritional status, promote response to medical treatment, and improve overall quality of life[10].

The **impact of diet on medication** is complex. Food can enhance or inhibit the absorption, metabolism, distribution and excretion of medication. Sometimes it is a matter of when the food is eaten, other times it is the content of the food itself. The type of food can also influence the effectiveness of a drug. Some foods will decrease the absorption of a given drug; others will increase it. The same is true for dietary supplements, including herbal remedies and traditional medicines[11].

Medication affects nutrient effectiveness. A common manifestation of nutrient metabolism changes due to ART, especially protease inhibitors, are changes to lipid or fat metabolism and storage called lipodystrophy. Depending on the ARV drug, patients may experience changes in the type of body fat or lipid, as well as elevated levels of triglycerides and blood cholesterol. Some drugs may affect glucose or sugar metabolism, resulting in insulin resistance and diabetes. In addition to direct interactions between nutrient and drug metabolism, ARVs may also have side effects that influence food intake and nutrient absorption. Taste changes, loss of appetite, nausea, bloating, heartburn, constipation, vomiting and diarrhea will affect nutritional status simply by causing a reduction in food intake. Reduced food intake and poor nutrient absorption can lead to weight loss and continuing impairment of the immune system, which, in turn, allows HIV to progress more rapidly to AIDS[12].

In 2008, the Ministry of Medical Services worked jointly with UNICEF, USAID and FANTA (Food and Nutrition Technical Assistance) on the **Kenya Nutrition and HIV/AIDS Strategy 2007-2010**.

The **purpose** of this strategy is to accelerate mainstreaming of nutritional interventions in HIV/AIDS policies and programs. This translates in the following two-folded approach: sensitizing policymakers about the critical role that food and nutrition security plays and advancing nutrition and HIV/AIDS as a priority on the health agenda; identifying nutrition interventions for integration into HIV/AIDS policies and programs, and incorporating HIV/AIDS in food and nutrition policies and programs.

[10] Source: www.fantaproject.org
[11] Source: www.globalhealth.org
[12] Ibid

The **targets** for the period include strengthening the capacity of service providers to ensure that over 75% of PWHAs receive nutrition education and counseling, and raising the proportion of hospitals that offer therapeutic nutritional care to 80%[13].

In order to strengthen the capacity of health professionals, **nutritional guidelines** were issued that help them in their work with PWHAs. This guide details the recommended daily/weekly quantities of each food categories (proteins, carbohydrates, fats…) depending on the stage of the disease of the patient. It also provides general guidelines concerning the water intake, the number and frequency of meals. This guide is used after a preliminary phase of assessing the nutritional status of the patient

We were not able to find an assessment of the results vs. the targets set in the Kenya Nutrition and HIV/AIDS Strategy 2007-2010. It is not clear if there is any area of the M&E aimed at assessing what is done in terms of food, nutrition and HIV/AIDS. This, added to the too little mention of nutrition in the UN report, seems to confirm an **insufficient focus on nutrition** and HIV/AIDS in Kenya's policies.

Last, the measures tailored under the Kenya Nutrition and HIV/AIDS Strategy seem to be more focused on providing food on prescription, rather than empowering the PWHAs to be independent and able to ensure their own food and nutrition security.

[13] KNHAS, 2008

Actual situation of families affected by HIV/AIDS

Methodology followed in the survey

We **interviewed 39 families** from September 29th until October 8th. The interviews were conducted in all divisions of Molo district, the number of families for each division being proportional to the number of households in the division (see annex 2).

We decided to exclude one of the questionnaires from the statistics that follow. Many obvious inconsistencies in the answers provided by the mother of the household made us doubt of their reliability. All statistics are therefore drawn from the answers of 38 families. The detailed data collected during the interviews can be found in annex 3.

Key findings

Family structure, HIV-status, education and religion

Only 15 over the 38 families (39%) visited are two-parents ones. The **single-parent families** are mostly families where the woman is alone (86% vs. 14% with father alone). In one family, both parents are dead, and the child is taken care of by his aunt.
In the case of single fathers, 2 out of 3 are widowers. In the case of single mothers, 5 out of 19 are widows; the others declared being single, separated or divorced. Some of them added that the separation was linked to the discovery of their HIV-status; out of respect for privacy we didn't ask when this information didn't come spontaneously.

Over the 15 two-parents families, 3 are **discordant couples**. In the 12 others, both parents are HIV-positive. In the 23 single-parent families, the remaining adult is HIV-positive.

The women we met are younger than the men (37 years old on average vs. 43) and slightly more educated (59% completed at least Class 8 vs. 50% for the men), to be compared with the national average at 78.6%.

On average, the families count 3,7 children. Over the 140 children of these families, 37 completed Class 8 (65% of which went further in their education) whereas 9 dropped out of school before this level.

Out of the 74 kids currently in primary or secondary schools, 19 (26%) are late vs. their age. Additionally, 5 kids above 6 years old are not yet in primary school (still in nursery) and 3 kids in age to attend primary school are currently not attending any school.

	Completed Class 8	**Went further**			**Dropped out before Class 8**	**Now in primary**	**Below age 6**	**Not in school**
		Now in secondary	**Completed Form 4**	**In university**				
# kids	37	16	7	1	9	58	28	8
% of total	26%	(% of the 37) 43%	(% of the 37) 19%	(% of the 37) 3%	6%	41%	20%	6%

71% of these families had had all their **children tested**. Out of the 11 families where this is not the case, 45% of them had none of the kids tested; for the remaining 55%, some kids were tested, others not.
Out of the 108 children tested, 91 turned out to be HIV-negative, while 12 are HIV-positive and 5 need a confirmation test. This places the HIV prevalence of these children at 11%, almost the triple of the average Kenyan population in rural areas (4%).

In terms of religion, it turns out 18% of the visited families are Catholic, which poses a problem given the position of Catholic church on condoms. Most of the rest belong to various Protestant churches, whose positions on condoms are not very clear. Two families declared not going to church at all.

Occupation and sources of income

In the 23 single-parent families, the **main breadwinner** is usually the remaining parent. However, in 3 families among them, it is another member of the family who bares this role: the first-born child, the grandmother or the uncle.

In the 19 two-parents families, it is usually the father who is the main breadwinner – though the mother usually brings in additional sources of income. In one case though, the mother is the main breadwinner as the father is alcoholic and keeps his salary for his drinks.

The main activity among all is farming. 19 families (50%) have as main source of income casual labor in farms. 15 of them have as a complement another agricultural occupation: products from a rented or owned *shamba*, goats, chickens, one cow or one sheep. In one family, they fetch water to sell it; in another the mother runs a hotel. Two families indicated that their children go for casual labor to bring more resources to the household.

Additionally, 7 families reported farming on their own farm as the main source of income, with a complement based on either casual labor or poultry or cow raising.

The remaining 12 families rely on a main activity based on services: butchery; buying milk from farmers and selling it in a dairy in Nakuru; casual labor as a driver or house help or laundry; cook in a secondary school; tailor.

Even in the family involved in services sector, there is often a secondary source of income linked to agriculture (*shamba*, chickens…). Only 4 families have nothing to do with agriculture.

Main source of income	Casual labor in farming			Farming on own farm	Services	
Additional sources of income	*Shamba*, goats, poultry, cow…	Services	Casual labor of children	Casual labor, poultry…	*Shamba*, poultry…	Other
# families	15	2	2	7	8	4
% of total	39%	5%	5%	18%	21%	11%

27 families **own or rent a *shamba***, in one case a combination of the two. The average size of it is 1.4 acre. 3 families rent part of their *shamba* to generate an additional income.

The **crops** grown are mainly corn, potatoes, beans and peas. For 11 families, they additionally grow traditional greens (kales, black nightshade), spinach, cabbage, carrots, and onions. Beetroot, bananas and wheat were quoted once. One family declared not having the seedlings to plant this year.

To note, 3 families cultivate on *shamba* belonging to their family. As we saw, this can be a potential problem in case of conflict with the family during inheritance.

	No *shamba*	Own a *shamba*	*Shamba* owned by family	Own & rent a *shamba*	Rent a *shamba*
# families	11	17	3	1	6
% of total	29%	45%	8%	3%	16%

18 families get some income from selling part of the products grown on the *shamba*. The 9 other families consume entirely what comes from the *shamba* they cultivate.

Assessing precisely their **monthly income** is difficult, as they are able to give us an average income due to casual working but it is harder to get an estimate for the other sources of income (income generated by the sale of vegetables from the *shamba* for instance). However, based on their estimations, it turns out that 22 families (58%) live with less than KES 2,000 per month. 9 families (24%) are able to reach a range of KES 2,000-5,000 per month and 2 families KES 5,000-10,000. For 5 families, we were not able to get an estimate as they rely on the income of another family member, or they were not able to give us an average income.

Given that the average size of these families is around 5 persons (1,4 adult and 3,7 children), the **poverty threshold** (1$/day/person) translates per month and per family in ca. KES 11,500. In other words, for the families for which we were able to assess a monthly income,

100% of them live below the poverty threshold. This figure has to be put in perspective with the average in Molo division at 60%[14].

This situation can be partly explained by two extraordinary phenomena that happened recently. **The drought** has impacted 33 out of the 38 families (87%) we visited, mostly as it resulted in little to no harvest for the main grown crops. A few were indirectly impacted by it: increased price of food, drought weakened some PWHAs and prevented them to go to work, it was harder to find casual work, the friends who usually helped couldn't afford it.

The **post-election violence** of 2007-2008 was a second major factor that made these families more vulnerable – though to a lesser extent than the drought. 28 families (74%) reported having suffered from the clashes. The effects were the following: house and farm destroyed, cattle stolen, forced to move somewhere else, impossible to work, hosted refugees and had to feed them, stress caused deterioration of health.

Food and water situation

36 families (95%) are spending **most of their income, if not all, in food**. One family declared to spend little in food, the majority of the income being used to pay for the KES 300 house rent. 21 families (55%) own the house they live in, the rest of them rent. One family borrows the house from a friend. The other areas of spending are: *shamba* rent, seedlings, hospital bills, school uniforms, school fees and other related spending for older children, water for some…

On average, they eat **2 meals a day**. Two families are not counted in this statistics: one has less than one meal a day ("We often go to bed hungry"); in the other, the patient health imposes that he takes a little meal every two hours.
This poses a serious issue as it is proven that ARVs work best when combined to sufficient (and balanced) food. Furthermore, as ARVs makes patients hungrier, some can be tempted to stop them when lacking food.

A typical day is: *chai* in the morning (not counted as a meal) or nothing, lunch and dinner. Lunch and dinner are typically made of a carbohydrate base (*ugali* or potatoes) with indigenous greens, sometimes with a source of protein in the form of beans or peas. Some families though told us eating "whatever they could find"; the family that has less than one meal a day relies exclusively on porridge.
A few families privileged breakfast and dinner, to the detriment of lunch. In this case, breakfast is made of *chai* and the leftovers from dinner.

With the recommendation for patients to drink at least 6 glasses of water per day, it was important to understand their **accessibility to clean and safe water**. It turns out that 4 families (11%) have to walk more than half an hour to access it. 14 families (37%) have to pay for it, which further impacts their monthly budget.
13 families (34%) don't **treat** water either never or not consistently. This behavior, explained by a lack of resources, puts at risk their vulnerable immune system with water-borne diseases.

[14] Source: Ministry of Agriculture, Molo division

Nutrition and medical treatment

36 families (95%) benefited from **nutritional advice** in relation to their HIV-status and treatment. The frequency of the advice differs greatly from one respondent to the other; 7 families mentioned "once, when discovered status" or "occasionally" or "when in ward" or "when I need". A few look for additional information anyway, and attend to Red Cross or APHIA II seminars – or get the information during the support group meetings.
6 families said that the doctor who gave them the drugs provided the nutritional advice. This suggests that there is no nutritionist in the health center and poses the question of the nutritional training of the person who gives the advice.

Out of these 36 families counseled on nutrition, only 5 (14%) are able to **follow the recommended diet**. The remaining 31 families (86%) can't follow it, either at all or consistently, due to a lack of money/food. Fruit intake was definitely the hardest part to comply with because of their price; but proteins are also an issue especially with the low availability of beans due to the drought. One woman added that her husband doesn't believe in the impact of nutrition (both HIV-positive); she has to fight against him even if she has the food to follow the advice.

When asked if they would follow the advice had they had the food, the large majority answered positively.

This nutrition situation is all the more frustrating as **treatment adherence** among the PWHAs we surveyed is very good. Over 60 PWHAs, 56 (93%) were on treatment and taking their drugs as advised at the hospital or health centre. The type of medication varied depending on their CD4-count, from Septrin alone to a combination of Septrin and ARVs. In some cases, patients also took multivitamins (especially the kids) or were under medication for opportunistic disease treatment. The frequency of visit to the health facilities varies from one patient to the other, from every month to every 3 months.

One patient is not under medication because she is afraid of the "very powerful drugs"; another because the church she attends encourages HIV-positive to stop treatment and pray. A kid had just been diagnosed and the positive result was handed to him without counseling; he was to recover from the shock before starting treatment. The last one is the father of a family in Lare, reportedly "not instructed by doctors to start medication".

Accessibility to health facilities is a big issue for some areas of the district, namely Kerisoi and Lare divisions where the health centers don't even have Septrin. For Kerisoi, patients go to Kericho or Londiani; for Lare, they go to Nakuru or Njoro. It is all the more difficult given the state of the roads in these two divisions.
Kamara and Mau Narok divisions are problematic for patients on ARVs as they are not available in the health facilities. For Kamara, patients go to Londiani or Molo; for Mau Narok, to Egerton College or Njoro.

Accessibility seems to be a bigger issue than **fear or shame** for patients to go and pick up their drugs at the health facilities. A large majority of the respondents declared having no problem what so ever to collect their medications; 2 declared having had this problem in the past but not any more. This finding should though be nuanced for two reasons. First, the PWHAs we met have done a lot of work on themselves to accept their status and overcome self-stigma. As a result, they can more easily face the community when it comes to going to

the health facilities and collect their drugs. But a large proportion of the HIV-positive population is not yet there and there is still a huge work to be done to reduce **self-stigma**. The second reason is linked to **outside stigma**. Indeed, 5 patients declared having a problem of being seen collecting HIV-drugs within their community. Some go to a further health center and are happy with this; others go to the health centre of their community and wish to be transferred to a further one.

9 patients spontaneously told us that the **service provided at the health facilities** is poor. The lack of doctors or nurses and the high number of patients cause long waiting times. In some cases, the patient got his drugs without seeing a doctor.

One of the patients we met is pregnant; in a few other cases, we met children under 18 months born from HIV-positive mothers. In all these cases, the mothers were provided with **PMTCT** counseling including a special treatment for them during the pregnancy, recommendation of exclusive breastfeeding for the first 3 months of the child, and a prescription of Septrin and multivitamins for the child until 18 months when he or she would be tested again.

Stigma

The situation on **status disclosure** is very mixed. 17 families (45%) declared having disclosed their status to at least part of their family and part of their community. The remaining 55% are shared: 65% of them disclosed their status to their husband at least, sometimes to other members of the family but not to their community by fear of stigma. The other 35% didn't reveal their status to anybody, for the same fear.

Stigma is indeed still very strong. This is true throughout Molo district, but even more dramatic in divisions like Keringet, Kerisoi, Mau Narok and Lare. Reasons for this situation are not clear, but we suggest that because of the difficult access to these remote areas, education and prevention campaigns there may have been less numerous than in more central parts of the district.

During our interviews we heard countless stories of communities or families rejecting the patient who disclosed his/her status. Among the most dramatic ones are: wives abandoned or chased out by their husband when they revealed their HIV-positive status; a school teacher fired from her job because she is HIV-positive and who can't start her own business because she won't sell; a widow with 8 children whose neighbor doesn't greet her nor does he come to help when she's sick. We also heard stories where the community thinks the CHW is paid by the Red Cross to say she is HIV-positive but that she's not, or even that she's paid by the D.O. to get names of PWHAs.

A **little hope** came though from a few CHWs/Ambassadors of Hope who said that their disclosing their status, talking openly about HIV/AIDS with their community and being a living proof helped reducing stigma. This confirms if needed be that education and communication on HIV/AIDS are strong assets in the fight against stigma.

CHWs, Red Cross, APHIA II and support groups

14 families (37%) reported never being **visited by CHW, the Red Cross or APHIA II**. The rest are visited on a more or less regular basis, and are given information on subjects like: the importance of adherence to the treatment, of living positively and disclosing one's status; the importance of getting tested; the importance of safe sex; the principles of a balanced diet and how it is a necessary complement to the drugs. They are also able to talk about the problems they experience and get encouragements.

Among the 14 families not visited by any CHW, 4 don't attend a support group, as there is none in their area (Kerisoi and Keringet). For these families, it means no possibility to talk about their suffering, and counseling and help limited to those they get from the understaffed and over-frequented health facilities.

Overall, 12 families (32%) don't attend a support group, the majority of them (83%) because there is no support group in their area.

26 families (68%) are able to **join a support group**. Support groups usually meet once a month, sometimes twice a month.
This is the opportunity for them to talk and learn about: nutrition, adherence to the treatment, how to reduce stress, get encouragement and support, importance to disclose one's status, importance of behavior change, how to live with the community and how to reduce stigma. Some groups also go on households visits, either to encourage those who don't know their status to get tested, or to visit one of their members if bed-ridden.

They otherwise think together about **ideas of IGAs**, either collective or individual ones. The examples they quoted revolve a lot around agriculture, like raising poultry or goats, or cultivating a plot with different crops. But they also try to capitalize on individual talents and have some IGAs ideas of small businesses (tailor, selling clothes...).

Finding funds to implement these ideas is the main challenge support groups are faced with. Most of the time, they don't know where to ask or are afraid by the administrative work required for CACC proposals – not to say that they're not necessarily accepted.

Worth noting though, a proposal issued by Nuru Ijami support group on community strengthening (support and empowering of PWHAs, prevention of HIV/AIDS) was recently funded thanks to CACC. Worth noting also, 3 support groups have already some resources resulting from donations. Sainte Clare's group has a small plot to cultivate; Tumaini's one a 2 acres farm given by the hospital where they employ people to cultivate for the group; Huruma's one was recently given goats by APHIA II.

Otherwise, most groups have a principle of **merry-go-round** that they use to grant loans either to help one of the members in a difficult situation or to some who wish to start an IGA. The two challenges they face though in this situation are: some members are reluctant or can't participate to the merry-go-round; the loans are not reimbursed afterwards, even when some of them are granted without any interest rate.

The kind of help they need…

… to reduce stigma

When asked how stigma could be reduced, most of the people answered on the means rather than on the message itself. 14 of them did tell us what the **message** should be, and their answers converge to the idea of more education on HIV (transmission ways, prevention…), as well as encouraging testing and status disclosure. One of them suggested that HIV-negative people should be integrated in support groups.

When it comes to the **means** to communicate these messages, some were frequently quoted like: seminars/outreach campaigns, household visits, one-to-one talks, churches, actions of CHWs and PWHAs (acting as Ambassadors of Hope), schools, posters in business centers, media (TV, radio).
Some privilege seminars and outreach campaigns as it allows to reach more people; others oppose that household visits and one-to-one talks are more efficient in convincing people, though more costly and tiresome.
Chief barazas were quoted twice as a good mean to disseminate the messages. One patient told us that if the facilitator of seminars comes from outside the community itself, his/her message would have more impact.

… to come up with IGAs

They usually have a good idea on **how to generate more income** for their household. Only 6 (16%) didn't answer to this question.

The IGAs are linked to **agriculture** 72% of the time, either crop growing or poultry or goat or cow raising. Rabbits were only quoted spontaneously once, and the few times we asked whether people would be willing to raise some, they answered that it was too much work.

The kind of help they would need for these agricultural IGAs are funds and training. People usually showed a lot of interest for **crops diversification training**. It seems all the more key to give them this knowledge as almost all the ones that currently farm grow a limited number of crops, including corn, peas and beans who suffer a lot in times of drought.

The other IGAs quoted by the respondents were linked to the **service sector**: buying and selling vegetables; tailoring; selling shoes; selling clothes; knitting; hotel and butchery. The kind of help in these cases is mainly funds, though one said she'd be also interested to improve her tailoring skills and when hotel and butchery were mentioned, it was on how to increase the already existing business. These families also declared being interested in **kitchen garden** and crops diversification trainings, as a way for them to grow at least part of their food.

The IGAs they come up with show a good sense of business and responsibility. They gave thoughts to them, identifying the skills they know they're good at. One patient told us that as her knitting skills were not common in the area where she lives, her products would sell well.

… to improve their skills on food preservation

Most people have a little knowledge about food preservation. Apart from the problem that with the draught there is nothing to preserve, they would be willing to have further training on the subject.

… to learn more on nutrition

20 families (53%) told us wanting more education on nutrition. Some insisted that the advice provided should take into consideration the locally available and affordable foods.

… and other kinds of help

Two single mothers told us being lost about how to have their children sponsored and taken care of in case they die. Advice on such a subject would certainly also be very much appreciated by the 23 single-parent families we interviewed.

Another patient told us about a group formed in Mau Narok to advocate for closer access to drugs. They're currently working on this with CACC.

Additional information collected during professionals' interviews

Some health centers are seriously **understaffed** and/or don't have sufficient supplies (drugs, material like gloves…). Some don't have a trained nutritionist to provide thorough nutritional advice. Food on prescription should be more available at nutrition offices, in order to help in most urgent cases

Men and women don't accept the situation the same way. Men have a harder time accepting their HIV-positive status than women.

Stigma has to be addressed. As long as stigma is around, PWHAs won't be able to get support from their communities; improve their psychological state, a necessary step in recovering health and finding energy to work. In some communities, PWHAs can't sell products, as the other members won't buy from them because of their HIV status.
Because of stigma, some tend not to go back to the CCC for treatment. At best, they go to a further one – at worst, they do nothing.
For the same reason, they won't disclose their status and take the necessary protective measures to protect their partner, which causes the virus to spread more.

The lack of education on HIV/AIDS makes business for **traditional or spiritual healers** who take advantage of patients. Some **churches** also encourage PWHAs to stop their treatment and pray to heal.

Baraka College informed us that 2 more support groups have **implemented IGAs**: Molo's group supplies oranges to 4 schools; Mau Summit's one is raising sheep, buying a new sheep thanks to the revolving fund (unfortunately, they stopped as during the post-election violence, the sheep were stolen).

Limits and challenges of our study

Because the people we surveyed have somewhat accepted their status (they at least accepted to receive us and answer questions on HIV/AIDS), they're not representative of the global HIV-positive population, where self-stigma is stronger. This means that the treatment adherence and attendance to support group rates for instance, are probably lower in the general HIV-positive population.

Because of time constraints, we were able to interview a limited number of families. A more thorough analysis of the situation would call for additional interviews.

Logistics or miscommunication in two divisions didn't allow us to visit the number of families initially planned and agreed.

In one division, we encountered a problem in the attitude of the CHW, as he was answering to our questions for the PWHA.

Some institutions, whose help was very much needed for our study, didn't give us the required support.

Last, on a more personal point of view, it was hard for the team to meet so many families in need of an immediate help, while we were not able to provide them with it.

Recommendations to improve food and nutrition security of families affected by HIV/AIDS

Reducing stigma

Though not directly linked to food or nutrition, stigma plays a huge role in the current situation of PWHAs and this report wouldn't be complete without addressing it.

There is a huge and urgent need to tackle the stigma issue. Not only does it worsen the PWHAs' living conditions, but it is also a terribly good fertilizer for the virus to spread. Stigma takes its roots in the **lack of knowledge on HIV/AIDS**, which feeds all sorts of fears on its transmission ways.

> Recommendation
> Educate, educate, educate. How the virus works, how it is transmitted, how it can't be transmitted, how to protect yourself from it.
> Encourage people to get tested, and to reveal their status afterwards.
> The message must be repeated and consistent, and converging from different means so as to reinforce its trustworthiness: health professionals, CHW, Red Cross, APHIA II, seminars involving people from outside the community, PWHAs, churches, media (TV, press, radio), posters, curriculum in schools, *chief barazas*…
> The community development facilitators of Baraka College could also do this.
> These actions must be done everywhere in the district, even in remote areas.

Politicians and influential people have a role to play in stigma reduction, but their intervention has to be carefully thought in order to have some impact. In Dec 2007, several MPs were tested in Nairobi to promote the message that everybody should know their status. This action would have had more weight if each MP had been tested in his own constituency where constituents would have heard of it. When US Senator Obama visited his paternal house in Kenya, he got tested. But it had the opposite effect than intended: the VCT was a trailer imported for the occasion. It gave the signal that testing is elitist, expensive and beyond the reach of the ordinary man[15].

A successful event was organized in June 2007, when a DC got tested in Maragua. Another example of successful communication was the media coverage of corporate executives, officers from the armed forces and youth celebrities attending the 'HIV Testing and Counseling Campaign Week' organized by NACC in 2007. It had a multiplier effect for VCT uptake during that week, and helped reduce stigma[16].

> Recommendation
> Tailoring well targeted and carefully thought public events involving politicians and influential people.

[15] UNGASS 2008
[16] Ibid

Leadership also has to go a step further by being transparent about status of politicians who fall sick with AIDS. This would help a lot in stigma reduction[17].

> Recommendation
> Strong signs like communicating the % of HIV-positive people working in ministries and public institutions – and how it is the fair thing to do not to fire someone because of his/her HIV status.
> Should some HIV-positive politicians and influential people disclose their HIV-positive status, it would also be very impactful.

This is a long process and things won't change from one day to the next. Meanwhile, some actions can be undertaken that will improve the PWHAs situation while also working on reducing stigma:

> Recommendation
> Bring support groups and other groups of interests (farmers, women…) together for them to exchange, organize common events…

> Recommendation
> While stigma is still a problem within the community, food produced by PWHAs can be sold to institutions (schools, hospitals…). It will be a strong sign towards the community, as well as a potential source of business for PWHAs.

Empowering PWHAs to be more self-sufficient

Agricultural training

Most PWHAs we visited work as farmers, and almost all of them have at least a minimal knowledge on agriculture. However, there is a need for **further education**: on crops diversification, to help them grow their own balanced diet; on indigenous crops, especially drought-resistant ones as the current drought impacted their corn, beans and potatoes harvests. We saw during the interviews that fruit is one of the problems when it comes to follow nutritional advice. Part of the training will have to be on what fruit do well in the different areas.

This implies a preliminary step that is to **map the indigenous crops, foods, knowledge and technologies**, including the existing ones as well as the ones that almost disappeared. The map should cover all areas of Molo district, as the information will be different from one part of the district to the other. The cultural diversity present in Molo district is a richness that can be used to improve nutrition security.

The training should also include a part on **kitchen gardens techniques** like sacs – this would be particularly useful to the families living in town who don't have a small plot to cultivate as well as to those with limited agricultural skills.

[17] Ibid

Recommendation
Complete a map of indigenous crops (including fruit), foods, knowledge and technologies for all areas of Molo district.

Recommendation
Design a training session including: crops diversification, indigenous crops (including the drought-resistant ones and fruit), kitchen garden sacs. The training can be done during support group meetings, as it will allow to reach groups of committed PWHAs. The community development facilitators from Baraka College could also do this.

Recommendation
Encourage households to raise poultry or rabbits, train on how to take care of them, as well as how to kill (especially for rabbits) and prepare them.

Because of the current financial situation of the affected families, this training should be completed by a program providing them with the minimal components to start with: seedlings, fertilizers, sacs, male and female chickens or rabbits. The exact content of this package should be adapted depending on the situation of each family (space for small cattle, *shamba*…) and the funding of such a program still needs to be found. See with MoA as the recommended crops would go in the sense they promote (go back to "orphan" crops) and they informed us on a fund that welcomes proposals for funding.

Recommendation
Provide affected families with a "start package": seedlings, fertilizers, small cattle…

Children have a role to play in this. Through the school garden initiative already in place in some schools of Molo district, they can be additional messengers / trainers for their parents on the subject of crops diversification and indigenous crops. The school garden initiative is also a way to ensure that next generation has a minimal knowledge on these subjects.

Recommendation
Continue the deployment of the school garden initiative in Molo district. School gardens should be viewed as community learning centers. Objective: 100% of primary schools in Molo district.

Food preservation and value-addition training

Because of the drought that hit the country over the past 12 months, this need seems now less relevant than the others identified. However, this climatic event is ending and hopefully, periods of plenty will come back. It is important that PWHAs are trained on how to handle these foods: **preserve** for later periods of food scarcity or **create value-added products** to be sold. It would also be useful to have them establish an annual schedule of what food is available when, so to plan when preservation is needed.

Recommendation
Design a training session including: food preservation including all the crops presented in the agriculture training; what kind of value-added products can be done from some of these crops and how to prepare them; how to establish an annual plan of what food is available when, and when preservation is needed. The training can be done during support group meetings, as it will allow to reach groups of committed PWHAs.

Cooking demonstrations

Because some of the crops introduced in the agriculture training can be new to some participants, it is essential that PWHAs be also taught **how to prepare them**. Furthermore, new ways of cooking more common crops can help increase appetite and re-develop taste for food, helping to improve food intakes when it is problematic.

Recommendation
Design a cooking demonstration session including: how to cook "orphan" crops, new ways to prepare common crops. The training can be done during support group meetings, as it will allow to reach groups of committed PWHAs.

Nutritional advice

Because health facilities are often understaffed, nutrition advice needs to come from other sources. The nutrition advice needs to take into consideration the available and affordable foods in the area.

Recommendation
Design a training session including: general nutritional advice (healthy adult and kid), nutritional advice adapted to PWHAs' needs, advice tailored to locally available and affordable foods. The training can be done during support group meetings, as it will allow to reach groups of committed PWHAs. The community development facilitators of Baraka College could also do this.

NB: the training sessions on cooking and nutrition could be designed to work together, which might help in the implementation of the nutritional advice.

Children can play a role in this as well. They can be additional messengers / trainers for their parents on the subject of nutrition. It would also be a way to ensure that next generation has a minimal knowledge on this subject.

Recommendation
Include in the school garden project or in the school curriculum, classes on nutrition tailored to locally available and affordable foods.

Providing access to clean water to all

The access to clean water has to be easier, and less expensive.

Recommendation
Advocate for closer access to clean water for all, and at a lesser cost.

Empowering PWHAs for funding their IGAs

Agriculture training is definitely key to empower PWHAs in creating IGAs based on agriculture. But as evidenced earlier in this report, the key challenge to implement IGAs is the funding.

Funding opportunities are available through CACCs, which coordinate all the HIV/AIDS stakeholders in the constituency, as well as through other funds – though they still need to be better identified.

However, the **process to get funds** through CACC may seem very complicated and rigid to most PWHAs, especially for those with a low level of education. We have to make it easier for them to generate proposals that have good chances to be accepted. What's more, there needs to be general business education: what investments are need? What is the plan to repay the loan? What is the return on investment of the activity?...

Recommendation
Design a business training session including: investment, reimbursement plan, return on investment, importance to pay back loans, principle of merry-gp-round… It should be done in collaboration with CACC and the district offices so to address the following additional points: explain the overall functioning of proposals and their acceptance, what are the key success factors in the proposal writing, occasional assistance for the writing in English. The training can be done during support group meetings, as it will allow to reach groups of committed PWHAs.

A challenge faced in raising funds is that, given their financial situation and self-employed status –and maybe sometimes also their HIV-status – it is harder for PWHAs to get a loan from a bank. As a way to tackle this issue, as well as **bring communities back together** and reduce stigma, we propose the following idea:

Recommendation
Bring together a group of HIV-positive and HIV-negative people around an IGA. The condition for loans to be granted would be the mixing of HIV-status. It could be for instance for farming: all members work together on the farm, the food produced would be for household consumption as well as for selling. The profits would be shared between members and further investments to develop the activity (equipment for food preservation or to produce added-value foods out of the crops grown…).

Providing a stronger health care frame

Health facilities

The **understaffing** in some health centers cause long waiting times, which can discourage some PWHAs to regularly come for consultation and drugs, as it takes on their time to generate income for their household. In some places, the recurring lack of supplies like gloves doesn't help to ensure good protection for people taking care of PWHAs.

All health facilities don't have Septrin and ARVs, who forces PWHAs from these areas to go **far to collect their drugs**. For those who actually do it, it is an additional financial burden (transport cost) as well as a loss of time that would otherwise be devoted to generate more income for their household. And unfortunately, some are discouraged by both these aspects and decide not to get treated.

Nutritional advice should be available, on a fairly recurring basis, in every health facility. This implies having in each of them at least someone trained on nutrition, if not a nutritionist. The training should focus on locally available and affordable foods, including indigenous and drought-resistant crops.

Recommendation
Lobby with Ministry of Health to ensure appropriate staffing, medical supplies and HIV drugs availabilities, and nutritional training of one person from the staff – for every health center and hospital in Molo district.
Supplementary food should be more available for emergency cases – but it's not the solution we recommend to solve the food and nutrition security issues of PWHAs as it doesn't empower them to be self-sufficient and is not sustainable in the long run.

CHW, Support groups

CHWs are key in the process of education on HIV, encouraging people to get tested, and providing advice to PWHAs at household level. The lack of them in some areas could be filled by **empowering and training PWHAs to become CHWs**.
They could also be the keystone in a more systematic **referral process** linking the person who just tested HIV-positive to all the actors able to help him/her: CCC, nutrition office, support group…

Support groups need to be created by PWHAs as a sign of their involvement in helping themselves. However, there has to be **awareness** in the PWHAs communities that such an opportunity exists – and the role of health professionals, Red Cross and APHIA II is key to raise this awareness. The awareness has to be raised also among actors like the MoA and oter institutions, as they are sometimes in a position to provide help.

CHWs, as well as CACCs, health professionals, Red Cross and APHIA II, should also offer **assistance** to PWHAs willing to form such a group, especially for the administrative process and for facilities like a place to meet.

Although it already exists, **exchange visits between support groups** have to be encouraged. It broadens the scope of people to exchange with, as well as enrich the knowledge of both groups through sharing of ideas.

Recommendation
Empower and train PWHAs to become CHWs. Create a real referral process for people who just tested HIV-positive, centered on CHWs. Have CHWs, health professionals, Red Cross and APHIA II raise awareness on support groups, assist PWHAs who want to create a support group and encourage exchange visits between support groups.

Other kind of help

Given the high proportion of single-parent families, there is a need to explain to them how to have their children sponsored and taken care of, in case they die.

Recommendation
Work with childhood associations to provide clear guidelines on how to sponsor children from single-parent families.

Estimate of HIV/AIDS affected households in Molo district

In order to assess the logistics and costs of action plan in the future, we need to have an idea of the number of households affected by HIV/AIDS in Molo district. We tried to get this information for the Ministry of Health – Molo district, as well as the Health Management Information System (HMIS) in Nairobi, but failed to get any answer from them.

As a consequence, we tried to come up with an estimate of this number, based on national figures as well as the data from our interviews.

There are 92,922 households in Molo district[18].

Based on an average of 6 individuals per households[19], this translates into 557,532 individuals living in Molo district.

Prevalence rate in Kenyan rural areas is at 4%[20].

This implies 22,301 PWHAs in Molo district.

During our interviews, we met 38 families, in which there were at least 60 PWHAs. This translates in an average of 1,58 PWHAs per affected household.

This implies 14,124 households affected by HIV/AIDS in Molo district.

Warning:
The main weakness of this model comes from the estimate of PWHA per affected household. Indeed within the 38 families, there were in total 193 individuals. Out of these 193 individuals, only 161 were tested. If the remaining 32 persons were to be tested, and turned out to be positive then it would mean 2,42 PWHAs per affected household.
This would translate to 9,211 households affected by HIV/AIDS in Molo district.

The best estimate we can give is therefore the following range:

Between 9,211 and 14,124 households are affected by HIV/AIDS in Molo district.

[18] Source: District Development Plan, Molo district, 2008
[19] Source: Ministry of Agriculture, Molo division, 2009
[20] Source: UNGASS report on HIV/AIDS in Kenya, 2008

Conclusion

In 1999, Kenyan government declared AIDS a national disaster. In 2002, the Total War against AIDS (TOWA) was launched. Government bodies and policies followed to monitor and coordinate actions in the country.

The prevalence rate drop observed (5.1% at the end 2006 10% in 1997-1998) is an encouraging result. But this decrease needs to be analyzed more thoroughly. The term "death-phase of the epidemic" is dangerously used. There is still a lot to do in terms of behavior change, through prevention and education actions. These have been overshadowed by the free ART roll-out. Not only are they needed to prevent new infections, but also they are essential to address the stigma. Stigma directly impacts the livelihood of affected families, and part of the recommendations of this report offer suggestions to reduce it.

ART, and even Septrin, accessibility is still very low in remote areas. Free ART program relies too much on donors' funding which makes it not sustainable in the long run.

Although scientific research proves that ART and nutrition are complementary components of a comprehensive response to HIV, little has been done on food, nutrition and HIV. Targets have been defined in the national strategy, but we failed finding assessments of results vs. these targets. Some nutritional guidelines for health professionals. But there is a lack of funds to implement the strategy behind them.

Furthermore, little to no focus is given to empowering the affected households in becoming self-sufficient to achieve their food and nutrition security. Instead, the answer mostly lies in food on prescription in the health facilities, for which funding is lacking and that doesn't represent a sustainable solution.

The recommendations detailed in this report aim at filling this gap. Through agricultural training, food preservation, value-addition creation, and business management skills, we believe we'll be able to provide the tools necessary to these families to improve their food and nutrition situation, as well as livelihood in general. "Don't give me fish, teach me how to fish" remains the most sustainable, as well as dignifying, answer to the problems families affected by HIV/AIDS are faced with.

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Annexes

Annex 1: Questionnaire used for interviews with families affected by HIV/AIDS

Annex 2: Repartition of families to be interviewed in Molo district

Annex 3: Data collected during the interviews with families affected by HIV/AIDS