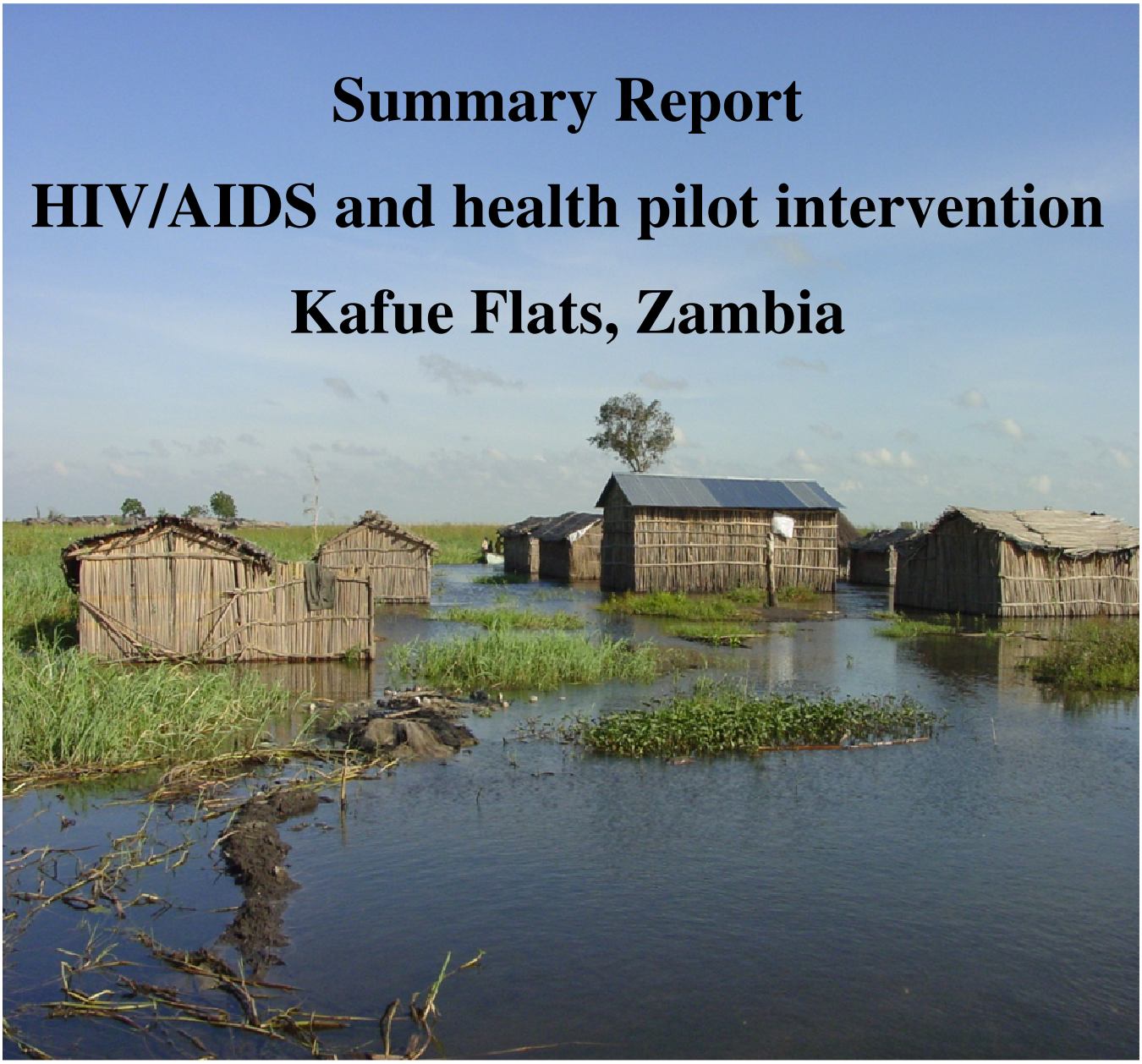
Summary Report

HIV/AIDS and health pilot intervention

Kafue Flats, Zambia



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May 2010

Background

Under the regional programme *Fisheries and HIV/AIDS in Africa: Investing in Sustainable Solutions*[1] the WorldFish Center Zambia has been conducting a socio-economic analysis in the Kafue Flats to understand mobility and migration patterns and access to health services, and to identify factors of vulnerability to HIV/AIDS among fishing communities, particularly focusing on female fish traders. Good health among fisher folk is a basic pillar of productive and sustainable fisheries, providing food and income to fishing communities and the nation at large. However, these potential benefits are severely at risk as per capita fish supply in Zambia is declining and fisher folk are among populations most vulnerable to HIV/AIDS.

In the Kafue Flats, a large number of people, many of them female fish traders, frequent fishing communities to buy fish. This means that besides the lack of health services, clean drinking water, sanitation and poor hygiene status, fishing communities face large influxes of (single) fish traders. In a context of poverty and high demand for fish, transactional sex is a common phenomenon, placing the migrant fish traders, but especially the local men and women in fishing communities at high risk of HIV infection. The main causes of death in fishing communities are AIDS, cholera and diarrhoea. Social cohesion in fishing communities was found to be weak, resulting in stigma and isolation of sick people. In the study, fishing communities identified health and HIV/AIDS information and services, including VCT, as one of the most critical needs to reduce their vulnerability. In response, the WorldFish Center in collaboration with Society for Family Health piloted HIV/AIDS and health interventions in two fishing communities in the Kafue Flats in September – November 2009. This report summarizes the steps undertaken in this pilot intervention and outlines preliminary results and recommendations for follow up.

Objectives

The objectives of the pilot intervention were aimed at improving the knowledge base of fisher folk and fish traders by providing training and sensitization on HIV/AIDS prevention, treatment, care and support. Objectives to reducing some of the health and economic needs unique to fishing communities and address risks associated with HIV/AIDS included:

***General objectives**:*

- To pilot mobile VCT and HIV/AIDS services to remote fishing communities;
- To reduce further spread of HIV transmission for most at risk populations through dissemination of HIV messages in sensitization and awareness campaigns;

Specific objectives:

- Promote hygiene and water treatment to reduce outbreaks of waterborne diseases (cholera, diarrhoea, malaria);

[1] The Regional Programme *"Fisheries and HIV/AIDS in Africa: Investing in Sustainable Solutions"* is being implemented by the WorldFish Center, in collaboration with the Food and Agriculture Organization of the United Nations (FAO), with financial assistance from the Swedish International Development Cooperation Agency (Sida) and the Norwegian Ministry of Foreign Affairs.

- Increase community awareness about reproductive health including HIV/AIDS, STIs prevention and family planning;

The results and lesson leant from this part of the pilot intervention in the Kafue Flats will inform the scale up of HIV/AIDS services, care and treatment programmes to other fishing communities in the Kafue Flats and other fisheries in Zambia.

Process and activities

a. Exploratory visit (June 2009)

The first step in the collaboration with SFH was to undertake a joint exploratory visit to the target communities (June 2009) to assess the feasibility of the foreseen HIV/AIDS and health interventions. WorldFish introduced SFH staff to the headmen and chairmen of the various fishing camps. The visit allowed SFH staff to develop a better understanding of fishing communities and to assess the specific health needs of the communities and knowledge levels regarding health issues of the field workers. The catchment areas for existing government health services were analysed and interviews were conducted with community members to establish whether there are any existing health interventions in the target fishing communities. SFH also assessed what kind of Inter-Personal Communications (IPCs) could be used in the targeted fishing communities.

The target fishing communities for the intervention were Nyimba and Namalyo, both along the Kafue River, across the Chunga Lagoon. The population in Nyimba is estimated at 4,000 people during the peak of the fishing season (between July and December), while Namalyo has a population estimate of 2,000 people. These figures are estimates however, in view of the high levels of mobility between the many fishing communities, remote fishing camps, fish landing sites and markets in the Kafue Flats area. This mobility of traders and fishers is one of the underlying causes of the rapid spread of HIV among fisher folk and fish traders, and beyond; to urban populations via fish marketing routes.

Through meetings and interviews with local leadership and community members, study results were confirmed that HIV/AIDS, STIs, malaria, cholera, dysentery and diarrhoea are among the major diseases affecting fisher folk in fishing communities. The lack of services inside communities and their remote location forces fisher folk to travel by water or to walk long distances to access health services; the nearest clinic 28 – 35 kilometres away. With fishermen moving around the Kafue Flats in search of fish, female fish traders follow them to purchase the fish, often in exchange for sex to ensure their purchase ("fish-for-sex" phenomenon). This leads to complicated sexual networks that put both fishermen, female fish traders and local women in fishing communities at risk of contracting HIV and STIs. Poverty is a known entry point for HIV, but the fish-for-sex survival strategy practiced by fisher folk places them at increased risk of HIV infection. The influx of female fish traders from outside the community coupled with limited accommodation facilities and alcohol abuse leads to extra marital relationships, causing marital problems (often violent) and divorce. Local married women feel they are only married to their husbands during the temporary fish ban period from December to February. Some local women in fishing communities report that they have lost their husband to the migrant female fish traders. While women are socially and economically disadvantaged and are at higher risk of HIV infection than men,

gender power disparities between men and women determine sexual relationships, where women often are unable to negotiate for condom use.

Low levels of condom use were reported. Female condoms are not available and male condoms are sometimes for sale at local shops in the fishing communities (ZK 500 – 1,000 per pack of 3). In addition, men generally prefer sex without condoms, based on myths and misconceptions:

- Condoms are not 100% safe and whether one uses a condom or not at one time in life or another he/she will surely die, be it of AIDS or another illness.
- AIDS is a disease like any other disease and there is no need to fear it or run away from it. "It's everywhere."
- AIDS can be cured using crocodile fats and other herbs. The majority of people living with HIV in fishing communities are using this to replace ARVs. This has made it difficult for health personnel in clinics and hospitals to capture information of people who are on treatment.
- "AIDS did come for human beings and not animals or trees; there is no need to worry about it. Whether one died of AIDS and another of malaria, the fact is that they are both dead."
- "The lubricant around the condom makes a man impotent while in women it leads to cervical cancer."

People in fishing communities fail to distinguish between HIV/AIDS and other diseases and do not worry about getting infected as they see no difference between death caused by AIDS or death by malaria. There is a general lack of knowledge and information regarding HIV prevention, care and treatment. Due to the remoteness, the vast amounts of water and being situated inside the national park, the target fishing communities are found to be more severely marginalised than other remote (rural) areas, resulting in limited access to health facilities where people can access medicines and HIV/AIDS related services such as VCT.

Knowledge on clean water and sanitation is generally lacking as people pass urine and faeces into the river from which they draw water for consumption and household use. Basic knowledge on processing water for consumption and domestic use is generally lacking and it is difficult to find chlorine. Other methods of heating/boiling water before drinking are seen as too time consuming. In addition, it is hard to come by firewood as there are few trees in the floodplains. All the above factors increase fisher folk vulnerability to sickness from preventable diseases, which often results into death.

Box 1: Activities and expected outputs of field visit to Nyimba and Namalyo fishing communities

Field objectives	***Expected outputs***
Introduce SFH staff to the traditional local authorities i.e., chiefs, headmen, fish camp chairmen/ and the local data collectors	○ Develop partnership with the local leadership in response to HIV/AIDS and create a general understanding on specific HIV and health interventions targeting fisher folk. ○ Gain further insights into the major HIV and health factors impacting on fisher folk livelihoods.
Discuss HIV and health related issues with the local leadership and community members	
Map existing government clinics and health services and assess their catchment areas.	○ Draw guidelines on HIV and health interventions targeting specific fishing communities falling beyond the reach of the existing government health institutions. ○ Make recommendations on the perceived and observed HIV and

	health challenges facing fishing communities.
Assess accessibility of fishing communities taking into account variations in changing weather patterns e.g., some fishing camps are not accessible during the rainy season.	○ Highlight expected challenges in the process of administering pilot interventions. ○ Design better approaches on how to access specific fishing communities that have shown difficulties in terms of accessibility due to poor road and transport infrastructure e.g., Nyimba fishing village can only be accessed by water transport.

Observations

Although the fishing communities of the Kafue Flats lie outside the existing catchment areas for government health services, lack of accessible and available health care services are a major issue. While there are many barriers to health care service delivery in Zambia, the following constitutes major barriers to health care delivery in the fisheries sector specifically:

- Distance to existing health services; patients arrive too late or cannot reach the health care facility at all. The already poor road infrastructure in fishing communities is affected with seasonal flooding, making access to health care facilities impossible or too costly.
- Medicines including ARVs remain in more central government hospitals and clinics.
- Lack of mobile hospitals, VCT and HIV/AIDS services targeting fishing communities.
- Lack of private or government run health centres in fishing communities.

In addition, the following observations were made as a result of the exploratory visit:

- There are no clinics in fishing communities in the Kafue Flats and the nearest one is about 30 kilometres away. There are very few fishing communities visited by DHMT, however free chlorine distributed periodically by the DHMT was reported in selected fishing communities.
- Fishing communities have poor water quality and sanitation.
- Certain fishing communities such as Nyimba village can only be accessed by means of water transport. Threats from hostile crocodiles and hippos are a major challenge in accessing Nyimba fishing community.
- Besides long distances to health services, the target area is characterised by very poor road infrastructure, resulting in geographical isolation of fishing communities. As most transport is by water transport, this means that people who are sick and in need of health services have to travel long distances by water and sometimes have to postpone their scheduled dates for receiving ARVs. Sometimes critically ill patients have to be carried on wooden stretchers on the shoulders or by ox cart to the nearest clinic at 30 kilometres distance.
- Fisher folk, especially in Nyimba, are not able to take their medication as required, due to lack of (money for) transport to and from the clinic. Some fisher folk also complained that they do not have access to their rations of food like soya meal and cooking oil to supplement their diets because these are only given in Monze at the hospital at least 85 kilometres away from Nyimba.
- There appears to be many people infected with HIV in fishing communities and yet they do not know their status. The majority are the local fishers and community members who lack access to VCT and health services.
- Fishers already infected with HIV and on ART are often drunk. The level of alcohol abuse and promiscuity among fisher folk is very high in situations where he/she discovers that his/her sexual partner is on ART. For those whose medicines are finished (ARVs) especially among men, alcohol abuse is a cheap option to minimise coughing. An additional challenge is that drunk

people are unable to cook and eat, thereby increasing their vulnerability to the infection as the immune system deteriorates.

- Crocodile fats are a commonly used remedy for HIV/AIDS in fishing communities. The use of this remedy makes it difficult for health personnel in clinics and hospitals to capture statistics on HIV prevalence in fishing communities.
- Fishermen prefer unprotected sex in transactional (fish-for-sex) deals. Re-infection and co-infection are likely to be high because of multiple partners and a lack of condom use.
- There are wrong perceptions among fisher folk regarding safety of condoms. They stated that condoms are the cause of diseases such as HIV and cancer. The HIV virus is perceived to be deliberately manufactured together with the condom and lives in the lubricant. Many women believe that condoms lead to cancer of the womb and other parts of the reproductive system.
- There is a lack of HIV and health services in fishing communities in the Kafue Flats. The nearest rural health centres seem not to be equipped with the latest version of screening machines and clients are asked to wait up to three months in order to obtain their results. By the time they return to the clinic, their results are often lost, resulting in clients not knowing their status.

Challenges

The exploratory visit highlighted two challenges that needed to be taken into consideration for the succeeding of the pilot intervention, namely access to the target communities and accommodation for the intervention team. In terms of access, the intervention depends on availability of transport. Certain fishing communities such as Nyimba can only be accessed by boat. Reliability on the ZAWA boat for pilot interventions as means for transport to cross the Lagoon must be treated with caution if interventions are to work out effectively and more efficient. Operations could be crippled in situations where the boat is not available or is unable to transport certain equipment like the Mobile Video Unit (MVU). In addition, water transport is very expensive. The willingness and support of the local leadership in community mobilization and participation of community members in the pilot interventions is critical for success. Resistance from the local leadership may block the interventions, so it is critical to involve them. In view of the distance between the target fishing communities, the intervention team will have to stay overnight in the fishing communities, probably 2 days in each fishing camp.

Recommendations

The following recommendations were formulated in preparation of the pilot intervention:

- Fishing communities are tied by intermarriages and extended family relationships in which HIV/AIDS awareness messages must categorically target untied family units or relationships e.g., separating husband and wife from in-laws. Interventions and risk reduction messages that are culturally sensitive must be delivered in such a manner that they are sensitive to family groupings and relations as in small groups by gender.
- Interventions by SFH should be timely and consistent especially after the rainy season (from July to November).
- Fishing communities have poor water quality and sanitation as a result emphasis should be made on condom disposal after use as some reportedly discarded them in the shallow water wells and in the river where the majority draw water for drinking and domestic use.

- Community Based Distributors (CBD`s) need to be trained in order to make products like Maximum Condoms, Chlorine and Safe plan more accessible.
- Brochures and HIV/AIDS awareness messages about the risks associated with concurrent sexual relations and the importance of couple counselling should be delivered in local languages (Nyanja, Lozi, Bemba and Tonga).
- Staff camping for pilot interventions in fishing communities seems inevitable due to distance.
- With the existing local interest in listening to radios, HIV/AIDS messages can be delivered to fishing communities, taking advantage of stations like Radio Mazabuka, Sky FM, 1 and 2 to disseminate information on HIV/AIDS.

b. Training workshop (September 2009)

In addition to meetings held with the local chiefs and headmen, a training workshop was organised at Malundu Rural Health Center in Monze District in September 2009. Issues discussed include HIV/AIDS prevention, health promotion and hygiene status of fishing communities. Participating fisher folk and fish traders stressed the importance of treatment and support services regarding HIV/AIDS and STI infections. In order to deliver HIV services and meet the aforementioned objectives, the WorldFish Center in collaboration with SFH conducted several activities and made regular visits to fishing communities with various activities ranging from VCT, hygiene promotion, HIV prevention and awareness campaigns.

c. Community mobilisation (September 2009)

Community mobilization was an essential component and first step in the delivery of HIV/AIDS services including community awareness and sensitization. It is an approach meant to reach out to all members of the community with HIV/AIDS and health messages. Effective prevention of HIV/AIDS requires that the community become organized and strongly motivated to participate in the programme. To successfully mobilise the community, the headmen and section chairmen were essential in the mobilisation of groups to central places where various reproductive, HIV/AIDS and VCT topics were discussed. Due to the great variety of age, community members were divided into groups according to age and gender, in order to discuss details in confidentiality with their peers.

d. HIV/AIDS awareness and sensitisation (September 2009)

Raising HIV/AIDS awareness was essential and a necessary step in the prevention of the disease and to distil myths and misconceptions while advocating for VCT. This was done through the distribution of IEC materials and teaching young people about the importance of healthy choices in their lives. Besides HIV/AIDS and other social issues, stigma was also discussed. Although some participants were relaxed in raising questions or sharing about their life experiences and health status in fishing communities, many requested for one-on-one discussions to discuss reproductive health issues away from the large group. The common session assessed the current health problems in the fishing community, which included HIV/AIDS, cholera, diarrhoea and malaria, and which were discussed into detail in smaller groups.

e. Group discussions (September 2009)

To ensure that people understand the reproductive health issues affecting them, small group discussions were held in a neutral place in fishing communities with special focus on HIV prevention by condom demonstrations. These detailed explanations provided clear information and understanding about HIV prevention for both sexes. Participants had an opportunity to ask different questions including on the definitions of HIV/AIDS and STIs, their similarities and differences, symptoms, treatment, care and support, including prevention using both male and female condoms. Some of the pictures of common STIs were presented on flip charts and different stages of the infections were thoroughly explained. Other topics included family planning and health promotion. Prevention efforts were recognized as the first steps in the fight against HIV/AIDS in fishing communities.

f. Health and hygiene promotion (October 2009)

- **Cholera and diarrhoea**

The discussions on cholera and diarrhoea were initiated by the participants themselves. Cholera has a marked seasonal component associated with the rainy season. However, an increase in unhygienic sanitary conditions is related to the increase in diarrhoea and cholera cases among the population. Poor quality drinking water and disposal of excreta in water sources (many households have no toilet) are the cause of these diseases. Support services and response activities are out of reach when fishing communities are hit by cholera or diarrhoea outbreaks. When cholera prevention, including types and common bacteria causing the disease, the mode of transmission and the risk factors, was discussed, it became clear that most people already understand the causes of the disease, but continue to practice low hygiene. People were encouraged to observe high standards of hygiene, while water treatment through chlorine at end user level is one of the possible prevention methods against diarrhoea and cholera.

Cholera was described as a water – and – food – borne disease through faecal-oral transmission whose source is embedded in the contaminated water and food. Lack of infrastructures to provide clean and safe drinking water and sanitation in fishing communities have made fishing communities susceptible to cholera. The general lack of latrines (poor excreta disposal) and poor hygiene status in fishing households are the underlying causes. Chlorination of drinking water and regular washing of the hands with soap are the basic preventive measures for the prevention of diarrhoea and cholera. Various levels of interventions were identified, including identification of household, individual and community weaknesses in practising hygiene. Chlorine was offered for sale by SFH at affordable prices.

- **Malaria**

The Kafue Flats floodplain ecosystem harbours a lot of mosquitoes that have resulted in high prevalence of malaria. Malaria prevention was a topic of concern among fisher folk and fish traders. Malaria not only remains an important cause of death in fishing communities but it also impedes fishing activities when family members and breadwinners become sick. Indoor spraying and mosquito nets were discussed as alternative prevention measures, while distance to the existing health care services surfaced as the major hindrance to malaria treatment.

- **HIV/AIDS**

HIV/AIDS remains the common and most outspoken disease in fishing communities. One out of four households visited mentioned HIV/AIDS as the most common disease in fishing communities. Some

households mentioned having lost some family members due to AIDS. Modes of transmission and prevention of HIV/AIDS were discussed at length, at individual and group level.

g. Mobile VCT (October – November 2009)

In response the demand for VCT, a mobile VCT clinic was mounted in both target fishing communities. Many appreciated having the mobile VCT service at their door step instead of travelling long distances to get the service. To make people feel encouraged and go for VCT, the mobilisation team was given the mandate to sensitise people before they could go for VCT. In some cases a door-to-door HIV/AIDS and VCT sensitization and awareness was conducted to inform and encourage people to go for VCT. Issues of stigma, discrimination and confidentiality were priorities to dispel rumours and misunderstanding about VCT, including the association of VCT being a form of Satanism. It was believed that the counselling staff would take one pint or one litre of blood for use in Satanism. The best way to prove this myth wrong came from the apparatus itself, which only requires a drop of blood from the thumb. When the test reacts and the results are positive, the client is subjected to the confirmatory strip (Unigold) – another test to confirm the result. If the client is still not satisfied with the VCT outcome, mostly for positive clients, s/he was encouraged to have another test from the clinic or hospital. Clients whose HIV test results were negative were encouraged to have another test after three months as they might be in the window period.

Analysis and results of VCT

Mobile VCT proves to be a cost effective intervention within the context of primary health care. The response for VCT in the two fishing communities was overwhelming during October and November 2009. The turn up among fisher folk and fish traders was as exciting as knowing their health status. In some cases, people had to queue for VCT, a sign that health services are on high demand, but often unavailable. Standard procedures for counselling and testing were strictly followed and monitored while clients were obliged to complete the form of informed consent. A total of 987 people were tested by SFH/New Start, the majority (660) from the two target fishing communities, and 327 from Monze fish market (of whom 187 were fish traders and 140 were other community members including customers, marketers and other traders). Interesting to highlight is the fact that despite the availability of clinics and hospitals in Monze, many preferred to have their HIV status tested from the mobile VCT of New Start Centre mounted near the Market. Some clients talked to explained that they feel more comfortable to be tested by somebody else whom they do not know and does not reside in Monze or fishing communities to maintain confidentiality hence the high turn up.

Visit	FC	M	FT	CM	RESULTS	M	F	M+	F+	T+	Couples	Total
1	400	100	60	40		313	187	51	43	94	31	500
2	260	227	127	100		282	205	29	40	69	14	487
TOTAL	**660**	**327**	**187**	**140**		**595**	**392**	**80**	**83**	**163**	**45**	**987**

Legend:

- *FC: Clients from Fishing Communities tested (i.e., fisher folk and fish traders)*
- *M: Total clients who tested at Monze fish market*
- *FT: Fish traders only who tested at Monze Fish Market*
- *CM: Community Members who tested at Monze fish market*
- *M: Male*
- *F: female*
- *M+: Males who tested positive*
- *F+: Females who tested Positive*
- *T+: Total of those who tested positive*
- *Couples: Couples that tested*

Analysis of the test results shows that 163 of the 987 clients tested positive with slightly more women (83) than men (80) testing positive. This gives an indicative HIV prevalence rate of 16.5% for the two targeted fishing communities, although the overall prevalence rate for all fishing communities and fishing camps in the Kafue Flats is likely to be higher as not all fisher men and fish traders were reached.

Conclusion

The estimated HIV prevalence rate (16.5%) in fishing communities is slightly higher than the national average 14.3% in Zambia. This prevalence rate was captured only from two fishing communities, Nyimba and Namalyo, during the HIV/AIDS pilot intervention. Considering all fishing communities in the Kafue Floodplains the HIV prevalence rate is estimated at 23.7% or even higher.

The preliminary testing results confirm the findings from the socio-economic analysis undertaken by the WorldFish Center in the Kafue Flats that fisher folk and fish traders are highly vulnerable to HIV/AIDS at different stages along the fish marketing chain; in fishing communities, on transit, at the market and at various levels in their fish trade. The study and the pilot intervention have confirmed that women are more vulnerable to the disease due to their lower socio-economic status, gender imbalances and economic vulnerability, but that these vulnerabilities are taking an extraordinary shape in fishing communities (f.i. the effects of "fish-for-sex").

Considering that 163 fisher folk and fish traders tested positive during the recent VCT in only two months, October and November 2009, the prevalence rate is likely to be higher in the Kafue Flats overall, due to the remoteness, the high-risk behaviours, and the lack of services and awareness programmes. Household food and income insecurity are another vulnerability factor identified in the study by WorldFish, which is closely linked to the position and status of women in fishing communities. In addition to the described health and HIV/AIDS interventions, a group savings model will be piloted in the target communities to empower women and to make their businesses more robust, so that they become less dependent and better organised. It is hoped that that will lead to increased access to health care services. A combination of training on financial and leadership skills, and increased knowledge on HIV/AIDS and other health issues, women in fishing communities can become less vulnerable and develop into actors of change for the betterment of their communities.