

Women and Fish-for-Sex: Transactional Sex, HIV/AIDS and Gender in African Fisheries

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Summary. — This paper analyzes the phenomenon of fish-for-sex in small-scale fisheries and discusses its apparent links to HIV/AIDS and transactional sex practices. The research reveals that fish-for-sex is not an anecdotal phenomenon but a practice increasingly reported in many different developing countries, with the largest number of cases observed in Sub-Saharan African inland fisheries. An overview of the main narratives that attempt to explain the occurrence of FFS practices is presented, along with other discourses and preconceptions, and their limits discussed. The analysis outlines the many different and complex dimensions of fish-for-sex transactions. The paper concludes with a set of recommendations.

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“Some elderly women go to the sea shore to buy fish directly from the fishermen. On the days when they have no money one has to offer sex to the fishermen in order to get fish to feed the grandchildren” Older woman, Kibaha district, Tanzania¹

traders and fishermen, in which the fish traders engage in sexual relationships with the male fishers to secure their supply of fish, which they then process and sell to support their families.

In a large number of fishing communities where these fish-for-sex practices occur, and more widely in the surrounding societies, this

1. INTRODUCTION

Small-scale fisheries and related activities such as fish processing and trading have long been recognized to provide a safety net for the “poorest of the poor” in rural communities in developing countries (Jul-Larsen, Kolding, Overå, Nielsen, & van Zwieten, 2003; Neiland & Béné, 2004; Panayotou, 1985). Recently, however, an increasing number of documents—essentially, but not exclusively, from non-governmental organizations—have been drawing attention to a “new” phenomenon: the occurrence within these small-scale fishing communities of what has been termed “fish-for-sex” transactions. The term refers to particular “arrangements” between female fish

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type of transactional sex is frequently compared to prostitution. The stigmatization can therefore be considerable for the women, often leading to social exclusion. At the same time, however, fish-for-sex is also generally perceived or presented as the consequence of individual economic impoverishment: if these female fish traders—often widowed, divorced, or single—engage in such activities it is because they lack the cash necessary to purchase the fish from the fishers and are therefore ‘forced’ to offer sex to secure their access to the product. The literature also makes explicit the direct link that exists between these practices and the spread of HIV/AIDS (e.g., AFARD, 2004; BDS, 2005; Seemungal, 2003) as most of these fish-for-sex transactions involve unprotected sex, putting both parties—the fisher and the fish trader—at risk.

Despite the direct and multiple links with issues of public health, HIV/AIDS, and social exclusion, this fish-for-sex (FFS) phenomenon has so far hardly been considered in the relevant literature. To the best of our knowledge, no scientific article has been published on this specific issue in the social, health, or development literature. The objective of this paper is to correct this omission by offering a first analysis of the phenomenon of FFS in small-scale fisheries in developing countries. To start with, we wish to investigate the real magnitude of this phenomenon; is this a marginal activity which involves a few women in specific fishing communities, or is it a practice which is observed more widely in a large number of artisanal fisheries? Second, we want to better understand who these women are—do they share some general common ‘profile’—are they victims or agents of this phenomenon and, in relation to this, to what extent FFS is similar, or diverges, from more ‘conventional’ transactional sex? Thirdly, and perhaps more fundamentally, is it possible, based on the existing information, to identify some of the social, cultural, or economic factors or mechanisms that lead women to engage in transactional fish-for-sex trade? To answer these questions and to provide a general overview of the phenomenon of FFS transactions, we will use an analytical framework that encompasses what appear to be the three main entry points directly relevant to the phenomenon of fish-for-sex, namely the emerging recognition of HIV/AIDS in fisheries communities; the issue of gender in fisheries; and the well-established knowledge on transactional sex. Other frameworks are

possible, however. In particular, analytical frameworks focusing on vulnerability would also be potentially enlightening.

The rest of the paper is articulated as follows: first, the phenomenon of FFS is presented and illustrated through a concrete example from a fishery in the Kafue flats in Zambia. The results of a global review on FFS are then presented and preliminary interpretations put forward to explain some of the most prominent trends revealed by this review. The next section discusses FFS in light of the literature on gender and HIV/AIDS in fisheries. The analysis will reveal the close links which exist between FFS and HIV/AIDS issues but also stress the risk that the gender-bias present in fisheries sciences is reproduced in HIV/AIDS literature and FFS analysis. In the next section, the main conclusions of the literature on transactional sex are revisited in light of our focus on FFS. The review demonstrates in particular how the economic impoverishment discourse, which is often put forward to explain FFS transaction is in fact too simplistic to capture the complexity of the FFS phenomenon. It will also raise questions about the comparison which is often made between FFS and prostitution and cast a new light onto this fish trader/sex worker amalgam. These different points are then illustrated through the re-analysis of the field data of the Kafue flats which underlines how critical it is to account for socio-cultural dimensions in the analysis of the FFS phenomenon. The last section of the paper draws on these different points to propose a series of preliminary directions for policy recommendations on FFS.

2. METHODOLOGY

Firstly, a global review of the literature was conducted to identify the various documents and media that report the occurrence of FFS transactions in fisheries across the world. Key-words used for this global research included “fish-for-sex,” “sex-for-fish,” “transactional sex + fish,” “sex + fish exchange,” and their equivalents in French, Spanish, and Portuguese. An initial set of 46 documents was identified. In order to reduce the risk of multiple counting and/or “factoidization”² of the information (Barnett & Prins, 2005), the exact location (village, municipality, or district) where FFS transactions are reported, the nature of the evidence, and the source of the document were systematically recorded. From this

screening process, 12 documents that mention FFS were discarded for the lack of credibility of their data or clear evidence of “recycling” from other previous documents. The remaining 34 records were kept for the analysis. These are detailed in Appendix 1.

Secondly, an in-depth analysis was conducted on the literature on HIV/AIDS and gender in fisheries, and on transactional sex (TS). The review on HIV/AIDS in fisheries included the comprehensive research by Allison and Seeley (Allison & Seeley, 2004a, 2004b; Kissling *et al.*, 2005; Seeley & Allison, 2005) and the works conducted under the Sustainable Fisheries Livelihood Programme in West Africa (e.g., SFLP, 2004), as well as previous articles published in the late 1990s (e.g., Pickering, Okongo, Bwanika, Nnalusiba, & Withworth, 1997). As for the literature on gender in developing countries’ small-scale fisheries, we essentially referred to the series of articles published in the international Workshop “Room to manoeuvre: Gender and coping strategies in the fisheries sector” (Bennett, 2005; Bennett, Rey Vallette, Maiga, & Medard, 2004), the Global Symposiums on Women in Fisheries (Choo, Hall, & Williams, 2006; Williams *et al.*, 2002), plus few additional individual contributions such as Davis and Nadel-Klein (1992) and Overå (1998). Issues on TS and trans-generational sex³ are better covered in public health and social sciences literature, especially since the recognition of the link between transactional sex and HIV/AIDS in Sub-Saharan Africa. We relied essentially on the recent and comprehensive reviews by Luke and Kurz (2002) and Chatterji *et al.* (2004) for this part of the research.

Finally, data collected in the Kafue flats (Zambia) were also included as a case study (Merten, 2006). The fieldwork took place during 2002–04 and extended over two periods of 6 months. It included ethnographical observations in a local settlement in the woodlands and in the fishing villages and was aimed at gaining an insight into local livelihoods, power structures, and local politics. Six focus group interviews were conducted on the subject of fishing activities and related problems. Another six focus group interviews were carried out on the topic of HIV/AIDS. In addition, semi-structured interviews on fishing, trade, and related problems were conducted with 84 fishermen in two fishing camps. Fifty-seven fish traders (26 females, 31 males) were surveyed using a common interview frame. Sixteen fishermen

and the 26 female traders were further interviewed about fish-for-sex deals by local fieldworkers, who, to ensure confidentiality, came from a different area. In addition, seven local female fish traders from the woodlands, who were willing to reveal their fish-for-sex activities, were interviewed in depth.

3. FISH-FOR-SEX: EMPIRICAL EVIDENCE THROUGH A CASE STUDY

The Kafue case study is first used to illustrate the issue of FFS. On the Kafue River and associated floodplains and lagoons (permanent large water-bodies), commercial fishing is done mainly by local Batwa people⁴ and immigrant fishers coming from other regions of the country. In these communities, women are not actively involved in fishing, but instead in the processing (drying) of fish and in trade. Large temporary fishing camps have also developed in many parts of the floodplain, attracting fishermen and both female and male traders from all over Zambia.

Contrary to fishermen where patron–client relations do exist between draw-net masters and their workers, fish traders (men and women) are independent ‘entrepreneurs’ who set up their own trading business. Women have an especially strong hold on the fish trade and the regular commercial traders regard themselves as businesswomen. Female fish traders have different reasons for taking up this profitable although arduous activity. Data indicate that the most common argument is the high profit that fish trade is expected to generate (Merten, 2006). In addition, little capital is needed to start the business, and it is relatively simple, not requiring any special manual or intellectual skills. Women who are widowed or divorced mention the separation from their husband as the strenuous life event forcing them to take up an income generating activity in order to support themselves and their families.

While both men and women are engaged in fish-trade, local women are aware that they have a good opportunity to trade fish with the full-time fishers and other seasonal immigrants in the fishing camps even if they lack initial capital to start with. Women, as a local informant put it, “go to the flats with nothing and return with a lot of fish.” As a form of sexual networking, some local women have their boyfriends in the fishing camps, which they visit

and from whom they get fish usually on a regular basis, in exchange for sexual favor. The women then dry and sell the fish in small quantities, an activity that represents often their only source of income. It appears that women who do have boyfriends in the fishing camps have easier, more regular, and often cheaper access to fish than those who do not, or than the male fish traders. As one woman describes it:

“The prices now are according to the size of the fish. For those who have a boyfriend there [in the camp] it is easier. They get sometimes for the same price, while others who do not have a boyfriend have to pay more. So, as I am having a boyfriend, I get the fish much cheaper so I can also sell it cheaper. So there is no big loss (if prices drop). Nevertheless many of the fish I was just given because I was staying with the boyfriend. So these I can sell now” (Female fish trader, Mbeza, 2002).

At the same time, the interviews also reveal that sex-for-fish transaction can also be requested by fishers from female traders through a coercive arrangement, whereby a fisher(man) may refuse to sell fish if the female trader does not get sexually engaged with him. In the camps it is known that traders, be it male or female, have to wait for many long hours if fish is scarce, sometimes for days, and that female traders who do get sexually involved with a fisher have a much better opportunity to get hold of a good catch.

Most of the time it is elder women, either divorced or widowed, who get engaged with fishers, although unmarried younger women with children might do the same. In the case of the Kafue, for instance, more than 36% of the women engaged in fish-trade are single or widowed and 57% of the single women engaged in fish trading declare having a ‘boyfriend’ in the fishing camp. In total 31% of the 26 female fish traders interviewed declared having a boyfriend in the fishing camps and are therefore likely to have an institutionalized fish-for-sex relationship (Table 1).

This figure of 31%, however, cannot be extrapolated to other fishing communities in Zambia or to other fisheries in the rest of the world. The question then arises: what is the real scale of occurrence of FFS; is this only a marginal activity involving a few women in a particular place in the middle of Zambia or is it a practice which is observed more widely in a large number of fishing communities across the globe?

4. GLOBAL REVIEW ON FFS IN SMALL-SCALE FISHERIES

Thirty-four documents reporting the occurrence of FFS transactions were identified in different parts of the world (6 scientific articles, book chapters, conference papers and thesis, 17 reports, 6 web-pages, 2 films and documentaries, and 3 newspaper articles). Figure 1 displays the number of counts of these documents over time, up to the year 2005. It indicates that all documents have been published or produced after 1997. Figure 2 shows the cases per region and Table 2 details those per country. Eighty-four percent of the cases are reported in Eastern and Southern Africa (49% and 35%, respectively) and another 13% in West and Central Africa. Overall 97% of the cases are reported in Africa, with only one case recorded in the Asian region (Papua New Guinea). The other noteworthy result highlighted by these data is that 91% of the FFS cases appear to occur in inland fisheries and in particular in lake fisheries (Table 3).

These different statistics call for a series of initial comments. First, the fact that the documents retrieved through the survey are relatively recent may initially be interpreted as the evidence of the novelty of FFS transaction. However, a closer look reveals that the totality of the documents mentioning those FFS cases derives in fact from studies addressing primar-

Table 1. *Marital status of female engaged in fish trading in the Kafue flat fisheries (based on survey data, N = 26)*

	“Boyfriend” relation			Total
	No	Yes	No answer	
Fish trader marital status				
Married	10 (38.5%)	4 (15.4%)	2 (7.7%)	16 (61.5%)
Single	2 (7.7%)	4 (15.4%)	1 (3.8%)	7 (26.8%)
Widowed	0 (%)	0 (0%)	2 (7.7%)	2 (7.7%)
Unknown	0 (0%)	0 (0%)	1 (3.8%)	1 (3.8%)
Total	12 (46.2%)	8 (30.8%)	6 (23.1%)	26 (100%)

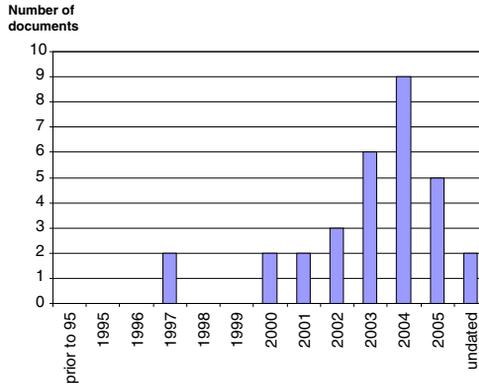


Figure 1. Global review: year of publication of the documents reporting cases of fish-for-sex.

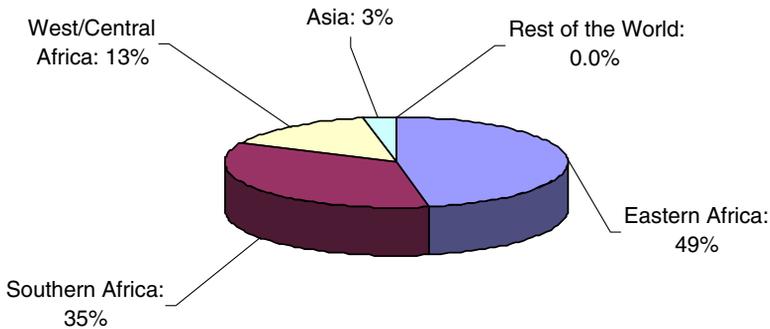


Figure 2. Geographical distribution of reported cases of fish-for-sex.

Table 2. Global review: reported occurrences of fish-for-sex transactions per country and region

Eastern Africa		Southern Africa		West/Central Africa		Asia		Rest of the world	
Kenya	9	Malawi	3	Congo	1	Papua New Guinea	1		0
Uganda	3	Zambia	4	Benin	1				
Tanzania	2	Zimbabwe	4	Ghana	1				
Lake Victoria	2	Namibia	1	Nigeria	1				
				DR Congo	1				
Grand total									34

ily HIV/AIDS issues. This apparent “outbreak” of FFS cases is therefore more likely to be the artifact of the increasing attention that is being paid to the HIV/AIDS pandemic since the mid-90s, rather than an increase in the occurrence of these FFS transactions *per se*. If this last hypothesis is true, this may also explain why the largest number of FFS

occurrences is reported in Southern and Eastern Africa—as this region is the part of the world where the bulk of the research and interventions on HIV/AIDS is currently made.

This potential artifact makes it therefore difficult to infer any definitive conclusion regarding the actual rate of occurrence of FFS in the other continents or even in other part of

Table 3. *Global review: distribution of the reported occurrences of fish-for-sex cases between inland (I) and marine fisheries (M)*

Country/region of occurrence	I/M	Frequency
Lake Victoria	I	16
Lake Malawi	I	3
Zambia (Kafue and Barotse floodplains)	I	4
Zimbabwe (Lake Kariba)	I	4
Namibia lake	I	1
Ghana (Volta Lake)	I	1
DR Congo (Katanga Province's lakes)	I	1
Nigeria (Taraba river)	I	1
Congo	M	1
Benin	M	1
Papa New Guinea	M	1
Total		34

Africa (West Africa). However, the very clear disparity between the level of occurrence of FFS in Africa and the rest of the world suggests that some 'social and cultural' factors may possibly be at work as well—as it is in the case for HIV/AIDS for which it has been suggested that sexual 'norms' and perceptions of what is "acceptable" as sexual behavior by societies have played a critical role in the differential spread of the pandemic in different parts of the world (Barnett & Whiteside, 2002; Caldwell, Caldwell, & Quiggin, 1989; Halperin & Epstein, 2004; Leclerc-Madlala, 2000; Poundstone, Strathdee, & Celentano, 2004). This last point emphasizes the link that seems to exist between HIV/AIDS and FFS and underscores the need to more closely consider the issue of HIV/AIDS in fishing communities.

5. HIV/AIDS AND GENDER IN FISHERIES

(a) *Fishers as a vulnerable group to HIV*

The recent research conducted on HIV/AIDS in fisheries suggests that fishing communities in developing countries are among the socio-professional groups with the highest levels of HIV/AIDS prevalence (Ainsworth & Semai, 2000; Allison & Seeley, 2004a, 2004b). In particular, in countries where data were available, a recent review shows that HIV prevalence rates in fishermen or fishing communities can be 4–14 times higher than the

national average prevalence rate for adults (Kissling *et al.*, 2005).

Outside the fishery sector, several frameworks and hypotheses have been put forward to attempt to explain why certain groups appear to be more vulnerable to HIV/AIDS than others. Gilbert and Walker (2002) for instance examined the longstanding relationship between social inequalities and health in general in the context of HIV/AIDS and gender, and used the concepts of vulnerability and social capital to shed light on the position of African women in the epidemic. They argued that although the role of poverty has been widely acknowledged in the literature and elsewhere, there are additional factors which profoundly shape the patterns of health and disease. These include the general low status of women in society; women's subordinate role in the family; and sexual-cultural norms and values (Gilbert & Walker, 2002, p. 1106). Coming from a slightly different angle, Barnett, Whiteside, and Decosas (2000) proposed another interesting conceptual framework—what they call the Jaipur Paradigm—to predict the pattern and severity of the HIV/AIDS epidemic in societies. They use the concepts of susceptibility and vulnerability in combination with wealth and income, and hypothesize that there is a relationship between the levels of social cohesion, income distribution, and the gradient and final peak of an epidemic curve.

In the fishery sector, Allison and Seeley (2004a) attempted to identify risks factors known from the general literature on HIV/AIDS that would also apply to the specific populations of fisherfolks. One of these factors appears to be mobility: many fisherfolks are geographically highly mobile, which makes them a particularly "vulnerable group" to HIV/AIDS as many of these other mobile groups such as truck or bus drivers, seasonal workers, or mobile traders (IOM, 2003; UNAIDS, 2001). Allison and Seeley also highlighted some other more specific factors related to the particular economic and/or cultural characteristics of fishing communities. These include

- *Cash income*: fisherfolks may not be wealthy by absolute standards, but in very poor coastal or lakeshore villages, they may be among the few people with a source of daily cash which they often spend on drink and leisure in places where no better alternatives are available.

- *Alcohol and sex*: among the many health-related implications of drinking behavior in fishing communities is its association with high-risk sexual activity. Heavy alcohol consumption reduces inhibitions and impairs decision-making. In particular, increased sexual promiscuity and risky decisions over condom use are often associated with alcohol abuse.
- *A subculture of risks*: Social and cultural attitudes, beliefs and values play an important role in the perception of, and response to, the danger in fishing communities. In particular the denial of danger, an emphasis on independence, and fatalism are common themes among many fishermen (Poggie, Pollnac, & Jones, 1995). It has been suggested that these attitudes may apply as much to attitudes about safe sex as to safe seafaring (SPC, 1999).

While we believe that these recent analyses will help draw the practitioner community's attention to the acute but largely ignored crisis that has been affecting the fisheries sector for more than two decades,⁵ we argue in the next section that there is a potential risk that the current fisheries literature on HIV/AIDS reproduces the gender-bias which has characterized—and still characterizes—most of the research in fisheries in general.

(b) *Gender-bias in fisheries*

Historically, fishing has always been perceived as a male-dominated economic sector where women have remained largely invisible, generally positioned in secondary roles related to kinship, social organization, household production, and the complementary gender division of labor (Bennett *et al.*, 2004; Lambeth *et al.*, 2002; Williams *et al.*, 2002). Part of this situation is the result of the historical development of the sector—in particular marine fisheries—where fishing predominantly involved men going fishing on boats while women were mainly engaged in post-harvest activities such as smoking, drying, and marketing, which earns often—but not necessarily always—a narrower profit margin than that made by fish catchers (Mbenga, 2000). A good illustration of this resulting gender-bias is the stereotyping noun “fisherman,” which explicitly reproduces and reinforces this androcentric vision of fisheries. Davis and Nadel-Klein (1992) summarized this by stating that women have been portrayed as passive actors in the typical gendered labor

model and that this oversimplistic binary theoretical framework—fishermen at sea and women at home—fails to acknowledge gender as a 2-way relational interaction (in which, however, the different actors often have unequal power). Not surprisingly, research on fisheries and fishing communities has generally perpetuated this androcentric bias by totally ignoring the role of women in fisheries or in fisheries management or by positioning them as subordinates (Bennett, 2005; Williams *et al.*, 2002).

What our research reveals, however, is that the literature on HIV/AIDS in fisheries runs the risk of repeating this gender-biased approach by focusing on fishermen or by presenting/addressing women only as sexual partners or wives. In fact, a review of the existing literature on HIV/AIDS in fisheries suggests that this gender-bias may already be implicitly at work. Huang (2002), for instance, in her article on “HIV/AIDS among fishers: vulnerability of their partners” used an intra-household model where women are presented only as fishers’ (sexual) “partners.” In her view: “Partners of fishers include wives, friends (both male and female) and commercial sex workers” (Huang, 2002, p. 51). By considering women only as sexual partners (spouse or prostitute), the researcher totally overlooks the active role that women play in the sector, for instance, as fish processors.

Additionally, some other elements might have contributed to this overall focus on (fisher)men in the emerging literature on HIV/AIDS in fisheries. In particular, the fact that, with the exception of sex-workers, the literature on HIV/AIDS in general identifies male-dominated groups—long-distance truck drivers, migratory workers, military personnel, and miners—as the main groups at risks does certainly influence the way the issue of HIV/AIDS is perceived in the more specific case of the fisheries sector. This could have important implications for research and interventions on HIV/AIDS in fisheries communities but also—and this is our main point—on the way the FFS phenomenon may be perceived and addressed in the future in the fisheries sector.

6. LESSONS FROM THE LITERATURE ON TRANSACTIONAL SEX

Transactional sex is formally defined as a relationship involving an “exchange of money

or gifts for sexual favors” (Chatterji, Murray, London, & Anglewicz, 2004, p. 1). When a female fish-trader offers sexual favors to a fisher in exchange of his fish, she is engaging in transactional sex. As part of our research we therefore consulted the literature on transactional sex (TS) to investigate what lessons or conclusions on TS could help in improving the understanding of the FFS phenomenon.

(a) *Two portrayals of transactional sex*

The first major conclusion, which is of interest for our discussion, is that two opposing portrayals of young women engaging in TS are usually proposed in the literature. On one hand, these young women are often presented as victims of the larger structural and cultural factors that shape their risky sexual behavior (e.g., Barker & Rich, 1992; Longfield, Glick, Waithaka, & Berman, 2002). This viewpoint underscores how women can be ‘coerced’ into behaviors by outside influences, including economic constraints, peer and relative pressures, and social norms of male dominance and physical control. The view also points out that others (including parents, friends, and relatives) may benefit from those TS relationships, but that the costs of these dangerous sexual transactions are felt directly by the women.

The second, and somewhat less frequent portrayal, is that of young women depicted as active social agents who rationally choose their behaviors and negotiate their sexual relationship (e.g., Silberschmidt & Rasch, 2001). This viewpoint emphasizes that those young women have learned that their sexuality is an economic valued resource, and they exercise agency to extract money and gifts from men for sexual services (see also Baumeister & Vohs, 2004). They may also engage with multiple partners simultaneously, in order to maximize the benefits of these relationships. Here, self-perceived risk on the part of those women is discounted in favor of the rewards they received from the relationship.

In effect, most of the experts agree that many women engaged in TS experience something in between these two portrayals—not entirely victims, yet not entirely in control of their sexual relationships. There may be considerable relationship bargaining, yet it occurs within a setting of significant gender power imbalance. The recognition of this combination of structural and agency contexts is useful to start unfolding the complexity of FFS transaction.

While our initial inclination might have been to reduce the FFS phenomenon to a structural (coercion) mechanism, the TS literature reveals other potential interpretations where women are seen as social actors taking an active and integral (though unbalanced) part in the transaction.

(b) *Determinants of transactional sex*

The second important conclusion of interest for our discussion is the fact that although financial reasons are usually thought to be the main motivations for adolescent girls and women to engage in TS, the reasons behind these motivations are complex and should not be oversimplified (Barker & Rich, 1992; Calves, Gretchen, & Eloundou Enyegue, 1996; Luke & Kurz, 2002). Three primary underlying factors are usually identified: (1) economic (short-term) survival situations where women seek resources from men for basic needs or in time of economic crisis; (2) increasing longer-term life chance: very young women (in particular adolescent girls) may seek to enhance long-term goals in higher economic status and security through their involvement with older partners⁶ (Machel, 2001; Sherman & Basset, 1999); and (3) increasing in status among one’s peers: this refers essentially to (young) women who engage in TS with older men for money and gift for nonessentials or luxuries such as nice clothes, soap, make-up, perfume, or jewelry (Longfield *et al.*, 2002).

The important point about this typology is that extreme poverty may not necessarily be the overriding factor leading young women to exchange sex for money or gifts; only a few studies report that the money received is used to “get by” or to support one’s family. In Africa, for instance, Chatterji *et al.* (2004) showed that no clear relationship exists between women’s economic status and their likelihood to engage in transactional sex. This conclusion, which may challenge the view that a large number of people have developed on transactional sex, will be re-discussed below in the context of FFS.

(c) *Divergence FFS–TS*

The third point of interest for our discussion is the age profile of the women engaged in TS. The literature clearly shows that women engaging in TS are for the most part extremely young—some still adolescent—and unmarried (Figure 3) (Chatterji *et al.*, 2004; PRB, 2000).

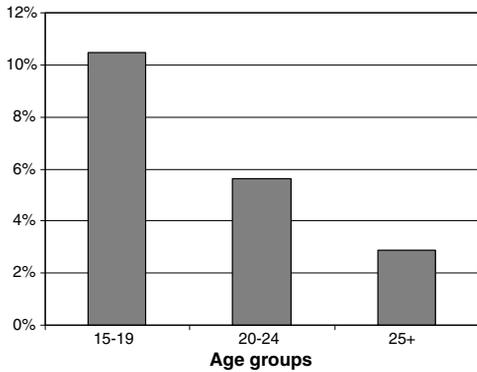


Figure 3. Percentage of sexually active women involved in transactional sex per age categories for 12 African countries (source: Chatterji et al., 2004).

This age-related trend is clearly an aspect that differentiates FFS from general TS. Indeed, the various documents reporting FFS make explicit the fact that, although single young (unmarried) women may engage in FFS, the large majority of the women effectively engaged in FFS transactions are older, married women. Several reports also mention widows and divorced women (e.g., Chigwedere, 2000; Ouma, 2005). The HelpAge International report quoted at the beginning of this article even makes reference to “elderly women.” Our own data from the Kafue flats fisheries confirm this. The proportion of women engaging in FFS in that area increases with age (Figure 4).

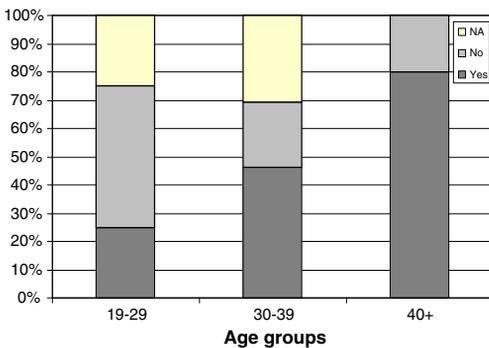


Figure 4. Fish-for-sex in fishing camps in the Kafue flats. Legend: Yes = percentage of female fish traders interviewed who recognize having boyfriend(s) in the camps. No = no boyfriend in the fishing camp; NA: unwilling to answer.

7. FISH-FOR-SEX AND PROSTITUTION

(a) Fish traders or sex-workers?

Women engaging in FFS transactions are often depicted as sex-workers by their own community/society, conveying more or less explicitly a link between FFS and prostitution. While prostitution undeniably exists in the sector and fishers are certainly one of the socio-professional groups which have the most frequent contacts with sex-workers, assimilating FFS to sex-workers is socially and economically questionable. In particular, it does not acknowledge the fact that women fish traders—whatever way they ‘purchase’ the fish, i.e., with cash or through sexual arrangement—are economically productive agents within the fisheries sector: like any other fish traders, they process, transport, and retail fish. They are thus fully integrated in the fish value-chain, in contrast to sex-workers who do not create direct value-added in the sector.

The association FFS-prostitution is also recurrently brought forward as part of the narrative of the poor, destitute woman who is forced to prostitute herself to buy fish—cf. Table 4. Although it can hardly be denied that female fish traders can be remarkably vulnerable to poverty—in particular the widows, single mothers, or divorced women—assuming a systematic link between extreme poverty and transactional sex may be too simplistic to capture the complexity of the factors leading women to engage in FFS. In particular it does not reflect the fact that women are socially active agents who may rationally choose their behaviors and negotiate the nature and continuance of their relationships with their partners.⁷ What, instead, the quotations listed in Table 4 may illustrate is that a large part of the literature essentially from NGOs and advocacy groups that focus on addressing extreme destitution and poverty among vulnerable groups (and in particular women) tend to use extensively or to instrumentalize the narrative of “the poor woman who is forced to prostitute herself to survive” in order to draw public attention to their own cause.⁸

The last element, which leads us to further question the association between prostitution and FFS, derives directly from the point mentioned above about the nature and continuance of the relationships between the partners engaged in these TS arrangements. This relates to the kinship dimension of FFS transaction, i.e., the fact that these relationships between

Table 4. *The link between fish-for-sex and prostitution*

Reference	Quote
Kageno report (n.d.)	"...mothers and even girls prostitute themselves to eat ... After drying the fish, middlemen buy at well below the market price, forcing women to repeat the prostitution the following day."
Chigwedere (2000)	"...thus wives are almost destitute and forced into extra-marital sexual favours in return for money or fish."
Ouma (2005)	"like in Mbita, ... many helpless widows are forced to succumb to sexual demands of fishermen with whom they are compelled to "trade sex for fish"
Awounda (2003)	"...due to increased poverty women fishmongers have become victims of fishermen who are now demanding sexual favours on top of supplying fish."
Kageno report (n.d.)	"When fishing is poor and the fishermen go to the other beaches to fish, the female residents left on the beach are left without income and food. These females—some as young as 10 years olds—are forced to prostitute themselves to remaining fisherman for food."
Anon (2004a)	Professional sex-workers ... the majority of these women are fish processors. They have two to three regular partners among the boat-owners and fishermen. This arrangement guarantees the women access to fish."
ActionAid Kenya (2003)	"...women traders who want to buy fish are often coerced to offer "sex for fish."
Geheb and Binns (1997)	"...competition between traders sometimes be savage, with women traders even prostituting themselves to fishermen and boat-owners in an effort to guarantee fish supplies."
HelpAge International (2004)	"On other days when [women] have no money one has to offer sex to the fishermen in order to get fish to feed the grandchildren."

fish traders and fishers do not reduce to mere sexual exchanges but involve longer-term social kinship. This is clearly the case of the Kafue flat fishing camps where interviewed women referred to these relationships as "temporal marriages" in which the fishers with whom they stay during their visit to the camps are viewed as "boyfriends"—and certainly not "clients." Those women who have boyfriends do get fish in exchange for a wife's duties including house-keeping, cooking, and other domestic tasks, and not simply sexual intercourse. The interviews also indicate that these arrangements were clearly perceived by these women as being different from "regular prostitution"—meaning sexual intercourse for money or fish, which is equally common in the camps, but predominantly done by sex-workers coming from town. Finally, the fact that women engaged in FFS do not consider themselves as prostitutes is not specific to the Kafue case study. The CSPA report mentioned for instance that "exchanging fish-for-sex by women in the Volta region ... was not considered to be prostitution by these women" (Douglass, 2003).

(b) *"No-deal, no-fish"*

In relation to the discussion on prostitution, an important additional facet of this debate needs consideration. Women are frequently presented or perceived as the initiators of this "prostitution"/FFS transaction. A caricature example of this is the article "Prostitution in the fishing community of Base-Agip" (Anon, 2004a) where the report explicitly presented the fishers of this coastal fishing community in Congo as "vulnerable men under great risk" who are the "prey" (p. 11) of these women who "chase" them up to the beach (p. 12) and "manage to ruin some of the boat-owners" (p. 13) who "seem to have little choice" and "are tied up ... with multiple sexual relationships" (p. 11).

As shown above, the reality might be slightly different and part of the responsibility is to be taken on by fishers. Indeed, in great contrast with the picture of vulnerable (male) prey hunted by (female) fish traders conveyed by the Base-Agip story, one could easily argue that nobody 'forces' fishers to accept, or to engage in, FFS transaction. On the contrary, some

reports point out that fishers may in some cases be the ones imposing this type of transaction on the fish traders through a “no-deal, no-fish” trade. Thus, in Seg Harbor in Papua New Guinea, Sullivan (2003), describing the occurrence of FFS relationship between local fish traders and foreign industrial ships crews, reported: “First it was vegetables and others things being exchanged, but then the crews began asking for sex.” This is echoed by Awounda (2003) who mentions that in the case of Lake Victoria “women fishmongers have become victims of fishermen who are now demanding sexual favors on top of supplying fish.”

8. EXPLAINING THE EXISTENCE OF FISH-FOR-SEX

Some of the elements outlining the different dimensions of FFS transactions have been highlighted in the previous sections. It remains now to try to assemble those into a synthetic overview of the different ‘narratives’ that are used—usually implicitly—to explain the occurrence of FFS practices.

(a) *The “miserabilism” narrative*

The first narrative, which people may use to ‘describe’ FFS, relates to the classical economic utilitarian model where FFS is simply explained (or interpreted) as the ultimate consequence of poverty. This is the “miserabilism” discourse⁹ in which the economic vulnerability and income-poverty of women emerges as the main factor leading them to engage in fish trading and, for some of them, into FFS transaction. This narrative is related to the role of “safety-net” that the activity of fish trading often plays in low-income countries (e.g., Gordon, 2003; Hapke, 2001). This safety-net dimension of fish trading explains why a relatively large proportion of widowed, divorced, or single mothers are engaged in this sector. Within this context, the association between FFS and poverty/vulnerability is easily made and statements such as “the penniless women will sell themselves to pay for the fish” (Kageno, 2005) are common. In this poverty-related narrative, the emphasis is on the *individual* economic status of the female trader who decides to engage into FFS practices as a way to sustain her livelihood in a low-income context.

It is well recognized, however, in the socio-anthropological literature that individual choice and decisions depend on opportunities, which are in turn influenced by external economic, demographic, environmental, power, or political changes (Coleman, 1990; Ensminger, 1992). In particular, the relative opportunity cost of engaging in fish trading needs to be considered and related to the existing livelihood options.

(b) *The institutional economic interpretation of FFS*

A second narrative is therefore one that describes FFS transaction from an institutional economic point of view. In this case, the focus is not on the individuals’ economic status, but on the *interactions* between the fish traders and the fishers, and in particular on the transaction costs induced by those interactions. In that sense, this second narrative can be viewed as a New Institutional Economics (NIE) interpretation of the phenomenon of FFS¹⁰ where FFS arrangement is viewed as one way to reduce the transaction costs of securing access to landed fish in an uncertain environment and/or imperfect market situation.

This interpretation is in line with the recent work of Abbott, Campbell, Hay, and Purvis (2007) on fish trade in the Caprivi (Upper-Zambezi) floodplain. These authors argued that transaction costs of operating fish trade in Sub-Saharan Africa can be particularly high, especially in inland (floodplain) fisheries for the reasons that

“...landing sites within a floodplain are both widespread and likely to change location over time, sometimes at a relatively rapid rate, according to the degree of inundation. Hence, not only are there small numbers of fishers using each landing site, it may be difficult for fish vendors to know where, when and if fishers will land their catch.” (p. 4)

These authors in fact echo Tvedten and Hersoug (1992) who argued that due to the scattered nature of fish and fisheries in floodplains, these systems are less likely to be well linked to the outside systems of consumption and production. In those circumstances, it is crucial for fish traders (who sometimes travel—by foot, bicycle, or public transport—for days on inundated roads to reach the landing sites) to develop strategies to reduce the transaction costs of ‘hunting’ for landed fish in situations where fish supply is highly uncertain and

fishers are highly mobile. Fish-for-sex transaction is clearly one possible strategy whereby female fish traders by establishing privileged relationships with fisher(s) ensure secured access to fish supply, thus greatly reducing the risk and the transaction costs of the trade. Clearly, this interpretation fits with the description given by one of the female fish traders interviewed in the Kafue flats: "... it was an agreement. I stay with the boyfriend and get all the fish" (Female fish trader, Mbenza).

In lake fisheries, the landing sites are often permanent and fishers and traders concentrate in the same place. The uncertainty regarding the time and place where transactions can take place is therefore reduced dramatically. But at the same time, the concentration of traders at landing sites exacerbates competition, especially when the number of fishers or the quantity of fish landed is not large enough to satisfy all traders' demands. In that case, special arrangements are sought by the fish traders to bind fishers and secure access to the fish supply. These arrangements may involve credit loans offered to fishers, and an abundant literature describes these particular types of arrangements (e.g., Marquette, Koranteng, Overå, & Aryeetey Bortei-Doku, 2002; Overå, 1998; Platteau, 1989). The literature reviewed here suggests that FFS is also another type of 'contract' developed by fish traders to secure access to fish supply in situation of high competition between fish traders. As Geheb and Binns (1997, p. 83) described it in the case of the Lake Victoria:

"The ratio of fishermen to traders may be as high as one to three. As a result, competition between traders can be savage, with women traders even prostituting themselves to fishermen and boat-owners in an effort to guarantee fish supplies"

What is not clear, however, from this NEI model is the reason why such phenomenon has not developed to the same degree in coastal fisheries where landing sites are also permanent and competition between fish traders tough as well. Table 3 presented earlier highlights that 91% of the cases of FFS have been reported in inland (lake, river, and floodplain) fisheries, not in coastal fisheries. One possible hypothesis for this difference is that the coastal areas are usually characterized by a higher density of population, with perhaps more economic opportunities than the rural, remote areas where floodplain, river, and lake fisheries are operated. The lack of economic alternatives is

indeed likely to exacerbate the occurrence of FFS practices. This hypothesis, however, remains to be tested.

(c) *Socio-institutional dimension of FFS: revisiting the Kafue fishery case*

One may be tempted at this stage to conclude that the root causes of FFS probably lie somewhere between the two narratives described above—where women are in some cases coerced (by fishers or destitution) to engage in FFS and where in other cases they 'voluntarily' develop those FFS strategies to reduce transaction costs and secure access to fish. This, however, would be forgetting some of the important results that the global review has highlighted and in particular the fact that the large majority of the cases of FFS are observed in some parts of Africa and nowhere else. This means that while the miserabilism and the institutional economic interpretations are useful to improve our understanding of why and where the FFS phenomenon occurs, it seems that the consideration of some socio-institutional elements is also necessary to explain why this FFS phenomenon occurs in some places and not in others. What is proposed in the rest of this section is to illustrate this socio-institutional dimension through our experience of the Kafue flat fishery.

In the Kafue flats, the majority of the ethnic groups (Batwa, Ila) are polygamous and women do expect men to support them financially and/or by gifts as a sign of affection, and as part of their man's duty. This applies to marital as well as to extra-marital relations. In some cases such as the Ila, sexual networking of married women has been socially accepted and was once institutionalized. In particular, a traditional arrangement called *lubambo*, which has earlier attracted special attention in colonial and ethnographic literature (Smith and Dale, 1968[1920]), has been described as one of the most important forms of institutionalized polyandry in Southern Africa. According to this *lubambo* arrangement, Ila women were allowed to engage in 'legal' extra-marital sexual relationships with other men, as long as their husbands were informed, had agreed and were compensated—usually with one head of cattle (Smith & Dale, 1968).

Extra-marital affairs among the Ila are thus not regarded as mere crime, although the traditional institution of *lubambo* together with polygamy has been recently heavily criticized by the modern Zambian state, the diverse

churches, and by health professionals in view of the HIV/AIDS epidemic and other sexually transmitted infections (STIs) that afflict the area. Despite these increasing pressures, we saw that female fish traders still engage in sexual relationships with fishers in exchange for fish. For these women, there is no doubt that this practice is perfectly acceptable and reflect their “traditional rights”; the right to have control over their own body and to negotiate their own sexuality to strengthen their economic empowerment. The evidence is that a large number of them refer to this *lubamdo* as a way to ‘legitimize’ or ‘justify’ their particular relationship with fishers (Merten & Haller, 2007).

The socio-institutional concept of *lubambo* has therefore been ‘modernized’ in a particular manner through this female fish traders—male fishers arrangement. As this example suggests, an economically regulated exchange of sexual engagements is not in every case what might be judged from a Christian or Islamic standpoint a shameful and stigmatized way of prostitution out of poverty. In societies who do not primarily have a romantic concept of all sexual relations, exchange of sexual engagement with gifts or money might not be seen as stigmatizing and/or morally unacceptable as it is in a (western) perception and has been therefore tolerated by parts of the community at least until the arrival of Christian missions, and later epidemics such as HIV/AIDS.

9. POLICY RECOMMENDATIONS

No country has yet drafted any policies or specific recommendation regarding the issue of fish-for-sex, despite the strong link which clearly exists between the spread of HIV/AIDS and the evidence of the increasing number of countries in which this FFS phenomenon is now reported. This section discusses some preliminary directions for policies and interventions on FFS, emphasizing in particular potential entry-points for practitioners and NGOs involved in field-based initiatives.

Perhaps, the first point to discuss is whether or not an externally driven ban on FFS (through, e.g., legislation) could be an effective and acceptable way to curve down the occurrence of this phenomenon. In the case of the Kafue for instance, partially out of fear of the spread of HIV/AIDS from the fishing camps to the remote rural villages, and partially

because of the increasing pressure put by the central government and other institutions, many local men and women are now clearly expressing views supporting the banishment of fish-for-sex trade. But the lack of better alternative to secure access to fish than by getting involved sexually with a fisher(man) might render every approach of local people, churches, or NGO’s to abolish fish-for-sex trade, quite difficult to implement at the present time. Similarly, although often postulated by local decision makers, the pure and simple legal prohibition of FFS does not seem likely to be a realistic concept, but, on the contrary, might create more marginalization and stigmatization of the already disadvantaged women by pushing them out of their poverty safety-net activity. Considering that the economic and social empowerment of women is one of the main targets to fight poverty, it could be argued that the effect of a legal prohibition of fish-for-sex trade in areas where transactional sex and polyandry is part of the local (past?) culture might have a negative impact on the economic activities of these women and more fundamentally on their freedom to control and negotiate their own sexuality, without addressing the fundamental question of the unbalanced views widely accepted in some societies about male and female respective promiscuities.

To us, prevention and awareness seem to be more appropriate and adequate key domains where interventions can have effective impact to curb FFS prevalence. In particular sensitizing and building capacity of NGOs, Department of Fisheries and other government public services (e.g., health) staff to deal with FFS related issues should be identified as important components of any FFS prevention program. At the local/community level, providing appropriate ways to stimulate individual reflection and group discussion with respect to risk behavior, FFS practices and gender relations through women’s discussion fora or individual counseling should also be part of those initial FFS programs. Initiatives aiming at improving delivery of sexual health services in migrant fishing camps focusing on prevention, treatment, and mitigation of STIs and HIV/AIDS are already promoted as part of HIV/AIDS programs in the fishery sectors (FAO, 2005). Interventions on FFS should clearly build upon and seek to complement these initiatives. Furthermore, as illustrated above through the case of the Kafue flats, it is also crucial to start identifying ways to find sensitive

and locally appropriate means of addressing socio-cultural factors that make particular groups of women more susceptible to engage into FFS/TS practices. At the same time, it is urgent that those interventions also provide solutions to address and reduce the risk of stigmatization and social exclusion that are being increasingly observed in these communities due to the close association between FFS with HIV/AIDS. One particularly good example of the already existing intervention in this area is the initiative led by the network "Sister 2 sister" in Namibia (SHADE, 2005).

In relation to transactional sex, recent experiences have shown that communication campaigns around Behavior Change Communication (BCC) can have positive results and reduce the likelihood that young women will engage in transactional sex. Luke (2001) for instance reported the case of the Girl Power Initiative in Nigeria universities. Although the comparison between urban educated young women in colleges or universities and unskilled rural fish traders in remote areas should be made with some caution, we believe that some lessons can certainly be learned from those BCC campaigns and applied to women in fishing communities.

Another potential important entry point for addressing FFS in fishing communities should be women empowerment. Focusing on some of the root causes of vulnerability, particularly for female headed households, to promote women's economic and social empowerment through the development of other economic opportunities, training, rural finance, and support groups can be instrumental in reducing the occurrence in FFS practices. A promising example of this type of intervention is the collaborative program that was established by the National AIDS committee of Congo and the Sustainable Livelihood Fishery Programme to develop saving schemes for vulnerable women and girls in fishing communities (FAO, 2005).¹¹ These types of support may provide the necessary elements (rebuilding of self-esteem, access to cash, alternative income-generating activities, etc.) which will help women break the "downward spiral" of poverty or increase their capacity to negotiate with fishers, and thus become less inclined—or less exposed to coercion—to engage in FFS practices.¹²

Finally, as this research reveals, the occurrence of "no-deal no-fish" practice indicates that targeting women (or women groups) alone in an attempt to reduce FFS will not be suffi-

cient. Along with those women-centered approaches, working closely with (fisher)men in order to change or influence their behaviors and expectations regarding multiple sexual partners will also be critical.

10. CONCLUSION

The present article has investigated the phenomenon of fish-for-sex in fishing communities. Our research suggests that fish-for-sex is not an anecdotal phenomenon occurring in few fishing communities but a practice that has been observed in a substantial number of countries in the world. The research also reveals that the very large majority of the fishing communities where the phenomenon has been reported are the African inland fisheries. The fact that most of these cases were reported through documents which were addressing issues of HIV/AIDS (and not FFS *per se*) suggests that the present FFS world-map may simply reflect the current focus on Southern and Eastern Africa where the prevalence of the AIDS pandemic is the highest in the world. More cases of FFS are likely to exist in other parts of the world (including West Africa) but are probably unreported.

The existing documents reporting FFS indicate that a large proportion of the women who engage in FFS are widows, divorced or single women, re-emphasizing the relatively high vulnerability of this group to poverty and thereby reflecting the safety-net role that fish trading activities traditionally play for a large number of poor women, especially in Africa. This link between FFS and female fish traders' vulnerability has been captured and reflected in a certain number of narratives and discourses which attempt to explain the occurrence of these practices. The most frequent one is probably the miserabilism narrative where FFS is viewed as a "strategy for survival" and women engaging in FFS as victims. Linked to this perception and reinforcing it is the very frequent confusion made between FFS and prostitution. While this article demonstrates why this confusion is disputable, it also recognizes that the increasing vulnerability of female traders is a reality which certainly reduces the negotiation/transaction power of these women, and also encourages fishers to impose these FFS transactions through "no-deal no-fish" coercive arrangements. At the same time, the new institutional economic approach

proposes an alternative to the miserabilism narrative and highlights the transactional dimension of FFS practices, suggesting that the lack of cash may not systematically be the only determinant that leads women to engage in FFS. Surely, there is no contradiction between these two interpretations. Social structures or institutions, class, gender inequality, kinship, and marriage do have a bearing on women's decisions, but those must still be seen as social actors with some power to negotiate.

Concurrently, the strong contrast between the level of prevalence of FFS in Africa as compared to Asia is the evidence that poverty and transaction costs are not the only two determinants of FFS in fishing communities—as they are certainly prevalent in Asia fisheries as well—and that another socio-institutional dimension is embedded in this practice, relating to sexual 'norms' and behavior. This dimension is of similar nature to the element highlighted in the literature emphasizing the high prevalence of HIV/AIDS in Africa. The links between FFS and HIV/AIDS in fishing communities is therefore undeniable, but our work suggests that this link does not necessarily occur because HIV/AIDS is induced by FFS as one may initially assume, but because both HIV/AIDS and FFS are conjoint (i.e., covariate) consequences of this particular socio-institutional

element of sexual behavior observed in sub-Saharan African societies.

In relation to this last point, our work also brings into light important issues about HIV/AIDS in fishing communities. It highlights in particular the need to ensure that the gender-bias present in fisheries sciences where women are perceived mainly as "wives at home" or "part of fisher sexual network" is not reproduced in HIV/AIDS or in FFS literature—and subsequently in policy recommendations.

On the basis of this first analysis, a number of directions have been highlighted for public health interventions. The starting point of these interventions should be the recognition of the deep genderization that characterizes the sector, with strong, generally unequal, relationships between men and women, institutionalized in both social and economic spheres. In this context, prevention, awareness-raising, and empowerment interventions that can help women to counterbalance on an individual or collective basis this power disparity will be key entry-points to curb the prevalence of FFS. These interventions should, however, be combined with actions which target male fishers and attempt to change their behaviors in relation to risk perception and sexual norms.

NOTES

1. Reported in HelpAge International "The Cost of Love" (2004).

2. "Factoids" are described as "pieces of data that look credible at first glance, but which are insecurely grounded on evidence. They achieve this status as a result of a form of pyramid selling by recycling through publications, grey literature and reports of meetings" (Barnett & Prins, 2005, p. 7).

3. Transactional sex involves the exchange of sex in return to money, or gifts or services. Trans-generational sex in turn refers to sexual relationship between older (usually richer, male) partners and younger (socially and/or economically lower status female) partners, including adolescents. Although transactional and trans-generational sex are therefore in theory two different issues, they are in reality often combined, as in the cases of relationship between male teachers and female school or university pupils, or more generally between young women and older, better-off men. There

is a large literature on these issues in social sciences and in particular public and reproductive health, family planning, or social medicine.

4. In addition to the Batwa, the two other major local ethnic groups are the Ila and the Tonga who are both mainly pastoralists.

5. In 2000, Ainsworth and Semai pointed out that of the 700 HIV/AIDS support services operating in Uganda in the late 1990s, none of them had focused on fishing communities, even though the first cases of AIDS in Uganda had been reported in fishing villages on the shores of Lake Victoria some 15 years earlier (Serwadda, Sewankambo, Carswell, & Musgrave, 1985) and estimates of 70% HIV seroprevalence had been stated to occur in Homa Bay, one of the main fishing areas in Kenya (Seemungal, 2003).

6. Much of these later cases concern female secondary students or university students who seek the financial

support of older men to stay in school and pay for necessities such as school fees and supplies.

7. The TS literature confirms that women engaging in TS are able to negotiate relationship formation and continuance; for example, they can choose the types and number of partners with whom they become involved and can discontinue a relationships if gift-giving ceases. However, once in a sexual partnership, women are usually unable to control sexual practices, with men maintaining control over the conditions of sexual intercourse, including condom and contraceptive use and the use of violence to ensure their dominant position.

8. On the issue of discourses and instrumentalized narratives in a different context, see *Béné (2005)*.

9. The term “miserabilism” is adapted from *Olivier de Sardan (2005)* who uses it to characterize discourses or perceptions that reinforce people’s hopelessness and misery to the extent that they only emerge as victims of “external” events.

10. New Institutional Economics has been frequently used in small-scale fisheries to explain the economic characteristics of the sector in developing countries. *Platteau (1989)*, *Chauveau, Jul-Larsen, and Chaboud*

(2000) and *Jul-Larsen et al. (2003)* for instance, consider why small-scale fisheries still operate despite modern production systems, and suggest that markets associated with these fisheries do not function according to modern economic theory, due to market imperfections on fish availability and price. As traders do not have the perfect knowledge about price and availability, they seek to overcome high transaction costs by personal networks and patronage. The higher the transaction costs, the more developed traditional linkages and/or patron-client relationships are, despite the fact that these practices limit economic expansion and accumulation.

11. Another successful example of women empowerment initiative is the WIFIP program in Kenya where female fish traders have managed to build up collective and individual self-confidence and to stand up against the fishers attempting to impose FFS transactions through a series of collective initiatives including a local radio program (*WIFIP, 2002*).

12. Other recent experiences from transactional sex programs reveal, however, that in some cases, additional income from alternative income-generating activities or improved access to credit may simply be used by women to supplement income from transactional sex (*Parker, 2002*).

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APPENDIX 1

Overall results of the worldwide search on FFS evidence. Thirty four reliable documents (including 6 scientific articles, book chapters, conference papers or thesis, 17 reports, 6 web-pages, 2 films or documentaries, and 3 newspaper articles) were found reporting FFS.

No.	Organization/ author	Document type	Document title/ work	Country, area	Date	Address/reference
1	Kim Geheb and Tony Binns	Scientific article	Fishing farmers' or "farming fisherman"? The quest for household income and nutritional security on the Kenyan shores of Lake Victoria	Kenya, Kisumu District	1997	African Affairs Vol. 96, No. 382
2	Pickering, H. <i>et al.</i> ,	Scientific article	Sexual behavior in a fishing community on Lake Victoria, Uganda	Uganda, Lake Victoria shores	1997	Health Transition Review 1997; 7, 13–20
3	Lilian Chigwedere	Country report	Case study on the interaction between HIV/ AIDS, development and local cultures	Zimbabwe, Binga town Lake Kariba	2000	http://www.synergyaids.com /documents/2963_culturalApproach_HIV.pdf
4	Anon	Media article	Zimbabwean women trade sex for fish	Zimbabwe, Kariba town, Lake Kariba	2000	http://www.zimbabwesituation.com/jul12a.html
5	FHI—Family Health International	Report on line	Report of the in- depth assessment of the HIV/AIDS Situation. Special section on fishermen	Nigeria, Tella town, Taraba State	2001	http://www.fhi.org/NR/rdonlyres/emonwh 7qa2n5y5v7zuuqbb6hsbfutgzkfh2uxdzeoomzymvph 5fqh5kz2ekyeexvnbqohsvh3duck/TarabaInDepth AssessmNigeria.pdf

6	MDT—Media for Development Trust	film	Musinsimuke (Wake up)	Zimbabwe, Binga town Lake Kariba	2001	http://mfd.co.zw/viewinfo.cfm?linkcategoryid=9&linkid=3&id=104&siteid=1
7	Refugees International	RI report	Evaluating the Implementation of UNHCR's Guidelines on the Protection of Refugee Women	Zambia, Barotse floodplain Western Province	2002	http://www.refugeesinternational.org/content/article/detail/1368
8	Brenda and Robert Rooney	film reportage	Condoms, Fish, and Circus Tricks	Zambia, Kafue flats	2002	www.filmakers.com/indivs/CondomsFish.htm
9	AMREF—African Medical and Research Foundation	Webpage	Breaking the Cycle—Johannesburg Summit 2002: Sustainable Development in an African Context	Kenya, Homa Bay, Nyanza District	2002	http://www.legambiente.com/documenti/2002/0821johannesburg/breaking_the_cycle.pdf
10	WIFIP—Women in Fishing Industry Project	Webpage	Women in Fishing Industry Project—webpage—introduction section	Kenya, Kisumu District	2002	http://www.iec.ac.uk/wifip_trust.html
11	Luyembe Sosthenes	Report	Wakerewe and globalization—Global Economy and Culture project	Tanzania, Ins ^(a)	2002	http://www8.georgetown.edu/centers/woodstock/GEC_Project/AFM14TanzaniaNarrative.pdf

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No.	Organization/ author	Document type	Document title/ work	Country, area	Date	Address/reference
12	Medard M. <i>et al.</i> ,	Conference paper	Women and gender participation in the fisheries sector in Lake Victoria	Lake Victoria, Ins	2002	6th Asian Fisheries Forum
13	Richard Douglass	Report on line	Social Factors Affecting Infectious and Communicable Diseases in Ghana	Ghana, Lake Volta	2003	http://www.ug.edu.gh/
14	ActionAid Kenya	Report	ActionAid Kenya annual report 2003	Kenya, Busia District	2003	http://www.actionaid.org/kenya/images/AAK%202003%20English%20Report.pdf
15	Martin Seemungal	CBC News Online	AIDS in Africa	Kenya, Homa Bay, Nyanza District	2003	http://www.cbc.ca/news/background/aids/aidsinafrica2.html
16	HelpAge International	Report on line	The gender dimension of HIV and AIDS care	Kenya, Ins	2003	http://www.helpage.org/images/pdfs/AgeinginAfrica/AfricaJune03.pdf
17	Moussa Awounda	Master's thesis	The Voice of Dunga	Lake Victoria, Ins	2003	http://www.sol.slu.se/publications/masters_23.pdf
18	Nancy Sullivan	Report	Sullivan Report	Papua New Guinea, SEG Harbour, Madang Lagoon	2003	http://www.rd.green.net.au/docs/sullivanreport.htm
19	Executive secretariat of the CNLS/ SFLP	SFLP Bulletin	Congo: Prostitution in the fishing community of Base-Agip	Congo Pointe Noire town	2004	http://www.sflp.org/eng/007/pub1/bul17_art2.htm

20	HelpAge International	Report	The Cost of Love	Tanzania, Tanga and Arusha municipalities	2004	Helpage International Tanzania, Adr es Salaam
21	SIDA	Report	Strategy for Swedish support for poverty reduction and sustainable development in the Lake Victoria Basin: 2004–2006	Uganda, Lake Victoria shores	2004	http://www.sida.se/sida/jsp/sida.jsp?d=481&a=1485&language=en_US
22	SSP—Safe Schools Program	Report	Malawi Assessment Report	Malawi, Malombe Lake	2004	www.usaid.gov/our_work/cross-cutting_programs/wid/pubs/ss_malawi.pdf
23	Sonja Merten	Conference paper	From Substance to Sale: Institutional Change in Indigenous Women's Access to Common Pool Resources	Zambia, Kafue Flats	2004	Tenth Biennial Conference of the International Association for the Study of Common Property
24	Anon	Strategy paper	Emergency Plan for AIDS relief (PEPFAR) Five-Year Strategy for Zambia	Zambia, Ins	2004	zambia.usembassy.gov/zambia/img/assets/5816/Revised%20Strategy%20FINAL%207feb05.pdf
25	National AIDS Council	IRIN article	Zimbabwe: Fishermen neglected target for new AIDS awareness	Zimbabwe, Lake Kariba shore villages	2004	http://www.aegis.com/news/IRIN/2004/IR040512.html
26	AFARD—Agency for accelerated regional development	Project document	Lakeshore AIDS Initiative Project	Uganda, Nebbi District, Lake Albert	2004	http://www.socsci.ru.nl/afard/index.php?option=com_docman&task=doc_download&gid=10&Itemid=50

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No.	Organization/ author	Document type	Document title/ work	Country, area	Date	Address/reference
27	Mamadou Baro and Tingle Azalou	Report	Dynamique du VIH/SIDA dans les communautés de pêche artisanales du Bénin	Benin, Gand Popo, Cotonou and Porto Novo area	2004	Draft Report. HIV/AIDS-FAO
28	KEFEADO— Kenya Female Advisory Organization	Webpage	Synopsis of KEFEADO activities	Kenya, Bondo District	2005	http://www.kefeado.co.ke/synopsis3.html
29	Joyce Ouma	Webpage	Another letter from the Akado Clinic	Kenya, Mbita town, South Nyanga District	2005	www.kageno.org/aboutus.html
30	Jacob Jimu	Media article online	Fish-for-Sex trade thrives in Mangochi	Malawi, Mangochi District	2005	http://www.amalawi.com/articles/fisnsex.htm
31	SARDC— Southern African Research and Development Center	Online book	Beyond inequalities: women in Malawi 2005 situation analysis	Malawi, Ins	2005	http://databases.sardc.net/books/malawi2005/view.php?chapter=6&id=10
32	Kalibu M. <i>et al.</i> ,	Report	Projet de pêche artisanale et aquaculture au Katanga et région annexe	DR Congo, Katanga Province	2005	Draft report. Agrer SA. For the Democratic Republic of Congo—Ministry of agriculture, fisheries and livestock

33	Kageno	Webpage	Project webpage— Income Generating Activities and Skill development	Kenya, Kolunga Beach, Suba District	n.d.	http://www.kageno.org/iga.html (accessed in 2005)
34	SHADE— Sojourner: Help, Advocacy, Development, Education	Webpage	Sister to Sister SMS Campaign— Satellite project document	Namibia, Liambezi Lake	n.d.	http://www.shade.org.za/Satellites/NAM% 20Namutoni/Namutoni.html (accessed in 2005)

Notes: (a) Ins: location not specified in the document.

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