

Mapping and size estimation of Female Sex Workers in Cameroon

To Inform HIV Program Design and Implementation

EXECUTIVE SUMMARY

WORKSHOP EDITION

August 2016

Bafoussam, Bamenda, Bertoua, Buea, Douala, Kribi, Limbé, Yaoundé



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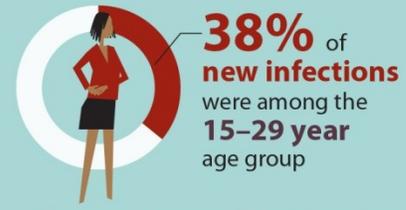


MAPPING FEMALE SEX WORKERS IN CAMEROON

A BETTER UNDERSTANDING OF KEY DRIVERS OF THE HIV EPIDEMIC

In Cameroon, new HIV infections and transmission rates are higher among females. The prevalence among women is, on average, double (5.6%) than that of men (2.9%) (DHS, 2011)

In 2014, there were an estimated **58,757** new infections in Cameroon (NACC and UNAIDS, 2014)



15-19 year old women had **x5** times higher HIV prevalence than men

20-24 year old women had **x6** times higher HIV prevalence than men

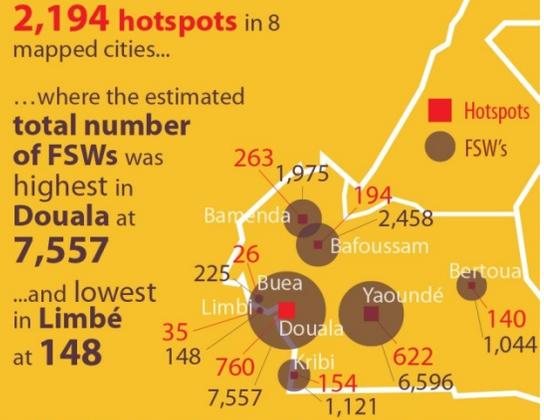


KEY RESULTS OF PROGRAMMATIC MAPPING

The female sex worker population in Cameroon is estimated at **112,580** (equal to about 2% of the adult female population)

FSWs generally congregate and meet in specific geographic settings

Mapping identified types of locations and hotspots where high-risk sexual activity occurs



FSWs in Cameroon face increased HIV vulnerability

While **HIV prevention services** were provided in 43% of the hotspots...

...in general, **HIV treatment** was **not available** in most hotspots

...and Punitive environments **limit the availability, access and uptake** of HIV prevention, treatment, care and support for sex workers and their clients

Mapping results will inform the effective and efficient planning and prioritization of HIV interventions for FSWs in Cameroon



EXECUTIVE SUMMARY

Background

Female Sex Workers (FSWs) in Cameroon have an HIV prevalence of 36.5 percent and are a key driver of the HIV/AIDS epidemic in the country. The Government of Cameroon has prioritized FSWs in the national HIV response. The government currently offers a minimum package of HIV related services for FSWs with support from the Global Fund and the United States government, through the United States Agency for International Development (USAID) and the Continuum of Prevention, Care and Treatment of HIV/AIDS with Most-At-Risk Populations (CHAMP) projects.

According to the 2014 UNAIDS Global AIDS Response Progress (GARP) Report, only about one third of countries report having risk reduction programs for sex workers, and these programs tend to vary in quality and reach (UNAIDS, 2014). Most programs across Sub-Saharan Africa are limited in scale, scope and coverage. For example, a review of 54 projects across Africa found that most programs included small, local-level efforts to provide condoms and occasionally test for HIV (Ashar, 2014). Very few countries invest sufficiently in HIV programs for sex workers. Even countries that report investing in HIV prevention for sex workers may not allocate funds for evidence-informed interventions (UNAIDS, 2014). Multiple studies have shown that targeting the epidemic drivers is the most efficient and effective strategy to combating the HIV epidemic. The practical guidelines issued by the Joint United Nations Programme on HIV and AIDS (UNAIDS) for intensifying HIV prevention recommend the use of strategic information to define key populations (KPs) and risk settings, and match prevention measures, including the allocation of resources and placement of interventions accordingly (UNAIDS, 2007). This is consistent with a ‘Program Science’ approach that systematically applies “theoretical and empirical scientific knowledge to improve the design, implementation and evaluation of public health programs” (University of Manitoba, 2015). From a service delivery perspective, it is essential to first quantify the size of KPs, understand their subtypes, and identify locations where they can be found, before proceeding with interventions at either the macro (national/regional/city) or micro (local/lowest administrative area/hotspot level) level.

Attempts to date to estimate the population size of sex workers in Cameroon have focused on a limited number of areas in selected cities, and were conducted at the macro level providing estimates at the city level. A recent study, for example, estimated that there are 98,102 (59,914-135,978) FSWs (aged 15-49 years) in Cameroon with 38,582 (23,563-53,477) living in urban areas (Papworth et al., 2014). The findings were extrapolated from seven cities in seven regions. While such studies are useful, allowing for national or municipal target setting, for example, effective HIV prevention programming requires the quantification, classification and mapping of KPs such as FSWs at both aggregate and local levels (focusing on the lowest administrative levels within a city). To this end, this study aimed to map and estimate the numbers and typologies of FSWs in Cameroon at the hotspot or micro level to inform the planning and provision of HIV-related services and align them to the local context. For the operational purpose of the mapping exercise, a FSW is defined as: “any female who exchanges sexual activity with a man in return for money or benefits, irrespective of site of operation (e.g. street, bars, home, hotel, etc.)”.



This study is in line with Cameroon’s national strategy for HIV/AIDS, and was undertaken in the context of a broader World Bank/USAID/UNAIDS joint technical support initiative for West and Central Africa that aims to: (i) support priority countries to assess and identify service delivery road blocks to effective FSW program implementation; (ii) support priority countries to plan, design and implement solutions to improve quality, scope and coverage of service delivery; and (iii) collect and disseminate good practices and lessons learnt in terms of HIV delivery solutions globally. This study uses geographical programmatic mapping, which gathers data from FSWs primarily in publicly-accessible locations, including their number, venues wherein they gather, and their typologies (sub-groupings) to understand their dynamics. Programmatic mapping and size estimation for FSWs is intended to inform HIV program design and implementation. The study’s objective to strengthen the HIV prevention program was pursued by estimating the total number of FSWs (population size), their typologies, and the availability of HIV services at FSW sites and in surrounding communities. The results of this study are expected to be used immediately for both planning and implementation of interventions.

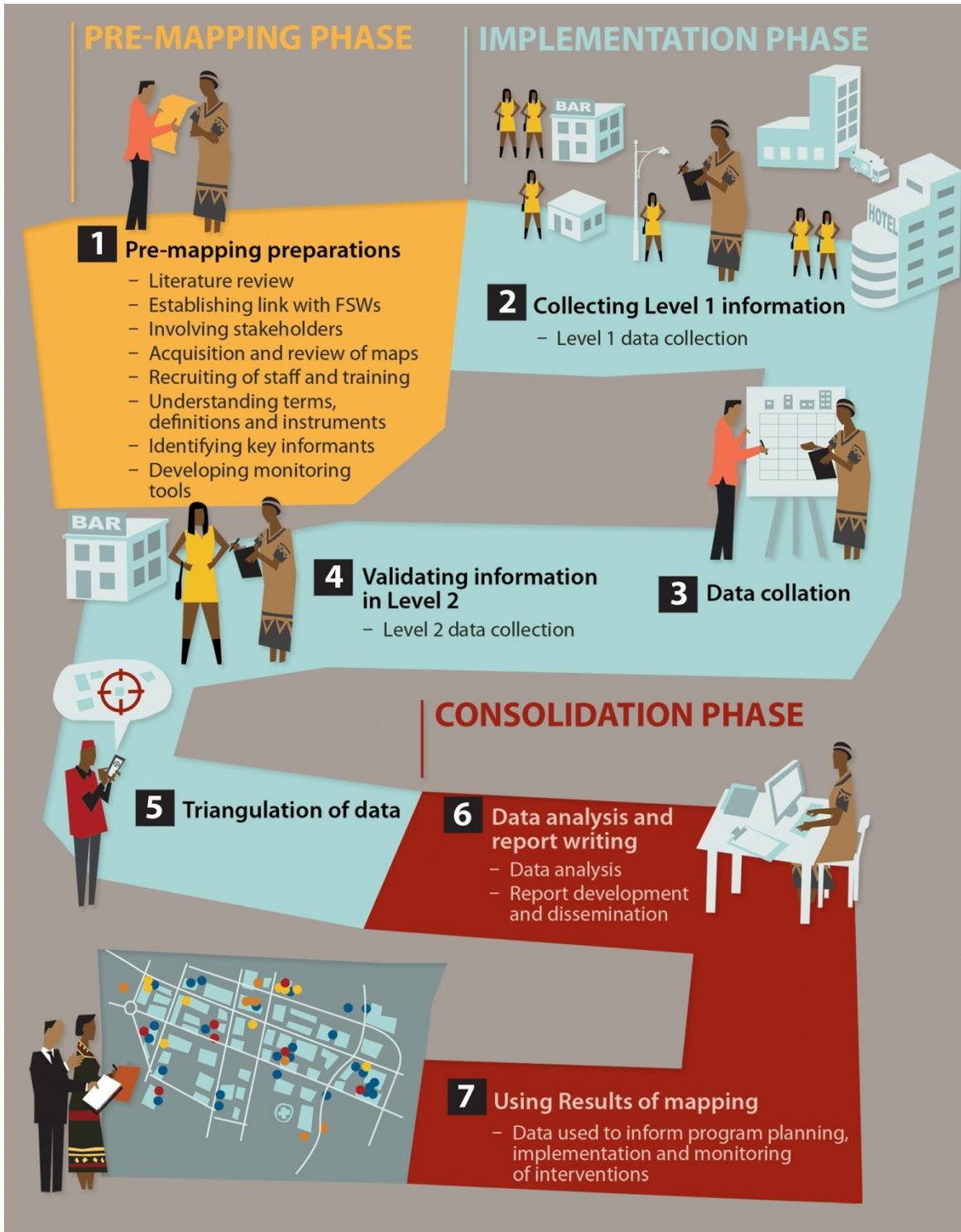
Methodology

Cameroon’s National AIDS Control Committee (NACC) and its partners agreed that a comprehensive programmatic mapping approach for FSWs is critical to the national HIV response, and identified several criteria to prioritize cities for the mapping. The criteria included: (i) the size of the city (both large and small cities); (ii) importance of the city in terms of HIV transmission; (iii) political consideration (French and English cities); and (iv) the presence of existing programs for FSWs that could be leveraged. Based on the aforementioned criteria, the cities Bafoussam, Bamenda, Bertoua, Buea, Douala, Kribi, Limbé, and Yaoundé were chosen.

The programmatic mapping methodology used in this study was developed by the University of Manitoba (UM) and adapted to the Cameroon context (summarized in Figure 1). The methodology uses two sequential steps following the preparation phase to identify locations where key populations (KPs) can be found and enumerated: Level 1 (L1) included systematic information gathering from secondary key informants (KIs), who were persons in direct contact with FSWs or those involved with KPs in a professional capacity, regarding the locations or “hotspots” where FSWs seek sexual partners and engage in sexual activity, the characteristics of the spot including the type of spot and peak hours of operation, and the estimated minimum and maximum number of FSW who frequent each spot. Based on the answers provided, a list was developed identifying every site named and the number of informants who named the site. Level 2 (L2) involved validating and profiling identified spots through interviews and focus group discussions with FSWs. Size estimations in the councils mapped were adjusted for FSW mobility and extended to other councils not mapped using a Poisson regression model.

Ethical clearance was obtained from the Cameroon National Research Ethical Committee for Human Health (NO 2015/07/617/CE/CNERSH/SP). Administrative authorizations were obtained from local Minister of Public Health representatives for each of the cities involved.

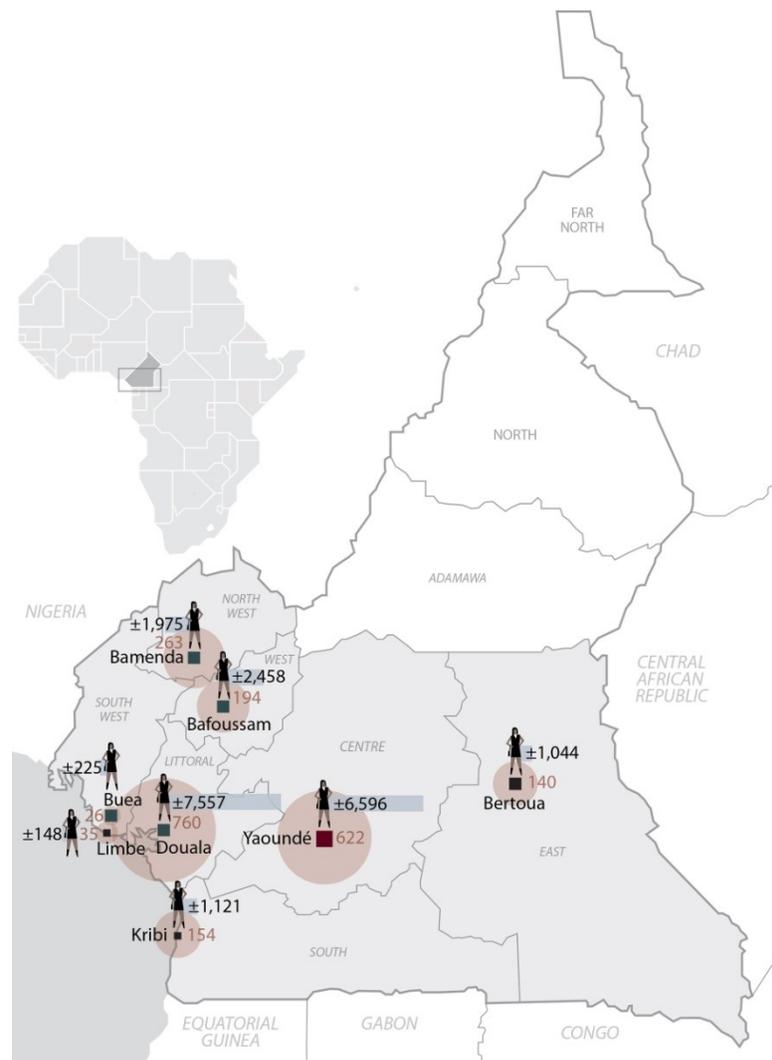
Figure 1. Summary of Programmatic Mapping Methodology



Results

The study identified a total of 2,194 hotspots (FSW sites): Yaoundé (622), Douala (760), Bamenda (263), Bafoussam (194), Kribi (154), Bertoua (140), Limbé (35), and Buea (26). The estimated total number (with range) of FSWs was 21,124 (16,079–26,170): Yaoundé 6,596 (4,712–8,480), Douala 7,557 (5,550–9,364), Bafoussam 2,458 (1,994–2,923), Bamenda 1,975 (1,605–2,345), Kribi 1,121 (832–1,408), Bertoua 1,044 (891–1,198), Buea 225 (185–266), and Limbé 148 (110–148). This variability of estimates between cities was also observed between councils of a city. The predicted estimates of the FSW population nationally was 112,580 (103,436–121,723), covering all councils of Cameroon. It was estimated that approximately two percent (1.91 percent: 0.47 percent–3.36 percent) of the adult female population in Cameroon could be sex workers.

The main operational typologies of hotspots identified included: bar/bar with rooms (45.3 percent), lodge/hotel/brothel (21.1 percent), street/public places (13.8 percent), and night club/casino (13.5 percent). Most hotspots operated after 9 pm; most FSWs in every city visited hotspots on Fridays, Saturdays, and Sundays. Few hotspots had received free HIV prevention services during the last six months. Lubricants and HIV counseling were not provided to FSWs in Buea and Limbé. Very few medical services providing consultations and management of sexual transmitted infections (STIs) were available at hotspots during HIV prevention activities. Condoms were distributed in all hotspots. However, other services, such as behavioral change communication and HIV education, referrals and linkages to other health facilities, nutritional support, family planning, and information on mother-to-child-transmission (MTCT), were rarely provided at hotspots. In addition, HIV treatment was generally not available in most hotspots (0 percent–10.2 percent).





Discussion

This study identified FSW hotspots and their typologies in eight cities in Cameroon and estimated the size of the FSW population at the hotspot level per city. As far as we are aware, this is the first study of its kind in Cameroon. While previous studies estimating the size of the FSW population have been carried out at the macro level in Cameroon, the resulting database from this study includes details at the micro or hotspot level that enable the implementation of effective and efficiently planned HIV interventions for FSWs in Cameroon. In addition, the maps developed for each council show the distribution of hotspots and the typology of those spots. This information allows for the design and implementation of targeted interventions that are responsive to the needs of the specific community taking into account the most appropriate service delivery modalities.

The mapping data allows programme planners and policy makers to ensure that appropriate HIV prevention services are optimally distributed across hotspots and enables them to prioritize certain locations as required. The mapping data can also help policy makers coordinate the HIV response in order to avoiding duplication of efforts among implementing partners and to identify gaps that need to be filled.

This study points to the need to compare the geographical distribution of hotspots and the location and scope of other services for FSWs including HIV prevention and treatment services, and other health services. This will help demonstrate whether services are accessible to and relevant for FSWs based on their needs.

Information on the operational typologies of the hotspots can be used to determine the best service delivery modalities and intervention packages to be provided in specific areas, as well as the ideal times for providing services to ensure access to the target population. Programmatic mapping can also inform FSW program planning, implementation and evaluation by providing: i) denominators used to set coverage targets, program reach and allocation of peer educators at program sites; ii) information that can be included in the terms of references of implementing agencies (e.g. expected number of FSW to be covered by services, typology of FSW and the best strategy of reaching them, which councils to prioritize based on the FSW population density, etc.); and iii) a sampling frame for planned research studies (detailed information of hot spots and key informants can be instrumental in helping obtain representative samples). Finally, information on HIV-related services at the micro level, and lack thereof, can inform priority interventions, ensuring intervention sites and service delivery modalities are aligned with FSW population densities and operational typologies, providing information to inform program scale up.

More specifically, the study's results will inform the implementation of interventions planned under the Global Fund and USAID projects. The results are also expected to identify priority areas of intervention and guide the choice of community-based organizations (CBO) that are responsible for implementation. In addition, for the eight cities where the mapping was done, the results will complement the ongoing integrated biological and behavioral surveillance (IBBS) study that is currently being conducted. In terms of priority interventions identified, lubricants and HIV counseling should be integrated in prevention packages, especially in Limbé and Buea. In Douala and other cities, medical consultations, behavior change communication and HIV education, referrals to other health facilities, hygienic nutritional support, family planning, and MTCT should



be reinforced at hotspots. Intervention strategies should prioritize the following types of locations: bar/bar with rooms, lodge/hotel/brothel, street/public places, and night club/casino. Since FSWs tend to be a mobile population, planned interventions should be initiated as soon as possible. In addition, mapping activities should be conducted routinely during implementation, continuously updating estimates as part of program monitoring, to help guide and improve service delivery. The results from this study also underscore the need to have FSWs and other key stakeholders at the community level, such as bar owners, managers and gatekeepers, involved in the planning and design of interventions as well as in helping with linkages and referral to HIV services.

A limitation of the study is that it did not include internet based FSWs, or those working with escort services who are mainly contacted through the telephone or social media. The numbers of these “hidden” FSWs are not known. However, it is important to have a better understanding of this typology of FSWs and to design targeted interventions to reach them. This may require a combination of more conventional approaches, such as peer education, as well as the use of technological innovations and social media.

Conclusion

This mapping and enumeration of FSW in eight cities in Cameroon provides important information, at both the micro and the macro level, enabling program planners and policy makers to prioritize the implementation and scale up of FSW HIV prevention programs. In addition, the study, the first of its kind in Cameroon, provides an important baseline for monitoring and evaluating HIV programs targeting FSWs.

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