IBBA ROUND 2
Process Document Format for Cluster Surveys

Name of the State: **Tamil Nadu**

Survey Group: **FSW (Combined FSW)**

Name of the District: **Chennai, Coimbatore, Dharmapuri/ Krishnagiri, Madurai, Salem**

I. Survey Groups Details

a. Specify any changes to eligibility criteria and geographic boundaries from IBBA Round I *If no changes to eligibility criteria, record 'Same as Round I' in the table.*
Fill Geographic Boundary details as 'entire district' or specify the area for which the survey is applicable. Some surveys may have conducted sampling frame development for an abbreviated part of the district. Please fill the information on these towns/talukas by either listing towns included or towns excluded (specify which is listed).

Survey District	Survey Group	Eligibility Criteria	Geographic Boundaries
Chennai	Female Sex Workers combined group	Any female, 18 years or older, either brothel based (working/ living operating in brothels/ brothel areas) or non-brothel based (soliciting male clients on the street or in other non-brothel settings) who sold sex in exchange for cash at least once in the last one month	Chennai district, including corporation limits, and bordering areas of Thrivalluvar district, which were Round I same as.
Coimbatore			Entire Coimbatore district
Salem			Entire Salem district, (excluding Yercaud)
Dharmapuri			Entire Dharmapuri and Krishnagiri districts
Madurai			Entire Madurai district

b. Explain reasons for changes to eligibility criteria and/or geographic boundaries from Round I, if any.

The eligibility criteria used for IBBA RII was the same as in Round I of IBBA. Similarly there were no major changes in the geographic boundaries between Round I and RII.

c. Explain reasons for abbreviated Geographic Boundaries if applicable for any survey.
Not applicable

II. Sampling Frame Development (SFD) and Sampling in Field Work (FW)

a. Fill Table Below

Survey District and Group	Period of SFD	Site Definition	Period of FW	Type of Sampling	If CCS and TLCS* used to cover a group, provide IBBA1 and IBBA2 ratios of CCS:TLCS	
					IBBA 1	IBBA 2
Chennai	04-Jun-09 to 29-Jun-09	'Site' or 'Hotspot' is a place with a definite geographic boundary where HRG are found.	01-Jul-09 to 02-Aug-09	TLCS / CCS	CCS:10% TLCS:90%	CCS:37% TLCS:63%
Coimbatore	08-Jun-09 to 27-Jul-09		12-Aug-09 to 17-Sep-09	TLCS / CCS	CCS:10% TLCS:90%	CCS:1.5% TLCS:98.5%
Dharmapuri	04-Feb-09 to 17-Mar-09		23-Mar-09 to 10-May-09	TLCS / CCS	CCS:13.5% TLCS:86.5%	CCS:1.5% TLCS:98.5%
Madurai	06-Feb-09 to 19-Mar-09		20-Mar-09 to 26-May-09	TLCS / CCS	CCS:7.5% TLCS:92.5%	CCS:3.75% TLCS:96.25%
Salem	05-Feb-09 to 21-Mar-09		23-Mar-09 to 26-May-09	TLCS / CCS	CCS:15% TLCS:85%	CCS:0.75% TLCS:99.25%

**CCS = Conventional Cluster Sampling, TLCS = Time Location Cluster Sampling*

b. Explain reasons for changes in site definition or type of sampling from IBBA Round 1.

There were no changes in site definition or type of sampling between Round I and Round II

c. Describe at least three main issues that complicated collection of SFD information (e.g. identification of sites, turnover, mobility, site timing, site size) and explain how it was overcome.

1. Firstly, we did not receive the updated mapping information from Avahan SLP in Tamil Nadu in time for start of IBBA SFD. They completed mapping activity in December 2008 in all the 13 Avahan districts in the state, but the data was made available to us only in June 2009, by which time we had completed SFD for 3 districts. Since we did not have the data, we used the old mapping information (of hotspots) from 2004 the updated mapping data from IBBA RI. These two were used as the base list of hotspots for SFD exercise. In addition, in some districts we were able to collect some local information from the NGOs in same districts on newer additional hotspots, were also included in SFD exercise.

2. While a set of CLOs were identified for the SFD activity, with help us the local NGOs in the district, they were not always familiar with all the areas which need to be mapped. Sometimes we could not identify some sites and to go to the NGO's, take the help of the field officers and identify other CLO's who were more familiar with the areas.

3. Many times the right key informants & KPs were not available at the sites when IBBA field staff visited the sites during the mapping updation; many times they had to go back to the sites again and collect the data on the number of FSWs who solicit and the timings of operation of the sites when a KPs were available. This affected the quality of the mapping information collected. During the review of mapping data, once collected we found at times there were major differences between what KIs reported & KP provided; in these cases, repeat visits were attempted and we relied more on information obtained from KPs.

4. We also had much difficulty in mapping the home based sites during SFD. The identified CLOs were not always from the local area and had difficulty in identifying the homes. In places like Chennai, we had difficulty identifying CLOs who were aware of some geographic areas, and it look longer time to update the data on home based sites, as multiple visits were required with different CLOs for completing the mapping updation.

5. Variation in number of sites: The number of sites in almost all the districts was different. In fact, the number of 'active' sites was fewer compared to the previous round due to various factors such as police raids and increased mobility of sex workers, use of mobile phones to pick up clients and shifting of prominent crowded areas such as bus stands, theatres, markets, etc.

d. Describe at least 3 scenarios where it was difficult to apply sampling methodology for FW (e.g. very large sites, hostile sites, mobility, etc.) and explain how this was dealt with.

1. It was challenging to apply the sampling methodology in the large and crowded sites such as big bus stands and street based sites. The coverage area, that is the boundaries of the sites, were large and difficult to cover by one person, so we had to place more than one field team member and at least two CLOs to cover such sites. Further, maintaining the count of the denominator was also difficult, as there is a lot of mobility in these large crowded sites. Most often, for convenience of sampling we segmented the sites at the time of field work and placed a minimum of two team members, one supervisor and one investigator / counter. Placing more than one CLO was difficult in many circumstances, but was done as much as possible. Recruitment and counting happened simultaneously in these segments. In most of these large sites we restricted the segments to two for ease of field work.

2. The timing of the TLCs in the updated mapping data was often a very narrow time, of 1 to 1.5 hours. It was very difficult to complete the sampling/ recruitment in this short time in most sites. This problem was addressed by extending the TLC time by one hour before the start of TLC and one hour after TLC time for the sites where timing was felt inadequate to cover the sample. This was done in the planning stage prior to field work in these sites. This was a major problem in the phase I districts, Madurai, Salem and Dharmapuri; we tried to rectify this in the second phase districts, in Coimbatore and Chennai by taking more care to collect the information during mapping updation.

3. While the majority of sites in TN are street based, many sites in all districts were located in residential areas, and here there was difficulty in recruitment. Since the team would become very visible in these sites, the FSWs feared that they would be recognized or identified in their community. A CLO with knowledge of the area and known in the neighborhood was necessary in these sites and the supervisor and counter had to take much care that they do not make anyone suspicious.

e. Describe at least three main issues (not related to sampling of respondents) that complicated FW (e.g. timing, cooperation from community) and explain how this was overcome.

1. Getting the cooperation of the FSW community was a challenge in all the districts. Though in each district the field teams met with each NGO working with FSWs, met with peer educators and ORW, and held community preparation activities, during the actual field work, getting cooperation was difficult. A number of issues contributed to this:
    a. Timing of sites made it difficult for getting cooperation. Many FSWs were unwilling to give up the income they would earn when going with clients compared to what they would benefit from coming to IBBA. In some places like Madurai, where we found that there was a lot of roudyism, we had situations where the clients did not allow the FSWs to participate. In some of these cases, the FSWs were recruited during the TLC time but since they could not come at this time, they were given appointments to come the next day.

    b. In districts like, Madurai and Salem, we had in the same time reports from potential respondents that there were too many surveys going on that were also collecting biological samples from FSWs. There was quite an amount of fatigue among FSWs in participating and responding to survey questions. We also got reports that respondents were compensated considerably more in some of these surveys and were keen to know what would be the compensation in IBBA.

    c. In all districts, the issue was raised that compensation provided to respondents was inadequate. In a number of places, especially conventional sites, the gatekeepers (Madams and Pimps) asked for considerable amount to allow access to the site and to do field work. We also got feedback that the Rs. 100 provided as compensation was not adequate by FSW respondents; many times FSWs recalled the reports that in IBBA RI they were given compensation plus a small gift. These issues were addressed through the CAB and CMB, providing clarification and encouraging cooperation by explaining the importance of IBBA.

2. As was our experience in RI of IBBA, getting suitable clinic locations was a problem in all districts. It was not possible to set up clinics in government hospitals, as there was less cooperation in this regard and further CAB advised early on that FSWs would be less willing to come to the government hospitals if IBBA clinic were set up there. The only feasible option was to get some rented places. In Tamil Nadu getting these involves giving a significant security advance etc.. Therefore for each district a maximum of two clinic locations were set up in the main city / town. All respondents recruited from the city / town locations were brought to these clinics. Sometimes, this involved traveling a distance of more than 10 kms to get to the clinic. This turned out to be a problem for getting cooperation of potential respondents many times. For sites which were located in rural areas, outside the main town, efforts were made to set up temporary clinics in the town. While most of the time this was possible, in some instances this was also a problem.

For example in Melur, which is a rural area about 50 kms from Madurai, a clinic was set up in Melur, but the FSWs from the selected sites refused to participate and the main reason was due to the location of the clinic within the city, as they feared being identified / recognized by local community. The clinic in Melur was shifted closer to Madurai and the recruited FSWs were willing to travel more than 20 kms to participate in the survey.

In other districts like Dharmapuri, which is predominantly rural, only one clinic was set up in Dharmapuri town and one in Harur for Krishnagiri; respondents from around the district were brought to the closers IBBA clinic; sometime this involved travel of one hour to the IBBA clinic. Respondents were brought to the clinic by auto, taxi or bus. Though given this situation the cooperation in Dharmapuri was better than in other districts.

3. Other logistical problems were also faced during field work. During the survey field teams did not always carry the map drawn during the rapid mapping updation exercise. This created problems for identifying / establishing the site boundaries during recruitment. Other issues such as non availability of a dedicated counter and problems with getting a suitable CLO who had familiarity in the area were some regular challenges. Early on in the survey, we also identified that counting of the denominator in TLCs was not being done consistently, as the counter and CLOs were not staying after completing recruitment till the completion of TLC time. Many times the CLOs had to go back to the IBBA clinic along with respondents and therefore counters had to stay back for counting; on these occasions, support of the local key informants or other FSWs in the sites were taken for helping to identify FSWs.

4. Several TLC sites had to be cancelled due to non-availability of sex workers in the site at the appointed time though mapping information suggested sex workers would be present at that time. Concurrent updation of sites, discussion with CMB members and local NGO support was enlisted to determine why sex workers were absent and subsequently number of cancellations was reduced considerably.

f. Describe strategies used to recruit respondents helped increase interest in the survey and minimize refusal rates.

From the planning stages efforts were made to ensure that adequate community preparation activities were taken up. In all the districts the NGOs working in the community were met with, the field teams as well as other project team members also met with peer educators and outreach workers and explained to them about IBBA. Considerable efforts were taken at these times to provide in detail about the procedures in IBBA and the benefits of participation. During the formation of CAB and CMB in each district efforts were made ensure key community leaders, NGO members, local official, community representatives were included, who would become spokespersons for explaining IBBA others in the district.

Recruitment of CLOs was done with the support of the NGO and community of FSWs in the districts. This allowed us to select CLOs who were more knowledgeable, aware of wide

geographic area, were known in their community and themselves had a large network of FSWs whom they knew.

We also included FSW interviewers in each of the field teams in all districts. They were identified and recruited in the beginning with the help of NGOs in the district and they participated in the main training. They also helped the other team members, mostly young men, on how to talk to FSW respondents and on asking sensitive questions during the questionnaire administration.

To the extent possible, CLOs were placed in the local areas where they had more familiarity and / or they had contacts in the neighborhood who would provide support during field work.

While sampling and recruitment in rural sites, we ensured as much as possible to locate IBBA clinics in the local town nearby. This would minimize the travel time to IBBA clinic and make it easier to get cooperation from FSWs who had little time in their hands.

Much care was taken to treat respondents well through out the survey work. Respondents were almost always transported to IBBA clinics in an auto or taxi and only very occasionally by bus. They were most often provided lunch, if the survey was in the middle of the day and also provided refreshments such as juice and biscuits immediately after biological sample collection.

All potential respondents were clearly explained about the benefits of participating in IBBA in particular the facility to get a check up with a medical doctor in IBBA clinic, test result for syphilis, referral and free treatment.

One or more CLOs were always present at the IBBA clinic to make sure that respondents felt comfortable and that they were being treated well. Throughout the surveys in all districts, feedback was received from CAB, CMB and other community members that the respondents who came to IBBA clinic were treated very well by the teams.

g. Explain the main reasons that individuals refused to participate in the survey. Describe at least 3 scenarios where refusal rates were especially high, explain reasons for this and how it was overcome (e.g. with certain sub-groups of sample, types of solicitation points)

The main reasons for refusal, as mentioned earlier as well, include: the period of field work in the district, timing of sites / field work and lack of time among FSWs, situation or district context, distance of clinics, compensation, fear of blood drawing, or just not interested in participating.

The field work in first three districts, Madurai, Salem and Dharmapuri was conducted between end of March and May 2009. Elections were held in the state, in these districts on May 13th which caused considerable problems in getting the cooperation of the FSW community. This was more of a problem in Madurai and Salem districts. The level of election activity in these districts was visibly high during the course of field work, and it was reported that many FSWs due to involvement in campaign meetings refused to participate in the survey. In Madurai district, the Chittirai festival, the major festival in Madurai, took place in the middle of April.

Both these above affected the number of FSWs seen in solicitation points, primarily street based locations in both districts. Due to participation in the festivities associated with all the local surrounding areas in the district, many FSWs refused to participate in IBBA. Given these situations, it was agreed that FSWs would be recruited during TLC time and appointments would be made so that respondents could come the next day for completing survey. While this work in a few situations and places it was not possible to take appointments in all cases.

There was also a problem with collection of biological samples among FSWs in most districts, wherein there was difficulty in getting sufficient blood sample for testing. In some situations, even when sufficient blood sample was collected the sample could not be used/ tested as it was lyzed or high in fat content (lipemic). The lab technicians were provided refresher training in these situations and the problem of inadequate or lyzed sample was reduced; but the problem of lipemic samples continued to be a challenge.

In both Salem and Madurai, due to the high shortfalls and refusals, second sampling had to be done for completing the survey.

In Chennai district, getting IBBA clinics in central location was a problem. It took nearly one month to establish one IBBA clinic and second was set up during the middle of the survey. Respondents from many parts of the district had to travel considerable distance to come to the IBBA clinic (1 to 1.5 hours); this was a major reason for refusal. Cost of setting up clinics was high and there was difficulty in getting rented. A second clinic set up in the city had to be changed within a week of it being set up, as the community members in the neighborhood had a problem with the survey being conducted there and reported to the police. Another problem in Chennai was the difficulty in getting CLOs with familiarity of different geographical areas. There were also more home based locations in Chennai and these required CLOs who knew the area as well as had some contacts in the neighborhoods. Very often we had shortfalls in these home based settings as we could not get a suitable CLO and cooperation locally with community members at the time of field work.

III. Stakeholder Involvement (SI)

Stakeholders include government officials/departments, Avahan program representatives, community members, Madams, Pimps, Brokers, Advocates, SACS, NGO representatives, etc.

a. Explain at least three major concerns raised by stakeholders and describe how each was addressed.

The most major issue raised by stakeholders during IBBA RII was regarding the respondent selection and recruitment in the phase one districts, in particular Madurai. It was reported by community members and members of the Positive network that some HIV positive FSWs had repeatedly been taken to the IBBA clinic during a specific time period of the survey. This message was discussed by the community members at a meeting with the Avahan SLP, TAI at a meeting and the PD TAI called FHI Coordinator raising the concern about this issue and how it would affect the results. It was also raised that due to the compensation to respondents was an incentive to FSWs to participate multiple times (creating duplicate samples).

Immediately CAB meeting was called and key representatives from the community including the positive networks were called. During the CAB meeting the members discussed the validity of the reports. The specific allegations could not be corroborated with evidence by those who made them. This was agreed upon by the members from the positive network as well; they agreed that it was possible that this could have been some isolated incident on a specific day or two, and was not reason to suspect the entire field work. It was recommended by CAB members to isolate the specific suspect samples and to disqualify them from the survey, and to continue the survey work, putting in place better monitoring mechanisms to ensure such issues do not happen again. CAB members recognized also that the survey would not be possible without providing the minimum compensation that was being provided to respondents and recommended that we continue to provide the Rs. 100 compensation to all respondents.

The CAB and community members were assured that every effort would be taken to discard the duplicates, that no particular group would be recruited in a targeted manner and strict monitoring mechanisms would be put in place to ensure there are no duplicates or repeat respondents.

There were specific allegations against a HIV positive CLO in the team. While she was not removed from the survey, her work was strictly monitored by the team members subsequent to the reports.
Investigations were conducted by the NIE teams to determine what had happened. Samples from the suspect time period were evaluated separately. Measures put in place included:

- The Research Agency was asked to step up the field monitoring by district coordinators as well as by Research associates
- IBBA team doctors were put on alert to identify any respondents coming more than once
- NIE project team members were present in the sites on a very regular basis, ensuring that protocol procedures were being followed
- Random exit interviews were done with respondents immediately after the problem was identified
- Samples from the suspected time period were analyzed and discarded from the final sample, after consulting the required experts on the validity of doing this.

Besides the above the other common concerns raised by stakeholders included: Inadequate compensation, the long distances traveled to bring respondents to IBBA clinic and issue of field technicians who had trouble drawing blood which caused pain to some respondents.

b. Describe at least three scenarios of how SI facilitated the survey.

1. During community preparation and early phase of survey, the community members, NGO outreach workers provided support for helping to identify the most suitable CLOs
2. Community members and CMB made visits frequently to clinic, sites and gave their valuable suggestions to improve the interactions with FSW and administration of questionnaire and collection of biological samples.
3. CLOs and other community members provided support to the survey team for identifying the IBBA clinic locations in many districts.

c. Describe at least two scenarios where SI complicated the surveys.

1. Sometimes the over enthusiasm of the CLOs and community members encouraged voluntary participation / recruitment in the field. They wanted all their 'friends' to have the benefit of being part of IBBA to get the health check up and the referral for free syphilis screening and treatment.

IV. Compensation

**Either list for all surveys in one line if same compensation given or specify for each survey if different compensation given*

Survey District	Survey Group	Specify Compensation
Five district	FSW	Rs.100 per head with pick and drop

a. Explain any concerns that had to be addressed regarding giving respondents compensation and describe how this was addressed.

1. CAB members suggested that 50% of the compensation can be paid to the respondents after interview and remaining can pay when they come to collect result. But since this would be difficult to implement it was not attempted.

2. The CAB members in the phase I districts brought up issue of making sure that the respondents were comfortable while coming for the survey to IBBA clinics. They suggested that lunch should be provided to all respondents who came during the middle of the day to participate in the survey. There suggestions were taken up and FSWs participating in the survey during the day time were provided lunch in all five districts.

V. Community Involvement (CI)

Survey District and Group	No. of CAB members	No. of CMB members	No. of CL employed
Madurai	13	13	5
Salem	8	9	5
Dharmapuri	6	11	6
Chennai	11	25	8
Coimbatore	18	12	8

a. Briefly explain how members of the CMB were identified and, in general, how they operated (e.g. collection of information, reporting to staff) for the surveys.

The first step during community preparation activities was to meet with the implementing NGO project coordinators and representatives and seek their help in identifying CMB members. CMB members were all FSWs or in some instances gatekeepers such as madams. The IBBA team requested for suggested list of potential CMB members from different geographic areas of the district. Once the sampling was completed the IBBA team selected the CMB members from the suggested list from the geographic areas that were to be covered during the survey.

The CMB members participated in the meetings held for them and provided feedback on reports or information they had heard from the community in their respective areas about IBBA. CMB members were asked to make random visits to areas where IBBA was completed, in their neighborhoods and elicit feed back by word of mouth, to ensure that respondents had been treated properly during the course of the survey.

b. List all activities that the CL worked on.

The community liaison person was a key person during the field work.

1. She was the main person who help with identification of eligible respondents in the solicitation sites
2. She helped the team to build rapport with the respondent and alleviated any fears the respondent had about participating in IBBA and giving blood
3. Wherever required the CL also helped to clarify the survey procedures to the potential respondents in their own language, stayed by the side of the FSW during clinical examination etc.

c. Who was chosen as CL (e.g. active SW, NGO volunteers, regular partners of SW, etc)? Were NGO representatives used as CL? Did CL work on sites in the IBBA where they operate as a member of the survey group?

Most often a Sex worker was chosen as a CL. In some instances, a pimp or gatekeepers like madams also acted as CL in a specific site for identification of eligible respondents. CLs were not always presently practicing sex work; though some CLs were and yes they were also operating as FSW in some of the geographic areas covered during the survey.

d. Explain at least three main ways in how CL involvement helped facilitate the survey and why their involvement was important.

The Community liaison officer was the main gateway of community and they are played a very important role between survey team and community. Their involvement was critical for getting cooperation of FSWs in the community; they greatly assisted the supervisors in approaching and recruiting the respondents and bring respondents from field sites to the IBBA clinics. The CL also explained to respondents about the referral and wherever required provided assistance to respondents to accompany them the referral clinics. In some districts the CL provided assistance to the field team to identify clinic locations. The CL also helped the field team on how to interact / talk to the respondent FSWs during the survey

e. Explain at least three main experiences in which CL involvement complicated implementation of the surveys.

Many times the over enthusiasm of the CLOs caused problems in recruitment. In each of our districts we had issues with CLOs recruiting FSWs by calling them on the phone or asking them to come directly to the IBBA clinic. This problem was a particular problem in the Salem and Chennai districts; when identified these samples and sites were cancelled and not included in the final sample. To avoid this problem, random checking with respondents were done by

team supervisor or NIE team members in the site. Further, CLOs were not informed ahead of time the location of field work, until the day of the survey.

Some CLOs when they were not very familiar with the area, especially in more rural areas, were fearful of approaching potential respondents for recruitment. In these situations a local person, such as pimp or one other local FSW was required to support the CLO.

f. Describe at least three key issues where CAB involvement was important to the survey.

The CAB were the spokespersons for IBBA in the district and were key to clarify the doubts of community members and other local stakeholders about IBBA. They understood the importance of IBBA and encourage the community's participation in the survey.

Many times the CAB members helped the survey team to identify suitable field clinics and also IBBA doctors.

As noted above, in some districts the CAB helped to identify the appropriate solutions for trouble shooting during IBBA and to continue the field work. In some districts they also made field monitoring visits for ensuring the quality of field work.

g. Describe the major feedback (at least three points) received from the CAB and how teams used in the information.

1. CAB members suggested early on that all respondents brought to the IBBA clinic during day time should be provided with lunch and this was followed by the teams.

2. The CAB members did suggest that IBBA clinics should be closer to the field sites to avoid traveling long distances for participating in the survey. It was difficult to implement this suggestion due to difficulty in setting up clinics locations. CAB members also suggested that clinic venues not be located in government hospitals and as they felt that FSWs would not be very willing to come to these venues. They suggested that clinic venues be located in residential buildings with adequate privacy.

3. The CAM members also noted that field lab technicians should be trained well, so that they have good technique while drawing blood and not causing much pain to respondents. This was taken up seriously in some districts and field lab technicians were given refresher training or were replaced with newly trained technicians.

4. Some CAB members gave feedback that respondents should be instructed at the time of survey that they should bring to the referral clinics only their own referral cards and not that of other FSWs. RPR results should be given only to the concerned respondents. Sometime reports were given from the NGO referral clinics that some FSWs were brining a bunch of referral cards for collecting test result. This issue was discussed during CAB and CMB meetings and the message was passed on to the community members that each person should bring their own referral card. During the survey as well, the team members informed the participating respondents on this issue. But nevertheless this continued to be a problem.

VI. Venues

a. List the types of venues that were used for the survey. Specify if certain types of venues received a better response from the community and why.

The main types of IBBA clinic venues used for IBBA RII in Tamil Nadu were: Residential houses, Private hospitals, Community halls or Churches campus.

The residential places and community hall received better response from the community as they were perceived to have more privacy for the respondents.

Government hospitals are not a preferred location in the state for a number of reasons; the CAB members in the early stages (including in RI) advised the team against setting up clinics in government hospitals or PHCs, or lodges. The most preferred locations that were considered to provide adequate privacy would be rented residential buildings.

Getting rented spaces for clinic venues posed a challenge in most districts in Tamil Nadu. The main challenge faced was in terms of getting a suitable place, where owners would provide the space for the survey. Secondly, rents for residential spaces in TN, requires security deposit, which caused concerns for the RA, due to increased cost of setting up clinic locations. Further rent for residential spaces was high in all the IBBA districts and therefore, RA had difficulty finding places which were within the budget, especially in Chennai.

Spaces in community halls or churches campus were utilized in small towns, across the district, where the surveys would take place only for a few days and where it would be difficult to get any other residential space. These were paid for on a daily basis by RA; in some instances were avoided by RA due to increasing cost of setting up and brought respondents long distances to the IBBA clinic set up in the main city.

b. Give the distance (minimum, maximum) from recruitment sites to the IBBA venue.

1km to 5Km in few sites could not arrange the temporary clinic maximum distance from clinic to site 60km

VIII. Referral Clinics

Survey District and Group	No. of Referral Clinics	No. of test results collected by respondents from referral clinics	Total number of test results delivered to referral clinics
Salem	4	108	406
Madurai	6	197	404
Dharmapuri	4	85	405
Chennai	1	63	408
Coimbatore	1	87	402

a. Describe at least two issues with the referral process for STI treatment (e.g. coordination with referral clinics/district lab, processing samples, packing results, time period, motivating the community).

1. The process of referral for STI treatment was smoothly coordinated with the implementing NGOs in each district. All those FSWs who came to collect the results were provided treatment. Prior to start of the survey the agency in charge of setting up the STI clinical services for TAI NGOs requested that in IBBA when we provide the results, we also provide the dilution / titer for which RPR positive / reactivity was found. This was also coordinated with the NIE State laboratory and provided in the RPR results sent to the referral clinics.

2. One issue that was recurrent was that some FSWs sent their referral cards through other FSWs to collect test result. This issue was reported from a number of NGO referral clinics. On these occasions the FSWs were informed that they had come themselves with their referral cards for getting the result and treatment if found positive.

IX. Transportation of Specimen

a. **Briefly describe the process of transporting the samples from field sites to district lab** *(who was responsible, frequency, storage at field site, type of transportation, timing, use of local freezers for gel packs, etc.)*

Transportation of samples to the district lab was carried out by designated personnel of the Research agency on a day to day basis. Samples were transported in thermocol boxes with frozen gel packs (provided from the district lab prior to the start of each day's field activity).

b. Describe at least 4 issues that arose during collection and processing of samples at the field sites (e.g. labels, electricity, space, lack of gel packs, documentation, stock maintenance) and how this was dealt with.

1. Instances of improper filling up of submission forms – feedback provided to supervisor and Lab tech for rectification and adherence.
2. Instances of improper storage of blood after collection (either left on bench for long duration - >30mins or abruptly keeping blood in cool box prior coagulation leading to haemolysis in some instances. The technician and supervisor were informed and re-emphasized on proper sample handling and storage.
3. Instances of erroneous labeling – supervisor/ District coordinator were informed and mismatched labels substituted with correct labels. In case of USTT, there were a few instances of labels being affixed over the 'window' making it difficult for the technician to accept the sample as complete – those labels were removed and fresh label (of same PID) affixed.
4. There were issues regarding management of logistics, with material sent to one clinic being used at another clinic. The field supervisor/ coordinator were instructed to avoid such practices unless in case of emergency.

c. Describe at least 3 main issues that arose during transportation of specimen from field to district lab (e.g. coordination, safety, timing) and how this was addressed.

1. Owing to use of public transportation, there was delay in sample delivery at the district lab especially during night.
2. There were some instances of lack of coordination between district and field personnel with respect to timely pickup of thermocol boxes at the start of the day's survey and at time of sample submission at the end of the day's survey.
3. Biowaste transportation not done properly (with 2-3 day old leaking waste bags being transported to district lab) – The field technician and supervisor were informed and asked to discard urine containers properly closed into the autoclave bags and all waste to be transported to district lab on daily basis.

Fill table below based on information on the lab submission form

Survey District and Group	No. of thermacol boxes where cold chain not maintained	Total number of thermacol boxes transported to district lab
Madurai FSW	0 (13)*	40
Salem FSW	0	52
Chennai FSW	0 (1)*	44
Coimbatore FSW	0	35
Dharmapuri FSW	0 (1)*	66

* The numbers in parenthesis represent boxes where the thermometer reading were >8^0C. However all these boxes had gel packs in frozen state and samples were transported in cold chain. The erroneous readings could be attributed to instances of improper placement of thermometers/ delay in reading thermometer after opening the box/ faulty thermometer.

e. Briefly describe the process of transporting samples from the district to the state laboratory (who was responsible, frequency, storage of samples, type of transportation, timing, coordination).

All samples collected at the end of the day's survey was checked by the supervisor and packed by the technician. The sample boxes are carried by a designated messenger (from Research agency) on the same day and handed over to the technician at the district lab along with submission forms and indents. Though ideally samples were required to be transported in a vehicle (auto/taxi) to ensure safety and timely transportation, they were mostly carried using a public transportation system. There were some instances of lack of proper coordination (due to lack of timely communication) between district staff and messenger regarding timing of handing over/ receipt of samples at the district lab.

f. Describe at least 2 main issues that arose during transportation of specimen from field to district lab (e.g. coordination, safety, timing) and how this was addressed.

The following are the issues regarding sample transportation from district to state lab

Shipment of samples from the district labs were done in a coordinated manner by a messenger (designated by NIE) in cold chain. But there were instances of submission forms being sent without proper and legible filling up, samples not arranged in sequential manner in the cryoboxes etc. These were promptly intimated to the concerned district lab technician for rectification and adherence. There were a few instances of samples being rejected at the state lab as they were lipemic/lyzed. The district lab technicians were instructed not to test lipemic/lyzed samples and to treat such samples as not-satisfactory.

X. Laboratories

Survey District and Group	Name of District Lab
Dharmapuri (FSW & TG)	IBBA lab (at SKS lab)
Salem (FSW,MSM, TG & Clients of FSW)	IBBA Lab (at Deputy Directorate of Health Services (Salem) building)
Madurai (FSW,MSM, TG & Clients of FSW)	IBBA Lab (at Health & Family Welfare Centre)
Chennai (FSW,MSM, TG & Clients of FSW)	IBBA Lab (at NIE)
Coimbatore (FSW,MSM, TG)	IBBA Lab (at PSG hospital)

a. Explain any problems that arose with regards to lab supplies or equipment.

Logistics supplied for round II were of satisfactory quality. However there were issues with certain material (leftover from Round I) such as gloves, alcohol swab etc. due to deterioration of quality and expiry. Due to malfunctioning of centrifuges, new centrifuges were provided for round II. Even with the new centrifuges there were instances of breakdown and difficulty in getting them repaired.

b. Based on laboratory quality assessment report, list at least three main issues.

All districts had performed well in the EQAS & Proficiency testing.

XI. Data Confidentiality and Management
Briefly describe data confidentiality and management procedure from field staff to state level.

Prior to initiating field work, all study team personnel signed a confidentiality undertaking with the field agency. The regular staff of the Field Agency also signed an undertaking to adhere to the policies on maintaining confidentiality in the data collected during IBBA. All study staff including investigators, supervisors, community liaison officers, district coordinators and other project staff were trained on data security and confidentiality regarding handling of data collected from study participants. The training should clearly laid out who should have access to what study materials/data collection forms and how they should be stored and transported to maintain confidentiality – as per the Operational Guidelines for data specimen safety.

Data from sampling frame development fieldwork, i.e. available mapping data on locations where survey population members could be found were strictly maintained by designated

persons at research agency, ICMR Institutes and FHI. No paper or electronic copies of these data were maintained by field team staff after they are turned into the central team. These data were only be shared with designated persons involved in sampling frame development at ICMR Institutes and FHI.

A detailed field plan describing the location, the timing, and the number of people to be recruited from each cluster was developed and given in soft copy to the Research Agency head and Field coordinator. In the field these plans were maintained by only by the team supervisor and not distributed to team members. The team supervisor was responsible for keeping the field plan in a secured place where other team members do not have access to it, until the time of field work.

In no circumstance was any field level information shared or given to any unauthorized individual. In no circumstance was any data stored, opened reviewed and modified on public computers such as computers in internet cafes, or computers which have common access to authorized and unauthorized persons.

After conducting each interview, the filled questionnaires and consent forms were considered confidential documents and were to be maintained in a locked private place, such as IBBA clinic. Questionnaires are to be kept separate from consent forms. These forms were to be kept in closed envelopes, marked confidential and are kept in the possession of the team supervisor until they are transported centrally. Instructions were given that filled questionnaire and consent forms should not be shown to, shared with, or given to anybody except the team leader.

On a weekly basis filled questionnaires and consent forms were bundled and safely transported by a to the State RA office. One designated team member personally carried the questionnaires and consent forms to the State office. Completed questionnaires and signed consent forms should be delivered to only designated person in the State RA and not anyone else.

Data entry was conducted only by the designated trained data entry technicians at Research Agency under the supervision of the data entry manager. Data was entered on designated computers and access to the computers was limited to only data entry technicians and data entry manager. The questionnaires were transported to state ICMR Institute at regular intervals, at the completion of data entry for each group, the questionnaires, consent forms and the soft copy of the data set was personally carried to the ICMR Institute by a designated and responsible person from Research agency. The questionnaires and consent forms were delivered only to a designated person responsible for the task at ICMR Institute, the data manager. The designated person checked the number of questionnaires, consent forms and soft copy data upon receipt. After receiving the acknowledgement from the ICMR Institute, the Research Agency was asked to delete the data set from the computer and to keep the soft copy of data set in CD as security backup.

At ICMR institute maintained all questionnaires and the soft copy of the data were kept in a designated locked cabinet. The cabinet was locked at all times and access to the key limited to concerned staff only. The consent forms were kept in a different shelf or drawer in the same locked cabinet as the questionnaires. The second data entry at ICMR Institute was be done only by a designated trained data entry technician under the supervision of state data manager.

Data was entered in designated computers and access to these computers was limited to the data entry technician and data manager. The database was backed up daily at the end of the day. After second data entry, hard copy of the questionnaires and consent forms were stored under lock and key in secured place.

After entering the laboratory results, the dataset was considered as a complete dataset. Routine backup of the dataset was ensured by the data manager.

As much as possible Confidentiality was maintained strictly at all levels from the IBBA clinic to the State ICMR Offices.

In the field, while field teams were instructed to store the survey forms separately from consent forms in the IBBA clinic in a locked storage space, there were breaches in following this, identified by the monitoring teams, and were corrected in an ongoing manner throughout the survey period to ensure this aspect of the protocol.

Sometimes the field teams were found to be storing the survey forms in their hotel rooms where they were staying and instructions were provided to avoid this practice.

XII. Adverse Events (AE)

Survey District/Group	No. of AE	Describe each event in one sentence *
Chennai	1	The residential community objected to the IBBA clinic
Coimbatore		None
Dharmapuri	1	Brief problem of police visiting the IBBA clinic premises during the interview time, due to reports by owner
Madurai	1	Rowdies problem during recruitment
Salem	1	None

*Be brief as the reader can refer to the AE reports for more detail

In all the cases above, when the contenders were explained about the nature of IBBA and show the letter from TNSACS approving for the study, there were no problems. All the above incidents were settled within a few hours or overnight in a smooth manner.

XIII. Intervention

Survey District and Group	Intervention Partners
Chennai	Tamil Nadu AIDS Control Society (TNSACS)
Coimbatore	Avahan SLP - TAI
Dharmapuri	Avahan SLP - TAI
Madurai	TNSACS and Avahan SLP – TAI
Salem	Avahan SLP - TAI

a. Briefly describe the strategy and core elements of the main interventions. If this is different by donor, describe both separately. Include information on if the intervention covers the entire district/portion of district and which groups are covered by each

intervention. A one page summary of the project strategy provided by the organization can also be attached instead.

Tamil Nadu AIDS Initiative (TAI) is the main implementer in the IBBA districts with the financial support of "Avahan", The Bill and Melinda Gates Foundation. TAI is part of Voluntary Health Service (VHS), a nodal agency in Tamil Nadu, has a rich tradition of service to the community and working on HIV/ AIDS in Tamil Nadu.

Tamil Nadu AIDS Initiative was launched with the objective of scaling up and increasing the coverage of HIV / AIDS prevention with sex workers in Tamil Nadu. The five-year project started on April 1, 2004. TAI implements a community-driven STD / HIV / AIDS prevention program in 11 districts in the state. The project addresses male and female sex workers in these priority districts. Male sex workers include Aravani Penngal and Kothis (transgender) besides Double-deckers. The initial target of 34,500 sex workers has now expanded to nearly 50,000 male and female sex workers.

The project goal is to reduce the spread of STD / HIV / AIDS in 13 districts in Tamil Nadu, among female and male sex workers. The objectives of the project include
Reduce the burden of sexually transmitted diseases among male and female sex workers and as well as their clients.

- Address the issues of vulnerability among sex workers.
- Focus on enhancing the quality of life, giving self confidence, developing high self esteem and empowering them to take control of their lives.
- Empower the key population to avoid unsafe sex through effective condom negotiation, and skills to manage power structures.
- Increase the health seeking behavior with regard to general health, hygiene and STD-treatment

In three of the five districts covered TAI program is the only intervention for FSWs in the district. The program covers FSWs across different areas of the district, in places having hot spots with considerable number of FSWs.
In two districts Chennai and Madurai, TAI program covers a significant portion of FSWs across the district, even while the planned coverage is not very high.

b. List the main differences in the partners, strategy/core elements between Round 1 and 2.

The main changes in the intervention since Round I, is that two of the IBBA districts were in the process of transitioning over to TNSACS.

Chennai district interventions were handed over to TNSACS in 2008. TAI started providing services to the high risk groups only from locations in Thiruvalluvar District, which is bordering district to Chennai. It is to be noted that many of high risk group members, travel to Thiruvalluvar district to avail of the TAI program services.

XIV. Size Estimation

Survey District and Group	Size Estimation Methods
Coimbatore	**Distribution unique objects**

a. Describe strength and weakness of using exposure information as a multiplier. Give specific survey level information if the strengths/weaknesses vary.

Using exposure information as multiplier for Tamil Nadu FSW groups has advantages and disadvantages.

In three of the five districts where IBBA was conducted TAI-Avahan program was the only intervention for FSWs (Dharmapuri, Salem and Coimbatore). In these cases, the exposure information, number of FSWs reporting having been contacted by a Peer educator in last month or last six months can be used as a mulitiplier. There were no problems in these districts for FSWs to identify the TAI-Avahan intervention program, therefore the exposure information is reliable.

In Chennai and Madurai districts the situation is more complex. While TAI-Avahan's intended coverage of FSWs in Madurai was below 50% of estimated FSWs, it was the most visible intervention and accessed by a large proportion of FSWs across the district.

In Chennai district, the situation is similar, with TAI program's intended coverage being low but the program having big visibility. While other interventions have been in place in Chennai for longer duration, it has been difficult to differentiate / isolate them.

Since 2008 Chennai was handed over to CAPACS NGOs and in 2009, all the NGOs were transitioned over to TNSACS. Due to the local sensitivities, IBBA was conducted in Chennai without any involvement of these NGOs.

b. Unique Object Method:

Survey District and Group	Total number of objects distributed	Weighted proportion of objects reported received in IBBA2
Coimbatore FSW	**1983**	**46.6**

c. Who distributed the object, which object was distributed and specify time period that it was distributed?

A small plastic multicolored flower with 3 inch stem was distributed as the unique object in the district. The object was distributed in all the TLCs of the prepared sampling frame after updation of the list of hotspots in the district.
Unique objects were distributed by investigators the RA field teams with support from CLOs (FSWs) from the district. The field investigators visited the given list of TLCs and spent one hour there to give the unique object to all the FSWs who were identified at the site during the time of their visit. Community members, CLOs or others helped the team to identify FSWs at the sites during the visit.

d. Describe strength and weakness of implementing the unique object method.

The main strength of this method was the entire district of Coimbatore, all hot spots mapped / TLCs were covered; FSWs soliciting in these locations were likely to be captured and provided the unique object. The object provided was very acceptable and gave the FSWs a chance to be part of something

There were a number of weakness of this method. A large number of places were required to be covered in a short time and with minimum resources. The time spent a the TLC was any one hour within operating hours of the site; therefore it is difficult to imagine how it would have been possible only to capture some proportion of the FSWs who would solicit from the spot.

XV. Community Environment

a. Briefly describe any characteristics of the population that have changed from Round I to Round 2 (e.g. change in typology)

Tamil Nadu has largely been having a street based typology of sex work. Not much change was therefore observed in typology. No other visible differences could be observed during field work that could have changed between round I and round II. The analysis of RI and II suggests that there could be a change in the population in some of the districts between the two rounds, but this needs to be looked into further through qualitative discussions with grass root level and program level stakeholders.

b. Describe any other contextual/environmental factors, which would help understand the data (e.g. legal issues, weather, delays in FW, NGO resistance, differences in context between Round I and II).

The contextual scenario in Tamil Nadu and in particular IBBA districts has been through some changes over the last few years, between RI and RII. This includes a change in the political climate in some districts such as Madurai, changes in interventions, i.e. handing over / transitioning of the Avahan program in Chennai and Madurai to State AIDS Control Society.

General points