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BACKGROUND MATERIAL

(Study design & methodology, documentation of review of ethics committee, preliminary data, facilitating tools)

for

The meeting of

MEMBERS OF THE RESOURCE GROUP
To discuss the plan of analysis

Scheduled on
Sat-Sun, July 20-21, 2002

At YMCA International, Mumbai Central

by the members of the project titled

ABORTION RATE, COST AND CARE: A COMMUNITY BASED STUDY

ABORTION ASSESSMENT PROJECT – INDIA (AAP-INDIA)

Pune
July, 2002

for CHC lib
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TABLE OF CONTENT[1]

[1] The report is presented in three sections. Each section carries a table of content, too at the beginning of respective sections.

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DRAFT STUDY DESIGN AND METHODOLOGY

FOR

ABORTION RATE, COST AND CARE: A COMMUNITY BASED STUDY IN TWO STATES

by

CEHAT, Pune

June, 2001

TABLE OF CONTENT

1. AIMS AND OBJECTIVES OF THE STUDY

Aims: The overall aims of the study will be to study analytically women's health problems and health care seeking behaviour with a focus on rate of abortion and related issues. Further, the study will enable providing inputs/feedback to society at large and to different stake holders including policy makers to facilitate women's access to safe, legal and affordable abortion care services.

Objectives: The specific objectives will be:

a) To arrive at estimates related to abortion incidence rate, such as,
   - To arrive proportion of women from reproductive age who have had at least one abortion.
   - To arrive at estimates of rate of abortions, both spontaneous and induced.
   - To arrive at average number of abortions per woman.

b) To arrive at estimate of burden and nature of abortion related morbidity for women.

c) To document indications of /reasons for seeking abortion and to analyse the changing pattern, if any.

d) To study women's abortion needs in the light of their socio-cultural milieu.

e) To study women's choice of provider to meet abortion care needs.

f) To study expenditure patterns on abortion care.

This would entail studying the following:

1. Socio-economic profile of the family / household.
2. Pregnancy histories/experiences, including abortions (life time) of women in the sample population, focusing on last two years, the recall/index period defined for this study. Recording life time abortions for the entire sample would allow us to examine the changing patterns as regards reasons of abortion and some other major issues, such as, providers approached, use of contraception, incidence of repeat abortions.
3. Causes of spontaneous abortion as perceived by women and reasons, including socio-cultural and economic, for seeking abortion/s (induced).
4. How pregnancies and abortions are dealt with - types of providers and procedures used, and cultural practices relating to women's behaviour during these events in terms of work loads, social support or lack of it etc.
5. Mortality and morbidity (nature/type), if any, resulting from induced and spontaneous abortion/s.
6. Household Expenditures on these events. We will try to obtain information on both direct and indirect cost including social cost.

Objectives (d) to (f) will be studied for abortions that took place during the reference period of three years.

2. METHODOLOGIES IN FERTILITY SURVEY AND ABORTION INCIDENCE RESEARCH: A LITERATURE REVIEW

2.1 Purpose and background

It would be inappropriate not to make any reference to the methodologies that have been used by researchers in abortion incidence studies the world over. The literature review presented here restricts itself to large-scale, community based retrospective surveys to study either fertility trends and/or abortion incidence and related issues with a brief reference to the other types of studies, such as hospital based and estimating rates using mathematical models.

The literature review shows that a range of methodologies have been used. There are issues of concern vis-à-vis various aspects of methodology, viz: sampling design, deciding upon the sample size enabling generalisation; under-reporting and methods to deal with it; formulation of tools of data collection. The literature review clearly shows the evolution of methods and approaches to overcome the problems in studying abortion through large-scale community based household surveys of women. However, some issues remain unresolved to date and apparently appear to be the inherent issues and constraints of survey based abortion research. While doing the literature review, we have made an attempt to understand implications of various issues for design of methodology for the study that we are taking up to enable laying mechanism to improve accuracy of data and results.

Different methods have been used to arrive at abortion incidence rates. These include **direct methods** – hospital based or community based empirical research, or **indirect methods** such as arriving at estimates using mathematical models based on the known parameters related to fertility.

Mathematical models: In case of abortion incidence studies, it was Davis and Blake (1956 cf Kanitkar and Radkar) who hypothesised that socio-economic factors affect fertility through a set of intermediate variables starting from exposure to intercourse upto a pregnancy ending in a live birth. Later Bongaarts (1983) modified the framework and identified 8 proximate determinants of fertility. They relate to biological or behavioural factors like marriage, frequency of intercourse, spontaneous intrauterine mortality, induced abortions, post-partum infecundability, use and effectiveness of contraception, permanent sterility and duration of fertile period. He further argued that from among 8 variable, 4 explain 96 per cent variation in fertility and thus only those could be used in estimation of total fertility. Nortman (19--) suggested a model, which a variant of Bongaart's mathematical model. These models have been used in the past to arrive at abortion rates where data on other concerned variables are available. However, these can't substitute the empirical research but certainly complement it.

The clinic or hospital based studies: Given the known constraints of the clinic or

hospital based studies to capture the extent of abortion incidence, researchers strived, especially since 70s, to get them from the community based studies. This was with the hope that better estimates would be possible to help policy planning. The major constraint of the clinic based studies is that only those women who approach health care facilities for seeking abortion care could be included in the study leaving a large population outside the purview of the study. Thus, getting the appropriate denominator for arriving at estimates is one of the major constraint of the clinic or hospital based studies.

The community based studies: They are primarily of two types - (a) prospective and (b) retrospective. They have their weaknesses and strengths. Prospective studies turn out to be more expensive as they require very large sample and multiple rounds; and are difficult to conduct ccmpared to retrospective studies. The ethical issues involved in such studies also seem to be of grave nature and rather difficult to resolve. However, there are advantages, too. For example, prospective studies are better suited to capture early losses – during the first six weeks of gestation. (Yerushalmy et al., 1956; Freedman et al., 1966; Chen et al., 1974; Potter et al., 1965 as quoted in Casterline 1989). Cross-sectional retrospective studies are more likely to be cost-effective as they allow obtaining data on wide range of aspects, including the trends over the time in a single round unlike prospective studies. Our review of literature indicates that researchers have chosen to go for the latter. However, retrospective studies have their own limitations. Susceptibility to recall bias is one of the major limitations of this approach. We have chosen to go for this approach. The discussion that follows, therefore, restricts itself to the community-based studies.

2.2 Issues involved

2.2.1 Concept and Definition of 'pregnancy wastage'

The first and foremost issue in community based research is definition of pregnancy wastage. It is 'wastage' or failing of a particular conception to reach to full term, which otherwise would result into a live birth. To be in position to acknowledge wastage or loss of a pregnancy, one should be able to **recognise the conception**. Pregnancy wastage could be involuntary, that is, spontaneous abortion or it could be a deliberate attempt to terminate the pregnancy and stop it from reaching to the full terms, which is referred to as induced abortion. In case of the latter, it is clear that conception is recognised. However, in case of the former, the issue of 'recognisable or observed conception', especially those of early gestation remains. This has implications for capturing the accurate denominator of all conceptions.

Clinical studies suggest that approximately 60 per cent of fertilised ova do not result in a live birth. Of fertilised ova that implant in the uterus *(thus, are not to be considered as conceptions)*, approximately 35 per cent *(21 of every 100 fertilised ova)* do not survive long enough to cause a delayed or missed menstrual period. (Gray, 1983 as quoted in Casterline, 1989). However, in case of spontaneous losses, a high proportion occur without being recognised, that is, the menstrual period is unaffected or is delayed only briefly. (James, 1970; Kerr, 1971 as quoted in Casterline, 1989). Despite

advances in medical technology, no conception can be detected before 5 weeks of LMP (first day of the last menstruation/onset of the last menstruation) or alternatively a week after the missed periods. If so, any natural/spontaneous loss before 5 weeks of gestation goes undetected. These losses are termed as 'occult losses/pregnancies'. (MFC, 1990). These losses, therefore, would remain outside the purview of any studies meant either to study natural and/or induced abortions.

The inherent constraints of identifying pregnancy wastage remains regardless of whether the research is hospital based or retrospective community based. The problems in the latter get accentuated for obvious reasons because the reported abortions can not be validated by clinical diagnosis. Thus, in the retrospective studies, clinically diagnosed pregnancy losses would not form a meaningful category to be pursued. Instead, the category would be 'observed or recognised pregnancy'. Recognised/observed pregnancy, thus, is a gestation resulting in at least one missed or delayed menstrual period. (Casterline, 1989).

2.2.2 Sample size and population parameter

The objectives of the present study demand that the sample size is large enough which would allow generalisation. One of the important information that required to arrive at appropriate sample size is to know the 'population parameter' for the phenomenon/ event under study.

It appears to be paradoxical, especially in a study of this type, which is primarily intended to enable estimates of abortion incidence, more reliable and valid as there is no such data available. And at the same it requires to have some understanding of the extent of abortion that take place in the given population. If no such data are available even to the extent that informed guesses could be made, undertaking a pilot study or an exploratory study to arrive at such a population parameter appear to be an ideal way of proceeding with a main survey (ref...). The issue of arriving at population parameter has to be dealt with, both for spontaneous and induced abortion.

Population parameter for spontaneous abortion: It perhaps is less complex to arrive at the population parameter for the spontaneous abortions unlike induced abortion. This primarily is because the extent of spontaneous abortion is largely dependent on the biological factors. To a great extent, it remains the same across the various populations whereas induced abortion is not. However, the impact of external factors, such as, environmental, nutrition on the extent and pattern of spontaneous abortion needs to be taken note of. Below is some literature indicating the extent of uniformity across the population and the also the studies demonstrating contribution of factors to variation as regards the extent of spontaneous abortion across the populations.

As regards spontaneous abortions, results of some of the carefully designed studies in various parts of the world would tell us the greater chances of its incidence rate being similar. For example, WFS and other data sources do not firmly establish that the likelihood of spontaneous loss differs among populations. (Leridon, 1977 cf. Casterline, 1989). Prospective studies in Hawaii (French and Bierman, 1962) and New

York City (Erhardt, 1963; Shapiro et al., 1970) yielded overall rates of loss of 237 per 1,000, 206 per 1,000 and 218 per 1,000 pregnancies. These rates are estimated through a double-decrement life-table methodology, which takes care of recording of losses during the early gestation period in a better way. Crude rates of loss from the same prospective studies are much lower: 153 per 1,000 for Shapiro et al., and 117 per 1,000 for French and Bierman. Casterline (1989) concludes that after sixth gestational week, at which point recognition of pregnancy is more certain, the rate of loss is probably 150 per 1,000, which might be taken as the rate that one could reasonably expect to attain in non-clinical studies. Potter and others (1965) recorded 136 per 1,000 (that is, 13.6 per cent of observed pregnancies) in rural Punjab. **Accepted estimate of overall spontaneous loss rates is stated to be 20 percent of recognised pregnancies.** (Bongaarts and Potter, 1983).

The extent of spontaneous abortion in a population may depend on the nutritional status of women or maternal health. (Visaria, L.1999). Retel-Laurentin (1973) presents data suggesting that high rates of fetal loss (33 per 100 pregnancies) due to a high prevalence of veneral diseases account for relatively low levels of fertility among some groups in Central Africa, and Gopalan and Nadamuni (1972) report a loss of 30 per 100 pregnancies among poorly nourished Indian women. In a study conducted in Bhopal, India after a massive gas leakage, increase in fetal death ratio was (spontaneous abortion per 100 pregnancy outcome, that is, spontaneous abortions, still birth and live births) found to be statistically significant. (MFC, 1990).

This suggests that the variation as regards spontaneous abortion rates is less even across the population, if the impact of external factors is not taken into account or considered to be absent for the purpose of calculations. There is range within which it takes place. However, the variation that occurs because of the external factors seems to be quite wide ranging. In absence of any substantial reasons to believe that such external factors exist, the incidence rate of spontaneous abortion for the purpose of **'population parameter' could be considered between the range of 15 to 20 per cent of the pregnancies.**

Population parameter for induced abortion: The similar studies elsewhere from other than India have used data based on the case load at clinics and/or small scale community based studies to determine 'population parameter'. (Okonofua, et al., 1999; Zamudio, et al., 1999). For two major reasons this appears to be adequate and appropriate. One, these studies looked into only induced abortions. In both the situations – Nigeria and Colombia respectively – health care facilities are sought by majority of the women undergoing abortion. However, the difference was, in Nigeria, women approached health care facilities for post abortion complications whereas in Colombia, women sought abortion care from the health care facilities. The denominator in both the cases were 'women from the reproductive age' and not pregnancies. Two, these studies, since did not look into spontaneous abortions, were not required to look into the issues involved in deciding population parameter vis-a-vis spontaneous abortions.

Population parameter as regards induced abortion would vary greatly across regions

within a country and across the population. As stated earlier, the studies in the past used the hospital based data to determine the population parameters vis-a-vis induced abortion. In Indian context, we need to **acknowledge the constraints** in this regard. In that, there is no national/state sampling frame for women by age or any other characteristics of women having bearing on abortion incidence rates to use. The only data available are from the state level MTP cells, which are quite inadequate. Among others, this is because **(a)** it does not take into account a large number of abortions done outside the legal abortion care facilities and **(b)** the registered MTP centres are known to report less than the actual procedures. Our field level experiences, interactions with medical professionals substantiate the latter. Some of the national level surveys on fertility or reproductive health have arrived at abortion incidence rates ranging between 5 to 8 per cent of observed pregnancies per year. (National Family Health Survey – I, India and Mahaashtra; National Family Health Survey – II, India; Reproductive and Health Survey, Maharashtra). This includes pregnancy loss on account of spontaneous, induced abortions and still births. These incidence rates are considered to be underestimation by about 5-7 times than the actual. One of the apparent reasons for such an underestimation is that enquiry into 'abortion' was not the thrust of these surveys.

The other estimate of pregnancy wastage that has been still used is the one by the Shah Committee that was appointed in 1966 to examine the feasibility of bringing in the abortion legislation. (MoHFW, 1966). Based on the data available then from a small-scale community based study, he came up with a formulation that there prevails about one third of the pregnancy wastage of which two fifth (about 13%) is due to spontaneous and the rest three fifth (about 20 %) is because of induced abortions. In absence any other estimates, researchers have been using this formulation with adjustments done vis-à-vis contemporary birth rates and population size at varius point of time. (Table 1).

Table 1 Estimates of Number of induced abortions nationwide annually

Source	Number of Induced Abortions Nationwide (Millions)
Shah, 1966	3.9
IPPF, 1970	6.5
Goyal et al, 1976	4.6
Unicef, 1991	5.0
GOI, 1991-92	0.6
Chhabra and Nuna, 1994	6.7
CEHAT, 1997	4.8*

* Using Shah Committee formula , extrapolated population and birth rates for 1997, Government of India, Planning Commission, 8th FYP, 1992-97, Vol I, New Delhi, 1992

The **pattern of reasons to opt for abortion are changing** over the years since the Shah Committee stated its rationale for a particular proportionate share of pregnancy loss and within that the proportionate share of spontaneous and induced abortion. One, therefore, **anticipates increase or decrease in number of induced abortions.** However, the trends regarding unmet needs of contraception, use of contraception, son preference that have been revealed through various surveys support the hunch that

the existing survey data on abortion is an under-reporting. For example, the percentage of couples of reproductive ages using a modern contraceptive would have been 41 per cent, 4.7 percentage points higher than the observed figure of 36.7 per cent. (Visaria, 1999). It is further stated that the contraceptive prevalence in the western-northern states, Gujrat, Himachal Pradesh, Harayana, Maharashtra is severely depressed by 8-10 percentage points because of son preference. For Maharashtra, the proportion of sterilised couples with two children increased from 16.6 in 1980 to 37.4 in 1992-93; but among couples with two sons, the same percentage increased from 21.6 to 55.2 for the same period. **These trends indicate increased likelihood of induced abortions for want of male children.** (Visaria, P., 1999).

The reasons stated for opting for abortion were largely either spacing (27%) or limiting the family size (67%, total number of induced abortion n = 1,197). (Bankole, et al., 1998).

The findings of the NFHS – I showed that in 1992-93, the ideal family size for India as a whole was between two and three children. (IIPS, 1994). **The urge to go for smaller family size, specific number and sex composition of the children logically leads to increased use of contraceptives and sterilisation procedures.** This is likely to increase accidental pregnancies, which are not wanted. Or such an urge, assuming no change in the existing pattern of use of contraception, would lead to more number of abortions. According to one projection, women in the reproductive age groups are increasing upto 2021. (Population Foundation of India, 1999 cf Kanitkar and Radkar, undated). This, against the fact that the family size is declining, indicates the number of unwanted pregnancies could increase (though not the proportion). Kanitkar and Radkar (undated) project the trend showing increase in number of abortion. This, according to them, is because of the small family norm and fertility decline. (Table 2).

Table 2

Projected values of indices of proximate determinants and abortion. 1992-2031

Year	TFR	Cm	Cc	Ci	TF	Ca	TA	Abortions
1992	3.39	0.7110	0.5840	0.5580	15.0	0.9754	0.1377	940508
1996	3.4	0.6938	0.5755	0.5659	15.5	0.9708	0.1648	1216357
2001	3.1	0.6587	0.5317	0.5722	16.0	0.9668	0.1712	1437635
2006	2.8	0.6236	0.4879	0.5785	17.0	0.9358	0.3089	2958714
2011	2.6	0.6002	0.4587	0.5827	17.5	0.9262	0.3333	3517194
2016	2.4	0.5768	0.4295	0.5868	18.0	0.9172	0.3488	3894714
2021	2.2	0.5534	0.4003	0.5910	18.5	0.9083	0.3573	4180465
2026	2.1	0.5417	0.3857	0.5931	19.0	0.8920	0.4094	4997240
2031	2.0	0.5300	0.3711	0.5952	19.5	0.8762	0.4549	5807000

This kind of discreet data and information with wide variation makes it extremely difficult to come up with any one figure as estimates of abortion incidence. However, there is enough reason to believe that the data obtained through any empirical research - hospital or community based research and the one from the official records as well - suffer from under-reporting. Researchers have different estimates of such underreported abortions. One opinion is that, among all induced abortions half are not reported. (Das, 1989). Similarly, Tiwari (1994), expressed that every year about 40 per

cent of the abortions are not officially reported. According to Karkal (..) there are 3 legal abortions conducted per legal abortion, in rural areas and 4 to 5 in urban areas. According to Jesani and Iyer (1993), this ratio is as high as 8 illegal abortions for each 1 legal abortion. Bandewar (2000) calculates this rate over the years and states that it ranges between 8 to 7 illegal for each 1 legal abortion.

Another estimate, which may reveal the extent of under-reporting is based on the empirical research in two of districts of Maharashtra. This research revealed that there exists 3 non-registered abortion care centres for every one registered abortion centers. Applying average number of MTPs per registered MTP centre, MTP rate turns out to be 2.27 per cent of live births[1]. With 9271 MTP centres available, it gives the rate of about 9 MTPs per 100 live-births, considering that there are about three non-registered centres for every one registered centre. This does not take into account (a) the under-reporting of the MTPs, (b) abortions that take place outside the formal institutions. This clearly indicates the large scale under-reporting of induced abortions in various community-based studies. In anyway, we have less scope to make guesses about the extent of induced abortion that remain unrecorded. Assuming that there is about 7-8 times of under-reporting/recording or that for every one legal abortion there exist 8 illegal ones, we arrive at the rate of 18 to 19 induced abortion per 100 live births. However, it is to be notes that these guesses are also based on Shah Committee formula.

The most recent estimates of induced abortion are based on the NFHS-I data using the Bongaart's model of proximate determinants of fertility. Kanitkar and Radkar (undated), also came up with estimates of under-reporting. From the year 1988-89 to 1992-93, the percent unreported abortions in total induced abortion ranges, according to their exercise, from 26.7 to 35.6. (Table 3).

Table 3 Estimates for induced abortion, India, 1988-92

Year	Estimated induced abortions	Reported MTPs	Estimated unreported abortions	Percent unreported abortions in total induced abortions
(1)	(2)	(3)	(4)	(5)
1888-89	794347	582161	212186	26.7
1889-90	882769	596357	286412	32.4
1990-91	901610	581215	320395	35.5
1991-92	920854	636456	284398	30.9
1992-93	940508	606015	334493	35.6

[1] This is based on the following statistics of the year 1993-94. For India, there were 9271 MTP institutions which performed 609915. Population for India was 934,218,000 and CBR was 28.7 which gives 26,812,056 total number of live birtths. We, tehrefore, calculated 2.23 number of MTPs per 100 live births. Assuming that there are about three non-registered centres for every one registered MTP centre, and with average case load of 62.7 MTP per centre, we can say that there are about 8.8 MTPs per 100 live births.

The above data and discussion indicate that it is not an easy task to arrive at 'population parameter' for induced abortion with such varied estimates of its incidence and equally varied estimates of under-reporting leading to under-estimates of the actual abortion estimates.

The salient features of the above discussion based on the available abortion incidence data are as follows:

- Estimates based on Shah Committee formula about the pregnancy wastage are still used in absence of any other empirical data allowing fresh estimates of abortion.
- The existing estimates of spontaneous abortion without much impact of external factors vary within the range of 15-20 per live births. Further, we assume that in a cross-sectional study, such differentials in the population would get automatically compemsated. It will therefore be appropriate to take either average or the outer limit (to be at safer side) these estimates for the present study.
- In Indian context, the estimates of induced abortions drawn from the empirical research vary to a great extent. They are also much less compared to what it may be in reality. These hunches about under-reporting are because
  - The official records are inadequate to consider as estimates as it suffers from under reporting by the concerned providers, and it leaves out those abortion which are not sought from the registered abortion care facilities.
  - The ratio of 3:1 of non-registered to registered MTP centres based on the empirical research on abortion care centres facilitates to arrive at 9 MTPs per 100 live births, which does take into account the under-reporting by the MTP centres and those abortions which take place outside the institutions. However, it is difficult to arrive at estimates, which would adjust the induced abortion rate. Assuming the ratio of legal to illegal abortion is 1:8, the abortion ratio per 100 live births turns out to be between 18-19.
  - There are changes in the patterns of reasons for seeking an abortion indicating mostly increase in the incidence of abortions.
  - There are not much insights one gathers from the existing literature as to what extent the increased use of contraception may have balancing effect on the increased abortions because of the unconventional and unanticipated reasons (son preference, abortion as a method of contraception, unmet need for contraception etc.).
- Given the serious constraints at various levels and in absence of any data even to arrive at informed guesses, it appears that it would still be appropriate to go by the Shah Committee estimates as population parameter. **Also, using various estimates based on the literature, especially for spontaneous abortions and calculations based on the data available in case of induced abortions, the overall pregnancy wastage ranges between about 30 to 40 per cent of live births. We decide to take the average of 35 per cent pregnancy wastage of total live births as the population parameter.** Ideally, the study design in such a context needs to be in such a way that, it will have an in-built mechanism to tap the extent of 'under-reporting' of the observed pregnancies.

2.2.3 Factors affecting abortion estimates in the retrospective community based abortion incidence studies

Under-reporting: Under-reporting of the abortion incidence or lack of complete coverage of pregnancy losses in retrospective inquiries have been widely acknowledged by researchers, especially those engaged in abortion incidence and fertility surveys. The problem is common to virtually all fertility surveys the world over. (Casterline, 1989; Jones and Forrest, 1992). Jones and Forrest further note the implications of failure to record all abortions which are not only to abortion studies but also for any analysis dependent on complete reporting of pregnancies and accurate measurement of pregnancy intervals. Regardless of whether abortion is legal or widely practiced, substantial under reporting is often thought to occur. (Huntington, et al., 1993).

Under-reporting could be intentional or unintentional. Legal context, cultural context, stigma attached to abortion, including spontaneous, are some of the reasons for women to withhold information about abortions. The reasons, which lead to **unintentional** underreporting are memory lapse and abortions that go unrecognised, for example, delayed menstrual periods, which may in reality be a spontaneous abortion. Thus, there is less scope for either capturing or improving the under-reporting arising out of memory lapse or unrecognised of conception. **Intentional under-reporting** may be improved to some extent by improving the methodologies, such as, formulation of the tools of data collection, creating conducive environment while conducting interviews, quality of training of the field investigators. This still does not ensure 100 per cent reporting of the recognisable abortions.

Under-reporting because of memory lapse in reporting pregnancy history: The researchers engaged in the fertility surveys and related research have observed different and at times opposite views about patterns and trends in memory lapse on part of the respondents while responding to the set of questions formulated to trace pregnancy history of women. In that, time factor, nature of the events – live birth, spontaneous abortion, induced abortion, death of a child who died later – play a role. There is evidence of omission of live births, especially those who later died, in the data from most surveys and pregnancy losses are probably more easily forgotten than live births. (Casterline, 1989). Anderson and others (1994) record virtually complete agreement between the hospital records and the survey on the number of children ever born unlike the trend observed in case of data on pregnancy loss. In an abortion incidence study conducted in Estonia, it is revealed that underreporting of lifetime abortion is of the same order as the under-reporting of recent abortion. (Anderson, et al., 1994). However, Casterline (1989) in his communication based on analysis of data from WFS from 40 developing countries says that in 17 of 22 countries, the percentage for the most recent five years exceeds that for the period five to nine years prior to the survey. This strongly suggests omission of a larger proportion of losses as one proceeds backwards from the surveys. A simple way of obtaining an estimate of the degree of recall error due to memory decline is to subdivide the total recall period into two or more equal sections and to ask about events that occurred within each section

separately (Ross and Vaughan, 1986). Huntington and others based on the abortion data from WFS, note that deliberate abortion is acknowledged less frequently than spontaneous terminations. (Huntington, et al., 1993).

Implications of under-reporting to study design: Implications of under-reporting are at two levels while designing the quantitative survey for studying abortion incidence studies. **One,** it has implications in determining the sample size for a community based cross-sectional quantitative survey. It is necessary that sample size is adjusted with the help of the prevailing understanding or knowledge of under-reporting, which often is inadequate, is based only on informed guesses. **Two,** it ideally is appropriate to have some in-built mechanism in the research methodology which would help to capture, the extent of (estimates of), at least, the intentional under-reporting of abortions, and profile analysis of respondents. This, in turn should facilitate an adjustment of the findings to arrive at more appropriate abortion incidence rates and ratios. The following discusses the mechanism to deal with both the above mentioned concerns.

For adjusting sample size: Like many other factors, figures for under-reporting in case of abortion incidence needs also to be estimated based on informed guesses. These informed guesses, in absence of any substantial research on abortion incidence, in the present case, are mostly drawn from small/large scale community based work either in abortion or prevalence of women's general, obstetric and gynaecological illnesses. We relied on various available researches done by others in the past to arrive at informed guesses regarding under-reporting as regards abortion, especially induced abortions. **(Annexure-XI).**

Mechanism to arrive at estimates of under-reporting in the community based abortion incidence studies: Some research studies on abortion incidence research conducted in different parts of the world have recorded the methods to address to the issue of underreporting. For example, Jones and Forrest (1992) evaluated the level of reporting of abortions in the various national surveys in the US during 1976 to 1988. Two of the methods used were as described here. (a) To compare the reported numbers of abortions with the numbers estimated as actually having occurred among comparable groups of women according to national counts external to the surveys. (b) To employ a method of a brief self-administered questionnaire (SAQ) in addition to the full-fledged interview, which provided a second, independent opportunity for respondents to reveal their abortion experience. In this the confidential approach to data collection was believed to help women respond more fully. Both these methods have limitations in themselves and will vary across the situations. For example, the assumption of availability of 'numbers external to the survey' will not hold true in situations like India where the records maintained by the state are known for their inadequacy. The option of using alternative instrument for data collection may not be possible for various reasons – cost implications, lack of literacy (which is a prerequisite for using SAQ). However, some other innovative methods could be thought of.

Validity of survey responses: The issues regarding under-reporting and validity of the responses are interrelated. Depending upon the subject matter under investigation, methods could be adopted to improve validity of the responses. Anderson and others

(1994) record three approaches to the validation of the survey responses. They are (a) to compare the consistency of the respondent's answers, either in a series of interviews or in response to related questions in the same interview; (b) to compare respondents' report about a given event or behaviour to that given by another respondent such as family member or another related individual (Anderson and Silver, 1987; Haberman and Elinson 1967; Koenig, et al., 1984 as quoted in Anderson, et al., 1994), (c) to compare respondent's report with an external standards or public source of information such as employers' records, police and court records, medical records, or voting registration record (Anderson and Silver, 1986; Bradburn and Sudman, 1980, Clausen 1968-69; Duncan and Mathiowitz, 1985; Loftus et al., 1992; Traugott and Katosh, 1979 as quoted in Anderson et al, 1994). Ross and Vaughan (1986) suggest that internal consistency should be checked within 24 hours and any errors reported to the interviewer and corrected if necessary, after a revisit to the subject.

For ensuring repeatability/reliability, it is suggested that re-interview of a random sample of respondents by a different lay interviewer who is ignorant of the first interview's findings appears to be the most feasible and useful method of checking for repeatability, despite its inherent disadvantages. (Ross and Vaughan, 1986). Such mechanisms may not always be feasible. In Indian context, the large scale surveys, such as, NFHS, chose to conduct a second round of interviews of a sub-sample by a different team of investigators.

Reporting of dates and ages: It is well known from past experience that, in many of the developing countries, women – particularly rural, non-literate – are not sure of the dates of births. (WFS, Comparative studies No-11-20, May 1980). 'Dating chart' or AGEVEN (age-event) chart were found to be useful aid in some contexts. However, it remains an issue of concern as error in misplacing the various life events along the calender year is almost non-detectable.

Understanding respondents' refusals: In any study, it often is insightful to know as to who are the people/women who refused to participate in the study. This is all the more important in the large-scale survey which are planned to be representative of the population. Understanding the profile of the non-respondents, therefore, helps to capture whether it is a particular sub-section of the population, which has refused to participate. This also avoids the possibility of mis-interpretation of the data, which arise on account of under representation of a particular group of people. The existing literature has not stated the mechanisms to address to this issue. Thus, there is not much we came across about strategies to obtain minimum relevant information about the non-respondents.

2.2.4. Tools of data collection for arriving at abortion rates through a community based studies

As discussed earlier, the large scale retrospective community based studies, regardless of the area of enquiry or the subject under study, do suffer from the problems such as, under-reporting, validity and repeatibility. These problems get more difficult in studies when the subject matter under enquiry is tabooed, stigmatised, experience socio-

cultural sanctions as is the case with abortion. A major obstacle in estimating the prevalence and determinant of unwanted pregnancy and unsafe abortion is the difficulty of eliciting abortion histories from women. They may be reluctant to admit to survey interviewers that they have terminated a pregnancy.

The literature on abortion surveys from the world over shows that over the years, the formulation of the tools of data collection has improved. Alternative methods of eliciting information from the respondents have been developed based on experiences in the past. These alternative methods could be used either independent of each other or in combination to complement each other.

The three major techniques/methods of data collection are described below in brief highlighting their strengths and weaknesses.

Self-administered questionnaire: As the title reads, a questionnaire is to be self-administered by the respondents themselves. It, therefore, requires to be self explanatory, crisp, short and with no ambiguity.

The advantage is that respondents may feel more comfortable to write down the responses to the questions regarding any sensitive topics, such as abortion instead of having to respond to them verbally.

> *Limitations:* Respondents need to know reading and writing. Also, it has to be a short and crisp to make it easier for respondents to fill it on their own with minimum individual biases. Thus, it restricts any detailed data collection, which is required on range of variables to enable analysis of range of correlates. It also can't study trends over the time as it requires tracing pregnancy histories, which is fairly complex structure and organisation of set of questions. In absence of training and orientation, respondents may not be able to respond to them on their own.

Randomised Response Technique (RRT): The technique was evolved by S L Warner to assist in obtaining valid answers to questions that respondents may be reluctant to answer in an interview situation. (I-Chen, et al., 1972). It was intended to overcome the hurdles in the research on topics which are sensitive and difficult to make respondents to open up to researchers, often strangers. The technique enables a respondent to provide truthful information on a sensitive or highly personal question and not reveal to the interviewer his status on the question. It is based primarily on the probability theories. Thus only a pair of questions could be posed to the respondents. Of these, one is with known probability of occurrence of an event across the population and other under investigation whose probability could then be found out by simple subtraction.

> *Limitation:* The very strength of the technique – maintaining the confidentiality of the women who may have experienced abortion – becomes a limitation. Thus, the technique is primarily useful if it is only to find the abortion estimates. In absence of any other data about the individual respondents, further research and/or analysis of the data obtained on events recorded is obstructed a great deal.

The abortion incidence research conducted in the past using techniques such as RRT suggest that they were primarily to arrive at abortion incidence alone. The other studies, which were intended to research the issue beyond capturing merely 'abortion incidence rate', used survey methodologies and conventional tools of data collection. (Zamudio, et al., 1999; Okonofua, et al., 1999). The difference, however, was precautions taken and sensitivity built in the conceptualisation and planning of the study; formulation of the tools and planning – sequence of the questionnaire, wording of the questionnaire, use of filter questions etc.

Survey questionnaire: Most of the abortion incidence studies, either independent or as part of the fertility survey, have recorded detailed pregnancy history of respondents including abortion incidence and their types as reported by women respondents. This allows data collection on life-time abortions, if required. Quality of data could be improved by careful formulation of questionnaire - wording and sequence of questions; ensuring consistency checks within the questionnaire (in-built checks); and by using innovative alternative methods like 'calender protocol' or dating charts to improve accuracy of dates of occurrence of various life events in woman's life.

Such adequately elaborate questionnaires allow researchers to collect data on range of related variables – characteristics of women, reasons for undergoing abortion, change in trends over the time through a cross-sectional study, and analysis of correlates. This also allows more in-depth analysis of abortions during the reference period in the last three to five years – recall/reference period.

Limitations: As discussed earlier, the obvious limitations are chances of under-reporting and invalid responses about sensitive events and related matters as perceived by women as result of socio-cultural, familial and legal context of abortion.

Formulation of questions and probes: The data on abortion in the various fertility surveys or abortion incidence studies have were gathered using (a) direct method of tracing the pregnancy histories or (b) indirect method of using a filter question and a follow up question. The filter question is a primarily an attempt to broach the subject in a non-stigmatising manner. (Table 4).

Table 4

Variants of the filter questions used in the indirect method of enquiry into abortion

Sr No	Study/Country	Filter question and their sequence in case of multiple filters	Follow up question
1	Estonia (Anderson et al., 1994)	Whether ever given a birth? If yes, Had ever had a pregnancy that did not result in a live birth?	If yes, Whether, the outcome was a result of an abortion, a miscarriage, or a stillbirth
2	Cote d'Ivoire (Huntington et al., 1993)	In the past, have your ever been pregnant when you did not want to be?	If yes, What did you do? Responses offered are: . nothing . attempted to stop the pregnancy, but did not succeed and gave birth .attempted to stop the pregnancy and succeeded
3	Indonesia (Hull et al., 1993)* and Senegal (Macro International, 1994)* – part of DHS III series	Sometimes a woman becomes pregnant when she does not want to be. Have you ever become pregnant when you did not wnat to be?	If yes, When was the last time this happened to you? When that happened to you, what did you do about it?

* as quoted in Huntington et al., 1996.

However, experience over the years as regards efficiency of one method over the other shows that there can't be one single rule which could tell us as what works better in what situation. For example, WFS included questions about induced abortion either in a separate series of questions about non-live births or within a group of integrated questions about pregnancy history. Comparison of WFS data with government and other local surveys indicate considerable underreporting; between 50 to 80 per cent of total pregnancy loss is estimated to have been reported. (Huntington, et al., 1989; Casterline, 1989). However, the same direct method of enquiry into induced abortion in Romania could capture the abortion rate if 70.5 per 100 pregnancies. Huntington and others (1996) demonstrate a wide range of variation in the results of studies, which used indirect method of eliciting information on unwanted conception. (Table 5). Type of setting for these studies differed. Interestingly, the ones conducted at family planning or similar set ups came up with a much better results compared to the one which were population based. Also, the indirect method of enquiry can't capture multiple abortions, an inherent limitation of the method. Thus, studying the trends over the time by enquiring into women's pregnancy history is not possible using the indirect method.

Table 5

Summary of results from studies reporting use of the unwanted-pregnancy filter question and the follow-up question about abortion, by country, according to sample type and size, 1992-94

Country (date)	Type of sample	Sample size (women)	Percent of women reporting an unwanted pregnancy	percent of total sample attempting an abortion	Among those reporting an unwanted pregnancy, percent who		
					attempted an abortion	attempted abortion unsuccessfully	Had a successful abortion
Cote d'Ivoire(1992)	FP clients	355	44	28	65	6	59
Ghana (1993)	MCH-FP clients	1,185	53	29	55	13	42
Egypt (1994)	FP clients (prospecti ve panel)	1,081	50	13	25	19	6
Turkey (1994)	FP clients	967	47	30	65	4	61
Mali (1993)	Rural population	1,300	29	6	19	11	8
Bolivia (1992-92)	Urban, employed	807	41	4.5	11	7	4
Indonesia (1993)	DHS	28,168	13	2.1	13	10	3
Senegal (1993)	DHS	6,310	18	0.5	3	1	2

DHS : Demographic and health Survey
For Egypt, numbers and percents shown refer to pregnancies rather than to women.
Source: Huntington, et al., 1996

As seen earlier, in the Indian context, the large-scale retrospective fertility surveys couldn't come up with abortion incidence rates, which could be considered anywhere close to actual. The rates apparently turn out to be very low. The methodologies, including formulation of the tools was perhaps not adequate enough tc capture data on abortion. Most of these surveys have used tracing and recording detailed pregnancy history of women, which allowed abortions to get recorded. However, not many of them paid adequate attention to specific methodological needs to capture abortions. Of these various surveys, in case of NFHS I, gross underestimates of abortion incidence have been attributed to the limitations in terms of the inadequate methodology to obtain data on the subject matter as sensitive as abortion, by those who designed and conducted these studies and peers as well. (Jejeebhoy, 99; Visaria, P. 99; Visaria, L, 99).

Review of the major surveys in Indian context, which have dealt with abortion incidence, such as NFHS-I and II and RCH shows that they have used variants of the direct method of enquiry for tracing pregnancy history. NFHS-I, did not have any probes on pregnancy wastage while recording pregnancy history. NFHS-II improved on this by including one single probe to know about abortion incidence while tracing pregnancy histories. It began the enquiry into the first live birth. The probe on abortion was to enquire for each of the interval between two live births. RCH survey recorded only the latest pregnancy from the reference period, which also included pregnancy wastage as one of the options for 'pregnancy outcome'. However, none of these surveys could record abortion rates, including spontaneous and induced along with still births more than 7 per cent of the pregnancies.

The various participating countries in the WFS and DHS used two types of approaches to record the pregnancy history. (a) Forward – where tracing of the pregnancies begins with the first one up to the last one, (b) Backward approach – it operates in exactly the reverse manner. In India, researchers have mostly used forward approach while recording pregnancy histories.

2.2.5 Selection of the study area and study units

The prime concern while laying down the strategy for selecting the study area and study units should be inclusion of respondents which would represent the population under study, especially as regards those characteristics of the population having bearing on the phenomenon under study. The critical issues, then are either to have the knowledge of those characteristics of the population, which have bearing on the occurrence of the phenomenon under study or know actually the proportionate occurrence of the phenomenon for each of the sub-population. In absence of any knowledge of these, which often is the case, multistage stratified sampling methods are adopted for selecting study units. The advantage is that strata at higher level could be defined using macro indicators for which data are available. In large scale population based studies, these criteria need not necessarily be used as 'analytical categories' but more so to ensure that the selected sample represents the population under study. Below is a brief account of approaches used for stratification and selection of the units drawn both from international and Indian experiences in silimar research.

The otherwise well documented research the world over under WFS and DHS programme has not discussed the topic of 'selection of the study area and study units' at length. However, in Indian context NFHS-I and -II do explain it elaborately and adequately on most of the issues involved in this. Before we get into the details of Indian studies, we would look into two of the abortion studies from outside.

The abortion incidence study conducted in Coloumbia was restricted to urban area alone. It used a specially stratified random sample procedure, with fixed proportions, including clusters of unequal size and quotas. In each cluster (city block including 30 households), 10 women with experience of abortion had to be found based on the hypothesis/assumption that three out of 10 women of reproductive age would have abortion experience. The criteria used for stratification are not mentioned in the paper. (Zamudio, et al., 1999). In another study form Nigeria, the study was restricted to two study sites. In the selected areas, a two-stage stratified random sample – stratifed by urban-rural residence and by health wards within the urban and the rural strata. (Okonofua, et al., 1999). A systematic simple random sampling was used to identify the eligible women. The existing national level surveys of household were used as sampling frame.

In Indian context, there are number of national surveys to study various aspects of people and regions. Some of them take place annually, for example, National Sample Survey (NSS). Of late, NFHS – and -II in 1990s, the major initiative to study the fertility behaviour pattern of the population are the large-scale cross-sectional surveys. Most of these surveys have done two stage stratified random/systematic random sampling. The primary study units (PSUs) or first study units (FSU) in these surveys have been villages in case of rural area and census enumeration blocks in case of urban areas. The secondary sampling units were 'households'. However, it is necessary that there is adequate representation of all the sections of population under study while PSUs are selected. NFHS and NSS series of surveys used different criteria to define strata to categorise villages other than any one or two criteria (as it is difficult to have any village level indices available) that could be used for selecting PSUs. With this constraint, often at the first level of stratification, district level indices are used to define strata to identify districts falling in these strata. The various possibilities for these are use of administrative divisions, agro-climatic zones, population resources regions or demographic zones. Villages from all the districts from one single strata are then treated together to be categorised further on some logical criteria, for which data would be available at the level of villages. They could be size of the village, per cent population of SC and/or ST, distance from the nearest town etc. In case of urban area, mostly cities with population more than 10 lakhs are treated separately. Of the rest, towns are stratified using some criteria, viz. population size. Various combinations and subtle stratification is possible. It depends upon the need of the study and also on the availability of data on required criteria at various levels as to what could be extent and levels of stratification to be used.

There are various schemes/indicators that have been used to define regions. Demographic zones, administrative zones or agro-climatic zones (used in NFHS – I, Maharashtra) or agro-economic (used in NSS), population resource regions,

cartographic zones are some of the schemes name. Often there is tendency that agro-economic and agro-climatic to coincide for obvious reasons. Efforts of the Planning Commission and Census to develop these schemes were with an intention to facilitate planning for respective areas of concern, viz: agriculture, economic development. The most logical for the present study would be to use demographic zones as conceptualised by Bose (Bose, 1994). He has used 21 indicators to arrive at an index determining character of a particular district. In this scheme, the focus is on women, health and education. However, this scheme of classification does not take into account standard geographical indicators, the premise for most other scheme combined with additional indicators.

Given the nature of the present study on the one hand and the overlap between these schemes allow us to choose any of these schemes without much loss vis-a-vis findings of the study. We would try to balance the choice for a particular scheme with availability of data at the district level from 2001 census. Thus, the priority would be to base the stratification on the 2001 census data as we are launching the field work in the same year.

2.3 Wrap up

The above presentation of the literature review combined with the rationale for making choices vis-a-vis various aspect of the present study is exactly the way went about developing the methodology that is laid down in details in the following sections of the document. It was an enriching experience to learn through the existing literature, especially the large-scale surveys like WFS, DHS and NFHS and other surveys India to study women's illnesses. We could combine these methods with our understanding of the abortion issue with its nuances and from women's perspective based on our earlier research in this area to make it more comprehensive and woman sensitive and within the framework of 'ethical research practices'. The challenge would remain throughout the study for two reasons. One, the earlier research in India have recorded high per centage of under-reporting of abortion incidence. There is nothing other than making guesses that we can fall back on as this is for the first time such a large scale community based abortion incidence study is being undertaken with prime thrust on abortion.

3. SAMPLE DESIGN

The study will be conducted in the two states. One of them would be Maharashtra.

3.1 Universe/population

The sample under this research study is designed to provide state-level estimates as well as urban rural estimates for rural and urban areas. The universe consists of all rural and urban areas (the entire population) of the state. The primary sampling units (PSUs – villages from rural areas and wards from the urban areas) would be selected from this universe. The secondary sampling units would be households.

3.2 Sample size

Being the 'rate' study, it would be essential to design a representative population based survey. This requires that we determine the sample size within the framework of survey sampling. That is to say, arriving at sample size using systematic criteria and 'factoring in' various aspects, such as, **design effect, under-reporting, non- response and other losses** which have critical bearing on applicability of the required statistical tests for the **purpose of generalisation.**

Estimation of sample size: Assumption based on informed guesses (discussed at length in the earlier section) about the population parameter/estimate of abortions is that one third, that is about 33 per cent of the conceptions, observed pregnancies to be more precise, are wasted during a given period of time. If so, to obtain a level of incidence with 95% confidence interval and with a precision of plus or minus 2 (that is, error) and plus or minus 1 standard error, we have to cover about 2222 conceptions, which would allow to capture about 741 abortions. This would mean that we need to cover a population of 64391 or about 13,000 households assuming a birth rate of 23/1000 population and if conceptions in one year are covered. (Annexure I). Conceptions if covered in three years would reduce the number of households to one third, that is, 4,333.

The above calculations assume (a) it is a simple random sampling (SRS), (b) there is zero 'no response' and no other losses, (c) the instruments are perfectly valid and reliable thus having no 'under-reporting'. In reality, these assumptions are untrue and therefore they need to be factored in.

Based on the earlier community based research experience, we assumed 15% **loss of sample on account of 'no response' and under-reporting,** inflating the sample size to 5,000. As we are covering the entire state to select PSUs, from there **would not be any cluster/design effect to be factored in.**

3.3 Allocation of the PSUs:

Allocation of the PSUs over the rural and urban areas is based on the following

assumptions based on data and statistical requirements:

(a) The data show that rural/urban population proportion in Maharastra is about 3:2. The sampled households (5,000) will be distributed over rural and urban areas in PPS manner. That is, about 3000 households from rural area and about 2000 households from urban area to be included in the sample.

(b) On an average 30 households (about 10 per cent of households in rural) and 20[2] household from urban PSUs will be included in the sample. This is primarily to reduce the cluster effect by spreading the sampled units - households - over the larger geographical area. This would help determining the number of PSUs to be selected from each of the rural and urban areas. Thus the total PSUs from rural areas will be 100 (3000/30) and 100 PSUs from urban areas (2000/20 = 100).

There would be three levels of stratification. The first level of stratification would be geographic. In that all the districts in Maharashtra will be grouped into six administrative divisions. (we may make some changes as mentioned in the earlier section.)

3.3.1. The rural sample: The frame, stratification and selection

The 1991 or 2001 Census, if available, list of villages would serve the sampling frame in rural areas.

In the second level of stratification, the population size of each village will be taken into consideration. The strata would be as follows:

Stratum 1: Less than 150 households
Stratum 2: 150-299 households
Stratum 3: 300-599 households
Stratum 4: 600-999 households
Stratum 5: More than or equal to 1,000 households

The fourth level of stratification would be ordering villages within each stratum by the level of women literacy.

There will be 36 strata from which the PSUs will be drawn in proportion to the population size of a particular strata with the total rural population.

We may make some changes in the proposed strategy of stratification for allocating PSUs.

3.3.2. Selection of households:

Households would be selected using systematic random sampling with equal

[2] The size of the urban blocks being larger , 10 per cent inclusion of the household from the PSUs may lead to a substantial cluster effect unlike rural PSUs. Thus, it is fixed to 20.

probability after undertaking an exercise of mapping and house listing. In case of villages with more than 500 household, it will be segmented based on the existing wards and to select two randomly selected wards.

3.3.3 The urban sample: The frame, stratification and selection

The list of 1991 Census Enumeration Blocks (CEBs) would serve as the sampling framework. At the first stage, the districts would be grouped in the same manner as would be done for rural area. Within each of these stratum, cities/town would be divided into three strata: cities with population more than 10 lakhs, district headquarter towns and other towns.

For district headquarters and other non-self selecting town, a three-stage sample was used: selection of cities/towns with PPS, followed by the selection of two census blocks per selected town with equal probabilities, and finally the selection households from each of the selected blocks.

4. CONDUCT OF THE STUDY

Launching of the field-work presupposes a successful pilot testing and revision of the methodology, including tools of data collection.

4.1 Making in-roads in the community

*What **purpose** would it serve?*

- Primarily to interact with the village community and to establish rapport.
- To get introduced ourselves and to know informally from people about themselves as a community.
- To share with them about the work/research study that we are there for and about our organisation.
- To create conducive environment for holding group meeting/s in the village. These meetings would be to provide public space for the villagers to question us about our work and its relevance etc.
- To screen a slide show on women's health in *Marathi* during these meetings. This is not only to facilitate rapport establishment but also a means to express our gratitude for their prospective participation in the study.

Through this process, if people from the village/community agree to participate in the study, the entire research team would gear itself to initiate the process of data collection.

Who from the research team would do it?

Two-three of the team members, one senior researcher and a couple of junior researchers and/or field investigators will be involved in this activity.

*What would it **involve?***

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***Who** from the research team **would do it**?*

Two-three of the team members, one senior researcher and a couple of junior researchers and/or field investigators will be involved in this activity.

*What would it **involve?***

- **Meeting** and interacting closely with mahila mandal/locally active women's groups; grass roots level health workers and women in the village.
- We may interact with some official/formal leaders/office holders; informal village leaders.

We would try to interact with village community without the top-down pressure of office holders. This implies that we try to establish rapport with the community through the support of villagers rather than the power holders. Practically, women should be in position to feel free to say 'no' if they wish and would be able to participate in the study only if they want to do so and not because someone 'up there' wants them to do so.

Time required for completing the task?

Would require a couple of days. However, if the community is generally welcoming (after communicating them about the study), on the first day, we can start off the next phase in parallel. The activities related to 'building awareness on women's health related issue' also can take place on later days during the field-work depending upon the response of the community.

*The **dilemmas and issues** involved?*

It is likely that after spending time and energies to establish rapport, people may decide not to participate in the study. And yet, this particular phase will not be compromised upon. The denials because of the sensitive nature of the issue at hand would be obvious. For us, the dilemma then is do we go for such a mode of rapport establishment? Do we disclose the tools of data collection, especially 'woman's interview schedule' to any one who is interested to know what is all about? What consequences would it have for 'participation of the community' and therefore for the research?

This would be the most critical phase of the field-work that we have to carefully tackle with in every village/community.

4.2 Preparing Village profile:

*What **purpose** would it serve?*

- To know the socio-economic characteristics of the study area.
- To arrive at the village level development index to explore whether it functions as one of the explanatory variables vis-a-vis the subject matter under study, especially abortion care and cost aspects.
- To record some of the village/area events – routine and historical – to be used as landmarks. This is to facilitate respondents to chronologically locate their life events with better accuracy by using these landmarks as reference points.

***Who would** do it?*

Mostly by one of the experienced researchers who has skills to interact and deal with varieties of personalities; to unravel the community dynamics through such interactions; and to be able to share this understanding with the team when it meets at the end of the day.

***Tool** to be used?*

'**Area Profile Recorder**' will be used to get the information to prepare village profile. **(Annexure II).**

***Time required for completing** the task?*

In about a days' time it would be completed. The persons responsible to complete this need not exclusively spend time on this, especially if some of the data items take time to be filled in. It is advisable to complete village profile before the team starts administering household interview schedules and woman's interview schedule. At least the section on 'village events' needs to be completed before HHD-IS and WOM-IS are administered for logical reasons. However, on some data items the little stretched out time schedule is logical as it involves meeting number of people engaged in various activities. It requires tapping multiple sources of data, such as primary, secondary and observation. Some of the data may also require cross confirmation, especially those related to statistics. On some of the data items, it may take longer. However, it needs to be completed before the team leaves the villages so as to save another trip/visit to the village.

***Timing with other activities** during the field work?*

Preparation of the village profile can go in parallel with the exercise of mapping the village and listing the households.

4.3 Administering Household Interview Schedule

*The **purpose?***

- To identify the eligible women for individual interview – the core of the data collection
- To have the well-defined base population, the denominator, needed for computation of abortion rates and other related demographic rates, if required.
- To provide us values/scores/indices for the set of explanatory variables – independent and/or intermediate. (pl refer to Annexure III)

***Who would** do it?*

The team of the field investigators would actively engage themselves in this phase of data collection.

Tool to be used?

Household Interview Schedule (HHD-IS) will be used for this purpose. **(Annexure IV).** We would prefer responsible male member/s to respond to this, especially the section on economic activities, land ownership, business matters etc. More than one respondents, including women of the household answering to this interview schedule would be welcome and encouraged.

***Timing with other activities** during the field-work?*

It will be started only after mapping and house listing are completed. This is because, households could be selected/sampled only after this. It would precede the stage of conducting women's interview schedule primarily because eligible women will be identified during interview to fill the household interview schedule.

***Time required for completing** the task?*

Filling of the one interview schedule would take about 30-35 minutes.

4.4 Administering Woman's Interview Schedule

***What purpose** would it serve?*

This is primarily to acquire data on abortion incidence, abortion related morbidity and reasons for induced abortions. This would be achieved by asking women about their obstetric history.

In addition to this, there is an in-depth exploration of spontaneous and induced abortions that women had during the reference period of three years. (for detail pl see Annexure IV)

***Who would** do it?*

The team of the field investigators would be engaged in completing this phase of data collection. At one single household, there certainly has to be a pair of the investigators so that one can engage oneself into administering household questionnaire and the other the woman's interview schedule/rate questionnaire.

Tool to be used?

Woman's interview schedule/Rate questionnaire (abortion incidence, morbidity) will be administered. **(Annexure IV).** This will be administered to all the eligible women, that is, ever married in the reproductive age (15-49 yrs) residing in the sampled households.

The various sections would be miscarriages in recall period (care and cost in details);

miscarriages in recall period (morbidities, care and cost); life time miscarriages (care and cost in brief); induced abortions (care and cost in details), induced abortions (morbidities, care and cost in details), sex selective abortions (care and cost in details); sex selective abortions (morbidities, care and cost in details);

***Timing with other activities** during the field-work?*

It will be conducted only after household interview schedule is administered and completed.

Time required for completing the task?

It would take about time in the range of 80-110 minutes depending upon number of abortions the woman may have had both during her life-time and reference period for the present study.

5. PROBLEM SOLVING & SHARING LEARNING THROUGH DAILY/REGULAR IN-GROUP SHARING

The late-night meetings of the research team are essential for the following reasons.

(a) To facilitate and develop a shared understanding of the village community and its dynamics, especially during the initial phases of establishing rapport with the community.
(b) To share with each other the problems faced during the field work and discuss them.
(c) To provide space for the investigators to share their emotions with the group and share their understanding and analysis of women's live situations.
(d) To ensure that data collection is going on smoothly, appropriately and no violation of ethical guidelines is taking place.

We would like to minute these discussions, highlighting at least the major issues.

6. TRAINING OF THE TEAM (RESEARCHERS & FIELD INVESTIGATORS)

Training of the researchers and field investigators would be required primarily to

(a) develop perspective on women's health and abortion,
(b) impart and develop skills, and
(c) build team solidarity.
(d) Orient and develop adequate understanding of research ethics
(e) orient them about the administrative procedures to be managed at the field level.

We see advantages in the entire team going through this training experience together. In that it would try minimise the psychological gap between 'positions' that various individuals would be holding within the team. This would provide opportunity to the new recruits to open themselves up to their fellow members and old team members as

well. For the old team members it would help to know the new recruits as individuals and as team members.

Qualifications of the field investigators

We would not be particular about having social science graduates. This primarily because, one of the CEHAT research of a similar nature recruited women with only about 8-10 years of schooling who did wonderful job during the community based field work. The reasons, one among others, may have been the fresh perspective with which they look at situations.

Following would be the **thrust areas in the training modules.** We are prepared a detailed training manual laying down each session stating (1) learing objectives, (2) resource persons, (3) time length of the session, (4) teaching aids and methods, (5) content of the session. The themes presented below will have different sequence of sessions to make it more logical and to maintain the flow of the content. We will be using interactive sessions and will make use of appropriate games, skits, role plays to seek active participation of the investigators. We will documenting the process for our own learning and for others reference.

(a) Developing the perspective
(about a 5-6 days)

- Orientation of the team: What are we getting into?
  - About CEHAT, its philosophy and thrust areas of work with special focus on issues and concerns as regards women's health;
  - The perspective with which the abortion research and advocacy in CEHAT has been shaped by and pursued since its inception; its links with issues and concerns in the realm of 'women's health'.
  - Objectives of the current research, that is AAP-I and abortion incidence study.
- Social systems and organisations:
  - Social organisations (caste structure/tribal organisations and dynamics – we can highlight through this session the concepts of 'discrimination' and 'marginalisation'.).
    - Social institutions (marriage/family/inheritance).
    - Concept of patriarchy & gender.
    - Political organisations and structures .
- Administrative structures (Various offices and their roles and responsibilities.
- Organisation of the health care system in India (public and private mix; structure of the public health care system).
- Various government development programmes and policies.
  - Development programmes (this in addition to understand the programmes would also help investigators to know as to from where to get the concerned data to fill in the area recorder).
  - Women's health programmes and programmes for children (FWP, CSSM, MCH, RCH, ICDS, immunisation).
- Health care

positive implications for individual growth which in turn would ensure quality of work. This primarily will be achieved through use of various training methods, use of physical spaces around us during the training period and different games.

There will be a sharing session, placed appropriately, for all the team members to open up and share in brief their life experiences which hit them for gender discrimination along with a brief life history and motivations to join on the project.

(d) Orient and develop adequate understanding of research ethics (one day)

There will be about two formal sessions on research ethics and its significance. However, most of the principles of ethics would be weaved with the entire training, especially during the training of aministering the protocols and understanding the protocols. NECSSRH guidelines will be used as a basic framework and CEHAT's guidelines will be discussed among the group to develop the understanding.

(e) Orienting on the administrative procedures (one session of 2 hours or half a day by Kiran and Taras)

This is primarily to orient the team on some of the essential administrative procedures that they would be required to do while in the field. This would include

- Orienting them about CEHAT's Rules and Regulations, salary structures, and various structures, which are meant to facilitate democratic processes and functioning within CEHAT. This would include to talk about WG, IEC, and SAG.
- Teaching them to make vouchers and maintaining the accounts at the field level

We would use **multiple modes for training**, such as, group discussion, role plays, lecture followed by open discussions and mock interviews.

Who would conduct training?

Resource people (from the institution, including team members or from outside) will be requested to hold these sessions for the entire team.

Time required?

We anticipate a two weeks' programme. This would allow the team to digest the concepts and the study that is required to initiate the field work. It would also stimulate the process of team gelling well together.

Resource material, resource persons; games and organisation of the sessions, scheduling the sessions, preparing the presentations, deciding on who is going to take what sessions from among us,

7. PILOT TESTING/PRETESTING

This is to impart and develop the skills required to conduct the field work – mapping and house listing, rapport establishment, conducting community meetings, administering tools of data collection

- Understanding the empirical research (continuation of what was touched upon during the first few days).
- Imparting skills in village mapping and house listing. Though all can undergo training in this, we would have space to concentrate on a few who demonstrate aptitude for taking up such a task. (this will be done independent of the entire training. The decision such as whether the teams of village mappers and house listers would be different or overlapping – fully or partially – would depend much upon as how we will be placed with the list of PSUs.
- Training the team in conducting community meetings before the field work in a particular PSU starts as part of (a) rapport establishment and (b) informing the community about the institution, work (c) advocacy on general health care issues as a gesture of our gratitude for their prospective participation in the study.
- Preparing the team to administer various tools of data collection. (this would require about 6-7 days)
  - Explaining the methodology and its rationale
  - Rationale for choosing this combination of methodologies. (quantitative survey followed by the qualitative study
  - Protocols for the quantitative survey: Choice of the protocol , rationale for each of the protocol, subheads in each of the protocol and their relevance to the objectives of the study
  - Explaining each of the data item (variable) in each of the protocol.
  - Explaining the glossary and reference manual and to provide them hand on practice for using them.
  - How to conduct interviews: Dos and donts.
  - Adequate training and practice in administering the various tools of data collection through mock administration of various tools. In that, emphasis would be on how to pose the questions and probes at appropriate places without changing (adding) meaning of the original question.
  - Seeking informed consent – significance and how to go about it.
  - Sharing of some of the community based research on women's illnesses highlighting
    - The problems faced by the respective teams; and means, methods and strategies used by them in a particular situation.
    - Getting information on gynaecological morbidity, probes and their administration.
  - Sharing of experiences form NFHS .

(c) Building team solidarity

This is primarily to develop and facilitate team solidarity, to foster mutual trust among the team members, and to develop respect for each other. This has great significance while working in the field over long stretches away from home having

- Health care services.
  - The organisation of health care services (public and private – structures, referral system).
  - The grass roots level health workers.
- Cost of health care services.
  - Public expenditure against household expenditure on health care.
  - Direct and indirect cost incurred

- Abortion: Facts and figures: Incidence, cost of abortion care,
  - Perspective:
    - Abortion and women's movement in the global context
    - CEHAT's perspective on abortion, CEHAT's work on abortion and abortion research in India
  - Legal aspects of abortion:
    - The global perspective on abortion legislation
    - The legislation in India and its salient features
    - Legislation and its historical context
    - The process of bringing the legislation in.
  - Medical aspects of abortion and human biology
    - Human reproduction, reproductive systems – men and women (the technique of the body mapping shd be used for this.).
    - The concept of abortion: induced and spontaneous
    - Abortion methods (conventional methods and advances in medical field as regards abortion methods)
    - Gynaecological morbidity and abortion complications: possible reasons, patterns, symptoms
    - Significance of reported morbidity against the clinical morbidity
  - Quality of care
    - Structure, process and outcome: Comparison between medico-technical model against a gender sensitive model
    - Significance of users' perspective on quality of abortion care services
    - The current status of affair – general health care and abortion care.
  - Unsafe abortion as a public health issues: The contributing factors (women's status in the family and in the society, familial dynamics around women's abortion needs and sexuality, stigma attached to the act of abortion, quality of abortion care services).
  - Politics of abortion:
    - State's population control policy, women's contraception and abortion needs
    - Does the legislation grant women abortion as a right: how does it get translated in reality?
    - The complexities and contradictions opposition of women's and other progressive groups to sex selective abortion and supporting abortion as women's rights.

(b) Imparting skills
(about 6-7 days)

*What **purpose** would it serve?*

In general, pilot testing is meant primarily to examine feasibility and practicability of the proposed methodology to obtain the data required to meet objectives of the study. In that, applicability of each and every aspect of various tools of data collection assumes special significance, especially if one is venturing into a population/community based study. At times, researchers even landed up doing 'mini studies' to meet the need of having pre-tested methodology and tools of data collection and to understand the problems in data analysis.

In the present case, pre-testing has its own significance for various reasons.

a) It is first of this kind of community/population based abortion incidence study in India. Implied in it is that we would be interacting with people/communities and women to delve into as sensitive and tabooed issue as abortion in a situation (household surveys) which inherently does not allow long spans for rapport establishment and anthropological approaches.
b) We, at this point of time have decided not to disguise the study with any other aspects and stick to abortion related matters alone.[3] This is primarily for three reasons.
   - One, our discussions with a gynaecologist suggests that it is difficult to tap the linkages between abortion related morbidites and other RH morbidities in any such population based study which primarily records perceived morbidities based on symptoms.
   - Two, inclusion of reproductive illnesses would make the study too massive to manage. It is likely that the data would remain under-utilised given the constraints of resources. Thus an ethically inappropriate strategy,. Also, the fact that there are community based studies available on women's illnesses today, it is less likely the data obtained on these aspects (which is not the thrust of the study) obtained with constraints around it would add any more to our existing knowledge on these aspects.
   - Three, we would be pilot testing the strategy of seeking written informed consent.

     It is, therefore, essential to pre-test whether women would welcome such a study without any disguise.

In the present study, following would be the specific objectives of the pilot testing:

- The extent to which eliciting information from women on their life time obstetric experiences including live-births and non-live births (spontaneous and induced abortions, still-births) is possible by using such a quantitative survey methodology. In other words we have to pre-test whether the tool/s allow to define all the

[3] There were two reasons as why we wanted initially to include reproductive illnesses of women. One, to explore the linkages between abortions and other reproductive illnesses, especially the situations where the reproductive illnesses get aggravated post abortion if the latter are conducted without taking appropriate precautions. Two, for the purpose of disguising the efforts to study abortion rates in anticipation that there would large scale under-reporting in absence of such disguise.

required denominators and numerators with accuracy.

- The extent to which women would be able to tell us the timing/exact years of their life conceptions.
- To tap the problems that women and investigators face in recording the years of conceptions.
- To tap the problems in recording the post-abortion complications. The same is true for data on maternal mortality and reasons for lifetime induced abortions.
- It will also be of critical importance to understand the problems in administering sections on cost and care of 'life-time abortion – spontaneous and induced' and also of in-depth enquiry on cost and care of 'spontaneous and induced abortion during the reference period', the point in time when women start feeling fatigues or tired affecting quality of responses etc.
- Besides, the sequence of sections and questions, language/vocabulary, clarity in the formulation of the questions etc. need to be examined during the pretesting.
- To record the time required for completing the questionnaire. This would enable time estimate for completing this phase in the main study for the stated sample size.
- To tap the quality and texture of the community response to the subject matter that would be studied without any disguise.

The major dilemma that we may face would be if there is reaction and therefore the denial to participate. If so, would it be rational to include subjects/issues regarding women's general health or reproductive health so that the 'abortion' as thrust of the research study would not hit the community in a manner that would have negative consequences. What then happens to extra information that we acquire? How do we resolve the concerns that we expressed earlier about obtaining information on such aspects for the reasons of disguising the study?

8. ETHICAL ISSUES AND CONCERNS

8.1 Seeking informed consent and mode of communication: The method of rapport development would serve the purpose of making community to know about our work. However, informed consent would be sought on one to one basis with each of the respondents. Informing respondents through a written note would primarily involve communicating to them in writing and in oral the following:

a) About CEHAT and its work.
b) The larger context of the research and overall objective of the research.
c) Significance of each one's participation in the study.
d) The way the data obtained through this work would be utilised in the course of the coming time.
e) About their right to withdraw at any stage if she wants.
f) About their right to question us about the work we are doing before we start an interview and even later. (Annexure V).

As explained earlier in this communication there would be different respondents to

respond to three different tools of data collection. They are:

i. *Key informants (for rapport establishment and for acquiring information on village profile):*
ii. *Members/head of the household (for obtaining information about selected households using household interview schedule)*
iii. Women respondent (for administering the abortion rate interview schedule)

In addition to the information on the items mentioned above, there would be specific information for each of the above type of the respondents, communicating to them as to why this particular information (eg. village profile) is being obtained and so on.

8.1.1 Constraints/limitations:

- These notes will be in local language. The constraint of non-literate women and other respondents not being able to read through such material remains. For them we would read the letter out to them. In either of the situation, women will be encouraged to clarify their doubts with us. Thus, oral briefing and interaction with respondents would be part of the process of seeking informed consent.
- As recommended by the ECG during the National Methodology workshop, Dec 11-13, we would pilot test seeking written informed consent of respondents. The experiences will be communicated to ECG. If there is large proportion of denial, it has risk of large 'no-response' than the proportion, which has been factored in while estimating the sample size.

In case an interview requires more than one visits/sittings with a woman and for that matter with any other respondents, we would seek informed consent every time before we start the rest of the interview. Similarly consent of women respondents obtained for the quantitative survey will not be considered to be so for her participation in the cohort study. Thus, informed consent would be sought afresh during the Phase II - cohort study.

In no situation, consent/permission by anyone other than respondent would be treated as informed consent of the respondent.

8.1.2 Informed consent during the pilot testing: The same process as described above will be followed for seeking informed consent during the pilot testing as well. In addition, the respondents would be informed about the fact that it is part of the pilot testing and that the data would not be used for preparation of the report. If in case respondents exhibit less or no interest in participating in the study, we would use the strategy to further tone down the purpose of the research ("deception") as approved by the ECG.

One of the most important strategies to be pilot tested, as mentioned earlier, is that of 'seeking written informed consent'.

8.2 Privacy: Privacy will be maintained during women's interviews. However, the fact

that we plan to conduct the interview in the community setting at woman's residence, it would be difficult to have control over the situation. The quantitative nature of the study would not allow us to make many visits so as to find women alone at home (which is very possible in qualitative anthropological studies). The household surveys of this nature conducted earlier have recorded these difficulties. Some allowed (as nothing else could be done about it) other women to be present during an interview with a respondent. (Madhiwalla, et al., 2000). Some others opted for dummy interviews of the other women. (Ganatra, et. al., 1999). As reported by the researchers it was primarily for the purpose of 'not singling out women with abortion experience'. This in the process may have also kept the family members occupied providing some privacy to respondents while being interviewed. It. However, without any concrete purpose and plan for utilisation of the data obtained from such dummy interviews, it would have additional ethical problems to attend to rather than resolve them.

It is difficult to maintain 100 per cent privacy in these situations. However, following will be done to address the issue partially:

a) We will make an attempt to fix timings of women's interview after discussing with her as to when would the better time for us to have the required privacy.
b) In case, others happen to be present, we will try to seek their cooperation to provide woman privacy.
c) We will not have any dummy interviews conducted.
d) Despite all these efforts, if others sit through interviews, we would record the situation specific observation (which may tell the influence of others' presence on the woman's response pattern,
e) We must record who were those ones – relationship with the woman respondent.

While doing any of these, women's concern and comfort should remain a priority.

Respondent's, especially women respondents' name will be protected either by putting a sticker on the name on the protocols/interview schedules.

It needs to be noted that the study design is such that it includes all the women in the reproductive age in a household, which would reduce to a great extent the risk of singling out women who may have undergone abortions.

8.3 Protection to the respondents, especially women: Implied in it is the risk of singling out women with abortion experience, which has the potential to crack confidentiality around women's abortion experiences. As it appears, there is no such risk involved in the Phase I - Quantitative Survey, that is collecting data, which would enable calculations of various rates. This is for two reasons. **One**, the methodology that is required to meet the prime objective of the study, includes all women of the reproductive age as respondents from the sampled household units. These women give us 'denominator for various calculations involved. **Two,** for each of the women, we would require to record detailed obstetric history. Abortion episodes would get recorded as part of this exercise. The tools that are designed have a table to record this information, which is titled obstetric history. **Three,** as part of the strategy to tone

down the explicit emphasise on abortion research initiative, the title of the project on each of the tools of data collection would read 'Pregnancy Outcome, Care and Cost Study' rather than 'Abortion Rate, Care and Cost study'.

8.4 Expressing our gratitude to people for their cooperation and participation in the study: The community based household survey spread over a large geographical areas where the institution taking up a research neither has (/can't) any roots in terms of interventions or services not have future plans in that direction often face an ethical dilemma as to what does the community or respondents get out of it. There is no direct and easy answer to this is available except that in long term it would benefit the larger society and facilitate furthering of knowledge (improved methodologies and understanding of abortion seeking behaviour).

As explained under 'making in-roads in the community', we would spend time and energies to disseminate health related information to the communities and women. CEHAT has large number of educational material prepared primarily for rural communities. We will have a poster exhibition in each of the PSUs for benefit of the entire community. And a set of five posters will be given to the village *panchayats* and ward offices We will also screen a slide-show on anaemia and women's health in each of the PSUs.

No individual compensation is planned. No monetary compensation to anybody participating in the study or facilitating the study at the local level. However, we would offer educational material to Mahila Mandals, Panchayats, libraries, panchayat mahila members, Tarun Mandal depending upon their interests, needs and women's and community's accessibility to these structures/ institutes/offices.

9. CONCEPTS AND DEFINITIONS

We prepared glossary for three purposes. (for glossaries – Annexure VI, VII, VIII) **One,** to understand various medical and clinical aspects of abortion, which was necessary for the entire research team even before it got into laying down study design and methodology. **Two,** it was essential to have clarity, especially about the symptoms of various abortion related morbidity and other morbidity while formulating the set of specific questions to be included in tools of data collection. **Three,** it would be an handy reference for field investigators/ supervisors/ editors while in the field to be on their own without getting stuck. Our earlier experience with preparation of such appropriate glossaries supports these uses.

It primarily contains definitions and concepts regarding abortion; definitions/description of abortion morbidity; their clinical symptoms and their perceptible and/or non-clinical symptoms. We used medical literature; referred to the community-based studies and discussed with gynaecologist to make the glossary appropriate, exhaustive and adequately self-explanatory. This would be available for field investigators in local language, too. These concepts and illnesses will be discussed thoroughly with the field investigators and others constituting the project team during

their training.

10. LIMITATIONS OF THE STUDY

- **Abortion mortality rates will not be captured.** This is because to be able to arrive at such rates, a very large sample is required given its comparatively low incidence (not a commonly occurring phenomenon). This was also suggested by the TAC during the meeting held in Oct at New Delhi to discuss the propcsal with the respective researchers.
- **Unmarried women will not constitute the sample**. Given the sensitive nature of an act of abortion because of moralistic values attached to it, women's sexuality involved in it etc., we will not be studying abortions among unmarried. In such a broad based cross-sectional community based study, there is less scope to have any support mechanism, either community based or otherwise, in place in case woman respondents, her family members would fall back on. The chances of unmarried women having had undergone abortions are more likely to feel the need of such support mechanism in case of community's untowardly reactions upon the knowledge of her so called illegitimate sexual indulgence leading to an abortion. If so, inclusion of unmarried women in the sample obviously raises major ethical issues. Without, any such support system in place, we would certainly exposing them to unnecessary risks.
- **Accuracy in reporting of the dates of occurrence of life events is difficult to ensure:** A studied and meticulous attempt is being made to trace birth history with as much accuracy as possible using appropriate combination of methods to do so. For example, data collection on the pregnancy history will be collected using appropriate combination of methods – integrated (live-births and pregnancy wastage obtained and recorded together - pregnancy history using 'calender' protocol method. The proposed use of 'calender' protocol method is intended to improve the 'dating' of obstetric events in woman's life. This still may not ensure accuracy in dates of events, especially pregnancy wastage.

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ANNEXURE I

ESTIMATING SAMPLE SIZE

(Detailed calculations for arriving at households sample size)

Table A

Assumptions for the population parameters and precisions set for the purpose of generalisation	Values
Population parameter/estimation of abortions	33 % of the conceptions are wasted
Confidence interval set	95%
Standard error allowed	plus or minus 0.01
Birth rate for Maharashtra (source – NFHS-II)	23 per 1,000 population

Calculations:

$$\sqrt{\frac{p(1-p)}{n}} < 0.01$$

$$n > \frac{p(1-p)}{(0.01)^2} = p(1-p) \times 1000 \quad \text{where } p = 1/3 \text{ and therefore } q = 2/3$$

$$n > (1/3) \times (2/3) \times 1000 = 2222$$

Assuming CBR = 23 (according to NFHS II and other data) per 1,000 population.

a. Assuming CBR = 23 per 1,000 population
To capture 2222 conceptions, that is to capture 1481 births and 741 abortions, population to be covered is

= (1481x1000)/23
= 64391

b. Assuming household size to be 5, households to be covered would be
= 64391/5
= 12,878 or approx 13,000 for conceptions covered in one year.

c. If conceptions are covered for three years, the household size would reduce to one third, that is

13, 000/3 = 4,333

d. With total loss of sample 15% (including no response and under reporting), the sample size would be 4,973 or approximately about 5,000 households.

PROBABILITIES

1. The overall sampling fraction, that is, the probability, f, of selecting a woman from Maharashtra would be

- $f = (nX\ 1.35) / N$ or $f = (n\ X\ 1.15) / N$

Where

n = number of women to be interviewed in Maharashtra adjusted for 35 per cent (or 15) to account for 'no response' and other loss; and

N = projected population of eligible women in Maharashtra (latest data).

The sampling rate (sampling fraction) would be the same in the urban and rural areas of the state, and thus the sample would be completely self-weighted.

2. The probability of selecting a PSU (f1) was computed as:

- $f_1 = (a\ X\ s_i) /$ summation s_i

where a = number of PSUs selected from rural Maharashtra
s_i = the population size of the selected PSU
summation s_i = total rural population of the state

3. The probability of selecting a household from a selected PSU (f2) was computed as:

- $f_2 = f / f_1$

ANNEXURE – II

AREA (RURAL/URBAN) PROFILE RECORDER (APR)

Purpose

The objective of administering the APR is as below:

1. To know the socio-economic characteristics of the study area.
2. To arrive at the village level development index to explore whether it functions as one of the explanatory variables vis-a-vis the subject matter under study, especially abortion care and cost aspects.
3. To record some of the village/area events – routine and historical – to be used as landmarks. This is to facilitate respondents to chronologically locate their life events with better accuracy by using these landmarks as reference points.

Not many studies in the past, including the large-scale national surveys, have made use of such data collected through area profile recorder, except using them for describing profile of the area studied. However, we anticipate that these data would enable construction of a village/ward level development index. Such an exercise was done by Sinha and Kanitkar (1994) was found to be useful in examining the trends of correlation between general development status of the area (at the level of village and ward) and people's patterns of utilisation of health care services.

This particular protocol is designed to suit specifics of both, rural and urban, primary sampling units (PSUs) to be included in the study.

Major heads for data collection

This protocol collects data/information about rural or urban status of the PSU and other identificatory details, such as, village/ward, taluka, district, slum identification; social structure (community' identity in terms of religion; caste/tribe composition etc.); the overall development status of the village in terms of availability of basic amenities; its approachability to the outside world (approach roads, transport facilities, communication means etc.); its access to educational facilities; its access to health care services (institutional and non-institutional; public and private; primary and others).

Visit details: This is primarily to maintain the records of the details of the field visit including the time frame (date/s of data collection etc.). It serves an administrative purpose and provides details of the concerned field team members to facilitate clarification, if required about the data.

I. Identification of the study area: These are the details of the area under study. It includes village or ward, taluka and district identification; identification details of urban wards (areas name, ward and/or survey number) and the PSU number for the area given to it for this specific research by the researchers.

In case of slums, there are some additional information/data items to know whether it is recognised or not, number of years that it is established. The recognised slums are supposed to have access to some basic amenities.

II. Area, Population & Community Composition: This is intended to know, size of the area in terms of population, number of households and area; population below poverty line. It also gets data on the dominant and co-dominant religious groups, casts groups, tribal groups.

This would help us to arrive at density of population (population per sq. km), proportion of the households/population living below poverty line.

The data on the dominant/co-dominant groups would help us understand differential access to basic amenities, including health care facilities when analysed in the light of the individual identities of the respondents. This will be an additional analysis available for the entire sample other than dichotomous analysis of upper caste and lower caste. It is likely that the dominant/co-dominant groups (regardless of caste identity) have better access to amenities.

III. Access: Roads and transport facilities: This is primarily to know whether the population living in the area under study has access to transport facilities determining their accessibility to the world outside. It includes data on availability of 'all whether road', distance to the nearest town, distance to the nearest pucca road, to the bus stop etc.

IV. Access to basic amenities: This is know the whether the population has access to the basic amenities – electricity, drinking water (source and availability round the year), drainage facility and toilet facility.

V. Access to education facilities: This is primarily to know whether the population has access to education facilities in the area itself or whether children in the area have to travel some distance to access educational facilities.

VI. Access to health care facilities:

Non-institutional health care service providers Insitutional This is know what kind of non-institutional health care service providers are available. These include both non-formal/private/untrained health care providers and formal/public/trained health care providers working at the grass roots level.

Institutional health care facilities: This is know what kind of institutional health care facilities are available. Institutional health care facilities include, both public and private. It also enquires into the type of health care services, including abortion care and type of health care service providers that are available at these institutional health care facilities.

VII. Access to other facilities: This looks into access to facilities such as, postal services, telephone services, fair price shop, bank, weekly market, and pharmacy.

VIII. NGO Interventions: This is to know if there are any other groups active in the area, period for which they have been active in the village or areas and nature of their activities. It also seeks information about the local mandals, both women's and youth's and nature of their activities.

IX. Major events in the area: This is to record the major village events, both annual (festivals/fairs/birth anniversaries round the year) and historical (epidemics; natural calamities). These will be used as reference points while interacting with respondents to help them place their life events more accurately in a chronological sequence along calender years.

X. Source of information and observation: The area (rural/urban) profile recorder, towards the end, records the sources of information for filling in this particular interview schedule.

Special attention required during pre-testing
Area (rural/urban) profile recorder

Section IV: Access to basic amenities

- What type of toilet facility does the majority (more than 50%) of the population have access to in the village/area? (mutually exclusive)
- What about the rest of the population? (multiple choice)

(similar questions needs to be examined whether they work as per our imagination and expectations).

Section VII: Access to health care services: Institutional health care facilities

- What are the services provided?

  It is an open ended question. PI see the pattern of responses – the extent of to which respondents can spell them out, the extent to which there is clarity in what they are saying.

  If it turns out to be vague, it is preferable to give them the cards with specific services listed on them. It would be easier to classify as respondents are offered a structured responses/alternatives.

References

Sinha R. K., and Kanitkar, T. (1994). "Acceptance of family planning and linkages with development variables: Evidence from an 80-village.". *The Journal of Family Welfare*, 40(2), pp: 18-25.

(Contd...
the protocol titled – Area Profile Recorder --->)

ANNEXURE -II

Confidential: For research only
PSU NO: _____
SCHEDULE NO: _____

PREGNANCY OUTCOME: A COMMUNITY BASED STUDY

A household survey undertaken by
Centre for Enquiry into Health and Allied Themes (CEHAT), Pune.

(AREA PROFILE RECORDER)

VISIT DETAILS	
Date (started on):	
Date (Completed on):	
Name of the team leader:	Signature and date:
Checked by (Name):	Signature and date:

I. IDENTIFICATION OF THE STUDY AREA	
101. Name of the village/town:	Village/Town code:
102. Name of the Taluka /tahsil:	Taluka code:
103. Name of the district	District code:
104. Name of region	Region code:
105. Municipal Corporation Survey no (please record actual survey number):	NA(in case of rural area).....9
106. Ward no (please record the actual number):	NA(in case of rural area).....9
107. Name of the area (applicable in case of urban PSUs only):	PSU code:
(APPLICABLE ONLY FOR SLUM AREA)	
108. Name of the slum:	
109. Status of the slum (recognized/unrecognized):	Recognised:.....1 Unrecognised: .....2 NA(in case of nonslum area)..... 9
110. Year of establishment of the slum (pl. record the actual year):	NA (in case of nonslum area).....9

II. AREA, POPULATION & COMMUNITY COMPOSITION

NO.	INFORMATION ABOUT	RESPONSES	SOURCE OF INFORMATION (Type of record / office)	YEAR OF INFORMATION (Please ask and record the year)
201	Area of the village/ward/slum (in Hectares):			
202	Current Population of the village/ward/slum:			
203	Total number of households in the village/ward/slum:			
204	Number of Below Poverty Level (BPL) households:			

NO.	INFORMATION ABOUT	RESPONSES
205	Dominant religious groups/communities[1]:	1 2 NA.....9
206	Co-dominant religious groups/communities[2]:	1 3 2 4 NA.....9
207	Other religion:	1 3 2 4 NA.....9
208	Dominant caste groups[1]:	1 2 NA.....9
209	Co-dominant caste groups[2]:	1 3 2 4 NA.....9
210	Other caste:	1 3 2 4 NA.....9
211	Dominant scheduled tribe [1]:	1 2 NA.....9
212	Co-dominant scheduled tribe [2]:	1 2 NA.....9
213	Other scheduled tribe:	1 3 2 4 NA.....9

[1] Dominant religion/dominant caste/ dominant scheduled tribe: Those religion /caste / tribe which have a population of more than 50% in that PSU.

[2] Co-dominant religion/dominant caste/ dominant scheduled tribe: Those religion /caste / tribe which have a population of less than 50% in that PSU.

III. ACCESS: ROADS AND TRANSPORT FACILITIES

NO.	INFORMATION ABOUT	RESPONSES
301.	Distance of the village/area from the nearest town:	Name of the town: Distance in Kms: NA*(in case of urban PSUs)*..... 9
302.	Distance of the village/ward/slum from the nearest all weather road: ***(If the village/ward/slum itself is connected by all weather road, record '0' km.)***	_____ Kms
303.	Distance of the village from the nearest bus stand/stop (state transport)	_____ Kms NA*(in case of urban PSUs)*..... 9
304.	Distance of the ward/slum from the nearest bus stand/stop ***(If available in the ward/slum record '0' Km)***	_____ Kms NA*(in case ofrural PSUs)*..... 9
305.	Distance of the village/ward/slum from the nearest Railway station: ***(if available in the village/ward/slum record '0' Km)***	_____ Kms
306.	Distance of the village/ward/slum from the nearest private transport stand/stop (*Tempo, Six sitter, Jeep etc.):* ***(If available in the village/ward/slum record '0' Km)***	_____ Kms

IV. ACCESS TO BASIC AMENITIES
(Electrification, drinking water and sanitation)

NO.	INFORMATION ABOUT	RESPONSES
401.	Is the village/ward/slum electrified?	Yes ..... 1 No 2
402.	For the majority of the population what is the main source of drinking water in this village/ward/slum: *(Record all sources)*	Pipe line ..... A Bore well .....B Well.....C River/pond/Lake.....D Other (specify) _____E
403.	Whether drinking water is available round the year?	Yes .....1 (***Go to 406)*** No 2
404.	During last 5 years, how many months in a year on average there is shortage of water in this area?	Months ☐ Days ☐
405.	During water shortage, is the water supply to the village/ward/slum private/public? *(Record all sources)*	Public supply .....A Private supply .....B Other (specify) _____C
406.	For the majority of the population what type of drainage facility do you have in the village/ward/slum? *(Record all sources)*	Underground drainage .....A Open drainage .....B No facility C
407.	For the majority of the population what type of toilet facility do you have in the village/ward/slum?	Open .....1 Community ..... 2 Individual 3

V. ACCESS TO EDUCATION FACILITIES

NO.	INFORMATION ABOUT		RESPONSES
	Facilities	**Is the facility available in the village/ward** ***(If not available in the village/ward record distance from the area in kms) If facility available record '0' km)***	**Which transport is generally used?** *(If the facility is available within the PSU, record NA)*
501	Primary School (1^{st} to 4^{th} standard)	_____ Kms	NA.....9
502	Middle school (5^{th} to 7^{th} standard)	_____ Kms	NA.....9
503	Secondary school (8^{th} to 10^{th} standard)	_____ Kms	NA.....9
504	Higher sec. school (11^{th} to 12^{h} standard)	_____ Kms	NA.....9
505	College / University	_____ Kms	NA.....9

VI. ACCESS TO HEALTH CARE SERVICES: INSTITUTIONAL/NONINSTITUTIONAL

A. Health care providers

	Type of health care service providers	Whether available in the village/ward/	Numbers present
601	Traditional healers *(Bhagats etc who treat in a traditional way)*	Yes ..... 1 No 2	
602	*Zola Chhap* (the ones who are mobile)	Yes ..... 1 No 2	
603	Local abortionist	Yes ..... 1 No 2	
604	Traditional birth attendants	Yes ..... 1 No 2	
605	Anganwadi Worker	Yes ..... 1 No 2	
606	Community health guide/worker (CHW)	Yes ..... 1 No ..... 2 NA (in case of urban PSU)...9	

	Type of health care service providers	Does he/she regularly come to the village?
607	Multipurpose worker (MPW)	Yes ..... 1 No ..... 2 NA (in case of urban PSU)...9
608	Auxiliary Nurse Midwife (ANM)	Yes ..... 1 No ..... 2 NA (in case of urban PSU)...9

VI. ACCESS TO HEALTH CARE SERVICES: INSTITUTIONAL/NONINSTITUTIONAL

B. Health care institutions

No.	Type of health care facility	Whether available in the village/ward/ (If not available, record distance from the nearest facility **(in kms)** Please record '0' km if the facility is available in the area itself)	Which are the services provided? (Pl *record as stated)*	Whether provides abortion care?	Type of service providers (ANMs, GP, Gynaec, surgeon, paediatrician, others)	Does any of these govt doctors are engaged? Who?
609	Govt. Mobile Health care unit	_____Km NA.....9		Yes ..... 1 NA.....9		
610	Sub-centre	_____Km NA.....9		Yes ..... 1 NA.....9		
611	Primary Health Centre *	_____Km NA.....9		Yes ..... 1 No 2		
612	Rural/ Cottage Hospital* /Com Health Centre	_____Km NA.....9		Yes ..... 1 No 2		

(cont..)

* Non applicable for urban PSUs

(cont..)

613	Health posts**	_____Km		Yes ..... 1 No ..... 2 NA.....9		
614	District level /tertiary hospital** *(with in-patient care)*	_____Km		Yes ..... 1 No.....2		
615	Municipal/ Corporation hospital	_____Km				
616	Private Clinic/ Dispensary *(Only outpatient)*	_____Km		Yes ..... 1 No.....2		NA.....9
617	Private Hospital *(inadmission)*	_____Km		Yes ..... 1 No.....2		NA.....9
618	Health care facility of NGO	_____Km		Yes ..... 1 No.....2		NA.....9
619	Others health care facility (specify)	_____Km		Yes ..... 1 No.....2		NA.....9

** NA in case of rural PSUs

NO.	INFORMATION ABOUT	RESPONSE
620.	Does the village/ward/slum have X-ray, blood and urine test facilities?	Yes .....1 ▶ *Go to 622* No 2
621	If the above facilities are not available, then record the nearest such type of facility?	_____ km Village/town _____
622	From where does the people from this PSU access sonography facility?	Village/town _____ Tal. name _____ District name _____ Name of the provider _____
623	Does the public health care facility based in the village/ward or/the nearest one has an ambulance/ vehicle?	Yes ..... 1 No ..... 2 ▶ *Go to 701*
624	Is the facility by and large made available to people when required?	Yes ..... 1 No 2

C. MINIMUM PUBLIC HEALTH CARE FACILITIES AVAILABLE

NO.	.PUBLIC HEALTH CARE SERVICES	RESPONSE
625	Does the dai in your village use safe delivery kit during delivery?	Yes .....1 No 2
626	In your village, were tetanus inj. and iron folic tablets provided during delivery?	Inadequate/ no service at all ....1 Irregular service available .....2 Regular, adequately available ..3
627	Does the sub-centre have adequate and daily supply of basic drugs?	Yes .....1 No 2
628	Does the basic drugs available at the primary health care centre provided free of cost?	All drugs available.....1 Few drugs had to be bought.....2 Most drugs had to be bought ...3
629	Is doctor available 24 hours for all the days in the primary health care centre?	Yes .....1 No 2
630	Does the primary health care centre have normal delivery facility?	Yes .....1 No 2

VII. ACCESS TO OTHER FACILITIES

NO.	INFORMATION ABOUT	RESPONSE
	Facilities	**Whether available in the village/ward/ slum?**
701.	Pharmacy/Medical shop	Yes .....1 No 2
702.	Fair price shop	Yes .....1 No 2
703.	Post office	Yes .....1 No 2
704.	Telephone	Yes .....1 No 2
705.	Bank	Yes .....1 No 2
706.	Weekly Market	Yes .....1 No 2

VIII. NON GOVERNMENT ORGANISATION (NGO) AND THEIR ACTIVITIES

801. Is there any NGO active in the area: Yes 1
No ..... 2 *(Go to 807)*

No.	Name of the NGO	Is it within the village/ ward/ slum?	For how many years are they working here?	What kind of services / interventions are they providing/making in the area?
802	**803**	**804**	**805**	**806**
		Yes .....1 No 2	completed year of work	
		Yes .....1 No 2	_____ completed year of work	
		Yes .....1 No 2	_____ completed year of work	
		Yes .....1 No 2	_____ completed year of work	

COMMUNITY LEVEL MANDALS

	Mandals	Whether any of the following Mandals are active in the village?	What kind of activities were organized in the last year?
807.	Mahila Mandal	Yes .....1 No..... 2 *(Go to808)*	
808.	Bhishi Mandal	Yes .....1 No..... 2 *(Go to809)*	
809.	Bhajan Mandal	Yes .....1 No..... 2 *(Go to810)*	
810.	Others (specify)	Yes .....1 No .....2 *(Go to901)*	

IX. MAJOR EVENTS IN THE AREA

Yearly festivals and fairs:

901. Major village/community festivals or fairs: (Record the month in which it is celebrated)

Name of the community festivals /jayantis	Which month of the year?
a)	
b)	
c)	
d)	
e)	

Epidemics:

902. Major epidemics & diseases in the village/community/area:

Epidemic or disease	Record month and year
a)	
b)	
c)	
d)	

Natural calamity:

	Whether the village/community had to face any of the following calamities?		Which year: (Pl r*ecord the year*)
903.	a) Flood	Yes .....1 No..... 2 (Go to b)	
	b) Drought (wet)	Yes .....1 No..... 2 (Go to c) NA.....9*	
	c) Drought (dry)	Yes .....1 No..... 2 (Go to d)	
	d) Earth Quake	Yes .....1 No..... 2 (Go to e)	
	e) Others (specify)	Yes .....1 No .....2 (Go to 1001)	

Not applicable in case of urban PSU

X. SOURCE OF INFORMATION AND OBSERVATION

1001. Any other comment/observation by the researchers/investigators about the PSU/area:

_____

_____

_____

1.1002. Major sources for obtaining the information:
(*Record all the sources contacted*)

Talathi .....A
Sarpanch .....B
Women Panchayat members C
Men Panchayat members.....D
Village leader (local) .....E
Gram sevak.....F
School teacher.....G
Health personnel.....H
Village level worker I
Corporator .....J
Local informal leader ..... K
Person in the ward office.....L
Others (pl specify) .....M

ANNEXURE-III

HOUSEHOLD INTERVIEW SCHEDULE (HHD-IS)

Purpose

These data is expected to serve the following purposes:

(a) To identify the eligible women for individual interview – the core of the data collection
(b) To have the well-defined base population, the denominator, needed for computation of abortion rates and other related demographic rates, if required.
(c) To provide us values/scores/indices for the set of explanatory variables – independent and/or intermediate.

This entails,

(a) To obtain detailed information about family/household composition in terms of household members – listing, basic demographic data such as sex, age and marital status.
(b) To obtain data on variables/ indicators constituting socio-economic profile; educational attainment of the family members.

Most of the large-scale community-based surveys, census in various countries; initiatives implemented globally with common core methodologies, such as, WFS, DHS series, NFHS series included household interview schedule in the set of data collection tools and as part of the methodology with similar objectives.

Major heads for data collection

Visit details: This is for the administrative purpose to keep the track of how many visits made and time required to complete a particular interview. This also records the status of the interview – whether the dwelling was located, whether it was inhabited, if the respondents could be found, whether the interview could be completed or there was refusal to participate in the study.

I. Identification of the field and the household location: These are the identification details of the area under study and the sampled household. It includes village or ward, taluka and district identification; identification details of urban wards (areas name, ward and/or survey number) and the PSU number for the area given to it for this specific research by the researchers. Investigators will record them.

Further, it records household number from the house listing (done by the team as part of this project), address of the household with stated (by the respondent) and observed (by the investigator) landmarks.

It records, relationship of the respondent (in case s/he is not head of the household and will be only when head of the household is not available) with the head of the household; and number of

years (in completed years and months) the family is staying in the village/area, primarily to know length of the stay of the family in the area.

II. Household members: Profile. It is to know the demographic composition of the family of the women who would be interviewed subsequently. Members of the household would constitute the based population for the study.

Information on age, sex, relationship to head of the household, current marital status and education, if married more than once will be collected. These data will be collected for all the persons – 'usual resident'[1] and visitors (including married daughters visiting parents' place).

We are taking the *'de facto'* base population, by considering visitors and guests as part of the sampled household. One prime reason is that it will help us to save the loss of sample, especially of women, if they are away from their home of residence. Overall, women's not being their at their usual residence would get compensated by including women in other sampled households who are 'visitors'[2]. Our field-work phase (which we anticipate to begin from Aug, '01) coincides with the annual peak season of festivals in Maharashtra. We, therefore, anticipate considerable number of women travelling to their natal homes on various occasions. *De facto* base population would take care of the sample loss to some extent by including visitors in the sample.

Once, we decide to include visitors in the base population, it is necessary to ensure that all visitors are included to be methodologically sound. We, therefore, have three probes to ensure that all those are covered constituting *'de facto'* base population. They are about (a) children and infants, (b) domestic servants, friends, and lodgers who 'usually live' and (c) guests or visitors temporarily in the household. This, we expect, would ensure that we know exactly the nature of 'base population', the denominator, without any ambiguity while arriving at various estimates.

This also includes a question to record information about multiple marriages, if any of the family members, including women, have had. The rationale to pose this question is as follows. We would require information about women's multiple marriages for two purposes. One, to arrive at more accurate age when women are not in position to say accurate date of birth. Two, to ensure that pregnancy history of the woman is traced through all marriages. Given our culture, we feel, it would be less sensitive to include such a direct question (as many other surveys have done it) on this in woman's interview schedule (WOM-IS). It is also likely that women feel offended when such a question is posed to them. Thus, inclusion of this question in this section of the HHD-IS is a strategic one to be culture and women sensitive. In this attempt, we would obtain information of men's multiple marriages, which is not necessarily required.

At aggregate level, the data obtained from this section would help us to lay down the profile of the base population from sampled households in terms of family size, age, sex, educational attainments, marital status.

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[1] Please see Annexure VI: Concepts and Definitions.
[2] Please see Annexure VI: Concepts and Definitions.

The second part of this section seeks information on general health care seeking behaviour of the family and their choice of provider. This information would give us the context in which woman seek treatment for delivery and abortion needs, which is collected in the woman schedule.

III. Access to basic amenities: This is know whether the household has access to basic amenities, such as, drinking water, electricity, type of fuel for cooking, bathroom and toilet facilities.

The additional questions on availability of water (302 to 306 and 309 to 312) are to get insights into the fact as to who (men or women) bears the burden of additional work load in case access to basic amenities is difficult.

The data obtained in this section would constitute one of the sub-indices of the socio-economic status of the household.

IV. Staple food grains: Sources and adequacy. This is to know whether the family/household has access to adequate food throughout the year. It collects information on the staple food, its source and adequacy round the year. This also would constitute one of the sub-indices of socio-economic status of the household.

V. Asset ownership and other sources of family income: This is to arrive at a gross indicator contributing to the economic status of households. It collects data on assets, such as, house ownership and land, irrigated land, livestock. It also obtains information about possession of household appliances and vehicles along with the details if they are put to use for income generation, and if does, whether the family can sustain itself in absence of this income. These data would contribute to form one of the sub-indices of socio-economic status of the household.

VI. Occupation and income of the individual family members in the household: This section records main occupation and subsidiary occupation[3] of the members above age 6 years; income from these occupations; self employment/business; and income from pensions, if any. This would constitute one of the sub-indices, which would contribute to determining economic status of the households.

We would be using the classification used by NSS for various terms, such as, main occupation, categories/types of employment. We would be doing some more work on formulation of this section, primarily to see as what is required, what works (based on others' experiences) better in the field situation in the survey whose focus is not study of 'employment' or 'socio-economic status'. However, we need to have some broad but sound indicator to talk about socio-economic profile of the population under study. It constitutes one of the important explanatory variables while studying cost of health/abortion care.

VII. Religion and caste: This is to record religion and caste/tribe of the head of the household.

---

[3] Please see Annexure VI: Concepts and Definitions.

Special attention required during pre-testing

Household interview schedule (HHD-IS)

1. **Section II: Household members: Profile**
   - 208: Could you please tell us if anybody from the list has married more than once? If yes, pl tell who they are and number of marriages s/he has has, including the current one.

2. **Section VI: Occupation**
   - Pre-testing in both rural and urban (including slums) will help clarify whether to retain this as it is or drop it completely or change it.

(Contd...
the protocol titled – Household Interview Schedule --->)

ANNEXURE - III

Confidential: For research only
Schedule no: _____
PSU No: _____

PREGNANCY OUTCOME: A COMMUNITY BASED STUDY
A household survey undertaken by
Centre for Enquiry into Health and Allied Themes (CEHAT), Pune.

HOUSEHOLD INTERVIEW SCHEDULE

Interview: visit/s made & status					
Visit details	1st Visit	2nd Visit	3rd Visit	Total visits/time	
Date				Visits made	
Time Required				Time spent	

Status of the interview conducted:	
Interview completed/uncompleted/other:	
Completed	1
Could not meet appropriate respondents after three visits	2
Refused to participate in the study (Record reason)	3
Others (Specify)	4
Interviewer's name:	**Signature & date:**
Checked in the field by (Name):	Signature & date:

TOTAL ELIGIBLE WOMEN (ever married women aged 15 to 60)_____
(to be calculated at the end from 'Household members: Profile' chart)
TOTAL ELIGIBLE WOMEN (ever married women aged 15 to 55)_____
(to be calculated at the end from 'Women Schedule: Profile' chart)

1. Identification of the field location		
101	Household No: (From the House Listing)	
102	Name of village/town:	Village/Town code:
103	Name of taluka:	Taluka code:
104	Name of district:	District code:
105	Name of Region	Region code:
106	Corporation or Municipal Survey No:	NA (in case of rural area)
107	PSU No.:	

Other details

108	Address of the household:	
109	Could you please tell us any landmark to locate your household? ***(For investigator: Pl also record the landmarks that are observed/noticed by you)***	
110	What is your name? ***(Respondent):***	
111	What is your relationship with the head of the household?	
112	How many years your family is living in this village/slum? *(record in completed years /months)* *(Less than 1 year record in months)*	_____ Years _____ Months

2A. Household Members: Profile

(Note: list the name of household members in column 202. Then ask the the questions upto column no. 207. Ask the question 208 to all members)

Sr. No	Once you have listed the name of the household numbers, before asking their details probe by asking questions No 209 to211 (Please give the names of the persons who usually live in your household, starting with the head of the household.[1])	Sex	Relationship to the head of household *	Age (in completed years)**		Applicable for persons aged 6 years and more			
						Current Marital status ***	Number of years of schooling ***(Record completed years of schooling. For no schooling record '0' years)*** If there is a degree, record a degree		Could you please tell us if anybody from the list has married more than once? *(If 'Yes')* Please tell us who they are and number of marriages, including the current one.
201	202	203	204	205		206	207		208
				Eligible Women					
				Before	After		Standard /degree	years	
1)		M / F						.....yrs	
2)		M / F						.....yrs	
3)		M / F						.....yrs	
4)		M / F						.....yrs	
5)		M / F						.....yrs	
6)		M / F						.....yrs	
7)		M / F						.....yrs	
8)		M / F						.....yrs	
9)		M / F						.....yrs	
10)	Guests:	M / F						.....yrs	
11)	Guests:	M / F						.....yrs	
12)	Guests:	M / F						.....yrs	
13)	Guests:	M / F						.....yrs	
14)	Guests:	M / F						.....yrs	
15)	Guests:	M / F						.....yrs	

(contd...)

(.....contd)

Note: Just to make sure that, I have a complete listing:

209	Are there any persons, such as, small children or infants that we have not listed	Yes ☐ →	Enter each in the above table	No	☐
210	In addition, are there any other people who may not be members of your family, such as domestic servants, lodgers, or friends who usually live here?	Yes ☐ →	Enter each in the above table	No	☐
211	Do you have any guests or temporary visitors staying here, or anyone else, who stayed here last night	Yes ☐ →	Enter each in the above table	No	☐

* Codes for Q. 204:		**Codes For Q.205: Age	***Codes For Q. 206: Marital status
Relationship to the head of the household:			
01- Head	08- Brother or sister	0- Age less than one year	1- Married
02- Wife or Husband	09- Brothers-in-law /sisters-in-law	95- Age 95 years or more	2- Widowed
03- Son or Daughter	10- sisters-in-law		3- Divorced
04- Son -in-law or Daughter-in-law	11- Nieces/nephews		4- Separated / Deserted
05- Grandchild	12- Other relatives		5- Unmarried
06- Parent	13- Adopted/fostered child		
07- Father-in-law/Mother-in-law	14 -Not related		
15-parents			

2 B. Health sicking behaviour of the household

NO	QUESTIONS	CODING CATEGORIES	SKIP TO
212	Generally where do you go when anyone in your family falls sick?	Home remedy.....A Local untrained health care provider.....B Government health care facility.....C Private ... .D Other (*specify*) _____ E	
213	Why do you go here only for treatment?		
214	Did anyone in your household fell sick in the last one month?	Yes.....1 No.....2 →	*Skip to 301*
215	If yes, what happened?		
216	Where did you take him/her for treatment?	Home remedy.....A Local untrained health care provider.....B Government health care facility.....C Private ... .D Other *(specify)* _____ E	
217	Why did you take there only for treatment?		

3. ACCESS TO BASIC AMENITIES

(Drinking water, source of lighting, fuel and sanitation facilities)

301	Usually from where do you bring drinking water?	Tap ... .1 Well.....2 Tubewell/Borewell.....3 River/Pond/Lake.....4 Other (*specify*) _____ 5	
302	Does your household own this tap/Well/tubewell?	Yes.....1 No.....2	
303	At what distance is the drinking water source from your house? ***(write unit of the distance stated-furlang, mile, k.m. etc.)***		***ask 307*** *If there is a tap in house*
304	How much time is required to make one trip? ***(including waiting time)***		
305.	How many trips are generally required for daily water requirement of your household?	.....trip/trips	
306.	Who fetches water generally?	Women in the household.....1 Men.....2 Both men & women.....3 Servants.....4 Other (*specify*) _____ 5	
307.	Do you have electricity at your house?	Yes .....1 No 2	

NO	QUESTIONS	CODING CATEGORIES	SKIP TO
308.	What type of fuel does your household mainly use for cooking?	Wood .....1 Crop Residual .....2 Kerosene .....3 Cow dung cakes .....4 Coal/coke/lignite .....5 Charcoal .....6 Electricity .....7 Liquid petroleum Gas.....8 BioGas.....9 Other (*specify*)_____10	→ *skip to 313*
309	How much distance to you have to travel to get wood? ***(write unit of the distance stated: furlang, mile, k.m. etc.))***		
310	How much time is required to make one trip?		
311	How many trips are generally required for daily fuel wood requirementent of your household?	.....trip/trips	
312	Who fetches wood generally? (***State relationship to the woman***)	Women in the household.....1 Men.....2 Both men & women.....3 Servants.....4 Other (*specify*)_____5	
313	How many rooms do you use including kitchen?		
314	Do you have bathroom facility inside your house?	No bathroom .....1 Outside the house.... .....2 Inside the house 3	
315	What kind of toilet facility does your household have?	Open/No facility.....1 Community facility .....2 Own Pit toilet.....3 Own Flush toilet 4	

4. STAPLE FOOD GRAINS : SOURCES AND ADEQUACY

401	How do you meet the needs of staple grains for consumption of your own family? ***(For investigator: pl record multiple sources, if any).***						
	Grains	**Own farm**	**Market**	**Ration(PDS)**	**Credit/ Loan**	**Not consumed**	**Others (specify)**
	a. Rice						
	b. Wheat						
	c. Jowar/Bajra						
	d. Bajra						
	e. Nachani						
	f. Cereals						

NO	QUESTIONS	CODING CATEGORIES	SKIP TO
402	How many times members of your family usually eat in a day?	.....times	
403	How many times usually does the men in your household have tiffin?	.....times	
404	How many times usually does the women in your household have tiffin?	.....times	
405	Do members in your family get enough food to eat throughout the year?	Yes..... 1 → *Skip to 501* No 2	
406	How many day/month in a year do you have food deficiency?	_____days/months	

5. ASSET OWNERSHIP AND OTHER SOURCES OF FAMILY INCOME

Housing/abode: Ownership and type

NO	QUESTIONS	CODING CATEGORIES	SKIP TO
501	Do you own this house?	Yes ..... 1 No 2	
502	Does your household own any other house?	Yes ..... 1 No 2	
	Type of house:		
503	Roof - ***(To be observed and written)***	Thatched/cloth/Sack ..... A Tiled/Tins ..... B Cement ..... C Others *(specify)* ..... D	
504	Wall - ***(To be observed and written)***	Thatched/cloth/Sack ..... A Tiled/Tins ..... B Cement ..... C Others *(specify)* ..... D	
505	Floor - ***(To be observed and written)***	Mud/cowdung ..... A Cement/Koba..... B Shahabadi tiles.....C Polished tiles.....D Wood ..... E Others *(specify)* ..... F	

Agricultural land and livestock: Ownership and type

506	Does your household own any agricultural land?	Yes, household ownership .....A Yes, joint household .....B No.....C → *skip to 509*		
507	How much land does your family own?	household ownership ..... (Size and unit) N.A 9	joint household ..... (Size and unit) N.A 9	
508	Out of this how much is irrigated?	household ownership ..... (Size and unit) N.A 9	joint household ..... (Size and unit) N.A 9	
509	Does your family own any livestock?	Yes .....1 No.....2 → *skip to 513*		

NO	QUESTIONS	CODING CATEGORIES	SKIP TO
510	Does your family earn any income from the live-stock?	Yes .....1 No.....2 → *skip to 513*	
511	What is the monthly income of the household from the livestock?	Rs. _____/- month or Rs. _____/- month	
512	Can your household run without the income you get from livestock?	Yes .....1 No.....2	

Other Assets

513	Does your household own any of the following?			
	Asset	Yes	No	
	1. Wooden shelf (in kitchen)	1	2	
	2. Fan	1	2	
	3. Radio/Transistor	1	2	
	4. Furniture (bed, chairs, table)	1	2	
	5. Mattress	1	2	
	6. Almirah/Cupboard	1	2	
	7. Bed/Divan/Cot	1	2	
	8. Television	1	2	
	9. Telephone	1	2	
	10. Refrigerator	1	2	
	11. Sewing machine	1	2	
	12. Bullock cart	1	2	
	13. Water pump	1	2	
	14. Bicycle	1	2	
	15. Motorcycle/moped/scooter	1	2	
	16. Cars/Jeep	1	2	
	17. Tractor	1	2	
	18. Thrasher	1	2	
	19. Other *(specify)*	1	2	

514	Some of these assets, such as sewing machine, bullock cart, cars/jeep, tractor, thrasher, are income generating. Does your household earn anything from any of the above assets?	Yes .....1 No .....2 N A _____9 → *Skip to 517*	
515	What is the monthly income of the household from these assets?	Rs. _____/- month Or Rs. _____/- year _____assets	
516	Can your household run without the income you get from these assets?	Yes .....1 No 2	
517	Which type of kitchenware this household mostly uses?	Clay.....1 Aluminium.....2 Cast iron.....3 Brass .....4 Stainless Steel.....5 Glass.....6 Other(specify).....7	

6. OCCUPATION AND INCOME OF THE INDIVIDUAL FAMILY MEMBERS IN THE HOSUEHOLD

(excluding income from agriculture and animal rearing)

Now could you please tell us about the occupation and income of each of the family members other than the ones we discussed earlier, such as income from land, livestock, and household assets.

(Note: Check 202 and those who are more than 6 years old ask the following questions. ***In case, a particular member is not working, record 'NA'. Investigators have to cross check with household member profile to ensure that all members are covered.***

Sr. No	Sr. no as recorded in coulumn no. 202	Is (name) engaged in paid work during the last 1 year?	Main occupation*	Monthly salary /wage from main occupation(s) (No. of working days in the month x wage)	Subsidiary ** occupation	Monthly income / wage from Subsidiary occupation (s) (No. of working days in the month x wage)	Pension	*TO BE CALCULATED* (Total income by individual: main occupation, subsidiary occupation, pension) 605+607+608
601	602	603	604	605	606	607	608	609 A
1		Yes ... 1 No .....2 → *(Go to 606)*						
2		Yes ... 1 No .....2 → *(Go to 606)*						
3		Yes ... 1 No .....2 → *(Go to 606)*						
4		Yes ... 1 No .....2 → *(Go to 606)*						
5		Yes ... 1 No .....2 → *(Go to 606)*						
6		Yes ... 1 No .....2 → *(Go to 606)*						
7		Yes ... 1 No .....2 → *(Go to 606)*						
8		Yes ... 1 No .....2 → *(Go to 606)*						
9		Yes ... 1 No .....2 → *(Go to 606)*						
10		Yes ... 1 No .....2 → *(Go to 606)*						
11		Yes ... 1 No .....2 → *(Go to 606)*						
						Total Income (per month/years)		609 B:

* Main occupation: When a person has worked in a particular occupation for atleast 6 months in the year preceding the survey

** Subsidiary occupation: When a person has worked in a particular occupation for less than 6 months in the year preceding the survey

NO	QUESTIONS	CODING CATEGORIES	SKIP TO
610	Are there any other member who spent money?	Yes ..... 1 No ..... .2 ⟶ *skip to 615*	

Sr. No.	Name	Relationship to the head of household	Income
611	612	613	614 A
1			.....Rs.
2			.....Rs.
3			.....Rs.
4			.....Rs.
		Total Income (per month/year)	614B:

615	Are there any other sources of income for your family? For ex: another house owned by you is rented out, STD booth, VCR, Computer, Ricksha or any such thing?	Yes ..... 1 No ..... .2 ⟶ *skip to 701*
616	What is the monthly income from this/these source/s? (***Record all source of income stated***)	Source1_____Rs./- per month/yr. Source2_____Rs./- per month/yr. Source3_____Rs./- per month/yr. Source4_____Rs./- per month/yr.
	Total	_____Rs./- per month/yr.

617	***TOTAL ANNUAL INCOME OF THE HOUSEHOLD: (511+515+609B+614B+616)***	Rs./- per month/yr

7. RELIGION AND CASTE

701	What is your religion (Name - head of the household)?	Hindu.....1 Muslim .....2 Sikh .....3 Buddhist/Neo Buddhist.....4 Jain .....5 Christian .....6 No religion.....7 Others (*specify*) 8	
702	What is your caste/tribes (Name - head of the household)? (pl record the stated caste/tribe)	Caste *(Specify)*.....1 Tribe *(Specify)*.....2 No caste.....3	

ANNEXURE-IV

Confidential only for research:
Schedule No.: .....
PSU NO.: .....

PREGNANCY OUTCOME: A COMMUNITY BASED STUDY

A household survey undertaken by

Center for Enquiry in Health and Allied Themes (CEHAT), Pune

WOMAN'S INTERVIEW SCHEDULE: OBSTETRIC HISTORY

Interview: visit/s made and status							
Visit details	1st Visit	2nd Visit	3rd Visit	4th Visit	5th Visit	Total visits/time	
Date						Total Visits made	
Time required for interview						Total Time spent	
Name of the women respondent:							
Status of the interview conducted: (completed/incomplete/other)							
Interview Completed 1							
Interview incomplete 2							
Cause of incomplete interview:							
Could not meet appropriate respondents after five visits 3							
Interview Refuse 4							
Cause of refused (***Specify***):							

Interviewer's name:	Signature & date:
Checked in the field by (Name):	Signature & date:

1. Identification of the field location

101	Household No: (From the House Listing)	
102	Name of village/town:	Village/Town code:
103	Name of taluka:	Taluka code:
104	Name of district:	District code:
105	Name of Region:	Region code:
106	Corporation or Municipal Survey No:	NA (in case of rural area).....9
107	PSU No.:	

II. PERSONAL INFORMATION

(Religion, caste, age, marital status, age at marriage)

NO	QUESTIONS	CODING CATEGORIES	SKIP TO
201	What is your name? ***(write full name)***		
202	Which religion do you belong to? Ex: Hindu/Muslim/Shikh	Hindu.....1 Muslim.....2 Shikh.....3 Christhan.....4 Baudh/Navbaudh.....5 Jain.....6 Don't follow any religion.....7 Other (specify)_____8	
203	Which caste do you belong to?	Don't believe in any caste.....7777 Have no caste.....8888	
204	***(write from the household information. In case he codes of the marital status is 1/2/3 and more details are required; do necessary probing)*** Current marital status?	Married and cohabit .....1 Married but husband stay .....2 Married but gauna not performed.....3 Widowed.....4 Divorced .....5 Separated/Deserted.....6	
205	Beside household work are you engaged many other work?		
206	***(If not gone to school write '0' years. If degree staus, write degree)*** Can you tell us your educational attainment?	Completed years ☐ Degree_____	

Section A

207	Can you please tell me your birth date?	Day/Month/Year ☐☐☐ Can't say: .....98 → ***skip to 207 in 'Section B'***	
208	***(In case of first marriage)*** Can you tell your date of marriage? (In case of second marriage) "While filling up the household schedule..... we got information if anybody in the family is married more than once. Accordingly, here we are referring to your first marriage". Can you tell me your date of marriage? Or At what age did you get married?	Day/Month/Year ☐☐☐ → ***in case of first marriage skip to 210*** Year ☐	
209	What is your date of second marriage? Or At what age did you get married for the second time?	Day/Month/Year ☐☐☐ Year ☐	

contd.....

..... contd.

210	***Don't ask this question. Calculate it from 208 or 209*** ***In case of first marriage.....*** Calculate years of marriage ***(If less than one year record in months)*** ***In case of more than one marriage*** calculate current years of marriage ***(If less than one year record in months)***	month ☐ → *In case of first marriage and less than nine months skip to 217.* Years ☐ Month ☐ Years ☐

After completed section A ask question 215

NO	QUESTIONS	CODING CATEGORIES	SKIP TO

Section B

	• ***In case the women is unable to state her age at menarche then consider her age at menarche as 13, and write it in the empty space beside the square/box***		
207	For calculating your present age we would be asking you two questions. At what age did you get your first period?	Completed years ☐ Can't say.....98	
208	Did you attain menarche before marriage?	Yes.....1 No.....2 → *Skip to 210*	
209	***(If less than 1 year record in months, if less than 1 month record in days.)*** How long before marriage did your period start?	days ☐ Months ☐ → *to 211* Years ☐	*Skip*
210	***(If less than 1 year record in months, if less than 1 month record in days.)*** How long after your marriage did your period start?	days ☐ Months ☐ Years ☐	
211	***(In case of single marriage)*** What is your date of marriage? ***(in case of second marriage)*** "While filling up the household schedule..... we got information if anybody in the family is married more than once. Accordingly, here we are referring to your first marriage". What is your date of first marriage?	Day/month/year ☐☐☐ → *In case of single marriage skip to 214* Can't say.....98 → *In case of single marriage skip to 214.*	
212	What is your date of second marriage?	Day/month/year ☐☐☐ → *Skip to 214.* Can't say.....98	
213	***(If less than 1 year record in months)*** How long after your first marriage did you marry for the second time?	Months ☐ Years ☐	

contd.....

Workload and Family /Social support

No. of Ind Abr.	After you had this miscarriage did you go to our natal home (generally within 8 days)? If Yes, for how many days did you go?	Did you get complete rest after you had this miscarriage?	For how many days did you get complete rest?	Who shared your workload (Record all responses stated)	What workload of yours was shared by them? (record all the work stated)	Ask 4,3,6 only if any of her child is less than 10 years, otherwise skip to 739. Who looked after your children? (record all responses stated)
731	732	733	734	735	736	737
1	Yes.....1 _____day No.....2	Yes.....1 To some extent....2 No .....3 → Skip to 739	____ days	Women from in-laws family.....A Women from natal home.....B Other relatives (female).....C Men from in-laws family.....D Friends.....E Other (*Specify*) .....F		Self.....A Women from your in-laws family.....B Women from your natal family.....C Other women relatives.....D Men from your in-laws family.....E Friends.....F Other (*specify*) .....G NA.....Z
2	Yes.....1 _____day No.....2	Yes.....1 To some extent....2 No .....3 → Skip to 739	____ days	Women from in-laws family.....A Women from natal home.....B Other relatives (female).....C Men from in-laws family.....D Friends.....E Other (*Specify*) .....F		Self.....A Women from your in-laws family.....B Women from your natal family.....C Other women relatives.....D Men from your in-laws family.....E Friends.....F Other (*specify*) .....G NA.....Z
3	Yes.....1 _____day No.....2	Yes.....1 To some extent....2 No .....3 → Skip to 739	____ days	Women from in-laws family.....A Women from natal home.....B Other relatives (female).....C Men from in-laws family.....D Friends.....E Other (*Specify*) .....F		Self.....A Women from your in-laws family.....B Women from your natal family.....C Other women relatives.....D Men from your in-laws family.....E Friends.....F Other (*specify*) .....G NA.....Z

contd.....

Note: incase the abortion was done in a health care facility then ask 740 to 746 or otherwise skip to section 8.

		Quality of abortion care: Women's perspective Now we would like to have your opinion about the quality of abortion care that you got.		
No. of Ind Abr	Why would you not like to stay away from household work?	Did the abortion service provider sought consent of your husband while providing abortion care?	What all precautions did the provider tell you to take post-procedure?	Did the provider ask you to make follow-up visit? In case the woman went for a follow-up visit, ask often how many days of her aborted did she go for a follow-up visit.
738	739	740	741	742
1	Help not available.....1 Help available, but I did not feel the need.....2 Other (*specify*) 3	Yes .....1 No.....2 Don't know.....8	Rest .....A No heavy work.....B Sexual abstinence.....C Other (specify)_____D Did not say anything.....E	Yes .....1 _____days No.....2
2	Help not available.....1 Help available, but I did not feel the need.....2 Other (*specify*) 3	Yes .....1 No.....2 Don't know.....8	Rest .....A No heavy work.....B Sexual abstinence.....C Other (specify)_____D Did not say anything.....E	Yes .....1 _____days No.....2
3	Help not available.....1 Help available, but I did not feel the need.....2 Other (*specify*) 3	Yes .....1 No.....2 Don't know.....8	Rest .....A No heavy work.....B Sexual abstinence.....C Other (specify)_____D Did not say anything.....E	Yes .....1 _____days No.....2

ANNEXURE - V

DRAFT LETTER OF INTRODUCTION AND INFORMED CONSENT FORM (to be used during field work)

An explanatory note for members of TAC, IEC and ECG

We have two phases of field work. (which would now run in parallel).

1. **Household listing:** This is optional. In case the census listing is available, we will make use of this data. For the purpose of house listing, we do not think informed consent is required to be sought.
2. **Quantitative Household survey:** We would be interacting with
   - Adult male member of the household to fill the household questionnaire.
   - All the ever married women from reproductive age (15-49 yrs)..

   We would seek informed consent for each one of them separately. We may, depending upon the situation, especially the comfort of women in the household, explain the project to all the eligible respondents together or separately. Everybody's doubts would be clarified. If women are found not to be comfortable with the situation and the group, we would meet them separately. Each one of them would sign independently, a separate informed consent form.

The following draft letter of introduction along with the informed consent form is designed for the purpose of 'quantitative household survey'. It contains, in brief, information about why the household information (from adult men) and pregnancy history of women (from individual eligible women) is being gathered.

The major information heads in this letter of introduction are:

1. Information about the institute, its work and premise on which it is founded.
2. About the current study and its rationale.
3. Significance of their participation in the study.
4. Two types of information/data collection – household questionnaire; and pregnancy history – women's interview schedule in the quantitative household survey
5. About selection of the sample and their inclusion in the study.
6. About their right to deny to participate, to withdraw and to know more about the work, its significance and about the institution.
7. Assurance for confidentiality of the information obtained from them and respecting autonomy (not revealing their identities, unless approved).
8. About the details of all the research team and IEC members to be able to approach them when required. (Will be enclosed later).
9. Informed consent form.

The letter of introduction and informed consent form will be translated in the local language eventually.

LETTER OF INTRODUCTION and INFORMED CONSENT FORM

Dear Shri/Smt ---

Greetings! We are a Research Centre of Anusandhan Trust, a non-profile educational trust. The research centre CEHAT, which in Hindi mean 'health', is working in health and related areas. The various thrust areas that are flourishing in our institution are women's health; health economics; health legislation, ethics, and patients' rights, and law; health and human rights; medical ethics. On each of these themes CEHAT is committed to do Research, Action, Service and Advocacy. 'Right to health care' is the premise on which the work in CEHAT has been built. People's health has been looked at from wider perspective and beyond techo-medical model.

Our team and some other researchers from the institute have been working on women's health issues for last 7 years. The current study is primarily to look into pregnancy outcome and its health consequences for women. It is also to understand the extent to which there is pregnancy wastage and to know the reasons for the same. This, we hope, in the future would facilitate the planning of appropriate intervention strategies to prevent unnecessary pregnancy wastage and untowardly pregnancy outcomes. Such a prevention would contribute to improving women's and children's health.

You may like to know that one in every three conceptions is wasted either because of natural reasons including women's poor health status and other circumstantial factors such as workload and pattern, quality of nutrition or because a conceptions is unwanted for various reasons. Given the fact that health care delivery system is inadequate and provide less than quality care on the one hand and women's inability to access quality services all the time, it is likely that women face negative health consequences. Ill-practices in health care service delivery system force women and people to pay from their pocket for the health care they seek depriving them of their right to health care from public health care facilities. Against this backdrop, your active participation in this research would be of great significance in understanding the issue at hand in a better way.

In this study, firstly, we would require some basic information about your household for the purpose of understanding your socio-cultural background. This would constitute one of the important analytical category for us to examine variations in the patterns of women's health status. This would be collected from one of the adult male members of your family.

Secondly, we would require information from women of age between 15-55 years about their life time conceptions and related information. This has direct relevance to the research problem at hand. This would be collected from individual women belonging to this reproductive age group.

Your household has been included in the sample only because the sampling method that we used for this study has picked you up. The prime concern for us is to have a representative sample so that the findings of the study by and large could be

generalised to the population. Anybody, who is interested to know more about it, is welcome to approach our team members for the same.

We would like to share with you that this phase will be followed by another one involving in-depth interviews of a sub-sample for better understanding of how people choose health care service providers, how much do they have to spend on it etc. We would very much appreciate similar cooperation from you during this subsequent phase.

We would like to explicitly mention here that we believe in respondent's to know more about the project activity and the institution, their right to deny to participate in this study and to withdraw half way through. We deeply respect these rights of yours and hereby assure you that they will not be violated. Neither of the team members of our research project will force you at any point of time to either participate or continue with interview against your wishes. The information gathered from you will be kept confidential and will never be used against you. Your identity as an individual respondent will not ever be revealed unless approved by you. Information gathered from your would constitute part of the aggregated data and will not be presented otherwise which may have potential for revealing your individual identities.

We will bring back to you the findings of the study upon completion of data analysis and writing.

In case you want to know more about us and our work, please feel free to ask our team members about the same.

Please find enclosed the list of researchers and some other key members that you can approach to in case of problems that you face with the way the field team is interacting with you. (will be provided then).

With this communication, may we request you to sign below as part of practicing ethical social science research which states that you are participating in the research only after obtaining thorough knowledge about it.

Thanking you.

The team

Annexure 1: List of the research team members and IEC members (not included at the moment.

I, ---- ---------- has been communicated about the research project titled '----------' by ----------. I am satisfied with clarifications and explanations offered to me by members of the research team working on the above mentioned project. I, hereby, offer my consent to participate in the first phase of the study, that is the quantitative household survey.

Name of the respondent
Signature of the respondent
Date

ANNEXURE VI - CONCEPTS AND DEFINITIONS

(For the reference of the research teams)

Medical science

1. **Abortion :** Abortion is the prevention of pregnancy that has already begun from going to term, from eventuating in childbirth; and abortion may be accomplished through a variety of methods - chemical, herbal, mechanical, surgical. (Petchsky, 1990)

   - Induced abortion: Willful termination of pregnancy. If the pregnancy is terminated through medical or non-medical means before seven months. (Ahmed & Rahman, et al., 1998)
   - Spontaneous abortion: Expulsion from the uterus of the products that is occurring naturally. If the pregnancy ended spontaneously and the pregnancy was less than seven months. (Ahmed & Rahman, et al., 1998)

2. **Abortion procedures** :

   - Surgical procedures: Abortion procedure which involves use of surgical tools to clean the uterus of products of conception.
   - Medical procedures: Abortion procedures where drugs are used for expulsion of conception products.

3. **Abstinence:** Restraining from the use of or indulgence in sex.(Dorland's Medical Dictionary, 1995)
4. **Amniotic sac** - Sac of fluid surrounding the foetus. (OBOS, 1992)
5. **Certainly Induced:** Women said so or evidence of genital trauma or foreign body of health worker or relative said so if women died.
6. **Contraception** – A contraceptive device that physically prevents spermatozoa from entering the endometrial cavity and fallopian tubes. (Dorland's Medical Dictionary, 1995).
7. **Counselling** - Professional advice about a problem (Oxford dictionary)
8. **Curettage** - Scrapping the inside of the uterus with a metal loop, called a *curette*, to loosen and remove tissue. (OBOS,1992)
9. **Dilatation** - Enlarging the cervical opening by stretching it with tapered instruments called *dilators*, or with laminaria. Many medical technicians use the word "dilatation" to mean the same thing. (OBOS, 1992)
10. **Habitual:** Spontaneous abortions occurring in three or more successive pregnancies at about same level of development of fetus (Length of gestation).
11. **Illegal abortion:** Any abortion performed outside the conditions of the MTP act of India. (ICMR, 1989)
12. **Incomplete abortion:** It encompasses both induced and spontaneous abortions.
13. **Inevitable abortion:** A condition in which vaginal bleeding has been profuse and the cervix has become dilated & abortion will inevitably occur.
14. **Length of gestation:** It is usually counted from the first day of the LMP and not from the day of conception (fertilization). (OBOS, 1992)
15. **Live birth:** A pregnancy is classified in having terminated in a live birth if a new born showed any sign of life – breathing, crying or movement. (Ahmed, et al; 1998)
16. **LMP:** Last menstrual period. (OBOS, 1992)
17. **Morbidity:** The condition of being diseased or morbid, the sick rate, the ratio of sick to well persons in a community (Dorland's Medical dictionary, 1995).
18. **Mortality:** The quality of being mortal, death rate, the ratio of actual deaths to expected deaths (Dorland's Medical Dictionary, 1995)
19. **MTP Act:** Medical Termination of Pregnancy Act (1971).

20. **Post partum amenorrhea (PPA):** Often women experience absence of menses for certain period after delivery. It varies from woman to woman. In India, it is around 10-12 months. (Roy and Rao, 19--). This is generally referred to as non-susceptible period for fresh conception. Length of such a period post abortion has less variation and is only about 5 months, consisting of about 3 months of gestation and 2 months of PPA.
21. **Primie:** First pregnancy
22. **Sex determination test**: Test done for determining the sex of the foetus.
23. **Stillbirth:** A pregnancy is classified as stillbirth if a new born showed no signs of life and its duration was seven months or more. (Ahmed & Rahaman, 1998)
24. **Threatened:** A condition in which vaginal bleeding is less than in inevitable abortion and the cerix is not dilated and abortion may or may not occur.
25. **Trimesters :**

    - First trimester: It is the first thirteen weeks
    - Second trimester: It is the fourteenth through twenty-fourth weeks
    - Third trimester: It is twenty-five weeks LMP and later (OBOS, 1992).

26. **Unsafe Abortion**: Termination of pregnancy performed or treated by untrained or unskilled persons.(OBOS, 1992)

    A procedure for terminating unwanted pregnancy either by persons lacking the necessary skills or in an environment lacking the minimal medical standards or both. (WHO 1994).

CONCEPTS AND DEFINITIONS
Social science research

Bad structure: If the structure of the building requires immediate repairs without which it is unsafe for habitation or if it requires to be demolished and rebuild, it is treated as in bad conditions.

De jure **base population:** This includes only the 'usual resident' as part of the base population. The data are collected through household interview schedules in the survey. The concept of 'usual residents', in WFS surveys the world over allowed a great extent of flexibility. It ranged from not defining it all when posed to the respondents to the definition with much stringent criteria, such as period of stay (pre and/or post survey) at the household, eats at least eats one meal a day with the family. (WFS, Comparative Studies, No, 31-40).

De facto **base population:** It includes all the members of the household at the time survey/conduct of the interview including visitors. (WFS, Comparative Studies, No, 31-40).

House: Every structure, tent, shelter etc.. is a house irrespective of its use. It may be used for residential or non-residential purpose or both or even may be vacant. (NSS-59th Round).

Household: A group of persons normally living together and taking food from a common kitchen will constitute a household. The members of a household may or may not be related by blood to one another. (NSS-59th Round).

Household size: The number of normally resident members of a household is its size. it will include temporary stay-ways but excludes temporary visitors and guests. (NSS-59th Round).

Kaccha Structure : A structure which has walls and roof made of non-pucca materials is regarded as a katcha structure. Non-pucca materials include unburnt bricks, bamboo, mud, grass, leaves, and/or other thatch. Katcha structures can be of the following two types: (NSS-59th Round).

a. Unserviceable katcha which includes all structures with thatched walls and thatched roof i.e. walls made of grass, leaves, reeds etc. and roof of a similar materials and
b. Serviceable katcha which includes all katcha structures other than unserviceable katcha structures.

Pucca Structure: A pucca structure is one whose walls and roofs (at least) are made of pucca materials such as cement, concrete, oven burnt bricks, stone, stone blocks, jack boards (cement plastered reeds), iron and other metal sheets, timber, tiles, slate, corrugated iron, zinc or other metal sheets, asbes-tos cement sheet, etc. (NSS-59th Round).

Slum: A slum is a compact area with a collection of poorly build tenements, mostly of temporary nature, crowded together usually with inadequate sanitary and drinking water facilities in unhygienic conditions. Such an area will be considered as unde-clared slum for the purpose of survey if at least 20 households live in that area. (NSS-59th Round).

Semi-pucca structure: A structure, which cannot be classified as a pucca or a katcha structure as per definition, is a semi-pucca structure. Such a structure will have either the walls or the roof but not both, made of pucca materials. Walls/roof made partially of pucca materials are regarded as katcha walls/roof.

Squatter settlement: An unauthorized settlement with unauthorized structures put up by squatters and not categorised and as slum area is treated as 'squatter settlement' (NSS-59th Round).

Other Room: A room which does not satisfy the specification of 4 square metre floor area and 2 metres height from the floor to the highest point of the ceiling or a room which though satisfies the specification, not used for living purposes. A room satisfying the size criterion, when shared by more than one household or when used for both residential and business purposes is to be treated as other room.

Usual resident: The concept was used in the WFS. There was flexibility as to how to define 'usual resident' for individual participant countries in the survey. (WFS, Comparative Studies, No, 31-40).

We define 'usual residents' as those who have (a) shared the abode/house, (b) stayed with the family/household for at least three months preceding the field-work and (c) and eat at least one meal a day.

We define 'visitors' as those who are not 'usual residents' and either have stayed the previous night or plan to stay overnight on the day of the interview.

ANNEXURE VII
REPRODUCTIVE AND ABORTION MORBIDITIES

1. **Amenorrhoea:** Absence or abnormals toppage of the menses (Dorland's Medical Dictionary, 1995)
2. **Cervical laceration/tear** (Post operative complication POC): The cervix may get injured during a second - trimester abortion. A small tear heals without any treatment. However, a more serious tear may require stitches, and there may be some bleeding from the tear. (OBOS, 1992)
3. **Cervicitis:** Cervical inflammation (Dorland's Medical Dictionary, 1995)
4. **Dysmenorrhoea:** Painful menstruation. (Dorland's Medical Dictionary, 1995)
5. **Dyspareunia:** Difficult or painful coitus.(Dorland's Medical Dictionary, 1995)
6. **Dysuria:** Painful or difficult urination.(Dorland's Medical Dictionary, 1995)
7. **Ectopic pregnancy:** Pertaining to ectopia ie located away from normal position.(Dorland's Medical Dictionary, 1995)
8. **Endometriosis:** Inflammation of the endometrium or an aberrant occurrence of tissue containing typical endometrial granular and stromal elements in various locations in the pelvic cavity or other areas of the body. (Dorland's Medical dictionary, 1995)
9. **Infertility:** Lessening or absence of ability to produce offspring. (Dorland's Medical dictionary, 1995)
10. **Menorrahagia:** Both, heavy bleeding and long periods (bleeding for more number of days) together.(Dorland's Medical dictionary, 1995)
11. **Missed abortion/Continued pregnancy** (POC): This is probable in early pregnancy, less than four weeks after conception, that is, six weeks after LMP. The tissue removed from the uterus immediately after abortion should be inspected to ensure that all pregnancy tissues have been removed. The abortion has to be repeated in a week or so. (OBOS, 1992)
12. **Perforation** (POC): It occurs if an instrument pierces through the uterus wall. The pulse, blood pressure, cramping and bleeding are closely monitored. The uterus generally quickly heals on its own. However, if a large blood vessel or another organ is damaged, hospitalization and probably surgery is needed. If abortion has been left incomplete due to perforation, it is finished in a hospital.(OBOS, 1992)
13. **Polymenorrhea:** Abnormally frequent menstuation. (Dorland's Medical Dictionary, 1995)
14. **Postabortal Syndrome (Blood in the Uterus)** (POC): If the uterus does not contract properly or if a blood clot blocks the cervical opening and prevents blood from leaving the uterus, blood collects within it resulting in pain, cramping and sometimes nausea increase. The clots can be removed either by deep massage directly over the uterus or if this fails by reaspirating the uterus. (OBOS 1992)
15. **Primie amenorrhoea:** Not getting the menses at appropriate age. this could be either congential (which mostly are difficult to attend to) or could be on account of anaemia and weak health status.(OBOS, 1992)
16. **Pelvic Inflammatory Diseases (PID):** Palpable and tender tissues around uterus, cervical motion tenderness. These are the symptoms of PID.
17. **Retained tissue** (POC): Sometimes some tissue may be left behind after the abortion. Signs include heavy bleeding, passage of large blood clots, strong cramps, bleeding for longer 3 weeks, signs of pregnancy for more than one week. This tissue may get infected. To remove the tissue either methergine or ergotrate are given to stimulate the uterus to contract and push the retained tissue out or aspiration procedure is carried out. (OBOS, 1992, pp 359)
18. **Sterility:** To make a person or an animal unable to produce children or young, especially by removing or blocking the sex organs.(Oxford Advanced Learner's Dictionary)
19. **Uterine haemorrahge (POC):** It may occur in second trimester abortions due to retained tissue, perforation or failure of uterus to contract. Drugs may be given to stimulate the uterine contractions, or aspiration may be done to slow done the bleeding. (OBOS, 1992, pp 359)
20. **Vaginal ulcer:** Inflammation of vaginal wall

ANNEXURE - VIII

POST-ABORTION COMPLICATIONS
(Post-procedure time lapse, type of illness and perceptible symptoms)

Post procedure time lapse before manifestation/ revealation of symptoms	Type of abortion morbidity	Perceptible symptoms
Within 24 hours after abortion procedure	Cervical tear	▪ Severe lower abdominal pain ▪ Painless bleeding ▪ Painful bleeding
	Uterine perforation	▪ Severe pain in lower abdomen ▪ Distention of abdomen. ▪ Looks pale ▪ Fainting attack
	Anaesthetic Complications	▪ Swelling all over abdomen ▪ Breathlessness ▪ Abnormal blood pressure
After 24 hours and within 8 days	Incomplete abortion, inflammation and infection	▪ Severe lower abdominal pain ▪ Fever ▪ Foul smelling discharge
	Septecemia (entry of infection in blood)	▪ Body becomes cold ▪ Becomes unconscious
	Intestinal injury during abortion	▪ Fever ▪ Severe pain in abdomen ▪ Distention of abdomen
	Organic psychosis	▪ Disturbed behaviour
Within 3 to 6 weeks after abortion procedure	Menstrual problems	▪ Irregular menses ▪ Painful menses ▪ Heavy menses ▪ Prolonged menses ▪ Scanty menses
6 weeks after the abortion procedure	Symptoms of Cervicitis, PID, Vaginitis	▪ Fever ▪ Pain in lower abdomen ▪ White vaginal discharge ▪ Foul smelling vaginal discharge ▪ Blood stained vaginal discharge ▪ Excessive vaginal discharge with itching ▪ Unable to have control over urinary bladder (bladder incontinence) ▪ Painful intercourse (Dyspareunia). ▪ Infertility

AANEXXURE X: REFERENCES

(used in Annexure VI-X)

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ANNEXURE IX

MEASUREMENTS
(Rates, ratios, averages, proportions and estimations)

1. **Abortion rate:** Number of abortion per 1000 women aged 15-49. It indicates the percentage of women in the reproductive age group having an abortion in one year.

   Crude rates of losses: losses per observed pregnancies (Casterline, 1989). This takes care of the fact that not all pregnancies are recognised, especially the early conceptions before the 4-6 weeks from the first day of the last menstrual period.

2. **Abortion ratio: D**ifferent researchers seem to have defined it in various ways.
   - Number of induced and spontaneous abortions occurring in the population during the 12 month study period per 1000 live births during the same study period. (Khan et al 1986).
   - The number of births in the denominator occurring during a 12 month study period starting 6 months later than the period when the abortions in the numerator occurred. (Tietze, 1983)
   - Number of abortion per 100 pregnancies. (Zamudio, Rubiano, et al., 1999). The author states that this is a particularly accurate indicator, because there is no bias introduced by greater or lesser risk of pregnancy, which happens in other measures where the denominator includes all women regardless of abortion risk.

3. **Abortion mortality:** Number of women dying as a result of abortion per 1000 live births occurring during the same 12 month study period.(Khan, Rochet, et al., 1986)
4. **Average number of abortions per woman:** Number of abortion that a woman have had in her life time. Sharper averages can be calculated if only 'women at risk of abortions' are considered.
5. **Estimated total abortion rate:** It is the average number of abortions a woman will have in her life time This can be obtained by multiplying the average annual abortion rate, as defined above, by 35 (to cover a woman's reproductive life). It assumes that the current level of abortions persists. (Singh &Wulf, 1994).
6. **Maternal Morbidity:** Morbidity in a woman who has been pregnant (regardless of the site and duration of the pregnancy) from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes. A term used interchangeably with obstetric morbidity. (WHO, 1992-94)
7. **Maternal mortality ratio:** The number of maternal deaths occurring over a year per 100,000 live births in that year; may also be expressed per 1000 or 10,000 live births. (WHO, 1992-94).
8. **Women at risk of abortion:** These are defined as those who have been pregnant at least once and who are sexually active. (Zamudio, Rubiano, et al., 1999).
9. **Units of observation/analysis in population based abortion incidence studies:**
   - An individual woman: This would allow us to calculate
     - Average abortions per woman
     - Differentials across age and social class cohort as regards average number of abortions per woman, repeat abortions, relationship between parity/pregnancy order and abortions, especially induced etc.
   - An induced/spontaneous abortion event: This would allow us to calculate
     - the ratio of abortions to all pregnancies occurring at a point of time
     - the rate / ratio(?) of abortions per woman

ANNEXURE – XI

ABORTION RESEARCH IN DIA

Sr No.	Yr (conduct of study and pubn)	Pregnancy wastage* recorded	Type of the study	Source/ Researchers and year of publication
1.	1992-93/1994	Among all the pregnancies reported in the survey, 7 per cent was pregnancy wastage (still births – 2%; spontaneous abortion - 4%; and induced abortion – 1%)	A state level cross-sectional sample survey to arrive at estimates at state level and for rural and urban areas regarding fertility related measurements. Multi-stage stratified random sampling procedure was adopted. Study area: Total state Sample size: 4, 063 households; 4, 480 women (ever-marred women from 13-49). Limitations: The survey was primarily to study fertility patterns. The focus was not to record abortion incidence rate. The questions to get data on abortion incidence were not adequate in terms of sequence, formulation, sensitivity and probes.	IIPS (1995): 'National Family Health Survey-Maharashtra', International Institute of Population Sciences, Bombay.

11.	Jan 1989 to March 1990	During the period of 15 months 300 women had 372 induced abortions.	It was a prospective study carried out in two adjoining villages in a PHC in West Bengal. Limitation: From the data abortion rates could not be calculated as it does not state neither number of pregnancies during the reference period nor the number of eligible women (women at risk).	Mondal, A.M.D. (1998): 'Induced Abortions in Rural Society and Need for People's Awareness', *Journal of Obstetrics and Gynaecology*, Vol. 41, pp. 450 – 457.
12.	1988	8 per cent had spontaneous abortion, 2 per cent fresh still birth and 2 per cent macerated still birth.	Hospital based study Sample size - 200 consecutive cases of pregnancy in women less than 19 years admitted in the hospital.	Bhalerao, A.R., Desai, S.V., Dastur, N.A., et al. (1990): 'Outcome of Teenage Pregnancy', *Journal of Postgraduate Medicine*, Vol. 36(3), pp. 136-139.

(*'Pregnancy wastage' in case of health care facility based study is based on the 'clinical diagnosed' and confirmed within the permissible limits of the accuracy given the inherent constraints)

ANNEXURE XII: SAMPLE PROFILE

Table 1 Regionwise representation of the districts in the rural sample

Regions	Represented in the rural sample survey		
	Districts	Tehsils	No of PSUs
R-1 Greater Bombay*, Thane, Raigarh, Ratnagiri, Sindhudurg	Thane	Bhiwandi (2), Shahapur, Dahanu	4
	Raigarh	Uran, Panvel (2), Karjat	4
	Ratnagiri	Dapoli, Sangameshwar	2
	Sindhudurg	Kankauli (2)	2
R-2 Nashik, Dhule, Jalgaon	Nashik	Nandegaon, Niphad, Igatpuri (2), Dindori	5
	Dhule	Dhule (2), Akrani, Talode	4
	Jalgaon	Bhusawal, Jamner, Jalgaon, Erandor, Amalner	5
R-3 Ahmednagar, Pune, Satara, Sangli, Solapur, Kolhapur	Ahmadnagar	Shirampur , Nevasa, Shevgaon, Karjat, Akola	5
	Pune	Haveli, Junnar, Shirur, Daund, Baramati, Mawal	6
	Satara	Satara (2), Koregaon, Phaltan, Man, Karad (2)	7
	Sangli	Khanapur, Atpadi, Jat	3
	Solapur	Solapur North, Manol, Malshiras, Madha(2)	5
	Kolhapur	Shirol, Kagal, Gadhinglaj	3
R-4 Aurangabad, Jalna, Parbhani, Bid, Osmanabad, Latur, Buldhana, Akola, Amaravati	Aurangabad	Aurangabad, Sillod, Vaijpur	3
	Jalna	Jalna, Partur	2
	Parbhani	Basmath, Gangakhed, Pathri	3
	Bid	Georai, Manjlegaon, Ambejogai, Kaij, Patoda	5
	Osmanabad	Kalamb, Tuljapur (2), Paranda	4
	Latur	Latur, Ahmadpur, Ausa	3
	Buldhana	Jalgaon (Jamod), Deulgaon Raja	2
	Akola	Akot, Patur	2
	Amaravati	Warud (2), Dharni	3
R-5 Nanded, Yavatmal, Wardha, Nagpur	Nanded	Kinwat(2), Deglur, Kandhar	4
	Yavatmal	Maregaon, Umarkhed, Darwha, Ner	4
	Wardha	Karanja	1
	Nagpur	Ramtek, Mouda (2)	3
R-6 Bhandara, Chandrapur, Gadchiroli	Bhandara	Tumsar, Tirora, Arjuni Morgaon, Lakhandur	4
	Chandrapur	Warora, Mul, Rajura	3
	Gadchiroli	Sironcha, Aheri	2

** This district did not get selected in the rural sample.*

1. An Application by the Project team to the IEC, CEHAT for review of the project for its ethical content: Team's response to the Checklist – II

2. Ethics Review Report: IEC certification

3. Response to the queries raised by Joe Lobo

ABORTION RATE, COST AND CARE: A COMMUNITY BASED STUDY IN TWO STATES

Our experiences during the pilot testing may bring us more clarity on the extent to which we would be causing our respondents to face such risks.

2. What steps have been taken to mitigate the risks?

   We at the moment would wait till pilot test and the experiences therein.

3. How do you balance the potential risks against the prospective benefits?

   Not applicable.

4. How do you plan to protect the anonymity, confidentiality and the privacy of the participants? Are there any specific concerns in these areas?

   Please refer to point '2. Privacy' and '3. Protection to the respondents', in the section titled '6. Ethical issues and concerns', p no 17-18 in draft methodology titled 'Study Design and Methodology for Abortion Rate, Cost and Care: A Community based study in two states'.

5. What is the mode and procedure for seeking consent? What is the information that you will be giving to the participants at the time of seeking consent?

   We, plan to pilot test seeking **written** informed consent from all the respondents. We are sceptical about as in our society, 'signing papers' has a connotation and people, especially among those who can't read or write generally tend to refrain from doing so. As a result, insistence for written informed consent may lead to large percentage of denial. In this regard, there would two possibilities that we envisage:

   a) If the experiences in the pilot test are reasonable (at least about 50% accept to give written consent), we would follow this system assuming some would not accept to do so. However, for the rest we would not insist for written consent, if they do not find it comfortable signing the papers.
   b) If the experience in the pilot test is not very encouraging, we will not go for written informed consent but will go for seeking verbal informed consent.

   Please refer to Annex V for the 'draft consent letter' that we plan to use during the process. This will be used in either of the above stated situation, except in the latter situation the section in the letter, which is meant for respondents to sign will not be there.

   In the past, in context of earlier research studies, we have sought informed consent, but had not made attempts for written consent. The scepticism in our minds as researchers about people's response to 'seeking written consent' though has reasons, it needs to be tested in the

field. Thus, we would make a systematic attempt to do so, making a beginning in the pilot test.

6. What are the criteria for selection of your participants? What is your sampling design?

   Please refer to the section titled '2. Sampling Design' (Pl refer – the draft methodology, p no 4-7).

   Once a Primary Sampling Unit (PSU) is selected using a multistage sampling, the households would be selected using systematic random sampling. From the selected household, all women falling in reproductive age (15-49 yrs) would be included.

7. How do you ensure voluntary participation?

   We have planned an adequate process and communication for seeking informed consent of the prospective participants in the study. (Annex V). This, we anticipate, would ensure voluntary participation of the respondents. Also, the way we have envisaged the team compositions and role of team members, we expect that unintentional (assuming that field teams **will not knowingly** indulge into coercive processes after undergoing pre-field work training) coercion would be taken care of. The team meetings at the end of the end to share problems faced and some unique experiences gathered by team members would also help the team to make such assessments for themselves, for field editor/supervisor to get the feel of the day's events etc.

8. Do you plan to give any remuneration? If yes, in what form and at what stage? Rationalize your stand.

   The community based household survey spread over a large geographical areas where the institution taking up a research neither has (/can't) any roots in terms of interventions or services not have future plans in that direction often face an ethical dilemma as to what does the community or respondents get out of it. There is no direct and easy answer to this is available except that in long term it would benefit the larger society and facilitate furthering of knowledge (improved methodologies and understanding of abortion seeking behaviour).

   As explained under 'making in-roads in the community', we would spend time and energies to disseminate health related information to the communities and women. CEHAT has large number of educational material prepared primarily for rural communities. We will have a poster exhibition in each of the PSUs for benefit of the entire community. (The mini-versions of posters are enclosed for your reference.). And a set of five posters will be given to the village *panchayats* and ward offices. It would cost us Rs 13/- for each of the PSUs, a financially feasible option. We will

also screen a slide-show on anaemia **and/or** women's health in each of the PSUs.

We plan to do this as part of our rapport establishment processes. This, therefore serves dual purpose – rapport establishment and imparting health education to the community members.

No individual compensation is planned. No monetary compensation would be offered to anybody participating in the study or facilitating the study at the local level. However, we would offer educational material (Lokvidyan booklets; booklets prepared during PHA campaign) to Mahila Mandals, Panchayats, libraries, panchayat mahila members, Tarun Mandal depending upon their interests, needs and women's and community's accessibility to these structures/ institutes/ offices. Dissemination of such material would depend upon the people's need, which would be assessed by the team leaders.

9. How many sessions and of what length do you anticipate or plan to have for data collection with each participant?

   As stated earlier in the draft methodology, we will have three protocols to be administered during the first phase of the field-work, that is the household quantitative survey. They are stated below along with the estimated time required to complete interviews with individual respondents or a group of respondents in case of village profile/community recorder:

   - Village profile/community recorder (Annex II, in the Draft Methodology). There will be more than one respondent to collect data on items in this protocol. This will require more than 15-20 minutes with various respondents.
   - Household questionnaire to be administered with adult male member of the household (Annex III, in the draft Methodology). This, on an average, would require about 25-30 minutes with an individual respondent. This includes time to introduce ourselves, seek informed consent and fill up the questionnaire.
   - Women's questionnaire to be administered with all women from falling in reproductive age. (Annex IV, in the Draft Methodology). This, on an average, would take about 25-30 minutes. This would include time required for seeking informed consent.

In general, with no respondent, would it take more than an hour to fill in the questionnaires. These interactions/interviews with respondents are expected to be one-time sittings with some exceptions.

10. What are the plans for data sharing and dissemination of research results vis-a-vis a) the respondents and b) the society at large?

Data sharing and dissemination at the level of respondents: In the earlier projects (that I was engaged in at CEHAT) we have been taking the findings of the study to the participants even before we took them to the wider public domain. This would not be feasible in the present context given the length and breadth of the geographical spread of the field area and its discrete nature

Besides, the nature of the data is such that there is minimal scope of individuals to get identified when we take it to the public domain as the data will be presented in the aggregated manner. We, therefore, would be able to share these data presented in aggregated manner to the larger community/society and the respondents as well. (Ref NCESSRH, III.4.3, P No. 14).

We would choose different forms while taking it to the community of respondents, specifically the PSUs included in the study and academicia and other concerned constituencies.

a) Taking the findings to the community studied (for instance PSUs):

The format: It would be in the form booklet in local language and with the purpose of 'educating the community on patterns of pregnancy outcome and the extent of ill-consequences – morbidity patterns - that prevail in the society at large'. We would be in position to offer some preventive measures to them as part of educating them.

Mode of communication:

By post: Would have less impact and reach out as well.

In person: Involves human power and finances. Does not seem to be feasible.

Utility to the community: Given the amount of energy and time that this method would require us to expend, we see less utility to the community even if we plan to share the study findings in person. This – direct benefit to the respondents - also does not constitute the major objective of the study, as we do not have advocacy component built in the project commitment.

We, therefore, would prepare summary findings in the local (Marathi) language to be sent to the key people – village leaders, various Mandal in the PSUs, concerned offices at the community level which they would be requested to share with their people. They can get back to us, when required for specific purposes. We would also take care of the possible harm that may be caused through dissemination of information and using such a mode of communication. For example, we would choose the key people during the field work to whom such material could be sent etc.

b) Taking study findings to other than the communities studied:

b.1 With the peers and academicia: We would bring out a report and/or research papers. These, primarily will be academic writings for peers.
The purpose would be to:

- Disseminate research findings.
- To share our experiences vis-à-vis methodologies developed and used.
- To share ethical research practices and the problems encountered.

CEHAT, has a system in place, for academic public peer reviews. We, as a rule do invite academic experts in the concerned areas from outside of CEHAT, representatives of the other concerned constituencies, which may facilitate the processes of advocacy (in a broader sense) for such public peer review workshops. Full-length reports are presented to the group with transparency – meaning thereby, we do share with the group the weaknesses and strengths of the study. There are discussants invited (often more than one so that major thrust areas of the study/report are subjected to thorough critique), who are expected to offer us critical feedback.

b.2 With the society at large: We view this as primarily feeding into the advocacy for improving women's access to safe and legal abortion care services. In that,

- we would do some writing for middle range health workers and grassroots organisation working in the area of women's health,
- write in the popular press.

These writings would weave the findings of the study in perspective notes or advocacy notes.

b.3 The booklets that we would prepare for the communities studies could be used in general also for grassroots organisations working in health.

ETHICAL REVIEW REPORT

1. Name of Study : **Abortion Rate Cost and Care: A Community Based Study**

2. Phase under Review: Draft Methodology for the quantitative household survey primarily intended to arrive at abortion rate.

3. Date of Meeting : March 6th, 2001

4. IEC Members present : Anil Pilgaonkar, Bhargavi Davar, Chandra Karhadkar, Joe Lobo (Chairperson), Sunita Bandewar (Secretary), Tejal Barai (Jt Secretary).

5.Study Team Members present : Sunita Bandewar, Madhuri Sumant, Shelley Saha, Bhagyashree Khaire, Priti Bhogale.

6. Work done to date on the study:

- The project proposal was discussed with TAC.
- Detailed draft methodology was prepared along with five protocols (death card and household eligibility questioonaires, which were dropped later).
- Detailed discussion with the resource persons on the draft methodology in the National Methodology Workshop for APP-I in Dec, '01.

7. Documentation presented to IEC members:

(1) The detailed draft methodology titled 'Study Designand Methodology for Abortion Rate, Cost and Care: A Community based study in two states', Including the protocols,
(2) The draft consent letter,
(3) Response to the Checklist–II of IEC-CEHAT.

8. Decision of the Institutional Ethics Committee, CEHAT

a. **The Committee, (with the exception of Mr. J. Lobo- see Annexure II below), had previously reviewed the Documentation presented to its members.**
b. **The Committee also interacted with the Study Team Members at the above meeting.**
c. **The Committee concluded that there was a clarity of focus to this stage of the study both in itself and in the minds of the study team members, and that due consideration has been paid to ethical issues as per the checklist.**
d. **The Committee therefore decides that this stage of the study should proceed as planned and presented, while keeping in mind the points raised during the discussions, which are listed in the Annexures below.**

9. Other Outcomes of the Review Meeting:

9.1. Procedural Decisions: The Committee also decided as listed below on the following general procedural issues

i. CEHAT has allowed for the possibility that the IEC might want to discuss the study between themselves before meeting with the Study Team representatives. IEC decided that since the study team representatives were present they (the IEC members) could benefit from being briefed personally by the study team members. However, IEC reserved for itself the prerogative to discuss between themselves ***in camera*** any aspect of the study, if it should decide to do so.

ii. Where other 'ethics' monitoring agencies might be involved in any given study, IEC-CEHAT's ***autonomy*** will be preserved. (see N.B at the end of Annexure I below)

9.2. Feed-back inputs

- Annexure I: Is a summary of issues that emerged in the IEC discussion on various aspects of the study at the March 6th meeting.
- Annexure II: Is a list of queries from Mr. J.Lobo, who belatedly examined the documentation presented. These queries do not impact in any way on the decision of the Committee.

The two Annexures are included here as feedback inputs to the study team and as items of process documentation for the IEC.

ANNEXURE 1
Summary of issues discussed

1. Need for developing a mechanism to ensure the authenticity of the data: This concern was expressed for more than one reason.
   (a) For the fist time such a large scale community based study is being conducted on abortion, cost – direct and indirect - of abortion care, morbidity due to abortion.
   (b) It would be spread across the entire state.
   (c) The data would be generated from grassroots level and would be used at the higher level.
   (d) It would generate huge data set.

   The concern was expressed by some of the IEC members based on the experiences in the past about 'misuse' of micro level data by others in case of household expenditure on health care and people's choice of provider, especially public against private health care service sector. These data were misinterpreted quite often by others to suit their needs and in favour of their vested interests. Such experiences in the past increase researchers' responsibility to ensure authenticity of the entire study.

   Given the path-breaking nature of the study, some of the potential situations having implications for authenticity of data obtained were mentioned and discussed by the IEC members. Following are some of them:

- **False positive syndrome:** An infertile woman, in order to prove her fertility, may tend to report having undergone abortion .
- **The difficulties in capturing abortion episodes**, both, spontaneous and induced. (Team responded that the review of global literature on abortion research has shown that some of the difficulties in recording abortions are almost beyond one's control.). There is a possibility of both, under-reporting of abortions and reporting of pseudo pregnancy.

2. With reference to the item **'do you anticipate any risks (physical, psychological, social, and economic and ...) to the participants?** in the Checklist-II, it was suggested that the range of possible risks could be studied and anticipated based on available literature. Bhargavi mentioned that she has some of the relevant literature on this. Sunita would eventually acquire these references. However, it was felt that, the study could go ahead.

3. In the same context, the research team if it puts in the required work regarding the above, it would be in better position to address to the items **'2. What steps have been taken to mitigate the risks?', and '3. How do you balance the potential risks against the prospective benefits?' in the Checklist-II.**

4. **Need to explicitly spell out the mechanisms and strategies to protect minor women respondents:** All ever married women of the reproductive age between 15-49 from the selected households constitute 'respondents' in this study. It was felt that young women, especially between 15-19 years, would require a careful dealing while interviewing. The two major concerns were expressed. **(a) One,** whether respondents of this age would necessarily be 'competent' enough to offer us exact information. This would have implications for 'authenticity' of the data obtained. (b) **Two,** the field investigators would be required to take extra efforts to be able to provide them space. This would enable respondents to deal with the subject matter under study. Field investigators need to develop specific mechanisms and undergo training to do so.

   It was also felt that the best standards be developed for minors, which would provide them space and privacy and would be sensitive to them. These standards then should to be applied to all respondents, instead of having separate ones for them, which may not be as sensitive and appropriate as those designed for the minors. **In brief, we develop the standards keeping the needs of 'minor respondents' in mind and apply the same for all.**

Team has accepted this and it would work it out at the level of protocols and during the training of the investigators.

5. **Need to clearly state the steps to be followed to ensure privacy while conducting women's interviews:** It was suggested that instead of keeping it flexible, as spelt out in the 'Response to the Checklist – II', it could be sequenced in a stricter manner.

   The team has accepted the suggestion by the IEC. It will be tested during the pilot test.

6. **Seeking informed consent**:

   6.1 Why are we seeking written informed consent? Doesn't it have the inherent risk of a larger refusal rate and thus drop-out given the connotation that 'signing papers' has in the Indian context?

   Response by the team: (a) An attempt to initiate the process of setting such practices in Indian context. It may take another two or three decades before it becomes a practice. **(b)** Given the fact that the PSUs would be selected from all over the state, to explore whether the connotation holds true all over the state. There is clarity among the researchers that written consent is not being sought for sake of 'completing legalities' etc.

   Besides, as explained in the Response to the Checklist-II, it would be tested during the pilot phase of the study. This is keeping in mind necessarily the concerns expressed by the IEC members.

   6.2 The need to incorporate some additional information, primarily limitations of the study, in the consent letter:

   The team expressed the constraints of the survey research, especially regarding its inability to provide any concrete interventions or services to the communities (PSUs) studied. Given the vast nature of the study and the way it is methodology has been laid down to balance the cost of the study and quality of data, the survey has to proceed with certain pace. This implies less scope for prolonged interactions with the community under study and individual respondents included in the study.

   IEC members felt that, with such a context, we need to explicitly spell out the constraints and limitation of the study as well as of our field team vis-à-vis one-to-one benefits/returns of the study that the respondents would be participating in. Some members shared with the group the experiences in the past in this regard. For instance, women or any other members of the community approached the field team – for their very personal problems. The team had less to offer them. In case of the present project, too women would come and ask help from us. And the team members would not be in position to do so. In the present study, the short stay in PSUs adds further to these constraints as in case the team offers something – it need not necessarily be in material terms - to the respondents, we would not be there to see its consequences, especially ill-consequences, which may worsen women's situation than improve it. And, thus the team needs to be cautious about this, too. In another instance of domestic violence that takes place in front of us while in the field, we still have no direct and clear strategies to know whether it is appropriate to intervene or stay away. With these dilemmas and constraints that could be attributed to survey methodology, it was felt that the team members could play the role of counsellor when required. This implies that they are oriented about **(a)** the range of situations and **(b)** develop some skills to interact with the community or respondents when required.

   With this debate, it was suggested that the consent letter explicitly mentions the fact that we as researchers in the future will not be providing any services to the community.

   The team accepted this suggestion. The consent letter would include limitations of the study, especially the fact that there is no intervention planned in the future as continuation or as a result of this survey.

   In this context, the team did share with the IEC that the team members experience discomfort about the fact that we would not be able to go back to them. The team would like to have something in place, which would help to keep in touch with the community and the individual respondents.

IEC suggested that, it can be thought over and the team may develop some mechanism to do so. One of the ideas shared was, to run a bulletin, which would carry primarily 'voices of people' from these areas. This also has a potential to be an organisational activity and a responsibility in the coming time to reach out and be in touch with all those with whom it has had interactions in the past. It could be explored and worked out.

The idea appealed to the team. However, as it has implications in terms of resources, it would be discussed within the organisation.

Informed consent of an individual and the community: Communities, though they would be informed about the project and the significance of their participation in the study, at no point of time, would the team consider community's consent as that of individual respondents. There was enough clarity on this among the team members and is exhibited in the 'Response to the checklist-II'.

7. **Voluntary participation:** The team believes that 'seeking informed consent' would ensure voluntary participation. In the 'Response to the Checklist – II', it was also articulated that the investigators would be trained to avoid coercion during seeking informed consent. The evening sharing sessions among the team members would help each other to understand and facilitate these processes.

   However, IEC members expressed that despite our efforts, it may not ensure voluntary participation of all the respondents at all the time. There is already a hierarchical structure in the interactions between field researchers/investigators and respondents. In such situations, it would be very difficult for people to say 'no' even if they want to do so. We need to keep in mind that ensuring 'voluntary participation' is a process and it's the responsibility of the team/researchers to facilitate it. 'Seeking informed consent' is not a one-time act. It needs to be pursued at various stages and at various points of time during the data collection and during ongoing interactions – one or more sittings - with individual respondents.

   The Team takes note of this discussion. Some of these concerns will be translated into imparting the required training to the investigators. The Team would share the training module once fleshed out (at present, the draft methodology tabled for IEC contained only the outline) with the IEC members. They would also be invited to attend some of the sessions constituting the training of the investigators.

8. Rapport establishment, dissemination of resource material, conducting public meeting in each PSUs before actually starting the survey: The team plans to conduct public meetings and organise health awareness programme in each of the communities before starting the field work. This is conceptualised as part of (a) a process of rapport establishment and (b) a means to express our gratitude for their prospective participation in the study.

   IEC members wanted to know how this would influence the response pattern and the biases.

   The team responded that the public meeting though it is intended to share with the larger community (beyond the respondents) /PSU about the project and its purpose, it would screen slide-show and/or put up a poster exhibition on health issues that concern community and not necessarily women. These health education programmes will not have anything on the issue that is under study, that is, abortion. This, therefore, would take care of the concern expressed by IEC about exposing the community and/or respondents to the abortion related material.

   IEC suggested that these public meetings meant for rapport establishment and sharing with the community about the study are documented to learn from in the future.

   The team accepted this suggestion.

9. How is this information going to be utilised – plan of analysis – is it worked out?
   Response: The plan of analysis is not yet worked out by the team, though the protocols for the study are guided and developed by stringently worked out objectives and detailed compilation of various measurements that we would like to arrive at using these data. However, the tentative plan of analysis will be worked out sometime soon. This is primarily to further ensure that there is no extra

information that would be collected and to also ensure that nothing is missing of what minimum is required to meet the objectives the quantitative phase of the study.

10. **About the protocols:**
The team communicated to the IEC about the revision that took place to further streamline the protocols, especially the household questionnaire. The revised protocols have rather broader criteria/indicators on socio-economic status. Earlier (the one which was enclosed for IEC's reference) was very detailed. The TAC has suggested to cut it down. However, the other two protocols, content-wise, are almost the final with some likely additions on cost and care.

10.1 About names of the family members that would be recorded in the household questionnaire: Some of IEC member/s expressed the need to protect their identities.

The team's response: The identities of family members will be protected by the two mechanisms that have been articulated by us. **(a)** No one other than the team will have access to the raw data at any point of time. **(b)** Once back from the field, the identity of individual respondents will be protected by putting stickers on them. Having protected the reference individual, it would be difficult to penetrate identities of family members. Also, the fact that field investigators and researchers would be more comfortable to identify individual respondents by their name rather than by code numbers, it would be appropriate to take care that access to data is restricted. Also, the fact that there is some kind of bonding that takes place between the researchers and respondents, addressing them by their names within the close circle of the team members is more humane as long as their autonomy is not compromised.

10.2. Why is the 'Household Questionnaire' being administered only to adult male members of the family? According to the existing statistics, half of households are headed by women. How would you take care of it?

Response of the team: Earlier experiences in such surveys indicate that women find it difficult to provide information about income, assets and many other subject heads. We, therefore, decided to collect such data from any adult male who would be in position to provide such information.

IEC suggestion: It can be termed as 'any relevant/equipped' person. This then would include any man or woman.

The team has accepted the suggestion, except that, it needs to be given thought in terms of its implication for the possible variation in the error which may not be uniform, as generally could be the case collecting information from either men alone or women alone from all the households. The team would test for such difference in the patterns of data obtained.

11. **Reporting of the data**: This was not specific to the project under review per se, instead an issue to be discussed and thrashed out in the coming time. It was also discussed in the IEC held on Feb 7, '01. Concerns were expressed as to the IEC's need to continue to deliberate on 'how would it be practically possible to monitor and control any problems about reporting of the data?'. Problems as regards data reporting could be of different types. It could be because of 'incomplete reporting', or because of 'misplaced reporting' or because of 'dishonest reporting'. It was clearly mentioned that the instances of 'dishonest reporting' would not take place. It is not so much about doubting 'integrity' of researchers. However, there may be occasions that researchers land up in these situations out of sheer ignorance. If so, we need to think about mechanisms to exercise control over such situations.

Some of the suggestions came up during the discussion were as follows:

(a) Peer reviews (within CEHAT and outside CEHAT) would take care of such situations to a great extent. These mechanisms are already in place in CEHAT. There is Peer Review Committee (PRC) within CEHAT. The studies upon completion are presented to the peers from outside of CEHAT by inviting public peer review workshops.

(b) The IEC can have access to raw data (not the interview schedules but the computerised data files with raw data and yet without individual identities revealed) if anytime they feel the need to ensure that it is neither incomplete reporting nor misplaced one.

Anyway, some such issues would remain concerns for IEC and there would be continued discussions around them.

N.B. A query of the IEC, especially with reference to the fact that this particular project throughout its tenure, would be reviewed for its ethical content by two committees (ECG, AAP-India and IEC, CEHAT):

What is the role of the local IEC?

Sunita shared with the group in brief the discussion and the decision made by the ECG in this regard. ECG has decided that the local IEC would have a larger role to play. It, upon in-depth ethical review of the project at appropriate stages, would forward its detailed Ethical Review to the ECG. In case, ECG needs some clarification etc. it would communicate the same to the team through AAP-India secretariat. It would be the responsibility of the team to interact with the IEC and address the issues raised by the ECG, if any.

ANNEXURE II.
J. Lobo's request for some clarifications

Background:
I received the hard copy of Sunita's Draft of the March 6th meeting, on the 17th of March, as there was a problem with the email . As I was very busy with college work, bringing out the college magazine, I could only get down to examining the material in the last week of March.

There were a number of queries I had, regarding the documentation which we were supposed to have read before the March 6th meeting. I am raising them here even though belatedly, only to achieve greater clarification if for no one else, then at least for myself. I have no reason to think that the issues raised will change the IEC decision to permit RAI to go ahead with the phase it had submitted for review. As said earlier, at most, the answers to my queries will help me understand the project under review better, something which should have been done BEFORE the IEC meeting of March 6th. I cannot recollect whether I had received the documentation as required, 10 days in advance and failed to go through it. Anyway whatever the reason, I feel 'ethically' obliged to raise the issues for circulation and clarification.

1.(Ref: Draft Methodology pg. 3 – Objectives)

- What is the ***principle*** behind the break-up of the objectives **(a –e),** and **(f – g),** which would entail/justify a distinct methodological phase?.

2.(Ref: Draft Methodology pg. 7 – Making in-roads in the community)

- Under the points listed for "what purpose would it serve", the issue of participation appears to be taken for granted, especially the latter part of bulleted item 5 "....a means to express our gratitude for their prospective participation in the study." Yet the very next paragraph raises the possibility of a refusal "...If people ....agree to participate in the study." **(Pg 8. The dilemmas and issues involved)** brings up the issue starkly. The rest of the paragraph however, does not indicate how it will be resolved. What in operational terms does the phrase *"And yet, this particular phase will not be compromised upon"* mean ? Will the study team really offer the community a choice whether to participate or not? And if so how is this structured into their interaction with the community? The *"dilemma"* referred to is really non-existent. We want the community to participate. I will be less comfortable speaking about "rapport", and more at ease with a statement saying clearly that the team will spend time persuading the community (in the best manner it can) to participate – (because without that the study is a non-starter). And if we cannot persuade them to participate then there is no point in pursuing the issue further. The team must get across the value of the study as a situation of learning for all concerned.

3.(Ref: Annexure II Village Profile Recorder)

- I accept that information pertinent to the objectives of the study should be recorded. But I'm having a problem with the following items which are going to be collected. Items numbering: 6, 14,15, 22, 23,24,25, 56, 57,59-65, 67-69,75-77, How do they tie in with the objectives of the study?

4.(Ref: pg. 9. Item 3.a. Household profile)

- I have similar problems with respect to the Household interview schedule.
  I think the purpose should state " to obtain information about the household pertinent to the objectives of the study". I find that there is just **too much** information sought to be collected which I cannot relate to either rate, cost, care of abortion. This could be a failing on my part. This is especially so, since as Sunita documents, the protocols submitted to us have already been both methodologically and ethically vetted by the TAC/ECG respectively. I would therefore be grateful, if any member of the study team went through the questionnaire item by item and pointed for its bearing on any of the three dimensions of the study.

5.(Ref: pg. 12 Timing of Cohort study)

- If there is no justifiable principle by which to distinguish (a – e) and (f-h), then there will not be any need for "a substantial gap between the two phases". But even if there is, what is the **extent** of analysis that would be necessary or even desirable "before getting into this phase"?

6.(Ref: pg. 12 Regular In-Group sharing)

- How is item (d) going to be "ensured"? in operational terms?

7.(Ref: pg. 12 Training of the team)

- Specific details of the selection of the team of field investigators, their numbers, age, qualities (as distinct from "qualifications") etc., is not documented to the extent it merits, when compared with the extensive details documented for the **target group selection**. An adequate team is as much an ethical imperative as it is a methodological one.
- The explanatory comment: "We, therefore, would not mind taking such girls/women"; is this a 'preferred option' or a 'making do with what is available'? In either case an elaboration beyond what is offered would be welcome

8.(Ref: pg.13 Thrust areas in training modules)

- Why are 'political organisations and structures, and local cooperatives and their functions' **thrust areas** in training? in terms of the objectives of the study?

9.(Ref: pg. 14 Pilot Testing)

- The statement "It is likely that the data would remain under-utilised... and therefore ethically inappropriate" is, by my reading of the items, also pertinent to most of the queries I have raised above, which relate to the Village Profile and the Household Questionnaire.

10.(Ref: pg.15. ethical issues and concerns)

"The method of rapport development would serve the purpose of making the community know about our work" Does this mean Cehat's work in general ? or the specific study team's presence in the area, in particular?

11.(Ref: pg. 16.)

"In no situation, consent/permission by anyone other than respondent would be treated as informed consent of the respondent" What happens if in the Household survey, the male is reluctant but the woman is amenable?

12.(Ref: pg. 16.)

"we would use the strategy to further tone down the purpose of the research ("deception") as approved by the ECG" I cannot fathom the meaning of this?

13.(Ref:pg.18)

"As part of the strategy to tone down the explicit emphasis on abortion..the title of the project....would read 'Pregnancy Outcome, Care and Cost study' rather than 'Abortion Rate, Care and Cost Study'. This to me is ethically debatable to say the least.

14.(Ref: pg 18 item 4)

The problem with 'showing gratitude' is that the research organization can attempt it as a 'token' while fully realizing that it cannot effect "commensurate" compensation. Or the research organization can attempt to compensate beyond a 'token', but then it must make a systematic effort to achieve as adequate a compensation (in whatever form) as possible. The RAI team is not attempting a mere 'token' compensation. A more rigorous formulation then of the effort to compute adequate compensation would be welcome.

J.Lobo
12/06/01

June 13, '01

ABORTION RATE, CARE AND COST: A COMMUNITY BASED STUDY

Response to the IEC certification dated June 12, '01

Response to queries in Annexure II: J Lobo's request for some clarifications

The **numbers below correspond** to that in the above mentioned Annexure II.

1. We now plan to merge these phases for logical reasons. The protocol –woman's interview schedule is designed accordingly.

2. The issues raised here by Joe, as I understand them, are as follows:
   a) The team is making an assumption about community's participation in the study.
   b) Researchers' efforts and strategy are 'to persuade' and not 'to establish rapport'.

   I tend to differ on this point with Joe. 'Rapport establishment', to me, means that in the process of 'getting to know each other' and 'developing mutual trust', the community or the respondent (should) have space to say 'no' to participate in the study. As part of the rapport establishment, researchers do get across the value of the study as a situation of learning for all concerned without being 'imposing/pushy' about it. We are using the method of communicating objectives of the research study in a broader context by sharing with them institution's work and commitment. This, we are combining with giving them some useful information on health related matters. This, we hope, would also help making clear our intentions to the community/people.

   The point about – '.. this particular phase will not be .compromised upon...' is to highlight two things. One, we will not stop being open, transparent and honest about the work we are doing, even it may mean in certain situation more chances of refusal to participate given the 'tabooed' nature of the subject under study. Two, we will not withdraw halfway through from the activities of (offering them the health education programmes, such as, screening slide-show) even if we get signals of their 'refusal'. This is with the belief that even if the community decides not participate in the study we would be making use of the opportunity to provide the community some useful information.

   The dilemma that referred to is about implications (viz. Community's refusal to participate in the study upon realisation just by glancing through the protocols that the thrust of the study is abortion) of adopting such a mode of rapport establishment and allowing access to the protocols if anybody wants to. We intended to argue (perhaps it is not reaching this way to the readers) that the choice for us to reduce probable refusal is not to be so open about the thrust of the project, which we are not opting for. And that is the context of the statement we made about not compromising (or not letting it go) on the approach to rapport establishment. I hope I am reading more clear now.

3. All the protocols have been fine-tuned to a great extent in the due course of time after going through a rigorous process of examining relevance of each of the question.

It is interesting to note that in quite a few instances, women/girls with years of schooling not as high as those with higher education opportunities, turned out to be more perceptive, sensitive and with better understanding of society than those with post-graduate training in sociology and social work. Our experiences in CEHAT on the earlier projects prompted us to be more inclusive vis-a-vis number of years of schooling while advertising the posts. Our experience over the last four months in the process of selecting women field investigators fall in the line with our earlier experiences.

8. We have dropped the data collection on local cooperatives from the protocols. Also, there are no data to be gathered from these structures, as we understand.

   About the need to incorporate training about 'political organisations and structures: The training will primarily be to understand the multi tire structure in itself and also in relationship with other structures, viz. Bureaucracy. We have two purposes for including this in the training. At local level these systems have their own dynamics. The team will be dealing with community leaders, both formal and informal, especially in rural areas. This is both for the purpose of general rapport and to collect data on certain aspects. It is important that team members know the dynamics at the level and relationship between local political leaders and bureaucrats and have adequate feel of the system at work. Team members come from varied backgrounds and may not be in position to see these structures in the context of project's needs.

9. Same as 3.

10. It would be both. Sharing of the project will be done in the larger context of CEHAT's work, though in a nutshell and in a language that non-academicia can understand.

11. As I can imagine at this point of time, there would be two type of situations: (a) A male/head of the household is reluctant to respond to the household interview schedule but does not mind woman responding to us. This is an easier situation to deal with and we will interview woman for both household interview schedule and Woman's interview schedule. (b) A male/head of the household refuses to respond to and also refuses to the idea that we either interact with her or conduct an interview. In this situation, it will be upto woman, whether she wants to interact with us without the knowledge of the male members of her family or otherwise. However, we will not go odd ways to include that household or women from the household in the sample keeping in mind the possible negative consequences of such an act to woman in concern. In case, woman/women take initiative and expresses to participate in the study, we would also tell her the possible consequences (as we envisage in a particular situation) of her initiative to participate in the study.

12. **(12 and 13 together)** The literature on 'ethical research practices' shows that "deception" is allowed (has sanction from ethical point of view) for greater good. The ECG on the similar grounds has allowed such a strategy to the research partners. In case of the present project, though the focus is very much on abortion, we have adopted the methodological approach to capture abortions by tracing pregnancy history of women. Thus, by changing

It was shared with the IEC that TAC (and the resource persons in the methodology workshop held in Dec)) suggested a major cutting down of the household questionnaire (ref: Annexure-I (attached to the IEC certification: Summary of issues discussed') in the light of the focus of the study. We would also be sending you the refined protocols.

4. Same as above.

5. The two phases are planned together now.

6. Following are the mechanisms:

   - Training of the team
   - Constitution of the team: There would be a team leader to guide the team of 6-7 investigators. The team leader would be responsible for the team and its work.
   - Documentation of the discussion: Teams would be documenting the discussions during these meetings for its own significance.
   - Regular interaction of senior researchers with the teams during the field work: Senior researchers and/or members of the core team on the project would be interacting and visiting with the field teams on a regular basis.

7. Team composition: Core team of five researchers which include one Sr Research Officer, one Jr Research officer and three Research Assistants.

   Field investigators:

   Profile: We have selected about 33 women with age ranging from 22-35 yrs and with 12-17 yrs of schooling/education level. It is a heterogenous groups in terms of their life experiences, opportunities and exposure, educational backgrounds, class character etc.

   The process of selection: It was difficult to get women/girls with a reasonable scoring made on the parameters that we had set to make an assessment of candidates during the interview, keeping in mind their anticipated job profile. We took about three rounds of advertisements, about five rounds of interviews and three months of period to constitute the team of qualified (using the above criteria) investigators. Panels of two members from CEHAT interviewed the candidates. The candidates were given CEHAT's brochure, a short note on the project and literature on CEHAT's work on abortion to read before they interacted with the panel for the interview.

   The parameters set for the assessment were social perspective - understanding of social situations, women's status, gender in every day life, capacity to observe, analytical skills, communication skills, sincerity, willingness to travel, aptitude for the team work. They were also asked to articulate reasons for exploring this job opportunity. Panel told them about the nature of work that they will be required to undertake, salaries and allowances that they would be getting and other relevant rules at the end of the interview. The job profile of 'field investigator' determines their salary scale as per CEHAT's functioning and rules and regulations. Thus, they are placed at the same scale regardless of their educational qualifications.

the title of the project to 'pregnancy outcome ...', would not be "deception" even in the sense of genuine need of the research on sensitive topic as such. Besides, the kind of strategies that we have conceptualised for rapport establishment, the content of consent letter etc. does not keep the thrust of the project out of sight of the population under study. Now, the fact that, in-depth interviews will be merged with the quantitative survey tool, it is more than obvious to anybody who even glances through the protocols that the focus of study is pregnancy wastage. However, according to me, by changing the title to the above, would help people/community, especially those who would not be participating in the study to be less skeptical about our work. This is not to deny them clarifications and explanation when sought but for obvious reasons that there will be lesser scope for doing so compared to what is possible with the participants in the study.

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June 13, '01

III. GLIMPSES

This section carries the following

1. Training of *Anveshis*

As mentioned earlier, a systematic training was organised for the *Anveshis*. A brief report based on impact assessment is presented here for your reference.

2. Field facilitating tools

2.1 Self-assessment
2.2 Response to the community meetings
2.3 Reported pregnancy outcome: Summary charts
2.4 Field conditions, community response & other experiences: Documentation by *Anveshis*
  2.4.1 Coding scheme (to analyse the above data)
  2.4.2 Analysis

We developed some tools to facilitate the conduct of fieldwork and online documentation. Their primary purpose was to develop a system, which will strengthen teams' confidence; sustain and further strengthen solidarity among themselves; enable self-sustaining sharing; allow self critique. It was also to have a system in place which will allow on-line documentation of their field experiences and field observation. The process ultimately was also expected to improve quality of work through empowering mechanisms.

3. Preliminary data

3.1 Response pattern: A Summary
3.2 Reported pregnancy outcome
3.3 Comparative data on reported pregnancy outcome

Since we used the facilitating tools during the field work, we could have PSU level data on reported pregnancy outcome is presented in summary form.

TRAINING OF ANVESHIS

Objective

One month training programme was organised for the *Anveshis* mainly

- to develop a common understanding of the project, its rationale and its content
- to build perspective to conduct research in a ethical and gender sensitive manner
- to impart skills required for collecting data like conducting interviews, establishing rapport in the study area, community meeting, and taking care of logistics during feildwork
- to maintain data quality at the field level.

Content

The major content areas on which *Anveshis* were given training were:

- about our organisation
- developing perspective on women's health and abortion
- politics of abortion
- types of abortion
- morbidities related to abortion
- about the study
- basic concepts about research methodology
- administering tools of data collection
- understanding our own bodies
- contraception
- health care service delivery system
- cost of health care services
- a brief introduction to social systems and sub-systems
- understanding the concept of gender
- Political and administrative structures of India
- practical sessions in administering tools and mapping
- editing of questionnaires

Methods:

Participatory methods of training was adopted – discussions, presentations, group work, body mapping, use of audio-visual aids.

Duration: Classroom training for 24 days, and two weeks of field training in administering and editing tools and mapping.

Results/outcome:

In order to see/assess to see the changes in the perceptions and understanding of Anveshis over the period of time after taking such an extensive training and detailed discussions about different issues. The assessment was done by formulating two types of questions – multiple choice and true or false.

The assessment was done on the major following issues/areas –

1. Gender based understanding of men's social roles and responsibilities
2. Gender based understanding of women's social roles and responsibilities
3. Understanding of existing gender roles
4. Understanding of certain scientific facts
5. Perceptions about certain facts about abortion
6. Understanding of the health care system and right to health care
7. Understanding of the relationship between population growth and poverty
8. Understanding of the caste system and social norms

An analysis of both pre and post training assessment results show that

- The gender based understanding about men's social roles and responsibilities show that most of the anveshis had a better understanding prior to the training also.
- Regarding anveshis understanding about women's social roles and responsibilities is little mixed. It is seen that they have some patriarchal value ingrained and even after training we were not able to bring about much change. For example, during the pretest we found that 18% of the anvenshi feel that women are by nature more tolerant and post assessment shows that it only changed to 45%.
- Perceptions about abortion: actually we did not have many questions on abortion issues but still among the formulated one the knowledge about the availability of safe abortion services was very good. But anveshis's perception about woman's right to abortion services shows that prior to the training only 41% anveshi thought that aborting a pregnancy is ethically wrong which after training it changed to 72%. Initially the girls used to hesitate or did not feel comfortable to talk about the abortion issues but a change is observed in the perceptions regarding the abortion issues over the period of time and now the Anveshis talk comfortably about the same.
- The understanding of the relationship between population growth and poverty and about common scientific facts was not at all good during the pretesting. But a drastic change was noticed after the training.
- Regarding the other parameters it was seen that training made an impact on the perception of the anveshis.

An assessment of our training programme was also done by our anveshis. It was found that generally they are very satisfied with our training programme in terms of content, methodology used and time allocated. Only two exceptions were on the topics on 'politics of abortion' and 'political and administrative structures' on which they thought that not much time was spent.

ABORTION RATES, CARE AND COST: A COMMUNITY BASED STUDY

Self-assessment (filled in by Anveshis during the field work)

District and code: **Tehsil and code:** **Name of the PSU and code:**

Name of Anveshi	TASKS PERFORMED			
	Houselisitng and sampling (selection of wards, identifying boundaries, actual houselisting, calculating probabilities, sampling interval and selecting the households to be included in our sample, assigning the selected hhds to anveshis)	**Ground work** (travel and logistics, accommodation,	**Preparing for community meetings** (informing the community about the meeting and finding out the suitability of the time and venue, arrangements for the meetings - light, place, putting up the posters	**Actually doing the community meeting** (who did what in the community meeting - poster presentation, introduction of CEHAT and project, documentation etc)

(Contd...)

(...Contd)

ABORTION RATES, CARE AND COST: A COMMUNITY BASED STUDY, CEHAT

Self-assessment (filled in by Anveshis during the field work)

District and code: **Tehsil and code:** **Name of the PSU and code:**

Name of Anveshi	TASKS PERFORMED		
	Number of interviews conducted (HHD and W)	Editing	Conducting team meetings at the end of the day and documentation

2.2

ABURTION RATE, CARE, COST : **A COMMUNITY BASED STUDY**

Response to the community meetings

(Filled by Anveshi during field work while in every PSU)

Name & code of the PSU	Whether a separate meeting held in harijan vasti?	Request for repeat meeting.: How far you were able to meet their demand?	Presence of		At what time the meeting was held (Morning, evening etc.)	Location of the meeting (Was it more advantageous for Male/Female?)
			Men	Women		

2.3

ABORTION RATES, CARE AND COST: A COMMUNITY BASED STUDY

REPORTED PREGNANCY OUTCOME: SUMMARY CHART
(filled in by anveshis during the field work in every PSU)

Information item	PSU details (Name and code)				
HHDs (sampled and actually interviewed)					
1. Total number of hhds sampled					
2. Number of hhds completely interviewed					
3. Number of hhds refused to participate in the study					
4. Number of hhds found locked					
5. Other reasons for which the hhd could not be interviewed					
Eligible women found and interviewed					
4. Total number of eligible women					
5. Number of eligible women completely interviewed					
6. Number of women refused to participate in the study					
7. Number of women not found upon three visits					
8. Number of women withdrew halfway					
9. Other reasons for which the woman could not be interviewed					
Conceptions and abortions in reference period					
10. Total conceptions in the reference period					
11. Total live births in the reference period					
12. Total spontaneous abortions in the reference period					
13. Total still births in the reference period					
14. Total induced abortions in the reference period					
Conceptions and abortions in life time (other than reference period)					
15. Total conceptions in the life time					
16. Total live births in the life time					
17. Total spontaneous abortions in the life time					
18. Total still births in the life time					
19. Total induced abortions in the life time					
Sex selection tests and abortions (total including life time and reference period)					
20. Total number of sex selection tests					
21. Total number of abortion following sex selection tests					

2.4

FIELD CONDITIONS, COMMUNITY RESPONSES AND OTHER EXPERIENCES: DOCUMENTATION BY ANVESHIS

(Based on the sharing session the need was felt to record some of the data for each PSU)

Team name_____

COL 1	COL 2	COL 3	COL 4	COL 5
PSU (code/name)	**Food**	**Place of stay**	**Stay**	**Transport**

COL 6	COL 7	COL 8	COL 9	COL 10	COL 11
PSU (code/name)	**Telephone facilities**	**Caste of the Leaders/con.person**	**How the caste comm.situated**	**Key people resp.for comm.meet**	**Use of resource material**

COL 12	COL 13	COL 14	COL 15	COL 16
PSU (code/name)	**Posters were displayed**	**How was the comm.meet useful for fieldwork**	**Whether the meet.held before data coll.**	**When not disp.whom did w give the posters**

COL 17	COL 18	COL 19	COL 20	COL 21
PSU (code/name)	**Response of the community**	**Language barrier**	**Seeking informed consent**	**Do you think estimates of age were close to correct**

COL 22	COL 23	COL 24	COL 25	COL 26
PSU (code/name)	**Did you meet local abortionists**	**Problems during data coll.**	**Listing: range of hhd listed**	**Time (in hours)**

COL 27	COL 28	COL 29	COL 30	COL 31
PSU (code/name)	**How often we done the listing in wrong areas**	**Problems in PSU maps**	**If no map, fr where did you get information**	**Rural listing problems getti ward level data**

COL 32 COL 33 COL 34

PSU (code/name)	If yes,time spent for getting ward level data	Problems during houselisting		

2.4.1

CODING SCHEME

Col 2. Food: Difficult to make arrangements = 1
Manageable=2
Comfortably managed=3
For urban PSUs – difficulty for lunch =4

Col 3. Place of stay:
1. Within PSU
2. Rest house
3. Lodge
4. Stayed in relatives/friends house
5. Others (specify)

Col 4. Stay:
1. Very difficult to make arrangements
2. Managed without much difficulty
3. Comfortably managed

Write the time spent to arrange (average) place of stay

Col 5. Transport:
1. Difficulty
2. Manageable
3 No problem

Col 7. Telephone facilities:
1. available in the village/locality itself
2.had to walk some distance
3. had to travel by using some transport facility

Col 8. Caste of the leaders/contact persons to establish the first contacts in the village

Col 9. How the caste communities were physically situated:
1. Traditional (castewise clusters and harijan vasti/rajwada outside and away from the Gaothan)
2. Mixed and nothing specific

Col 10. Key people responsible for community meeting:
1. Tarun Mandal
2. Gram Panchayat – gram sevak
3. AWW
4. Local social workers
5. ANM
6. Sarpanch
7. Dawandi
8. Others (specify)

Col 11. Specific use of resource material – *Doctor nasal thethe/ AIDS material*
1. Yes
2. No

COL 13
Posters were displayed during our stay in the village (either by the community members or by Anveshis or together):

1. Yes
2. No

COL 14
How was the community meeting useful for the field work?

COL 15
Whether the meeting was held before data collection started?

1. Yes
2. No

COL 16
When not displayed whom did we give the posters-

1. Anganwadi worker
2. Anganwadi assistant
3. GP member,
4. Sarpanch,
5. Teachers from the primary/secondary schools)
6. Other

COL 18
Response of the community:

1. very welcoming and co-operative
2. somewhat okey
3. neutral
4. not co-operative and welcoming

COL 19
Language barrier –

1. severe – had to hire translators/
2. managed with some assistance from some members in the community – school going girls, IS – parallel in the local language were learnt from the anganwadi worker or others,
3. No problem

COL 20
Seeking informed consent:

1. Do you feel research participants by and large grasped what we wanted to communicate with them and responded appropriately?
2. Do you think there was no comprehension at the other end despite our efforts to simplify our communication with to the extent possible?

COL 21
Do you think that estimates of age in this community were close to "correct"?

1. Can't say (for example - Tringalwadi, Garpeth)
2. In case of certain women, estimates may not be very correct as there was no information available on any of the base line indicator
3. By and large estimates should be right
4. By and large, since the birth dates and other dates were available we could get the actual dates (urban areas for example)

COL 23
Did you meet the local abortionists in the PSU?

1. Yes
2. No
3. NA

COL 24
Problems during data collection:

1. No space to sit and fill the schedule
2. Embarrassment in slums where people don't have space - used to come out almost unclothed
3. No problem
4. Other

COL 25
Listing: Range of households listed

COL 26
Time (in hours) – in listing of the PSU (starting with getting ward level data till the end of listing)

COL 28
How often we may have done the listing in wrong areas?

COL 29
Problem in PSU maps:

1. Good map
2. Problem in locating the PSU
3. Problem in selecting the boundary but later identified
4. All the 4 boundaries could not be identified
5. Change of landmarks – how many landmarks were matching
6. In appropriate mapping - width of roads, distances

COL 30
PSU which did not have maps, from where did you get the information (if necessary use multiple codes)

1. Municipal corporation/Corporation
2. Census office
3. Statistical department
4. Nagar sevak
5. Information not got at all
6. Census book

COL 31
Rural listing: problem in getting ward level data:

1. Yes
2. No

COL 33
If yes, how much time was spent in getting the ward level data?
At the end did you get all the information that is required? Eg in majrewadi, ward level data was not available till the end.

COL 34
Problem during houselisting (if necessary use multiple codes):

1. Most of the families have migrated to *Ustorila*
2. Watchman did not let us to enter
3. Majority of the household people have gone out for job
4. Rough terrain
5. Other
6. NA

2.4.2

FIELD CONDITIONS, COMMUNITY MEETINGS, PROBLEMS FACED: AN ASSESSMENT BY ANVESHIS

FIELD CONDITIONS (col 2 - 7):

Food: It is seen that anveshis got adequate food in urban areas comparative to rural areas where they had insufficient food in approx 7% of the villages. At times they found it quite difficult to manage food. In around 17% of urban areas the anveshis had problem in getting lunch due to the absence of restaurants in those PSUs on the one hand and reluctance of the local residents to arrange for their lunch.

Stay: In the rural areas in most of the times we stayed within the PSU as compared to the urban areas. Most of the times in the urban areas it was not possible to stay within the PSU. For example, in Mumabi and Thane. The first preference was given to stay within the village as it has many advantages. In that understanding the community and culture was possible. It also helped facilitate our field work. For Anveshis it was satisfying and gainful as they interact with the community and were accessible to them when they wanted. Many a times we stayed in govt. facilities like rest houses, hostels and health care centres. While working in Mumbai a flat was rented for staying. Though in most of the cases we did not have to spend much time but in 14 areas we had to spent half a day to one day to make staying arrangement.

Transport: Reaching rural PSUs was more difficult than urban areas (It was difficult to reach 25 PSUs in rural areas as compared to 2 in urban areas).

Telephone facilities: In the villages making phone calls was very difficult and time taking. Only 48 rural areas had the facilities within the PSU in comparison to 98 in urban areas. In about half of the villages we had to use some transport facility to make the phone calls as they were sitauted at distance from the PSUs.

RESPONSE OF THE COMMUNITY (col 8-18[1]):

About the communities studied: Of the 103 rural PSUs, about 38 PSUs were such that at least two caste groups and/or religious co-dominated. Among 100 urban PSU, 19 areas were slum areas, 20 areas were from the lower middle class, 36 areas were from the middle class and 25 areas belonged to the upper middle class/elite class. Majority communities from the upper middle class and elite class were non- cooperative and neutral during the data collection. In many of the areas the watchmen did not let us enter in the societies. It was generally very difficult to convince the people from the upper middle class. In general, the people from rural communities were not only more cooperative but also warm and welcoming compared to those from the urban areas.

[1] This part also contains data from chart 2.2, filled by anveshis in the field.

Conducting community meetings

Unlike other large-scale surveys, we thought of conducting meeting in our selected PSUs, where all villagers would be invited. The main objective of conducting the meetings was to build rapport with the community through the support of the villagers rather than the power holders and also to inform the community about our organization and objective of our study. It would also serve as a means to express our gratitude for their prospective participation in the study.

Of the 103 rural Psus we were able to conduct meeting in 91 PSUs. From 22 PSUs there was a request for repeat meeting but we could meet their demand only in 16 cases. We also gave special emphasis to conduct meetings in minority communities. Of the 103 PSUs, in 56 communities there was a separate harijan vastis or rajwadas but only in 9 places we could conduct a separate meeting. The major reason for not being able to conduct the meetings in 12 PSUs is the reluctance of the community, though there were other causes like rough terrain, some event in the village and language problem. As far as urban areas are concerned we were able to conduct meeting in only one area. We did not expect the community meetings to happen in the urban areas in anyway.

Although the community meeting was supposed to be held before data collection, it was not possible to do so in 39 rural areas due to various unanticipated problems. According to our anveshis the community meetings were useful in the data collection process in terms like better acceptance by the research participant during data collection and rendering logistical support. It was felt that it helped reduce refusals.

Except in 14% rural PSUs, our meetings were attended by substantial number of villagers. While calling people for the meeting special emphasis was given to make women attend the meeting and it was seen that except in 9 areas we had substantial number of women. The timing and venue of the meeting was fixed according to the suitability of the people of the PSU. It is seen that most of the meetings (around 52) were conducted in the evening since it was convenient to the villagers followed by the morning and afternoon time. In majority of the cases the meetings were held either in the school or in temples.

Generally anveshis relied on villagers for assistance and co-operation in conducting community meetings. Most of the time it was either sarpanch and/or anganwadi worker and/or local youths who helped us organising the meetings. In other areas help to organise the meeting was rendered by teacher and other local leaders. In some villages, the meetings were publicly announced through the local mechanism namely *dawandi*. In 9 areas, meetings were conducted without any help from local people.

In order to give something to the community, we gave set of health posters and a basic health guide to each PSU. When requested in some PSUs, more than one sets were also given. We were particular as to who received the set of posters. In most cases it was the woman health worker, youth and/or school teacher. Despite our efforts only in 6 areas the posters were displayed before the anveshis left the PSU.

We used some posters and charts to explain different health issues and the information about health care system while conducting the meeting. In the first phase[2] of our field work which was rural

[2] In the first phase we completed 61 rural PSUs

based, community members from various PSUs demanded for information on AIDS and related issues. We, therefore, in the second phase used the books by Lokvigyan and Prayas in addition to the PHA posters we. It is our general feeling that through these community meetings a bond was developed with the communities. Each of the anveshis depending upon their interactions with the communities continue to interact with members of these communities through letters and telephones. Information exchange takes place at different level and is of different type.

LISTING AND MAPPING (col 25-34):

Time spent in listing: In both the urban and rural areas we did the listing in groups to save the time. We divided the team into 2 or 3 groups and did the listing in parallel by segmenting the village or block. There are about 5 small villages, which has less than 50 hhds. From the above table we can say that in about 40% of the villages the hhds ranged between 201-300.Only in 8 villages we did listing of more than 500 households. Villages with listing of less than 50 or up to 200 took less time as compared to the villages where two wards were to be listed. In about 49 villages we could complete the house listing in a day. In another 42 rural PSUs, it took 1-2 days and in two villages it took more than three days. The longer period required was because of the difficulty in getting the ward level data and/or the difficult terrain. In one PSU, house listing took 5 days to complete. As regards number of households, most of the blocks in the urban areas ranged between 101-200 households. Only in 4 blocks it more. In urban areas, time required for house listing was much less once the boundaries of the PSU were identified. During the urban field work, boundary selection was a major time taking task due to the various problems in the location maps. In urban areas the time required for boundary identification varied between half an hour to 5 hours. In one PSU in Mumbai we virtually spent the whole day to locate the PSU and left with uncertainly in our mind about appropriateness of the PSU.

Problems faced during listing: In more than 80% of the rural PSUs we faced problem in listing either due to rough terrain and/or large geographical spread with no facility of intra-PSU transportation, difficulty in getting reliable information about wards, boundaries and the ward level population data. In few Mumbai PSUs, the watchmen in the societies did not permit us to enter. Sometimes the odd working hours of the households members became a severe constraint. We found the houses were locked and therefore we faced problem in recording names of the heads of the households.

Location maps: In the urban area we located the boundaries of the PSU or the selected area with the help of the location maps. Of the 100 urban PSUs we were unable to get maps of 21 PSUs. Of the 79 maps available, 31 maps were not very clear and we had problems in identifying and locating PSUs. Sometimes there were problems in the boundary selection due to the changes in the landmarks (1991 census maps were used), all the boundaries/landmarks not stated clearly and/or because of inappropriate or enlarged maps. In Mumbai we had a major problem in locating PSUs as the maps did not state 'East or West' side of a particular area.
In 21 cases where we did not have the maps we tried to get the block level information or the location of the boundary from some concerned offices. Most of the time we got it from the municipality or the corporation offices. In Mumbai we got the information from the census handbooks. Sometimes we have to go to two or three places to get the information.

Inspite of care taken to identify selected PSU, we went wrong in 3 areas (2 in the rural areas and 1 in urban area). The problem occurred mainly because the selected areas now are named differently. In all these areas, we had to redo the exercise.

PROBLEMS DURING DATA COLLECTION (col 19 and 24):

In general, more problem were faced during data collection in urban areas than in rural ones. The nature of the problems faced were different in the two areas. In urban areas anveshi had to administer and fill the interview schedules by standing either because there was absolutely no place to sit (like slums in Mumbai) or they had to stand as the residents of the households did not offer them a seat (like in societies). In a few urban PSUs our anveshis were embarrassed and felt discomfort because of the way people presented themselves. Also, it was in urban areas that we needed to spend more energies to convince them about authenticity of our organisations and the work it is engaged in.

The problems in rural areas were terrain (which in some cases were rough or was well spread out and thus have to walk long distances), lack of electricity and other causes like heavy rainfall during data collection. Language was yet another problem in rural areas. In 6 rural PSUs the anveshis faced language problem and of these we had to take the help of translator in 2 villages. In Mumbai we had language problem in the sense that there are families who could speak only Gujrati and English. In these households, other researches collected data in English.

PERCEPTION ABOUT QUALITY OF DATA (col 20-21):

Informed consent: In our study special effort were made that informed consent was sought in a meaningful manner. Anveshis carry a little discomfort about how much people understood of what was being communicated to them during the process of seeking informed consent in about 26 rural PSUs. Anveshis perceive it to be because of problems in comprehension in what we were trying to communicate to them. The problem was more accentuated in tribal tribal areas, in areas where there was a language barrier and existed a cultural gap.

Data on Age: In the rural areas getting the accurate age was quite difficult and we had to take extra efforts to reach to the correct age. We used some extra probes to get the close to accurate age. Of all the rural based PSUs, we could get the actual dates (the villages were more urbanized) only in 2 PSU compared to 55 in urban areas. Despite our efforts, uncertainly about accuracy of age continues to exist at least in case of 23 rural PSUs.

3.1

RESPONSE PATTERN: A SUMMARY

	Urban		Rural		Total		Mumbai	
Result	*Number*	*Percent*	*Number*	*Percent*	*Number*	*Percent*	*Number*	*Percent*
Households selected	**2226**	***100.00***	**3458**	***100.00***	**5684**	***100.00***	**738**	***100.00***
Households completed	2046	*91.9*	3332	*96.35*	5378	*94.61*	643	*87.12*
Households with no competent hhd member	0	*0.0*	4	*0.11*	4	*0.07*	0	*0.0*
Households absent	96	*4.31*	108	*3.12*	204	*3.58*	42	*5.69*
Households refused	65	*2.92*	5	*0.14*	70	*1.23*	34	*4.60*
Households left the PSU	0	*0.0*	7	*0.20*	7	*0.12*	0	*0.0*
Dwelling destroyed	0	*0.0*	1	*0.02*	1	*0.01*	0	*0.0*
Problem in listing	2	*0.08*	1	*0.02*	3	*0.05*	2	*0.27*
Access denied	16	*0.71*	0	*0.0*	16	*0.28*	16	*2.16*
Others (eg cannot speak)	1	*0.04*	0	*0.0*	1	*0.01*	0	*0.0*
Eligible women	**2340**	***100.00***	**3923**	***100.00***	**6263**	***100.00***	**701**	***100.00***
Women interviewed completely	2088	*89.2*	3593	*91.58*	5681	*90.7*	608	*86.73*
Women not at home	214	*9.14*	306	*7.80*	520	*8.30*	76	*10.84*
Women refused	31	*1.32*	17	*0.43*	48	*0.76*	14	*1.99*
Other (eg cannot speak)	7	*0.29*	7	*0.17*	14	*0.22*	2	*0.28*

Note: The above data is of 201 PSUs of the total 203 PSU

3.2

REPORTED PREGNANCY OUTCOMES

REPORTED PREGNANCY OUTCOME	LIFETIME				REFERENCE PERIOD			
	Urban	Rural	Total	Mumbai	Urban	Rural	Total	Mumbai
Induced Abortions	253 (4.3) [62.0]	155 (1.4) [38.0]	408 (2.4) [100.0]	93 (6.1) [NA]	95 (7.4) [51.4]	90 (3.6) [49.6]	185 (4.9) [100.0]	34 (11.0) [NA]
Spontaneous Abortions	299 (5.1) [41.8]	417 (3.75) [58.2]	716 (4.2) [100.0]	88 (5.7) [NA]	80 (6.2) [38.5]	128 (5.1) [61.5]	208 (5.5) [100.0]	25 (8.0) [NA]
Still births	60 (1.0) [24.9]	181 (1.6) [75.1]	241 (1.4) [100.0]	17 (1.1) [NA]	17 (1.3) [35.4]	31 (1.2) [64.6]	48 (1.3) [100.0]	4 (1.3) [NA]
TOTAL PREGNACY WASTAGE	**612** (10.5) [44.8]	**753** (6.8) [55.2]	**1365** (8.0) [100.0]	**198** (13.0) [NA]	**192** (15.0) [43.5]	**249** (10.0) [56.5]	**441** (11.7) [100.0]	**63** (20.2) [NA]
Live births	5238 (89.6) [33.5]	10375 (93.3) [66.5]	15613 (92.0) [100.0]	1323 (87.0) [NA]	1090 (85.0) [32.7]	2244 (90.0) [67.3]	3334 (88.3) [100.0]	249 (79.8) [NA]
TOTAL PREGNACIES	**5841** (100.0) [34.4]	**11116** (100.0) [65.6]	**16957** (100.0) [100.0]	**1519** (100.0) [NA]	**1282** (100.0) [44.0]	**2491** (100.0) [66.0]	**3773** (100.0) [100.0]	**312** (100.0) [NA]

Note: 1. Lifetime means through out the life span of the woman inclusive of reference period (since Jan 1996)

2. Outcome of pregnancies would not add up to the total pregnancy reported as there are cases of twin pregnancies.

3. Braces means column percentages

4. Square brackets means row percentages in their respective categories

3.3

COMPARATIVE DATA OF PREGNANCY OUTCOMES
(in percentages)

REPORTED PREGNANCY OUTCOME (LIFETIME)	CEHAT	RCH[1]	NFHS -2[2] (Mah)
Induced Abortions	2.4	1.4	1.9
Spontaneous Abortions	4.2	3.5	3.8
Still births	1.4	1.0	1.5
TOTAL PREGNACY WASTAGE	8.0	5.9	7.2
Live births	92.0	95.0	92.8

Few highlights of CEHAT's study:

- Abortion rate (lifetime) = 72 per 1000 livebirth
- Induced Abortion rate (lifetime) = 26 per 1000 livebirth
- Induced Abortion rate (reference period) = 55 per 1000 livebirth
- Spontaneous Abortion rate (lifetime) = 46 per 1000 livebirth
- Spontaneous Abortion rate (reference period) = 62 per 1000 livebirth

[1] Source: RCH-Rapid household survey, India
[2] Source: NFHS – India, 1998-99, pg 95