MELA RESEARCH

Maternal, Child Health and Family Planning Baseline surveys and data for the IFHP program areas in Ethiopia

This study was sponsored by Pathfinder International/ IFHP Ethiopia, November 2009

Additional information about this study may be obtained from:

Mela Research PLC
P.O. Box 34422
Addis Ababa, Ethiopia
Telephone: +251-11-8688765
E-mail: melainfo@melaresearch.com
Internet: http://www.melaresearch.com.

Suggested citation:

Mela Research. 2009. Maternal, Child Health and Family Planning Baseline surveys and data for the IFHP program areas in Ethiopia. Addis Ababa, Ethiopia

TABLE OF CONTENTS

LIST OF ACRONYMS

ANC-	Antenatal Care
ARI	Acute Respiratory Infection
CBRH	Community Based Reproductive Health
CBRHA	Community Based Reproductive Health Agents
CHP	Community Health Promoters
CPR	Contraceptive Prevalence Rate
ESHE	Essential Health Services in Ethiopia
FP	Family Planning
HEW	Health Extension Worker
IFHP	Integrated Family Health Project
ITN	Insecticide Treated Net
JSI	John Snow Inc.
L10K	Last 10 Kilometer
MDGs	Millennium Development Goals
MNCH	Maternal Newborn and Child Health
NGO	Non-Governmental Organization
ORS	Oral Rehydration Solution
ORT	Oral Rehydration Therapy
PI-E	Pathfinder International – Ethiopia
PPS	Probability Proportional to Size
RH	Reproductive Health
RHB	Regional Health Bureau
RHF	Recommended Homemade Fluid
SNNP	Southern Nations, Nationalities and People's Region
TTI	Tetanus Toxoid Injections

EXECUTIVE SUMMARY

Pathfinder International Ethiopia (PI-E) is implementing an Integrated Family Health Program (IFHP) in collaboration with the John Snow Inc. (JSI). The Program emphasizes family planning (FP), elements of reproductive health (RH), malaria, and maternal, newborn, and child health (MNCH) at household, community, health post, and health center levels, focusing on rural, peri-urban and hard-to-reach populations. Close linkages with other programs addressing clinical care at hospitals will also be made. The four major regions, Amhara, Tigray, Oromia and SNNP that constitute about 85% of the country's population are the target focuses of the IFHP.

This report presents baseline indicators with reference to maternal, newborn and child health for future program monitoring and evaluation of the IFHP intervention.

A large set of household health survey data that came from previous surveys (April-June 2008) in Amhara, Oromia and SNNP coupled with an independent survey from Tigray (December 2008-January 2009) were the sources for this baseline report. Between April and June 2008, the former USAID funded JSI/ESHE project conducted an end-line household health survey in the three most populous regions of the country, namely Amhara, Oromia and SNNP, as part of end of project evaluation. The survey was designed to provide project level as well as region wide estimates of key maternal, newborn and child health indicators. The IFHP in collaboration with the JSI/Last Ten Kilometers (L10K) project fielded a region wide household health survey in Tigray (i.e. between December 2008 and January 2009). Both surveys followed similar methodologies and collected comparable information, targeting women respondents of same reproductive profile.

The surveys interviewed a total of 7,920 women age 15-49 years, 2,520 had children age 0-11 months and 2,400 children age 12-23 months. Pre-coded survey questionnaires were used to collect relevant FP/MNCH indicators. This baseline study involved a comparison group by dividing the survey areas into IFHP and non-IFHP areas. Out of the total 7,920 interviews, 4,110 (52%) fall in the IFHP category and the remaining 48% in the non-IFHP. Survey indicators presented for the two areas combined and separately for each survey domain. Indicators also compared between the IFHP and non-IFHP areas.

The salient findings are detailed below:

Household safe water supply and sanitation

- Overall, in nearly 60% and 53% of the households, respectively, there were improved sanitation facilities and water sources. Whereas the possession of improved facility compares between the IFHP and non-IFHP areas, the supply of improved water sources appeared significantly better in the IFHP area than in the non-IFHP (57.8% VS. 48.1%).

Bed Net in the household

- Nearly 70% of the households surveyed owned at least one bed net. Coverage with bed net appeared almost similar between the IFHP and non-IFHP areas. The vast majority of the households (90%) owned permanent nets.

Antenatal Care Coverage:

- Nearly 60% of the mother received at least one antenatal care (ANC) visit in health facility during the most recent pregnancy. About a fifth of the women reported that they had received the service from a health post. Though comparable, a slightly higher ANC coverage can be noted in the IFHP areas than in the non-IFHP (59.3% vs. 54%).

Tetanus Toxoid Injections (TTI):

- The receipt of at least two doses of TTI during the most recent pregnancy was reported at 46%, which is pretty similar between the IFHP and non-IFHP areas. About 57.5% of the

women were fully protected against neonatal TT, 56.5% of those from the IFHP and 57.8% from the non-IFHP

Delivery care:

- Institutional delivery accounted for 8.1%. Though institutional delivery is extremely low in both IFHP and non-IFHP areas, there was a higher coverage of institutional delivery in the non-IFHP areas than in the IFHP (10% vs. 6.5%).

Postnatal care:

- Postnatal care within 2 days of delivery is virtually absent with only 1% of the mothers with children age 0-11 months receiving the service (1.1% in the IFHP and 0.9% in the non-IFHP).

Breastfeeding:

- Fifty Nine percent of the women with children age 0-11 months reported initiating breastfeeding within an hour of birth. A slightly higher proportion of women initiated breastfeeding within an hour in the IFHP areas (62%) than in the non-IFHP (56.7%). Colostrums feeding (first milk) reported by 59.2% of the women. Of note, women in the IFHP area appeared significantly more likely than those from the non-IFHP to feed first milk (66.8% vs. 52.6%).
- Exclusive breastfeeding of children up to the age 5 months was reported by 76% of the women in the 4 regions. The practice of exclusive breastfeeding found significantly higher in the IFHP areas than in the non-IFHP (82.6% vs. 70%).

Vitamin A supplementation:

- In the 4 regions, 64% of the children age 6-23 months received vitamin A supplementation. The coverage of vitamin A supplementation was comparable between the IFHP and non-IFHP areas.

Home management of diarrhea:

- Oral rehydration solution (ORS) was given to a third (34.5%) of the children with diarrhea in the two weeks prior to interview. The same proportion of children with diarrhea was given recommended home made fluid (RHF) (34.7%). The proportion of children that received either ORS or RHF was 56%. The home management of childhood diarrhea such as the provision of ORS, RHF, and increased fluid intake appeared comparable between the IFHP and non-IFHP areas

Child immunization:

- By combining information obtained either from cards or reported by the mothers, 43.8% of the children in the 4 regions were fully vaccinated; 36.4% before their first birthday.
- The coverage of BCG, which is an indicator of access to vaccination services, recorded at 78.5%.
- DPT3 coverage often provides a good indication of vaccine continuation. In the 4 regions, DPT3 coverage reached 61%.
- Dropout rate from DPT1 to DPT3 remains high and recorded at 22%.
- Measles coverage in the 4 regions reported at 59%.
- On the whole, child vaccination compares well between the IFHP and non-IFHP areas although BCG, DPT1 & 2 and Measles found to have slightly higher coverage in the IFHP areas. The proportions of children fully vaccinated have shown almost similar coverage in the two areas at 43.4% and 44.2%, respectively.

Contraceptive prevalence rate:

- The contraceptive prevalence rate (any method) in the 4 regions combined recorded at 29.4%. Injectables is the most widely family planning method with a prevalence rate of 23.7% followed by pills at 2.4%. Long terms and permanent methods are rarely practiced at less than 2%. Only 2%reported practicing traditional/natural methods

- The contraceptive prevalence rate compares very well between the IFHP and non-IFHP areas

HIV/AIDS/PMTCT:

- Women's awareness of vertical transmission of HIV[1] (mother-to-child) was found to be very low, with only 7.5% in IFHP areas and 6.5% in Non-IFHP areas reporting all three means of vertical transmission. In general, women reported better awareness of HIV transmission via breastfeeding, as reported by 60.1% in IFHP areas and 62.2% in Non-IFHP areas. The reporting of other routes such as during pregnancy (29.7% in IFHP areas and 22.4% in Non-IFHP areas) and at delivery (18.4% in IFHP areas and 21.1% in non-IFHP areas) can be considered low.

[1] Vertical transmission routes: during pregnancy, at delivery and during breastfeeding

I. BACKGROUND AND OBJECTIVES

Pathfinder International Ethiopia (PI-E) is implementing an Integrated Family Health Program (IFHP) in collaboration with John Snow Inc. (JSI). The Program emphasizes family planning (FP), elements of reproductive health (RH), malaria, and maternal, newborn, and child health (MNCH) at household, community, health post, and health center levels, focusing on rural, peri-urban and hard-to-reach populations. Close linkages with other programs addressing clinical care at hospitals will also be made.

The four major regions, Amhara, Tigray, Oromia and SNNP that constitute about 85% of the country's population are the target focuses of the IFHP. Though limited in scope, the program is extended to Somali and Benishangul Gumuz regions. Primary collaborators will be the four Regional Health Bureaus (RHBs) and selected zonal and woreda offices.

The purpose of this analysis and brief report is to generate baseline data and set benchmarks with reference to maternal, newborn and child health for future program monitoring and evaluation of the IFHP intervention. For this purpose the program utilizes available data from previous surveys (April –June 2008, in Amhara, Oromia & SNNP) and its own recent survey in Tigray (December 2008-January 2009).

II. NOTE ON SURVEYS METHODOLOGIES

These baseline results have been generated by combining data from two independent surveys conducted in April-June 2008 and December 2008-January 2009.

The former USAID funded JSI/Essential Health Services in Ethiopia (ESHE) project conducted the first survey (between April – June 2008) in the three most populous regions of the country -- Amhara, Oromia and Southern Nations, Nationalities and People's Region (SNNP) -- as part of end of project evaluation. The survey was designed to provide project level as well as region-wide estimates of key maternal, newborn and child health indicators. Recently, the IFHP in collaboration with the JSI/Last Ten Kilometers (L10K) project fielded a region-wide household health survey in Tigray (i.e. between December 2008 and January 2009). Both surveys followed similar methodologies and collected comparable information, targeting women respondents of the same reproductive profile. A brief account of the methodologies employed in the two surveys is discussed below:

2.1. Study Design, sampling and field operation

ESHE end-line survey in Amhara, Oromia and SNNP (April – June 2008):

The survey employed a cluster sampling procedure whereby Kebeles (smallest administrative units) served as clusters. The survey divided a region into two domains, as ESHE-project focus Woredas and non-project Woredas. From each area, 30 clusters were selected using *probability proportional to size* (PPS), which results in a total of 60 clusters (Kebeles) for a region. All the Kebeles in each sample area were included in their respective sampling frame for selection.

Several maternal, newborn, child health and other related indicators were the focuses of the survey. The indicators emerged from interviewing the following groups: (1) women in the reproductive age (15-49 years), (2) women with children age 0-11 months and (3) women with children age 12-23 months. A community questionnaire that also collected Kebele/cluster profiles with reference to availability of community health workers, health facilities and, whether or not the Kebele is endemic

to malaria, among others, was also administered. Respondents to the community questionnaire were either health extension workers (HEWs) or Kebele chairpersons.

The end-line survey sample size for each target group is 30 interviews per cluster (i.e. 10 with women age 15-49, 10 with women of children age 0-11 months, 10 with women of children 12-23 months). Overall, there were 600 respondents women age 15-49 years; 600 respondent women with children age 0-11 months and another 600 respondent women with children 12-23 months, for a region. For the three regions combined a sample size of 1800 was achieved in each category of respondents.

About 180 data collectors and supervisors were involved in the field work. The data collectors and supervisors were health workers mostly coming from Woreda health offices. The survey team in each region were given a 5-day intensive training including role play and field practice. Close monitoring of data collection was made by the supervisors as well as regional ESHE office staffs that had undergone the 5-day training themselves. Data collection took about a month in each region.

Data from the field were simultaneously entered into microcomputers at the then ESHE office in Addis Ababa. Two highly-experienced data entry clerks computerized the survey data using EPI-INFO 6.04. A brief training about the questionnaires, variables and the organization of the database was given to the data entry clerks.

IFHP Tigray baseline survey (December 2008 – January 2009):

The IFHP survey also divided the Tigray region into two domains, as IFHP areas and non-IFHP areas. A cluster sampling approach was employed, as that of the ESHE end-line survey. From each domain 30 Kebeles were selected using the PPS, totaling 60 for the entire Tigray region. The survey was designed to provide project-level as well as region-wide estimates. This survey also collected information allowing the estimation of several indicator values concerning maternal, newborn, and child health, among others.

Like the ESHE end-line survey, the Tigray survey targeted the same three groups: (1) women in the reproductive age (15-49 years), (2) women with children age 0-11 months and (3) women with children age 12-23 months. Nevertheless, the Tigray survey can be considered an improvement to the earlier one in terms of sample size and the amount of information it collected. At cluster level it achieved 42 interviews (20 with women age 15-49 years, 12 with women of children 0-11 months and 10 with women of children age 12-23 months). Overall, the IFHP survey in Tigray had 1200 respondents women age 15-49 years, 720 women of children 0-11 months, and 600 women of children 12-23 months.

A total of 49 data collectors and supervisors were recruited from the Tigray regional health offices, trained for 5-days and deployed into the field. The regional health bureaus recruited the data collectors from Woreda Health offices and facilities. The training also included a 1-day field practice. The data collection was closely supervised by the regional coordinators, the IFHP, L10K staffs, as well as the consultant.

The data from the field was edited in the field as well as in the office. Data entry templates developed (in EPI-INFO) and tested for applicability. Three experienced data entry clerks recruited, trained and computerized the data in the L10K's office in Addis Ababa. Open ended responses were translated from Tigregna to Amharic before computerization. For this purpose a translator was hired and worked closely with the data entry clerks. In order to assure data quality, spot checking as well as a 5% double data entry was employed and high concordance was achieved between the computerized data and the hard copy.

2.2. Constructing IFHP areas and non-IFHP areas sample domains

The Tigray survey was designed to allow estimation of indicator values separately for IFHP and non-IFHP areas, as well as a combined estimate for the entire Tigray region. This was not the case for the ESHE end-line survey, which was originally designed to provide estimates separately for ESHE and non-ESHE areas, as well as the entire region.

For the purpose of generating baseline indicators for IFHP and non-IFHP areas, the ESHE end-line survey clusters were reconstructed/rearranged to fit into the IFHP and non-IFHP domains. Table 1 presents the sample size achieved for each group of respondents stratified by IFHP and non-IFHP areas. Interestingly, the number of interviews achieved in the four regions appears to be nearly equally divided between the IFHP and non-IFHP areas - out of the total 7,920 interviews, 4,110 (52%) fall in the IFHP category and the remaining 48% in the non-IFHP.

Table 1: Number of respondents from the 4 regions, Amhara, Oromia, SNNP (June 2008) and Tigray (January 2009)

	IFHP Area*	Non-IFHP Area**	4-Region***
Number of respondents to the questionnaire for women 15-49	1550	1450	3000
Number of respondents to the questionnaire for women with children 0-11 months	1310	1210	2520
Number of respondents to the questionnaire for women with children 12-23 months	1250	1150	2400

*Note: * Refers to all IFHP areas in Amhara, Oromia, SNNP and Tigray, ** Refers to all Non-IFHP areas in Amhara, Oromia, SNNP and Tigray, and *** Refers to all IFHP areas and Non-IFHP areas in Amhara, Oromia, SNNP and Tigray, and it applies for all tables in the main body of the brief report.*

2.3. Merging data files from the 4 regions

The merging of the 4 regions' data files was an important step before embarking into data analysis and generation of indicators. The two surveys implemented similar methodologies, targeted the same group of respondents, and also asked comparable questions for most indicators of interest to IFHP. The Tigray survey, however, sampled more women than that of the ESHE end-line, asked more questions and, in some instances, provided detailed information comparable to that of the Ethiopia DHS 2005. The merging of the two datasets followed the steps below:

- Item by item (question by question) review of the questions included in the two surveys and locate those common questions from the two surveys
- Compared similar questions from the two surveys for their consistency in wording, response categories, numbering, labeling, and formatting
- Using the ESHE end-line as a reference point renamed all variables (question numbers) and value labels (response categories) from the Tigray survey to match the variables from ESHE end-line.
- Merged the files from the 4 regions to generate combined files for (1) for women age 15-49 years, (2) for women with children 0-11 months, (3) for women with children 12-23 months, and (4) for community.

- Created additional merged data files as needed. For example, for indicators on the entire age cohort of children age 0-23 months, created a merged dataset from the 0-11 and 12-23 months questions.
- Labeled variables and values of the merged data.
- Performed other data management operations such as checking the merged data for completeness and consistency, among others.

2.4. Sample weighting:

Since nearly comparable numbers of clusters fell within the IFHP and non-IFHP areas irrespective of their population size, sample weights were introduced to reflect the total population in each domain in order to get 4-region combined estimates as well as regional estimates. Population size, population proportion, the sample size for each target respondent and the sample weights for the 4-region combined and for each region is shown in Tables 2.1 – 2.5. Of note, in each region the IFHP and non-IFHP areas are self-weighted while the region-totals are based on weighted estimates, as shown in Tables 2.2 – 2.5.

4-region weighting:

Table 2.1. Population size by region and sampling domain, survey sample size and sample weights for each target respondents by domain

SAMPLING DOMAIN	***A:***	***Survey sample size***			**Sample Weights**		
	Population (2007 Census) N (%)	**B: Women 15-49 N (%)**	**C: Women with children 0-11mo N (%)**	**D: Women with children 12-23mo N (%)**	**Women 15-49 % Col. A %Col. B**	**Women with children 0-11mo % Col. A %Col. C**	**Women with children 12-23mo % Col. A %Col. D**
Amhara	9,050,668	370	370	370	1.15	0.97	0.92
- IFHP areas	(14.2)	(12.3)	(14.7)	(15.4)			
Amhara	8,163,388	230	230	230	1.67	1.40	1.34
- Non-IFHP areas	(12.8)	(7.7)	(9.1)	(9.6)			
Oromia	12,094,448	330	330	330	1.73	1.45	1.38
- IFHP areas	(19.0)	(11.0)	(13.1)	(13.8)			
Oromia	15,064,023	270	270	270	2.63	2.21	2.10
- Non-IFHP areas	(23.6)	(9.0)	(10.7)	(11.2)			
SNNP	5,730,873	250	250	250	1.08	0.91	0.86
- IFHP areas	(9.0)	(8.3)	(9.9)	(10.4)			
SNNP	9,311,658	350	350	350	1.25	1.05	1.00
– Non-IFHP areas	(14.6)	(11.7)	(13.90	(14.6)			
Tigray	2,772,447	600	360	300	0.22	0.30	0.35
– IFHP areas	(4.4)	(20.0)	(14.3)	(12.5)			
Tigray	1,542,009	600	360	300	0.12	0.17	0.19
– Non-IFHP areas	(2.4)	(20.0)	(14.2)	(12.5)			
Total	63,729,514	3,000	2,520	2,400			
	(100.0)		(100.0)	(100.0)			

Amhara region weighting:

Table 2.2. Population size by region and sampling domain, survey sample size and sample weights for each target respondents by domain, Amhara

AMHARA SAMPLING DOMAIN	***A: Population (2007 Census) N (%)***	***Survey sample size***			**Sample Weights**		
		B: Women 15-49 N (%)	**C: Women with children 0-11mo N (%)**	**D: Women with children 12-23mo N (%)**	**Women 15-49 % Col. A %Col. B**	**Women with children 0-11mo % Col. A %Col. C**	**Women with children 12-23mo % Col. A %Col. D**
Amhara - IFHP areas	9,050,668 (52.6)	370 (61.7)	370 (61.7)	370 (61.7)	0.85	0.85	0.85
Amhara - Non-IFHP areas	8,163,388 (47.4)	230 (38.3)	230 (38.3)	230 (38.3)	1.24	1.24	1.24
Total	17,214,056	600	600	600			

Oromia region weighting:

Table 2.2. Population size by region and sampling domain, survey sample size and sample weights for each target respondents by domain, Oromia

OROMIA SAMPLING DOMAIN	***A: Population (2007 Census) N (%)***	***Survey sample size***			**Sample Weights**		
		B: Women 15-49 N (%)	**C: Women with children 0-11mo N (%)**	**D: Women with children 12-23mo N (%)**	**Women 15-49 % Col. A %Col. B**	**Women with children 0-11mo % Col. A %Col. C**	**Women with children 12-23mo % Col. A %Col. D**
Oromia - IFHP areas	12,094,448 (44.5)	330 (55.0)	330 (55.0)	330 (55.0)	0.81	0.81	0.81
Oromia - Non-IFHP areas	15,064,023 (55.5)	270 (45.0)	270 (45.0)	270 (45.0)	1.23	1.23	1.23
Total	27,158,471	600	600	600			

SNNP region weighting:

Table 2.4. Population size by region and sampling domain, survey sample size and sample weights for each target respondents by domain, SNNP

SNNP SAMPLING DOMAIN	***A:***	***Survey sample size***			**Sample Weights**		
	Population (2007 Census) N (%)	**B: Women 15-49 N (%)**	**C: Women with children 0-11mo N (%)**	**D: Women with children 12-23mo N (%)**	**Women 15-49 % Col. A %Col. B**	**Women with children 0-11mo % Col. A %Col. C**	**Women with children 12-23mo % Col. A %Col. D**
SNNP	5,730,873	250	250	250	0.91	0.91	0.91
- IFHP areas	(38.1)	(41.7)	(41.7)	(41.7)			
SNNP	9,311,658	350	350	350	1.48	1.48	1.48
– Non-IFHP areas	(61.9)	(58.3)	(58.3)	(58.3)			
Total	15,042,531	600	600	600			

Tigray region weighting:

Table 2.5. Population size by region and sampling domain, survey sample size and sample weights for each target respondents by domain, Tigray

TIGRAY SAMPLING DOMAIN	***A:***	***Survey sample size***			**Sample Weights**		
	Population (2007 Census) N (%)	**B: Women 15-49 N (%)**	**C: Women with children 0-11mo N (%)**	**D: Women with children 12-23mo N (%)**	**Women 15-49 % Col. A %Col. B**	**Women with children 0-11mo % Col. A %Col. C**	**Women with children 12-23mo % Col. A %Col. D**
Tigray	2,772,447	600	360	300	1.28	1.28	1.28
– IFHP areas	(64.3)	(50.0)	(50.0)	(50.0)			
Tigray	1,542,009	600	360	300	0.71	0.71	0.71
– Non-IFHP areas	(35.7)	(50.0)	(50.0)	(50.0)			
Total	4,314,456	1200	720	600			

2.5. Data analysis

Data analysis is based mainly on descriptive statistics and univariate analysis was conducted when deemed necessary. All Tables and figures present selected indicators separately for IFHP areas, non-IFHP areas, and 4-region combined. Indicator values were computed for each region, stratified by IFHP and non-IFHP areas (Annex 2-5). To identify trends since 2005, DHS data was used for the four regions and compared findings with the recent survey results for selected indicators.

2.6. Methodological limitations:

- Since the ESHE end-line survey was not originally meant to provide estimates for IFHP and non-IFHP areas, we reconstructed the ESHE end-line clusters to create sampling domains for IFHP and non-IFHP areas. Weighting was introduced as part of the reconstruction of the sample domains to compensate for the unequal selection probability of clusters falling in the new domains. Of note, the allocation of clusters into the IFHP and non-IFHP domains is not based on random assignment.
- The ESHE end-line and the Tigray surveys were conducted 8 months apart from each other; this should be taken into account while comparing indicators across regions.

III. KEY BASELINE FINDINGS

3.1. Sample characteristics

Women's background characteristics (Table 3):

- The mean age of respondents was 27 years; similar age patterns were noted between women interviewed in the IFHP and non-IFHP areas. About a third of the women were 25 years or younger.
- The vast majority of the women surveyed (90%) were married at the time of interview. The proportion of married women compared well between the IFHP and non-IFHP areas.
- A little over three quarter of the women (77.4%) cannot read or write; 22.3% can read or write. The proportion that can read or write appeared a bit higher in the non-IFHP areas than in the IFHP (24.4% vs. 19.8% respectively).

Table 3: Percent distribution of women age 15-49 by background characteristics, Amhara, Oromia, SNNP (June 2008) and Tigray (January 2009)

	IFHP AREA (4-region weighted)		***NON-IFHP AREA (4-region weighted)***		**4-REGION (Weighted)**	
Characteristics	Percent	Number	Percent	Number	Percent	Number
Age						
15-19	8.6	128	7.5	116	8.0	244
20-24	24.7	379	26.8	377	25.8	756
25-29	29.9	433	30.4	414	30.1	847
30-34	18.2	306	19.7	272	19.0	578
35-39	10.0	167	10.9	169	10.5	336
40-44	6.2	100	3.5	73	4.8	173
45-49	1.5	27	1.0	26	1.3	53
Missing	0.9	10	0.2	3	0.5	13
Mean age	27.4	1540	27.0	1447	27.2	2987
Marital status						
Currently married	89.1	1330	90.4	1244	89.8	2574
Currently co-habiting	1.6	28	1.1	13	1.3	41
Formerly married	6.5	74	5.7	58	6.1	132
Never married	2.8	116	2.5	131	2.6	247
Missing	0.0	2	0.3	4	0.2	6
Years of education						
None	79.9	1117	75.2	1060	77.4	2177
Informal	0.2	9	0.0	9	5.7	18
1 – 3	4.7	81	6.5	84	9.4	165
4 – 6	8.1	135	10.5	162	6.9	297
7 – 12	6.4	171	7.4	123	0.5	294
more than 12	0.7	37	0.4	12	0.1	49
Literate (can read or write)	19.8	1550	24.4	1450	22.3	3000

Sampled children sex and age (Table 4):

- The surveys targeted mothers of children age 0-11 and 12-23 months. These children were equally divided by sex. The sex distribution of children is similar between the IFHP and non-IFHP areas.
- The age profile of children is as follows: 26.4% were younger than 6 months, 25% 6-11 months, and 48.5% 12-23 months. Likewise, there is no significant difference in the age distribution of sampled children between the IFHP and non-IFHP areas

Table 4. Percent distribution of children under two by selected background characteristics, 4-region, Amhara, Oromia, SNNP (June 2008) and Tigray (January 2009)

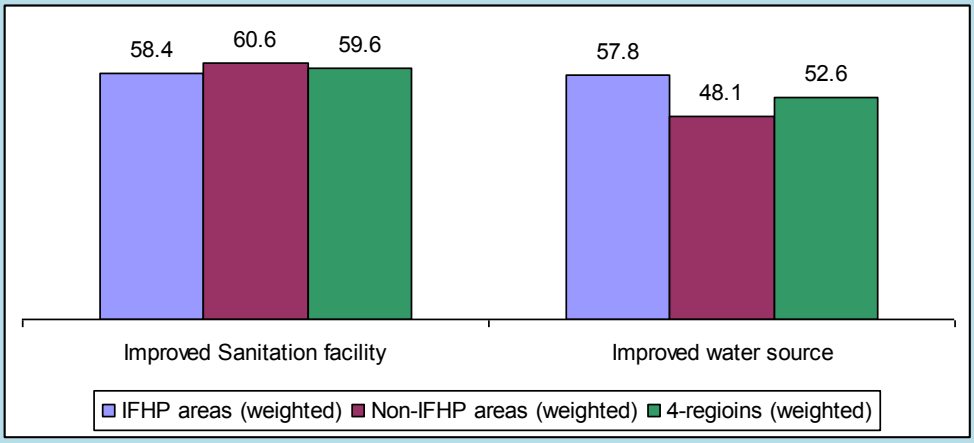
	IFHP AREA (4-region weighted)		***NON-IFHP AREA (4-region weighted)***		**4-REGION (Weighted)**	
Characteristic	Percent	Number	Percent	Number	Percent	Number
Male	48.5	1257	51.0	1194	49.8	2451
Female	51.1	1293	49.0	1163	50.0	2456
Missing	0.4	10	0.0	3	0.2	13
Age						
< 6 months	25.4	638	27.3	620	26.4	1258
6-11 months	25.8	668	23.9	588	24.8	1256
12-23 months	48.5	1237	48.5	1136	48.5	2373
Missing	0.3	17	0.3	16	0.3	33

3.2. Household Characteristics

Household safe water supply and sanitation (Figure 1)

- The presence of improved sanitation facilities and water sources was assessed at the household level.
- A household is considered as having improved water source if it has water supply piped into the dwelling, water piped into the compound, water piped outside the compound, water from a covered well, or water from a protected spring. A household is considered as having improved sanitation facilities if it owns a flush toilet, a pit latrine/traditional pit toilet, or a ventilated improved pit latrine (VIP).
- Nearly 60% households in the IFHP areas and 53% households in non-IFHP areas have improved sanitation facilities and water sources.
- Whereas the possession of improved sanitation facilities was similar between the IFHP and non-IFHP areas, the supply of improved water sources was significantly better in the IFHP area than in the non-IFHP (57.8% vs. 48.1% respectively).
- Compared with the results from the 2005 DHS, there was a significant improvement (from 29% to 60%) in the ownership of improved sanitation facilities in the 4 regions

Figure 1: Percent of households with improved safe water supply[2] and sanitation[3], Amhara, Oromia, SNNP (June 2008) and Tigray (January 2009)



Bed Net in the household (Table 5)

- The presence of a bed net at household level was assessed in those clusters/Kebeles known to be endemic to malaria, which represented 73% of the clusters in the four regions.
- Nearly 70% of the households surveyed owned at least one bed net. Coverage with bed nets appeared almost similar between the IFHP and non-IFHP areas. The vast majority of the households (90%) owned permanent nets.
- There is a massive increase in the coverage of bed nets in the four regions since 2005 from a low of 8% in 2005 (DHS) to 70%.

[2] Improved water source include: piped into dwelling, OR piped into compound, OR piped outside compound, OR covered well, protected spring

[3]Improved sanitation facilities include: Flush toilet OR Pit Latrine/traditional pit toilet OR ventilated improved pit latrine (VIP)

Table 5: Percent households in malarious areas who owned at least one insecticide treated net (ITN), the number of ITNs in a household and the average number per household, 4-region, Amhara, Oromia, SNNP (June 2008) and Tigray (January 2009)

	IFHP AREA (4-region weighted)		***NON-IFHP AREA (4-region weighted)***		**4-REGION (Weighted)**	
	Percent	Number	Percent	Number	Percent	Number
At least one bed net in the household	69.2	1120	69.8	1200	69.5	2320
	n=760		n=947		n=1707	
Number of bed nets						
1	39.2		35.0		36.9	
2	55.1		51.3		53.0	
3	5.5		12.2		9.2	
4	0.1		1.4		0.8	
5	0.1		0.1		0.1	
6	0.0		0.0		0.0	
7+	0.0		0.0		0.0	
Mean bed net per household (95% CI)	1.7(1.6-1.7)		1.8(1.7-1.9)		1.7(1.7-1.8)	

3.3. Maternal healthcare services

Antenatal Care Coverage (Table 6)

- Nearly 60% of surveyed mothers attended at least one antenatal care (ANC) visit in a health facility during the most recent pregnancy. About a fifth of the women reported that they received ANC services from a health post.
- Although similar, slightly higher ANC coverage was noted within the IFHP areas than within the non-IFHP (59.3% vs. 54% respectively).
- The uptake of ANC improved significantly in the 4 regions since 2005 DHS from 27% to 60%.

Table 6. Place of at least one Antenatal care visit, 4-region, Amhara, Oromia, SNNP (June 2008) and Tigray (January 2009)

Place of Antenatal Care	***IFHP AREA (4-region weighted)***		***NON-IFHP AREA (4-region weighted)***		**4-REGION (Weighted)**	
	Percent	**Number**	**Percent**	**Number**	**Percent**	**Number**
Any Health Facility (excluding HP)	33.6	1310	39.5	1210	36.8	2520
Health Post (HP)	20.4	1310	19.8	1210	20.1	2520
Any Health Facility (Including HP)	54.0	1310	59.3	1210	56.9	2520

Tetanus Toxoid Injections (TTI) (Table 7)

- The receipt of at least two doses of TTI during the most recent pregnancy was reported for the 4-regions at 46%, which is similar to receipt of two doses reported in the IFHP and non-IFHP areas.
- About 57.5% of the women were fully protected against neonatal TT; 56.5% of those from the IFHP and 57.8% from the non-IFHP
- The proportion of pregnant women who received at least two TT during their most recent pregnancy increased significantly from 29% (DHS 2005) to 46%.

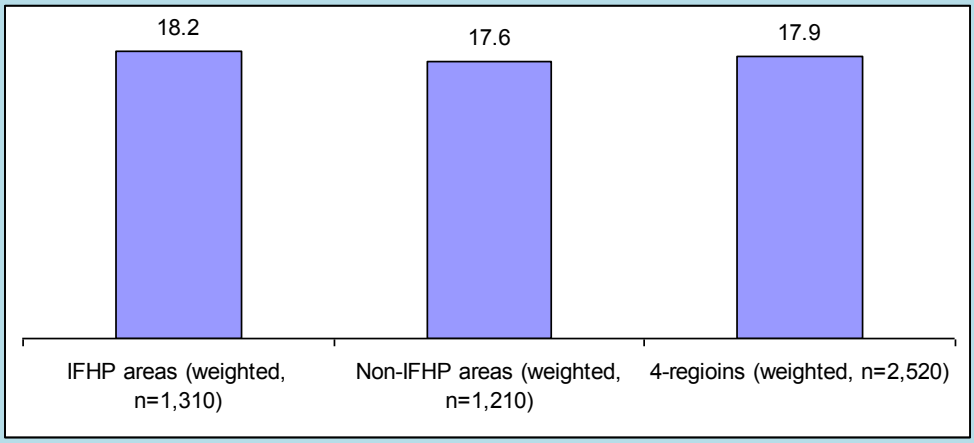
Table 7. Percentage distribution of women according to receipt of TTI and those mothers of children 0-11 months protected against neonatal tetanus at birth, 4-region, Amhara, Oromia, SNNP (June 2008) and Tigray (January 2009)

	IFHP AREA (4-region weighted) N=1310	***NON-IFHP AREA (4-region weighted) N=1210***	**4-REGION (Weighted) N=2520**
TTI during the pregnancy (last year)			
None	38.2	40.3	39.3
1	14.9	14.4	14.7
2+	46.8	45.3	46.0
Protection against Neonatal Tetanus: (Women)			
Received 2+ doses, last within 3 yrs	47.2	45.8	46.7
Received 3+ doses, last within 10 yrs	7.7	9.9	8.9
Received 5+ doses during lifetime	1.6	2.1	1.9
Protected against Neonatal TT	56.5	57.8	57.5

Iron/Folic Acid (Figure 2)

- During antenatal consultation, pregnant women receive iron/folic acid supplementation as an intervention to prevent anemia.
- In the 4 regions about 18% of the women with children age 0-11 months reported receiving iron/folic acid during the ANC visits and this is similar between the IFHP and non-IFHP areas.

Figure 2. Percent of mothers of children 0-11 months who have received Iron/folic acid during the last pregnancy, 4-region, Amhara, Oromia, SNNP (June 2008) and Tigray (January 2009)



Delivery care (Table 8)

- The vast majority of the women (92%) delivered their most recent child age 0-11 months at home.
- Institutional delivery accounted for 8.1%. Although institutional deliveries are extremely low in both IFHP and non-IFHP areas, there was a higher coverage of institutional deliveries in the non-IFHP areas than in the IFHP (10% vs. 6.5% respectively).
- Health extension worker (HEWs assisted only 1% of the women during delivery
- Institutional deliveries remain low, but have increased significantly since 2005 (from 4% [2005 DHS] to 8%).

Postnatal care (Table 8)

- Postnatal care within 2 days of delivery was virtually absent, with only 1% of the mothers with children age 0-11 months reporting receipt of this service.
- Nearly 8% of the mothers received postnatal check-up within 45 days.
- Although postnatal care within 45 days remains low, there has been improvement since 2005 (from 1.6 % [2005 DHS] to 8%).

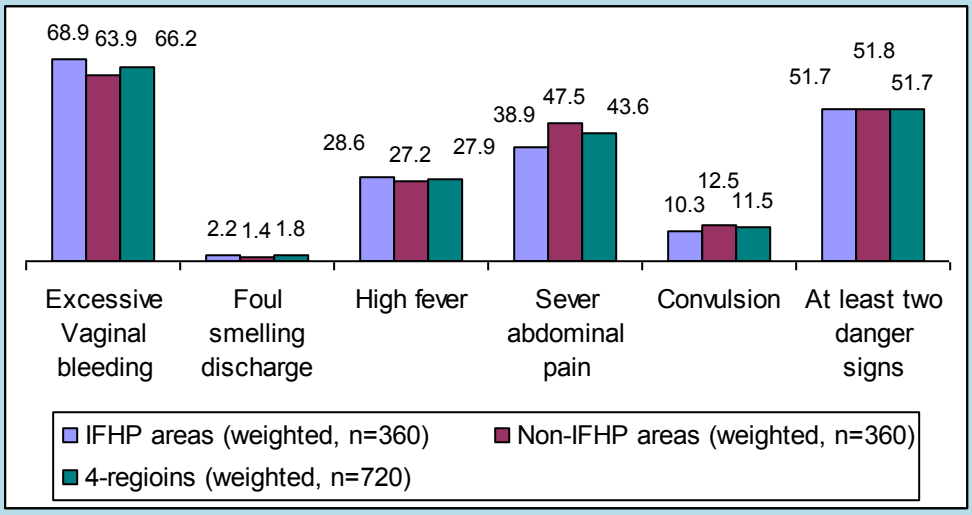
Table 8. Percentage distribution of women with children age 0-11 months according to place of delivery, assistance during delivery, and the receipt of postnatal care, 4-region, Amhara, Oromia, SNNP (June 2008) and Tigray (January 2009)

	IFHP AREA (4-region weighted) N=1310	***NON-IFHP AREA (4-region weighted) N=1210***	**4-REGION (Weighted) N=2520**
Home delivery	93.3	90.6	91.9
Assistance during delivery			
Health professional	6.5	10.0	8.4
Health Extension Workers	1.7	2.2	2.0
Trained traditional birth attendant	16.2	11.1	13.5
Untrained traditional birth attendant	39.0	27.9	33.0
Postnatal care by health professional			
Check-up with 2 days after delivery	1.1	0.9	1.0
Check-up with 45 days after delivery	8.2	7.2	7.6

Knowledge of Danger Signs during Pregnancy-Tigray (Figure 3)

- Women's awareness of postpartum danger signs that require treatment from health facilities was assessed in the Tigray region. This information was not available for the other regions.
- Slightly more than half (52%) of the women in Tigray were able to report spontaneously at least two important danger signs. Most (66%) were able to report excessive vaginal discharge, followed by severe abdominal pain (43.6%), high fever (27.9%), and convulsion (11.5%). Fewer than 2% considered foul smelling discharge (an indicator of STIs) as a danger sign.
- The reporting of at least two danger signs by women compares well between the IFHP and non-IFHP areas of Tigray. Nevertheless, women from non-IFHP areas appeared more likely than those from the IFHP to report severe abdominal pain among the danger signs (47.5% in non-IFHP vs. 38.9% in IFHP).

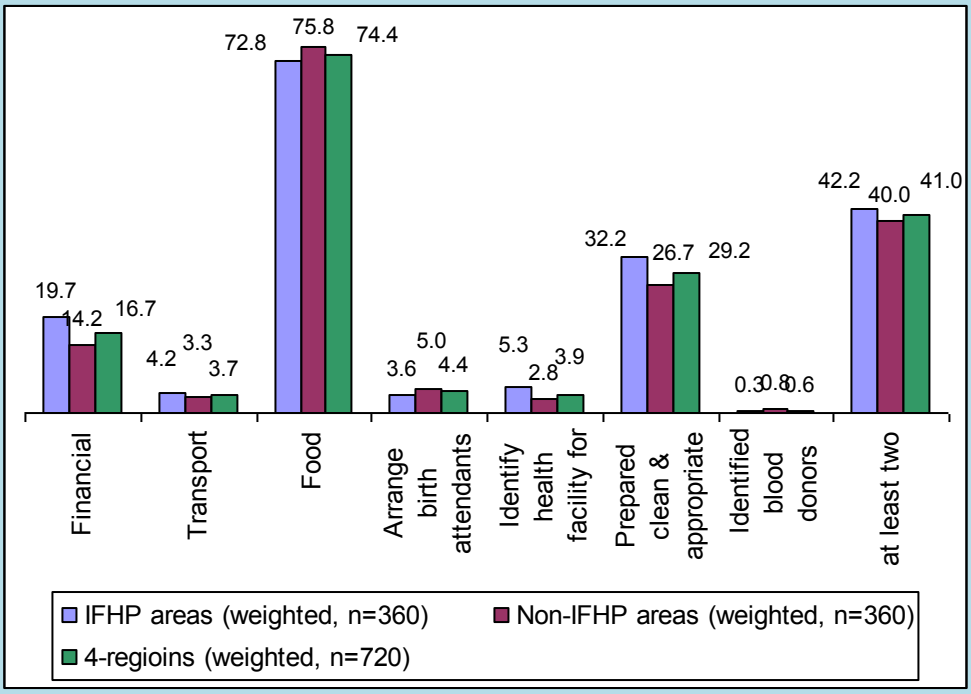
Figure 3. Percent of mothers of children 0-11 months who mentioned the different danger signs of women after delivery and those able to report at least two known maternal danger signs after delivery, Tigray (January 2009)



Birth preparedness-Tigray (Figure 4)

- Birth preparedness includes plans regarding finances, food preparation, identification of health facilities for delivery, arrangement for birth attendants, and transport arrangements, among others. In the Tigray survey, women were asked whether they had any birth preparedness plans prior to the delivery of their most recent child age 0-11 months. This information was not collected from the other regions.
- About three-fourths of the mothers in Tigray reported that they had made food preparation plans as part of their birth preparedness. Twenty-nine percent reported they had prepared clean and appropriate materials (e.g. to cut and tie the cord) and 16.7% had financial preparations in place. Only 4% reported that they had identified a health facility and another 4.4% arranged for a birth attendant.
- The reporting of birth preparedness by women does not vary between the IFHP and non-IFHP areas of the Tigray region

Figure 4. Percent of mothers of children 0-11 months who report having prepared and planned their delivery by the different elements of birth plan and those who reported at least two elements of birth plan, Tigray (January 2009)



Exposure to information during pregnancy (Figure 5)

- During pregnancy of the most recent child age 0-11 months, 18.4% and 10.3% of the pregnant women, respectively, were visited at home by HEWs and community health promoters (CHPs).
- Pregnant women from the IFHP areas were in general more likely than those from the non-IFHP to have been visited by HEWs (22% vs. 15%) and CHPs (14% vs. 7%).

Exposure to information immediately after delivery (Figure 6)

- Data demonstrate that HEW or CHP visits to women within 7 days after delivery is virtually absent (0.4%) in both the IFHP and non-IFHP areas

Figure 5. Proportion of women contacted by HEW and CHP during pregnancy, 4-region, Amhara, Oromia, SNNP (June 2008) and Tigray (January 2009)

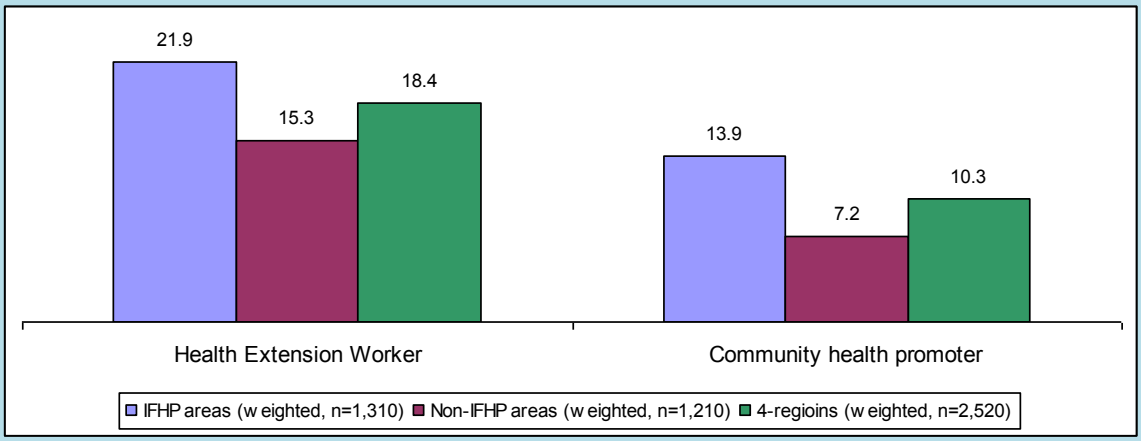
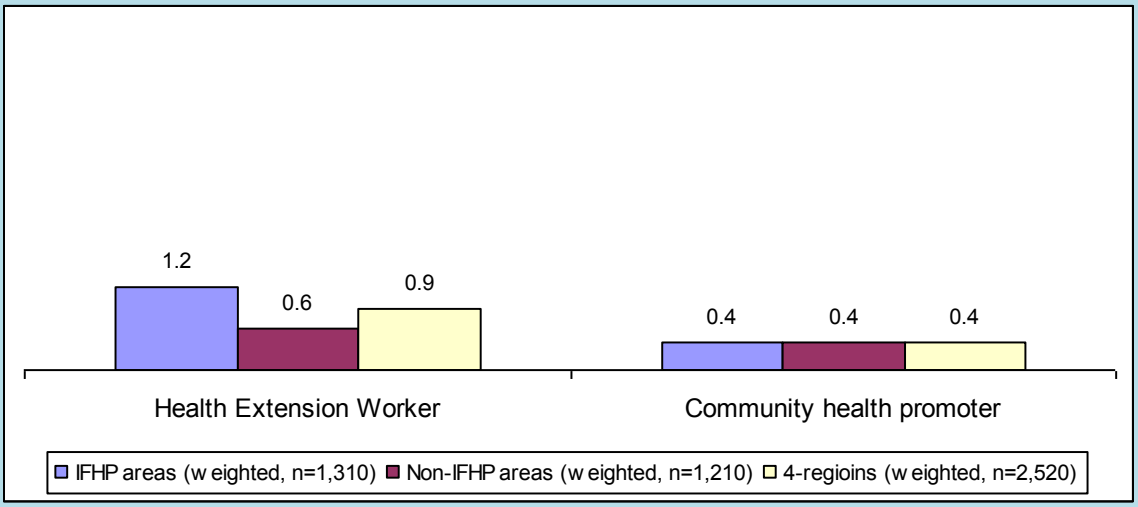


Figure 6. Proportion of women contacted by HEW and CHP within 7 days after delivery, 4-region, Amhara, Oromia, SNNP (June 2008) and Tigray (January 2009)

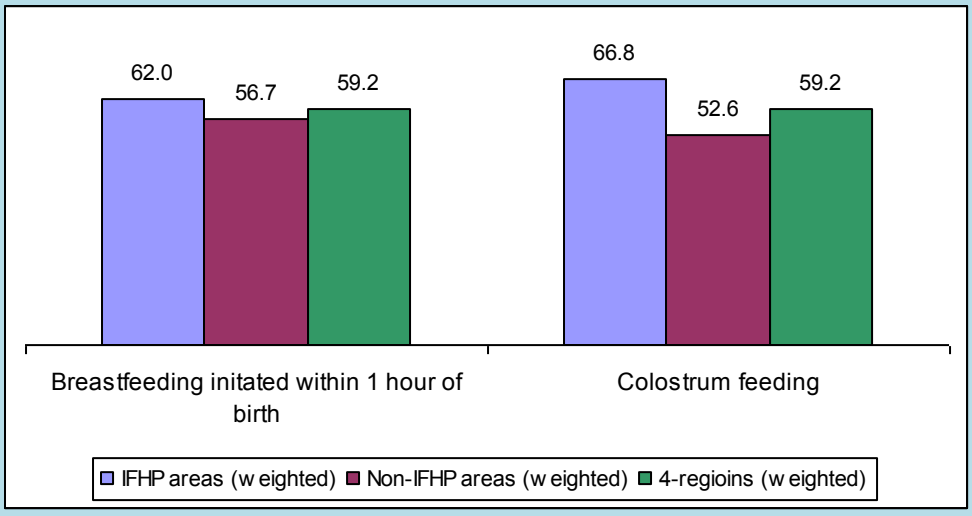


3.4. Breastfeeding and complementary feeding

Breastfeeding (Figure 7 & Table 9):

- In the 4 regions, 59.2% of the women with children age 0-11 months reported initiating breastfeeding within an hour of birth. A slightly higher proportion of women initiated breastfeeding within an hour in the IFHP areas (62%) than in the non-IFHP (56.7%).
- Colostrum feeding (first milk) was reported by 59.2% of the women. Of note, women in the IFHP area appeared significantly more likely than those from the non-IFHP to feed first milk (66.8% vs. 52.6% respectively).
- Exclusive breastfeeding of children up to the age of 5 months was reported by 76% of the women in the 4 regions. The practice of exclusive breastfeeding was significantly higher in the IFHP areas than in the non-IFHP (82.6% vs. 70% respectively).
- Trend data show a significant increase in the proportion of women exclusively breastfeeding up to age 5 since 2005 from 49% (2005 DHS) to 76%
- A modest reversal trend is noted with the proportion of women who initiated breastfeeding within an hour after delivery in the present survey (59%) compared to 2005 DHS (68%).

Figure 7. Percentage of mothers with children age 0-11 months who initiated breastfeeding within an hour of birth and those who fed the first milk (colostrums), 4-region, Amhara, Oromia, SNNP (June 2008) and Tigray (January 2009)



Complementary feeding (Table 9):

- It is recommended to introduce complementary foods at 6 months of age in order to provide infants with nutrients that are not available from breast milk alone. The 'timely complementary feeding rate' is defined as the percentage of children age 6–9 months who were fed solid or semi-solid complementary foods in addition to breast milk in the 24-hours prior to the interview.
- In the 4 regions 63.7% of the children age 6-9 months reported to have semi-solid food in the 24 hours prior to the interview and this compares well between the IFHP and non-IFHP areas.

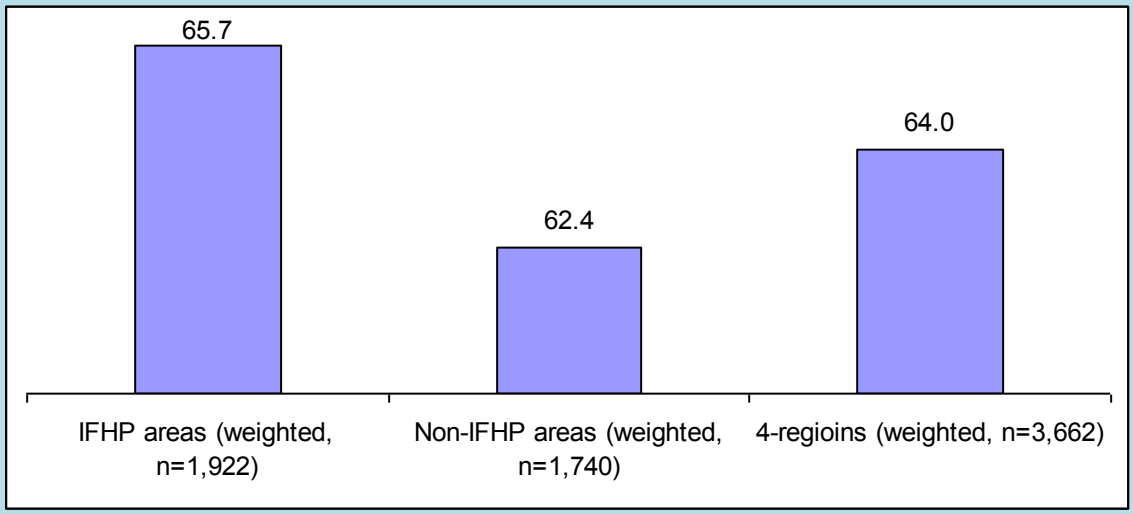
Table 9: Percent of children by breastfeeding and complementary feeding status, 4-region, Amhara, Oromia, SNNP (June 2008) and Tigray (January 2009)

Age in months	***Percent of children 0-3 months exclusively breastfed***			***Percent of children 0-5 months exclusively breastfed***			**Percent of children 6-9 months receiving breast milk and solid/semi-solid complementary foods**		
	IFHP N=407	Non-IFHP N=401	REGION Total (weighted) N=808	IFHP N=638	Non-IFHP N=620	REGION Total (weighted) N=1258	IFHP N=450	Non-IFHP N=401	REGION Total (weighted) N=851
Male	86.9	73.5	79.1	82.6	67.6	74.3	65.1	63.4	64.2
Female	89.8	77.0	83.0	82.5	72.4	77.0	63.9	63.9	63.1
Mother's Education									
None	90.3	77.3	83.3	83.8	72.9	78.0	61.2	57.6	59.5
1 – 6 years	83.0	65.2	72.0	79.0	64.3	69.6	82.5	73.7	76.8
7 or more	73.4	80.0	77.7	72.8	53.7	60.9	60.3	88.2	75.6
Total	88.5	75.2	81.1	82.6	70.0	75.7	63.7	63.6	63.7

Vitamin A supplementation (Figure 8):

- In the 4 regions 64% of the children age 6-23 months received vitamin A supplementation. The coverage of vitamin A supplementation was comparable between the IFHP and non-IFHP areas.
- Vitamin A supplementation coverage increased significantly from 46% in 2005 (DHS) to 64% in the present surveys of the 4 regions

Figure 8. Children age 6-23 months who received Vitamin A in the previous 6 months, 4-region, Amhara, Oromia, SNNP (June 2008) and Tigray (January 2009)



3.5. Child Health, Nutrition during Illness and Care Seeking

Incidence of illness (Table 10)

- Of all the children age 0-23 months, 23.4% were reported ill during the previous 2 weeks. Twelve percent reported diarrhea, 13.2% fever, 10.7% cough, and 3% had difficulty breathing. The incidence and pattern of illness compared well between children in the IFHP and non-IFHP areas.

Table 10. Percentage of children age 0-23 months reported to be ill with fever, diarrhea, cough, and difficulty breathing in the two-week preceding the survey, 4-region, Amhara, Oromia, SNNP (June 2008) and Tigray (January 2009)

	IFHP AREA (4-region weighted) N=2562	**NON-IFHP AREA (4-region weighted) N=2358**	**4-REGION (Weighted) N=4920**
Fever	13.3	10.9	12.1
Diarrhea	14.3	12.1	13.2
Cough	11.0	10.5	10.7
Difficult breathing	2.9	3.0	3.0
Any illness	24.8	22.2	23.4

Home management of diarrhea (Table 11)

- Oral rehydration solution (ORS) was given to a third (34.5%) of the children with diarrhea in the two weeks prior to interview. The same proportion of children (34.7%) with diarrhea was given recommended homemade fluid (RHF). The proportion of children that received either ORS or RHF was 56%.
- In the 4 regions 18% of the children with diarrhea were offered increased fluids and 82% reported continued eating during illness.
- The home management of childhood diarrhea such as the provision of ORS, RHF, and increased fluid intake appeared comparable between the IFHP and non-IFHP areas

Table 11. Percent of children aged 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) or appropriate recommended homemade fluids (RHF), or received more fluids, and continued eating somewhat less, the same or more food, 4-region, Amhara, Oromia, SNNP (June 2008) and Tigray (January 2009)

	IFHP AREA (4-region weighted) N=380	***NON-IFHP AREA (4-region weighted) N=400***	**4-REGION (Weighted) N=780**
Oral Rehydration Solution (ORS)	32.5	36.6	34.5
Recommended Home made Fluid (RHF)	34.4	34.9	34.7
ORS or RHF	55.8	56.2	56.0
Increased Fluid	18.6	17.3	18.0
Continue eating during illness	80.4	83.4	81.9
ORS or RHF or increased fluid, AND continue eating	56.7	54.3	55.6

Fluid and food intake for Sick child (any illness) (Table 12)

- It is recommended to increase the amount of fluid and provide food to children during illness.. Mothers were asked about changes in feeding practices for ill children during the 2-weeks prior to the interview.
- In the 4 regions, 16.1% of the sick children were given more fluid to drink than usual while 44.6% received same amount or less than usual. Although approximately 73% of the children continued eating during illness, 44.4% ate much less than usual or none Only 15.4% of children took increased fluid as well as continued eating during illness.
- Of note, there is no difference in the feeding practices to sick children between the IFHP and non-IFHP areas.

Table 12: Percentage of children 0-23 months of age reported ill during the last two weeks who received increased fluids and continued feeding, 4-region, Amhara, Oromia, SNNP (June 2008) and Tigray (January 2009)

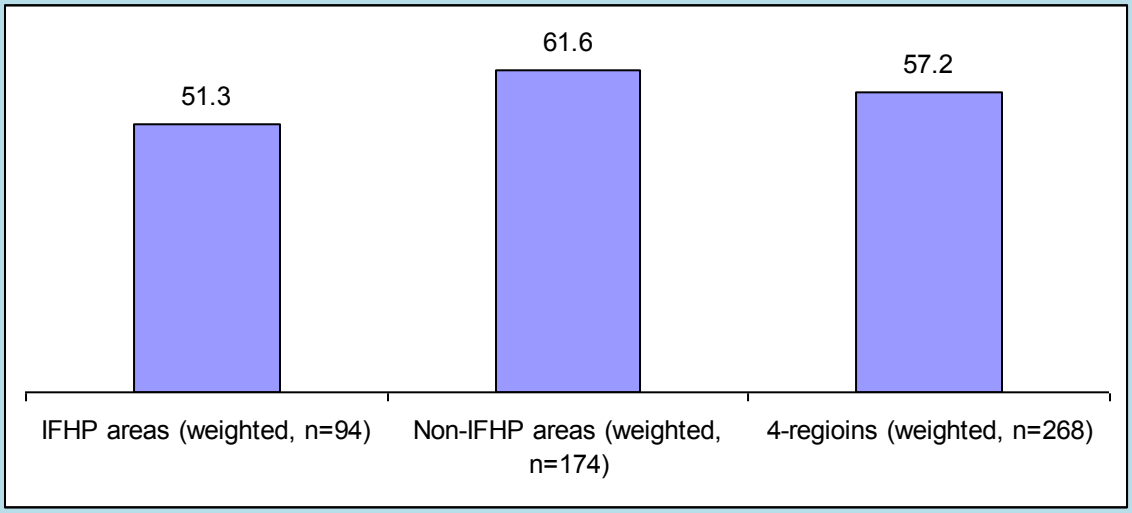
	Reported illness in last two weeks	*Children with an illness who:*					*Number of children*
		Drank more	**Drank the same or less**	**Ate somewhat less, same or more**	**Ate much less or none**	**Took increased fluids and continued eating***	
Sex*							
Male	25.9	16.1	44.2	73.3	43.9	15.3	2450
Female	20.9	16.3	44.8	71.9	45.0	15.6	2458
Domain							
IFHP Area	24.8	16.3	44.1	72.1	43.0	15.4	2562
Non-IFHP Area	22.2	16.2	45.1	73.5	45.9	15.5	2358
Child's age							
0-11 months	21.5	12.5	33.7	52.3	33.3	11.3	2520
12-23 months	25.3	19.4	53.9	90.4	54.1	19.0	2400
4- Regions Total	23.4	16.2	44.6	72.8	44.4	15.4	4920

12 children have missing information on sex

Treatment for ARI (Figure 9)

- A symptom of ARI is defined as a cough accompanied by chest-related short and rapid breathing.
- Among children with symptoms of ARI in the 2-weeks preceding the interview, 57.2% were taken to a health facility for treatment. Treatment seeking for sick children with ARI is higher in non-IFHP areas than in the IFHP (61.6% vs. 51.3% respectively)

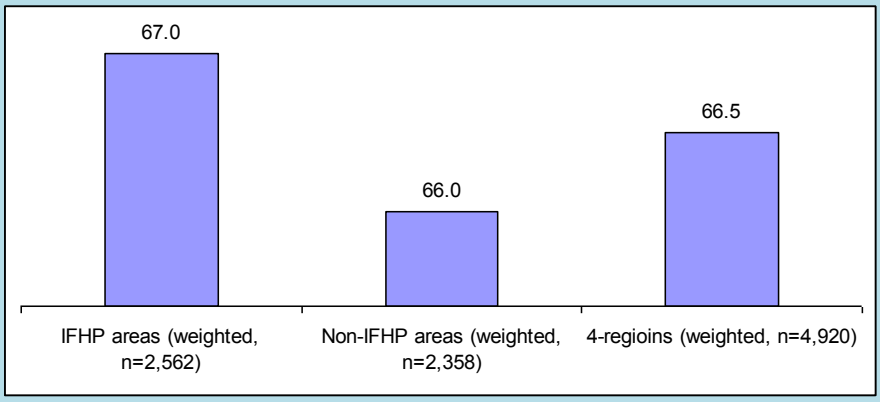
Figure 9. Among children age 0-23 months with symptoms of ARI (last 2 weeks), the percentage that were taken to a health facility for treatment, 4-region, Amhara, Oromia, SNNP (June 2008) and Tigray (January 2009)



Awareness of children < 5 years danger signs[4] (Figure 10)

- Women's awareness of the major danger signs for children under-5 years of age that require treatment from a health facility was assessed.
- About two-thirds (66.5%) of the women were able to mention three or more of the danger signs. Similar levels of awareness were reported in the IFHP and non-IFHP areas.

Figure 10. Percent of mothers with children 0-23 months who know at least 3 symptoms that would cause her to seek care immediately for a child under 5 years, 4-region, Amhara, Oromia, SNNP (June 2008) and Tigray (January 2009)



[4] Danger signs include: *repeated watery stools, any watery stools, repeated vomiting, any vomiting, blood in stools, fast breathing, difficult breathing, noisy breathing, fever, convulsions, stiff neck, marked thirst, unable to drink, not eating/not drinking well, getting sicker/very sick, not getting better, sick for a long time, sunken eyes, cough*

ITN use among children (Table 13)

- Among children 0-23 months residing in malarious areas, 43.5% were reported to have slept under an ITN the night prior to the interview. This compares well between the IFHP and non-IFHP areas at 42.7% and 44.1%, respectively.

Table 13. Percentage of mothers residing in malarious areas who reported their children 0-23 months slept under an insecticide-impregnated bed net during the previous night, 4-region, Amhara, Oromia, SNNP (June 2008) and Tigray (January 2009)

	Slept under a bed net N=3204	**Number of mothers**
Male	43.7	1616
Female	43.3	1580
IFHP Area	42.7	1616
Non-IFHP area	44.1	1588
4- Region (Total)	43.5	3204

** Information on sex is missing for few children*

3.6. Child Immunization

Child immunization (Table 14)

- Vaccination cards were seen by the interviewers for 41% of the sampled children age 12-23 months.
- By combining information obtained either from cards or reported by the mothers, 43.8% of the children in the 4 regions were fully vaccinated; 36.4% before their first birthday.
- The coverage of BCG, which is an indicator of access to vaccination services, is reported at 78.5%.
- DPT3 coverage often provides a good indication of vaccine continuation. In the 4 regions, DPT3 coverage reached 61%.
- Dropout rate from DPT1 to DPT3 remains high recorded at 22%.
- Being one of the MDG target indicators, monitoring trends in measles coverage is of paramount importance. These surveys indicate measles coverage in the 4 regions as 59%.
- In general, child vaccination compares well between the IFHP and non-IFHP areas although BCG, DPT1 & 2 and measles have slightly higher coverage in the IFHP areas. The proportions of children fully vaccinated have shown almost similar coverage in the two areas at 43.4% and 44.2%, respectively.
- Data also revealed a recent improved trend in vaccination coverage in the 4 regions as compared to the 2005 DHS. DPT3 increased from 32% to 61%, measles from 36% to 59% and the proportion fully vaccinated from 20% to 44%.

Table 14. Immunization coverage of children 12-23 months by antigen, 4-region, Amhara, Oromia, SNNP (June 2008) and Tigray (January 2009)

	IFHP AREA (4-region weighted) N=1250	***NON-IFHP AREA (4-region weighted) N=1150***	**4-REGION (Weighted) N=2400**
% With vaccination card	41.4	41.0	41.2
BCG	81.5	75.6	78.5
POILO0	7.2	9.4	8.2
POLIO1	89.1	89.9	89.5
POLIO2	78.1	80.4	79.4
POLIO3	64.5	66.8	65.8
DPT1	79.1	75.0	76.9
DPT2	72.6	68.9	70.6
DPT3	61.7	60.2	60.9
Measles	62.0	56.3	58.9
Fully immunized[1]	43.4	44.2	43.8
Fully immunized before 1st birthday[5]	36.0	36.7	36.4
Drop-out rate:			
DPT1 to DPT3	23.6	20.6	22.0

[1]*Children who are fully vaccinated are those who have received BCG, measles, and three doses of DPT and polio vaccines (excluding polio vaccine given at birth)*

3.7. Family planning

Awareness of family Planning methods and sources (Table 11)

- Knowledge of family planning is short of universal with 87.6% reported ever heard of family planning. It appears that women in the IFHP areas have slightly better awareness about family planning than those from the non-IFHP (90% vs. 85.5% respectively).
- Health extension workers (HEWs) emerged as the leading source of FP information. Approximately half (51%) of the women reported being informed about FP from HEW during the 6 months prior to the interview. This is followed by health workers (39.2%), radio (37%), community events (37%), friend/families (33.8%), community health promoters (24.3%) and community based reproductive health agents (16.8%).
- Eighty percent (80%) of the women reported knowing at least one place where they can obtain a FP method.
- Health posts (48.1%) and health centers (46%) were reported by women as the major sources where family planning methods can be obtained.

[5]For children whose information was based on the mother's report, the proportion of vaccinations given during the first year of life is assumed to be the same as for children with a written record of vaccination

Table 15. Percentage of mothers who heard about family planning from different source (last 6 months) and knowledge of places whereto obtain a family planning method, 4-region, Amhara, Oromia, SNNP (June 2008) and Tigray (January 2009)

	IFHP Area (weighted) N=1550	***Non-IFHP Area (weighted) N=1450***	**4-Regions (weighted) N=3000**
% ever heard of family planning	90.0	85.5	87.6
Source of information about family planning (last 6 months)			
Radio	38.0	36.9	37.4
Television	3.5	3.0	3.3
Newspaper/magazine	3.1	2.6	2.8
Pamphlet/poster	6.7	6.7	6.7
Health Worker	42.3	36.5	39.2
Community events	37.4	36.7	37.0
CBRH	19.5	14.5	16.8
Friends/Family	36.3	31.7	33.8
Health extension worker	55.1	47.2	50.9
Community health promoter	27.5	21.6	24.3
Places where to obtain a family planning method			
Knew at least one place:	81.5	78.9	80.0
Hospital	6.5	3.8	5.1
Health center	47.3	44.9	46.0
health station/clinic	17.3	12.4	14.7
Health post	49.8	46.7	48.1
CBRHA	3.5	2.6	3.0
Other facilities (private or NGO)	6.0	9.0	7.6

Contraceptive prevalence rate (Table 16)

- The contraceptive prevalence rate (CPR) for any method in the 4 regions combined is recorded at 29.4%.
- Injectables is the most widely used family planning method with a prevalence rate of 23.7% followed by pills at 2.4%.
- Long terms and permanent methods are rarely practiced at less than 2%.
- Only 2%reported practicing traditional/natural methods.
- Of note, the contraceptive prevalence rate (CPR) compares very well between the IFHP and non-IFHP areas.
- The CPR in the 4 regions has shown dramatic increase since the DHS 2005 from 14% to 29%. This represents an unprecedented increase of over 3.5% per annum. The prevalence of Injectables has increased from 9.8% to 23.7% while pill has shown a reversal trend from 3% to 2%.

Table 16: Percentage of women aged 15-49 who are using (or whose partner is using) a contraceptive method**,** 4-region, Amhara, Oromia, SNNP (June 2008) and Tigray (January 2009)

Percent of women 15 – 49 years who are currently using:	***IFHP Area (weighted) N=1550***	***Non-IFHP Area (weighted) N=1450***	***4-Regions (weighted) N=3000***	**Age of woman****	
				15-24 N=1000	**25-49 N=1987**
Fem. Sterilization	0.1	0.0	0.1	0.0	0.2
Male Sterilization	0.0	0.0	0.0	0.0	0.0
Pill	2.7	2.1	2.4	1.5	2.9
IUD	0.0	0.3	0.2	0.1	0.3
Injectables	23.9	23.6	23.7	25.5	22.9
Implants	0.7	1.2	1.0	0.6	1.1
Condom	0.0	0.1	0.0	0.0	0.0
Diaphragm/foam/jelly	0.0	0.1	0.0	0.0	0.0
LAM	1.4	1.7	1.6	2.4	1.1
Periodic abstinence	0.3	0.5	0.4	0.6	0.3
Withdrawal	0.0	0.0	0.0	0.0	0.0
Other	0.1	0.0	0.0	0.0	0.1
Any modern method	27.4	27.3	27.4	27.7	27.4
Any traditional method	1.8	2.3	2.0	3.0	1.5
Any method	29.2	29.6	29.4	30.7	28.9

*Total number of women 15–49 who are not currently pregnant; ** age missing for 13 women

3.8. HIV/AIDS awareness

HIV/AIDS awareness (Table 17)

- Women in the 4 regions are yet to be sufficiently aware of the "programmatically important"[6] ways of avoiding HIV/AIDS. Twenty-eight percent were able to identify two programmatically important ways of avoiding HIV/AIDS and only 5.7% identified three major ways of avoiding HIV.
- Women's awareness of vertical transmission of HIV[7] (mother-to-child) was also found to be very low, with only 7% reporting all three means of vertical transmission. In general, women reported better awareness of HIV transmission via breastfeeding, as reported by 61.2%. The reporting of other routes such as during pregnancy (25.8%) and at delivery (19.8%) can be considered low.
- Overall, women's awareness of HIV/AIDS appears comparable between the IFHP and non-IFHP areas

[6] abstinence, faithfulness to ones partners and condom
[7] Vertical transmission routes: during pregnancy, at delivery and during breastfeeding

Table 17. Women's awareness of HIV/AIDS prevention and vertical transmission (mother to child) of HIV, 4-region, Amhara, Oromia, SNNP (June 2008) and Tigray (January 2009)

	IFHP Area (weighted) N=1550	***Non-IFHP Area (weighted) N=1450***	**4-Regions (weighted) N=3000**
Awareness of HIV/AIDS prevention:			
Percent of women 15-49 years who can mention correctly two ways* to prevent HIV/AIDS	29.9	27.7	28.8
Percent of women 15-49 years who can mention correctly the three major ways to prevent HIV/AIDS	4.8	6.5	5.7
Awareness of mother to child transmission of HIV (vertical transmission)			
Percent of women 15-49 years who know a mother can transmit HIV to her infant:			
During pregnancy	29.7	22.4	25.8
At delivery	18.4	21.1	19.8
During breastfeeding	60.1	62.2	61.2
Percent of women that correctly identify all three means of vertical transmission**	7.5	6.5	7.0

**Correct ways include (1) abstinence, (2) faithfulness & (3) condom use*
*** Correct modes of vertical transmission include (1) during pregnancy (2) at delivery & (3) during breastfeeding*

IV. CONCLUSION

The 4-region surveys provide baseline data for IFHP as well as non-IFHP areas for future program monitoring and evaluation of intervention efforts. Although the household health surveys from Amhara, Oromia and SNNP were not originally designed to serve as baseline for the IFHP, the observed comparable sample clusters falling in the IFHP and non-IFHP areas when reconstructed, the reasonably large sample size and the similarity in the coverage of key maternal, newborn and child health services indicators between the two areas will allow use of the data as a benchmark for future program monitoring and evaluation of the IFHP interventions.

These four regions constitute about 85% of the country. Any improvement or setbacks within these regions heavily influence the entire country. A recent positive surge in maternal, newborn and child health is noted within these regions when compared with 2005 DHS data.. Significant improvements have been noted in the areas of family planning, household access to improved sanitation, ITN coverage, antenatal care, tetanus toxoid injections, and child immunization among others.

The present data also reveals modest changes or trends stagnating at very low levels for a number of key maternal and child health indicators including skilled delivery, postnatal care, newborn care, women's awareness of the danger signs of childhood illness, treatment seeking behavior for the sick child, home management of childhood illness, use of long term and permanent family planning methods, and comprehensive knowledge of HIV/AIDS.

Several factors may play a part in the recently recorded positive changes in the areas of maternal and child health in these four major regions of the country. Nevertheless, it is plausible to heavily attribute these changes to the recent improved population access to key maternal, and child health services through the Health Extension Program, as well as community-based intervention efforts of development partners in the areas of health and population. While maintaining the current impetus and capitalizing on what has already been achieved, programs should work towards filling critical gaps to further improve the health of mothers and children in the country and achieve the goals set in the MDGs.

Annex I. Selected indicators table, 4-region

Variable/Indicator/Category	All Four IFHP Focus Region (Amhara, Oromia, SNNP and Tigray Regions together)					
	IFHP Area		Non-IFHP Area		4-Regions (Weighted)	
	%	N	%	N	%	N
HOUSEHOLD CHARACTERISTICS						
Percent of households using improved sanitary facilities	58.4	1550	60.6	1450	59.6	3000
Percent of households using improved drinking water sources	57.8	1550	48.1	1450	52.6	3000
Percent of households with at least one bednets	69.2	1550	69.8	1450	69.5	3000
Average bed nets per household	1.7	1550	1.8	1450	1.7	3000
MATERNAL, NEWBORN and CHILD CARE						
Percent of mothers with children 0-11 months who had at least one antenatal care at a health facility during pregnancy (excluding HPs)	33.6	1310	39.5	1210	36.8	2520
Percent of mothers with children 0-11 months who had at least one antenatal care at Health Post (HP) (excluding other health facilities)	20.4	1310	19.8	1210	20.1	2520
Percent of mothers with children 0-11 months who had at least one antenatal care at a health facility during pregnancy (including HPs)	54.0	1310	59.3	1210	56.9	2520
Percent of mothers with children 0-11 months who had at least two antenatal visits to a health professional prior to delivery	44.0	1310	51.6	1210	48.1	2520
Percent of mothers with children 0-11 months who were given at least 2 doses of Tetanus Toxoid (TT) vaccine within the appropriate interval prior to giving birth	46.8	1310	45.3	1210	46.0	2520
Percent of pregnant women who have received Iron/folic acid during the last pregnancy	18.2	1310	17.6	1210	17.9	2520
Percent of mothers with children aged 0-11 months who delivered with a skilled health professional (excluding HEWs)	6.5	1310	10.0	1210	8.4	2520
Percent of mothers with children aged 0-11 months who delivered with HEWs only (Excluding other skilled health professionals)	1.7	1310	2.2	1210	2.0	2520
Percent of mothers with children aged 0-11 months who delivered with a skilled health professional (including HEWs)	8.2	1310	12.2	1210	10.4	2520
Percent of children aged 0-11 months whose delivery took place at a health facility (including Health Posts)	6.7	1310	9.4	1210	8.1	2520
Percent of last live births in the 1 year preceding the survey that were weighed at birth	3.5	1310	4.4	1210	4.0	2520
Percent of women who report receiving postpartum visit within two days of birth	1.1	1310	0.9	1210	1.0	2520
Percent of children under one who were checked at least once with in 7 days after birth	2.3	1310	2.2	1210	2.2	2520
Percent of newborns who started breastfeeding within one hour of birth	62.0	1310	56.7	1210	59.2	2520
Percent of infants aged 0-3 months who were fed breast milk only in the last 24 hours, and no other food given	88.5	407	75.2	401	81.1	808
Percent of infants aged 0-5 months c who were fed breast milk only in the last 24 hours, and no other food given	82.6	638	70.0	620	75.5	1258

Percent of children aged 6-9 months who where fed solid or semi-solid complementary foods in addition to breast milk	63.7	450	63.6	401	63.7	851
Percent of last live births whose mother reports feeding the first milk (colostrum)	66.8	1310	52.6	1210	59.2	2520
Percent of children aged 6-23 months who received a Vitamin A dose in the last six months	65.7	1922	62.4	1740	64.0	3662
Percent of children aged 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (**ORS only**)	32.5	380	36.6	400	34.5	780
Percent of children aged 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) **or appropriate home solution**	55.8	380	56.2	400	56.0	780
Percent of children aged 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) **or an appropriate household solution or received more fluids AND continued eating somewhat less, the same or more food**	56.7	380	54.3	400	55.6	780
Percent of children 0-23 months with symptoms of ARI in the two weeks preceding the survey that were taken to a health facility for treatment	51.3	94	61.6	174	57.2	268
Percent of mothers with children 0-23 months who know at least 3 symptoms that would cause her to seek care immediately for a child under 5 years	67.0	2562	66.0	2358	66.5	4920
Percentage of children 0-23 months whose mothers (residing in malarious areas) report that child slept under bednet the previous night	42.7	1616	44.1	1588	43.5	3204
Percent of children 12-23 possessing an immunization card	41.4	1250	41.0	1150	41.2	2400
Percentage of children aged 12-23 months vaccinated against measles	62.0	1250	56.3	1150	58.9	2400
Percentage of children aged 12-23 months vaccinated against measles before 12 months of age.	51.5	1250	46.7	1150	48.9	2400
Percentage of children aged 12-23 months immunized against DPT3	61.7	1250	60.2	1150	60.9	2400
Percentage of children aged 12-23 months immunized against DPT3 before 12 months of age	51.2	1250	50.0	1150	50.5	2400
Percent of drop-outs between DPT1 and DPT3	23.6	1250	20.6	1150	22.0	2400
Percent of children aged 12-23 months fully vaccinated	43.4	1250	44.2	1150	43.8	2400
Percent of children aged 12-23 months fully vaccinated before the first birthday	36.0	1250	36.7	1150	36.4	2400
FAMILY PLANNING:						
Percentage of women age 15-49 years who heard about family planning	90.0	1550	85.5	1450	87.6	3000
Percent of women in the age group 15-49 who heard of a specific message on Family Planning by source of information (last 6 months):						
Radio	38.0	1550	36.9	1450	37.4	3000
Health Worker	42.3	1550	36.5	1450	39.2	3000
HEWs	55.1	1550	47.2	1450	50.9	3000
CBRHAs	19.5	1550	14.5	1450	16.8	3000
Community Health Promoters	27.5	1550	21.6	1450	24.3	3000
Community events	37.4	1550	36.7	1450	37.0	3000
Percent of women in the age group 15-49 who know where to obtain at least one modern method	81.5	1550	78.9	1450	80.0	3000
Percent women aged 15-49 who are using a modern method	27.4	1550	27.3	1450	27.4	3000
Percent women aged 15-24 who are using a modern method	27.4	507	28.1	493	27.7	1000
Percent women aged 25-49 who are using a modern method	28.0	1033	27.1	954	27.4	1987*
HIV/AIDS:						

Percent of women 15-49 years who can mention correctly two ways to prevent HIV/AIDS	28.9	1550	27.7	1450	28.8	3000
Percent of women 15-49 years who can mention correctly the three major ways to prevent HIV/AIDS	4.8	1550	6.5	1450	5.7	3000
Percent of women that correctly identify all three means of vertical transmission (i.e. transmission of HIV from mother to child)	7.5	1550	6.5	1450	7.0	3000
Percent of women 15-49 years who know a mother can transmit HIV to her infant during pregnancy	29.7	1550	22.4	1450	25.8	3000
Percent of women 15-49 years who know a mother can transmit HIV to her infant during delivery	18.4	1550	21.1	1450	19.8	3000
Percent of women 15-49 years who know a mother can transmit HIV to her infant during breastfeeding	60.1	1550	62.2	1450	61.2	3000

Annex II. Sample size and selected indicators table, Amhara

Annex 2.1 Number of respondents by type, Amhara (June 2008)

	IFHP Area	Non-IFHP Area	Amhara
Number of respondents of the questionnaire for women 15-49	370	230	600
Number of respondents of the questionnaire for women with children 0-11 months	370	230	600
Number of respondents of the questionnaire for women with children 12-23 months	370	230	600

Annex 2.2. Selected indicators table, Amhara

Variable/Indicator/Category	Amhara					
	IFHP Area		Non-IFHP Area		Amhara (Weighted)	
	%	N	%	N	%	N
HOUSEHOLD CHARACTERISTICS						
Percent of households using improved sanitary facilities	40.0	370	52.2	230	45.8	600
Percent of households using improved drinking water sources	65.7	370	63.5	230	64.6	600
Percent of households with at least one bednets	77.7	300	58.8	170	69.1	470
Average bed nets per household	1.7	300	2.0	170	1.8	470
MATERNAL, NEWBORN and CHILD CARE						
Percent of mothers with children 0-11 months who had at least one antenatal care at a health facility during pregnancy (excluding HPs)	31.4	370	43.5	230	37.1	600
Percent of mothers with children 0-11 months who had at least one antenatal care at Health Post (HP) (excluding other health facilities)	14.3	370	17.0	230	15.6	600
Percent of mothers with children 0-11 months who had at least one antenatal care at a health facility during pregnancy (including HPs)	45.7	370	60.5	230	52.7	600
Percent of mothers with children 0-11 months who had at least two antenatal visits to a health professional prior to delivery	33.0	370	51.3	230	41.7	600
Percent of mothers with children 0-11 months who were given at least 2 doses of Tetanus Toxoid (TT) vaccine within the appropriate interval prior to giving birth	39.2	370	43.0	230	41.0	600
Percent of pregnant women who have received Iron/folic acid during the last pregnancy	14.1	370	25.7	230	19.6	600
Percent of mothers with children aged 0-11 months who delivered with a skilled health professional (excluding HEWs)	7.8	370	18.3	230	12.8	600
Percent of mothers with children aged 0-11 months who delivered with HEWs only (Excluding other skilled health professionals)	1.1	370	2.2	230	1.6	600
Percent of mothers with children aged 0-11 months who delivered with a skilled health professional (including HEWs)	8.9	370	20.5	230	13.4	600

Percent of children aged 0-11 months whose delivery took place at a health facility (including Health Posts)	7.6	370	17.4	230	12.2	600
Percent of last live births in the 1 year preceding the survey that were weighed at birth	2.0	370	4.8	230	3.3	600
Percent of women who report receiving postpartum visit within two days of birth	0.3	370	0.0	230	0.1	600
Percent of children under one who were checked at least once with in 7 days after birth	1.6	370	0.4	230	1.1	600
Percent of newborns who started breastfeeding within one hour of birth	47.3	370	27.4	230	37.8	600
Percent of infants aged 0-3 months who were fed breast milk only in the last 24 hours, and no other food given	91.9	123	85.2	81	85.6	204
Percent of infants aged 0-5 months c who were fed breast milk only in the last 24 hours, and no other food given	89.1	193	77.8	117	83.8	310
Percent of children aged 6-9 months who where fed solid or semi-solid complementary foods in addition to breast milk	54.8	104	60.3	73	57.6	177
Percent of last live births whose mother reports feeding the first milk (colostrum)	49.5	370	29.6	230	40.0	600
Percent of children aged 6-23 months who received a Vitamin A dose in the last six months	60.9	547	57.3	342	59.2	889
Percent of children aged 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (**ORS only**)	24.8	105	26.4	53	25.5	158
Percent of children aged 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) **or appropriate home solution**	44.8	105	54.7	53	49.0	158
Percent of children aged 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) **or an appropriate household solution or received more fluids AND continued eating somewhat less, the same or more food**	42.9	105	50.9	53	46.3	158
Percent of children 0-23 months with symptoms of ARI in the two weeks preceding the survey that were taken to a health facility for treatment	50.0	26	55.6	9	51.9	35
Percent of mothers with children 0-23 months who know at least 3 symptoms that would cause her to seek care immediately for a child under 5 years	60.5	741	54.0	459	57.4	1200
Percentage of children 0-23 months whose mothers (residing in malarious areas) report that child slept under bednet the previous night	59.7	600	67.7	340	63.3	940
Percent of children 12-23 possessing an immunization card	40.0	370	46.5	230	43.1	600
Percentage of children aged 12-23 months vaccinated against measles	61.1	370	67.4	230	64.1	600
Percentage of children aged 12-23 months vaccinated against measles before 12 months of age.	50.7	370	55.6	230	53.2	600
Percentage of children aged 12-23 months immunized against DPT3	88.7	370	85.1	230	86.8	600
Percentage of children aged 12-23 months immunized against DPT3 before 12 months of age	73.6	370	70.6	230	72.0	600
Percent of drop-outs between DPT1 and DPT3	26.4	370	13.2	230	19.6	600
Percent of children aged 12-23 months fully vaccinated	41.1	370	59.1	230	49.7	600
Percent of children aged 12-23 months fully vaccinated before the first birthday	34.1	370	49.1	230	41.3	600
FAMILY PLANNING:						
Percentage of women age 15-49 years who heard about family planning	91.4	370	88.7	230	90.1	600

Percent of women in the age group 15-49 who heard of a specific message on Family Planning by source of information (last 6 months):						
Radio	34.9	370	33.9	230	34.4	600
Health Worker	38.7	370	35.7	230	37.2	600
HEWs	49.5	370	55.7	230	52.4	600
CBRHAs	17.0	370	23.5	230	20.1	600
Community Health Promotors	17.3	370	11.3	230	14.5	600
Community events	20.5	370	33.9	230	26.9	600
Percent of women in the age group 15-49 who know where to obtain at least one modern method	81.6	370	85.7	230	83.5	600
Percent women aged 15-49 who are using a modern method	23.0	370	26.5	230	24.5	600
Percent women aged 15-24 who are using a modern method	27.3	132	25.3	91	26.3	223
Percent women aged 25-49 who are using a modern method	20.6	238	27.3	139	23.7	377
HIV/AIDS:						
Percent of women 15-49 years who can mention correctly two ways to prevent HIV/AIDS	32.2	370	43.0	230	37.3	600
Percent of women 15-49 years who can mention correctly the three major ways to prevent HIV/AIDS	6.0	370	13.9	230	9.7	600
Percent of women that correctly identify all three means of vertical transmission (i.e. transmission of HIV from mother to child)	8.9	370	8.3	230	8.6	600
Percent of women 15-49 years who know a mother can transmit HIV to her infant during pregnancy	30.8	370	26.5	230	28.8	600
Percent of women 15-49 years who know a mother can transmit HIV to her infant during delivery	16.5	370	22.2	230	19.2	600
Percent of women 15-49 years who know a mother can transmit HIV to her infant during breastfeeding	59.7	370	67.8	230	63.6	600

Annex III. Sample size and selected indicators table, Oromia

Annex 3.1 Number of respondents by type, Oromia (June 2008)

	IFHP Area	Non-IFHP Area	Oromia
Number of respondents of the questionnaire for women 15-49	330	270	600
Number of respondents of the questionnaire for women with children 0-11 months	330	270	600
Number of respondents of the questionnaire for women with children 12-23 months	330	270	600

Annex 3.2. Selected indicators table, Oromia

Variable/Indicator/Category	Oromia					
	IFHP Area		Non-IFHP Area		Oromia (Weighted)	
	%	N	%	N	%	N
HOUSEHOLD CHARACTERISTICS						
Percent of households using improved sanitary facilities	57.2	330	55.9	270	56.5	600
Percent of households using improved drinking water sources	39.4	330	36.3	270	37.7	600
Percent of households with at least one bednets	58.8	170	70.5	190	66.2	360
Average bed nets per household	1.6	170	1.7	190	1.7	360
MATERNAL, NEWBORN and CHILD CARE						
Percent of mothers with children 0-11 months who had at least one antenatal care at a health facility during pregnancy (excluding HPs)	30.9	330	37.0	270	34.3	600
Percent of mothers with children 0-11 months who had at least one antenatal care at Health Post (HP) (excluding other health facilities)	17.6	330	18.2	270	17.9	600
Percent of mothers with children 0-11 months who had at least one antenatal care at a health facility during pregnancy (including HPs)	48.5	330	55.2	270	52.2	600
Percent of mothers with children 0-11 months who had at least two antenatal visits to a health professional prior to delivery	37.9	330	50.0	270	44.6	600
Percent of mothers with children 0-11 months who were given at least 2 doses of Tetanus Toxoid (TT) vaccine within the appropriate interval prior to giving birth	45.2	330	45.6	270	45.4	600
Percent of pregnant women who have received Iron/folic acid during the last pregnancy	10.9	330	10.4	270	10.6	600
Percent of mothers with children aged 0-11 months who delivered with a skilled health professional (excluding HEWs)	3.0	330	7.9	270	5.7	600
Percent of mothers with children aged 0-11 months who delivered with HEWs only (Excluding other skilled health	0.3	330	0.4	270	0.3	600

professionals)						
Percent of mothers with children aged 0-11 months who delivered with a skilled health professional (including HEWs)	3.3	330	8.3	270	6.0	600
Percent of children aged 0-11 months whose delivery took place at a health facility (including Health Posts)	3.6	330	7.4	270	5.7	600
Percent of last live births in the 1 year preceding the survey that were weighed at birth	1.5	330	4.1	270	3.0	600
Percent of women who report receiving postpartum visit within two days of birth	0.0	330	0.3	270	0.2	600
Percent of children under one who were checked at least once with in 7 days after birth	0.3	330	1.5	270	1.0	600
Percent of newborns who started breastfeeding within one hour of birth	34.4	330	34.0	270	34.1	600
Percent of infants aged 0-3 months who were fed breast milk only in the last 24 hours, and no other food given	91.6	107	78.4	102	83.8	209
Percent of infants aged 0-5 months c who were fed breast milk only in the last 24 hours, and no other food given	82.4	165	74.7	154	77.9	319
Percent of children aged 6-9 months who where fed solid or semi-solid complementary foods in addition to breast milk	68.3	120	68.4	79	68.3	199
Percent of last live births whose mother reports feeding the first milk (colostrum)	39.9	330	32.2	270	35.6	600
Percent of children aged 6-23 months who received a Vitamin A dose in the last six months	72.7	495	67.9	386	70.1	881
Percent of children aged 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (**ORS only**)	34.5	87	47.9	48	40.6	135
Percent of children aged 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) **or appropriate home solution**	66.7	87	64.6	48	65.7	135
Percent of children aged 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) **or an appropriate household solution or received more fluids AND continued eating somewhat less, the same or more food**	64.4	87	58.3	48	61.6	135
Percent of children 0-23 months with symptoms of ARI in the two weeks preceding the survey that were taken to a health facility for treatment	72.7	11	88.9	9	81.7	20
Percent of mothers with children 0-23 months who know at least 3 symptoms that would cause her to seek care immediately for a child under 5 years	74.5	660	74.3	540	74.4	1200
Percentage of children 0-23 months whose mothers (residing in malarious areas) report that child slept under bednet the previous night	36.1	360	44.0	380	40.9	740
Percent of children 12-23 possessing an immunization card	37.3	330	38.2	270	37.8	600
Percentage of children aged 12-23 months vaccinated against measles	54.6	330	45.9	270	49.8	600
Percentage of children aged 12-23 months vaccinated against measles before 12 months of age.	45.7	330	38.4	270	41.7	600
Percentage of children aged 12-23 months immunized against DPT3	56.1	330	48.2	270	51.7	600
Percentage of children aged 12-23 months immunized against DPT3 before 12 months of age	47.0	330	40.3	270	43.3	600
Percent of drop-outs between DPT1 and DPT3	25.9	330	27.3	270	26.6	600

Percent of children aged 12-23 months fully vaccinated	37.8	330	34.4	270	36.0	600
Percent of children aged 12-23 months fully vaccinated before the first birthday	31.6	330	28.8	270	30.1	600
FAMILY PLANNING:						
Percentage of women age 15-49 years who heard about family planning	86.3	330	86.3	270	86.3	600
Percent of women in the age group 15-49 who heard of a specific message on Family Planning by source of information (last 6 months):						
Radio	42.1	330	49.3	270	46.1	600
Health Worker	38.8	330	33.7	270	36.0	600
HEWs	58.8	330	38.5	270	47.6	600
CBRHAs	17.6	330	8.5	270	12.6	600
Community Health Promoters	17.6	330	25.2	270	26.3	600
Community events	43.3	330	40.4	270	41.7	600
Percent of women in the age group 15-49 who know where to obtain at least one modern method	90.1	330	92.3	270	91.3	600
Percent women aged 15-49 who are using a modern method	27.3	330	29.6	270	28.5	600
Percent women aged 15-24 who are using a modern method	24.3	107	28.9	97	26.9	204
Percent women aged 25-49 who are using a modern method	28.7	223	30.1	173	29.4	396
HIV/AIDS:						
Percent of women 15-49 years who can mention correctly two ways to prevent HIV/AIDS	24.9	330	24.4	270	24.6	600
Percent of women 15-49 years who can mention correctly the three major ways to prevent HIV/AIDS	3.0	330	4.0	270	3.8	600
Percent of women that correctly identify all three means of vertical transmission (i.e. transmission of HIV from mother to child)	5.2	330	7.8	270	6.6	600
Percent of women 15-49 years who know a mother can transmit HIV to her infant during pregnancy	22.4	330	24.1	270	23.3	600
Percent of women 15-49 years who know a mother can transmit HIV to her infant during delivery	15.5	330	19.6	270	17.8	600
Percent of women 15-49 years who know a mother can transmit HIV to her infant during breastfeeding	62.7	330	62.6	270	62.7	600

Annex IV. Sample size and selected indicators table, SNNP

Annex 4.1 Number of respondents by type, SNNP (June 2008)

	IFHP Area	Non-IFHP Area	SNNP
Number of respondents of the questionnaire for women 15-49	250	350	600
Number of respondents of the questionnaire for women with children 0-11 months	250	350	600
Number of respondents of the questionnaire for women with children 12-23 months	250	350	600

Annex 4.2. Selected indicators table, SNNP

Variable/Indicator/Category	SNNP					
	IFHP Area		Non-IFHP Area		SNNP (Weighted)	
	%	N	%	N	%	N
HOUSEHOLD CHARACTERISTICS						
Percent of households using improved sanitary facilities	89.2	250	78.3	350	81.6	600
Percent of households using improved drinking water sources	74.4	250	50.6	350	57.8	600
Percent of households with at least one bednets	73.2	190	73.9	260	73.6	450
Average bed nets per household	1.7	190	1.8	260	1.7	450
MATERNAL, NEWBORN and CHILD CARE						
Percent of mothers with children 0-11 months who had at least one antenatal care at a health facility during pregnancy (excluding HPs)	36.0	250	37.7	350	37.2	600
Percent of mothers with children 0-11 months who had at least one antenatal care at Health Post (HP) (excluding other health facilities)	31.6	250	25.4	350	27.3	600
Percent of mothers with children 0-11 months who had at least one antenatal care at a health facility during pregnancy (including HPs)	67.6	250	63.1	350	64.5	600
Percent of mothers with children 0-11 months who had at least two antenatal visits to a health professional prior to delivery	61.2	250	54.0	350	56.2	600
Percent of mothers with children 0-11 months who were given at least 2 doses of Tetanus Toxoid (TT) vaccine within the appropriate interval prior to giving birth	62.6	250	47.7	350	52.3	600
Percent of pregnant women who have received Iron/folic acid during the last pregnancy	38.4	250	20.6	350	26.0	600
Percent of mothers with children aged 0-11 months who delivered with a skilled health professional (excluding HEWs)	4.8	250	6.0	350	5.6	600
Percent of mothers with children aged 0-11 months who delivered with HEWs only (Excluding other skilled health professionals)	4.4	250	4.9	350	4.7	600
Percent of mothers with children aged 0-11 months who delivered with a skilled health professional (including HEWs)	9.2	250	10.9	350	10.3	600

Percent of children aged 0-11 months whose delivery took place at a health facility (including Health Posts)	4.8	250	5.4	350	5.2	600
Percent of last live births in the 1 year preceding the survey that were weighed at birth	4.4	250	4.0	350	4.1	600
Percent of women who report receiving postpartum visit within two days of birth	2.8	250	2.3	350	2.4	600
Percent of children under one who were checked at least once with in 7 days after birth	5.6	250	4.6	350	4.9	600
Percent of newborns who started breastfeeding within one hour of birth	40.6	250	34.4	350	36.3	600
Percent of infants aged 0-3 months who were fed breast milk only in the last 24 hours, and no other food given	81.9	72	59.4	106	66.1	178
Percent of infants aged 0-5 months c who were fed breast milk only in the last 24 hours, and no other food given	79.5	117	56.0	175	62.8	292
Percent of children aged 6-9 months who where fed solid or semi-solid complementary foods in addition to breast milk	73.0	100	61.2	116	65.3	216
Percent of last live births whose mother reports feeding the first milk (colostrum)	38.0	250	27.4	350	30.7	600
Percent of children aged 6-23 months who received a Vitamin A dose in the last six months	62.1	383	59.8	525	60.5	908
Percent of children aged 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (**ORS only**)	36.7	79	33.0	109	34.2	188
Percent of children aged 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) **or appropriate home solution**	54.4	79	49.5	109	51.1	188
Percent of children aged 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) **or an appropriate household solution or received more fluids AND continued eating somewhat less, the same or more food**	65.8	79	52.3	109	56.5	188
Percent of children 0-23 months with symptoms of ARI in the two weeks preceding the survey that were taken to a health facility for treatment	100.0	5	80.0	25	82.2	30
Percent of mothers with children 0-23 months who know at least 3 symptoms that would cause her to seek care immediately for a child under 5 years	74.2	500	67.1	700	69.3	1200
Percentage of children 0-23 months whose mothers (residing in malarious areas) report that child slept under bednet the previous night	57.1	380	53.7	520	54.7	900
Percent of children 12-23 possessing an immunization card	40.4	250	37.7	350	38.5	600
Percentage of children aged 12-23 months vaccinated against measles	68.0	250	59.4	350	62.0	600
Percentage of children aged 12-23 months vaccinated against measles before 12 months of age.	55.8	250	48.7	350	50.9	600
Percentage of children aged 12-23 months immunized against DPT3	69.6	250	59.1	350	62.3	600
Percentage of children aged 12-23 months immunized against DPT3 before 12 months of age	57.1	250	48.5	350	51.1	600
Percent of drop-outs between DPT1 and DPT3	22.4	250	20.3	350	21.0	600
Percent of children aged 12-23 months fully vaccinated	46.4	250	44.0	350	44.7	600
Percent of children aged 12-23 months fully vaccinated before the first birthday	38.0	250	36.1	350	36.5	600
FAMILY PLANNING:						
Percentage of women age 15-49 years who heard about family planning	92.4	250	80.8	350	84.4	600

Percent of women in the age group 15-49 who heard of a specific message on Family Planning by source of information (last 6 months):						
Radio	41.6	250	23.4	350	29.0	600
Health Worker	49.6	250	41.1	350	43.7	600
HEWs	69.6	250	58.0	350	61.5	600
CBRHAs	27.2	250	17.4	350	20.4	600
Community Health Promoters	48.8	250	26.3	350	33.2	600
Community events	50.8	250	36.3	350	40.7	600
Percent of women in the age group 15-49 who know where to obtain at least one modern method	92.6	250	88.6	350	90.0	600
Percent women aged 15-49 who are using a modern method	35.2	250	25.7	350	28.6	600
Percent women aged 15-24 who are using a modern method	31.7	82	30.9	94	31.2	176
Percent women aged 25-49 who are using a modern method	36.9	168	23.8	256	27.6	424
HIV/AIDS:						
Percent of women 15-49 years who can mention correctly two ways to prevent HIV/AIDS	32.0	250	19.1	350	23.1	600
Percent of women 15-49 years who can mention correctly the three major ways to prevent HIV/AIDS	3.6	250	3.1	350	3.3	600
Percent of women that correctly identify all three means of vertical transmission (i.e. transmission of HIV from mother to child)	6.8	250	2.9	350	4.1	600
Percent of women 15-49 years who know a mother can transmit HIV to her infant during pregnancy	38.8	250	15.1	350	22.4	600
Percent of women 15-49 years who know a mother can transmit HIV to her infant during delivery	19.6	250	20.9	350	20.5	600
Percent of women 15-49 years who know a mother can transmit HIV to her infant during breastfeeding	54.4	250	59.4	350	57.9	600

Annex V. Sample size and selected indicators table, Tigray

Annex 5.1 Number of respondents by type, Tigray (January 2009)

	IFHP Area	Non-IFHP Area	Tigray
Number of respondents of the questionnaire for women 15-49	600	600	1200
Number of respondents of the questionnaire for women with children 0-11 months	360	360	720
Number of respondents of the questionnaire for women with children 12-23 months	300	300	600

Annex 5.2. Selected indicators table, Tigray

Variable/Indicator/Category	Tigray					
	IFHP Area		Non-IFHP Area		Tigray (Weighted)	
	%	N	%	N	%	N
HOUSEHOLD CHARACTERISTICS						
Percent of households using improved sanitary facilities	59.7	600	43.8	600	54.0	1200
Percent of households using improved drinking water sources	77.8	600	67.3	600	74.1	1200
Percent of households with at least one bednets	62.6	460	89.8	580	73.8	1040
Average bed nets per household	1.7	460	2.0	580	1.9	1040
MATERNAL, NEWBORN and CHILD CARE						
Percent of mothers with children 0-11 months who had at least one antenatal care at a health facility during pregnancy (excluding HPs)	47.8	360	53.6	360	49.9	720
Percent of mothers with children 0-11 months who had at least one antenatal care at Health Post (HP) (excluding other health facilities)	29.2	360	16.4	360	24.6	720
Percent of mothers with children 0-11 months who had at least one antenatal care at a health facility during pregnancy (including HPs)	77.0	360	70.0	360	74.5	720
Percent of mothers with children 0-11 months who had at least two antenatal visits to a health professional prior to delivery	71.4	360	56.9	360	66.2	720
Percent of mothers with children 0-11 months who were given at least 2 doses of Tetanus Toxoid (TT) vaccine within the appropriate interval prior to giving birth	46.6	360	40.2	360	44.3	720
Percent of pregnant women who have received Iron/folic acid during the last pregnancy	21.7	360	26.9	360	23.6	720
Percent of mothers with children aged 0-11 months who delivered with a skilled health professional (excluding HEWs)	20.8	360	11.7	360	17.6	720
Percent of mothers with children aged 0-11 months who delivered with HEWs only (Excluding other skilled health professionals)	4.4	360	3.6	360	4.2	720
Percent of mothers with children aged 0-11 months who delivered with a skilled health professional (including HEWs)	25.2	360	15.3	360	21.8	720

Percent of children aged 0-11 months whose delivery took place at a health facility (including Health Posts)	21.1	360	10.3	360	17.3	720
Percent of last live births in the 1 year preceding the survey that were weighed at birth	15.9	360	7.2	360	12.8	720
Percent of women who report receiving postpartum visit within two days of birth	5.0	360	2.8	360	4.2	720
Percent of children under one who were checked at least once with in 7 days after birth	6.4	360	4.2	360	5.6	720
Percent of newborns who started breastfeeding within one hour of birth	40.8	360	31.7	360	37.6	720
Percent of infants aged 0-3 months who were fed breast milk only in the last 24 hours, and no other food given	74.3	105	69.6	112	72.6	217
Percent of infants aged 0-5 months c who were fed breast milk only in the last 24 hours, and no other food given	65.4	163	60.3	174	63.7	337
Percent of children aged 6-9 months who where fed solid or semi-solid complementary foods in addition to breast milk	46.8	126	55.6	133	50.1	259
Percent of last live births whose mother reports feeding the first milk (colostrum)	47.8	360	41.9	360	45.7	720
Percent of children aged 6-23 months who received a Vitamin A dose in the last six months	64.3	493	68.7	486	65.9	979
Percent of children aged 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (**ORS only**)	39.5	109	35.8	190	37.7	299
Percent of children aged 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) **or appropriate home solution**	51.4	109	55.3	190	53.3	299
Percent of children aged 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) **or an appropriate household solution or received more fluids AND continued eating somewhat less, the same or more food**	50.5	109	56.3	190	53.3	299
Percent of children 0-23 months with symptoms of ARI in the two weeks preceding the survey that were taken to a health facility for treatment	17.3	52	19.1	131	18.3	183
Percent of mothers with children 0-23 months who know at least 3 symptoms that would cause her to seek care immediately for a child under 5 years	33.3	660	38.5	660	38.4	1320
Percentage of children 0-23 months whose mothers (residing in malarious areas) report that child slept under bednet the previous night	59.9	276	50.3	348	55.9	624
Percent of children 12-23 possessing an immunization card	65.7	300	60.7	300	63.9	600
Percentage of children aged 12-23 months vaccinated against measles	84.7	300	79.3	300	82.8	600
Percentage of children aged 12-23 months vaccinated against measles before 12 months of age.	78.8	300	73.7	300	77.0	600
Percentage of children aged 12-23 months immunized against DPT3	84.7	300	78.7	300	82.5	600
Percentage of children aged 12-23 months immunized against DPT3 before 12 months of age	78.8	300	73.2	300	76.7	600
Percent of drop-outs between DPT1 and DPT3	9.7	300	14.0	300	11.2	600
Percent of children aged 12-23 months fully vaccinated	69.0	300	61.7	300	66.4	600
Percent of children aged 12-23 months fully vaccinated before the first birthday	64.2	300	57.4	300	61.8	600
FAMILY PLANNING:						
Percentage of women age 15-49 years who heard about family planning	95.7	600	89.8	600	93.6	1200

Percent of women in the age group 15-49 who heard of a specific message on Family Planning by source of information (last 6 months):						
Radio	77.3	600	86.8	600	80.7	1200
Health Worker	53.8	600	40.3	600	49.0	1200
HEWs	28.0	600	22.5	600	26.0	1200
CBRHAs	19.5	600	8.3	600	15.5	1200
Community Health Promoters	16	600	12.5	600	14.8	1200
Community events	38.2	600	18.5	600	31.2	1200
Percent of women in the age group 15-49 who know where to obtain at least one modern method	90.8	600	82.2	600	87.7	1200
Percent women aged 15-49 who are using a modern method	29.5	600	20.5	600	26.3	1200
Percent women aged 15-24 who are using a modern method	32.3	186	25.1	211	29.5	397
Percent women aged 25-49 who are using a modern method	28.3	414	18.0	389	24.7	803
HIV/AIDS:						
Percent of women 15-49 years who can mention correctly two ways to prevent HIV/AIDS	40.2	600	30.8	600	36.8	1200
Percent of women 15-49 years who can mention correctly the three major ways to prevent HIV/AIDS	11.2	600	6.7	600	9.6	1200
Percent of women that correctly identify all three means of vertical transmission (i.e. transmission of HIV from mother to child)	14.8	600	5.7	600	11.6	1200
Percent of women 15-49 years who know a mother can transmit HIV to her infant during pregnancy	38.7	600	27.7	600	34.7	1200
Percent of women 15-49 years who know a mother can transmit HIV to her infant during delivery	34.3	600	30.5	600	33.0	1200
Percent of women 15-49 years who know a mother can transmit HIV to her infant during breastfeeding	61.8	600	44.8	600	55.8	1200