The Summary: List of Input

JICA Reproductive Health Project in Nghe An, Vietnam
Phase II

September 2000 - August 2005

September 2000 - August 2005

Prepared by JOICFP based on the data presented by Provincial Steering Committee
for the Project in MCH/FP center, Nghe An Province

The List of Input

The list of input is made to indicate the **estimated amount** of the input provided to the activities planned for the respective outputs set by PDM. It also shows the input by administrative levels, i.e. provincial, district and commune levels. Please be noted some of the activities are still underway and to be completed by the end of the project and, therefore, the list is to be finalized when the project ends in 31 August 2005. The list shows the input provided by the end of May, 2005. In addition, the input granted directly by the JICA headquarters. such as the cost for long- and short-term experts and for counterpart training conducted in Japan are not included.

It should also be noted that some of the activities are related to the different outputs and, therefore, some input (activities and equipment) **overlapping.** (appearing twice or more). This is to show the whole picture of the activities conducted for the respective outputs. The total input, therefore, **exceeds the actual sum of the actual input** reported in the regular reports.

Estimated JICA's total input as of May 2005 (excluding costs for Japanese experts and c/p training in Japan) **US$2,210,000**

① Experts:

- Long-term experts (9 experts): 2 chief advisors, 2 administrative coordinators, 2 midwives, 2 public health nurses, 1 demographer

Planned input in PDM: Team leader, Administrative Coordinator, Midwife, Public Health Nurse, Demographer, and others.

- Short-term experts (49 experts): MCH/FP administration,, RH survey, IEC, Midwifery education, Community health promotion, HMIS, client friendly servces, project management, etc

Planned input in PDM: MCH/FP administration, RH survey, IEC, Midwife, Public Health Nurse, Community-based MCH promotion, Project Management, and others.

② Equipment: Total: approximately **US$1,332,000.-**

Planned input for equipment: J.Yen 120-150 millinon (approximately US$1.1.-1.35 million)

③ Training

- C/P training in Japan: 44 trainees (See the list of C/P trainees in the activity repo

Planned No. of trainees in Japan (C/P training): 13 - 16 persons/5 years

* About 20 additional C/P were trainined by a country specific C/P training from 2003.

- Local training /workshops (IEC/RH seminars and dissemination workshops): Total: 516 courses with 24,809 trainees/participants:

Approximately US$394,000.-

(See the list of trainings attached.)

1 Input by administrative levels

1-1 Input at provincial level MCH/FP center, JICA office, PWUs, PHS, etc.	US$217,995	10%
1-2. Input at district level DHCs, DWUs, etc.	US$417,681	19%
1-3. Input at commune level CHCs, CWUs, HHWs, etc..	US$1,574,550	71%
Total	**US$2,210,226**	

2 Input by outputs

Total (US$)	2,210,226 **	
Output 0. Organization	268,593	12%
Output 1. Safemotherhood	1,288,709	58%
Output 2	84,401	4%
Output 3	88,139	4%
Output 4	64,425	3%
Output 5	317,518	14%
Output 6	98,441	4%

** This excludes the local administrative cost for project office

3 Proportion of Input by Activities (Training, Equipment, IEC, and others)

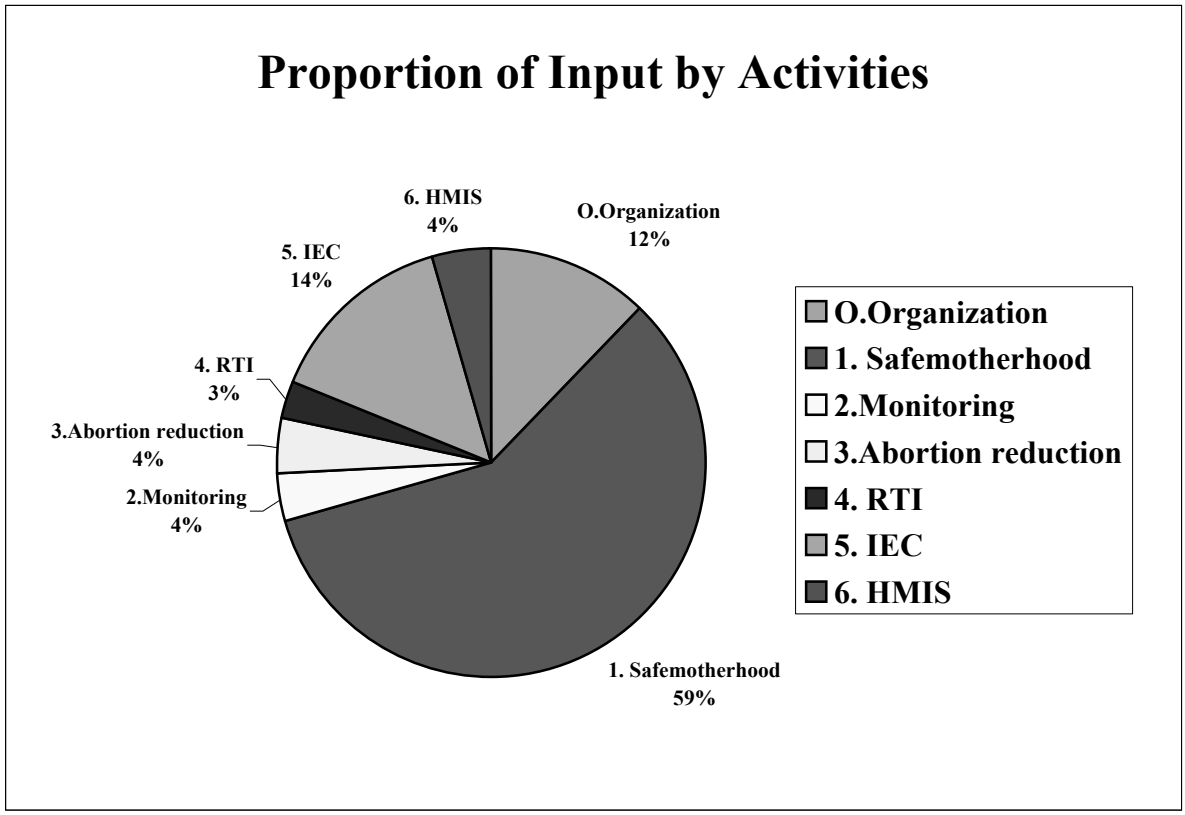
Equipment	1,331,975	58%
Training/Seminars	393,987	17%
IEC materials and publication	184,459	8%
CHC facility renovation	163,814	7%
Operational (local administrative) cost	223,113	10%

Input by Activities according to the Expected Outputs

	Output No.	Province	District	Commune	Total
O.Organization	0. Steering Committees (SC) at all levels are established and are functioned regularly and continuously for further integration of RH and FP services.	62,919	181,692	23,982	268,593
1. Safemotherhoo	1. Safe and hygienic delivery is promoted at commune level.	7,917	83,752	1,197,040	1,288,709
	1. Safe and hygienic delivery is promoted at commune level.	1,883	15,484	348,444	
	1-1 Prenatal care at commune level is	1,264	4,388	60,742	
	1-2 Delivery Care at commune level is	2,209	29,598	92,238	
	1-3 Postnatal care at commune level is	76	7,065	75,234	
	1-4 Essential medical equipment is utilized to all CHCs.	2,485	27,217	442,013	
	1-5 Hygienic facilities such as delivery room, latrine, well and shower room of CHCs are improved	0	0	178,369	
	1-6 Integration of RH and FP is promoted and improved at all levels.	0	0	0	
2.Monitoring	2. Monitoring capacity of MCH/FP Centre and selected DHCs is improved.	59,471	24,930	0	84,401
3.Abortion reduction	3. Number of abortion including MRs conducted at MCH/FP center and selected districts is reduced.	1,104	17,802	69,233	88,139
4. RTI	4. Capacity for RTI detection and the development of prevention strategy is improved at MCH/FP Centre	60,263	4,162	0	64,425
5. IEC	5. Quality of IEC&Motivation activities of MCH/FP Centre and the selected districts, women's union and DHCs in particular, for RH promotion aiming at behavioral change of service providers, women as well as men is improved.	5,667	37,686	274,165	317,518
6. HMIS	6. The system of recording, summarizing and reporting health information is upgraded.	20,654	67,657	10,130	98,441
	Total (Output 1 - Output 6)	217,995	417,681	1,574,550	2,210,226

Grand Total: US$2,210,226

* This total does not include the project office running


Proportion of Input by Activities
6. HMIS
4%
O.Organization
12%
5. IEC
14%
4. RTI
3%
3.Abortion reduction
4%
2.Monitoring
4%
1. Safemotherhood
59%
O.Organization
1. Safemotherhood
2.Monitoring
3.Abortion reduction
4. RTI
5. IEC
6. HMIS

Inputs by levels

Output		Province	District	Commune	Total
Output. 0	Steering Committees (SC) at all levels are established and are functioned regularly and continuously for further integration of RH and FP services.	62,919	181,692	23,982	268,593
Output. 1	Safe and hygienic delivery is promoted at commune level.	7,917	83,752	1,197,040	1,288,709
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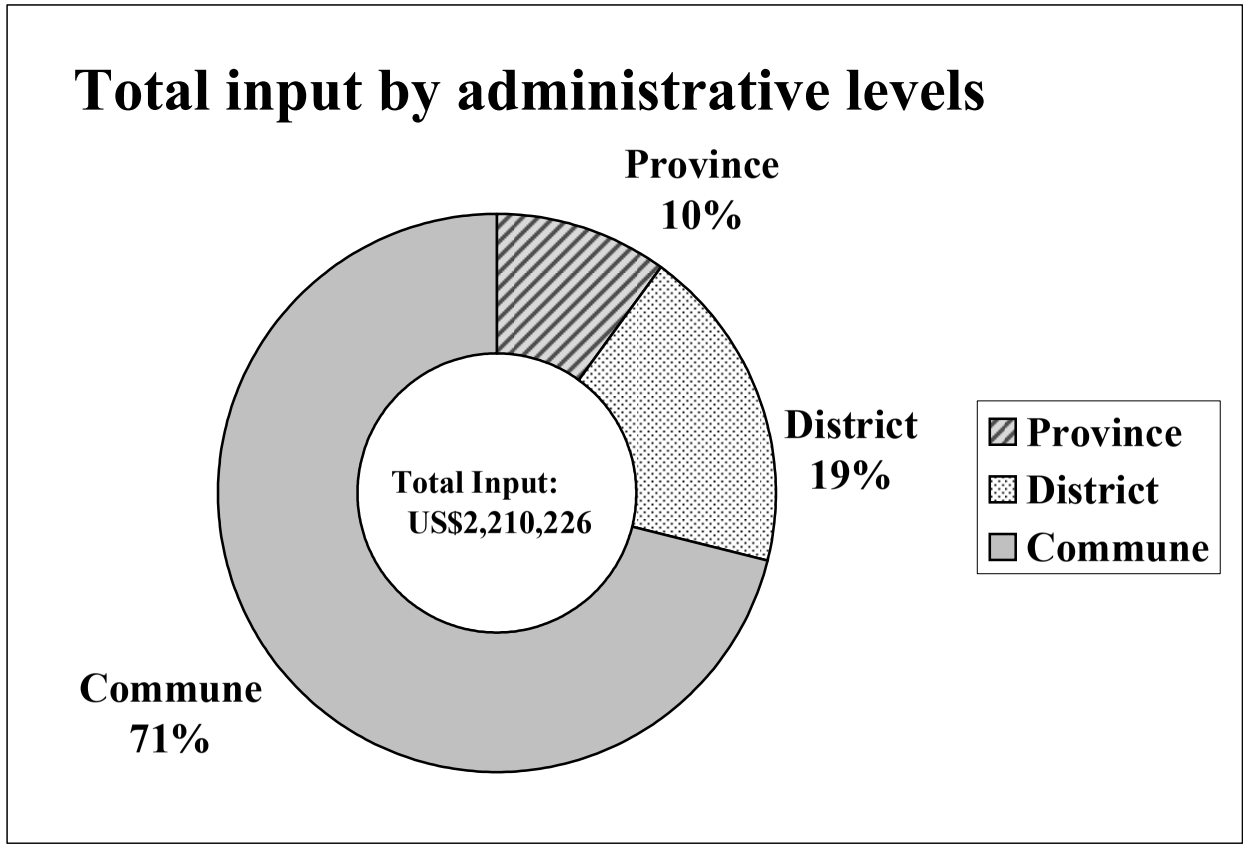
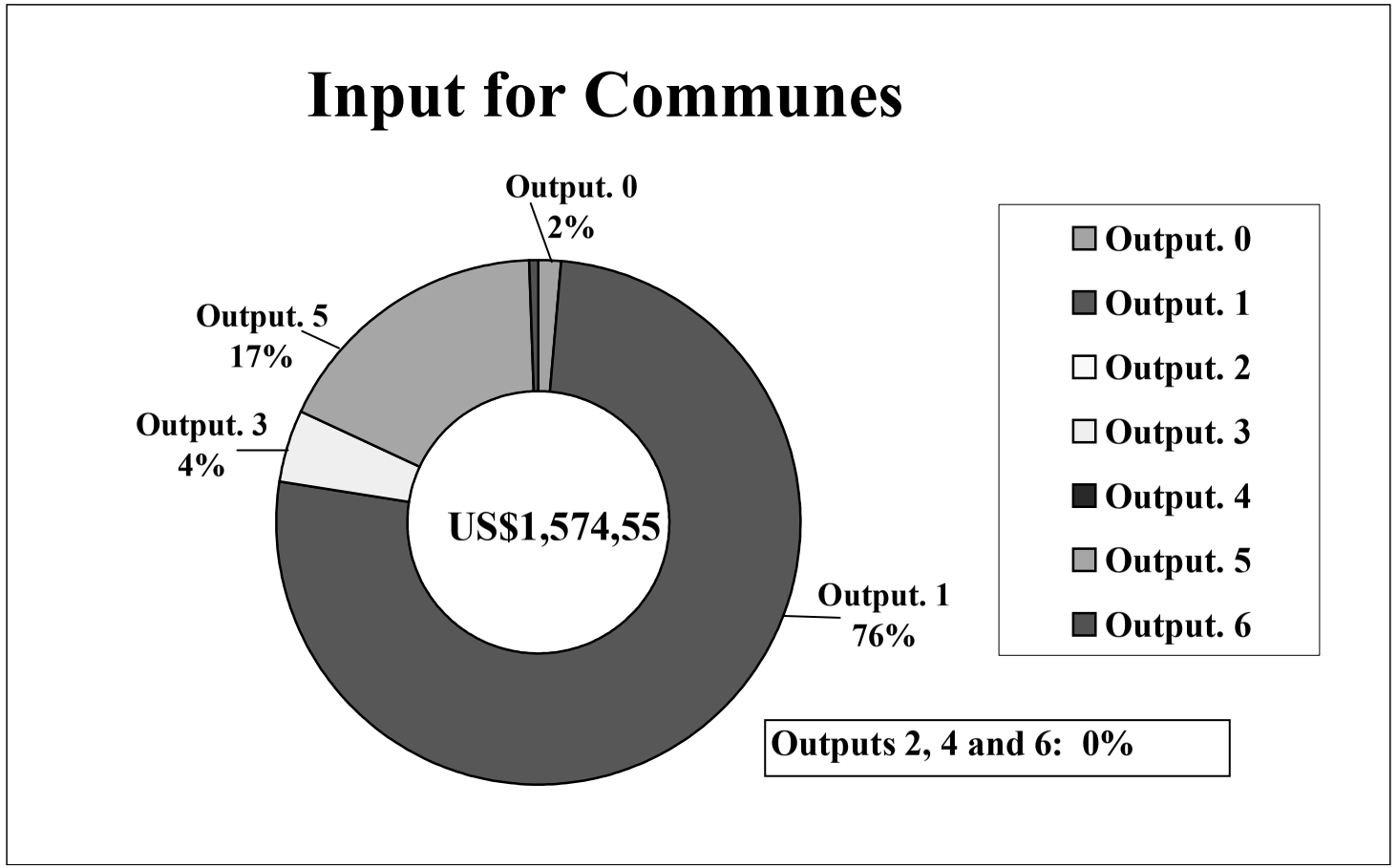
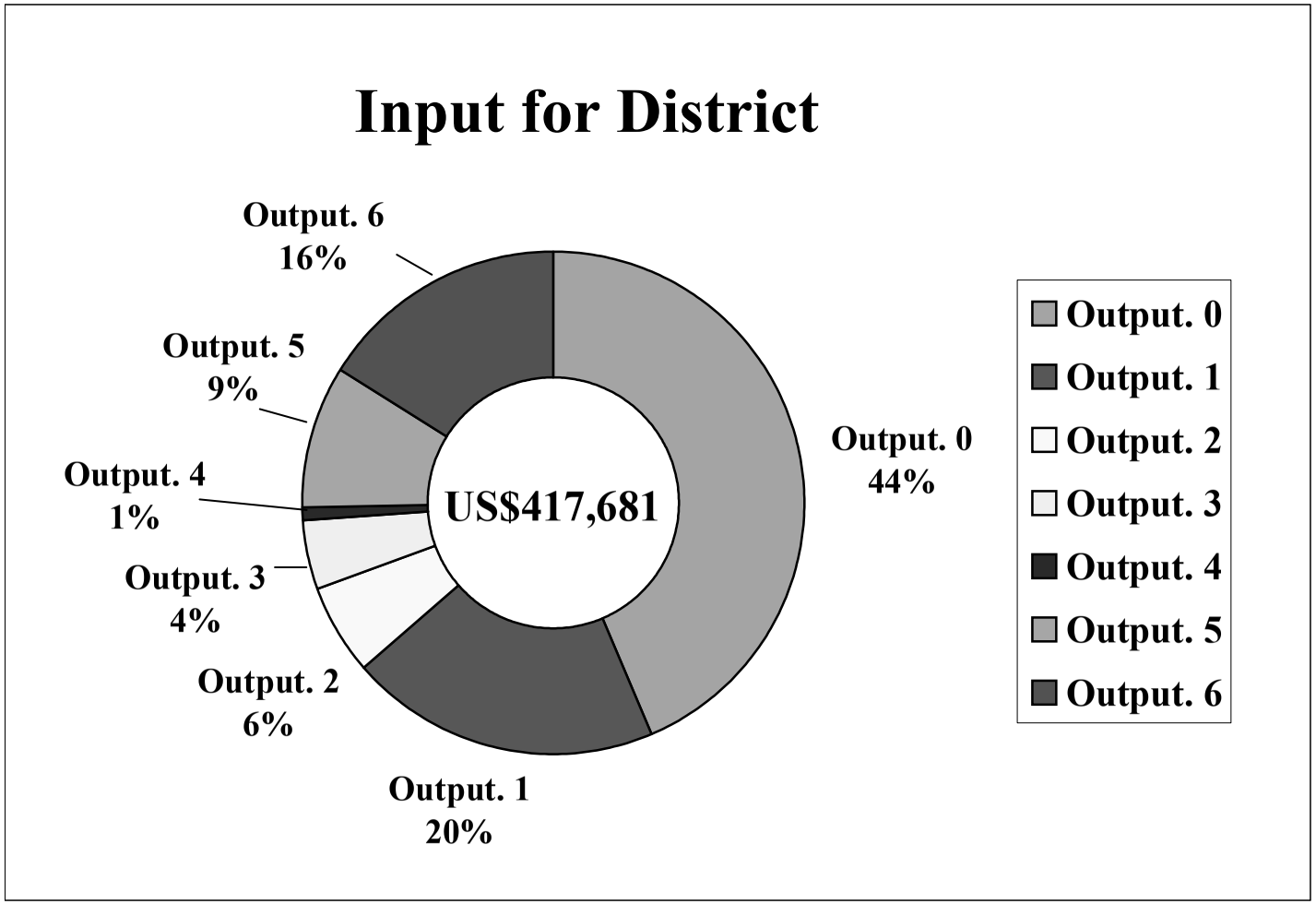
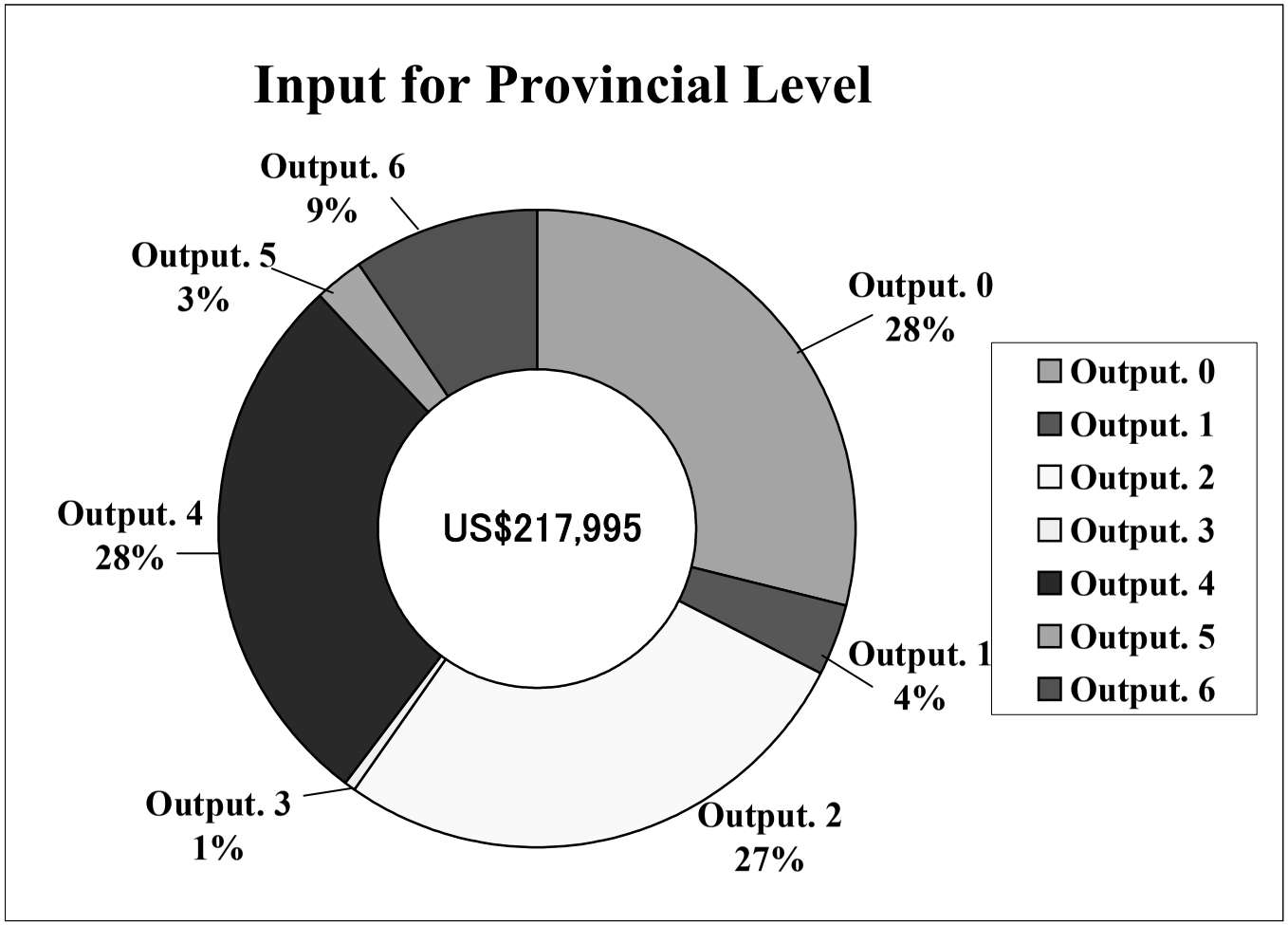
	1-5 Hygienic facilities such as delivery room, latrine, well and shower room of CHCs are improved	0	0	178,369	
	1-6 Integration of RH and FP is promoted and improved at all levels.	0	0	0	
Output. 2	Monitoring capacity of MCH/FP Centre and selected DHCs is improved.	59,471	24,930	0	84,401
Output. 3	Number of abortion including MRs conducted at MCH/FP center and selected districts is reduced.	1,104	17,802	69,233	88,139
Output. 4	Capacity for RTI detection and the development of prevention strategy is improved at MCH/FP Centre	60,263	4,162	0	64,425
Output. 5	Quality of IEC&Motivation activities of MCH/FP Centre and the selected districts, women's union and DHCs in particular, for RH promotion aiming at behavioral change of service providers, women as well as men is improved.	5,667	37,686	274,165	317,518
Output. 6	The system of recording, summarizing and reporting health information is upgraded.	20,654	67,657	10,130	98,441
	Total (Output 1 - Output 6)	217,995	417,681	1,574,550	2,210,226


Total input by administrative levels
Province
10%
District
19%
Commune
71%
Total Input:
US$2,210,226
Province
District
Commune


Input for Communes
Output. 0
2%
Output. 5
17%
Output. 3
4%
US$1,574,55
Output. 1
76%
Output. 0
Output. 1
Output. 2
Output. 3
Output. 4
Output. 5
Output. 6
Outputs 2, 4 and 6: 0%


Input for District
Output. 6
16%
Output. 5
9%
Output. 4
1%
Output. 3
4%
Output. 2
6%
Output. 1
20%
Output. 0
44%
US$417,681
Output. 0
Output. 1
Output. 2
Output. 3
Output. 4
Output. 5
Output. 6

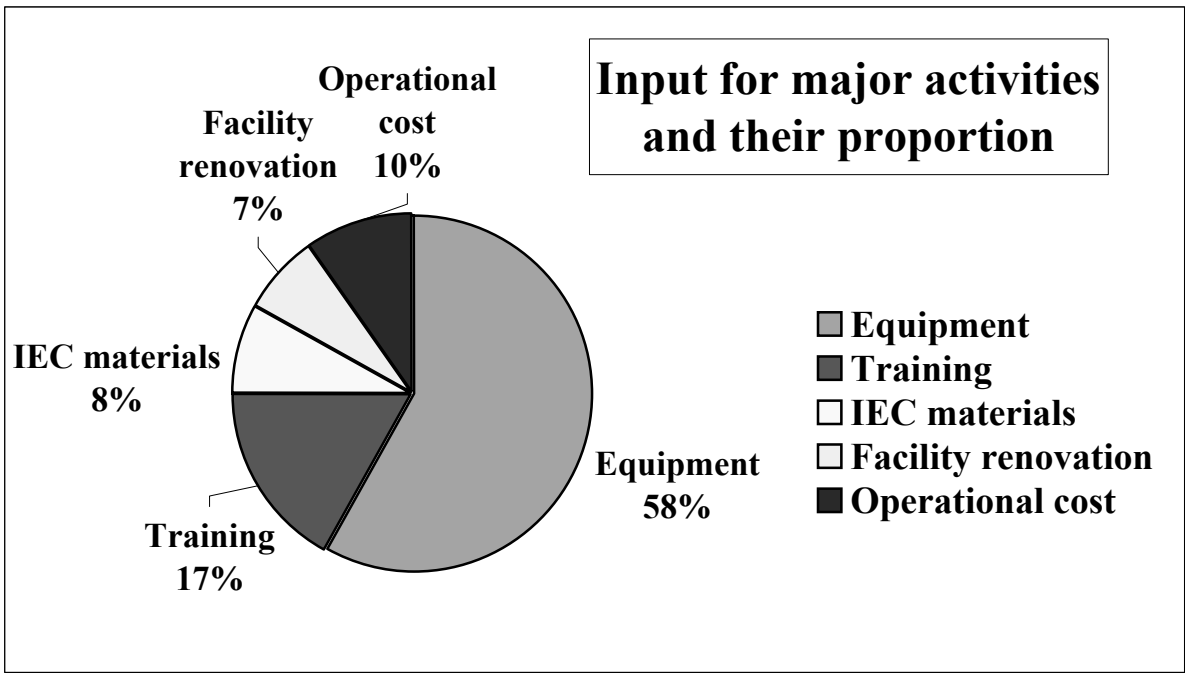

Input for Provincial Level
Output. 6
9%
Output. 5
3%
Output. 0
28%
Output. 4
28%
US$217,995
Output. 1
4%
Output. 3
1%
Output. 2
27%
Output. 0
Output. 1
Output. 2
Output. 3
Output. 4
Output. 5
Output. 6

Input for Equipment by year

Fiscal Year	Total annual input for equipment	Equipments brought by experts	IEC materials	Reports	Cost for operation (local administrative cost)*
2000	155,078	11680	8547	4812	51,141
2001	220,821	2362	3799		40,849
2002	455,650	30600	26640		13,149
2003	229,450	18637	35542		55,446
2004	204,103	3594	102898	2221	62,528
sub total	1,265,102	66,873	184,459		223,113
Total (US$)	1,331,975				

*This includes the initial cost of $32,156 for project office set up.

Equipment	1,331,975	58%
Training	393,987	17%
IEC materials	184,459	8%
Facility renovation	163,814	7%
Operational cost	223,113	10%
Total	2,297,348	



Training/Workshop/Seminars

	Training	Workshop/seminars	Total	Province-wide RH contest, dissemination seminar to other provinces, etc.	
No. of Trainees	**4,585**	**20,224**	**24,809**	954	25,763
No. of courses	**225**	**291**	**516**	6	522
Total amount of input	**153,588**	**208,368**	**361,956**	32,032	393,988
Provincial level	7,878	11,388	19,266	0	19,266
District	18,929	50,014	68,943	6,336	75,279
Commune	126,781	146,966	273,747	25,696	299,443
			361,956	32,032	393,988

Trends in Indicators

JICA Reproductive Health Project in Nghe An, Vietnam
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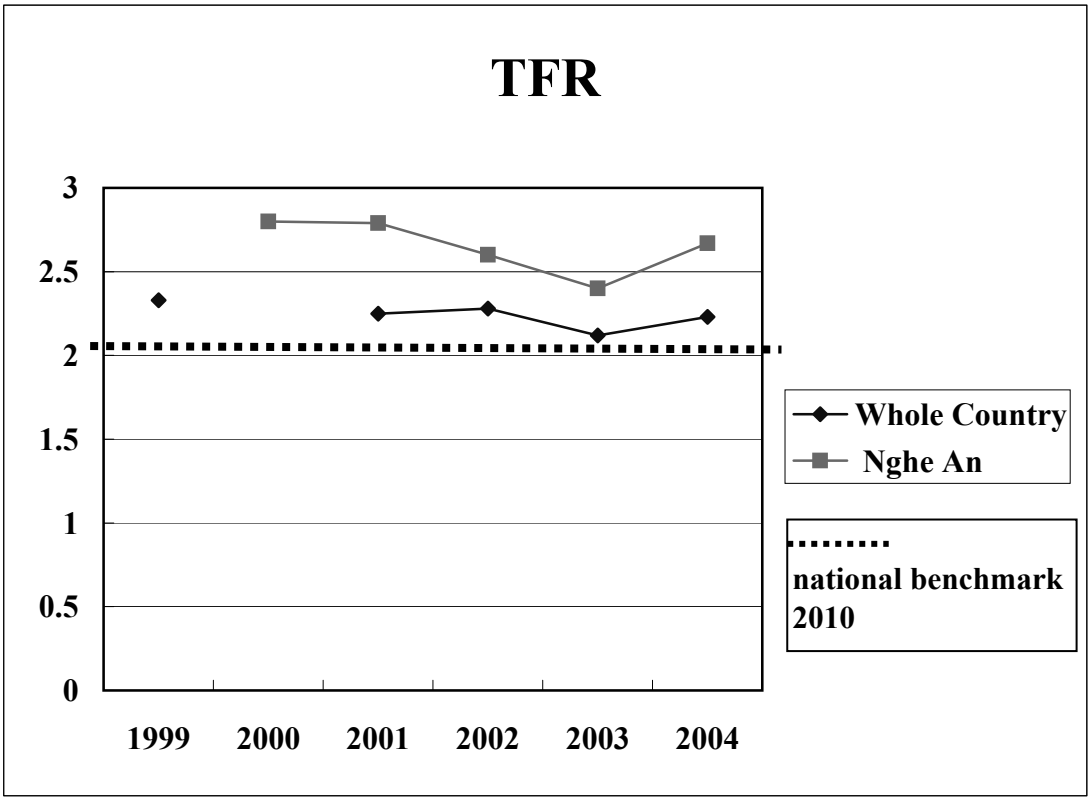
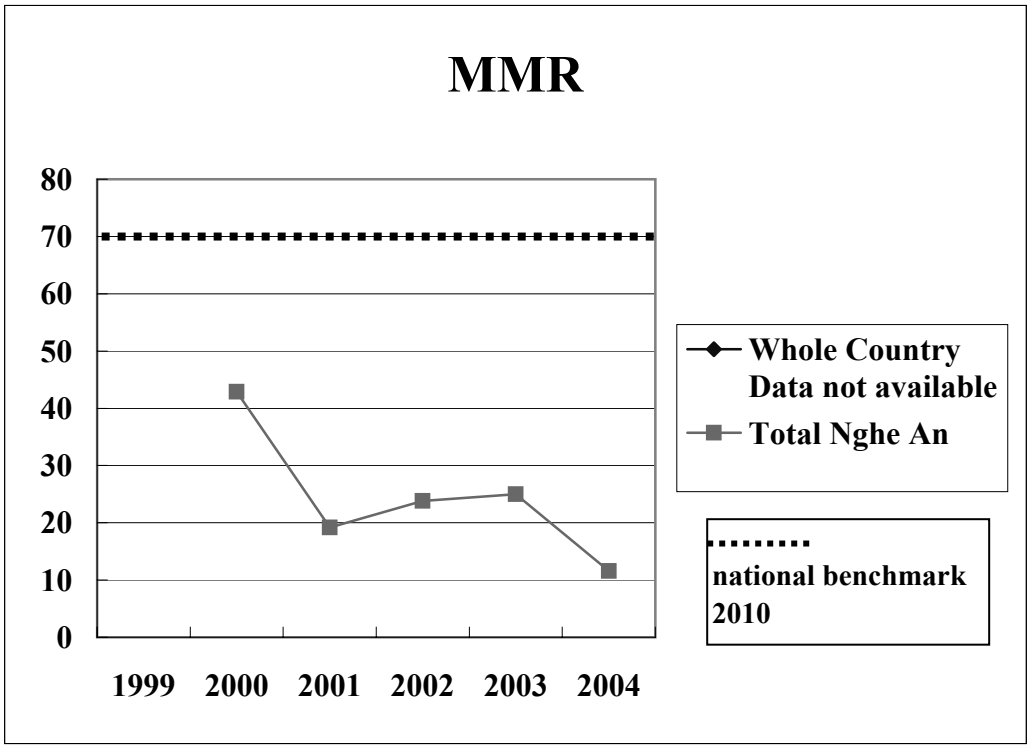
TFR

	1999	2000	2001	2002	2003	2004	data source	national benchmark 2005	national benchmark 2010
Whole Country	2.33		2.25	2.28	2.12	2.23	Vietnam Population News No34, Jan-March 2005		2.0
Nghe An		2.8	2.79	2.6	2.4	2.67	PDM Indicator matrix		



MMR (No. of maternal deaths/100000 live births)

	1999	2000	2001	2002	2003	2004	data source	national benchmark 2005	2010
Whole Country Data not available								80	70
Total Nghe An		42.9	19.2	23.8	25	11.6	PDM Indicator matrix		



IMR (Infant deaths/1000 live births

	1999	2000	2001	2002	2003	2004	data source	national benchmark 2005	2010
Whole Country	36.7	31.2	31	26	21	24	HSY	30	25
Total Nghe An		9.3	9	8.7	7.2		PDM Indicator matrix		

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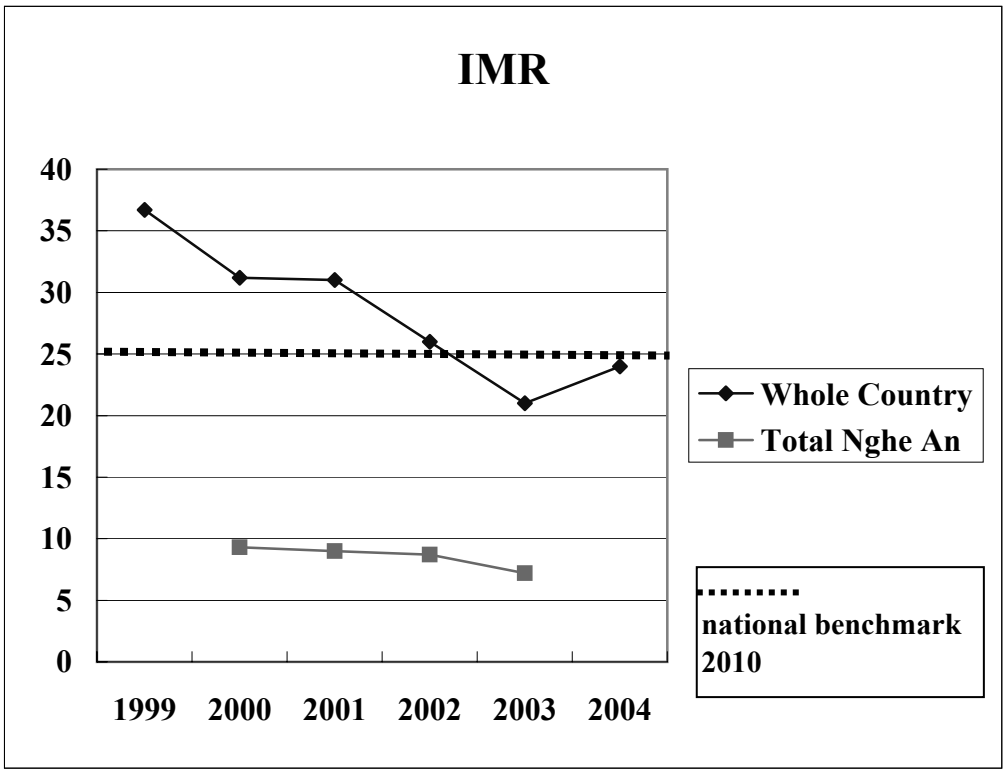

% of Commune with physicians (M.D.)

	1999	2000	2001	2002	2003	2004	data source	national benchmark 2005	2010
Whole Country	33.9%	51.1%	56.1%	61.5%	65.4%			65	80
Nghe An	62	132	183	173	194	208	HSY		
Nghe An	13.3%	28.3%	39.3%	37.1%	41.4%	44.3%	HSY		

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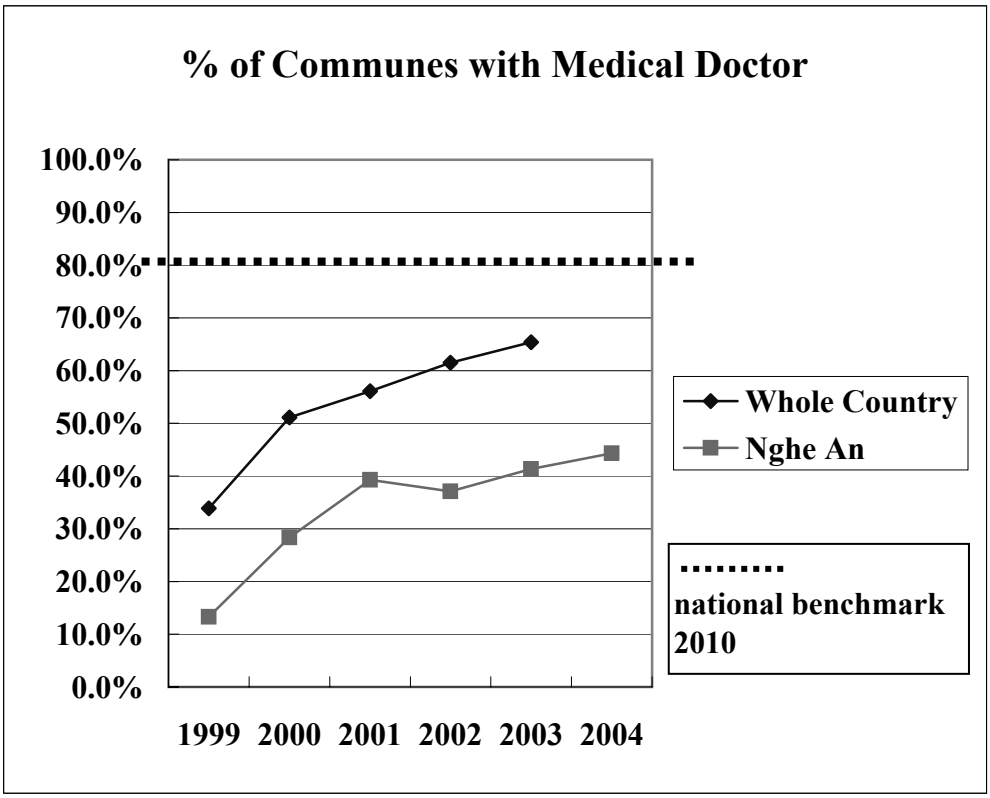

% of Commune with trained midwifery staff (A.D.in obstetrics and/or midwife)

	1999	2000	2001	2002	2003	2004	data source	national benchmark 2005	2010
Whole Country	84.2%	92.4%	87.7%	91.3%	93.1%			100	100
Nghe An	323	418	399	460	454	469	HSY		
Nghe An	69.3%	89.7%	85.6%	98.7%	96.8%	100.0%	HSY		

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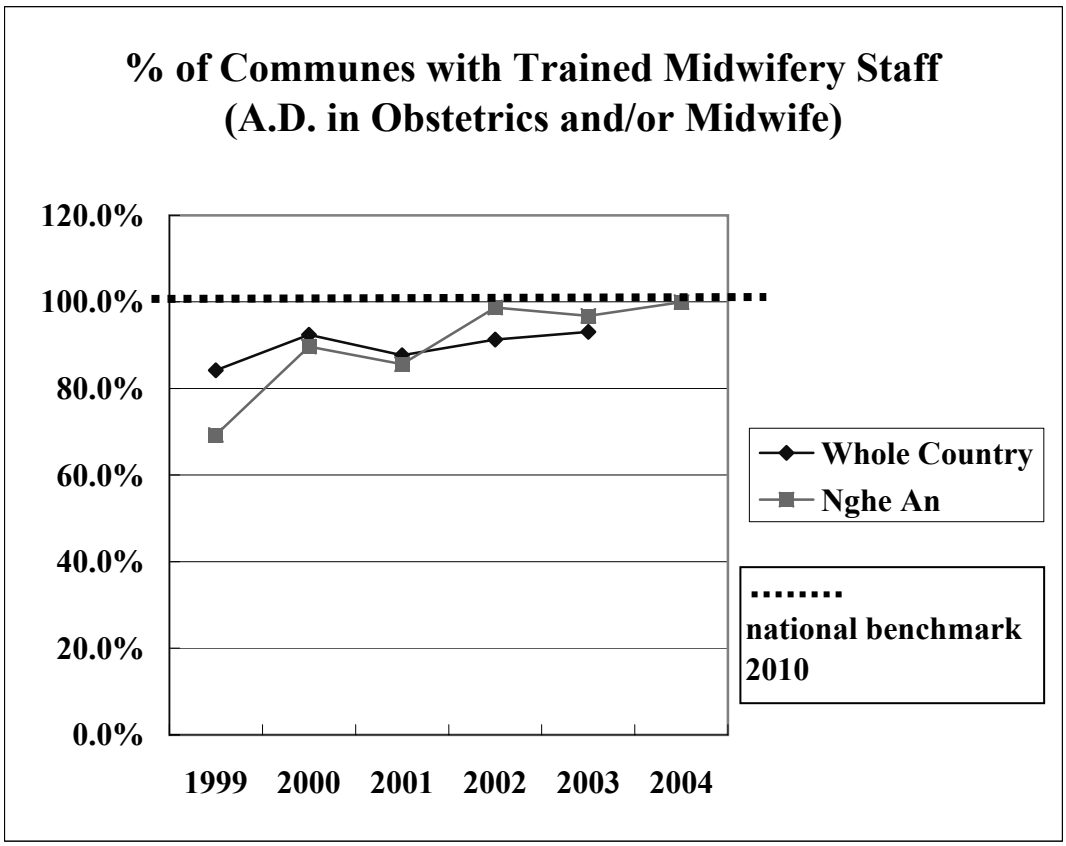

Low birth weight
(% of live birth with low birth weight below 2500g / 100 live births)

	1999	2000	2001	2002	2003	2004	data source	national benchmark 2005	2010
Whole Country				7	6.5		HSY	<7	<6
Nghe An		4.6	3.8	4.7	3.0	2.5	corriculated from MCH/FP data matrix		
original data									
Nghe An									
No.LBW		1928	1580	1787	1215	1100	MCH/FP data matrix		
Total Live birth	41754	41919	41620	37895	40331	43257	MCH/FP data matrix		

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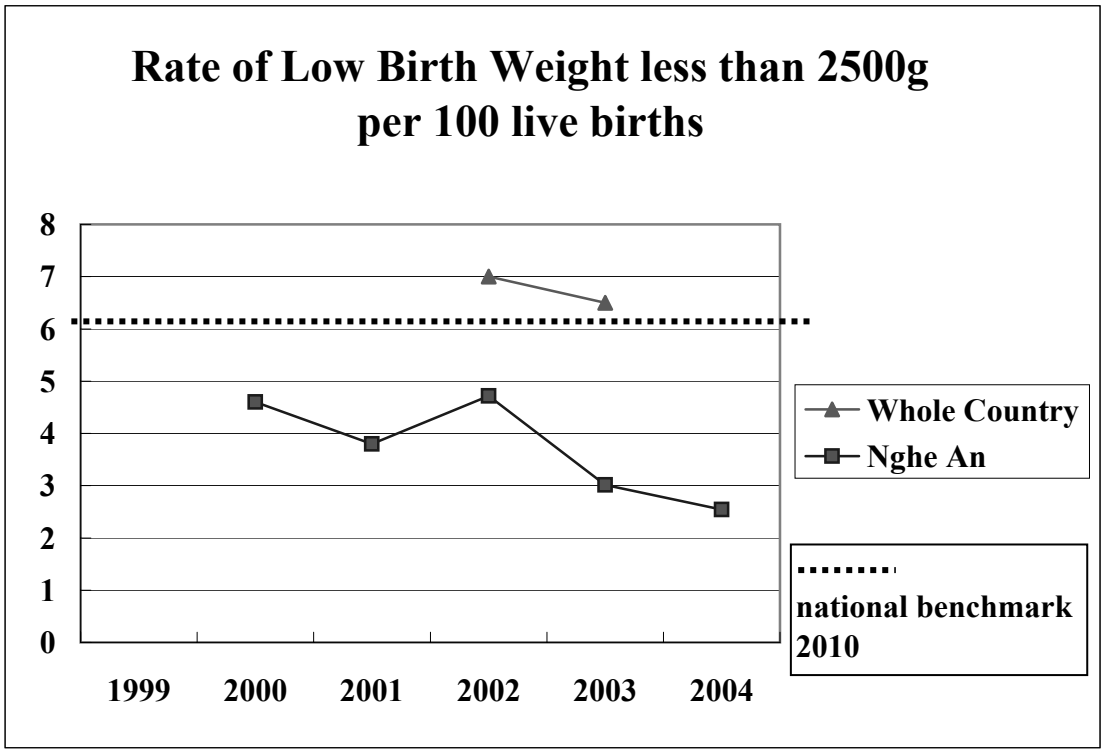
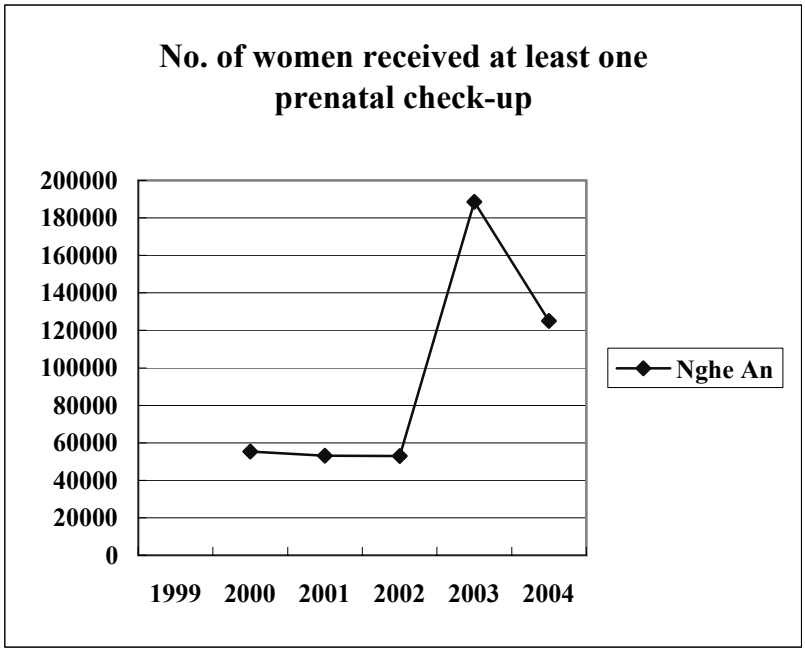


No. of women received at least one prenatal check-up

	1999	2000	2001	2002	2003	2004	data source	national benchmark 2005	2010
Whole Country									
Nghe An		55,304	53,190	52,898	188,509	125,059	MCH/FP data matrix		



Prenatal check-ups

	1999	2000	2001	2002	2003	2004	data source	national benchmark 2005	2010
Whole Country	1.9	2	2.1	2.2	2.5		HSY		

CHC data

non-mountainous	3.04	3.2	3.3	3.2	3.34	PDM Indicator matrix		
mountainous	2.2	2.5	2.6	2.84	2.75	MCH/FP Center		

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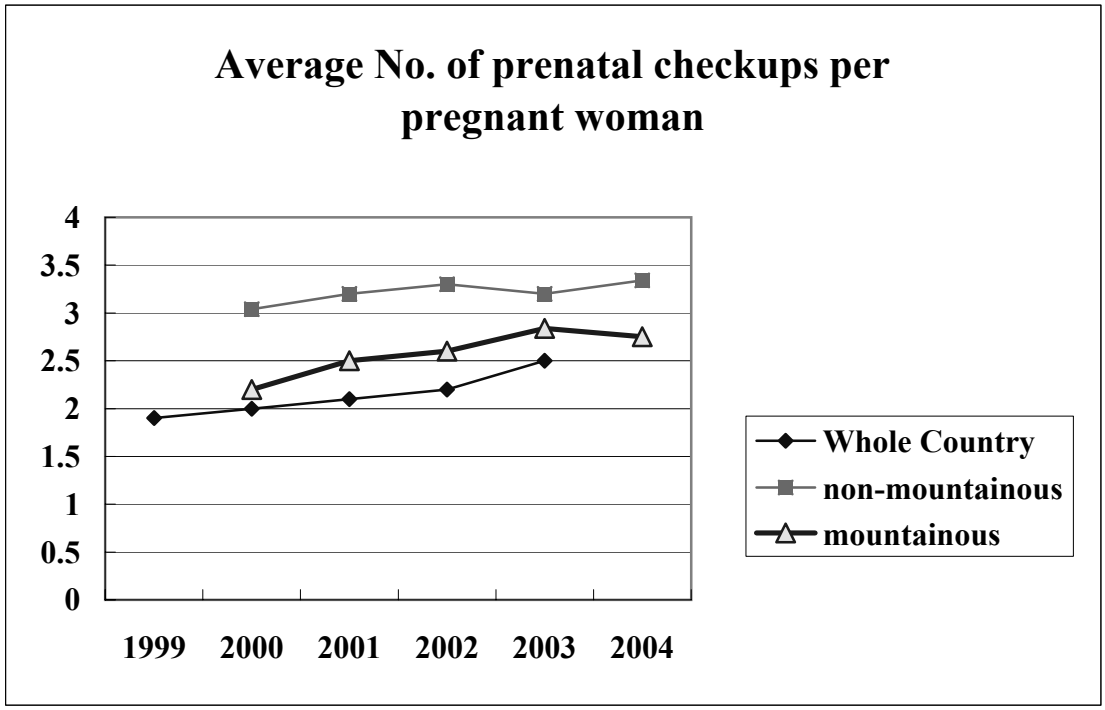

No. of Gynecololgical examination ('000)

	1999	2000	2001	2002	2003	2004	data source	national benchmark 2005	2010
Whole Country	7,335	8,396	11,179	11,402	9,487		HSY	–	–
Nghe An		214,268	313,940	302,199	246,692	258,338	MCH/FP data matrix		
MCH/FP Center		2,832	8,678	14,540	11,902	11,241	Client data		

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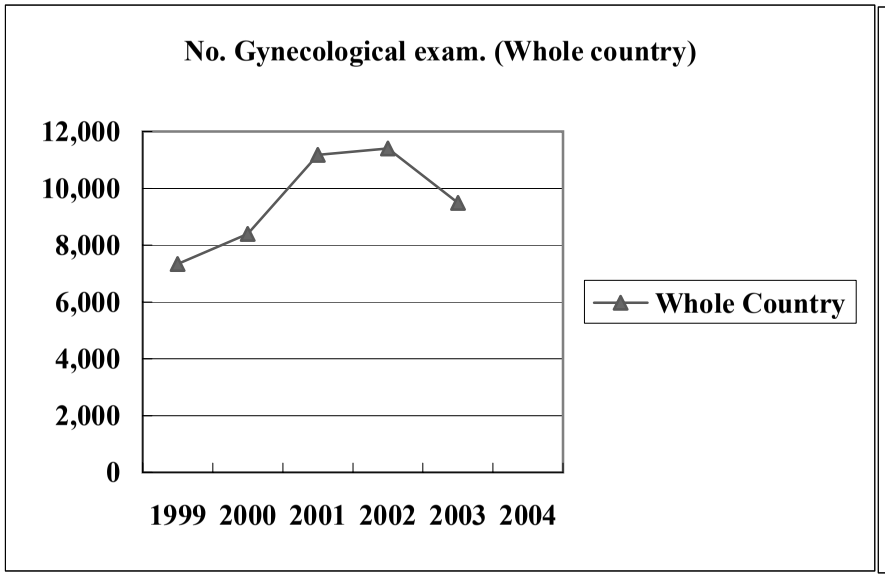

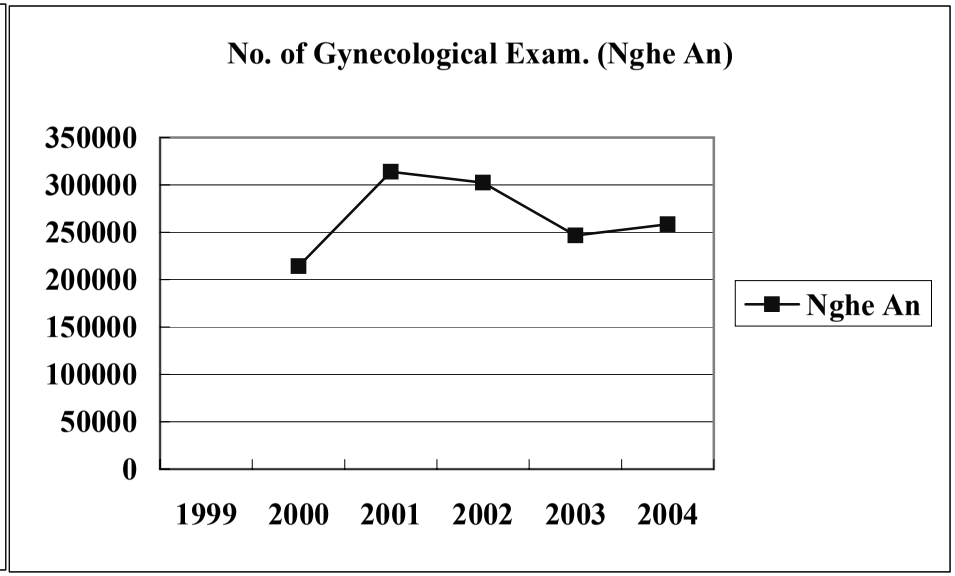

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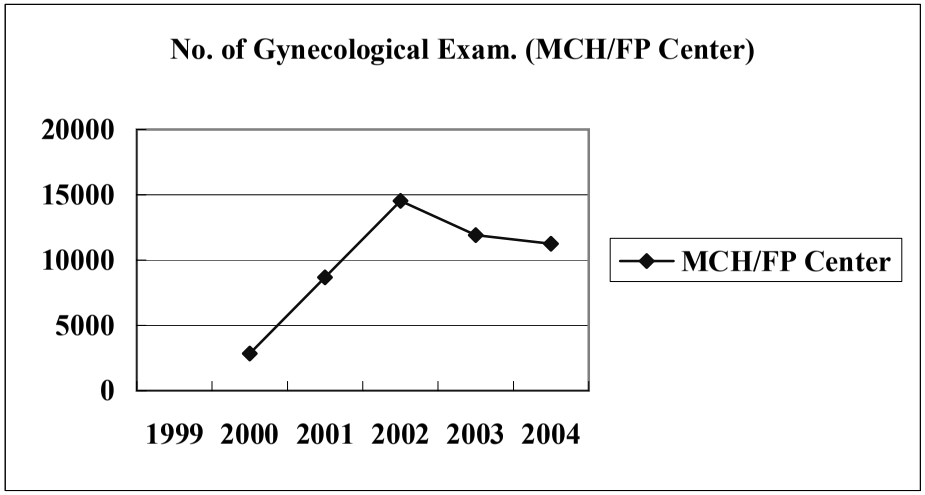
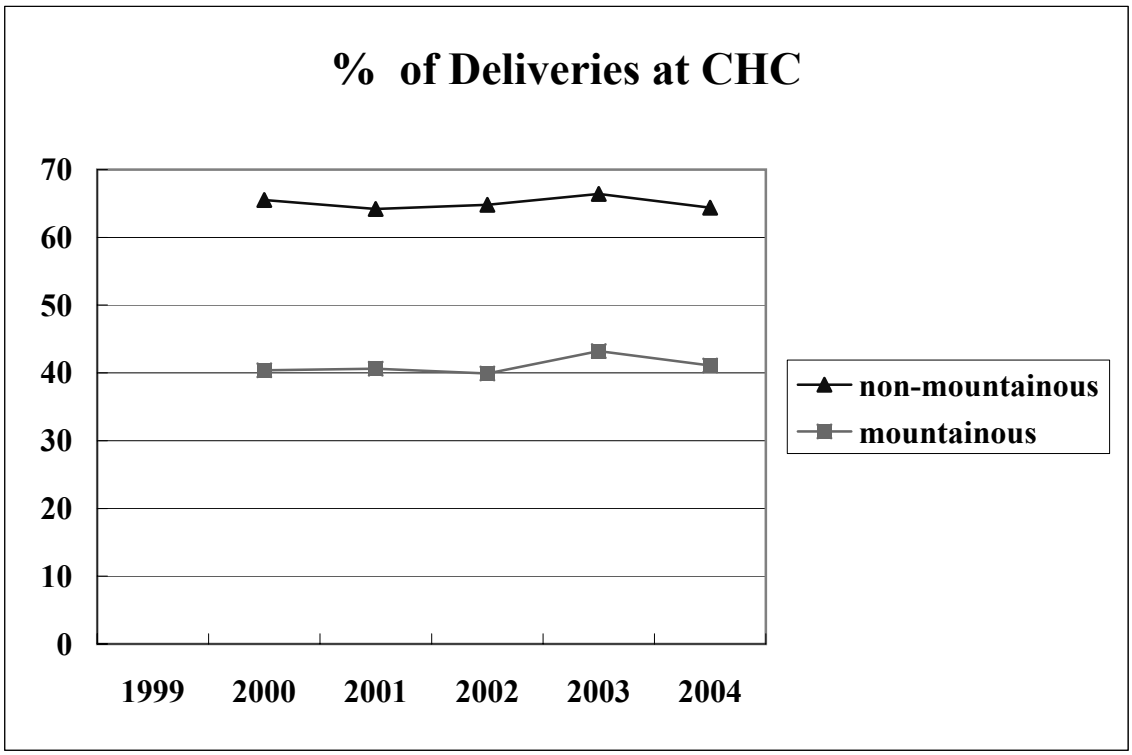
national benchmark


No. of Gynecological Exam. (MCH/FP Center)
20000
15000
10000
5000
0
1999
2000
2001
2002
2003
2004
MCH/FP Center

% Delivery at CHC

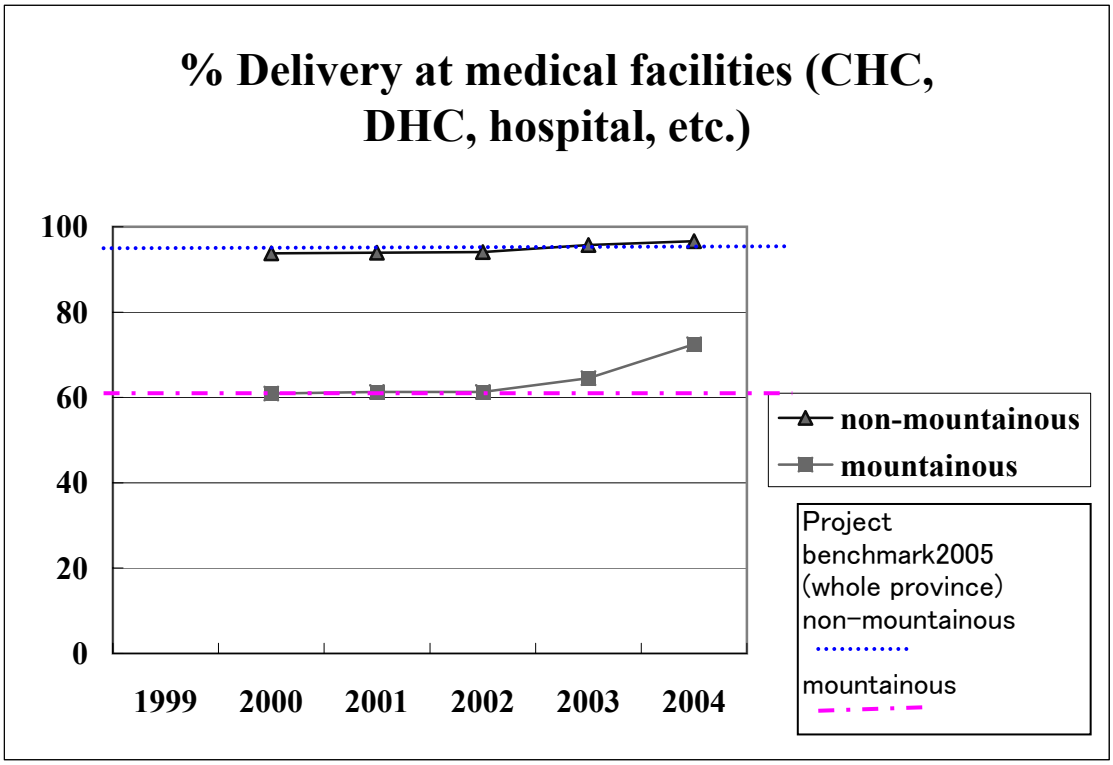
	1999	2000	2001	2002	2003	2004	data source	national benchmark 2005	2010
Whole Country								–	–

non-mountainous	65.5	64.2	64.8	66.4	64.4	PDM Indicater matrix		
mountainous	40.4	40.6	39.9	43.2	41.1	PDM Indicater matrix		



% Delivery at all medical facilities

	1999	2000	2001	2002	2003	2004	data source	national benchmark 2005	2010
Whole Country									
								Project benchmark2005	
non-mountainous		93.8	93.9	94.1	95.7	96.6	PDM Indicater matrix	95	
mountainous		60.9	61.3	61.3	64.5	72.5	PDM Indicater matrix	60	



CBR (No. of live births/Total population x 1000)

	1999	2000	2001	2002	2003	2004	data source	national projection 2005 – 2010	
Whole Country	20.5			19	17.5	17.7	HSY		18.0
Nghe An	14.8	14.6	14.4	13.0	13.6	14.2	carriculated from MCH/FP data matrix		

No. of live births	41,754	41,919	41,620	37,895	40,331	43,257	MCH/FP data matrix
Total Population	2,822,910	2,865,940	2,891,784	2,904,973	2,955,532	3,045,800	MCH/FP data matrix

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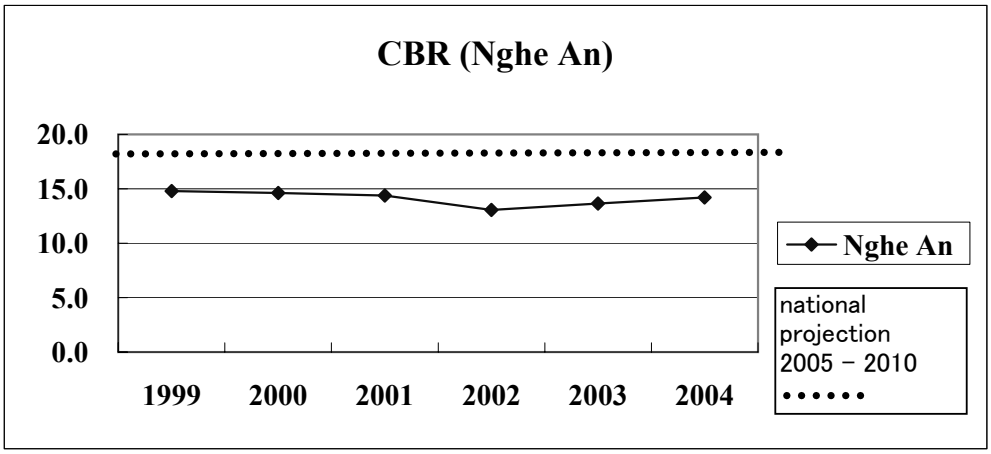
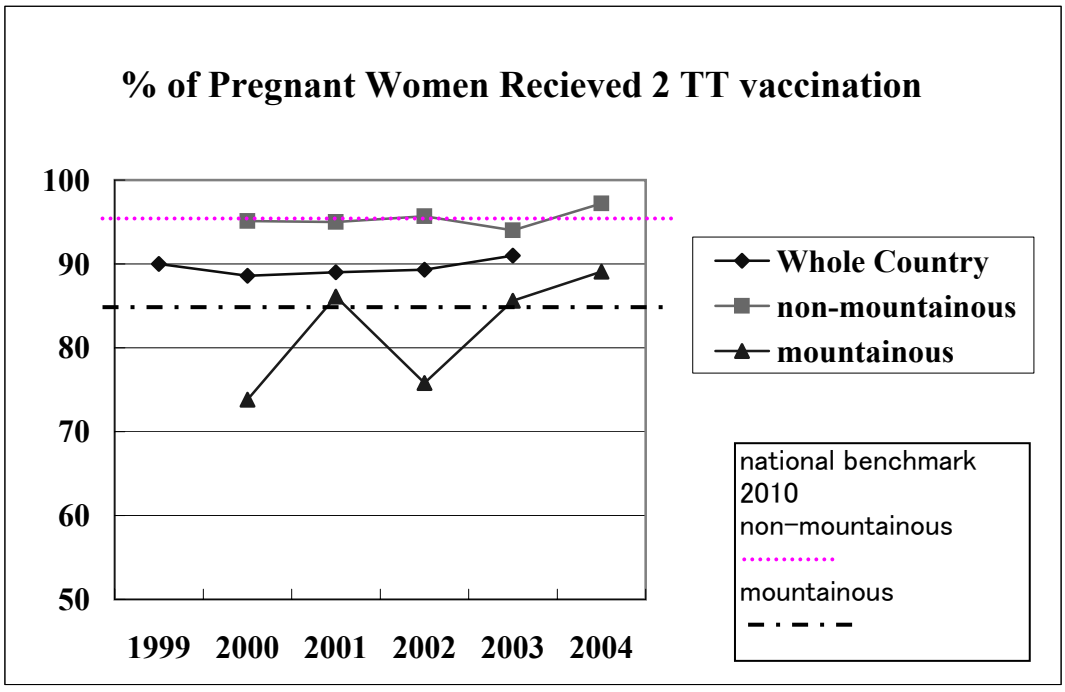


TT2

	1999	2000	2001	2002	2003	2004	data source	national benchmark 2005	2010
Whole Country	90	88.6	89	89.3	91				
% Nghe An									
non-mountainous		95.1	95	95.7	94	97.2	PDM Indicater matrix		95.0
mountainous		73.8	86.1	75.8	85.6	89.1	PDM Indicater matrix		85.0
No.(Nghe An)									
non-mountainous		25533	95	95.7	94	97.2			
mountainous		11132	86.1	75.8	85.6	89.1			
		38980							
		22275							



No. of Abortions by type of procedures

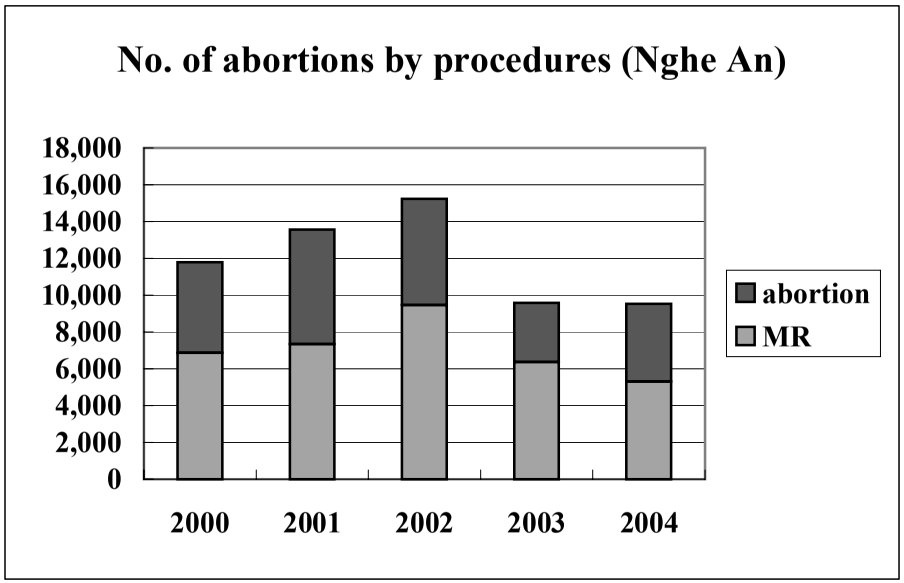
Whole country

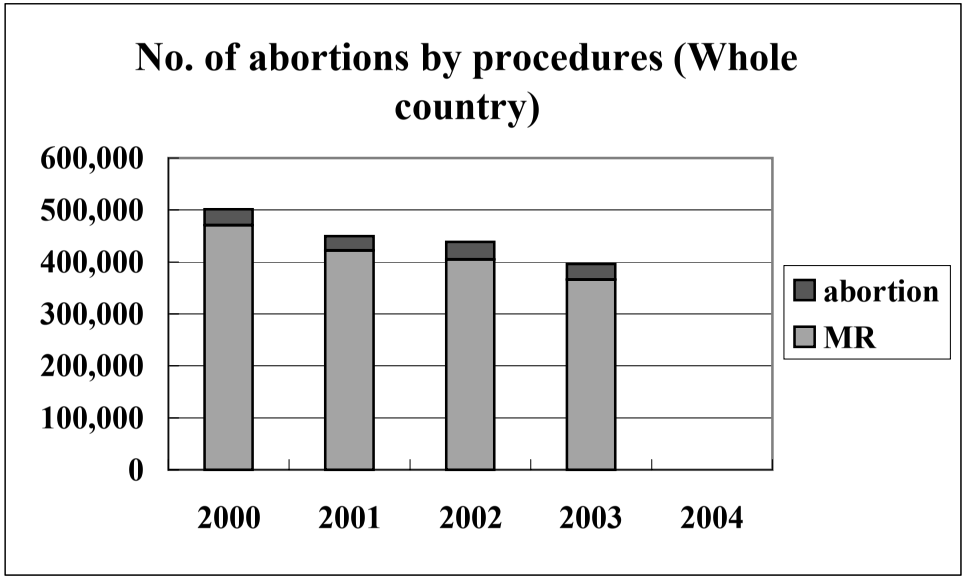
	2000	2001	2002	2003	2004	data source	national benchmark 2005	national benchmark 2010
MR	470,338	421,701	404,435	365,872		HSY		
abortion	30,865	28,035	33,945	30,130		HSY		
Total	503,203	451,737	440,382	398,005				

Nghe An

	2000	2001	2002	2003	2004	
MR	6,874	7,335	9,456	6,357	5,304	MCH/FP data matrix
abortion	4,923	6,223	5,786	3,229	4,226	MCH/FP data matrix
Total	13,797	15,559	17,244	11,589	9,344	

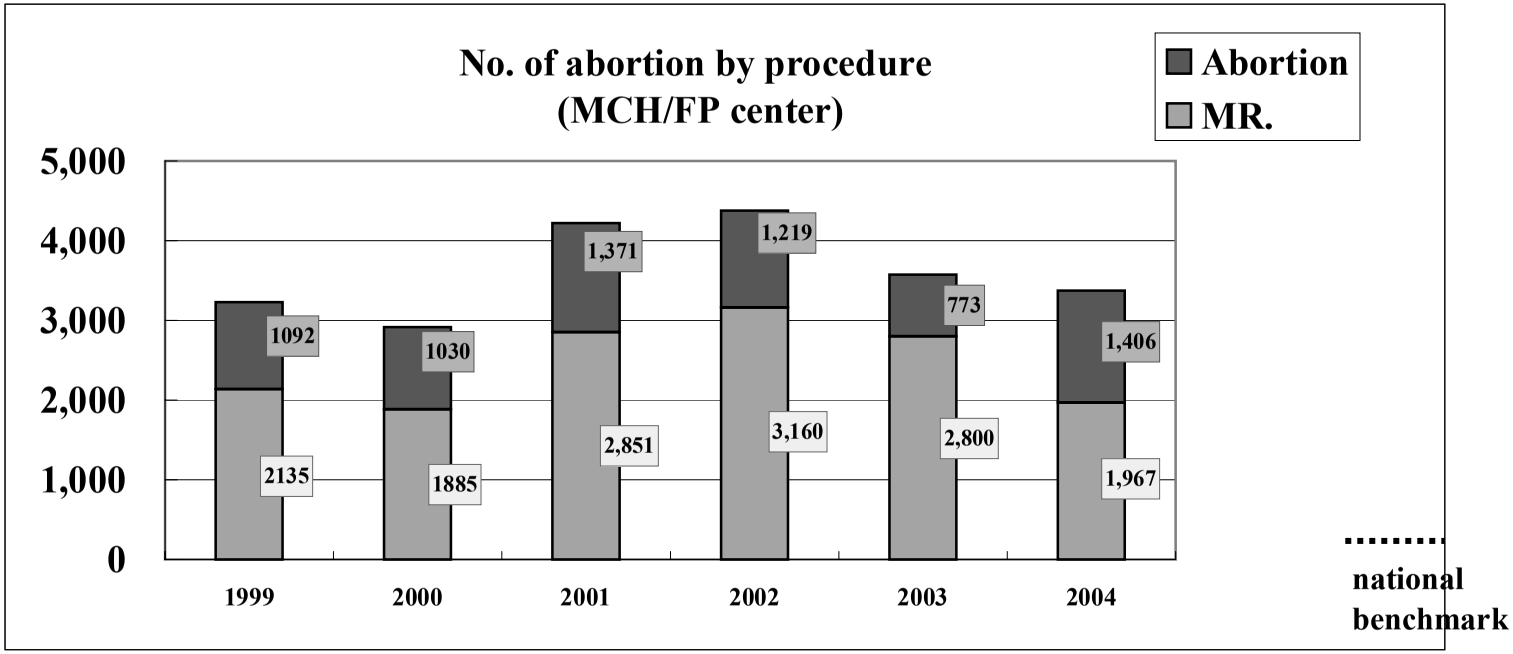
HSY・・Health Statistical Yearbook





MCH/FP client data

		1999	2000	2001	2002	2003	2004	Unit price (,000 VND)	data source
1.	Prenatal check-ups	1968	1571	1,407	3,387	6,834	7,638	10	MCH/FP center client data 1999-2004
2.	Delivery attendance	135	137	107	140	124	104	130 ~ 180	
3.	Ultrasound	2046	2826	5,869	21,697	14,257	19,401	20	
4.	X-ray	380	579	622	878	496	285	4 ~ 30	
5.	Laboratory	12169	11927	18,372	29,421	17,585	22,426	4 ~ 35	
6.	Health education (class/couple)	Not yet	349	750	1848	3115	4351	Free	
	class	Not yet	21	44	84	91	166	Free	
7.	Gyn. examination	4043	2832	8,678	24,165	11,902	11,241	10	
8.	Infertility examination and treatment	98	159	156	358	259	220	3	
9.	IUD insertion	2237	695	973	1,901	1,075	1,053	Free	
	MR.	2135	1885	2,851	3,160	2,800	1,967	24	
10.	Abortion	1092	1030	1,371	1,219	773	1,406	55	
12.	Sterilization	107	106	51	60	9	4	Free	
13.	Injectables	0	26	504	940	383	292	Free	
	Pill					601			
14.	T/T2 injection	371	1571	798	1,153	3161	607	3	
15.	Iron tablets	1583	1850	1,980	923	1,304	1,935	Free	

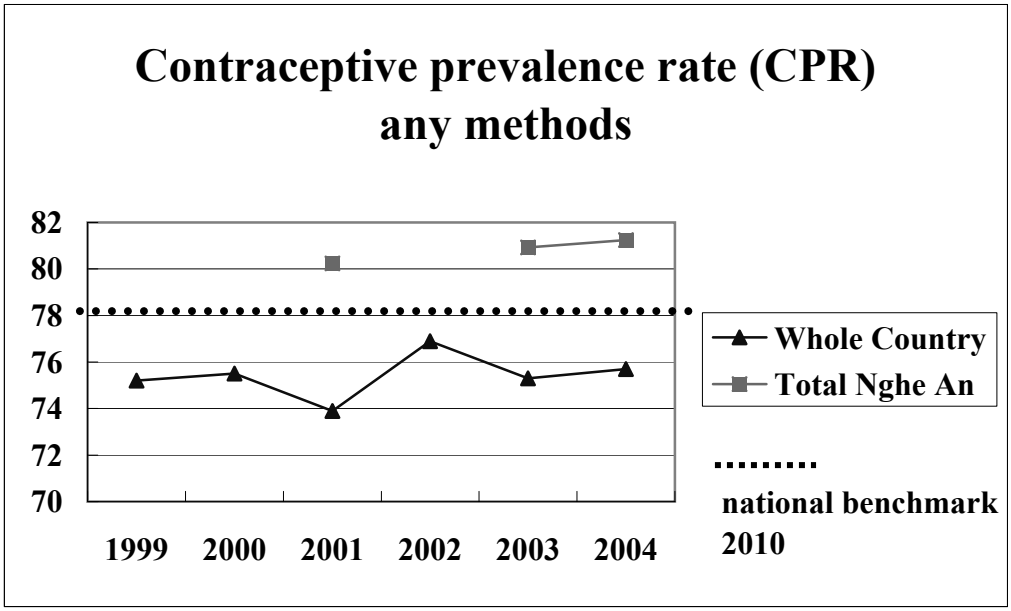


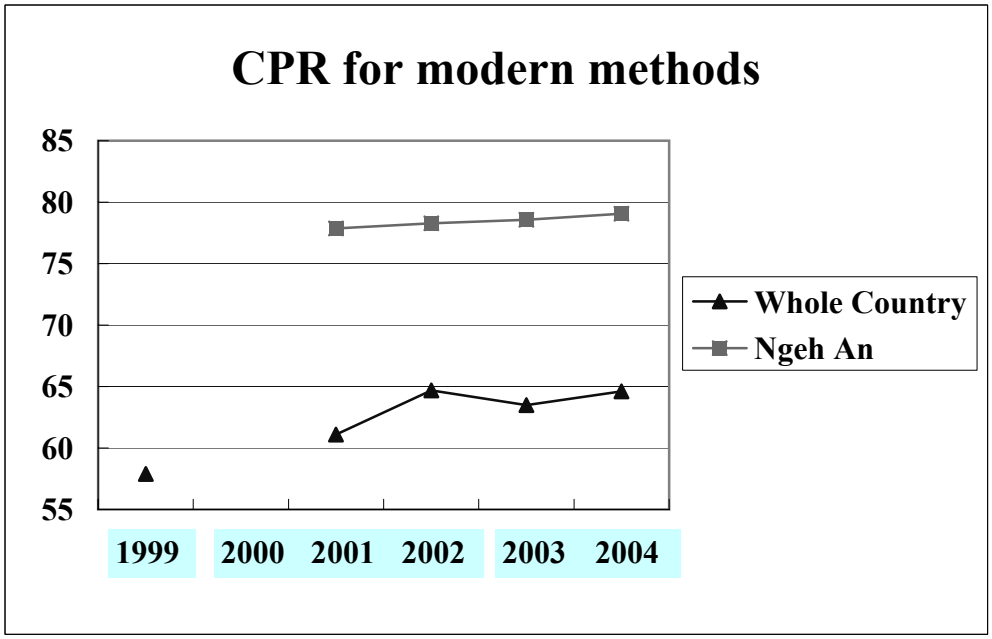
CPR

	1999	2000	2001	2002	2003	2004	data source	national benchmark 2005	2010
Whole Country	75.2	75.5	73.9	76.9	75.3	75.7	HSY		78.0
Total Nghe An			80.24		80.92	81.25	PCPFC Nghe An		

Modern method	1999	2000	2001	2002	2003	2004			
Whole Country	57.9		61.1	64.7	63.5	64.6	HSY		
Total Nghe An			77.86	78.28	78.57	79.07	PCPFC Nghe		

HSY・・Health Statistical Yearbook

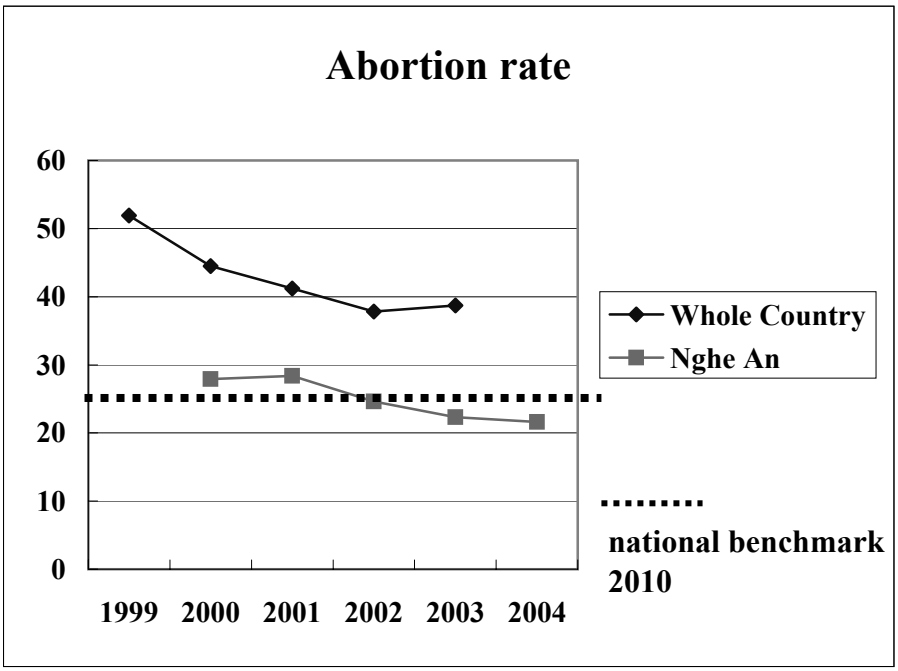




Abortion rate (No. of abortion including MR/100 live births

	1999	2000	2001	2002	2003	2004	data source	national benchmark 2005	2010
Whole Country	51.9	44.5	41.2	37.8	38.7		HSY		25.0
Nghe An		27.9	28.4	24.6	22.3	21.6	MCH/FP data matrix		

HSY・・Health Statistical Yearbook

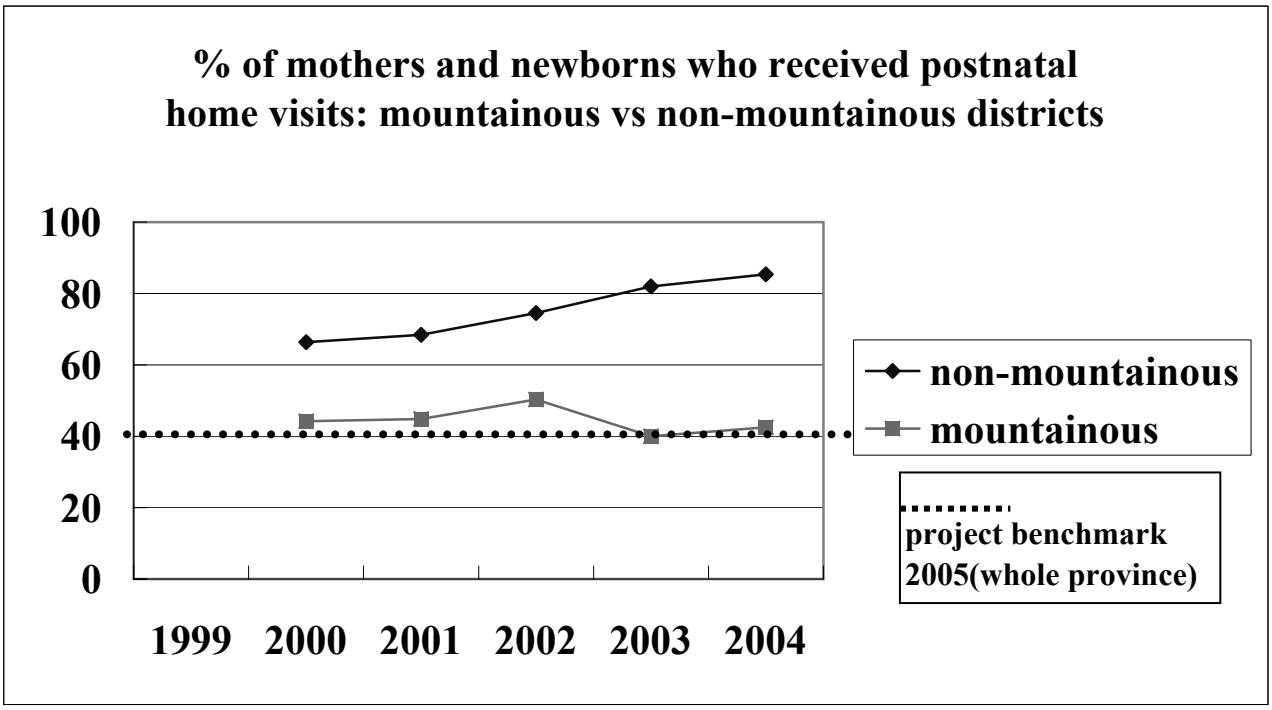


% of mothers and newborns who received at least one postnatal home visits

	1999	2000	2001	2002	2003	2004	data source	national benchmark 2005	2010
Whole country								–	–

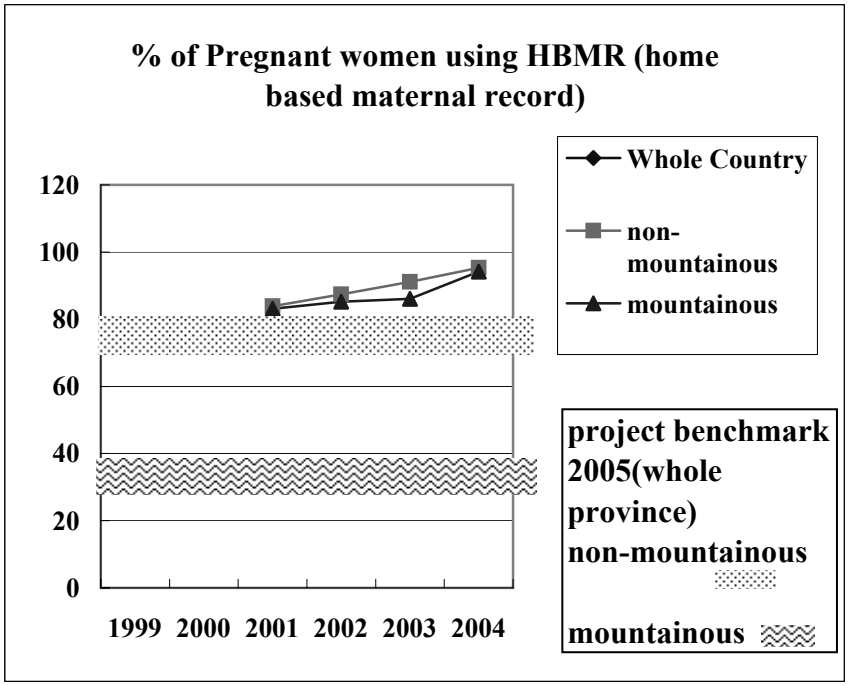
project benchmark2005

Nghe An								40.0	
non-mountainous		66.4	68.4	74.5	82	85.4	PDM Indicator matrix		
mountainous		44.2	44.8	50.3	40	42.5	PDM Indicator matrix		



Use of HBMR (% of CHCs organizing HBMR)

	1999	2000	2001	2002	2003	2004	data source	national benchmark 2005	2010
Whole Country									
Nghe An			74						
non-mountainous			83.9	87.4	91.1	95.3	PDM Indicator matrix	70-80%	
mountainous			83.1	85.2	86.1	94.2	PDM Indicator matrix	33-40%	



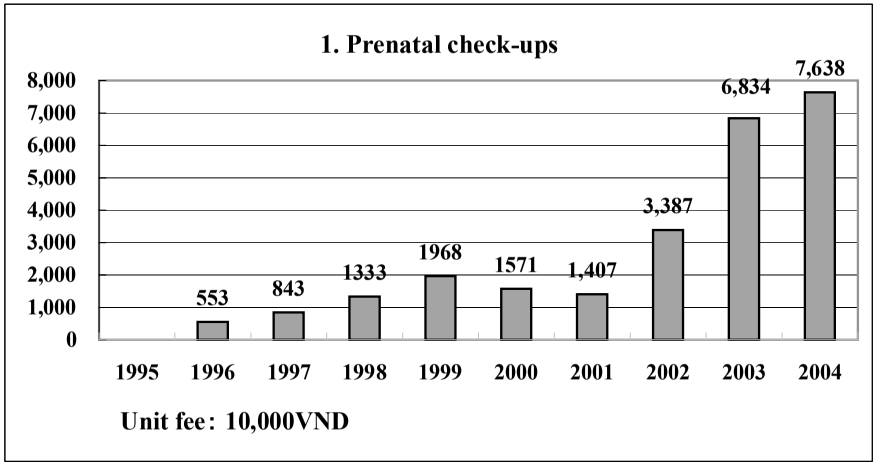
MCH/FP Center - Client Data 1996-2004

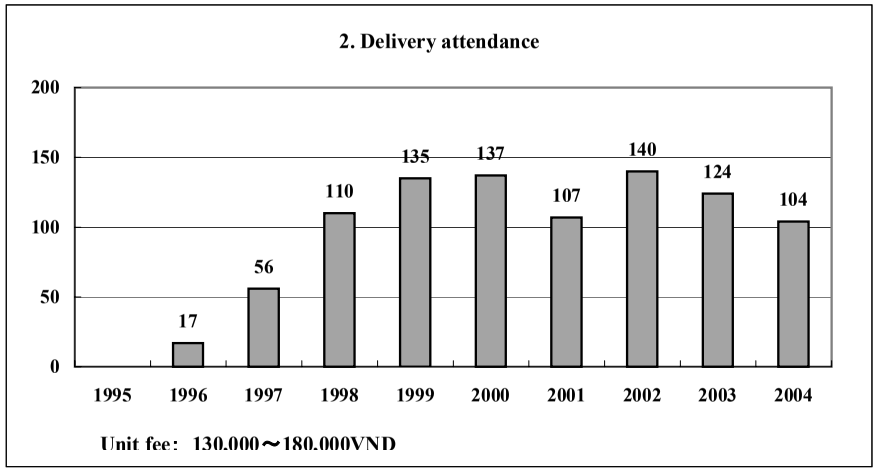
JICA Reproductive Health Project in Nghe An, Vietnam
Phase II

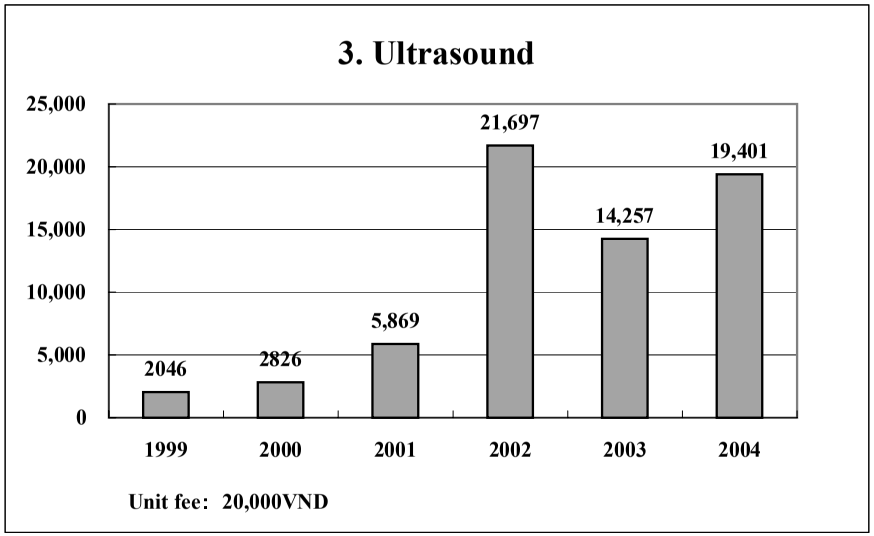
September 2000 - August 2005

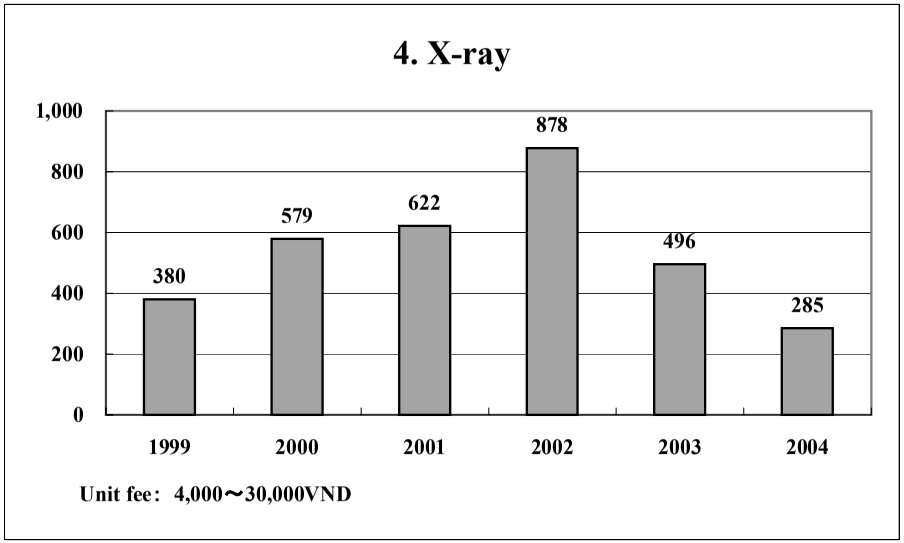
September 2000 - August 2005

Prepared by JOICFP based on the data presented by Provincial Steering Committee
for the Project in MCH/FP center, Nghe An Province

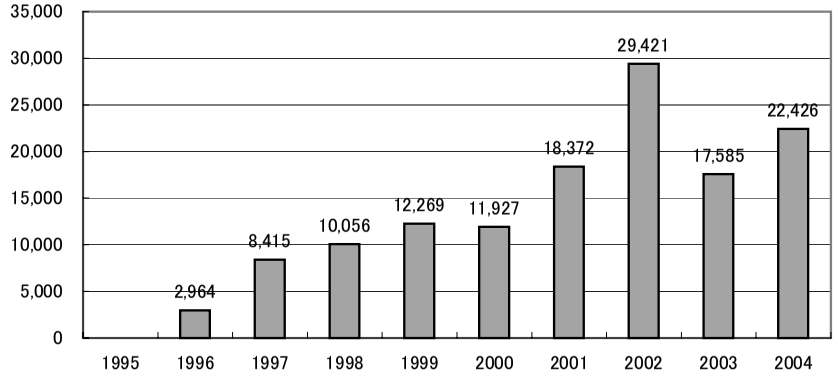

1. Prenatal check-ups
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
553
843
1333
1968
1571
1,407
3,387
6,834
7,638
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
Unit fee: 10,000VND


2. Delivery attendance
200
150
100
50
0
17
56
110
135
137
107
140
124
104
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
Unit fee: 130.000～180.000VND


3. Ultrasound
25,000
20,000
15,000
10,000
5,000
0
2046
2826
5,869
21,697
14,257
19,401
1999
2000
2001
2002
2003
2004
Unit fee: 20,000VND

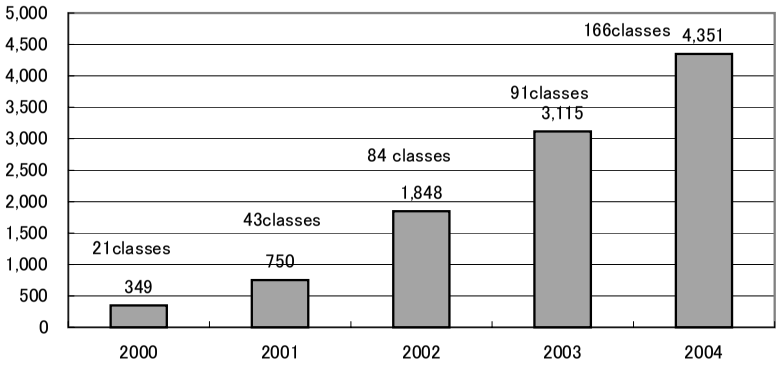

4. X-ray
1,000
800
600
400
200
0
380
579
622
878
496
285
1999
2000
2001
2002
2003
2004
Unit fee: 4,000～30,000VND

5. Laboratory



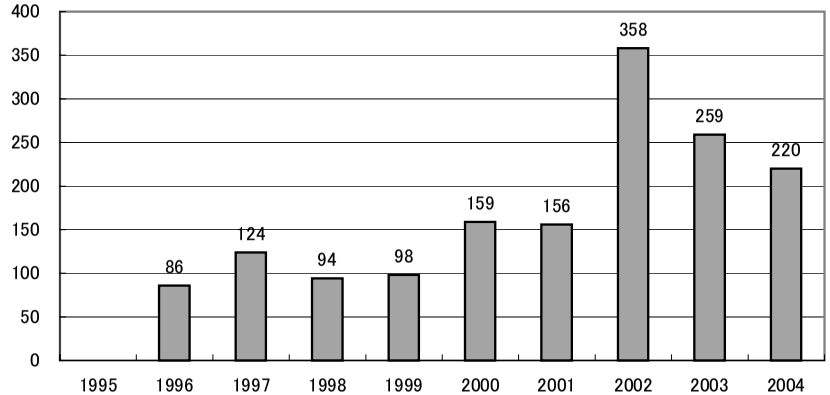
Unit fee: 4,000～35,000VND

6. Health education (class/couple)



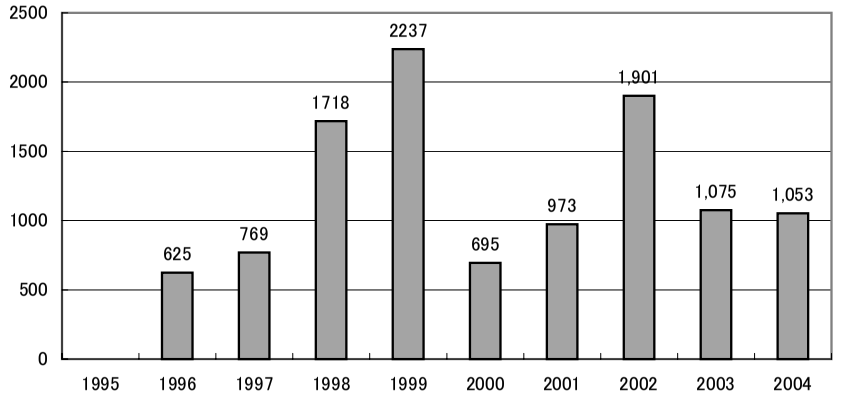
Unit fee: Free

7. Infertility examination and treatment



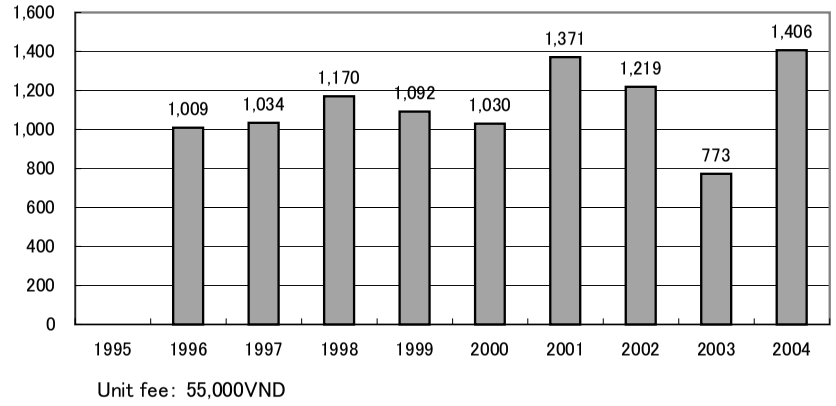
Unit fee: 10,000VND

8. IUD insertion



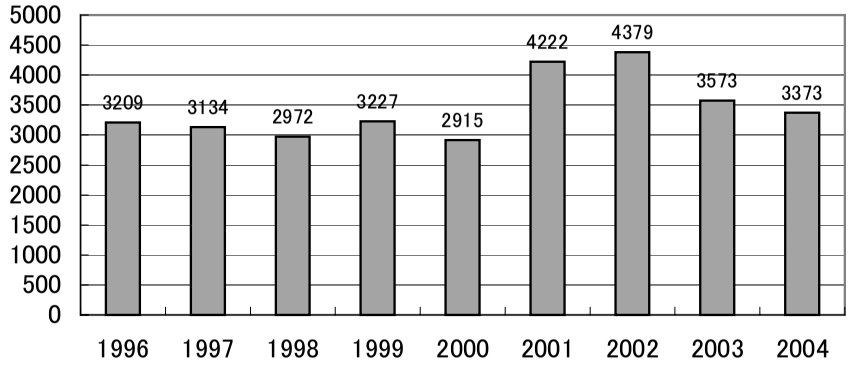
Unit fee: 3,000VND

9. Abortion after 7 weeks



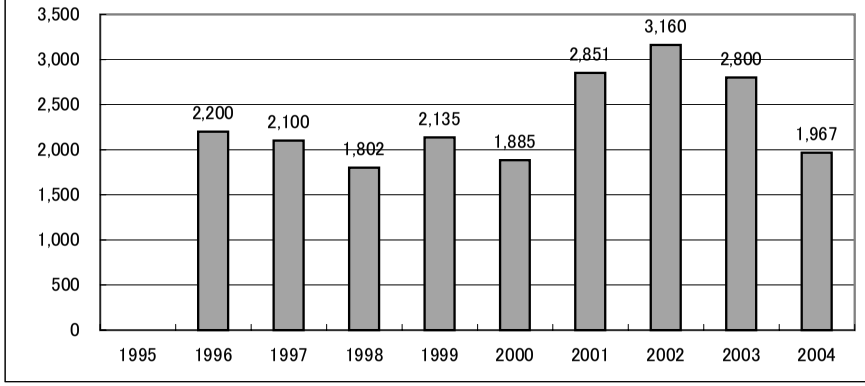
Unit fee: 55,000VND

10. Abortion including vacuum aspiration



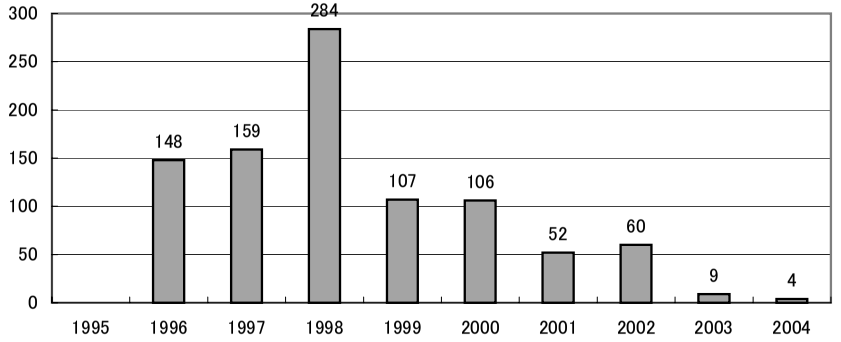
Unit fee: 24,000VND

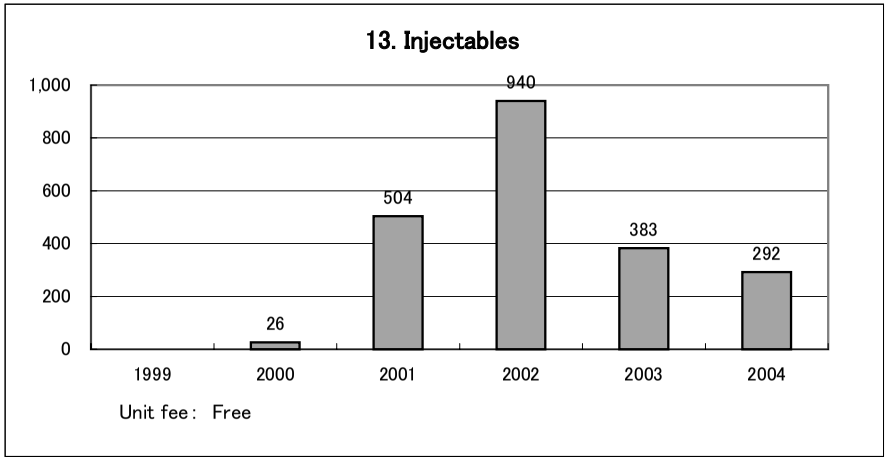
11. Vacuum Aspiration.

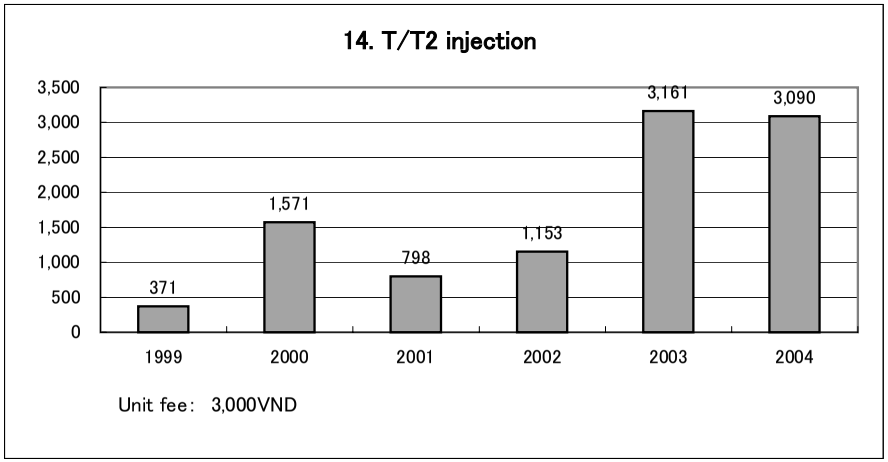


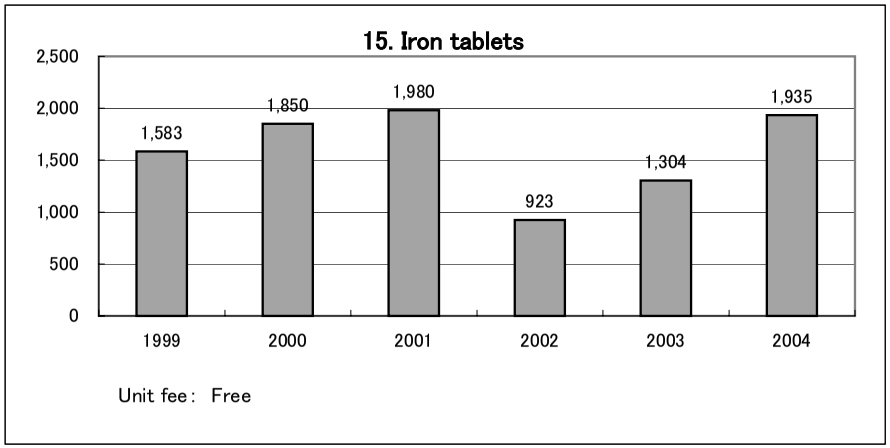
Unit fee: Free

12. Sterilization




13. Injectables
1,000
800
600
400
200
0
26
504
940
383
292
1999
2000
2001
2002
2003
2004
Unit fee: Free


14. T/T2 injection
3,500
3,000
2,500
2,000
1,500
1,000
500
0
371
1,571
798
1,153
3,161
3,090
1999
2000
2001
2002
2003
2004
Unit fee: 3,000VND


15. Iron tablets
2,500
2,000
1,500
1,000
500
0
1,583
1,850
1,980
923
1,304
1,935
1999
2000
2001
2002
2003
2004
Unit fee: Free

Population Council

JICA

A Final Assessment on the Reproductive Health Project in Nghe An Province

Le Thi Phuong Mai
Vu Quy Nhan

Submitted to JICA and Nghe An MCH/FP Center

Hanoi, 2005

ACKNOWLEDGMENTS

The Population Council expresses its thanks to the Japan International Co-operation Agency (JICA) for inviting it to conduct the final assessment of the Reproductive Health Services in Nghe An Province. The purpose of this assessment was to assess the achievement of the project intervention in order to make recommendations for the future acuities of the RH program in Nghe An.

We are grateful to the People's Committee of Nghe An for its support and for encouraging local agencies, especially the Health Service, the MCH/FP Center and other health facilities in the province to collaborate and support this assessment. The MCH/FP Center together with the surveyed district health centers and commune health centers have closely and effectively collaborated with us in the fieldwork.

In addition, we offer our sincere thanks to women who were clients of the health facilities for voluntarily participating in our study by answering interview questions and giving permission to our data collectors to observe their examinations and procedures. We also thank to commune women and men in reproductive age who are enthusiastic participating in the focus group discussion that bring us insight knowledge in RH activities in community

We are also indebted to program leaders and administrators, health and non-health professionals from selected districts and communes collaborating on several focus group discussions and in-depth interviews, and providing us with valuable information on the general impact of the project.

Finally, we greatly appreciate our colleagues from Hanoi Medical University and other national research institutions in Hanoi who have collaborated with us in this Assessment.

The authors

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ACRONYMS

ANC	Antenatal Care
CCPFC	Commune Committee for Population, Family and Children
CHC	Commune Health Center
COP	Combined Oral Pill
DCPFC	District Committee for Population, Family and Children
DHC	District Health Center
FGD	Focus Group Discussions
FP	Family Planning
HBMR	Home-Based Maternal Record
HMIS	Health Management Information System
IEC	Information, Education, Communication
IDI	In-depth Interview
IUD	Intra-uterine Device
JICA	Japan International Co-operation Agency
MCH/FP	Maternal and Child Health/ Family Planning
MOH	Ministry of Health
MR	Menstrual Regulation
MTA	Mid-term Assessment
Ob/Gyn	Obstetrical/Gynecological or Obstetrics/Gynecology
PDM	Project Design Matrix
POP	Progestin - only Pill
PSC	Project Steering Committee
RH	Reproductive Health
RTI	Reproductive Tract Infection
SA	Situation Analysis
STD	Sexually Transmitted Diseases
TT	Tetanus Toxoid
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund

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Executive summary

Four years after the Baseline Survey (2001) was conducted to study reproductive health (RH) service delivery in the public sector in Nghe An province, in 2005, the Japanese International Cooperation Agency (JICA) requested the Population Council to conduct a Final Assessment (FA) of the RH project in Nghe An Province. Two years ago (2003), also at JICA's request, the Population Council conducted a Mid-term Assessment (MTA) of RH project activities for necessary adjustments of the implementation of Phase II of the project in the remaining years 2003-2005.

The objective of the final assessment is to investigate changes in the quality of RH services provided to clients after several years of project implementation, through a set of six project outputs: including: (1) improvement of hygienic and safe delivery at the Commune Health Centers (CHCs); (2) enhancement of monitoring competencies of the Provincial Maternal and Child Health/ Family Planning Center **(**MCH/FP Center) and District Health Center (DHCs); (3) reduction of abortions at both provincial and district levels; (4) improvement of detection and treatment of Reproductive Tract Infection(s) (RTIs); (5) improvement of the quality of IEC activities; and (6) improvement of Health Management Information System **(**HMIS) work. The final assessment also aims to assess the relevance, efficiency, effectiveness and sustainability of the RH project in Nghe An. Based on the results of this assessment, recommendations are made for RH services in the future

The final assessment uses the same instruments and contents as in the Baseline Survey in 2001, with the same study population, In addition, some information is investigated to explain further project outputs as designed in the Nghe An Reproductive Health Project proposal document .

Both qualitative and quantitative methods are combined in the study method. The quantitative method used the Situation Analysis approach with the health facilities selected for the survey. The provincial MCH/FP Center and all DHCs of 19 districts/towns are surveyed. CHCs are selected randomly from the list of CHCs surveyed in the 2001 study. The research teams combined the qualitative study method at 8 districts according to JICA selection, including half mountain and half plains districts. The qualitative study provides a more in-depth insights on the changes in RH services in Nghe An, and provides supplementary more information which cannot be obtained from the quantitative study.

In March 2005, 6 survey teams, including 18 researchers and 2 supervisors, visited 77 health facilities providing RH services (each team worked at a health facility for one full day), including the provincial MCH/FP center, DHCs of 19 districts/towns and 57 CHCs. The researchers conducted a facility inventory; interviews with questionnaires with health providers; observations during antenatal care (ANC) and RTI service provision process; interviews with ANC and RTI clients after they received services at the health facility.

At the health facilities, qualitative data collection was also conducted. The researchers facilitated focus group discussions (FGDs) with local people (separate groups for women and men) of reproductive age, and in-depth interviews with health leaders and managers, officers of different sectors and organizations (Women's Union, Commission for Population, Family and Children (VCPFC), and People's Committee), community leaders, population collaborators, and village health workers (VHWs).

The researchers also carried out observations of 347 cases of interaction between health providers and their RH clients at these selected health facilities, including 250 ANC cases and 97 cases of RTI/STD examination. 96 health providers were interviewed, 77 health facilities were checked and 340 ANC and RTI/STD clients were interviewed at their exit (exit interviews).

The survey team also conducted 33 FGDs with health leaders, health, population, Women's Union and local authority officers at both district and commune levels; women and men of reproductive age; and 19 in-depth interviews with provincial and district health leaders. A total of more than 800 people participated in interviews in this study.

This study has some limitations. Firstly, the sample size of CHC in this assessment is smaller than that of the baseline study in 2001. Another limitation is that in the 2005 study, there is additional information requested by the donor, but there was no such information in 2001 study. Thus, in these cases, no comparison can be made.

The main results and recommendations based on 6 outputs

1. Improvement of hygienic and safe delivery at commune health centers:

In comparison with 2001, fundamental conditions of infrastructure for hygienic and safe delivery improved at the time of the evaluation. In the final assessment in 2005, the percentage of CHCs with a separate delivery room is higher than that in 2001 (86% compared with 59%). The percentage of CHCs with delivery rooms which met infection prevention and safety standards is also higher than 2001 figures; however, there is still a significant difference between CHCs in mountainous areas (76%) from those in the plains areas (94%).

Compared to 2001 figures, the percentage of CHCs with clean delivery kits and iron tablets increased significantly (49% with clean delivery kits and 65% provide iron tablets for pregnant women, in comparison with 25% and 47% respectively in 2001).

This positive change shows that much attention has been given to ANC services for pregnant women and substantial improvements made. The percentage of pregnant women receiving ANC is very high and all CHCs have a supply of HBMR to distribute to pregnant women. The percentage of pregnant women with ANC visits is 87% in the mountainous communes and 97% in the plains communes. The percentage of pregnant women with sufficient tetanus vaccination shots is 88% in the mountainous and 97% in

the plains communes. The percentage of deliveries assisted by trained health providers is 81% at the mountainous CHCs, lower than that among the plains CHCs (97%). The average number of ANC visits per pregnant woman is 2.7 times in the mountainous areas and 3.7 times in the plains areas. The first ANC visit of women in their first pregnancy is early, at the gestation age of 15.6 weeks on average. In general, these figures are higher than those in the baseline survey in 2001 and also higher than the projected indicators set before the start of project implementation.

Counseling is now given more attention during ANC service provision. More than 80% of health providers, during their counseling sessions, mention important messages relating to safety in pregnancy and delivery. These messages include "nutritional diet during pregnancy"; "workload and rest during pregnancy"; clients are counseled on the "early discovery of warning signs during pregnancy"; ANC clients are reminded of the importance of sufficient tetanus vaccination shots.

There is substantial improvement in MCH services in both mountain and plains districts. However, due to difficult geographical characteristics, scattered residential areas, traveling disadvantages and the difficult economic situation of the mountainous districts, mountainous local people have limited accessibility to the health facility. Qualitative study shows that there are still women who deliver at home

Recommendations:

- It is necessary to ensure that all deliveries outside health facilities are safe and hygienic and with assistance from trained health providers (VHWs or midwives) in using clean delivery kits.
- Encourage and mobilize further coordination of local authorities (People's Committee) to provide some financial support for better use of sterilizing instruments such as steam sterilizers and sterilizing boilers provided to CHCs

2. Improvement of monitoring competency of staff from the provincial MCH/FP center and DHCs.

Monitoring activities to lower level are well respected. Members of the monitoring teams are trained on monitoring skills and content and they understand that the goal of monitoring is to support the lower implementation level to solve problems to improve their work, rather than only to find out shortcoming for criticism.

100% of DHCs are monitored by staff from the provincial level, 100% of CHCs are monitored by staff from the district level and only 7% of CHCs are monitored directly by the provincial level. Monitoring activities are more regularly conducted in the plains areas than in the mountainous ones.

Technical shortcomings discovered during monitoring are often addressed immediately through coaching at the site, or referral for training at the district level after the monitoring trip. Other difficulties and problems addressed in the monitoring trips that

need support from relevant sectors and organizations are also resolved except those which require a large budget.

In addition to health system supervisors, monitoring-team also include representatives from the local authorities, health and population sector and women's unions. Local health managers also believe that monitoring improves the quality of health examination and treatment services provided by the health facilities. They highly appreciate the monitoring skills of officers from the provincial MCH-FP and DHCs. Monitoring activities not only contribute to the improvement of RH care services at the local level, but also improve the monitoring competency of monitoring officers at the provincial and district health levels.

There are difficulties in involving representatives from all the sectors and organizations in the monitoring trips. Monitoring skills of members are uneven due to lack of training. Particularly in the mountainous districts, some monitoring officers are not trained on monitoring and supervision.

Recommendations:

- To organize supplemental training on monitoring skills and content for untrained and new monitoring officers.
- To find solutions for absences of several monitoring team members in a trip
- To increase the traveling budget for monitoring team members.
- To consider additional approaches to supplement infrequent monitoring trips (once or twice a year) by routine activities and higher frequency. For example, increase the quality of monthly and quarterly meetings of health providers
- To encourage and mobilize cooperation of local sectors and organizations, including the local people, to increase the budget for CHCs to fix problems relating to infrastructure that are found during monitoring trips.

3. Reduction of abortions at the provincial and district levels

The final assessment shows significant reduction in the number of abortions being done in facilities of the Nghe An Provincial Health Service. Health facility statistics collected through the final assessment show that there is an average of 26 cases of abortion per month in each DHC. This figure in the baseline survey (2001) was an average of 37 cases per month. Factors contributing to the reduction include increases in distribution of contraceptives through health and population networks, and in information on contraceptive options for clients. Contraceptive availability was not part of the 2001 survey; the 2005 study found that contraceptives such as IUDs, oral contraceptive pills, and condoms are available at about 80% to 90% of health facilities. Injections are available at 74% of health facilities. Availability of contraceptives helps reduce the number of unexpected/unwanted pregnancies and unsafe abortions.

The 2005 evaluation shows that the majority of DHCs (90% in the mountainous and 100% in the plains areas) provide counseling after abortion. This indicator is lower at the commune level, with 52% among mountainous CHCs and 69% among plains communes. The prevalence of post-abortion counseling is rather low at the CHCs partly because abortion are generally not provided at CHCs.

Most health providers at the district level and about three-fourths at CHCs are trained and retrained on post-abortion counseling. IEC activities and counseling on abortion reduction are conducted in coordination with many different sectors and organizations. The content of health education on abortion reduction not only explains the risks of abortion but also the benefits of using contraceptives to reduce unwanted pregnancy leading to abortion.

However, according to some health providers working at DHCs in mountainous areas , the number of abortions in these districts is higher than the plains districts. Researchers' observations of clients coming for services at the health facilities in mountainous areas found that health providers do not make use of opportunities to provide counseling on contraceptive methods for their clients, including ANC and RTI clients.

Recommendations:

- Understand the link between the prevalence of contraceptive users and abortions in the mountainous districts
- Encourage the medical abortion method (by using abortifaecient) for mountainous districts of Nghe An because this methods is safer than the surgical one.
- Train health providers on how to integrate counseling on reduction of abortion not only for abortion/FP clients but also for ANC and RTI clients.
- Emphasize the benefits of modern contraceptives to avoid unexpected pregnancy rather than overly focusing on abortion risks.

4. Improvement of Reproductive Tract Infection (RTI) detection and treatment

Overall, 87% of DHCs and 82% of CHCs in the province provide RTI examinations and treatment. The majority of health providers (more than 90%) working at both mountainous and plains DHCs are trained on RTI diagnosis and treatment. The percentage of health providers receiving training on RTI counseling at the district level is higher in the mountainous ones than the plains ones (93.% compared to 84%).

The 2005 final assessment found that all DHCs provided *wet-mount* tests. This figure is significantly higher compared to 53% in 2001. The percentage of DHCs that can do the test has doubled in comparison to 2001 findings. Gram-stain testing is provided by 60% of mountainous districts and 78% of plains ones.. These two findings indicate great improvement in the provision of lab tests for RTI diagnosis at the district level.

Health providers discussed the following topics with their clients: history of STD symptoms (47% at district and commune level); gynecological history (73% at district and

80% at commune level), and menstruation history (district: 80%; commune: 65%). Information that most health providers neglected to discuss with their clients included the risk of multiple partners (only 13% of district health staff and 2% of commune health staff discussed on this topic); counseling on condom usage (7% district health staff and 5% commune health statff) and advising them to bring partners to come for examination (13% district health staff and 4% commune health staff).

Counseling provided by the MCH-FP Center is much better than at the lower level. Some counseling content is covered more often by plains CHCs than the mountainous CHCs, such as counseling on menstruation; RTI transmission risks; and switching contraceptive methods for RTI clients. Topics discussed more often at mountainous communes are safe sex and the importance of a strict compliance with prescriptions in STD treatment.

Infection prevention/control is not been strictly followed in pelvis examinations. In pelvis examinations in mountainous CHCs, 45% of health providers at DHCs and 44% at CHCs washed their hands with soap before starting the exam. The respective figures for health providers at the plains DHCs and CHCs are higher than in mountainous facilities -- 83% and 78%. Observers did not find any health providers who provided condoms to RTI clients to use to avoid transmission to and from their spouses or sexual partners.

Apart from health facilities, RTI examinations and treatment are provided on an ambulatory basis in the community through campaigns of gynecological examination and treatment, and family planning (FP) campaigns that integrate health education on hygiene for women and environmental hygiene.

Recommendations:

- Maintain and strengthen DHCs received training on RTI tests and diagnosis so that they can be developed into RTI reference testing centers, where specimens can be referred from CHC
- Organize refresher training for health providers to provide correct and quality counseling on RTI.
- Improve infection prevention/control in pelvis examination
- Keep on the strengthening of campaigns on MCH-FP care including gynecological exam and treatment. Strengthen health education prevention on hygiene and the use of clean water.
- Invest in developing clean water sources to reduce the prevalence of gynecological. infections:
- Monitor treatment for RTI clients until they finish the prescription to avoid re-infections
- Health providers in Nghe An believe that RTI prevalence is very high among women in Nghe An because they only rely on clinical diagnosis. Encourage them to use relevant tests for RTI diagnosis to avoid unnecessary and irrelevant treatment.

5. Improvement of the quality of Iinformation Education Communication (IEC) activities

IEC activities are not only conducted at the health facilities but also in the communities. The majority of health facilities (90%) have IEC materials on FP, antenatal care, breastfeeding, and nutrition for pregnant women. About three-fourths of health facilities provide material on childcare, post-partum care, STD prevention and HIV/AIDS prevention. The percentage of health facilities at the commune level that have IEC materials is higher in the final assessment compared with the baseline survey. For example, IEC materials on breast-feeding were available at 80% of CHCs in 2001, and at 98% of CHCs in 2005; and IEC materials on nutrition increased from 87% to 96%.

Over 95% of the surveyed DHCs and CHCs report that IEC materials on RH are provided by the JICA project. However, only 32% of the health facilities report having enough materials for distribution to clients. Most clients can read IEC materials at the health facilities.

Apart from IEC activities at the health facilities, the project also works with the Women's Union (WU), population collaborators, and VHW networks to implement activities in the communities. There is a high diversification of IEC channels and forms, including small plays, contests, videos, radio broadcasts, cassettes, and developing small village libraries These materials are assessed by the local people to be relevant, easy to understand and attractive.

Focus Group Discussion(s) (FGDs) show that IEC activities are very effective and useful. IECs directly help local residents understand the significance of MCH care, raise awareness-- particularly for women-- and encourage behavior change. People know more about the CHCs, where they can come for health care services, gynecological examinations, ANC, tetanus vaccinations and delivery.

However, IEC materials are not provided in ethnic minority languages/dialects. Health education in the mountainous areas is still difficult because the mountainous people live in scattered spaces and their living and working customs and lack/shortage of electricity; make it harder to organize meetings for IEC activities.

Recommendations:

- Consider the relevant IEC forms and channel for each ethnic minority group. Focus on audio channel (pre-recorded cassettes in the ethnic minority languages)
- In difficult geographic areas, make use of traditional events such as fairs or festivals for health education, in combination with provision of services ANC, gynaecological examinations and Family Planning (FP) services)
- Continue training to improve skills for IEC officers, including WU members, population collaborators and VHWs.

6. Improvement of the quality of HMIS management

The project provides computers for DHCs and training on HMIS for health officers. At the commune level, the project provides training for midwives on how to fill data in the standard form for input in the computer.

The HMIS system is useful for management, monitoring and direction to the lower implementation level. With HMIS, coordination between the provincial and district level provides better technical guidance of MCH care.

At the commune level, forms are sufficiently recorded (77% of CHCs). At the commune level, regularly reports are sent to the higher level but only 88% receive feedback. This figure is higher among the plains than mountainous communes. FOR CHCs receiving feedback from the higher level, 60% concern professional issues, and the rest are other. This figure is higher among plains areas.

Due to the limited skills of officers in charge, despite training courses provided, midwives at the CHC face many difficulties in filling out the forms, especially midwives from mountainous areas. Some health providers are unaware of the importance of accurate and precise data, which adversely affects the quality of information and data sent to the higher level. Another difficulty is staff change at the district level; newcomers are not trained on computer skills and HMIS software.

Recommendations:

- To operate HMIS effectively, provide more investment in the commune level because they make a lot of mistakes. Improvements will help midwives record more precisely. Encourage CHC heads and physicians or assistant physicians to assist in reporting. Strengthen training in monthly meetings so that the district officers can directly help commune midwives.
- Organize additional training for newly hired HMIS officers for both district and commune level.

Evaluation of the relevance, efficiency, effectiveness and sustainability of the JICA program in the RH system in Nghe An Province

Relevance

The final assessment shows that the project's objectives correspond well with the National Strategy on Reproductive Health 2001-2010, with a focus on the improvement on women's RH.

The establishment of the Project Steering Committee (PSC) at all levels (province, district and commune) with representatives from the local authorities, health sector, CFPC and WU is appropriate in implementing a health project in the rural area. It encourages collaboration among several local institutions and organizations. Various project activities (such as training of midwives, provision of medical equipment to health facilities as well as the training and distribution of IEC materials through local Women's Union network) target the urgent need for improvement of women's RH status and strengthens health providers' technical competency and the capacity of other organizations in providing RH care to women at all levels, especially the grass-roots level.

Efficiency

In general, there is readiness (also called package approach) at the surveyed health facilities in terms of infrastructure, equipment, human resources and logistics to provide various RH services for clients, particularly antenatal and post-partum care.

The readiness/package approach substantially improved in comparison with the baseline survey in 2001. Study results show that JICA's financial support plays an important role in enhancement of the health status of the community and facilitates long term impact of RH care and FP in Nghe An

- In general, infrastructure meets requirement for adequate services, particularly RH care for mothers. Infrastructure has been upgraded to satisfy basic conditions for improvement of RH care services at the commune level.

- Most health providers are trained on ANC skills and treatment of pregnancy related complications and apply their skills in their daily work. Project training is effective and of good quality, meeting local level requirements.
- Most health facilities have IEC materials on FP, antenatal care, breastfeeding, mother's milk and childcare. The logistics system to provide clean delivery kits and iron tablets for women greatly improved in comparison with that in 2001.
- Most health facilities have officers trained on HMIS, and commune midwifes are especially trained on recording data into forms to submit to the district level. District officers are trained on software to input and process the data for consolidation and report to the provincial MCH-FP Center. HMIS system operates well at the DHCs.
- Coordination among different sectors and organizations (health, population, WU, as well as other organizations) at the local levels in MCH/FP care is efficient and convenient. Close coordination is shown most clearly through regular meetings of the population committee with the participation of other sectors and organizations; and through close collaboration in campaigns of dissemination and the provision of contraceptives.
- Monitoring activities not only help improve the RH care services at the commune level but also enhance the monitoring competency of the provincial MCH-FP Center and DHCs.

Effectiveness

The quality of the services provided to clients at health facilities improved: the readiness/package approach is a fundamental factor in improving the quality of service provided to clients. Particularly, the provincial MCH-FP Center, an agency with high technical competency, provides good technical direction in RH care throughout the province.

- With a focus on women's health, the RH Project funded by JICA makes a substantial impact on the improvement of community health and an increase of awareness of the local people, especially women at reproductive age. The increase in awareness contributes to behavior changes in seeking RH services. RH care for mothers indicators show the effectiveness of the RH/FP program in terms of good impact on women's behaviors. The percentages of pregnant women who receive ANC services, two Tetanus vaccination shots, and deliveries assisted by trained health providers all increased. The average number of ANC visits increased in comparison with the 2001 study.
- Similar to the results of the baseline study, the final assessment shows a good relationship between health providers and clients.
- Counseling before and after abortion is mainly provided at the district health facilities where abortions are performed. Interviews with questionnaires show that the majority of health providers attend training on counseling on abortion reduction. Interviews with community officers show that counseling on reduction of abortions including encourage of contraceptive using to avoid the need for abortion is also disseminated through IEC activities in the community, through networks of WU, VHW and population collaborators
- Local officers highly appreciate JICA's contribution*:* JICA's support is acknowledged to promote significant improvements in RH care in Nghe An, particularly at the grassroots level. The presence of long-term Japanese adviser/experts working in close cooperation with Vietnamese counterparts has made exchanges of knowledge and experience very effective.
- The training/study tour to Japan is a good opportunity for key staff at the provincial and district level to learn more about women's RH services and apply them appropriately to the Viet Nam context.

Sustainability

In this evaluation, results and interviews with local leaders show optimism and desire to sustain achievements of the project as well as to sustain activities which improve the quality of services:

- A Project Steering Committee (PSC) with participation of important organizations and sectors in addition to health, including the local authorities, population sectors and Women's Union, helps to guarantee the sustainability of the project because RH care for women is also the technical function of these organizations and sectors
- Local leaders show strong commitment to sustaining project activities, and have a plan for this purpose. For example, sustaining project activities can be done by integrating technical training for midwives into existing regular meetings of midwives at the district level, and by integrating monitoring activities on RH care into other technical monitoring activities of the health sector.
- Local officers' heightened awareness of the benefits of the improvement in RH care for women is an important foundation for the continuation of activities for good quality service provision.

In conclusion, the final assessment conducted in 2005 has shown improvements in all six project outputs. The plains area has a higher achievement. However, the health facilities in the mountainous area have made achievement which is higher than initial plans projected would be the case. This assessment also indicated that the RH project in Nghe An is relevant, effective and efficient and that local partner is already strongly committed to sustainability of the project. .

There is a need to think about all possible improvements and lessons learnt from this assessment as part of the development of future activities for this and related projects.

Chapter 1

Introduction

1.1 Background

Reproductive health in general and MCH/FP in particular are given great attention from the Party, the government and authorities of different levels, with concentration of resources and support. In the past few years, MCH care services receive investments not only from the state and local budgets but also from international organizations. Nghe An is one province that receives many assistances from international agencies but that fromthe Japanese International Cooperation Agency (JICA) for the RH program has been a long-term and comprehensive support. With JICA's support, many of the interventions aim to improve the quality of RH care for women, including upgrading equipment and facilities, construction of toilets, training on professional skills for health providers, training on IEC and provision of IEC materials and health education in the community.

Direct impact on the targeted beneficiaries and lessons learned for future initiatives are always an expectation for the implementation of any intervention. JICA has conduct many studies and evaluations to meet this requirement.

In 2001, with JICA support, the Population Council conducted the *"Baseline Survey on the RH services provided by the public sector in Nghe An province"* to evaluate the quality of RH services, with a focus on: antenatal care, STD treatment and prevention, and abortions provided at public health facilities. The survey was conducted at a time when funding activities for the RH program conduct in health facilities in half of the districts of Nghe An had been in place for three years and JICA was preparing for expansion of intervention activities in the remaining districts of the province.

The baseline survey in 2001 applied the Situation Analysis mention developed by the Population Council, which has also been applied in other countries to assess the quality of FP services programs. This method helps evaluate the *readiness* of a health facility in organizing provision of RH services and the *quality of services* that clients receive.

As of 2003, Phase II of the RH project, with financial support from JICA (here by called JICA Project), was implemented at all health facilities of 19 districts and towns of Nghe An for over two years. JICA requested the Population Council to conduct a *Mid-term Assessment* to evaluate the interventions of the RH program and its strengths and weaknesses to make necessary adjustments for the implementation of the project in the remaining time in Phase II (2003-2005). The midterm assessment was conducted in April 2003, and showed little difference from the baseline survey in 2001 in terms of content and methodology. This assessment focused on some limitations in implementation of the project in the health units, including management, relevance,

effectiveness and efficiency of the project (standards set according to JICA's *"Guidelines on Monitoring and Evaluation"* (1996)).

In the mid-term assessment, RH-related contents were investigated including antenatal care with focus on FP, counseling before and after abortion with referral to FP services after abortion; the availability and system of FP services provision and the coordination of different sectors and organizations in the field of MCH/FP services provision at local levels. In addition to the from the quantitative study applied in the Baseline Survey, in the Midterm Assessment, a qualitative study was also conducted to collect additional information, which was unavailable in the baseline survey conducted at health facilities. The results of the mid-term assessment were used by the RH Project Management Unit of Nghe An to adjust the activities for the remaining two years of the project (2004 and 2005)

The year 2005 is the final year of the RH project of Nghe An province. JICA again requested the Population Council to conduct the final assessment of the project. The objective of this evaluation is to investigate changes in quality of RH services in comparison with findings from the baseline survey in 2001. Based on the assessment findings, recommendations are made for RH services in the future. The evaluation study is based on the sample from the baseline survey, with focus on some targeted beneficiaries and with the same survey contents. This study has some supplemental information to clarify the results of the project outputs designed in the first phase of the project.

Since 2001, when the baseline survey was conducted, many changes in the health system in general and the RH services in Nghe Anh in particular can be observed. For example, the Ministry of Health (MOH) issued the Guidelines and National Standards of RH Care in 2003. The MOH also passed the national targets of health care at the CHCs for the period from 2001-2010. MOH policies and regulations of are implemented nation-wide, so Nghe An must follow and implement these policies. Therefore, the final assessment of the Nghe An RH project will refer to these targets and the above-mentioned MOH standards.

Another change that may affect RH service provision, particularly contraceptive methods, is the integration of the National Committee for Child Care and Protection (NCCCP) into the National Committee for Population and FP (NCPFP) to establish a new agency: the Vietnam Commission for Population, Family and Children (CVPFC) in 2002. Previously, the NCPFP played a key role in the national population and FP program.

Another important development in this period is the piloting of the Health Management Information System (HMIS) by MOH in many provinces and cities, including Nghe An province. Therefore, the final assessment of the project should consider any possible impact from above changes on the project implementation.

1.2 Objectives of the final assessment

Objectives of the final assessment of the project include:

- To evaluate the improvement in RH care services based on six project outputs in comparison with the 2001 Baseline study.

- To evaluate the relevance, efficiency and effectiveness of the RH program in Nghe An province through the package approach on the readiness and the quality of RH services provided to clients, with focus on ANC and care for RTIs, counseling after abortions, and contraceptives.

- To evaluate the relevance and the sustainable development of the project and draw lessons for future projects.

In Phase II of the JICA project, there are six outputs, including: (1) improvement of hygienic and safe delivery at the CHCs; (2) enhancement of the monitoring competencies of the Provincial MCH/FP Center and DHCs; (3) reduction of abortions at both provincial and district levels; (4) improvement of detection and treatment of RTIs; (5) improvement of the quality of IEC activities; and (6) improvement of the HMIS.

According JICA's "*Guidelines on monitoring and evaluation"* (1996 and 2004), *efficiency* helps evaluate the methods, procedures, terms and costs of the project with a view to productivity. *The relevance* of the project is expressed by whether the project is in correspondence with the country's needs and designed in alignment with the national master plan. *Effectiveness* helps evaluate the achievements of the project against its initial objectives and the attributes of the results. *Sustainability* evaluates the autonomy and sustainability of the project after the termination of the cooperation.

1.3 Study methodology

The final assessment of the project also uses the research methodology and instruments of the Situation Analysis method developed by the Population Council to evaluate the quality of FP and RH services in developing countries. This methodology was also applied in the baseline survey of the Nghe An RH project in 2001 and its mid-term assessment in 2003. The use of the same research methodology and instruments for the study help compare the data of different studies to measure changes in readiness and quality of RH services provided to clients.

In this study, quantitative research instruments including facility inventory, interviews with structured questionnaires with health providers and clients and observations of service provision process are used.

In order to gain profound insight on the nature of the changes in RH care services in Nghe An, to investigate and find out new information, it is limiting to use interviews or observations only. Aqualitative study is also used in this final assessment, including in-depth interviews and FGD with relevant study populations of RH services.

Sampling of health facilities

In the final assessment of the project, all of the district/town health facilities in the province are surveyed. At each district, the survey is conducted at the ob-gyn. departments. Also in each district, based on the list of CHCs selected in the baseline study, 3 CHCs are randomly selected for evaluation. Thus, selected facilities includes the provincial MCH-FP Center (MCHFPC), 19 DHCs and 57 CHCs, of which there is one health facility at the provincial level, 100% at the district level and about 12% of health facilities at the commune level.

Among 77 selected health facilities, a quantitative study was conduct at the MCH-FP Center and 8 districts according to JICA's list, including 4 mountainous and 4 plains districts. These districts are H-ng Nguyª n, Nghi Léc, Quúnh L-u; Yª n Thµnh; T-¬ng D-¬ng; Anh S¬n; QuÕ Phong and Quú Hîp. In each of the districts, one of selected communes are again randomly selected for an additional qualitative study. Thus, in the final assessment of the project, a total of 77 health facilities participate in quantitative, of which 17 facilities participate in both qualitative and quantitative studies.

Research instruments

Quantitative instruments include:

a. Facility inventory
b. Interviews with questionnaires with health providers
c. Interviews with ANC and RTI clients with questionnaires
d. Observations of the service provision process: ANC and RTI examination
e. Examination of regular reports of statistics; HMIS (at the pilot districts) and monitoring reports.

Qualitative instruments include:

a. In-depth interviews with leaders and senior officers of the MCH/FP center (provincial level)
b. In-depth interviews with some heads of obstetric department and FP team leaders (district level)
c. FGDs with leaders/mamanager of authorities, the population/FP programs, health sector, and women's union at the district and provincial levels;
d. FGDs with commune leaders
e. FGDs with men and women of reproductive age at the commune level

Data collection is conducted at the MCH-FP center, DHCs and selected CHCs. At each facility, the survey team conducts a facility inventory, interviews with questionnaires with 2 health providers, observation of the service provision (ANC, RTI/STD

examination), interviews with questionnaires with clients (ANC, FP). In the qualitative study conducted at the district and provincial level, the research team facilitates an FGD with health managers, authorities, representatives of WU and PCPFC; and in-depth interviews with 2-3 managers of the obstetric department or FP team leaders. At the commune level, the qualitative study includes one FGD with community leaders/ population collaborators, VHWs, WU members; one FGD with women and another with men of reproductive age.

There are a total of 77 facility inventories, 96 interviews with health providers, 250 observations of ANC service; 97 observations of RTI service provision; 340 ANC and RTI clients; 33 FGDs with health leaders and local leader and the local people of all the three levels; and 19 in-depth interviews with health managers participating in the final assessment.

1.4. Organization of the research

Before developing the research instruments and study method, the project team made a planning trip to Nghe An, meeting with the JICA Office and the provincial MCH/FP Center of Nghe An province. The objective of the visit was to discuss with the Center and JICA the responsibilities of the project management unit in the field study, including transportation means for the research team; arrangement of the survey schedule as agreed with the Population Council, as well as contact with local authorities, organizations and health facilities selected for the study. The project team also investigated the HMIS as well as the monitoring activities at the local level, at JICA's request. The trip helped finalize the research instruments and field-work schedule.

The Population Council team directly provide training on qualitative and quantitative instruments for data collectors in Hanoi. Researchers include teachers and physicians of the Public Health and Obstetrics Departments of Hanoi Medical College. Moreover, there are masters (MA) and doctors (Ph.D) and physicians with specialty level I and II working in different health facilities. Through training, research instruments were further improved through researchers' feedback both in terms of contents and language.

Field survey was conducted from 06 to 23 March 2005. There are two research groups, with three teams each. Each group has a supervisor. According to the planned survey schedule agreed between PC and the Nghe An MCH/FP Center, both research groups worked independently. The provincial MCH-FP Center sent staff to accompany each research group, supporting them in contacting with the local organizations and providing logistical support to the field team .

Each survey team comprises of three members, including two physicians (one an obstetrician). According to the plan, each team stays at a surveyed health facility for a full day. Two physicians conduct observations of examination or procedure process (ANC or RTI), a facility inventory and interviews with health providers. The expert in social sciences is responsible for exit interviews with clients; and conducts FGDs and in-depth interviews in health facilities where a qualitative study was added.

All researchers/experts participating in the field-work of this assessment are medical experts and officers working for central state agencies or in Hanoi to ensure the objectiveness of the study. JICA strongly supports this approach. All the team members are very experienced in research and most of them have participated in research in public health or situation analysis research in the past.

1.5. Data processing and analysis

Filled-in questionnaires are checked and processed in Hanoi. Quantitative data are inputted twice (double entry) and processed in EP-info software. Tape-transcribing qualitative analysis is also done in Hanoi. Senior researchers of the Population Council write the reports and will submit the report draft to JICA in early June 2005. Based on JICA's comments on the first draft, the Council's revised and final report will be submitted by the end of July 2005.

1.6 Limitations of the study

Firstly, regarding sample size, and similar to the baseline study, all 19 districts/towns are selected for the survey at the final assessment. The results of the survey at the DHCs represent the general situation of the DHCs of the province and can be compared with the results of 2001. However, only three CHCs are selected from each district for the survey. The total number of CHCs participating in this survey is only half of that in the baseline study. The two studies have different CHC sample sizes and comparison in some indicators may not be very accurate .

Regarding study method, according to the request of the donor, the content of the final assessment (2005) is not completely similar with those in the baseline study (2001). Therefore, some quantitative information in the final evaluation cannot be compared with that in the 2001 baseline survey. For example, in the baseline survey (2001) contraceptives were not surveyed because the JICA project placed more emphasis on hygienic and safe delivery and the provision of contraceptives were under the responsibility of the health and population programs. In the final assessment, the donor highlighted availability and provision of contraceptives as a preventive method to avoid unexpected pregnancy and unwanted abortion. The same limitations apply to HMIS monitoring and operating indicators.

Under the regulation of the MCH/FP center of Nghe An, abortions (including "Menstruation Regulation" (MR)) are provided at the district level only, there are no abortion clients at the CHCs. Experience from the baseline study (2001) was that there were few abortion clients who came in on the survey day. In the final assessment, again, abortion clients are not surveyed and observed. As a result, there is no information on the quality of abortion service in this report. Post-abortion counseling is added to the evaluation instead.

Preparations for participants in the qualitative study are made by the MCH-FP Center staff in collaboration with study sites. Selection of participants in FGDs at the commune level is done by the commune and there may be a bias in the selection of participants. Communes tend to select participants who are more experienced with interviews rather than provide a truly random selection of particpants.

With the stipulation that six clients be selected at each health facility, the number of clients does not reflect the actual proportion of clients coming to receive services. The number of clients surveyed is also higher than the baseline survey-- only 3 clients a day coming to receive RH services at a CHC were selected.

Chapter 2

Description of the study sample

2.1 Characteristics of the surveyed health facilities and clients

A total of 77 health facilities in Nghe An province participated in the final assessment, including the provincial MCH/FP Center and 19 DHCs, accounting for 25% and 57 CHCs accounting for 74% of the total. The health facilities in rural areas account for 78%, while those in the urban areas account for 22% of total health facilities surveyed.

At the time of the survey, two selected CHCs did not have clients because the midwives were absent from the CHC on the day of observation. A total of 347 clients came for RH services (ANC, RTI examination and treatment) at the CHCs. Excluding the two CHCs, an average of 4-5 clients come for ANC and RTI services at each health facility in a day.

The researchers observe the process of examination, service provision, and communication between health providers and clients. Of the 347 observations, ANC cases are the majority, with 72% compared with 28% of RTI clients. The clients are also interviewed at exit. 340 clients were interviewed, of which 72% are ANC clients and 27% RTI clients. Seven clients refused to be interviewed.

Out of 250 ANC clients, 41% are pregnant for the first time (primigravida), 42% for the second time, and 17% for the third time. 60 women paid their first ANC visit (accounting for 24% of the total). The average gestation age at first antenatal visit is 15.6 weeks.

2.2 Demographic, economic and social characteristics of the interviewed clients

Age, marital status, and the number of living children: all of the interviewed clients are married women. 56% of them are 20-29 years old, 30% at 30-39, and a few are over 40 or under 19 years of age (10% and 4% respectively). About 32% of the clients do not have children yet, 57% have one to two children. Approximately 10% have three or more children.

Ethnicity, educational level and occupation: About 78% of the interviewed clients are Kinh majority, 22% of other ethnic minorities, including H'Mong, Sandiu, Dao, etc. and the majority report no religious affiliation. Regarding educational level, 9% finished primary education, 44% finished lower secondary education and 31% have graduated from higher secondary education level. The percentage of clients who did not finish primary education or obtained university or college training level is low (below 10%). About 64% of them do farming work; 16% are civil servants; 13% have their own businesses or services. Clients with other occupations are rather few (less than 3%).

2.3 Demographic, economic and social characteristics of interviewed health providers

Professional level: A total of 96 health providers are interviewed in the final assessment of the Nghe An project, 63% are midwives, 20% are obstetric-pediatric assistant-physicians, 14% obstetric physicians and 2% assistant physicians of other specialties. These statistics are similar to the 2001 baseline survey, in which midwives and obstetric-paediatric assistant-physicians were the major health providers included in the sample study on RH service provision at the district and commune public sector health facilities. In the plains districts, more obstetric physicians are interviewed than in the mountainous districts, while the reverse is true for midwives and obstetric-pediatric assistant-physicians. The plains CHCs have more midwives and less obstetric-pediatric assistant-physicians than mountainous CHCs (81% compared to 68% and 19% compared to 24% respectively).

Age, gender, marital status and number of living children: 93% of health providers are married women and nearly half of these women are between 30-39 years old (46%), and one-third are 40 years of age and over. The majority (83%) have one or two children, one-seventh (13%) have 3 or more children and very few (4%) have no children.

Ethnicity and religion: All health providers claim no religious affiliation and most are Kinh majority (89%); and 11 percent are from other ethnic groups

2.4 Demographic characteristics of health leaders and local officers of different sectors and organizations at the provincial, district and commune levels involved in FGDs and IDIs

A total of 51 provincial officers and 8 district officers participated in FGDs or IDIs. They are provincial health leaders, leaders of the MCH center, district health leaders (Head or Deputy Head of DHCs, Head/deputy Head of Obstetrics Department; FP team leaders); WU officers (Chairperson/vice chairperson), and officers from the Committee for Population, Family and Children (CPFC). On average, provincial officers are 53 years old, while district officers are 45 years of age. 60% are male and all district officers being Kinh majority, accounting for 77%. Most are married.

At the commune level: 82 commune leaders participate in focus group discussions. They are heads of CHCs, CPC officers, WU officers, population collaborators, VHWs, with the average age of 41. Female officers account for 60%. 71% are Kinh majority, the remaining are Thai minority (28%). The average duration of work experience is high, 11.9 years. All are married with 2.4 children on average. 80% of them do farming work (along with their part-time jobs as population collaborator, WU officer, etc.).

At the commune level, 147 community residents particpated in focus group discussions with an average age of 35. Women account for 52% of the participants. 73% are Kinh majority and 27% are Thai minority. The percentage of married interviewees is 90% with 1.9 children on average. In general, average educational level completed is lower

secondary school. They mainly do farming work, accounting for 92% of occupations. A few are in business-related occupations.

Chapter 3.

Results of evaluation

The results from the final assessment in 2005 will be presented in the order of the outputs of the project, which are: (1) improved safe and hygienic delivery at commune health centers; (2) strengthened monitoring capacity of the provincial MCH-FP center and district health centers; (3) reduced cases of abortions at the provincial and district level; (4) improved detection and treatment of STIs; (5) improved quality of Information-Education-Communication (IEC) activities; and (6) improved quality of health management information system (HMIS). In addition to analysis of these outputs, some relevant indicators are used to compare between the mountainous and plain (non-mountainous) areas and the results between the baseline survey (2001) and the final assessment study (2005).

3.1. Improvement of clean and hygienic delivery at the commune health centers (CHC)

Improvement of safe and hygienic delivery is one of the first outcomes of the project. Antenatal and postpartum care is reportedly provided at all of the surveyed health facilities. To ensure safe delivery, the pregnant mother is encouraged to register for pregnancy examination early, keep a Home-based Maternal Record (HBMR) at home, receive sufficient examinations and counselling, have two tetanus vaccinations and her delivery must be assisted (at home or at the CHC) by a health provider who is trained in midwifery. There should be sufficient facilities and conditions for a safe and hygienic delivery at the delivery space, usually at the health center. These conditions include a hygienic delivery room, sterilized instruments and health providers trained in midwifery. The delivery process should strictly follow the procedures standardized by the Ministry of Health and in particular, every labor must be monitored by partograph.

Indicators for a safe and hygienic delivery are assessed below:

a. Improved infrastructure and essential conditions for clean and hygienic delivery

Infrastructure plays an important role in safe and hygienic delivery. Sufficient essential facilities helped improve safe and hygienic delivery in Nghe An. In the final assessment study in 2005, 100% (in both the plain and mountainous areas) of the DHCs have a separate delivery room. The percentage of CHCs that have a separate delivery room is lower in the mountainous areas (76%) compared with that in the plain areas (94%). In comparison with the baseline study in 2001, the percentage of CHCs with a separate delivery room in the whole province has increased significantly from 60% in 2001 to 86% in 2005.

In considering hygienic conditions of the health centers and their delivery rooms (cleanliness, ventilation, privacy, safety, sufficiency of instruments and essential drugs for delivery) in 2005, significant improvement has been observed in comparison to observations made in 2001, particularly at the commune level. Such indicators as usable toilets, clean toilets, availability of a working telephone line, sufficient lights and clean water, are of better quality at the CHCs in the non-mountainous regions than those in the mountainous regions and showed a significant improvement from the baseline study conducted in 2001 (table 3.1).

Table 3.1: Percent of health facilities with sufficient conditions for clients, by type of facility

	2001			2005			
	DHCs	**CHCs**	**All**	**MCH-FP center**	**DHCs**	**CHCs**	**All**
Enough waiting room for clients	57.1	25.9	30.7	100.0	42.1	52.6**	50.6
Usable toilet	100.0	76.7	80.3	100.0	89.5	94.7***	93.5
Clean toilet	71.4	69.7	70.0	0.0	42.1	64.9	58.4
Permanent electricity supplied	95.2	86.2	87.6	100.0	100.0***	93.0***	94.8
Available working telephone line	90.5	17.2	28.5	100.0	100.0***	87.7***	90.9
Clean examination area	100.0	94.0	94.9	100.0	94.7	100.0***	98.7
Sufficient clean water at the examination area	85.7	77.6	78.8	100.0	100.0*	89.5*	92.2
Separate space for counselling	85.7	36.2	43.8	100.0	73.7	50.9	57.1
Privacy during examination	100.0	78.4	81.8	100.0	94.7	73.7	79.2
Privacy during counselling	71.4	24.1	31.4	100.0	84.2	45.6**	55.8
(n)	21	116	137	1	19	57	77

*Facility inventory; * P value<0.05; ** p value<0.01; *** Pvalue<0.001*

One of the conditions for hygienic delivery is the *availability of boiled water* for the midwife to wash her hands before assisting the delivery. The 2005 evaluation shows that containers of boiled water are available in nearly 90% of the CHCs in the mountainous and plain districts while this figure is lower (92%) among the mountainous communes compared with those in the non-mountainous communes (97%). Noteworthy progress is shown in comparisons made between the figure of 73% of CHCs with available boiled water containers in the baseline survey in 2001 and that of 95% in 2005 survey. The final assessment study in 2005 also indicates that about 97% of the CHCs have Ergomtrin or Oxytocin available at the delivery room. There is no difference between the plain and mountainous areas but there is an increase among CHCs with Ergomtrin or Oxytocin available at the delivery room in 2005 compared to the baseline survey. (Table 3.2)

Table 3.2: Delivery room status in 2005

	Mountainous districts			Non-mountainous districts			Province			
	DHC	CHC	All	DHC	CHC	All	MCH/ FP center	DHC	CHC	All
Well-ventilated	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Dirt can come through	20.0	20.0	20.0	0.0	9.4	7.3	0.0	10.5	14.0	13.0
Window has a screen/curtain	70.0	88.0	82.9	88.9	87.5	87.8	100.0	78.9	87.7	85.7
Working spot light	100.0	76.0	82.9	100.0	81.3	85.4	100.0	100.0	78.9	84.4
Have lamp/lantern to use during blackout	90.0	84.0	85.7	100.0	71.9	78.0	100.0	94.7	77.2	81.8
Have a container of boiled water	90.0	92.0	91.4	88.9	96.9	95.1	100.0	89.5	94.7	93.5
Have a container of boiled water with a wooden handle longer than 20cm	90.0	88.0	88.6	66.7	90.6	85.4	100.0	78.9	89.5	87.0
The floor is clean	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Have a cabinet to store equipment	100.0	96.0	97.1	100.0	96.9	97.6	100.0	100.0	96.5	97.4
Have oxytocin or ergometrin	100.0	96.0	97.1	88.9	100.0	97.6	100.0	94.7	98.2	97.4
Have a kit for neonate esuscitation	100.0	80.0	85.7	100.0	68.8	75.6	100.0	100.0	73.7	80.5
Resuscitation box is stored in a separate sterile tray	100.0	68.0	77.1	88.9	65.6	70.7	100.0	94.7	66.7	74.0
Clean, sterile cloth for covering instruments	80.0	76.0	77.1	55.6	71.9	68.3	100.0	68.4	73.7	72.7
Boiled soap in closed box	80.0	72.0	74.3	22.2	81.3	68.3	100.0	52.6	77.2	71.4
Used water is drained into a closed tank outside	100.0	52.0	65.7	88.9	65.6	70.7	100.0	94.7	59.6	68.8

	Mountainous districts			Non-mountainous districts			Province			
	DHC	CHC	All	DHC	CHC	All	MCH/ FP center	DHC	CHC	All
labor room										

Facility Inventory

Facilities for antenatal and postpartum care are also sufficient at most of the DHCs and CHCs in both the mountainous and plain regions, including equipments such as fetal heart rate detectors, Sphygmomanometera, delivery kits, pelvimeters, and aspirators. In particular, the availability of neonate resuscitation equipment is also important for the safety of the newborn. In 2005, these instruments are available in 80% of the CHCs in the mountainous communes and 67% of those in the non-mountainous communes.

The percentage of the health facilities with sufficient delivery instruments increased in 2005 compared to 2001. For example, the percentage of CHCs having neonate resuscitation kits increase from 57% in 2001 to 74% in 2005; the percentage of the CHCs having Ambou ball increased from 28% in 2001 to 49% in 2005. Sterilization instruments such as instrument boilers and steam sterilizers also increased (from 87% in 2001 to 97% in 2005).

Despite the sufficiency of equipment and instruments at the health facilities, it is still found that stethoscopes and sphygmomanometers are not of good quality in 40% of CHCs in the non-mountainous communes and over 50% of those in the mountainous communes.

Ultrasound dianogsis is a safer procedure (in contrast to X-ray method) and very useful for obstetric care and treatment. It helps health providers detect warning signs during pregnancy (twin pregnancy, hydro-amnios, marginal placenta and placenta preavia) as well as during labor (measuring fetal head, estimating fetal weight for prognosis of the delivery). Ultrasound dianogses increase the safety for pregancy and delivery. The final assessment in 2005 shows that this service is provided in 70% of the DHCs in the mountainous districts, compared with 45% of those in the non-mountainous districts. At the commune level, this service is provided at only 3% of the CHCs in the non-mountainous area.

The availability of essential drugs for ob-gyn emergency treatment is very important to ensure safe delivery. Essential and/or alternative medicines for ob-gyn care and delivery are available in most of the surveyed health facilities, including oxytocique, medicines for treatment of toxemia and eclampsia, pain killers, medicines for allergia and shock treatment, infusion solutions, anti-biotics, and hormones. Availability improved in 2005 (see table 3.3). *Oxytocique (oxytocine)* is now available at 95% of the CHCs in the mountainous communes and 100% of those in the non-mountainous ones in 2005. This figure shows a great improvement in comparison to 2001 (91%) and 2005 (98%). However, in both studies, it was found that Ag Nitrat and Agyrol - eye drops are rarely available in all health facilities at both commune and district levels.

Commodities for emergency cases: Transportation means for emergency cases are available at all DHCs and only at one-fifth of the CHCs. At DHCs, transportation means are mainly cars. At the commune level, transportation means are mainly arranged by clients themselves. There is not a big difference between the mountainous and non-mountainous health facilities. The percentage of health facilities that referred emergency cases to the higher level in 2005 (47% of DHCs and 60% of CHCs) is less than that in 2001 (62% at DHCs and 65% at CHCs). This reduction may be due to the improved skills of health providers who are now more capable to deal with complicated cases.

Table 3.3: Percent distribution of available essential drugs for management of Ob-Gyn emergency, by type of medicine and facility

	Survey in 2001			Survey in 2005			
	DHC	**CHC**	All	**MCH/ FP center**	**DHC**	**CHC**	All
1. Treatment of toxemia & eclampsia							
Diazepam	100.0	54.3	61.3	100.0	94.7	59.6	68.8
Magnesium sulfate	47.6	41.4	42.3	100.0	47.4	26.3*	32.5
Dopegyt	14.3	3.4	5.1	100.0	47.4*	42.1***	44.2
Hypothiazid	85.7	68.1	70.8	0.0	89.5	57.9	64.9
2. Pain relief /killer							
Lidocain/xylocain	100.0	75.0	78.8	100.0	100.0	80.7	85.7
Paracetamol	100.0	99.1	99.3	0.0	78.9*	98.2	92.2
3. Anti-spasmodique							
Spasrmaverine	14.3	12.9	13.1	100.0	21.1	22.8	23.4
Papaverin	100.0	96.6	97.1	100.0	100.0	98.2	98.7
4. For allergia and shock treatment							
Epinephrin/Adrenaline	100.0	87.1	89.1	100.0	94.7	96.5**	96.1
Promethazine	66.7	68.1	67.9	0.0	21.1***	26.3***	24.7
5. Tetanic Toxoid	71.4	6.0	16.1	0.0	10.5***	5.3	6.5
6. Agyrol – eye drop	28.6	20.7	21.9	100.0	15.8	21.1	20.8
7. NitratAg – eye drop	9.5	0.9	2.2	100.0	5.3	5.3	6.5
8. Infusion solutions							
Clorua Natri 9%o	95.2	78.4	81.0	100.0	100.0	77.2	83.1
Glucoza	100.0	93.1	94.2	100.0	100.0	96.5	97.4
9. Anti-biotics	100.0	100.0	100.0	100.0	94.7	96.5	96.1
11. Hormones							
Oxytocin	100.0	95.7	96.4	100.0	100.0	100.0*	100.0
Ergometrin	66.7		66.7	100.0	57.9	0.0	60.0
(n)	21	116	137	1	19	57	77

Facility inventory; ** P value<0.05; ** p value<0.01; *** Pvalue<0.001*

A clean delivery bag is one of the tools that ensures hygiene and safety for delivery in places other than health facilities. The percentage of mountainous CHCs that provide *clean delivery bags* is 40% compared with 56.3% of the non-mountainous CHCs. The

percentage of DHCs with clean delivery bags is not high for both mountainous (20%) and non-mountainous (22%) areas. The low number for DHCs may be may be due to less need for the bags because they are only used for the case of delivery at home, which falls to the CHCs to oversee. The percentage of CHCs that have iron tablets to provide pregnant women is rather high (65% for all CHCs in both mountainous and non-mountainous areas) while this figure is lower at the district level (10% among mountainous DHCs and not available among non-mountainous DHCs). In comparison with 2001figures, the percentage of CHCs that have clean delivery bags and iron tablets significantly increased (49% of CHCs have clean delivery bags and 64.9% of CHCs provide iron pills for pregnant women, compared with only 25% and 47% respectively in 2001). This shows a great improvement of and attention paid to ANC activities.

Training: most health providers were trained at a training institute or attended some advanced training courses on antenatal and postpartum care. They were also trained to screen prenatal cases with high risk of complications (Table 3.4). There is not a big difference among health providers at the mountainous and non-mountainous areas or between district and commune levels. No difference inthis indicator between the two studies (2001 and 2005) may mean that the same training content was kept during the implementation of the project.

Table 3.4: The percentage of health providers having learnt skills in school or from clinical practice on ANC

	Results from the baseline study in 2001			Results from the final assessment in 2005			
	DHCs	CHCs	All	MCH/FP center	DHCs	CHCs	All
Perform prenatal risk screening	97.6	98.3	98.1	100.0	97.3	98.2	97.9
Use partograph to manage labor	87.8	80.2	82.2	100.0	91.9*	100.0***	96.8
Manual removal of placenta	95.1	77.6	82.2	100.0	94.6	98.2***	96.8
Start IV infusion	100.0	97.4	98.1	100.0	100.0	100.0*	100.0
Check Hemoglobin	26.8	11.2	15.3	0.0	5.4***	10.7	8.4
Bimanually compress the uterus (internal)	87.8	76.7	79.6	100.0	75.7	53.6**	63.2
Bimanually compress the uterus (external)	100.0	93.1	94.9	100.0	94.6	91.1	92.6
Repair an episiotomy	100.0	94.8	96.2	100.0	100.0	98.2	98.9
Repair a cervical laceration	80.5	49.1	57.3	100.0	81.1	67.9*	73.7
Suture (repair) vaginal Lacerations	90.2	62.9	70.1	100.0	89.2	91.1***	90.5
Repair a 3rd/4th degree Laceration	61.0	39.7	45.2	100.0	75.7	69.6**	72.6
Perform reflex testing	58.5	49.1	51.6	0.0	56.8	35.7*	43.2
Perform speculum examinations	100.0	98.3	98.7	100.0	100.0	98.2	98.9
Perform bimanual examinations	100.0	93.1	94.9	100.0	91.9	100.0*	96.8
(n)	41	116	157	2	37	56	95

*Interviews with health providers; * P value<0.05; ** p value<0.01; *** Pvalue<0.001*

Interviews with health program managers at both provincial and district levels shows that the activities of the reproductive health project funded by JICA made a valuable contribution to the readiness of health facilities in providing clean and safe delivery services in terms of infrastructure, equipment and human resources:

> *After 7 years of implementation of the project funded by JICA, all the delivery rooms have been upgraded and we are performing 'hygienic deliveries'. In general JICA provided rather sufficient equipment along with standardized training programs, etc. At the CHCs, midwives received fundamental and comprehensive training. Delivery assistance procedures were standardized. A strength of this district is the health service provider network including midwives, ob-gyn department and FP sector are closely coordinated. The 2nd strength lies in the strict technical regulations. Modern facilities and medicines are rather sufficient."* (Male, aged 43, FP team leader of Nghi Loc district)

> *"It has improved a lot. In addition, instruments and facilities for midwifery are more sufficient and of better quality. Nowadays, we have a sterilizer while we carry out the procedures "manually" (without any facilities) but the procedures are now standardized. Secondly, four conditions must be met during the delivery: clean mother, clean delivery, clean delivery room and clean health provider."* (Male, aged 46, Head of Gynaecological Department of DHC in Hung Nguyen district)

> *"Thanks to the financial support from JICA, safe and hygienic delivery is improved because midwives now understand what to do during counseling, performing to ensure safety for the mother and newborn. Midwives are also trained on technical skills to minimize complications and maternal mortality. Facilities for emergency treatment and clean midwifery such as steam sterilizers are sufficiently provided. Midwives know how to handle the steam sterilizers for instrument sterilization"* (Female, FP vice team leader, Que Phong District)

b. Improved antenatal and postpartum care

Indicators to evaluate the quality of ANC and management are measured by the regular statistics at the surveyed health facilities. In general, these indicators are signficantly improved. The percentage of pregnant women who received ANC is 88% in the mountainous communes and 97% in the non-mountainous ones. The percentage of pregnant women receiving sufficient tetanus vaccinations is 88% in the mountainous communes and 98% in the non-mountainous ones. The percentage of mothers who were assisted by trained health providers during delivery is 82% in the mountainous communes, lower than that in the non-mountainous communes (98%). The number of ANC visits per pregnant woman is 2.7 on average for the mountainous communes, lower than that in the non-mountainous communes (3.7 times). There is an increase in these indicators in comparison with the 2001 study, showing improvements in safe and hygienic delivery (table 3.5).

The use of HBMR is one of the activities to ensure safety for delivery, to monitor pregnancy and detect or anticipate any risks during pregnancy. This activity is now successful in Nghe An province. HBMR is available at 100% of all CHCs in both mountain and non-mountainous communes. The percentage of sufficiently and correctly recorded forms is 92% (mountain CHCs) and 97% (non-mountainous CHCs). This indicates an improvement compared with 2001 figures, when only 78% of health facilities reported that they knew how to use the form for MCH service provision and management of pregnant women

Table 3.5: Indicators on ANC in 2000 and 2004

	2000	2004
	CHCs	CHCs
Percent of pregnant women who attend ANC visit	92.1	96.3
(n)	*93*	*56*
Percent of deliveries assisted by health providers	91.0	86.9
(n)	*115*	*57*
Average of ANC visits of delivered women	2.78	3.3
(n)	*116*	*57*
Percent of pregnant women vaccinated with 2 AT	91.2	93.4
(n)	*99*	*57*

Facility inventory

Interviews with women of reproductive ages also show good management of pregnant women through the MCH form. Through this HBMR form, the health center, as well as the pregnant women, know the schedule of ANC visits and health status of the mother and the fetus:

> *"I was provided with the HBMR in the first month of my pregnancy for monitoring and ANC care. This book helps me rememberthe scheduled ANC visits, if I forgot to pay the visit, the collaborator would come to remind me."* (Woman, aged 30, Nh©n thµnh, Y^{a}n Thµnh)

> *"Each family was provided with one HBMR book. In the first 3 months of my pregnancy, I had an antenatal check-up once a month. I had a vaccination shot in the sixth month. I had ANC visits until delivery. Even in the 7th and 8th months, I still went to the health center for monitoring the fetus, ultrasound examination helps me know whether there was any change of fetus's head presentation. For those who live far away from the health center, or they can't come to health center, the village health workers would provided ANC at home.*" (Woman, aged 27, Tam quang, T-¬ng D-¬ng)

Pregnant women visiting health centers will have more oppportunities for counselling on health care during pregnancy. In the final assessment of the project, a total of 250 clients

came to the centers for ANC at the surveyed CHCs and DHCs. Information from observations of clients coming for ANC at health facilities and from exit interviews with clients is an input to assess the quality of this service.

Observation of 250 *ANC service provision* cases shows that, while providing counselling to clients coming for pregancy examination, health providers mentioned important information relating to safety in pregnancy and delivery. The message of "nutritional diet during pregnancy" was mentioned in 95% of ANC cases at CHCs (both mountainous and non-mountainous areas) and in 93% cases at mountain DHCs and 84% at the non-mountainous DHCs. There are similar figures for health providers discussing "appropriated working pattern and rest during pregnancy" with clients. In most of the ANC cases (89% of those in the mountainous CHCs and 82% of those in the non-mountainous CHCs), clients were counseled on the "early discovery of warning signs during pregnancy". This indicator is rather high among mountain districts (93%) compared with the non-mountainous districts (68%). The majority of ANC clients were reminded of sufficient tetanus vaccination shots (82% in mountain communes and 91% in non-mountainous ones; 98% in mountain districts and 74% in non-mountainous ones). Counselling has improved since 2001 (table 3.6).

Table 3.6: Percentage of ANC clients receiving counselling on related issues, by type of facility

	Results of the survey in 2001			Results of the evaluation in 2005			
	DHCs	CHCs	All	MCH/ FP center	DHCs	CHCs	All
Nutrition during pregnancy.	92.9	91.9	92.1	100.0	88.5	94.7	92.8
Appropriate work/rest/ living conditions	85.7	87.6	87.3	100.0	87.2	88.2	88.0
Health providers Inform client on fetal health & risk	92.9	85.7	86.9	100.0	96.2	92.9	94.0
The need of two tetanus vaccination shots	90.5	85.2	86.1	100.0	85.9	86.4	86.4
Number of ANC visits	83.3	80.0	80.6	100.0	73.1	72.8	73.2
Effect of iron tables/ axit folic	66.7	55.7	57.5	100.0	80.8	71.6***	74.8
Provider told the client when to come back	85.7	87.6	87.3	100.0	92.3	97.6	96.0
Come to a clinic if any warning signs appear	76.2	65.2	67.1	100.0	80.8	85.8***	84.4

ANC observation questionnaire; **** Pvalue < 0.001*

Among clients coming for ANC on the survey day, 60 clients were in their first pregnancy. ANC clients bearing their first child had their first antenatal check-up at an average gestational age of 15.6 weeks. The average of gestational age of ANC clients at

the mountainous CHCs is 14.6 weeks and 16.9 for non-mountainous CHCs. There is no difference between DHCs and CHCs. In comparison with the baseline survey in 2001, the first ANC visit of pregnant women in 2005 is earlier (15.6 weeks compared with 29 weeks in 2001). This indicates that IECs have significant impact on women's awareness of the importance of ANC and early pregnancy examination.

For clients on first ANC visit, health providers at both district and commune levels provided improved ANC services, including measuring clients' weight, pulse rate and blood pressure. Measuring clients' pelvis was conducted properly for 73% of the cases with less than 20 weeks of gestational age and there is no difference between the mountain and non-mountainous areas.

Table 3.7 Percent age of first ANC visit clients receiving various services, by gestational age and facility.

	Results of the survey 2001		**Results of the evaluation study 2005**	
Gestational age:	**≤ 20 weeks**	**> 20 weeks**	**≤ 20 weeks**	**> 20 weeks**
Measured client's weight	81.8	76.0	97.9**	100.0***
Measured client's pelvis	36.4	40.0	58.3	33.3*
Measured blood pressure and pulse rate	95.5	93.3	100.0	100.0***
Checked for anemia	45.5	40.0	70.8**	75.0***
Checked for edema	54.5	58.7	64.6	66.7***
Measured abdominal circumference	81.8	97.3	50.0	100.0*
Measured the uterine fundal height	90.9	98.7	75.0	100.0
Palpated client's abdomen	81.8	94.7	47.9**	91.7**
Listened to fetal heart beat	77.3	100.0	4.2***	75.0***
(n)	*22*	*75*	*48*	*12*

*ANC observation questionnaire; * P value<0.05; ** p value<0.01; *** Pvalue<0.001*

When a partograph is used appropriately, it is very helpful for the midwife or health provider to detect cases without progress during labor to have timely interventions or referral for timely treatment. Most of the health staff are trained in using the the partograph correctly. In the final assessment of the project in 2005, the percentage of health providers who used partograph equipment at DHCs is high, with 89.5% (mountainous) and 80% (non-mountainous). This percentage is 100% at mountainous CHCs and 97% in the non-mountainous CHCs. The overall percentages of health staff using the partograph in 2001 are 73.2% (DHCs) and 60.3% (CHCs) and have largely increased in 2005, with 85.3% and 98% at the district and commune level respectively. However procedures and records on the partograph at the CHCs are still a concern. At

the CHCs, the midwife often assists the patient alone during delivery (she needs to wear sterilized gloves for the procedures) and she also has to record on the partograph at the same time (this violates the sterility rule). Additionally, the midwife or health provider cannot use partograph for the cases of delivery at home. However, if there is another assistant (who is an intern or a nurse) to help the midwife, it is neccessary to use partograph to monitor labor of all patients.
While CHCs mainly manage pregnancy and provide services for normal deliveries, there are cases of deliveries with complications with patients that were provided with preliminary care at CHCs. Therefore, health providers at CHCs should also learn about common complications in pregnancy and how to deal with these cases. In the questionnaire for interviews with health providers, four questions relating to complications during pregnancy were asked to assess health providers'knowlege and skills.

Interviews with health providers show that many of them have adequate diagnosis and timely treatment for 28-week pregnant women with vaginal bleeding. The procedures adopted are to monitor signs of labor (by 63% of health providers of DHCs and 44% of CHCs in the mountainous areas and 72% and 48% respectively in the non-mountainous areas) and to monitor the amount of bleeding (by 68% of health providers of DHCs and 76% of CHCs in the mountainous areas and 72% and 74% respectively in the non-mountainous areas). Regarding treatment, two correct procedures were reported, including vaginal examination (by 74% of health providers from DHCs and 60% CHCs in the mountainous area and 83% and 68% respectively in the non-mountainous areas) and monitoring blood pressure and pulse rate (by 53% of health providers from DHCs and 88% from CHCs in the mountainous and 89% and 81% respectively in the non-mountainous areas).

For the case of toxemia, 100% of health providers at the district and commune level reported that it is necessary to measure pulse rate and blood pressure; 100% from DHCs and 88% from CHCs in the mountainous areas and 100% and 97% respectively in the plain areas thought that it is neccessary to detect protein in urine. Two appropriate treatment procedures are the use of sedatives and medicines for hypertension treatment, which were mentioned by many health providers and the number of those who gave correct answers in the non-mountainous CHCs is larger than their colleagues in the mountainous areas: 53% of health providers in DHCs and 64% in CHCs in the mountainous areas compared with 61% and 68% respectively in the plain areas mentioned pain killers; 60% of health providers in DHCs and 56% in CHCs in the mountainous areas compared with 78 % and 68% respectively in the plain areas mentioned medicines for hypertension treatment.

For cases that have suspected infections after delivery (puerperial infection) , the majority of interviewed health providers report correct management procedures, such as examining whether discharge is smelly (79% of health providers at DHCs and 72% of CHCs in the mountainous areas compared with 89% and 71% respectively in the non-mountainous areas). The majority of health providers (about 90%) also reported two correct monitoring procedures, including uterus contraction and discharge.

For the case of hemorrhage after birth, the majority of health providers at the district and commune levels report correct procedures as follows: taking the patient's pulse and blood pressure; massaging perineal uterus; ergotime injection; and checking whether there is laceration or episiotomy and IV infusion .

During interviews with provincial, district and commune health managers, some said that the MCH care program, particularly ANC, safe and hygienic delivery and post-partum care are significantly improved. Health facilities are now reliable placesthat attract women to come for examination and delivery:

> *"Pregnant women have 4 periodical ante-natal check-ups, scheduled in a HBMR book. Each woman has two copies. Any warning signs are recorded in the book and they also receive counselling on health care during pregnancy. Most of the women come to the CHC for delivery. Only the complicated cases are sent to DHCs. Within 42 days after the birth, they have two post-partum care visits to check whether puerperal infections happens, whether the milk gland is blocked, to give instructions to other family members and remind the mothers to keep hygienic practices after birth. In the first week of the newborn,a midwife comes to examine the umbilicus, whether any other infections appear and the baby's growth."*
> (male, aged 35, Head of CHC, Quynh Ba)

> *"I think that after the implementation of the project, the prevalence of deliveries at the CHCs largely increased. Nearly 100% of the pregnant women gave birth at the CHCs. This is firstly due to the improvement of the delivery room - a spacious, well- ventilated and clean room with reliable equiment and facilities to attract more clients. The second factor is midwives who have been trained on fundamental knowledge and skills to strictly follow procedures from how to wash hands, to wear gloves ..., to many more important procedures, which is a very good improvement".*
> (Male, aged 44, head of gynecological department of Nghi Loc DHC)

The pregnant women know the necessity of health care during pregnancy and the health center as a place to come for ANC:

> *"Previously, talking about ANC but I didn't know where and how many times to go for ANC or the danger of not having ANC or tetanus vaccinations. Since the implementation of the project and its dissemination and education, women's awareness has improved and many of us attended meetings for experience exchange when collaborators distributed leaflets for pregnant women. For those who are expecting their second or thirdchild, they come to CHC for ANC without reminder."(*Woman, aged 40, Hung Thong, Hung Nguyen)

> *"During pregnancy, it is necessary to regularly monitor growth of weight and health status. Since the beginning of pregnancy until one month after the birth, the woman needs to take iron tablets regularly to avoid anemia and she should go to the CHC for ANC, in the first 3 months, 6 months and closer to the birth to monitor*

*the fetus and discover any warning signs for referal if need be." (*Woman, aged 36, Hoi Son, Anh Son)

"ANC aims to detect potential complications and any warning signs that may affect the fetus and the mother." (Woman, aged 31, Quynh Ba, Quynh Luu)

"During pregnancy, the woman needs to have two tetanus vaccination shots and have at least three ANC visits." (Woman, aged 35, Chau Quang, Qui Hop)

"*In fact, during pregnancy, the woman should firstly ensure appropriate workload and diets to have sufficient nutrition for the child'sl growth."* (Woman, aged 34, Nghi Xa, Nghi Loc).

Due to good health care and monitoring during pregnancy, the number of pregnant women delivering at the CHCs increased. Complications are assessed to be reduced significantly and delivery is assessed to be safe. Good ANC provided to pregnant women helps detect many potential difficult delivery/complications for timely referral. Facility inventories shows that about 60% of the CHCs reported referals to higher levels. This figure is higher among health facilities in the non-mountainous areas and is reduced in 2005 compared with that of the baseline survey in 2001. In-depth interviews also show similar results in that safe midwifery improves maternal and child health protection in Nghe An province:

"Obstetrical complications are significantly reduced. There hasn't been any maternal mortality cases for 4 years. This is the only district without any maternal mortality for 4 consecutive years. Other obstetrical complications such as haemorrhage, umbilical infections and others have been minimized and safe delivery is ensured." (Male, aged 49, Head of Nghi Loc DHC)

"For example, obstetrical complications used to happen, but no more now. Support included training on skills and knowledge and equipment. There was no aspirator at the CHC, newborns died of asphyxia. Now with additional support, they know when and whether it is necessary to refer the case to higher level. Secondly due to hygienic delivery, there are almost no cases of peurperal infections." (Female, FP team leader, Yen Thanh district)

Apart from safe and hygienic delivery, post-partum care is also more closely monitored. Apart from counseling on FP and breastfeeding during ANC visits in the last 3 months of pregnancy, etc., the patient is also monitored in the post-partum period:

"In general, after delivery, 70% of mothers receive post-partum care visits for 42 days by the CHCs, to monitor for any complications or problems. New mothers are visited at least 25 first days after delivery." (Male, aged 52, Vice Head of Yen Thanh DHC)

"After delivery I still monitor the patients and provide counselling on nutritional diet, etc and instructions on FP and contraceptives." (Female, aged 35, Head of Gynaecological Department of Anh Son DHC)

c. Limitations

Despite significant improvement in MCH care in the non-mountainous districts, there are still many difficulties in the mountainous areas. With difficult geographical characteristics, scattered clusters of inhabitants, harsh transport and economic difficulties, local people's accessibility to health facilities is still limited:

*" I can confirm that clean delivery rooms are available at 100% of the 456 communes, including 252 mountainous ones. However, it is more difficult to attract the local people in the mountainous communes to go to the CHCs because they live too far away. The CHC is beautiful but not used, there are only 1 or 2 cases per year. Only women living in the nearby villages come to deliver at the CHC, most others deliver at home. Our village health volunteers come to assist them with the clean delivery bags."(*Male, aged 48, Head of Planning Department, MCH Center)

"Health education has increased their understanding, but they don't have money to travel for one day from home to the CHC. So only those who live near the CHCs come to give birth there, if they live far away, they will deliver at home. The only means to travel from home to the CHC is by 'taxi-bikes' (xe lai), which costs from 40 to 50 thousand dong while they earn their living day by day." (Female, Head of Gynaecological Department of Tuong Duong DHC)

"*It takes at least 6 hours to walk non-stop from the center of the commune to the farthest village. It often takes a man 4 hours to walk but for pregnant women, it's impossible*." (Male, aged 42, Head of Children, Family and Population Committee (CFPC) of Tuong Duong district)

Home deliveries are still very few nowadays, and happen mainly in the mountainous districts. The reasons are due to the long distance to the CHC, old customs or or no knowledge of potential birth date because clients are too busy. Deliveries at home, assisted by traditional birth attendants not longer happen. Therefore, the role of village health workers (VHWs) and the CHCs are very important because they are trained and living near the local people:

"Due to the mountainous terrain characteristics and in fact, some villages are too far away, it takes 5 to 6 hours to walk to some villages. As a result, the percentage of pregnant women coming to our CHC is still low. We have tried many ways to motivate and encourage them to give birth at the CHC. During ANC visits, we also

provided them with a clean delivery bag and midwives and ob-gyn assistant physicians are also intructed to assist deliveries at home. In using the clean delivey bag, health providers and VHWs can use them very well for deliveries both at the CHC and at home." (Male, Head of surgery department, Que Phong DHC)

"VHWs are often called for assistance at birth if they live nearby, though those living in the far-off villages often give birth at home, they only go to the CHC when they have difficulty or to the DHC when it is impossible to manage it at the CHC." (Male, aged 40, Head of Tuong Duong DHC)

"Deliveries at home are still common in my commune. For me, I gave birth to both of my daughters at home. My house is 5 kms away from here. It is very difficult to travel... and due to old customs. We invited VHWs to come for assistance during delivery."(Female, aged 39, Tam Quang, Tuong Duong)

Due to distance, it is not feasible to rigidly encourage pregnant women living in far-off villages to give birth at the CHCs. Instead, it would be more relevant to provide additional training for VHWs to perform safe and hygienic delivery. For deliveries at home, despite the VHWs' technical assistance, it is still very important to have the clean delivery bag to avoid infections for both the mother and the newborn, particularly tetanus infection at birth (umbilical tetanus).

On the other hand, provision of equipment and tools for safe and hygienic delivery should be considered to ensure relevant application in the particular context of each CHC. All the CHCs should not be supplied with the same equipment and facilities becausee each CHC has to adapt to different conditions. Though some health providers say that support of these facilities is relevant and of use, others believe that the provided facilities are not put to good use.

Local health facilities are responsible for some medical instruments remaining unused. Reasons are the lack of necessary conditions to use the equipment-- no electricity, for example-- or lack of electric voltage to use it (weak electric wire from the electric pole to the CHC). Consequently, some provided instruments are not used:

"The equipment that we can't use is the steam sterilizer provided by JICA due to the lack of electricity for its operation. Electricity is available but it is difficult to ask for an electric wire with sufficient capacity for its operation. Secondly, if electricity is not available, it can operate by wood-fire, but the staff is too lazy to get firewood. Another equipment is goose lamp, which can't be used without electricity." (Male, Head of Surgery Department of Que Phong DHC)

However, some health providers also state that certain equipment and facilities are not relevant with the local context, causing waste.

"Support of equipment should be based on the contextual situation. Take toilets as an example, in some CHCs, there are 3 septic-tank toilets. Cam Son CHC is an

example, one toilet had been constructed when another was built by an ODA funded project and finally the third toilet was built under this project, which is not very necessary. In many CHCs, there are 2 toilets, which is not necessary according to the level of the CHCs and the number of in-patients and clients while there is a lack of other infrastructure such as water source and places for patients living far away from the CHC, or a kitchen." (Male, aged 46, Vice Head of Anh Son DHC)

In summary, MCH care and clean and safe midwifery has remarkably improved in the past years. It has not only changed the health providers and local people's awareness of MCH care but also made dramatic change in ante-natal and post-partum care. However, there are still some limitations and difficulties in these activities in some mountainous areas in Nghe An province that requires some adjustments and solutions for future interventions.

3.2. Capacity of MCH/FP Center and district in monitoring the lower implementation level

Monitoring is one of the most important components of health management. In the past, monitoring was mixed with inspection. Monitoring in the Vietnamese context was understood as an investigation for shortcomings to provide criticism. Recently, particularly under the implementation of the project, the managers are trained in monitoring and aware that it aims to support colleagues at lower levels to improve their work.

In the final assessment in Nghe An province, the capacity and quality of monitoring of MCH activity carried out at the communes by the provincial level (MCH/FP Center) and district as well as at districts by the MCH/FP Center was also assessed. This assessment is not only made through reports of managers at the higher level but also through the assessment of monitored providers at the lower level.

a. Training on monitoring

Training on monitoring helped improve the knowledge of monitoring officers. In in-depth interviews and FGDs with health managers, the majority report that they attended training on monitoring and understood the fundamental objective of monitoring activities is to help improve the quality of health care and service provision.

"*I highly appreciate this training course because we did not understand monitoring before. We even thought that monitoring means inspection/control. After I attended the training, we understood that monitoring is not to inspect but to support others*." (Female, Vice Director of provincial MCH Center)

"Before the RH project funded by JICA, we did some monitoring but we did not have clear objectives and contents for our monitoring activity. We mainly came to check how the local officers at the lower level worked and gave criticism. Since the

implementation of the project, and after attending the training, we understand that the objective of monitoring is to support officers at the lower level for their improvement and consolidation of knowledge and to encourage them for good work" (Female, aged 45, Head of Quy Hop DHC)

"The training is very useful, i.e. after the training I have improved my knowledge of how to monitor and evaluate, how to develop a monitoring plan, how to check… through the lessons learnt we understood better, how to conduct monitoring activities, to give marks and to write a monitoring report… in general I found it very useful." (Male, aged 52, Vice Head of Yen Thanh DHC)

Most monitoring officers are trained on monitoring skills so their skills are clearly improved. In-depth interviews show rather good evaluation of their monitoring skills:

"Regarding monitoring, it is so far quite good, firstly the monitoring officers are trained on monitoring skills, secondly, and most of them have good monitoring knowledge and have plenty of time. At least 5-7 monitoring trips with the Japanese experts provided a lot of experience. I think monitoring and evaluating skills are very good" (Male, aged 52, Vice Head of Yen Thanh DHC)

"At the beginning, I was not used to monitoring plans but after the training, I feel confident. Now we can develop a plan for a monitoring trip, what to monitor, who does what and what to emphasize on the final assessment day, how to have support from different levels, how to encourage them and give feedback without criticism. Monitoring is gradually improved." (Male, aged 50, Head of Planning Department, provincial MCH Center)

"We are all trained on monitoring skills at the MCH center. Besides, I also attended a training courses by module so I think monitoring skills of this officers in this center are quite good." (Male, Head of Surgery Department, Que Phong DHC)

District officers also appreciate monitoring skills of officers from the provincial MCH center in making good plans, their knowledge, calibre of communication skills and working style. They provide good examples for officers at the district level in monitoring activities:

"*Monitoring skills of provincial officers are generally good and particularly when I started working here, I experienced a monitoring trip by all provincial female midwives. Among them, there is only one physician who I think has very good monitoring skills. They worked very seriously and openly. It is often better to have monitoring at the district level by the provincial officers than at the commune level by the district officers. They make better preparations at the province, officers at the commune level often have more difficulties due to their limited conditions."* (Male, aged 43, FP team leader, Nghi Loc district)

"In fact, provincial monitoring officers have many good skills that we should learn. The first is communication skills. We also have but not very good communication skills. Or skills to guide commune midwives to practice, they always show good ways to give feedback and comments. They also found shortcomings and support in such a way that the commune midwife acknowledge their mistakes by themselves for improvement." (Female, aged 36, FP vice team leader, Que Phong district)

"Provincial monitoring officers came many times, the strength of acquiring their skills is quick. Whenever they came for monitoring district officers obtained some more experiences and techniques." (Male, Head of Obstetric Department, Yen Thanh DHC)

"I found the monitoring skills of provincial officers very strong. They had a monitoring trip at the district, we learnt experiences that they had very good attitude, they were very sympathetic and shared with our difficulties. They did not criticize the district or commune but gave very tactful feedback, encouraging the local office to improve the project of JICA at provincial and district level." (Female, aged 50, Vice Chairwoman of WU of Anh Son district)

b. Monitoring activities

Monitoring of health facilities is conducted through two channels: the province monitors both the district and commune level health facilities and the district monitors the commune level. Facility inventories show that monitoring is conducted at all district and commune facility levels. All of the DHCs are monitored by the province, 100% of commune health facilities are monitored by the district level. About 60% of the CHCs report that monitoring trips are conducted once a month. One-third of the DHCs also report monthly monitoring visits. Monitoring activities are more frequent in mountainous rather than plains areas (table 3.8). The percentage of health facilities monitored in 2005 is higher than that in 2001 (see in data set).

Table 3.8: Percentage distribution of health facilities that were monitored, by facility

	Mountainous districts			Plains districts		
	DHCs	CHCs	All	DHCs	CHCs	All
Currently monitored	100.0	100.0	100.0	100.0	100.0	100.0
(n)	10	25	35	9	32	41
Frequency						
Once a month	20.0	60.0	48.6	44.4	62.5	58.5
Every 3 months	20.0	16.0	17.1	33.3	18.8	22.0
Every 6 months	30.0	12.0	17.1	11.1	6.3	7.3
Other	30.0	12.0	17.1	11.1	12.5	12.2
(n)	10	25	35	9	32	41
Monitored by						
Provincial MCH center	100.0	8.0	34.3	100.0	6.3	26.8
DHCs	0.0	100.0	71.4	0.0	100.0	78.0
(n)	10	25	35	9	32	41

Facility inventory

Interviews with health providers show that 72% participated in monitoring activities, 84% in the mountainous districts and 60% in the plains district. In-depth interviews with local officers indicate that training on knowledge and skills are more regularly organized, and efficient scheduling plans. In general, CHCs are monitored once a year by provincial level managers, and once or twice at the district level. In some areas, monitoring is conducted three or four times:

> *"We conducted monitoring trips once a month to the selected districts and once a quarter to non-selected districts."* (Male, age 50, Head of Planning Department, provincial MCH center)

> *"We organize monthly monitoring to CHCs. We plan to organize at least two monitoring trips a year to each commune"* (Female, age 45, Head of Quy Hop DHC)

> *"We monitor 2 times a year at most at the commune level. We divide this district into 3 regions and whenever we conduct monitoring, we visit the whole region, including several communes."* (Female, age 50, Head of Obstetric department Tuong Duong DHC)

> *"According to the monitoring schedule, each CHC is monitored every 3 months, or every 2 months for some CHCs. We organize 4 monitoring trips a year at each CHC."* (Male, Head of Surgery Department, Que Phong DHC)

As regulated, monitoring trips by the higher level should be conducted by a team with representatives from local authorities, the health sector, CFPC, Women's Union and sometimes with participation of experts. For each monitoring trip, the monitoring team coordinates with members of the commune steering committee, including the People's Committee, CHC, CFPC and local Women's Union (WU). All members of the monitoring team have separate responsibilities, using a standard checklist. For example, health representatives are responsible for technical procedures and protocols; WU representatives are responsible for IEC activities, and hygiene; CFPC officers for IEC activities and supply of contraceptives, etc. Local commune authorities are responsible for infrastructure, equipment and consider whether the recommendations of the monitoring team are feasible.

> *"Representatives from the Commune People's Committee (CPC) are responsible for considering whether recommendations by the team are feasible while the WU representatives are responsible for encouraging local women because they can approach them more easily. Representatives from the CFPC have better understanding of the context and they go to visit the commune regularly to encourage and educate on public health. We are working on the technical side so we guide on procedures and detect shortcomings."* (Male, age 35, Head of Gynaecological Department Anh Son DHC)

> *"The role of the MCH center and DHC team is to provide technical support. We divide ourselves into small teams. The chairman of the CPC should look at his/her*

own limitations and decide on the budget for improvement of certain infrastructure of the CHC. Members of WU and CFPC collaborate with the health sector to encourage local women to seek ANC and use CHC services and IECs. Health providers are responsible to determine their strengths and weaknesses of daily RH care services so that monitoring activities can be enhanced toward the improvement of RH care objectives." (Male, age 50, Head of Planning Department of provincial MCH center)

"*In the monitoring trip conducted by district and provincial level, they arrange a group of members to monitor technical procedures, some directly interview midwives, conduct observations and record shortcomings and give feedback immediately. In IEC education activities of the commune WU, the [monitoring committee] can supplement information if important information is omitted. The steering committee members give feedback on our specific shortcomings or request the CPC to make written commitments on financial investment on improvement of CHC infrastructure.*" (Male, age 35, Head of Quynh Ba CHC)

"In 2004, a total of four monitoring trips by the district and two by the provincial level [were conducted]. There are three monitoring targets: firstly the progress of project implementation, secondly, the technical procedures and services provided at the health center and thirdly, the basic infrastructure at the CHC, particularly those related to RH care. They check carefully from the speculum to steam sterilizer and examination and treatment procedures. Monitoring is conducted according to the checklist provided by JICA." (Male, age 58, Head of CHC, Nghi xa, Nghi Loc)

However, at the district level, not all the representatives participate in monitoring trips. Some interviewees from the mountainous districts confirm that monitoring trips are mainly conducted by the health sector, but with irregular participation of members from CFPC and the Women's Union:

"So far, mainly officers from the DHC carried out the monitoring activities and sometimes members of WU and CFPC participated in monitoring, at important events only." (Female, age 36, FP vice team member of Que Phong district)

"In general, there are many different members in the monitoring team, but it's hard to have them all. The main and regular members are from the management board, heads of department, followed by midwives, population team leaders and WU members. But normally the population and WU reprehensive do not attend often enough." (Female, age 50, Head of obstetric department of Tuong Duong DHC)

"Monthly monitoring at the commune level is mainly conducted by the health sector. Sometimes, if members from other sectors, such as WU members or CFPC, are free then they will join. District authorities rarely join and the vice chairman of PPC only join in important events. They are very busy." (Female, Head of obstetric department, Quy Hop district)

c. Effectiveness of monitoring activities:

Interviews with questionnaires with health providers show that 86% of commune health providers and 78% of district officers believe that monitoring is very effective, and respectively, 11% and 22% assess that monitoring is fairly effective. There is no significant difference in the assessment of the mountainous and plains health providers.

Monitoring not only improves RH activities at the local level but also the monitoring skills of provincial and district officers. Interview respondents say that monitoring tasks help improve management skills in provincial and district project implementing activities.

> "*I understand that, thanks to this monitoring activity, I can assess the activities at the local level and draw lessons and experiences to improve my management [skills] and direction of local level activities.*" (Male, age 52, chairman of CFP Committee of Anh Son district)

> "*If we conduct frequent monitoring, then the program is effective and the evaluation of effectiveness of the program is precise. For the health sector, monitoring is very important and it decides the quality and success of the program. Monitoring is based on the performance of annual evaluation indicators of the Evaluation Board, so even when the JICA program is finished, monitoring is still conducted according to the requirements of the targeted programs.*" (Male, age 56, chairman of CFP Committee of Quynh Luu district)

> "*After each monitoring [trip], I think there will be changes in management because the monitoring officers also obtain experience and know what to improve and supplement to accomplish their tasks, secondly, gynaecology is related to the lives of both the mother and the baby-- it is important that any shortcoming or shortages need to be dealt without delay. Only monitoring helps you meet these requirements. The manager may not see the shortcomings in his daily work but after monitoring, these shortcomings become much more explicit.*" (Male, age 43, FP team leader of Nghi Loc district)

In general, most CHCs highly appreciate the benefits of monitoring trips conducted by province and district officers. Local officers also say that monitoring is very useful and a good opportunity for them to review their performances more objectively. Monitoring is now considered a supportive activity, i.e. technical limitations are identified and addressed by monitoring officers from higher levels and difficulties are recommended for discussion by local officers. Monitoring helps improve the quality of health care services provided by CHCs:

> *"Through the monitoring, we understand the shortcomings in technical procedures. I was instructed to improve techniques and shortcomings so my work becomes more and more effective*". (Female, age 33, population collaborator, Quynh Ba, Quynh Luu)

"After each monitoring, I found an improvement in technical skills and management at the CHC. However, some difficulties are impossible to deal with, such as limited budget, or professional knowledge, which is not the same for all health providers. This could be solved by recommended training. Therefore, training after each monitoring was organized annually. There was one training course for secondary nurses and assistant physicians in Obstetrics and Paediatrics in the province in 2003. Much improvement has been made since the implementation of monitoring under the JICA program." (Male, age 58, head of CHC Chau Quang, Qui Hop).

We learned a lot and understood the effects of the program after each monitoring. After monitoring interviews, there is a review on whether our performance is adequate. It is very useful for the commune officers." (Female, age 48, Vice chairwoman of CPC, Nhan Thanh commune, Yen Thanh)

Discussions with local officers show that a review meeting is conducted to discuss shortcomings and any problems to find out solutions and assign responsibilities after each monitoring trip. Findings relating to technical aspects are immediately discussed on the spot and reviewed again in the next monitoring trip. Difficulties and problems encountered in the monitoring with participation of the related branches and organizations are also addressed:

"The addressed problems are assigned to relevant officers for solutions. For example, if the monitored CHC has difficulty with it financial budget, the CHC manager must report to the CPC to call for support. If the problem is the midwife's record book, she would be assigned to ensure that the problem is solved, with a deadline". (Female, age 36, FP vice team leader, Que Phong district)
"*Most of the related problems are solved. For example, if the partograph is recorded incorrectly this month at the CHC, they will improve it in the next month. Or if the counselling is not very good, then they will improve it in the next month."* (Female, age 45, FP team leader, Hung Nguyen district)

"*In the previous years, IEC activities were not wide enough [in scope]; we recommended organizing more training courses for the CHC, CFPC officers, and WU members from the commune to village levels periodically*."(Female, age 49, Chairwoman of WU, Nghi Xa commune, Nghi Loc)

"*In general, any difficulty is taken care of immediately during the monitoring trip, including technical support.*" (Male, age 43, Head of CHC, Hanh Dich, Que Phong)

Problems related to district level are also dealt with immediately, including organization of training for improvement of skills:

"For some shortcomings, we can coach right away, but for some other it takes time to give support. The procedure of washing hands, for example, is taught but if it is not ensured then we organize a training immediately. Or some technical issues,

such as in cases of an ectopic pregnancy leading to repetition of curettage-- if this happens at some CHCs, we then organize training. We have monthly meetings on the 4th every month with midwives in the whole district; we invite gynaecological physicians to talk about this disease. For heads of CHC, we also organize monthly meetings on the 5th and we do the same for them." (Male, age 52, Vice Head of Yen Thanh DHC)

"Similarly, after the monitoring, we give guidance on professional skills during monthly meetings with midwives, such as skills on measuring the pelvis, i.e. each of us is responsible for dealing with certain problems/shortcomings." (Female, age 36, FP vice team leader Que Phong district)

However, not all problems discovered during monitoring could be solved by the following monitoring trip. Results from the qualitative study show that only 20% of the officers at the mountainous CHCs report that all shortcomings found in the monitoring are dealt with and 80% of the health facilities report that the issues are only partly rectified. These percentages are 66% and 34% in the plains areas. The unsolved problems are mainly related to infrastructure and requests for larger budgets to improve the CHCs. It is not easy to deal with these issues, particularly in poorer areas:

"It costs 15 million dong to repair the house ceiling and floor but we cannot afford it. The steps, for example, can be painted with our budget, or we can afford to improve some others such as a sign in front of the delivery room or cleaner water. It is very difficult to get financial support from the commune, particularly if it is related with the management mechanism." (Male, age 48, Head of Planning Department, provincial MCH center)

"It is impossible to deal with all problems. Sometimes, they tell us that they cannot solve that problem due to the requirement of extra budget and others. They can do it only with support from the CPC, otherwise, they cannot." (Male, age 35, Head of Obstetric department of Anh Son DHC)

"Issues related to improvement of infrastructure such as housing and improvements of rooms depend on the local budget so it is impossible to deal with them immediately." (Male, age 46, Head of Obstetric department of Hung Nguyen DHC)

"It seems that the only difficulty is the lack of funds. Because the center is very short on funds despite the recommendations made, the advance was too little."
(Female, age 50, Head of Obstetric department of Tuong Duong DHC)

"It is not necessary to deal with all problems because it depends on many factors. For the commune, it is impossible to improve all infrastructures immediately or to provide all medical instruments." (Male, age 44, Vice chairman of CPC, Chau Quang, Qui Hop)

d. Some difficulties in monitoring activities

Some respondents report inadequate cooperation among the steering committee in the monitoring activities, leading to untimely solutions for problems found in monitoring:

> "*Now I am not working there, if another also left, I wonder what the successor was handed. There is no communication. There should be cooperation and regulations for the steering committee. Because of inadequate planning, it is impossible to monitor each other's work. The successor can't continue the predecessor's work, so problems may not be solved.*" (Male, age 42, Chairman of CFP committee of Tuong Duong district)

Others report that due to lack of additional training for new monitoring officers replacing retiring ones, monitoring activities are adversely affected:

> *"There are very few trained monitoring officers, so some officers who were not trained on monitoring skills still had to conduct monitoring. Their monitoring skills are not very good."* (Female, age 50, Head of Obstetric department of Tuong Duong DHC)

> "Monit*oring skills are not the same for all officers. Some trained officers have retired and the new officers don't have the same skills*." (Male, age 44, Head of Gynaecological Department, Nghi Loc DHC)

On the other hand, some responses bring up the limited time for monitoring tasks because of already heavy workloads, and difficulties in arranging monitoring activities with participation of all principals. This problem is specific to the local commune and the steering committee is recommended to provide a relevant solution:

> "*We are part-time officers. Our main responsibilities relate to many activities with different content so we have limited time… for example, if we are responsible for monitoring remote areas, it is harder to coordinate.*" (Male, age 49, Head of Hung Nguyen DHC)

> *"Some times, all WU members are sent for training in Vinh City, so it is difficult to form a monitoring team."* (Female, age 50, President of WU of Yen Thanh district)

> "*If monitoring is organized once a year within a sector we can have all members [participate], but sometimes although health sector officers can arrange their time, the officers from other sectors are busy. Despite that, it is a requirement for all to participate in the monitoring, but it is hard to have staff and members from all sectors participate in monitoring teams for all 43 communes. Last years, only we had sufficient members to participate in monitoring in about 17, 18 communes.*" (Male, age 48, Head of Quynh Luu DHC)

> "*The difficulty of monitoring is due to inappropriate planning, too many targets for monitoring, selection of inappropriate priority issues, too limited time. Additionally, many activities and tasks overlap, leading to poor management of*

time and progress of the monitoring trip and finally, low quality." (Male, age 49, Head of Nghi Loc DHC)

Lack of funds is also a concern in monitoring activities, particularly in the mountainous districts where travelling and transportation are more difficult:

> *"We are provided with monitoring allowances only, but no financial assistance for travelling. Sometimes, it costs us 300,000 VND to travel to a commune, but we don't receive financial support. This also affects the quality [of monitoring] because it is necessary to encourage officers' enthusiasm in financial terms. We have to pay with our own money for travelling, and receive no financial support from the center."*(Female, age 36, FP vice team leader, Que Phong district)

> "*To tell the truth, we have many difficulties because this is a mountainous area. Travelling is very harsh, mainly by motorbike. If the commune is far, then we have to borrow motorbikes to drive there. There is no allowance. Only monitoring at communes with 20 km distance is eligible for travelling payment, otherwise, we have to pay out of pocket*." (Female, Head of Obstetric department of Quy Hop DHC)

> "*Support for monitoring officers is too little. They have many difficulties, many monitoring trips while there is no support for petrol expense or no allowance. Travelling allowance for a monitoring team is only VND 88,000 a month.*" (Male, age 44, Head of Obstetric department of Nghi Loc DHC)

In some cases, staff shortage leads to irrelevant assignment of district monitoring officers to the lower level. This adversely affects the quality of monitoring:

> "*In fact, commune officers attend more training than those at the district level. The difficulty is that there are not enough physicians to do monitoring so midwives and gynaecological assistant physicians are assigned to do monitoring. Gynaecological physicians are also available at some CHCs, so when the gynaecological assistant physicians came for monitoring, there will be difficulties due to discrepancies in professional knowledge. Secondly CPC authorities do not find monitoring important, so they don't prioritise it.*" (Female, FP team leader, Yen Thanh District)

Difficulties occur when the monitoring officers do not meet with local authorities to discuss solutions to local CHC problems:

> "*The first difficulty is related to the commune authorities. They are too busy so sometimes it is hard to meet with the responsible officer*." (Male, age 46, Head of Obstetric department, Hung Nguyen DHC)

e. Suggestions to improve monitoring activities:

Many report that human resources are the most important factor in improving monitoring activities. Monitoring officers should be trained not only in monitoring skills but also in professional knowledge and provided more support to carry out this task:

"In order to improve monitoring activities, I think firstly, monitoring officers should always be provided with updated professional knowledge and regular training. Professional as well as other knowledge is changing year by year. Technical knowledge is constantly changing, for example. This method is good this year, but there will be a new, better method next year." (Female, Vice Head of provincial MCH center.)

"According to me, monitoring officers should be trained officially with professional skills to ensure quality of monitoring. Without training, they don't know what to monitor, even give incorrect instructions, I think monitoring is very important." (Male, age 57, Vice Director of Provincial Health Department)

"In order to improve monitoring effectiveness, the first requirement is to have professional officers. Additionally, travelling expenses should be supported to encourage more frequent monitoring trips. If they have to pay by themselves, monitoring will be limited." (Female, age 50, Head of Gynaecological of Tuong Duong DHC)

"We find that the monitoring method is fine but monitoring officers should be trained on planning skills so that they have the skills to deal with issues and improve shortcomings relevant to the local context rather than strictly follow the forms provided by JICA." (Female, age 36, FP vice team leader, Que Phong DHC)

Effective scheduling to ensure participation of officers from all sectors and branches is very important in improving the quality of monitoring. It is also necessary for local authorities to provide support and recognize responsibilities in health care in general and RH care in particular to enhance the effectiveness of monitoring.

"The CPC's role should be enhanced to improve monitoring results. Midwives' skills have gradually improved but there is lack of infrastructure. To have safe midwifery, a hygienic environment is also important-- in some CHCs, the floor has been ruined. It takes time to get support from the commune authorities to upgrade it. We also have difficulties in clean water sources, particularly for communes in remote areas. Support from commune authorities is limited. We want our clients to keep hygienic while we don't have clean water for them. So it's hard to meet the requirements." (Female, age 36, FP vice team leader, Que Phong District)

"The issues related to commune budget are difficult to deal with. It's easier if the commune authority pays attention to the issues; otherwise, it is very difficult. The second issue is related to members of the monitoring team. If representatives from WU, CFPC, etc., know their responsibilities, they will be very enthusiastic. But some are not clear on their role in the project, so their contribution is limited." (Male, age 50, Head of Planning Department of Provincial MCH center)

It is necessary to have financial support to improve monitoring activities:

"Another important point is the limited budget for the monitoring team."

(Male, Head of Surgery Department of Que Phong DHC)

"Monitoring should be provided with financial support. For example, in our population sector (VCPFC), monitoring activity has its own annual budget to cover petrol expense, travelling means and all expenses are reported." (Male, age 42, Chairman of CFPC, Tuong Duong district)

"*I am responsible for monitoring at the commune, so travelling is a difficulty. There should be certain incentives to encourage the monitoring officers' enthusiasm and responsibility not only in spiritual but also reasonable financial terms*." (Female, age 38, President of WU of Hung Nguyen District)

"I know that not every one feels comfortable when money is mentioned but according to me, financial support is necessary to do a good job." (Male, age 43, FP team leader of Nghi Loc district)

Reservations were also expressed about the monitoring checklist and that monitoring methods should be changed to avoid boredom:

"During monitoring, there should be some change in the form of monitoring rather than using the same content and method all the time. The questionnaire provided by JICA is kept the same for all communes, but for some very good communes we would like to change the content with questions related to ANC service or ob-gyn emergency treatment. The same questionnaire is used at the beginning and repeated at the end of the year, so it's quite boring." (Male, age 45, FP team leader, Quynh Luu district)

"The questionnaire and checklist developed by JICA project are used year after year without any change in the contents, it's very boring" (Female, FP team leader, Yen Thanh district)

Thus, monitoring is a good way to address difficulties, solve problems and maintain quality of performance. However, to ensure effectiveness of monitoring, it is necessary to invest in human resources to improve monitoring capacity; to increase training for new officers; to develop a stable staffing plan to ensure sufficient members of the monitoring team, and provide financial support for monitoring activity. There should be a mechanism to ensure frequency and favourable conditions for monitoring activities.

3.3. Reduction of abortions at the provincial MCH-FP Center and DHCs

a. Abortion rate

Reduction of abortion is one of the targets of the Viet Nam population, FP, and RH strategy for the period 2001-2010. It is also the project objective in Nghe An, where the prevalence of abortion is high. The project final assessment collected information on abortions at the district and provincial level, based on service statistics in 2004. The data is processed into monthly averages. Results show that averages of 26 abortions a month are performed at the DHCs. The number of abortion clients of the MCH-FP center is 751

persons per month. The number of abortions at the public health facilities reduced in the recent years, from 37 cases a month on average at the DHC in 2001 down to 26 cases in 2004.

The qualitative study (FGDs with health leaders) also provides more information on abortions of Nghe An. In general, since the implementation of the project, the prevalence of abortions has improved:

> *" The abortion rate was 30.2% in 1998, reduced to 28.4% in 2001 and down to 21.6% in 2004. But Nghe An is still the province with a high abortion rate. We are making efforts to reduce this prevalence."* (Male, Vice Director of MCH center)

> *"Since the implementation of the project, the prevalence of abortion significantly reduced. Take for example, while in 1999, there were 148 cases of abortion and 7 cases of MVA, in 2004, these figures were 56 and 2 respectively."*(Male, Head of Surgery Department of Que Phong district)

> *"Previously the abortion rate was quite high, but it has dramatically reduced in the last two years. This means that in 2004, there were only more than 100 cases in the whole district, with 23 communes. There were only 73 cases in my center in 2004."* (Female, age 45, FP team leader, Hung Nguyen District)

However, some respondents state that the abortion rate has not decreased or that the decrease is insignificant and the statistics are not accurate. Officers from mountainous districts report that the abortion rate was still very high. This may be due to the fact that the DHC is the only choice for abortion clients in these districts because of traveling constraints. In the plains areas clients from one district can seek services from another district for many reasons, including proximity.

> *"Despite the availability of the statistics, it is still difficult to assess the situation if the people do not go the DHC in their residential area but to DHCs outside their own, or to higher level facilities. There are many health facilities providing abortion services so the statistics cannot be accurate."* (Male, age 43, FP team leader, Nghi Loc district)

> *"Abortion services provided by private health facilities are very common in other places. But in my district, Quy Hop, it is limited except for some illegal units. Women here mainly come for FP services, and in fact, the abortion rate is still very high. Personally, I think the statistics are not accurate; the abortion rate is much higher than before. For some districts may not record everything, but in Quy Hop, we recorded all."* (Female, Head of Obstetric department, Quy Hop DHC)

> *"According to the population officers, abortions tend to increase, not only among people of reproductive age, but also increased among teenagers in particular."*
> (Male, age 42, Chairman of CFPC, Tuong Duong District)

Teenage abortion is also a concern. A reason cited for teenage abortions is limited IEC and education on adolescent RH. It is therefore, necessary to implement programs on gender and sex education for youth.

> "*This may be due to many social factors, but according to me, there is not sufficient dissemination, communication and education on RH and sex, particularly for adolescents. I think we should integrate education on RH in the curriculum for pupils very soon. This is good preparation for them. Many pupils become are vulnerable due to lack of awareness. But their awareness is raised thanks to IECs on gender and sex, rather than education at school where information is inaccurate or introduced only in primary school."* (Male, age 48, Head of Provincial Planning Department)

> *"Clients also include adolescents because they are not educated [on RH]. There is no project to teach RH. Adolescent clients are also hesitant to mention RH issues or access information. People would like to hear about it, but dare not [talk about it]; they are not provided with sufficient information, so the abortion rate is very high."* (Male, age 42, Chairman of CFPC of Tuong Duong district)

b. Availability of contraceptive methods.

The final assessment shows that contraceptives are sufficiently available at all health facilities in Nghe An province. Intra uterine devices (IUDs), condoms, and contraceptive pills are all available at most of the health facilities. 100% of DHCs (both mountainous and plains) provide IUDs, while 88% of mountainous CHCs and 91% of plains CHCs have IUDs. Condoms are available at 90% of mountainous DHCs and 78% plains, and at 88% mountainous CHCs and 91% plains CHCs. Contraceptive pills are available at 70% of mountainous DHC and 78% plains DHCs, 80% mountainous CHC and 84% plains CHC. Injections are more available in the mountainous than plains areas, 90% at mountainous DHC and 44% at plains DHC; and 88% at mountainous CHC and 66% at plains CHC (table 3.9). Thus, the most common three methods provided in the Vietnamese government FP program, including IUDs, condoms and contraceptive pills are available at all the DHCs and CHCs, regardless mountainous or plain. Availability provides more options for clients in contraceptive methods, and may contribute in reducing unexpected pregnancy.

Table 3.9: percentage of health facilities with available contraceptive services and methods, by type of facility

	Mountainous district			Plains district			Province			
	DHC	CHC	All	DHC	CHC	All	MCH-FP center	DHC	CHC	All
Contraceptive pill	70.0	80.0	77.1	77.8	84.4	82.9	100.0	73.7	82.5	80.5
Contraceptive pill with progestin only	20.0	20.0	20.0	33.3	31.3	31.7	100.0	26.3	26.3	27.3
IUD	100.0	84.0	88.6	100.0	90.6	92.7	100.0	100.0	87.7	90.9
Condom	90.0	88.0	88.6	77.8	90.6	87.8	100.0	84.2	89.5	88.3
Injectables	90.0	88.0	88.6	44.4	65.6	61.0	100.0	68.4	75.4	74.0

Facility inventory

Availability of contraceptive methods is also confirmed during in-depth interviews with health sector managers at both provincial and district levels. The majority confirm the sufficiency of contraceptive provision in the program. Contraceptive methods are provided through the population and health sector, and the health sector is responsible for provision of sufficient contraceptives, particularly clinical methods such as IUD insertion, sterilization, and injections while the population sector is responsible for non-clinical methods such as contraceptive pills and condoms. The availability of contraceptive methods helps reduce unexpected pregnancy and unsafe abortions.

> *"Regarding availability, I know contraceptive methods are always available. Through the population channel or from our center, we provide sufficiently for all districts. Whenever they have the demand we supply them immediately. Through many monitoring trips we also find that they have a sufficient quantity of contraceptive methods."* (Female, Vice Director of MCH center)

> *"There are two sources that supply (contraceptives): one is from the population sector and the other is from the provincial MCH center. There is no lack of contraceptives-- we have all - IUD, condoms, and oral pills."* (Male, Head of Obstetric Department, Nghi Loc DHC)

> *"There are many types of modern contraceptives here but 80% of clients use IUDs. The injection method is not used here. Injections are provided at the communes. Some are plentiful, because they are provided by both population and health sectors, including condoms and contraceptive pills available at the village level and distributed by collaborators. They have all the types. We focus on pills and condoms."* (Male, FP team leader, Quynh Luu district)

c. Post-abortion counseling

At health facilities: Apart from provision of contraceptives for frequent users, health facilities also provide counseling on contraceptive methods to abortion clients. The 2005 evaluation shows that the majority of DHCs (90% mountainous and 100% plains ones) provide post-abortion counseling. This figure is lower at the commune level, with 52%

in the mountainous communes compared with 69% in the plains communes, partly because this service is generally not provided at the commune level.

Health providers at the district and commune levels who are trained on the importance of post-abortion counseling can help reduce repeat abortion cases. Most district health providers and three-fourths of their colleagues at the commune level are trained on counseling on abortion. This figure is higher in the mountainous than plains areas. Health providers are re-trained with additional content for post-abortion counseling. Nearly 90% of district health providers and 70% at the commune level received re-training on counseling on abortion. This figure is higher among mountainous DHCs than plains ones. There is no difference among trained health providers between mountainous and plains communes.

Health facilities help reduce unnecessary abortions via health providers' seizing opportunities to provide counseling on contraceptives to clients, including those coming for RTI/STD examinations and treatment and ANC clients.

The final assessment shows that counseling ANC clients on contraception is still weak, with only 23% of ANC clients in the mountainous DHCs and 11% of plains DHCs receiving counseling on FP after delivery during their visit to health facility. Counseling on FP provided is 9% at the mountainous CHCs 13% at and plains CHCs.

Few health providers (below 7%) at both levels provide counseling to RTI clients on condom use as not only a contraceptive but also for prevention of RTI/STDs. There are no health providers at the district level that provide counseling on switching contraceptive methods for RTI clients. The percentage of health providers that suggest switching contraceptive methods is higher in the plains communes than the mountainous ones (26% compared with 15%).

Interviews with ANC and RTI clients at district and commune health facilities show that most clients (from 95% to 98%) are aware of contraceptive methods. This shows the effect of the propaganda and education activities and reflects clients' attention to and need for contraceptive methods. A high percentage (82% to 97%) of clients know of the primary contraceptive methods, including pills, IUDs and condoms. The percentage of clients of different areas that know contraceptive injections is a little lower, from 40% to 70%.

At the community level: In-depth interviews and FGDs also show that Nghe An province pays sufficient attention to abortion issues and strategies for abortion reduction. IEC activities and counseling to reduce abortion are provided with coordination of other sectors and branches:

> "*Regarding the reduction of abortion, the MCH center had a meeting and made a plan to coordinate with the WU and the CFPC to develop a joint strategy among the three sectors. The WU and CFPC are responsible for IEC activities; the health sector is responsible for counseling and IEC dissemination. Counseling aims to*

prevent repetition of abortions and promote the use of modern contraceptives after abortions. For those who never had an abortion, IEC aims to raise the awareness of the dangers of abortion as well as reasons for abortion and how to use contraceptive methods. We also have a plan to provide counseling for women of reproductive age and adolescents. However it is still difficult to provide counseling for adolescents." (Male, age 50, Head of Planning Department of MCH Center.)

"In order to reduce the abortion rate, we enhance health education and motivation among the local people and promote the use of modern contraceptive methods. When a client has an unexpected pregnancy and comes for an abortion, we provide counseling on the use of contraceptives before and after the abortion. We also introduce 3 or 4 methods for her selection and provide her with the contraceptives she prefers. We provide relevant counseling to avoid repetition of abortion." (Female, age 45, Head of Quy Hop DHC)

In general, the commune WU plays an important role in IEC activities while provision of counseling on abortion is mainly provided by population collaborators or VHWs. At the CHC, midwives will directly provide counseling for abortion clients at both the commune or district health centers.

"Counseling on abortion is made with collaboration among the WU, CFPC and health sector where the health and population sectors play an important role. Before the abortion, the population collaborator, in coordination with the midwife provides counseling and after the abortion, the midwife will take care of the patient." (Male, age 58, Head of CHC, Chau Quang, Qui Hop)

"Counseling before and after abortion is done by both population collaborators and health providers. They come to encourage the client to use contraceptive methods more effectively to avoid any dangers to their health." (Female, age 45, President of commune WU, Nhan Thanh, Yen Thanh)

Health education and counseling aimed at reducing the abortion rate have an emphasis on the dangers of abortion to avoid multiple abortions. Therefore, not only managers and officers but also local people, especially men have understood about the risks related to abortion:

"We provide health education to women of reproductive ages to raise their awareness of the harms of abortion to their health and psychological health through a talk at the commune or in coordination with the WU. In addition, we also talk about contraceptive methods to reduce unexpected pregnancy."
(Male, Head of Surgery Department of Que Phong district)

"In the recent years, the number of abortion has decreased due to a wide health education campaign for women on the risks of abortion and other abortion-related factors that may affect their health and lives. When women are informed, the abortion rate is reduced. Frequent provision of contraceptive services also improves the awareness of young couples on contraceptive methods. This results in

increased use of contraceptive methods among young couples and those of reproductive age, leading to a reduction of abortion rate." (Female, age 42, standing member of WU steering committee of Nghi Loc district)

"*According to me, the harm of abortion is that it may cause after-effects such as cervical infections. It also contributes to the deterioration of health, maybe not immediately but later on when we get older, our health status will be damaged.*"(Male, age 45, living in Chau Quang, Qui Hop)

"Abortion can be very harmful- may cause death- but also abortion cause the uterus and the womb to thin multiple abortions leads to fragility of the uterus, which may lead to death..." (Male, age 50, Chau Quang, Qui Hop)

FGDs with local people living in the surveyed communes show that they are not only widely informed on the risks of abortion but also aware of the benefits of contraceptive methods to avoid unexpected/unwanted pregnancy and abortions:

*"Contraceptive methods are very beneficial, firstly to avoid abortion, ensuring health for the mother, secondly unexpected/unwanted pregnancy will affect their plans in raising their children and finally if the mother participates in social activities, then she will have difficulties. If there is an unexpected pregnancy, then the mother will face more difficulties in raising her existing child, particularly in the rural areas." (*Male, age 42, Chau Quang, Qui Hop)

*"Contraceptives firstly prevent risks to the women's health; secondly avoid unexpected/unwanted pregnancy." (*Male, age 30, Nghi Xa, Nghi Loc)

"To avoid abortion, we should use contraceptive methods such as IUD insertion, condoms or oral contraceptive pills, injections. If the woman's body is resistant to all the methods, then sterilization is an alternative." (A woman, age 36, Tam Quang)

*"Abortion will adversely affect the woman's health so it is better to use contraceptive methods to avoid unexpected/unwanted pregnancy and to avoid abortions." (*Female, age 29, Hoi Son)

Thus, because of IEC activities by both health sector and in the community, according to local officers' assessments, the abortion rate has reduced. Local residents also appreciate the support of JICA in IEC activities on abortion prevention.

3.3. Improvement of RTI detection and treatment

a. Readiness for implementation of RTI detection and treatment

In facility inventories, 66% of health facilities in the mountainous district and 83% of those in the plains districts report that they provide diagnosis and treatment for RTIs.

84% of health facilities report that counseling on RTIs is provided. Counseling is provided more frequently at the district level than the commune level.

2004 commune service statistics show that, on average, 56 gynecological examinations are provided at the CHC in the mountainous districts in a month. This number at the CHC in the plain district is 50. The number is higher in 2005 compared with 2001 (52 compared to 32 exams in a month).

A current problem is the limitation of laboratory tests at the CHC. Wet mount and Gram staining and urine tests are not provided at the CHC. Therefore, it is difficult to correctly diagnose RTIs while CHC providers still examine and treat RTIs by providing unnecessary drugs or antibiotics. Currently, lab tests to diagnose RTIs are conducted at the DHCs.

The project's final assessment shows that wet mount is done at all DHCs, which is a significantly improvement in comparison with 53% in 2001. Gram staining for microbes or fungi is performed at 60% of the DHCs in the mountainous areas and 78% of DHCs in the plains areas, which is double compared with 2001 figures. There is a significant improvement in lab tests at the district level.

Detecting and treatment RTIs largely depends on professional knowledge and skills of the health providers. Interviews with 96 health providers show that about 90% of health staff were trained on diagnosis and treatment of RTIs for both mountainous and plains districts. The percentage of health providers trained on counseling for clients of RTIs is higher among mountainous district health providers compared to plains ones (93% compared with 84%).

Health providers receive training on fundamental knowledge and also attend refresher/advanced training. Interviews with health providers show that in the last 3 years, 89% of health providers from mountainous districts have been re-trained on RTI diagnosis and treatment, compared with 94% of the plains districts. At the CHCs, this figure is higher among the mountainous commune (81%) compared with 77% in the plains communes. The percentage of health providers trained on RTI counseling is rather high, about 94% for both mountainous and plains areas. This figure is again higher among CHCs in the mountainous commune (86%) than in the plains communes (81%). This means that training on RTI diagnosis, treatment and counseling is given great attention. All health providers report that basic and re-training contribute to the improvement of their professional knowledge and skills in RTI diagnosis and treatment.

b. The quality of RTI examination and treatment

Interviews with questionnaire with health providers show that they followed the following procedures to a client suspected to have an RTI: the majority (76 % of DHCs interviewed health providers) requested clients to have lab test before deciding a prescription (74% of DHCs at the mountainous districts and 79% at the plains ones).

However, very few health providers at CHCs prescribe the test (lower than 20%), because laboratory is not available at most of CHC. Counseling to clients on safe sexual behaviors was done for both district and commune level at both mountainous and plains areas (74% and 63% of health providers at DHCs in the mountainous and plains areas respectively; 68% and 63% those at CHCs in the mountainous and plains areas). Only 55% of health providers (in which 53% of health providers at the mountainous DHCs and 58% from plains DHCs) carried out treatment after there are lab results (table 3.10).

However, questionnaire interviews also show that health providers have some limitations on their knowledge and performance for RTI clients. Only 40% of health providers at DHCs (in which 47% mountainous DHCs and 32% at plains ones report that they provide treatment for both partners/spouses. The percentage of health providers at mountainous and plains CHCs following this is rather low (about 20%). Only 32% asked clients about sexual relationships in the mountainous DHCs compared with 21% in the plains districts. This figure is also low at the commune level (44% in the mountainous CHC and 39% in the plain CHC). Encouraging RTI clients to inform their partner/spouse of disease and health status is rarely done by health staff (21% at all DHCs; 11% at mountainous districts and 32% at plains districts). Counseling for RTI clients about effective contraceptive methods will help treatment. The assessment shows that 47% of health providers at the mountainous DHCs and 37% of those in the plains DHCs reported that this message is provided, and is even lower at the commune level (table 3.10). In additional training for health providers, it is necessary to emphasize the following shortcomings.

Table 3.10: Percentage of health providers who perform necessary procedures for clients with RTI/STD risk, by type of facility

	Mountainous districts			Plains districts			Province			
	DHC	CHC	All	DHC	CHC	All	MCH/ FP center	DHC	CHC	All
Examination and diagnosis	89.5	84.0	86.4	84.2	80.6	82.0	100.0	86.8	82.1	84.4
Treatment based on clinical diagnosis	10.5	36.0	25.0	31.6	32.3	32.0	50.0	21.1	33.9	29.2
Requesting lab test before treatments	73.7	16.0	40.9	78.9	19.4	42.0	100.0	76.3	17.9	42.7
Treatment based on the result of lab tests	52.6	0.0	22.7	57.9	6.5	26.0	100.0	55.3	3.6	26.0
Recommending	21.1	72.0	50.0	21.1	77.4	56.0	50.0	21.1	75.0	53.1

	Mountainous districts			Plains districts			Province			
	DHC	CHC	All	DHC	CHC	All	MCH/ FP center	DHC	CHC	All
places for diagnosis										
Recommending places for treatment	26.3	64.0	47.7	31.6	67.7	54.0	0.0	28.9	66.1	50.0
Asking about sexual relationships	31.6	44.0	38.6	21.1	38.7	32.0	0.0	26.3	41.1	34.4
Counseling on preventive sexual behaviors	73.7	68.0	70.5	63.2	64.5	64.0	100.0	68.4	66.1	67.7
Encouraging the client to inform partner/spouse	10.5	16.0	13.6	31.6	16.1	22.0	0.0	21.1	16.1	17.7
Carrying out treatment for both partners/spouse	47.4	20.0	31.8	31.6	19.4	24.0	50.0	39.5	19.6	28.1
Asking about the use of contraceptives	21.1	12.0	15.9	21.1	19.4	20.0	0.0	21.1	16.1	17.7
Counseling on a relevant contraceptive method	47.4	40.0	43.2	36.8	22.6	28.0	0.0	42.1	30.4	34.4
(n)	*19*	*25*	*44*	*19*	*31*	*50*	*2*	*38*	*56*	*96*

Interview with health providers

In the final assessment of the project, 97 clients visited health facilities for RTI examination on the survey date. Researchers observed RTI service provision and interviewed them at their exit. The following information was obtained from observations and exit interviews with clients:

There are not many RTI clients at the DHCs, 7 clients at the mountainous districts and 8 at the plains ones. Among the 7 RTI clients visiting the mountainous DHCs, 4 did lab tests while 3 clients coming in for lab tests among the 8 RTI clients going to the plains DHCs. All the clients who came for testing received results and prescriptions within the day.

In general, for all RTI clients at all levels, the most common topics discussed are the client's age (83%) and ob-gyn disease history (79%). About 50% of the clients received counseling on STD history, contraceptive history and previous abortion(s). Sexual history, including number of partners of the client, number of partners of client's partner/spouse; and history of RTI of client's partner/spouse is not discussed (table 3.11).

Counseling service provision at the provincial MCH-FP center is much better than the lower level. There is no significant difference between the mountainous and plains areas, except that information is reported better in the mountainous than plains area, including STD history (51% compared with 44%), menstruation (71% compared 65%); and

explanation of the importance of treatment of STDs strictly following prescription (78% compared with 61%) (Table 3.11).

Counseling information on RTI prevention was mentioned sufficiently for examination and treatment cases at the MCH-FP center, except for counseling on possible FP method switching. However, counseling service is poorly provided at the district and commune levels. Only 40% and 59% of clients at the district and commune levels respectively mention the most basic information of personal hygiene. Other information is rarely mentioned. For example, only 15% of the clients at the plain commune level receive counseling on the risks of RTI while non of them in the mountainous commune receive this counseling; 25% and 4% of clients at the district and commune levels respectively are informed about the risks of having multiple partners; 14% and 3% of clients at the mountainous district and commune level respectively receive counseling on condom usage as a way of RTI prevention. Some messages are counseled better at the plains communes than at the mountainous ones, including topics of personal hygiene (61% compared with 56%); the risks of RTI transmission (15% compared with 0%); possible FP method switching when the client contracts RTIs/STD (26% compared with 15%). Whereas, some other messages are counseled better in mountainous districts, such as counseling on the use of condoms (24% compared with 0%); personal hygiene (57% compared with 25%), and safe sex (43% compared with 13%). Thus, many topics are overlooked during the counselling process, such as information on the risk of having multiple partners and RTI transmission.

Results are similar in comparison of data between 2001 and 2005 surveys. The information mentioned by health providers remains similar between the two surveys, including: RTI symptoms; obstetric history; menstruation and contraceptive history. In contrast, the following information is rarely mentioned (below 10%): the number of client's partners; the number of the partners of client's partners/spouse and client's partner's RTI history. In particular, neglected information in 2005 was even higher than 2001. This means that limitations revealed from the findings of the previous surveys in 2001 and 2003 have not been addressed.

Table 3.11: The percentage of observed cases of RTI/STD examination and treatment in which health providers discuss related issues with clients, by type of facility

	Mountainous districts			Plains districts			Province			
	DHC	CHC	All	DHC	CHC	All	MCH /FP center	DHC	CHC	All
Issues discussed										
History of STD symptoms	42.9	52.9	51.2	50.0	43.5	44.4	100.0	46.7	47.5	48.5
Ob-gyn history	71.4	76.5	75.6	75.0	82.6	81.5	100.0	73.3	80.0	79.4
Menstruation	100.0	64.7	70.7	62.5	65.2	64.8	100.0	80.0	65.0	68.0

	Mountainous districts			Plains districts			Province			
	DHC	CHC	All	DHC	CHC	All	MCH /FP center	DHC	CHC	All
Multiple/single partners	0.0	0.0	0.0	12.5	0.0	1.9	0.0	6.7	0.0	1.0
RTI history of client's partner	0.0	5.9	4.9	0.0	6.5	5.6	100.0	0.0	6.3	7.2
Used contraceptive methods	85.7	64.7	68.3	12.5	54.3	48.1	100.0	46.7	58.8	57.7
Discussion of FP with partner/spouse	0.0	0.0	0.0	0.0	4.3	3.7	50.0	0.0	2.5	3.1
Previous abortions	28.6	61.8	56.1	25.0	41.3	38.9	100.0	26.7	50.0	47.4
Prevention of RTI/STDs										
Counsel on RTI/SDT/HIV/AIDS	0.0	0.0	0.0	0.0	15.2	13.0	100.0	0.0	8.8	9.3
Counsel on multiple partner risk	0.0	0.0	0.0	25.0	4.3	7.4	50.0	13.3	2.5	5.2
Counsel on condom use in against STDs	14.3	2.9	4.9	0.0	6.5	5.6	100.0	6.7	5.0	7.2
Instruct condom use	14.3	2.9	4.9	12.5	4.3	5.6	100.0	13.3	3.8	7.2
Refer client partner for RTI/STD care	57.1	55.9	56.1	25.0	60.9	55.6	100.0	40.0	58.8	56.7
Counsel on personal hygiene	42.9	23.5	26.8	12.5	17.4	16.7	100.0	26.7	20.0	22.7
Counsel on safe sex/abstinence	0.0	14.7	12.2	0.0	26.1	22.2	0.0	0.0	21.3	17.5
Counsel on possible FP method switching	7	34	41	8	46	54	2	15	80	97
Others	100.0	69.2	77.8	62.5	60.0	60.7	100.0	76.9	63.6	68.8
(n)	*5*	*13*	*18*	*8*	*20*	*28*	*2*	*13*	*33*	*48*

RTI/STI observation

Infection prevention: Pelvis examination is one of the procedures in gynaecological examination, particularly for RTI clients. Strictly following infection prevention/control standards help reduce the risk of infection. Observations of these cases indicate how health providers' examination procedures adhere to these principles.

In the final assessment of the project, in preparation of pelvis examination, 46% of health providers of mountainous DHCs and 44% of those at the mountainous CHCs wash their hands with soap. The relevant percentages are 83% and 78% at the plains DHCs and CHCs respectively. There are health providers who change gloves without washing their hands before pelvis examination, particularly in the mountainous districts (36% of DHCs and 35% of CHCs). These percentages are lower in the plains areas, with 0% among DHCs and 13% among CHCs. It is noticeable that all health providers who provide pelvis examination wear sterilized gloves, with 90% and 97% of mountainous DHCs and CHCs respectively compared with 100% and 91% among plains DHCs and CHCs, respectively. A comparison between the two studies of 2001 and 2005 show that the percentage of

health providers who wash their hands with soap is 60% among DHCs and 73% among CHCs (in 2001) compared with those of 65% and 64% respectively in 2005. Thus, infection prevention principles are not strictly followed in pelvis examination.

Speculum examination is often performed as part of pelvis examination procedure. The final assessment shows that speculum examination is performed for 64% of clients examined at the DHCs and 100% at the CHCs in the mountainous districts, compared 75% and 98% respectively in the plains districts.

In particular, in the final assessment of 2005, no RTI clients were provided with condoms, both at district or commune level, mountainous and plains areas. In the 2001 baseline study, the number of RTI clients provided with condoms was 17% at the DHCs and 5% at the CHCs. Despite availability of condoms at the health facility, health providers still do not provide condoms to RTI clients, which raise questions about awareness of providers about prevention methods.

c. Campaigns to support RTI examination and treatment

Apart from RTI examination and treatment at the health facilities, the health sector also organizes campaigns of gynecological examination and treatment in the community to reduce the prevalence of RTI in Nghe An province. Interviews with health managers at the district and provincial levels show that much consideration has been given RTI examination and treatment in Nghe An and this service is provided throughout the province:

> *"In the recent years, to reduce the prevalence of RTI, we organized some campaigns to provide RH care, i.e. providing medicine for gynecological diseases and treatment for all clients, including ANC. Since 2000, there have been many campaigns, reducing gynecological diseases, particularly among the cases of serious diseases or infections. "*(Male, age 52, Chairman of CFPC of Anh Son district)

> *"We often coordinate with the CFPC to organize gynecological examination campaigns in the whole district. Services and medicine are provided free. After detection of the disease, we asked clients to come to the health center for further counseling, on how to promote hygiene and health and menstruation care."* (Male, age 43, FP team leaders, Nghi Loc district)

> *"We also organize periodical gynecological examination and treatment. All health providers in our center are able to provide the service. We also organize a mobile team to provide gynecological examination and treatment services at the communes. We also coordinate with the CFPC to provide RH care services in the remote and difficult areas."* (Male, Head of Surgery Department, Que Phong DHC)

Apart from organization of the examination and treatment campaigns, IECs for women via mass media or VHW channels are also carried out, i.e. health education on hygiene, use of clean water and visiting health facilities when exhibiting symptoms:

> *"At our place, there are many campaigns aimed at reducing gynecological diseases. Firstly, health education on the use of clean water. There is not money to provide clean water for each household, but in some communes, a public water tap is constructed. We instructed them how to maintain hygiene in these places."* (Male, Head of Surgery Department, Que Phong DHC)

> *"Knowledgeable women go to health facilities whenever there is any suspected condition. But for some poor families, they only go to health facilities when the disease becomes very serious. For those cases, VHWs can provide counseling through group discussion, private talks and encourage them to go for examination. In general, counseling is the most important."* (Female, FP team leader Yen Thanh district)

> *"There is general training on IEC at the community, VHWs also give instructions on daily personal hygiene, in spousal intimate relationships, how to avoid transmission between spouses, provide counseling on monogamous spousal relationship to avoid infection transmission; those women who work under water streams are advised to clean up carefully in the evening. The prevalence of infection has been limited. In the last campaign, the prevalent infections were mainly discharge and microbes and flagella , no case of candidiasis."* (Male, age 40, Head of CHC, Hoi son, Anh Son)

Apart from organization of examination and treatment and health education, more investment on infrastructure for clean water is also planned in areas without clean water to reduce RTI prevalence:

> *"There are more investments in infrastructure for clean water from mountain creeks. Among 13 communes, only 5 communes have water pipes. The water is considered unclean because it is not processed. We are constructing a water station at the water source, using rubber pipes. The district also directed 7 communes to construct the system, but not yet for remote communes."*(Male, age 50, Vice Head of Que Phong DHC)

However, gynecological disease control faces many difficulties, firstly because of the people's limited awareness of personal hygiene and sexual hygiene in spousal relationships. Besides, water source for daily use is not clean in some communes, there is also lack of medical instruments for gynecological examination for campaigns and the comprehensive treatment of RTIs. Health providers and local authorities are aware of these difficulties and have suggested some initial solutions.

"The women in the remote areas are often more uneducated so if we provide treatment to the wife only, but not for her husband, she may contract the infections again." (Male, age 40, Head of CHC, Hoi Son, Anh Son)

*The people, particularly the women, have to work very hard while there is no clean water. The women often use water from streams or wells, which is not clean enough so they easily contract gynecological diseases. Besides, in sexual relationships, many do not want to use condoms, leading to high risk of contracting STDs." (*Male, Head of Surgery Department of Que Phong DHC)

"In each campaign, 200-300 people are provided with examination and treatment in a morning, so it is hard to avoid accidental transmission of diseases from one to another because there are only 8 sets and 8 speculums in the commune. In a recent campaign, for example, we provided examination for 480 clients for 2 days so we had to borrow instruments from other communes but there were not enough. Personally, as a health provider, I didn't feel comfortable with the infection prevention principle." (Male, age 40, Head of CHC, Hoi Son, Anh Son).

"*We provided treatment for women according by giving a standard prescription. We asked them to come back after they finished the dose. But we are not sure if they do come back, that's why the prevalence of women with chronic diseases is still high and it is hard to provide thorough treatment for women*." Male, age 48, Head of Quynh Luu DHC)

Male partners' participation is still limited.

"Not only women, but men should also be aware of these issues. It is possible that the husband transmits the disease to his wife, so men should participate in this activity. For the WU, when we provide health education on FP, we encourage some men to participate in the activity. Some even provided Magie aprons for our IEC session. also It was successful but rare. It is very difficult to encourage male participation. They always think that it's women's business." (Female, age 37, Vice President of WU, Quy Hop District)

"It is noticeable that only women learn from women, men do not know anything, so finally many women want to do FP but their husbands do not want to, which is an obstacle. Particularly, husbands should be provided with counseling on the use of contraceptives. Fungal diseases or RTIs not only effect women but also men in winter, if they do not wash their bodies and have sex immediately after coming back home from a drinking party, it may cause RTIs."(Male, age 57, Vice Head of Quy Hop DHC)

There are some concerns about funds for implementation of activities:

"In general the local people support the implementation of the activities. The difficulty, however, is the limited budget. In this mountainous area, budget for health providers' travel is very limited. It is very difficult to travel and transport in

the remote areas, secondly if we carry out activities at an appropriate time it will be effective, otherwise it is impossible to do any thing if we organize activities during cropping season, thirdly the prevalence is higher in the remote areas."(Male, age 52, Chairman of CFPC, Anh Son District)

In the phase II of the project, JICA also conducted a survey on the prevalence of pregnant women contracting RTIs in 10 communes of 4 districts in Nghe An Province (in 2002). Through this survey, the health providers' competence of RTI diagnosis at the provincial MCH-FP center as well as of the survey districts improved. The center organized training on skills of clinical diagnosis and tests for health providers in 19 districts in the province. This intervention aimed to improve the quality of health providers' competence in diagnosing and dealing with RTI clients in Nghe An.

Before this survey, health providers in Nghe An believe that the prevalence of RTI among women was very high. Similar with other regions in Vietnam, RTIs are often diagnosed based on health providers' clinical experience without lab tests (of fungus, trichomonas, microbes/bacteria, etc.).Among district health providers, it is believed that prevalence is still very high.

"The prevalence of women contracting RTIs is still rather high in Quynh Luu. This is because the people in Quynh Luu mainly do farming work, which is very hard and difficult to maintain proper hygiene. They are too busy earning a living so do not have time to take care of themselves. Gynecological diseases are rather common among women who participated in the RTI examination and treatment campaigns." (Male, age 48, Head of Quynh Luu DHC)

"The percentage of infections is still rather high. According to our statistics in the RH examination campaigns conducted every year, about 80% of women have RTIs." (Male, age 42, Chairman of CFPC, Tuong Duong district)

"*The prevalence is still very high in the community. Nearly 90% of women at various levels, contract STDs, such as vaginal infections and cervical infections level I."* (Female, age 45, Head of Quy Hop District)

Health providers in Nghe An believe that the prevalence of women contracting RTIs is high based on their clinical experience, but without lab tests. The survey on the prevalence of pregnant women with RTIs in some districts in Nghe An are based on lab results and show a lower rate of infection (36%).

3.5 IEC activities

IEC on health care and RH care plays a crucial role in providing information and hopefully changing health care and health-seeking behaviours. This activity is given much attention in the JICA project. IECs evaluation in this study includes health providers' participation in counselling and providing information to clients during service provision, training for IEC officers and IEC effectiveness in raising awareness and changing behaviours.

a. IEC activity at the health centers

Inventory at the health facilities show that RH information is provided in all IEC materials in the service provision system. The majority of health facilities (over 90%) have sufficient materials on FP, prenatal care, breastfeeding, and nutrition for pregnant women. Approximately three fourth provide IEC materials on child care, post-partum care, STD prevention, and HIV/AIDS prevention and control. There is not a significant difference between the mountainous and plains areas. In comparison with the 2001 baseline survey, the number of health facilities with IEC materials on breastfeeding, childcare and nutrition for pregnant mothers and primary health care (PHC) increased in the final assessment.

In 2005, most of the health facilities (95%) report that IEC materials are provided by the JICA project, at both commune (95%) and district (95%) levels. These figures are higher than that in 2001 (68%; 67% and 71%, respectively). The use of IEC materials from other sources such as the Ministry of Health or CFPC declined during this period.

Despite the availability of IEC materials in the majority of health facilities, when asked if there are enough materials to distribute to clients, 32% of the health facilities report that the quantity is sufficient, 64% report that the quantity is not enough for distribution and only 4% report have no materials for distribution. The percentages of health facilities with IEC materials for distribution to clients is higher in 2005 compared to 2001, which is indicated in the improvement of the IECs on MCH care (table 3.12).

Table 3.12: Percentage of health facilities with IEC materials for distribution to clients, by year

	2001	2005
Available, enough	26.3	32.5
available, not enough	61.3	63.6
Not available	12.4	3.9
Total	100.0	100.0
(n)	137	77

Facility inventory

Interviews with ANC clients and gynecological examination and treatment (RTI) clients show that the majority have read the IEC materials provided at the health facility, with no difference between the mountainous and plains areas, and, again, the number is higher compared to 2001 (table 3.13). Clients primarily receive information on pre-natal care (78%). Only one-third says that they received other types of materials.

Table 3.13: Percentage of clients given IEC materials, by type of facility

	2001			2005			
	DHC	CHC	All	MCH/ FP center	DHC*	CHC**	All
Read at the health facility	52.9	43.6	45.2	42.9	76.2	74.3	74.1
Bring home	1.5	7.5	6.5	0.0	13.1	18.9	17.1
Read at the facility and bring home	0.0	2.4	2.0	42.9	10.7	5.2	7.4
(n)	68	335	403	7	84	249	340

*Client interviews; *(P<0.05); ** (P< 0.001)*

Observation of service provision shows that health providers actively participate in health education and counselling on MCH care. This finding is analyzed in sections 1, 3 and 4 under assessment of the quality of provided services.

b. IEC activities in the community

IEC activities target clients at health care facilities and also in the community. Interviews in the qualitative study show that IEC activities supported by JICA were successfully carried out with coordination and participation of many different branches and sectors, particularly the CFPC, the WU and the health sector. IEC activities are quite diversified, combining many different communication channels. IEC is disseminated directly by WU members, P/FP collaborators, and VHWs in the form of exchange meetings, resident clusters meetings, and distribution of materials, leaflets, and newspapers. Information dissemination is also conducted via mass media such as loudspeakers, posters, video tapes, plays and more comprehensive IEC campaigns:

> *"Everyone in Nghe An province knows about the IEC activities for health care. The reason is that the project steering committee at the communes includes the WU, population officers, and local authorities, so many workshops on health care, ANC and post-partum care, reduction of abortions were organized. Therefore, the IEC activities have improved and became ingrained in the minds of women and the WU local officers."* (Male, aged 50, Head of Planning Department of provincial MCH center)

> *"The WU organized contests at the village level; once or twice a year during the IEC campaigns on RH care, the second selection round is at commune level, then at the district level. This is a very interesting approach because people like to directly see the images. Previously we disseminated information by giving lectures in the meeting hall; they listened attentively but then forgot easily. Now they can see what the uterus looks like, where the fetus lies and how it grows, which is much more interesting."* (Male, aged 45, FP team leader, Quynh Luu district)

"Currently, IEC activities have been made theatrical, by organizing contests, forums, using Magie aprons, we introduced members of the club, inviting midwives to come to give a talk. We transform RH knowledge into poem and, folk songs so that everyone can memorize the knowledge more easily."(Female, aged 50, Vice President of WU of Anh Son district)

Forms of activities are very diversified and relevant to the local context, even in more difficult areas without electricity:

"They provided each commune a set of loudspeakers to organize talks to disseminate on FP. However, for some communes in the remote areas such as Lien Hop, Nam Son, Bac Son, where electricity is not provided yet, they come to talk. If there are all mountainous people in the communes, then I come to provide counseling in their own language so that they can understand." (Female, Head of Obstetric Department of Quy Hop DHC)

FGDs and in-depth interviews show that JICA provides IEC materials mainly through WU channels. Bookshelves, with 43 different titles are provided by JICA in most project villages, including material on care for pregnant mothers, adolescent reproductive health, FP, etc. for borrowing. In the ethnic monitory regions, the materials are translated into the local language.

"*JICA provided materials to all WU branches. For the first time, all WU branches have a bookshelf. I provided books to all branches, except for the propaganda posters, which were only provided to each village. It is very convenient*."(Female, aged 50, Vice President of WU, Anh Son district)

"*Members can borrow books, in rotation, in this way, counseling is provided to everyone. In addition, we (WU) have public dissemination, integrated in the meetings."* (Female, aged 49, President of WU, Nghi Xa commune, Nghi Loc)

*"There is a bookshelf at the CHC, I still have two books. Whenever I go for health examinations, I borrow one book to read, and share it with other women. When we finish, we can borrow another book. I think it's good to maintain this activity in Nhan Thanh."(*Male, aged 33, Nhan Thanh, Yen Thanh).

"Materials provided by JICA are sufficient, with good illustrations, helping deepen understanding after reading. We also read the materials then interpret them in the local language for dissemination to ensure readers can understand correctly the messages of effective contraceptive methods." (Female, aged 41, member of WU steering committee, Que Phong district)

In order to successfully implement RH care IEC activities, the project organizes training for IEC officers, and includes supplies of sufficient IEC equipment:

"We are also happy that JICA provided us with IEC equipment, including loudspeakers. We also have a set of loudspeakers in the commune, but we have to

bring it to the commune, then they often borrow them for their dissemination on RH, sometimes with our video tapes. I feel happy that all communes have loudspeakers; even the population sector has their own. We have enough IEC equipment."(Female, aged 50, Vice President of WU Anh Son District)

"*I think JICA supported a lot in terms of infrastructure, materials, knowledge, IECs, such as loudspeakers, radio, and IEC equipment from the district to the commune level. JICA provided loudspeakers for the district and amplifiers for 34 communes for disseminatio*n." (Female, aged 42, member of WU steering committee, Nghi Loc district)

"Regarding IEC equipment, we are provided with loudspeakers and bring them with us wherever we go for dissemination. At the end of 2004, we were provided with an amplifier, so we have enough equipment for IEC activities, even in the remote communes, we organize ourselves to bring the equipment there for IEC activities." (Female, aged 37, Vice President of WU, Quy Hop district)

c. Evaluation of effectiveness of IEC activities

Figures show that IEC activities are effective and practical for the local people. Respondents say that IECs are directly beneficial to the local people in raising their awareness of the importance of MCH care and hopefully lead to behaviour change. People are more aware that they should go to health facilities for health care, gynaecological examinations, ANC, tetanus vaccinations and to deliver at local health facilities:

"Due to IEC, the people's awareness has improved somewhat, more FP is done because there are less deliveries at home and more deliveries at the health facilities, except for the case of very difficult travel or if women live too far away from a health facility. In general, IEC is effective for the local people." (Male, aged 43, FP team leader, Anh Son district)

"In general, IEC activities were extensively implemented… [like] encouraging women to go to health facilities for gynaecological examination. Previously, they did not go for examinations but now they voluntarily go for gynecological examinations. RH care, particularly in gynecological diseases, are given more attention and the women have started using medicine for genital washing. Female staff at the CHC even boils water to give women instructions on how to wash so that they can practice at home." (Female, aged 50, President of WU, Yen Thanh district)

*"Thanks to IEC activities and dissemination, and information provision through mass media, nowadays most pregnant women go to health facilities for ANC. This is not only beneficial to them but also to society. Once your fetus is healthy, you can give birth to a healthy child."(*Male, aged 35, Chau quang, Qui Hop)

In general, local residents believe that IEC content is relevant and commensurate to their educational and understanding level. They believe that information on MCH care and adolescents RH care are easy to understand and helpful for improvement of fundamental knowledge for behaviour change. IEC materials are also relevant for both women and men, and in urban as well as rural areas. Moreover, more attractive forms of dissemination, such as theatrical performances of small plays, resonate with local people, attracting the participation of many

> "*According to me, the content of the books are very useful for spouses and for adolescents, with the information that you may not know or are still worried about and you can learn from the experiences and lessons given in the books. The content is relevant and easy to understand."* (Male, 31, Nghi xa, Nghi Loc)

> "*We found the materials provided by JICA quite understandable, we understand clearly the risks of abortion, its consequences, and the concerns of having many children in a short time.*" (Female, aged 40, Hung Thong, Hung Nguyen)

> "*Some women did not go to school due to difficult family situations, so they cannot read. Books and leaflets with illustrations are helpful for them to understand what food is good for health.* "(Female, aged 32, Hoi son, Anh Son)

> *"Information in the leaflet is understandable even for people with the lowest educational level. According to me, it is very easily to understand. Some with low educational level can understand the content because of illustrated images in the books. I think the materials are relevant within the local context." (*Male, aged 43, Tam Quang, Tuong Duong)

In particular, some IEC activities were aimed at attracting males and other family members' participation in RH care activities**:**

> "*We participated in WU contests. In IEC activities campaigns, we encouraged 48 men participating in the contest from the commune to district level. Previously we had one-way communication, i.e. one-way transmission of knowledge without discussion and particularly visual aids and tools to attract the local people. It is relevant with the local people's educational level*."(Female, aged 50, Vice president of WU, Anh Son district)

> *"Many forms, movements and community participation in IECs in the form of plays were done to attract male participation. We staged small plays and invited them to participate*." (Female, aged 40, Hung Thong, Hung Nguyen)

d. Difficulties encountered with IEC activities:

Despite certain successes, IEC activities alsoo faced difficulties. The primary difficulty is local residents' low educational level and ingrained traditional beliefs, which is hard to

change. Many still believe they need to sons to continue the family line. This detracts from IEC activities on family planning.

> "*Educational levels are different among the local people. For example, two-thirds of the people in Nghi Xa are Christiann and their attitudes are hard to overcome. It is very difficult to encourage them to have abortions. They cannot do that because they are afraid of sin. Secondly, they typically want to have many children. The percentage of IUD insertion iss very high, but after several years they have it removed, leading to unexpected/unwanted pregnancy. They do not have it removed at our CHC, but went to other CHCs nearby*." (Female, aged 52,YT village, Nghi xa, Nghi Loc).

> *"There are still cases of woman having three children. Firstly, because some women livee in remote areas, they go to the field to farm most of the day, so their awareness of having single sex children is still limited, so they are encouraged to have a third child. "(*Female, aged 43, Chau Quang, Qui Hop)

> *"According to the local custom here, if they don't have a son, they will continue to have more children, ignoring others' advice and they do what they want. We can't imprison them. Some women keep having babies until there is a son."* (Male, aged 27, Hanh Dich, Que Phong)

In the mountainous districts, despite JICA's provision of sufficient IEC equipment and materials, impact of the activities is minimal due to low educational levels. Very few people are literate in the Kinh majority language (Vietnamese), so these materials are often impractical:

> *"Many materials and equipment are provided. But the difficulty is due to limited educational level and knowledge. Materials are distributed at home, but they are often neglected…Some can read and write but others cannot, they only see the images so they don't understand everything. Take Kh'Mu and H'Mong as examples, the people don't know any Vietnamese or Thai words so translation is another difficulty. Because the majority of women are dependent on their husbands, women who come for examination are often accompanied by their husbands for translation, otherwise, they do not understand." (*Female, aged 50, Head of Obstetric Department of Tuong Duong district)

> *"Since the implementation of the project, we are provided with many materials, leaflets and IECs on RH care workshops organized by JICA. In fact, the content is quite satisfactory and detailed, but only understandable for those who can read. In my communes, women get married early… they can't read."*(Female, aged 36, FP vice team leader, Que Phong district)

> *"Because the educational level of women is very low and the region is so big, whenever health providers come from the higher level, the main activity is still dissemination but illiterate women do not understand. Therefore, it is necessary to organize training on RH and child feeding, once or twice a year. It is better to*

explain to them at the training course, and then they have better understanding and avoid having a third child."(Female, aged 32, Hoi son, Anh Son)

On the other hand, due to mountainous and remote areas customs, residents often leave home early for farming work far away from their homes. It is difficult for information dissemination to make substantial impact. Electricity is not available in many areas so forms of dissemination via mass media such as television or radio are unavailable.

"The limitation in the mountainous and remote areas is that they can't come here. We can't go everywhere. Only in the commune meetings can we disseminate to the chairperson or vice chairperson of the commune WU but not all the commune WU members can go to the villages for dissemination. In the remote areas, there are VHW networks, but the educational level is low and due to the long distances, women's healths as well as awareness are limited." (Female, President of WU of Tam Quang, Tuong Duong)

"Broadcast through radio is to the central region only. Television does not cover the remote areas, which is one difficulty for information dissemination. Electricity is not available so they can't obtain information via television." (Female, aged 41, member of steering committee of WU of Que Phong district)

"There are disadvantages that limit women's accessibility [to information]. When they work in the field they can't join the meetings we organize for IEC dissemination. When they finish farming work and come back home, then we have already finished the dissemination. Materials are fine." (Female, aged 37, Vice President of WU of Quy Hop district)

Moreover, men may receive information but it doesn't necessarily lead to behaviour changes and specific action. So far, men who participate in dissemination activities have responded enthusiastically but it is harder to gauge if participation leads to behaviour change

*"Only the wives come for condom distribution, while their husbands are too embarrassed. Women always concede [to their husbands]. Not many men in this commune use contraceptive methods." (*Female, aged 25, Hanh Dich, Que Phong)

"When we come to do motivation in the families with single sex children, we are more afraid of the husband's presence, particularly the hot-tempered ones. We cannot talk to them. Farmers are argumentative so population collaborators are often hesitant in these cases. In general, the husband always makes decisions and is always more important." (Female aged 30, Nhan Thanh, Yen Thanh)

"Many women are dependent on their husbands, particularly those with single sex children. They want to stop [having children] but their husbands do not. It is necessary to motivate both of them and the population committee should have a specific plan." (Female, aged 30, Tam Quang, Tuong Duong)

Finally, some CHCs report that lack of IEC equipment such as diapositive film projectors; adversely affect the information disseminated to the people**:**

> *"I found that in the district workshops or workshops organized by experts at the provincial level a set of projectors were used to demonstrate very good films, such as the cartoon film "The Birth of Tomy", or "Linh's story". When invited to these workshops the commune leaders, WU representatives and others enjoyed the films very much. We watched the films several times but still found them very interesting and would like to bring them to the communes but we don't have the projector or the videotapes. Many communes proposed it but we were sorry that we could not provide them because we do not have the equipment."* (Female, aged 38, President of WU of Hung Nguyen)

> *"Request for loudspeakers or radios and video players for direct IEC dissemination have been proposed but we haven't been provided with them until phase II. In general, we cannot conduct dissemination activities through radio."* (Male, Head of Que Phong DHC)

e. Recommendations for quality improvement

Interviewed health providers recommend that training for capacity building for IEC officers is very important to success of IEC activities:

> *"The first is the content; secondly the IEC officers should be trained to have good communication skills to attract audiences. With the same content, if we don't have good communication skills, people get bored… So it's necessary to train communication skills for IEC officers."* (Male, aged 45, FP team leader, Quynh Luu district)

For the mountainous districts, IEC dissemination in minority ethnic languages is a great need, particularly in the places where Vietnamese is not the main language:

> *"There should be IEC dissemination in all the languages/dialects of all ethnic minorities, such as in Kh'Mu or H'Mong language for the Kh'Mu and H'Mong people. Kinh language can be used for the Thai because most of them can speak Kinh. Moreover, dissemination should also be broadcasted in the languages of the ethnic minorities; otherwise, they can't understand it."* (Female, aged 50, Head of Obstetric Department of Tuong Duong DHC)

Dissemination meetings should be organized around residents' working schedules and other constraints for more effectiveness:

> *"Counselling is provided in a talk, so it is more effective to organize meetings in the evening than during the daytime. For some communes, dissemination is organized during the daytime so only women of 15-49 years old of reproductive age could come. Youth and husbands cannot. If it is organized in the evening there will be more participants and more people will understand, including both males and females, both youth and the elderly."* (Female, Head of Obstetric Department, Quy Hop DHC)

It is also recommended that IEC materials be distributed to everyone, especially in the mountainous areas:

> *"Books on FP, for example, are not available in remote areas. In the two bordering villages of Tam Quang district, books on feeding and teaching children are available in villages only where there is a WU board. Leaflets on FP are available in the nearby communes, not in remote ones however."(Male*, aged 46, Tam Quang, Tuong Duong)

3.6. HMIS Quality

One of the project activities is to improve the Health Management Information System (HMIS), ensuring recording and reporting in a systematic and scientific way to assist management, supervision and monitoring of MCH activities in Nghe An Province. Based on the HMIS software provided by the MOH, Nghe An supplemented with specific information tailored to provincial context. To carry out this activity, the project organizes training on HMIS softwares for provincial and district officers and provides computers to provincial and district levels for data entry and processing. These are general health data reporting software, MCH/FP reporting software; and hospital based HMIS software. At the commune level, midwives are trained on how to fill the forms and send them to DHCs. CHCs send monthly reports to DHCs for entering in the district computers then consolidating into a report to submit to the provincial level.

After more than one year of implementation, the quality of HMIS has partially improved. The result of the final assessment show that the majority of health facilities have some staff trained on HMIS and most of them are placed in charge of this task after the training. However, in some plains CHCs, there are no trained staffs and in some DHCs the trained staff does not take over the task.

In general, HMIS operates well at the district level. FGDs and in-depth interviews show that since the application of HMIS for reporting, statistic and reporting tasks has undergone substantial changes. The software assists the district in preparing better, faster, more precise and more scientific reports:

> "*We found consistent information on MCH and FP activities obtained from the same report forms at both district and commune level. The communes send monthly reports to the district, the district then reports to the provincial level, who then continues to report to the heath department and the people's committee with the consistent format.*" (Female, Vice Director of provincial MCH center)

> "*Previously we had to prepare reports manually, which took a lot of time and was very difficult. Since we've been provided with HMIS software everything is faster. Information feedback from CHCs is also much faster than before. It used to take longer time to prepare a report. When we submit our reports to the provincial MCH-FP center, they find out immediately what is good, what needs development,*

for immediate feedback." (Female, aged 36, FP vice team leaders, Que Phong district)

"*This system is very helpful for me, particularly for information management. For example, previously, we had to prepare reports manually, which was not effective or precise. Secondly, the reporting system is available in the computer and is always ready whenever we need it. Previously, we filed a hard copy, and the Head took it away for a meeting and did not return, then we lose it. Now, we must ensure the precision of the data before entering it in the computer, while before we just did it manually without double-checking.*" (Female, aged 45, FP team leader, Hung Nguyen district)

"Feedback to communes is given only when the communes finish their data collection. District officers can recognize mistakes and give feedback for adjustment when the information is incorrect. Previously health data was a major problem for health facilities." (Male, aged 45, FP team leader, Quynh Luu)

The survey shows that HMIS is very useful for management and direction, and supervision and monitoring of activities at the provincial and district levels. Based on the information system, officers can determine strengths and weaknesses, analyze, compare to work out solutions for problems so that feedback from district to commune level is more timely, practical and relevant**:**

"The system that is very useful for us is management. For example, while checking data of neonatal mortality, maternal and newborn death, if we find high prevalence of neonatal mortality or high prevalence of abortions, we immediately make plans to investigate the reasons whether it is due to the low quality of ANC or the lack of ANC visits of pregnant mothers or due to the problem of data collection. Secondly, we can ascertain the number of ANC visits and post-partum visits for appropriate management and direction." (Male, aged 50, Head of provincial MCH center)

"*It is very good to have HMIS. Firstly, it saves time, the computer consolidates the data for us, secondly it helps analyse the data and makes comparison between different points of time. For example, it provides the information on the time when gynaecological diseases are more prevalent, whether it is affected by seasonal factors. I think the system is very valuable. Professional officers can find immediate solutions, which point of time in the year the highest frequency of pregnancies occur to focus more on contraceptive methods at that time*." (Male, aged 45, FP team leader, Quynh Luu district)

"*Yes, it is very useful. For example, we can give feedback immediately to a commune where there is a high or low prevalence of a certain issue. It is also easier to process data and compare data among communes.*" (Female, HMIS manager, Nghi Loc district)

"*This HMIS is of great help. We know how the communes are performing, how the situation at the commune is, including the FP situation, how many families having a third child in the commune or other MCH indicators*." (Male, aged 43, FP team leader, Anh Son)

Officers at the district level also report that with HMIS, the coordination between the province and district levels are more effective in regards MCH tasks. Facility inventories show that after consolidation of the commune reports, most districts send consolidated reports to the province and receive feedback from the provincial level. Feedback on technical issues from the provincial level is reported by 44% of the DHCs and other issues are reported by 77%. However, qualitative research shows that the main content of the feedback from the district to commune level are mainly related with data imperfection rather than technical support:

> "*As a matter of fact, we received direct feedback from the province right after we submitted our reports or when we go for training or meetings, we received very little feedback. Feedback from the province to district is less than from the district to commune level. There is a closer communication between the district and commune level.*" (Female, aged 38, Vice head of Anh Son DHC)

> *"They give feedback only when there is a discrepancy in data input by the commune. They don't have any other feedback to the whole report."* (Male, aged 44, Head of Obstetric Department, Nghi Loc DHC)

> *"There is very little feedback from the higher level to the lower level. Feedback is mainly to HMIS officers, if there is any incorrect data, then the province will give feedback immediately."* (Male, aged 37, CFPC, Yen Thanh district)

> *"An example is the problem of data collection. If there is a discrepancy between the MCH program (reported 15 for example) while the other program (that reported 14), then they would request us to double check. We had to deal with the problem and respond."* (Female, aged 45, FP team leader, Hung Nguyen district)

At the commune level, facility inventories show that reporting formats are sufficiently recorded (at 77% of communes). All communes report sending regular reports to the higher level, and 88% receive feedback. This figure is higher among the plains respondents than the mountainous ones. Among the communes receiving feedback, 60% report feedback relating to technical issues, the remaining report other issues. This figure is also higher among health facilities in the plains areas than those in the mountainous areas.

Disadvantages

Difficulties in recording and report preparation are reported by about 80% of DHCs and 40% of CHCs. The biggest disadvantage of DHCs (87%) for both mountainous and plain areas is that data submitted from the lower level can be incorrect. At the commune level, 38 % also report that data recording is very difficult because they have to collect data from different sources and data is uncorrected . CHCs in plain area find more difficult than that in mountainous area.

In-depth interviews with district officers also show that most of the reports submitted by the communes have problems with data that need adjustments and correction. Data collected from the commune level (not only mountainous but also plains communes) are perceived to be unreliable and affect the quality of information of the whole province.

"There is a huge disadvantage in the management information system at the provincial level because they receive different data from different sources. In general, data discrepancy is unavoidable. Data collection by midwives is different between the mountainous and plains areas, sometimes, data is missing. As a result, the quality of information management is not very good." (Male, aged 50, Head of Planning Department of the provincial MCH Center)

One of the mentioned difficulties is the limited competency of commune health providers despite training-- they are not proficient in data recording. Although filling out forms are very complicated, recording them is considered more difficult for commune officers. District officers say that they have problems with adjusting data submitted by communes at most every month:

"The district is responsible for consolidating data submitted by the communes. Due to the limited competencies of midwives, they make many mistakes in data recording. We had to send back their reports to adjust the data because if the data is not relevant, the computer does not accept the entry. It takes a lot of time to check the report and data." (Male, aged 43, FP team leader, Anh Son District)

"*It is true that reporting is a headache. Several training sessions have been organized for the commune and district levels. We explain every item in the report but they still make mistakes. For example, the total number of ANC visits should be larger than the number of deliveries because some women come for 2 or 3 ANC visits. But they still make this simple mistake. The computer will reject the entry of this data so before we input the data, we have to check if the data is relevant, then inform the midwife of her mistake and discuss our adjustments. For some communes, this simple mistake is repeated every month."* (Female, aged 45, FP team leader, Hung Nguyen district)

"Reports submitted by the communes are often imprecise. For example, there were 5 home-based deliveries and 10 cases at the health center, but there is not a total number of deliveries in the report. This mistake is because the RH part is prepared by the primary level midwives." (Female, Head of obstetric department of Tuong Duong DHC)

"At the commune level, reports from some communes in the plain regions are very good, but from some mountainous communes they are very poor." (Female, aged 44, Health statistician, Que Phong district)

District officers also say that commune officers trained on recording do not take over reporting duties due to career change or being sent for other training. Replacements did not attend training. On the other hand, commune officers are unaware of the importance of the data recording, which affects the quality of information reported to the higher level:

"For some communes, it is due to the weak professional competency of midwives. For some other communes, the trained staff has stopped working or been sent away

for further training so their successors don't do it well. For some communes, they just wanted to finish the job, so they did not pay much attention to the data." (Male, aged 43, FP team leader, Anh Son district)

*"The emerging disadvantage is limited awareness of the reporters. They do not invest much of their time and energy and do not pay due attention to the quality of statistical work. They are unaware of its importance." (*Male, aged 37, CFPC of Yen Thanh district)

Apart from insufficient computers, impractical arrangement of computers at the DHC also affect health information management tasks:

"We have a disadvantage that the MCH data reporting team has only one computer provided by JICA. Of course, when we use the computer for data recording, the health center has difficulties because I am responsible for both technical work and health information management. The computer is now located in the management room, so we cannot arrange our own time to use it. When we want to use the computer, it is occupied by the management staff and when they release it we are busy again." (Female, aged 36, FP vice team leader, Que Phong district)

"*In fact, the MCH program provided us with a computer for data recording only. If it is used for the reporting team only, all the members could learn and update the information, so when one of us is absent the other can cover without difficulties. But due to the lack of computers here, and it is located in this room, shared for other purposes. Even myself, after the training, I do not have many opportunities to practice, so it is a disadvantage. Reports are made every 3 months, so I cannot remember everything, I have to open my notebook again whenever I prepare reports.*" (Female, aged 45, FP team member, Hung Nguyen district)

Some district officers also say that while managing this task, they still lack information knowledge and are in proficient in dealing with the reports, leading to difficulties in operating this system:

"*The first difficulty is my competency [in regards to HMIS]. It is not very difficult to follow all the steps of the software, but the matter is that I am away all the time. I don't have enough time to practice with the computer, so my computer skills are very limited*." (Female, aged 45, FP team leader, Hung Nguyen district)

"There are many procedures with the computer. We are not trained at all on computer skills, we learn by ourselves." (Female, aged 36, FP vice team leader, Que Phong district)

"The difficulty at the district level is that this is the first time information technology has been applied in the health sector. They are trained in office skills but the disadvantages are for the older age staff and their inattention to the new skills, lack of computer skills." (Male, aged 37, CFPC, Yen Thanh district)

"I did not quite understand the content of FP report processing in the training. I studied medicine, but I have been working for the CFPC since graduation, so I am

not confident with my trained reporting skills."(Female, HMIS officer, Quy Hop DHC)

To overcome difficulties in operating HMIS, some recommend more training for officers in charge and stabilizing staff. Computers should not only be provided at district level, but also to the commune level, although this will pose challenges for commune officers to use the computers effectively:

> *"The first solution is to intensify training for officers in charge to increase understanding. Secondly, the management level should ensure staff stabilization and minimize changes in personnel. There should be adequate compensation for the officers."* (Male, aged 50, Head of Planning Department of provincial MCH center)

> *"It is obvious that in order to maintain consistent data from the commune to district and provincial level, training is necessary. Commune officers should also be trained on information skills. The district officers work with computers while commune officers do not, This is a problem. It would be difficult to integrate the commune level to the computer network in the future.*" (Male, aged 37, CFPC, Yen Thanh district)

> "*I would like to recommend training and supply of computers and the information system for health facilities of 12 communes, a district town and two polyclinic centers*." (Female, aged 44, District health statistician)

> "*I think JICA provided computers for the districts for data management, but it is better if the CHCs are also provided with computers. I know that it is difficult, but it would be much more convenient. The link from district to province is fine now, except for that between districts and communes.*" (Male, aged 44, Head of Obstetric Department, Nghi Loc DHC)

Consistency in forms for information collection, particularly at the commune level, will help keep recorded information short and simple:

> "*I think that it is better if the MOH and RH Department agree on the same form for all levels. I know that Vietnamese information and statistics are very poor and unreliable. It is most reliable to ask midwives about RH information. But according to the Head of that CHC, the information is updated on the 20th monthly as requested by local authorities, while it is recorded on the 30th monthly by the RH program. This causes discrepancies so it is difficult to keep consistent reports.*" (Female, Vice Director of Provincial MCH center)

HMIS-related tasks require more regular training on data management and recording for the commune level because they are the primary collection units for the HMIS. Refresher training for replacements in the case of staff change is also recommended.

Chapter 4

Relevance, effectiveness, efficiency and sustainability of the project

The objective of the RH project supported by JICA in Nghe An province is to improve RH care for women through the provision of essential equipment for district and commune health facilities; through training to improve the professional competency of health providers, particularly midwives at the commune level; and through training activities and provision of IEC materials to the WU, and to encourage the participation and coordination of all sectors, organizations and associations in RH activities.

In chapter 3, the results of the final assessment of the project have been analyzed according to six main project outputs. The project achievements can be evaluated in an additional manner, which is often applied by JICA, i.e. the assessment of results of the project based on four aspects: relevance, effectiveness, efficiency and sustainability of the project. In chapter 4, these four aspects will be analyzed based on the results from the qualitative and quantitative project assessment.

4.1. Relevance of the RH program in Nghe An

According to JICA's *"Instructions on supervision and monitoring"* (1996), the *relevance* of the project is evaluated based on indicators of whether the project correctly identified the appropriate requirements of the country and whether the project was designed closely in alignment with the overall national program/master plan.

The Nghe An RH Project, supported by the Japan International Co-operation Agency (JICA) focuses on improvement of RH of women in the province. This project is one among very few RH projects supported by international donors, and targets rural areas and focuses on women's health at all levels with an orientation to community health promotion. The improvement of women's RH is a high priority of the Ministry of Health (MOH) of Vietnam in recent years. At the *macro-level*, the project's objectives correspond with those of the National Strategy on Reproductive Health in general, as well as with those of Nghe An RH Program specifically. Following are some relevant objectives of the National Strategy on Reproductive Health (NSRH):

> **Objective 2:** *To sustain the fertility reduction trend; to ensure the rights of women and couples to have children and select contraceptive methods of good quality; to reduce unwanted pregnancies and abortion related complications.*
>
> **Objective 3:** *To improve the health status of women and mothers; to obtain a further reduction in maternal mortality and morbidity, peri-natal deaths and infant mortality between different regions and target groups, with special attention to disadvantaged areas and to beneficiaries of government policies.*

Objective 6: *To improve the RH status, including sexual health, of adolescent through education, counseling and provision of RH services suited to different age groups.*

Objective 7: *To improve the knowledge of men and women about sexual relations and sexuality to fully exercise their rights and responsibilities towards reproduction; to promote safe and responsible sexual relations on the basis of equality and mutual respect to improve RH and quality of life.*

At the *micro-level*, program relevance is reflected in many ways. Establishment of the project steering committees at all levels (province, district and commune) with representatives from the local authorities, health sector, CFPC and WU is totally appropriate in implementing a health project in rural areas. It promoted strength of collaboration among several local institutions and organizations where most local members of the project steering committee (PSC) are at the same time leaders of these institutions and organizations. In-depth interviews also provide insight to different project activities (such as training of midwives, provision of medical equipment to health facilities as well as training and distribution of IEC materials through the local Women's Union network). All of these activities are appropriate, with urgent need for improvement of women's RH status and health providers' technical competency and capacity of other organizations in providing RH care to women at all levels, especially the grass-roots level. Program relevance overlaps with program effectiveness and efficiency in this assessment as discussed below.

4.2. The efficiency of RH programs in Nghe An

Program efficiency not only reflects the productivity of program inputs in terms of quantity but also in quality of services the program may offer to clients. Regarding the quantitative dimension of the program, efficiency can be assessed through the readiness of a health facility to provide services. Attention towards quality of maternal and RH care is evident through investments to ensure the readiness of health facilities to provide services. Important supporting components mentioned include the infrastructure of facilities, providers' technical competence, the availability of IEC materials and activities, logistics, recording system and regular monitoring and supervision of the facility activities at the higher level.

In general, readiness (also called package approach) is seen at the surveyed health facilities in terms of infrastructure, equipment, human resources and logistics to provide various RH services for clients, particularly antenatal, intra-partum, and post-partum care.

The readiness/package approach significantly improved in comparison with the 2001 baseline survey. Results from both studies show that JICA's financial support plays an important role in enhancement of the health status of the community, and is also evident in the long-term impact of the program funded by JICA in RH care and FP:

- In general, the infrastructure meets the requirement of tasks, particularly RH care for mothers. Infrastructure has been upgraded to satisfy basic conditions for improvement of RH care services at the commune level. Clean toilets were built, electricity and working telephone lines are now established. Separate delivery rooms are available at about 86% of CHCs. Despite a higher figure compared to the baseline survey in 2001, the percentage of health facilities that have separate rooms for ANC services, FP room, and gynaecological examination is still rather low.

- In comparison with the baseline study, the percentage of CHCs that have a separate room for counseling and with adequate privacy increased (from 44% and 24% in the baseline survey in 2001 to 51% and 46% in the final assessment). Sufficient types of IEC materials are available at the counseling space.

- Essential equipment is sufficient, provided by different sources, in which JICA is the largest contributor, particularly at the commune level. Most of the equipment and facilities provided by JICA are still in good condition and usable. However, at the time of the final assessment study, equipment and facilities at some CHCs are still not of good quality, for example, stethoscopes at the CHCs (46%), blood pressure measuring devices (47%), goose lamps (30%) and vaccumn aspirators (21%) fall below standard. At some facilities, certain equipment are irrelevant with the services provided, such as abortion kits at CHCs (CHCs are not allowed to provide abortion services), or steam sterilizers are not usable due to the requirement of high power capacity, or speculums are too big. All the delivery rooms are well equipped with amenities purchased with financial support from JICA.

- Qualitative results show that health providers believe that the strength of the project lies in the supply of equipment for health facilities, which is based on specific demands. Before establishing a list of demanded equipment, the project organized a survey to determine local level needs. Therefore, the project is evaluated to be efficient.

- The majority of health providers are trained and receive refresher training (through the government's programs as well as other projects). Training topics include RH, particularly RH care for women and counseling for reduction of abortion. In the final assessment, 92% and 84% respectively of district and commune health providers report that they attended refresher training in the past three years, in comparison with 71% and 65% in 2001. Most health providers are trained on ANC skills and treatment of pregnancy-related complications and apply their skills in their daily work. Survey findings show that project trainings are effective and of good quality, meeting local level requirements.

- Most health facilities have IEC materials on FP, antenatal care, breastfeeding, and childcare. The percentage of health facilities that report receiving IEC materials from JICA in 2005 is much higher than that in 2001 (95% at the district level and 95% at the commune level compared with 71% and 67%, respectively). The percentage of health facilities that have sufficient materials to distribute to clients is also higher than 2001 findings (47% compared with 24%). JICA IEC materials are also distributed through the WU network. A bookshelf provided by JICA is located at each commune for women to read and exchange books with each other.

- The logistical system providing clean delivery kits and iron tablets for pregnant women improved since 2001 (these facilities are not included in the framework of the JICA project). 49% of CHCs have clean delivery kits and 65% have iron tablets for pregnant women. These figures are higher than those in 2001.

- Provision of contraceptives is carried out by the government health and population sectors. Due to effective coordination of these two networks, contraceptives such as IUDs, oral pills, condoms and injections are available at all health facilities. The availability of these contraceptives provides more choices for clients to avoid unexpected /unwanted pregnancy.

- The recording book system on MCH/FP data is sufficient. Most health facilities have officers trained on HMIS, and in particular, commune officers are trained on recording data onto forms to submit to the district level. District officers are trained on the software to input and process the data for consolidation and report to the provincial MCH-FP Center. Filling in forms at the commune level is done properly and correctly in 77% of CHCs. The HMIS system operates well at the district level. However, 89% of health facilities at the district level and 40% of CHCs report difficulties in recording and archiving data. The main difficulty at the district levels is due to inaccurate data recording from the commune level while the main difficulties at the commune level are insufficiency of data, limited skills of officers and their limited awareness of the importance of precise data recording for management. Feedback from the higher level to the lower level is rather good.

- The RH programme in Nghe Anh receives financial support from different sources, including the government and other organizations. Funds from these sources mainly support infrastructure, equipment supply, training for health staff and health education for local people. In general, the objectives of these funds do not overlap except for the construction of toilets.

- Coordination among different institutions and sectors (health, population, the WU, as well as other organizations and associations) at the local level on MCH/FP care is efficient and convenient. This close coordination shows most clearly through routine meetings of the population committee with the participation of other organizations and associations; through close collaboration in IEC campaigns, provision of services and integration of this activity into regular activities of the organizations and associations.

- Establishment of project management mechanisms from the center to the commune level utilizes the close coordination among different organizations because members of the project steering committees are also leaders of these organizations such as health, population, local authorities and Women's Union, etc.
- Monitoring activities not only help improve RH care services at the commune level but also enhance the monitoring competencies of the provincial MCH-FP center and DHCs. Findings show that monitoring helps improve management and execution of work at district and provincial levels. Qualitative interviews with managers also show that monitoring is an effective tool to identify shortcomings and difficulties in order to improve the quality of work at the lower implementation level. However, in order to ensure quality of monitoring activities, it is recommended to invest in additional training to raise level of competency, to provide training for new officers, and develop a plan to ensure sufficient members of the monitoring team from relevant organizations and associations. A mechanism to ensure more frequent and convenient monitoring activities is also recommended.

4.3 The effectiveness of the program

According to *"Instructions on supervision and monitoring"* (1996), the *effectiveness* of the project is to evaluate project achievements against its targets. In this report, effectiveness will be considered in the aspect of the quality of services provided to clients based on the six project outputs; and the effectiveness of JICA's contribution in terms of infrastructure, technical assistance and support of human resources to the RH program in Nghe An.

The quality of services provided to clients at the health facilities is improved: The readiness/package approach of the health facilities is the fundamental factor in improving the quality of service provided. Particularly, the provincial MCH-FP center, which is an agency with high technical competency, can promote progress in RH care in the whole province.

- Indicators for RH care for mothers show the effectiveness of the RH/FP program in terms of positive impact on behavior. The percentage of pregnant women who receive ANC services at the mountainous CHCs is 88% and 97% among plains CHCs. The percentage of pregnant women who have had two vaccination shots against Tetatus is 88% at the mountainous CHCs and 98% at the plains ones. The percentage of deliveries assisted by trained health providers is 82% at the mountainous CHCs-- a little lower than plains ones (98%). Each pregnant woman at the mountain communes makes approximately 2.7 ANC visits, compared with 3.7 times at the plains areas. In comparison with 2001, figures in the final assessment of the project are generally higher, indicating successful safe and hygienic delivery. These figures are calculated based on CHC official regular reports.

- Similar with the results of the baseline study, the final assessment shows a good relationship between health providers and their clients. Health providers exhibit a friendly attitude towards clients, listening to them, asking questions and reserving sufficient time for each client. Clients say that they are satisfied with services they receive.

- Information exchange between health providers and clients during counseling for ANC clients or RTI clients is rather good, particularly at the MCH-FP center. Most ANC and RTI clietns receive counseling on issues related to the objective of the visit rather than comprehensive information on RH. For example, about 90% of ANC clients at the district and commune level receive counseling on nutrition during pregnancy, tetanus vaccinations and visits to health facilities when there are warning signs. But very few women discuss precautions of medicine usage during pregnancy (under 18%), or sexual relations during pregnancy (under 15%).

- About 60% of RTI clients at the commune level receivedcounseling on personal hygiene and the importance of compliance with medication prescriptions; 20% are counselled on safe sex and possible switching of contraceptive methods. Very few clients (below 10%) receiving services related to RTIs and STDs are counselled on RTI prevention such as the risk of transmission, safe sex and condom usage for prevention, etc.

- Counseling before and after abortion is mainly provided at the district health facilities where abortions are performed. Interviews with questionnaires show that the majority of health providers attend training on counseling on reduction of abortions. Interviews with community leaders show that counseling abortion reduction is done through IEC activities at the community level, through WU networks, village health workers (VHW) and population collaborators. Counseling appears to focus on the risks of abortion. Counseling also emphasizes the usefulness of contraceptives in reduction of unexpected/unwanted pregnancies and unwanted abortions. Health, population and community leaders also understand that to reduce abortion, it is necessary to provide many choices of contraceptives for clients. A strategy, therefore, has been established to ensure the availability of contraceptives for anyone in need.

- Most health providers have conduct basic ANC as well as emergency treatment of cases in later gestational age. The percentage of those who effectively follow these procedures is higher than that of 2001, proving another improvement in safe delivery.

- However, there are limitations in that infection prevention/control principles are still violated in pelvis examinations. In the final assessment, in preparation of pelvis examinations, only 45% and 44% respectively of health providers of mountainous DHCs and CHCs wished their hands with soap. These figures are higher in the plains areas, at 83% and 78%, respectively. There are still some physicians who do not wash their hands (they only change gloves) before pelvis examination, particularly among mountainous district (36% of DHCs and 35% of CHCs). This percentage is lower in the plains districts with 0% of DHCs and 13% of CHCs.

- Most midwives receive training on the use of partograph. In the final assessment, the percentage of health providers who use the partograph at the DHC is high 90% (mountainous) and 80% (plains). This figure is 100% among mountainous CHCs and 97% among plains communes. The overall percentage of health providers that used partographs increased signifcantly from 72% (DHCs) and 60% (CHCs) in 2001 to 85% for the district level and 98% for the commune level in 2005.

- With a focus on women's health, the RH project supported by JICA has made a strong impact on the improvement of community health and people's awareness, particularly for women of reproductive age. 97% of clients visiting health facilities know of contraceptive methods. The majority (90%) of interviewed clients know about STD/HIV/AIDS, their symptoms and about prevention. The majority of women participating in FGDs know very clearly how to take care of pregnant mothers and about nutritional diets for children.

- Raised awareness contributes to changes in women's health-seeking behaviors for RH services. Pregnant women know that it is necessary to have ANC check up early when the gestational is only about 15 weeks, which is earlier than that in 2001 (29 weeks). All pegnant women have their own home-based maternal record (HBMR) book.

- In general, RH services are convenient and accessible to clients. Clients are satisfied with the services. The majority of clients (83%) state that the reason why they select the commune health station is because of convenience.

Local leaders highly appreciate JICA's contribution:

- JICA support has initiated significant changes for RH care in Nghe An, particularly at the grass-roots level. In particular JICA support impacted infrastructure, equipment and particularly IEC materials and improvement of professional skills for health cadres, especially for midwives or WU members at the local level.

- Equipment provided by the project is relevant and include essential tools to ensure that all CHCs are capable of providing hygienic and safe delivery.

- The JICA project contributes to positive professional changes towards the improvement of quality of services for clients and improvement of people's awareness, particularly for women of reproductive age.

- The presence of longterm Japanese adviser/experts working in close cooperation with Vietnamese counterpart aims to exchange knowledge and experience. This working method help ensures the effectiveness and the relevance of the program.

- Training courses organized by JICA for midwives at the local level or training sessions on IECs are highly appreciated by local leaders. Training was evaluated to be very practical and relevant.

- Training/study tour to Japan: In implementation of the project, many key staff at the provincial and district level visited Japan for training. The training aims to increase understanding, create opportunities for exchange of knowledge and experience on health management at the local level, and improve MCH community activities. The Vietnamese officers find these learning Japanese experiences to be relevant and useful for their work in Vietnam..

4.4. **The sustainability of the program**

In this evaluation, results and interviews with local leaders show intent to sustain the achievements of the project as well as the sustainability of activities to improve the quality of RH services:

- A project management unit with participation of important organizations and sectors including local authorities, the health and population sectors and the WU is guarantee for the sustainability of the project because RH care for women relies on the technical functions of these organizations and sectors.

- Local leaders show strong commitment in sustaining the project activities and have a plan to discuss action plans for the future. For example, sustaining the project activities can be done by integrating technical training for midwives into routine meetings at the district level or integrating monitoring activities on RH care into other technical monitoring activities of the health sector.

- Local project officers' improved awareness of RH care is an important foundation for contining activities to promote high- quality service provision.

- Findings show that the JICA project has positive impact in the Nghe An health sector as well as for RH care. One way to sustain the project in the long run and mobilize achievements is to link achievements with national sources of investment in this sector, such as the state budget for the Population sector (CFP committee), and the national program for health, or through other local financial sources.

Chapter 5

Summary and recommendations

The final assessment was carried in 77 health facilities, including the MCH-FP center, at 19 districts and 57 communes in Nghe An province. Plains and mountainous health facilities are included in the final assessment. All surveyed health facilities receive financial support from JICA, between 1997 at the earliest and in 2001 at the latest.

Results from the final assessment show significant improvement in RH care in Nghe An since the baseline survey was conducted in 2001. The achievements of the RH program in Nghe An are supported with contributions of the Government and other donor agencies. JICA's role is acknowledged to be very important and highly appreciated by community leaders, professional officers at different levels, and the local people.

5.1 Achievements are assessed according to six project outputs

1. Improvement of hygienic and safe delivery at the commune health center (CHC)

Improvement of hygienic and safe delivery at the CHCs is assessed through the following indicators: infrastructure; skilled and professional health providers (midwives); and pregnant women's awareness in following health providers' advice on health care during pregnancy (enough ANC visits and tetanus vaccination shots, etc.) and after.

In comparison with 2001, the fundamental infrastructure conditions to ensure hygienic and safe delivery improved at the time of the final assessment survey. In the final assessment in 2005, the percentage of CHCs with a separate delivery room increased to 86% compared with 59% in 2001. This figure is lower among mountainous CHCs (76%) compared with the plains ones (94%). The percentage of CHCs with delivery rooms following infection prevention/control and safety principles is also higher than that in 2001. The conditions for infection prevention and safety principles include boiled water for midwives' washing hands; delivery kits and neonate resuscitation equipment; the availability of essential medicines, particularly oxytocique such as oxytocin and clean delivery packages.

Other factors to ensure hygiene of health facilities improved in 2005 in comparison with those in 2001, including usable toilets, clean toilets, working telephone lines, sufficient light and clean water. Conditions are better among plains CHCs that the mountainous ones.

The percentage of CHCs with *clean delivery kits* in the mountainous areas is 40% compared with 56% of plains ones. Iron tablets for pregnant women are available at a high percentage of CHCs (65% for both plains and mountainous areas). In comparison with the results of the baseline survey in 2001, the percentage of CHCs with clean delivery kits and iron tablets significantly increased (49% of CHCs have clean delivery

kits and 65% provide iron tables for pregnant women compared with 25% and 47%, respectively in 2001). This shows a great improvement in health care services for expectant mothers.

Health providers, in this evaluation, midwives are trained on hygienic and safe delivery; provision of counseling to pregnant women; detection of warning signs during pregnancy and the use of partographs.

Readiness strengthening produces good results. The percentage of pregnant women who receive ANC with home-based maternal record (HBMR) books is very high (100%); the percentage of pregnant women receiving ANC is 88% at the mountainous CHCs and 97% at the plains ones. The percentage of pregnant women who have two tetanus vaccination shots is 88% at the mountainous CHCs compared to 98% at the plains ones. The percentage of deliveries assisted by trained health providers is 82% in the mountainous CHCs, which is a slightly lower than plains ones (98%). The average number of ANC visits is 2.7 times in the mountainous areas, lower than the average in the plains areas (3.7 times). The first ANC visit of primi-gravida women is earlier, at the gestational age of 15.6 weeks. In general, all these indicators are better than the baseline survey results and exceed the project objectives (these indicators are presented in the Project Design Matrix (PDM) adjusted in 2002), indicating significant improvement in hygienic and safe delivery.

Counseling is emphasized during ANC examination. Observation of 250 ANC examination cases show that health providers mention important points relating to the safety of pregnancy and delivery during the counseling session. These messages include "nutritional diet during pregnancy" (about 95% at both moutainous and plains CHCs); "workload and rest during pregnancy" (86% of mountainous CHCs and 91% of palins CHCs); health providers instruct the clients to "detect warning signs during pregnancy" (above 89% among moutainous CHCs and 82 plains CHCs); reminders about tetanus vaccinations (82 % among mountainous CHCs and 91% among plains CHCs). The professional competency of health providers during ANC examination remains the same.

In in-depth interviews with health leaders at the provincial, district and commune levels of Nghe An province, the majority believe that the MCH program, particularly ANC, hygienic and safe delivery, and post-partum care services significantly improved. CHCs are now reliable facilities that attract women to seek ANC services and assistance for their deliveries.

Difficulties and limitations: Despite great improvement in MCH services in both the mountain and plains districts, there are still some difficulties, particularly in the mountainous districts, which have geographical and traveling disadvantages, scattered residential areas, and difficult economic situation, leading to limited accessibility to the health facility. Women still deliver at home, although their deliveries are assisted by VHW or midwife with the use of clean delivery kits when possible. Support from local authorities to ensure favorable conditions for operation of the CHC is still limited (such

as lack of conditions for operating some sterilizers). In some places, investment in infrastructure is not adapted to the local context, leading to wasted or unused resources.

Recommendations:

- Home deliveries will remain prevalent among ethnic minorities in the mountainous communes/district due to custom and difficulty in traveling from home to CHC. Therefore, it is necessary to ensure that deliveries outside health facilities are hygienic and safe, with the assistance of trained health providers (VHWs or midwives) and the use of clean delivery kits.
- To encourage and mobilize more coordination of local authorities for better use of sterilizing instruments, such as steam sterilizers and sterilizing boilers provided by the project to the CHCs.

2. Improvement of monitoring competencies of the provincial MCH/FP center and DHCs

Monitoring activities at the lower level are well-received. The project established monitoring teams at the provincial and district levels, including representatives from the local authorities, health and population sector and Women's Union. The project also established standard monitoring tools and an annual schedule for each level. According to the schedule, the province is responsible for monitoring the district and commune level while the DHCs are responsible for CHCs.

All members of the monitoring team are trained on monitoring skills and understand the nature of monitoring is to support the lower implementation level to solve problems to improve their work, rather than only pointing out shortcomings to criticize.

Facility inventories show that all the DHCs are monitored by the provincial level, and all CHCs are monitored by the district level. 61% of CHCs report that monitoring trips are conducted once a month. This figure at the DHC level is about one-third. Monitoring activities are conducted more regularly in the plains areas than in the mountainous ones, and the frequency of monitoring in 2005 is higher than that in 2001.

Interviews with health providers show that 72% participate in monitoring activities, with 84% among mountainous district compared with 60% among plains districts.

At the monitored health facilities, representatives from local authorities, health and population sectors, and WU take different responsibilities to identify problems, discuss solutions and arrange different tasks among the team members to deal with specific problems. Technical shortcomings are often addressed immediately through technical assistance, and training and reviews are conducted during the next monitoring trip.
In general, most CHCs express appreciation for the benefits of monitoring conducted by the district and provincial levels. Local officers report that monitoring is very useful and provides opportunities to review their work in a more objective way. Findings show that

monitoring helps improve the quality of health examination and treatment services provided by the health facilities.

Local officers appreciate the monitoring skills of officers from the provincial MCH-FP center—the efficient preparation for the monitoring trip, professional skills, communication, working style, and providing effective examples for the lower levels in their monitoring activities.

Monitoring activities not only contribute to the improvement of RH care services at the local level, but also the monitoring capacity of monitoring officers of the provincial and district levels. Providers report that monitoring improves their management work at the provincial and district levels.

However, not all the disadvantages and problems addressed during the monitoring trip are solved in the next trip. Only 20% of the mountainous health facilities report that all problems had been solved and 80% reported that some problems were solved. These figures are 66% and 34% respectively among the plains health facilities.

Difficulties and limitations:

- Due to the fact that most of the monitoring team members work at the management level for their own organizations and only work part-time for the project, it is hard to schedule to accommodate all the members. The team does not often have all desired members participating in each monitoring trip.
- Monitoring skills are uneven due to lack of training. Particularly in the mountainous districts, some monitoring officers are not trained in monitoring and supervision so they do not know about monitoring content or protocol.
- Lack of budget for travel leads to the limitation participation of some members because they must pay out-of-pocket to travel to the monitoring site.
- Professional shortcomings and problems are more easily addressed than problems relating to infrastructure. Infrastructure problems that need a big budget can not be solved, especially in the poor areas.

Recommendations:

- Organize supplemental training on monitoring skills
- Develop solutions for absence of monitoring team members
- Provide a travel stipend for monitoring team members
- Consider a complementary mechanism to periodic monitoring trips (once or twice a year) by routine and more frequent activities. For example, improve the quality of monthly and quarterly meetings.
- Encourage and mobilize the cooperation of local branches and organizations, including the local people, to mobilize funds for CHCs to deal with current infrastructure deficiencies.

3. Reduction of abortions at the provincial and district levels

Abortion of reduction is one target of the National Strategy of Reproductive Health Care and also an RH project output. Health facilities statistics collected through the final assessment of the project show that there is an average of 26 cases of abortion a month per DHC, compared with 751 cases at the provincial center. Compared 2001 figures, the average number of abortions per month at a DHC reduced from 37 cases (2001) to 26 cases (2004).

In-depth interviews with provincial and district health managers show significant reduction in the number of abortions. To contribute to this reduction, provision of contraceptives through the health and population networks have met demand for contraceptives, and increased options for clients. Contraceptives such as IUDs, contraceptive pills, and condoms are available at about 80%- 90% health facilities. Injections are available at 74% health facilities. Availability of contraceptives contributes to the reduction of unexpected/unwanted pregnancies and unsafe abortions.

Apart from regular provision of contraceptives to clients, health facilities also provide counseling to abortion clients on contraceptives. The 2005 evaluation shows that the majority of DHCs (90% in the mountainous and 100% in the plains areas) provide post-abortion counseling. This indicator is lower at the commune level, with 52% among mountainous CHCs and 69% among plains communes. The prevalence of post-abortion counseling is rather low at the CHCs partly because this service is generally not provided at CHCs.

Most health providers at the district level and about three-fourths of those at the CHC are trained on post –abortion counseling. This figure is higher in the mountainous areas than the plains ones. Health providers also receive refresher training with on content for post-abortion counseling. Nearly 90% of health providers at the district level and 70% of those at the commune level attend refresher training on post-abortion counseling provision. There is no difference between trained staff at mountainous and plains communes.

In-depth interviews and FGDs with Nghe An province leaders show that the province focused on and developed good strategies on abortion reduction. IEC education and counseling on abortion reduction are carried out with coordination of different organizations and associations. The content of dissemination on abortion reduction not only comprise abortion risks but also the benefits of using contraceptives to reduce unexpected pregnancy leading to unwanted abortion.

Difficulties and limitations: According to health providers working at the mountainous DHCs, the number of abortions at these districts is higher than the plains districts. Many report that the DHC abortion statistics are unreliable because abortion clients of one district can seek service from another district or they may also seek this service at the private health facilities.

Observations of clients coming for services at the health facilities show that health providers do not take advantage of opportunities to provide counseling on contraceptive

methods for their clients, including ANC and RTI clients. 23% of clients of mountainous DHC and 10.5% of clients of the plains DHCs receive counseling on contraceptives after ANC service provision. This indicator is 9% and 13% respectively among mountainous and plains CHCs.

For RTI clients, the percentage of health providers who provide instruction on condom usage, both as a contraceptive method and as a STD prevention method, is very low at both levels (below 7%). None of the district health providers counseled their clients on switching to more effective contraceptive methods. The percentage of health providers that provide counseling on the switching contraceptive methods is higher among plains communes (26%) than the mountainous ones (15%).

Recommendations:

- Investigate to obtain the exact number of abortions of each districts, including those are performed at private health facilities
- Better understand the relation between the number of contraceptive prevalence rate and the number (or prevalence) of abortions in the mountainous districts
- Apply the method of medical abortion by medication for mountainous districts of Nghe An because this medical method is safer than the surgical one
- Train health providers on how to integrate counseling on reduction of abortion not only for abortion/FP clients but also ANC and RTI clients as well.
- Emphasize the benefits of modern contraceptives use to avoid unexpected pregnancy rather than overly focus on abortion risks.

4. Improvement of RTI detection and treatment

In general, 87% DHCs and 82% CHCs provide RTI examination and treatment. The majority of health providers (91%) working at both mountainous and plains DHCs are trained on RTI diagnosis and treatment. The percentage of health providers receiving training on RTI counseling at the district level is higher in the mountainous ones than the plains ones (93% compared with 84%).

Health providers (over 80%) also receive refresher training. Much attention is given to training on RTI diagnosis, training and counseling for health providers at the mountainous CHCs. All health providers report that basic and refresher training improves their professional skills and competency in RTI examination and treatment.

The final assessment of the project also shows that all of DHCs provide *wet-mount* tests. This figure is significantly higher compared with 53% of 2001. Gram staining of fungus/bacteria is performed at only 60% mountainous districts and 78% plains ones. In comparison with the 2001 survey, in this evaluation study, the percentage of DHCs that now performs this test has doubled, showing great improvement in the provision of lab tests at the district level.

Regarding the quality of RTI examination and treatment, interviews with health providers show that 76% of health providers at the DHCs request their clients to take a test; 55% provide treatment based on test results; and 68% provide counseling to clients on RTI prevention. However, they neglect to provide treatment information for both partners/spouses (40%) or do not encourage their clients to notify their partner/spouse of their infections (21%).

Observations of 97 RTI clients visiting health facilities show that health providers discuss on the following topics with clients: history of STD symptoms (47% at district and commune level); gynecological history (73% at district and 80% at commune level) and menstruation history (district: 80%; commune: 65%). Information that health providers do not discuss with their clients include: risks of having multiple partners (district: 13%; commune: 2.5%); counseling on condom usage (district: 6.7%; commune: 5%) and do not advise clients to bring their partners to the examination (district: 13%; commune: 4%).

Counseling provided by the MCH-FP Center is better than at the lower level and in general, plains facilities provide more consistent counseling than their mountainous counterparts. Counseling on menstruation was provided by 60.9% compared with 55.9%; RTI transmission risk (15% compared with 0%); and counseling on switching contraceptive methods for RTIs clients (26% compared with 14.7%). Some topics are discussed more often in the mountainous districts. For example, counseling on condom usage (24% compared with 0%); safe sex (43% compared with 13%); and explanation of the importance of strict compliance of prescription in STDs treatment (69 compared with 60%).

Infection prevention is not been strictly followed in pelvis examinations. In pelvis examinations, 46% of health providers at DHCs and 44% of those at the CHCs washed their hands with soap. The respective figures at the plains district and commune are higher, with 83% and 78%. In comparison of results between 2001 and 2005, the percentage of 2001 health providers that wash their hands with soap at the DHC is 60% and 73% at the CHCs compared with 65% and 64% respectively in 2005.

RTI clients are not provided with condoms, a decrease from the earlier study. The 2001 baseline survey shows that 17% RTI clients at the DHCs and 5% of those at the CHCs are provided with condoms.

Apart from health facilities, RTI examination and treatment are also provided in the community through gynecological examination and treatment campaigns and FP campaign that integrate IEC activities on environmental hygiene and female hygiene.

Difficulties and limitations: At the commune level, laboratory tests remain under-developed, so RTI diagnosis and treatment are limited, leading to casual diagnosis and ineffective treatment.

Counseling on RTI prevention is still poor. Health providers miss opportunities to provide information during the process of service provision, such as messages on risks of RTI and the risk of having multiple partners.

Infection prevention/control has not yet been improve.

Recommendations:

- DHCs receive training on RTI testing and diagnosis. Because DHCs participated in the survey on "Reprodutive Tract Infection among pregnant women in Nghe An province" carried out by JICA, the DHCs can develop RTI reference testing centers to provide training at the commune level.
- Offer additional refresher training for health providers to provide correct and quality counseling on RTI.
- Improve infection prevention in pelvis examination procedure
- Continue the enhancement of RH care, including gynecological examination and treatment of gynecological diseases. It is necessary to strengthen health education on disease prevention, hygiene, and the use of clean water.
- Apart from examination and treatment and health education, invest in clean water projects at places where clean water is unavailable to reduce the prevalence of gynecological infections.
- Ensure that RTI clients comply with the treatment
- Health providers in Nghe An believe that RTI prevalence is very high among women in Nghe An because they diagnose based only on clinical examination. It is necessary to encourage them to use relevant tests for RTI diagnosis.

5. Improvement of the quality of IEC activities

IEC activities are not only carried out at the health facilities but also in the communities in both mountain and plains areas. The majority of health facilities (90%) have IEC materials on FP, antenatal care, breastfeeding, and nutrition for pregnant women. About three-fourths of health facilities have materials on child care, post-partum care, STD prevention and HIV/AIDS prevention. The percentage of health facilities at the commune level that have IEC materials is higher in the final assessment compared with that in the baseline survey of 2001.

Over 95% of the surveyed DHCs and CHCs report that IECs materials on RH are provided by the JICA project. However, only 32.5% health facilities report enough materials for distribution for clients to take home. Most of clients can read IEC materials at the health facilities.

Apart from IEC activities at the health facilities, the project also works with the WU, population collaborators and VHWs networks to carry out activities in the communities. There is high diversification of IECs, including acting small plays, contests, video

playing, broadcast, cassette playing, and village libraries. These materials are assessed as relevant, easy to understand and attractive by the local people.

Findings show that IECs are very effective and useful for local people. IECs help them understand the significance of MCH care, raise awareness, leading to behavior changes. Community residents know more about CHCs, where they can come for health care services, gynecological. examinations, ANC, tetanus vaccinations and deliveries.

Difficulties and limitations*:* There are difficulties in IEC activities in ethnic minorities areas (Kh'Mu and H'Mong) because the majority of women do not understand Vietnamese and often need their husbands to translate. Other difficulties are that ethnic minority women live in scattered spaces, work all day , and the unavailability of electricity. These factors make it difficult to organize meetings for health education.

For some health facilities, lack of some IEC equipment effect dissemination content and distribution to the local people.

Recommendations:

- Consider forms and communication channels which are appropriate for each ethnic minority group. Overcome illiteracy by using audio techniques (cassettes, translations in the ethnic minority languages/dialects)
- Make use of the traditional events such as a regular market, or a festival, for health education with provision of services (ANC, gynecological. examination and FP services)
- Continue enhancement of training to improve skills for IEC officers, including WU members, population collaborators and VHWs.

6. Improvement of the quality of HMIS management

In implementation of the RH program in Nghe An, the Ministry of Heath piloted and then replicated the HMIS system. This activity was very important in phase II of the project. The project also provides computers for DHCs and training for HMIS officers. At the commune level, the project provides training on how to fill data in the form for input in the computer for midwives.

After more than a year of implementation, the district officers report convenience in reporting to the provincial level or for review or analysis of requested data HMIS is useful for management, monitoring and direction to the lower implementation level. Based on this information system, strengths and weaknesses are easily discovered, and analysis and feedback is also prompt.. Feedback from the district level to the commune level is very practical, timely and more relevant**.**

District officers also report that with HMIS, coordination between the provincial and district level can improve MCH care. 44% DHCs report that feedback from the district level is related to technical issues while 77% are related to other issues. However, the

qualitative study showw that feedback from the provincial to district level comprise mainly of comments on incorrect data from CHC rather than technical support.

At the commune level, the forms were sufficiently recorded (77% of CHCs). Commune level officers report that they regularly send reports to the higher level but only 88% receive feedback. This figure is higher among the plains than mountainous communes. Among those receiving feedback, 60% say that feedback is related to technical issues while the remaining is related to other issues. This figure is again higher in the plains areas.

Difficulties and limitations of this system include the limited skills of officers in charge, despite training courses provided. Midwives at the CHC make regular mistakes. In order to fill in the 2-page form for HMIS, the midwife needs to collect information from different books leading to greater possibility of inaccurate reporting; this is particularly for primary level midwives in the mountainous areas. Most interviewed district officers complain about mistakes in the data submitted by CHCs, which cause difficulty for data input at the district level. Another difficulty is continuous staff change at the district level-- newcomers are not trained on computer skills and HMIS software. Some commune health staff are unaware of the importance of precise data, which adversely affects the quality of information and data sent to the higher level:

Recommendations:

- To operate HMIS well, encourage more investment at the commune level. Improvements should be made to help midwives record data correctly. Assistance from the head of the CHC or physician or assistant physician may help. Improve the forms at the regular monthly meetings so that the district officers can directly help the commune midwives.
- Offer additional training when a new HMIS officer is hired, for both district and commune level.
- Effective scheduling for the use of computers at the DHCs to ensure HMIS is updated effectively.

5.2 Evaluation of the relevance, effectiveness, efficiency and sustainability of the JICA program in the RH system in Nghe An Province

Relevance

The final assessment shows that the project's objectives correspond well with the National Strategy on Reproductive Health 2001-2010, with a focus on the improvement on women's RH.

The establishment of the Project Steering Committee (PSC) at all levels (province, district and commune) with representatives from the local authorities, health sector, CFPC and WU is appropriate in implementing a health project in the rural area. It encourages collaboration among several local institutions and organizations. Various

project activities (such as training of midwives, provision of medical equipment to health facilities as well as the training and distribution of IEC materials through local Women's Union network) target the urgent need for improvement of women's RH status and strengthens health providers' technical competency and the capacity of other organizations in providing RH care to women at all levels, especially the grass-roots level.

Efficiency

In general, there is readiness (also called package approach) at the surveyed health facilities in terms of infrastructure, equipment, human resources and logistics to provide various RH services for clients, particularly antenatal and post-partum care.

The readiness/package approach substantially improved in comparison with the baseline survey in 2001. Study results show that JICA's financial support plays an important role in enhancement of the health status of the community and facilitates longterm impact of RH care and FP in Nghe An

- In general, infrastructure meets requirement for adequate services, particularly RH care for mothers. Infrastructure has been upgraded to satisfy basic conditions for improvement of RH care services at the commune level.

- Most health providers are trained on ANC skills and treatment of pregnancy related complications and apply their skills in their daily work. Project training is effective and of good quality, meeting local level requirements.
- Most health facilities have IEC materials on FP, antenatal care, breastfeeding, mother's milk and childcare. The logistics system to provide clean delivery kits and iron tablets for women greatly improved in comparison with that in 2001.
- Most health facilities have officers trained on HMIS, and commune midwifes are especially trained on recording data into forms to submit to the district level. District officers are trained on software to input and process the data for consolidation and report to the provincial MCH-FP Center. HMIS system operates well at the DHCs.
- Coordination among different sectors and organizations (health, population, WU, as well as other organizations) at the local levels in MCH/FP care is efficient and convenient. Close coordination is shown most clearly through regular meetings of the population committee with the participation of other sectors and organizations; and through close collaboration in campaigns of dissemination and the provision of contraceptives.
- Monitoring activities not only help improve the RH care services at the commune level but also enhance the monitoring competency of the provincial MCH-FP Center and DHCs.

Effectiveness

The quality of the services provided to clients at health facilities improved: the readiness/package approach is a fundamental factor in improving the quality of service provided to clients. Particularly, the provincial MCH-FP Center, an agency with high technical competency, provides good technical direction in RH care throughout the province.

- With a focus on women's health, the RH Project funded by JICA makes a substantial impact on the improvement of community health and an increase of awareness of the local people, especially women at reproductive age. The increase in awareness contributes to behavior changes in seeking RH services. RH care for mothers indicators show the effectiveness of the RH/FP program in terms of good impact on women's behaviors. The percentage of pregnant women who receive ANC services, two Tetanus vaccination shots, and deliveries assisted by trained health providers all increased. The average number of ANC visits increased in comparison with the 2001 study.
- Similar to the results of the baseline study, the final assessment shows a good relationship between health providers and clients.
- Counseling before and after abortion is mainly provided at the district health facilities where abortions are performed. Interviews with questionnaires show that the majority of health providers attend training on counseling on abortion reduction. Interviews with community officers show that counseling on reduction of abortions is also disseminated through IEC activities in the community, through networks of WU, VHW and population collaborators.
- Local officers highly appreciate JICA's contribution*:* JICA's support is acknowledged to promote significant changes in RH care in Nghe An, particularly at the grassroots level. The presence of long-term Japanese adviser/experts working in close cooperation with Vietnamese counterparts exchanges knowledge and experience.
- The training/study tour to Japan is a good opportunity for key staff at the provincial and district level to learn more about women's RH services and apply them appropriately to the Viet Nam context.

Sustainability

In this evaluation, results and interviews with local leaders show optimism and desire to sustain achievements of the project as well as the sustainability of activities to improve the quality of services:

- A Project Steering Committee (PSC) with participation of important organizations and sectors including the local authorities, health, population sectors and WU is a guarantee for the sustainability of the project because RH care for women is also the technical function of these organizations and sectors.
- Local leaders show strong commitment in sustaining project activities, with a plan to sustain the project activities. For example, sustaining project activities canbe done by integrating technical training for midwives into existing regular meetings

of midwives at the district level and integrating monitoring activities on RH care into other technical monitoring activities of the health sector.

- Local officers' improved awareness of the benefits of the improvement in RH care for women is an important foundation for the continuation of activities for good quality service provision.

Appendix :

Indicators in comparison with PDM, Baseline Survey (2001), Mid-Term Assessment (2003) and Final Assessment (2005)

Indicators in RH Project's PDM (revised on August 21, 2001))	Output indicators	Baseline Survey 2001 (whole Nghe An Province)	Mid-term Assessment 2003 (Four districts)	Final assesment 2005 (whole Nghe An Province		
				Mountainous	Non-mountainous	Whole province Nghe An
For output 1: **1. Safe and hygienic delivery is promoted at commune level:**						
- Percent of pregnant women using Home Based Material's Record (HBMR)	- Percent of deliveries used Home-Based Maternal Record	na	96,0	97.1	87.8	92.2
- Percent of deliveries assisted by health providers	- Percent of deliveries assisted by health providers	91,0	95,3	34,3	48,8	86,9
	- Percent of health facility having delivery kits	24,1	7,1	48.6	51.2	41,6
	- Percent of health facility having Ion tables (cycles/bottle)	48.2		48.6	51.2	50.6
1.1 Prenatal care at commune level is improved - Average of pregnant women of pre-natal check-ups in plane	- Average number of prenatal check-ups per delivered woman (year 2000)	2,8	3,0	2,7	3,2	3,3

Indicators in RH Project's PDM (revised on August 21, 2001))	Output indicators	Baseline Survey 2001 (whole Nghe An Province)	Mid-term Assessment 2003 (Four districts)	Final assesment 2005 (whole Nghe An Province		
				Mountainous	Non-mountainous	Whole province Nghe An
districts is more than 3 times						
- Number of trained health workers in mountainous area increased	- Average months of health provider's R.H training (months)	16,0	26,4	22,7	23,0	22,6
	- When the last refresher training was given (months)	13,7	14,7	15,8	13,5	14,5
	- Providers receiving refresher training	67,3	87,5	88,6	86,0	87,5
	- Percent distribution of providers received refresher training on:					
	* ANC	84,1	96,4	97,4	79,1	88,1
	* Pospatum	83,2	96,4	84,6	86,0	85,7
	* FP	92,5	100,0	89,7	90,7	90,5
	* Counseling on FP	92,5	96,4	92,3	90,7	91,7
	* Counseling on abortion	----	85,7	74,4	76,7	76,2
- Number of pregnant women received T/T remains high as much as 95%	- Percent of delivered women received T/T injection (year 2000)	91,2	96,5	88,0	97,5	93,4
- Referral case at CHCs increased	- Percent of facilities having referral cases	64,2	75,0	48.,6	63,4	57,1
- Quality of ANC	**Counseling to ANC clients**					
	- Nutrition during pregnancy	92,1	79,4	93,8	91,5	92,8
	- Appropriate work/rest/ living conditions	87,3	58,8	86,9	88,9	88,0
	- Come to a clinic if any warning signs appear	67,1	52,9	90,0	77,8	84,4
	- Need 2 tetanus vaccination shots	86,1	52,9	86,9	85,5	86,4
	- FP after delivery	----	11,8	13,1	12,0	13,6

Indicators in RH Project's PDM (revised on August 21, 2001))	Output indicators	Baseline Survey 2001 (whole Nghe An Province)	Mid-term Assessment 2003 (Four districts)	Final assesment 2005 (whole Nghe An Province		
				Mountainous	Non-mountainous	Whole province Nghe An
	- Mean gestational age at first ANC visit (month) - Percent of clients (ANC/RTI) who reported obtaining all wanted services/information -	29,1 >77.0	17,0 >90	14,6 97,6	16,9 98,2	15,6 97,9
1.2 Delivery care at commune level is improved - Partograph is applied more than 80% of the deliveries at CHCs	- Percent of health providers received basic training on using partograph to manage labor - Percent of health facility received refresher training on using partograph during last three years - Percent of health providers using partograph to manage labor	63.7	100.0	79,5 92,3 100.0	82,0 86,0 93.9	81,3 89,3 96.8
1.3 Postnatal care at commune level is improved: quantitative data are not collected	-					
1.4**. Essential medical equipment is utilized to all CHCs**	- Percent of health facility having equipment utilized	100,0	100,0	100,0	100,0	100,0
1.5. Four facilities of CHCs (delivery room, latrine, well	- Clean examination area:	94,9	96,4	97,1	100,0	98,7

Indicators in RH Project's PDM (revised on August 21, 2001))	Output indicators	Baseline Survey 2001 (whole Nghe An Province)	Mid-term Assessment 2003 (Four districts)	Final assesment 2005 (whole Nghe An Province		
				Mountainous	Non-mountainous	Whole province Nghe An
and shower rooms) are improved	- Percent of health facility having enough clean water in examination area	78,8	85,7	85,7	97,6	92,2
	- Percent of health facility having clean recover room:	90,4	96,4	74,3	75,6	75,3
	- Percent of health facility having working toilet:	80,3	60,7	91,3	95,1	93,5
	- Percent of health facility having clean toilet	70,0	78,6	45,7	70,7	58,4
	- Designated room for ANC examination	19,0	28,6	51,4	58,5	55,8
	- Designated room for delivery	65,7	60,7	82,9	95,1	89,6
	- Designated counseling room	43,8	53,6	51,4	61,0	57,1
	- Counseling room with fully private	31,4	46,4	51,4	58,5	55,8
	Delivery room					
	- Well – ventilated	92,0	100,0	100,0	100,0	100,0
	- Possibility for dirt to enter	20,4	21,4	20,0	7,3	13,0
	- Window with a screen or a curtain	73,0	92,9	82,9	87,8	85,7
	- Working ceiling lamp	77,4	89,3	97,1	95,1	96,1
	- Working gynecological exam lamp	59,9	71,4	82,9	85,4	84,8
	- Equipped with lamp or lantern to use during blackout	46,0	75,0	85,7	78,0	81,8
	- Equipped with a container of boiled water	75,9	100,0	91,4	95,1	93,5
	- Equipped with a container of boiled water with a wooden handle longer than 20cm	62,8	60,7	86,6	85,4	87,0
	- Clean floor	84,7	100.0	100,0	100,0	100,0
	- Equipped with a cabinet for equipment	79,6	100,0	97,1	97,6	97,4
	- Equipped with oxytocin or ergometrin	92,0	100,0	97,1	97,6	97,4

Indicators in RH Project's PDM (revised on August 21, 2001))	Output indicators	Baseline Survey 2001 (whole Nghe An Province)	Mid-term Assessment 2003 (Four districts)	Final assesment 2005 (whole Nghe An Province		
				Mountainous	Non-mountainous	Whole province Nghe An
	- Equipped with a kit for neonatal resuscitation (catheter with 4-5 mm in diameter 20 ml bulb syringe for suctioning infants, sterile compresses, two resuscitating balloons)	59,9	85,7	85,7	75,6	80,5
	- Resuscitation box is stored in a separate sterile tray	46,7	53,6	77,1	70,7	74,0
	- Clean, sterile cloths available for covering instruments	51,1	85,7	77,1	68,3	72,7
	- Boiled soap is prepared in a closed box	65,7	96,4	74,3	68,3	71,4
	- Used water is drained into a closed tank outside the labor room	30,7	82,1	65,7	70,7	68,8
For Output 2 Strengthened monitoring capacity of the provincial MCH-FP center and district health centers						
	- Percent of ehealth facilities having supervisory visit	85.4	100.0	100.0	100.0	100.0
	- Mean number of visits	4.1	3.6	--	--	--
	- Percent of health facilities having monthly supervisory	--		48.6	58.5	53.9
	- Percent of CHC was supervised by MCH/FP Center	--		8.0	6.3	7.0
	- Percent of DHC was supervised by MCH/FP Center	--		100.0	100.0	100.0
	-Percent of CHC was supervised by DHC supervised CHC	--		100.0	100.0	100.0

Indicators in RH Project's PDM (revised on August 21, 2001))	Output indicators	Baseline Survey 2001 (whole Nghe An Province)	Mid-term Assessment 2003 (Four districts)	Final assesment 2005 (whole Nghe An Province		
				Mountainous	Non-mountainous	Whole province Nghe An
	- Percent of CHC reported that problems identified during monitoring was: *addressed fully * addressed partly			 20.0 80.0	 26.8 73.2	 23.7 76.3
	- Percent of CHC reported that monitoring contributes to improving quality of care			80.0	82.9	81.6
For output 3: Number of abortion conducted at MCH/FP center and selected districts is reduced	- Number of abortion conducted per month in DHC	37,2	49,0	26,5	25,4	26,0
	- Number of health providers attended basic training on abortion counseling	--	93.8	88.6	80.0	84.4
	- Number of health providers attended refresher traing on abortion counseling	--	85.7	74.4	76.7	76.2
Output 4: Improved detection and treatment of STIs	- Percent of health providers attended basic training on *Diagnosis. treatment *Counseling	 96.2 88.7	 96.9 100.0	 90.9 93.2	 88.0 84.0	 89.6 88.5
	- Percent of health providers attended refresher traing on *Diagnosis. treatment *Counseling	 87.9 88.8	 96.4 100.0	 84.6 89.7	 83.7 86.0	 84.5 88.1
	- Percent of DHC provide vaginal discharge smear	52.4	100.0	100.0	100.0	100.0
	- Percent of DHC provide Gram stain	33.3	75.0	60.0	77.8	68.8

Indicators in RH Project's PDM (revised on August 21, 2001))	Output indicators	Baseline Survey 2001 (whole Nghe An Province)	Mid-term Assessment 2003 (Four districts)	Final assesment 2005 (whole Nghe An Province		
				Mountainous	Non-mountainous	Whole province Nghe An
	- Percent of RTI clients receving counseling on:		--			
	*History of STD symptoms	85.7		51.2	44.4	48.5
	*Ob/Gyn history	75.5		75.6	81.5	79.4
	* Mentruation	65.3		70.7	64.8	68.8
	*Multiple/single partner	5.4		0.0	1.9	1.0
	*RTI history of client's partner	22.4		4.9	5.6	7.2
	*Previous use of FP methods	69.4		68.3	48.1	57.7
	*Discussion on FP with spouse	21.1		0.0	3.7	3.1
	*Previous abortion	29.9		56.1	38.9	47.4
	*Counsel on RTI/SDT/HIV/AIDS	54.4		0.0	13.0	9.3
	*Counsel on multiple partner risk	13.6		0.0	7.4	5.2
	*Counsel on condom use in against STDs	29.3		4.9	5.6	7.2
	*Refer client partner for RTI/STD care	18.4		4.9	5.6	7.2
	*Counsel on personal hygiene	69.4		56.1	55.6	56.7
	*Counsel on safe sex/abstinence	52.4		26.8	16.7	22.7
	*Counsel on possible FP method switching	27.2		12.2	22.2	17.5
	*Explain the importance of compliance of prescribed treatment	76.6		77.8	60.7	68.8
Output5: Improved quality of Information-Education-Communication (IEC) activities;	- Women have knowledge on RH and safe motherhood	yes	yes			
	- Percent of facilities having IEC materials:					
	*ANC	94,2	92,9	94,3	92,7	93,5
	*Post atenatal care	81,8	78,6	74,3	80,5	77,9

Indicators in RH Project's PDM (revised on August 21, 2001))	Output indicators	Baseline Survey 2001 (whole Nghe An Province)	Mid-term Assessment 2003 (Four districts)	Final assesment 2005 (whole Nghe An Province		
				Mountainous	Non-mountainous	Whole province Nghe An
	* FP *Breasfeeding	93,4 79,6	96,4 92,9	88,6 100,0	92,7 95,1	90,9 97,4
Input 6: Improved quality of health management information system (HMIS	- Percent of facilities having good logbook system	56.8	>70,0	88,6	92,5	90,8
	- Percent of facilities trained on HMIS	--	--	100,0	92,7	96,1
	- Percent of facilities having dificulty in managing HMIS	--	--	51.4	51.2	51.3
	- Percent of facilities reported having difficulty in managing HMIS because of unreliable data	--	--	55.6	38.1	46.2
	-					

JICA 技術協力プロジェクト

ベトナム社会主義共和国
ゲアン省リプロダクティブヘルス・プロジェクト・フェーズ II

終了時アセスメント報告書
要約

2005 年 6 月

ポピュレーション・カウンシル

ポピュレーション・カウンシル
終了時アセスメント報告書　2005 年 6 月
要約

ゲアン省公共セクターによるリプロダクティブ･ヘルス事業の基礎調査(2001 年)実施から 4 年経過した 2005 年、ポピュレーション・カウンシルは国際協力機構(JICA)の要請を受けて､同省でのリプロダクティブ･ヘルス･プロジェクトの終了時評価を実施した。当カウンシルは、2 年前の 2003 年に、やはり JICA の要請でプロジェクト・フェーズ 2 の残り期間(2003-2005 年)の活動調整をめざした中間評価も実施した。

本評価の目的は､プロジェクト実施後の数年間で RH サービスの内容がどのように変化したかを調査することにあり、このため、次の 6 つのプロジェクト成果の一つひとつについて評価を行なった。

1) コミューン保健センター(CHC)の衛生的で安全なお産
2) 母子健康・家族計画(MCH/FP)センターおよび選ばれた郡ヘルスセンターのモニタリング能力の向上
3) 省と郡のレベルでの人工妊娠中絶の減少
4) 生殖器系感染症(RTIs)の診断と治療の改善
5) IEC 活動の内容の改善
6) 保健管理情報システム(HMIS)業務の向上

さらに、ゲアン省での JICA RH プロジェクトの妥当性、有効性、効率性、インパクト、自立発展性の 5 項目について評価し、その評価の結果をもとに、将来のリプロダクティブ・ヘルス事業について提言を行なう。

終了時評価では 2001 年の基礎調査で使用した方法と同じ手法を使用した。さらに、ゲアン省リプロダクティブ・ヘルス(RH)・プロジェクトが目指したプロジェクト成果を説明するために追加情報を何点か加えて調査した。

調査には定性分析、定量分析の両方を組み合わせた。定量法では、調査用に選んだ保健施設について状況分析法（situation analysis）を使用した。省 MCH/FP センターおよび 19 郡の郡保健センター(DHC)について調査した。CHC については 2001 年調査で対象となった CHC のリストのなかから無作為で選んだ。調査チームは、JICA が選んだ 8 郡での調査では定性法を組み合わせて使った。この 8 郡は地理的条件で山間部と平野部半々で構成されている。定性分析ではゲアン省の RH サービスの変化についてより詳細に把握でき、定量分析ではわからない補完的情報が手に入る。

2005 年 3 月、調査者 18 人、調査責任者 2 人を含む調査団は 6 チームに分かれ、リプロダクティブ・ヘルスサービスを提供する保健施設を 77 カ所訪問調査した。対象になったのは、省および 19 郡の DHC、それに 57 カ所の CHC で、どのチームも一箇所の施設の調査に丸一日かけた。調査内容は、施設の機材・消耗品調査、質問表にもとづくサービス提供者の面接調査、産前ケアと RTI 診療の観察調査、ならびに各施設でこれらの治療を受けたクライアントたちの面接調査であった。

保健施設では、定性データの収集も行った。地元住民をはじめとしてフォーカス・グループ討議を男女別に実施し、いろいろな関係セクター・組織(女性連合、人口家族子ど

も委員会 CPFC、人民委員会)の保健担当リーダーや責任者、それにコミュニティ・リーダー、FP コラボレーター（ボランティア)、村落保健ワーカー(VHWs)を対象に詳細にわたる面接調査を実施した。

調査した保健施設では､保健要員とクライアント間のやりとりを合計 347 件観察した。その内訳は産前ケア 250 件、RTI/STI(性感染症) 97 件であった。面接調査した保健要員は 97 人、調べた保健施設は 77 カ所、産前および RTI/STI 診療クライアントで出口調査に応じたのは 340 人だった。

さらにフォーカス・グループ討議（FGD）を 33 回実施した。対象はコミューンレベルの保健責任者、保健スタッフ、人口家族子ども委員会、女性連合および郡とコミューンのレベルでの行政担当官、出産可能年齢の男女、省と郡のレベルの保健責任者との詳細面接であった。この調査で面接した人は合計 800 人以上にのぼった。

この調査にはある程度限界もあった。第一に、2001 年の基礎調査で対象にした CHC とくらべ、今回調査した CHC の数が少なかった。また、2005 年の調査時には、JICA より追加的情報の要請があったが、2001 年の調査ではデータを収集していないので比較検討ができなかった。

６つの成果についての結果：要点と提言

1. コミューン保健センター(CHC)の衛生的で安全なお産

2001 年と比較して、評価時には、衛生的で安全なお産のインフラの基本状況は改善していた。2005 年の終了時評価では､分娩室を他とは別に備えていた CHC の割合は 2001 年の 58%に対して 86%であった。感染予防と安全基準をそなえた独立した分娩室のある CHC は 2001 よりも増えていたが、山間地と平野部では 76%と 94%の違いがあった。

清潔な分娩キットと鉄剤を備えた CHC の割合は、2001 年と比べると大幅に増加し、49%が清潔な分娩セットを備え、65%が妊婦に鉄剤を供与していた。2001 年にはそれぞれ 25%と 47%だった。

このような良い方向での変化は、産前ケアに注目し、実質的な改善がなされたことを示している。妊婦の間で産前ケアを受ける割合は非常に高く、どの CHC も妊婦全員に配付するのに十分な「母性手帳」(HBMR)を用意していた。産前ケアを受ける妊婦の割合は山間部のコミューンで 87%、平野部では 97%であった。破傷風の予防接種を受けた妊婦は山間部 88%、平野部では 97%である。訓練を受けた保健要員の介助を得て出産する割合は、山間部の CHC で 81%、平野部での CHC での 97%よりも低い。妊婦一人当たりの産前ケア受診回数は山間部で 2.7 回、平野部では 3.7 回である。初めての妊娠で産前ケアを受ける時期はかなり早く、平均して妊娠 15.6 週目である。これらの数字は 2001 年当時の基礎調査の数字よりも高く、プロジェクト実施前に設定した目標値よりも高い。

産前ケアではカウンセリングに一層の注意を払っている。保健要員の 80%以上がカウンセリング中に、妊娠と出産について重要なメッセージを伝えていると考えている。重要なメッセージとは､「妊娠中の栄養のある食事」「妊娠中の仕事の負担と休養」などで、

クライアントは、「妊娠中の異状の兆候の早期発見」について説明を受け、破傷風の予防接種を受けるように勧められている。

山間部、平野部ともにMCHサービスは大幅に改善した。それでも地理的な特徴、点在する住宅地、交通の便、山間地の郡の経済事情などから、山間地の住民は保健施設を利用したくても制限されている。定性調査では、自宅分娩する人も依然として少なくないことがわかる。

提　言

・ 保健施設以外の場所でのお産が安全で衛生的であり、かつ訓練を受けた保健要員(村落ヘルスワーカーまたは助産師)の介助を得て、清潔な分娩セットを使用して行なわれるようにする必要がある。
・人民委員会に勧めて、調整を行い、CHCに提供するスチーム消毒器や消毒ボイラーなどの消毒機具の活用を促すための財政支援を得る。

2. 母子保健･家族計画(MCH/FP)センターおよび選ばれた郡ヘルスセンターのモニタリング能力の向上

下位レベルでのモニタリングは大事にされている。モニタリング・チームのメンバーの技能と内容についての訓練も行き届いており、モニタリングの目的についても、短所をみつけて批判するのではなく、彼らの仕事を支援し、内容の改善にむけて問題を簡潔する助けをすることにあることを理解している。

省レベルの職員がDHCの100%をモニターし、郡レベルの職員がCHCの100%をモニターしており、省レベルの職員が直接モニターしているCHCは7%である。モニタリングをより定期的に実施しているのは、山間地よりも平野部の方である。

モニタリングの最中に技術的な問題が見つかった場合には、その場で指導することが多い。ときには後日、郡レベルでの訓練を受けるよう提案することもある。モニタリング訪問中に明らかとなった問題で関連部門や組織の支援を必要とするものは、高額の予算を必要とするものでない限り、解決にむけて対応されている。

モニタリング・チームには保健セクターの責任者の他に、行政、保健・人口部門それに女性連合の代表が加わっている。地元の保健責任者はモニタリングによって健診や治療の質的向上がはかれると感じており、省のMCH/FPセンターとDHCの担当者のモニタリング技能の高いことを評価している。モニタリングは地方でのリプロダクティブヘルス・ケアの改善に役立つだけでなく、省レベルと郡レベルの担当官のモニタリング技能の向上にも役立っている。

モニタリング・チームに関連部門と組織全部の代表を常に入れるのは困難である。チーム・メンバーのモニタリング技能には訓練不足のためバラつきがある。とくに山岳地にある郡では、モニタリング担当官といっても、モニタリングについても監督についても訓練を受けていない。

提　言

・モニタリング技能と内容について、これまで訓練を受けていない担当官と新任担当官むけに補完的訓練を実施する。

・モニタリング訪問に欠員が出た場合の補充方法を考える。
・モニタリング・チームの旅費予算を増額する。
・モニタリングの頻度が年に 1 回ないし 2 回と少ないため、これを日常活動として、より高い頻度で実施あるいは補完する方法を考える。保健サービス提供者の月次会議や四半期会議の内容にモニタリングの要素を加えることを考える。
・地元の関係組織ならびに住民の協力を奨励・結集し、モニタリングをとおして指摘されたインフラ関連の問題を解決するため、CHC の予算を増額する。

3. 省と郡のレベルでの人工妊娠中絶の減少

ゲアン省の保健サービスで実施した人工妊娠中絶件数は目に見えて減少しているのが最終評価でみてとれる。保健施設統計によると、DHC あたりの毎月の人工妊娠中絶件数の平均は 26 件である。2001 年の基礎調査の数字は 37 件だった。この件数の減少には保健・人口ネットワークをとおしての避妊具(薬)の配付、それにクライアントむけ避妊具（薬）の選択肢に関する情報の増大が寄与している。避妊具（薬）が手に入りやすいかどうかについて 2001 年調査の対象にはなっていなかった。2005 年の調査では、IUD、経口避妊薬、それにコンドームが保健施設の 80%から 90%に常備してあることがわかった。注射による避妊法も保健施設の 74%で実施していた。避妊方法が手に入ることは、予期しないまたは望まない妊娠と安全でない中絶を減らす助けになる。

2005 年評価では DHC の大半(山間部の 90%と平野の 100%)で中絶後のカウンセリングを実施していることが示された。コミューン・レベルでは、この指標は低く、山岳地帯の CHC では 52%、平野部でも 69%にとどまっている。コミューンでの中絶後のカウンセリングの普及度が低い背景には、CHC では通常中絶はしていないこともその理由の一端をなす。

郡レベルの保健サービス提供者のほとんどと CHC の提供者の 4 分の 3 は、中絶後の訓練または再訓練を受けている。中絶を減らすことを目指した IEC 活動とカウンセリングは、多くの関連組織と連携して実施されている。中絶を減らすための保健教育の中身は、中絶の危険について説明するだけでなく、人工中絶につながる、望まない妊娠を減らすうえで避妊具(薬)を使用する便益について説明している。

しかし、山間部の DHC で働くサービス提供者によると、平野部にある郡とくらべて、人工中絶件数は依然として多い。山間部の保健施設の診療状況を観察した調査者は、産前ケアや RTI の診療で来所している機会をとらえて、避妊方法について助言している提供者はいないと報告している。

提　言
・山間部の郡での避妊具（薬）の利用者の広がりと中絶の関連性を把握する。
・ゲアン省の山岳郡むけに中絶手術よりは安全な人工妊娠中絶薬を使った医療的中絶を奨励する。
・保健サービス提供者に、中絶や家族計画目的に訪れるクライアントだけでなく、産前ケアや RTI の診療で来所しているクライアントむけに助言活動をどのように組み合わせていくかについて訓練を受けさせる。
・人工妊娠中絶の危険について過度なまでに説明するのでなく、想定しない妊娠を回避するには近代的避妊具（薬）に利点があることを強調する。

4. 生殖器系感染症(RTI)の診断と治療の改善

全体的にみて、省内 DHC の 87%、CHC の 82%が RTI 検査と治療を行っている。山間地・平野を問わず保健サービス提供者の大半(90%以上)は RTI 診断と治療の訓練を受けている。郡レベルで RTI のカウンセリングの訓練を受けている提供者は平野では 93%、山間地では 84%で平野の方が知られている。

2005 年の終了時アセスメントでは、DHC すべてで wet-mount テストを行っていることがわかった。これは 2001 年の 53%とくらべてはるかに高い。このテストができる DHC の割合は 2001 年から倍増した。グラム染色テストは山間部の郡の 60%、平野部の郡の 78%で実施している。これら 2 点から、郡レベルでの RTI 診断用実験室テストの実施に大幅の改善があったことを示す。

RTI の検査および治療の質は良好といえる。保健サービス提供者へのインタビューによると、DHC では、76%がクライアントに検査を勧めており、55%が臨床検査の結果をもとに治療を行なっていると回答した。

STD の既往症（郡の 47%とコミューン・レベルの 80%)、 婦人科既往症（郡 73%、コミューン 80%）それに月経歴（郡 80%、コミューン 65%）の諸点についてクライアントと話し合っていた。ほとんどの保健サービス提供者が触れていなかったのは、複数のパートナーをもつ危険性(郡の保健要員でこの点にふれていたのは 13%、コミューンでは 2%)であり、コンドームの使用を助言(郡の職員で 7%、コミューンでは 5%)したり、パートナーにも検査を受けに保健施設に来るよう助言したりする(郡の職員で 13%、コミューンの保健施設職員で 4%)ことであった。

MCH/FP センターでのカウンセリングは、下位レベルでのものよりもずっと良質である。カウンセリング内容のなかでも、月経、RTI 感染リスク、RTI 関連のクライアントに対する避妊法の変更など、いくつかの点について平野の CHC の方が山間部の CHC よりも高い頻度で網羅していた。山間部のコミューンで取り上げられた話題は、安全なセックスと STD 治療の処方をきちんと守ることの大切さについてであった。

骨盤検査をする際の感染予防・制御方法は厳格に守られてはいない。検査前に石鹸で手を洗っていたのは、山間部の DHC の担当者の 45%、CHC の 44%だけだった。この割合は平野部の DHC と CHC ではそれぞれ 83%と 78%で山岳地の保健所より高い。観察した調査者はいずれも、配偶者またはセックスのパートナーに病気をうつしたり、うつされたりするのを避けるために、保健要員が RTI クライアントにコンドームを渡している姿は目撃しなかった。

保健施設とは別に、RTI 検査と治療は、婦人科検査と治療のキャンペーン、それに女性むけ衛生と環境衛生についての保健教育を統合した家族計画キャンペーンをとおしての地域内巡回サービスでも実施している。

提 言

・DHC の職員が RTI の検査と診断ができるように訓練を受けることを継続・強化し、CHC から検体が持ち込まれる DHC を RTI 検査センターとして機能できるようにする。
・保健要員に再訓練を受ける場を与え、RTI について正しい、良質の助言ができるよう

にする。
・骨盤検査の際の感染予防の心得を向上させる。
・婦人科系の検査と治療も含めた MCH/FP ケアについてのキャンペーン強化を継続させる。衛生およびきれいな水を使うことに関する保健教育を強化する。
・きれいな水源を得るために投資し、婦人科系の感染の蔓延を減らす。
・RTI でのクライアントの治療を追跡し、再感染を避けるため、処方薬を飲み終えるのを見届ける。
・ゲアンの保健要員は、省内の女性の間で RTI 罹患率が高いとされるのは、臨床診断にのみ頼っているからだと考えている。RTI 診断のための臨床検査を受けることを勧め、不要かつ無駄な治療を避けるようにする必要がある。

5. IEC 活動の内容の改善

IEC 活動は、保健施設だけでなく、地域社会でも行われている。ほとんどの保健施設(90%) は、家族計画、産前ケア、母乳育児、妊婦むけの栄養に関する IEC 資機材・教材を備えている。保健施設の約 4 分の 3 は、育児、産後ケア、STD 予防と HIV/エイズ予防に関する資料を提供している。コミューン・レベルでの保健施設のうち IEC 資機材・教材をそなえている割合は、基礎調査時と比べて終了時アセスメントの方が高い。母乳育児に関する IEC 資機材・教材は 2001 年には CHC の 80%に備えてあったのに対し 2005 年には 98%になっていた。栄養に関する資料については 87%から 96%に増えた。

調査対象の DHC と CHC の 95%は、リプロダクティブヘルスについての IEC 資機材・教材は JICA プロジェクトから提供を受けたと報告している。しかし、クライアントに配付するのに十分な部数があると答えたのは 32%だけである。クライアントのほとんどは保健施設で IEC 資機材・教材を読める。

保健施設での IEC 活動の他に、プロジェクトでは女性連合、FP コラボレーター、村落ヘルスワーカー・ネットワークと共同で地域社会の中で活動した。 IEC の方法と形には、劇、コンテスト、ビデオ、ラジオ放送、カセット、村の文庫づくりなど多岐にわたる。地元の人たちは、これらの資料を実態にあっている、わかりやすい、魅力的だと評価している。

フォーカス・グループ討議では、IEC 活動が大変効果的で有用であると結論づけられた。IEC は直接、地元住民に MCH ケアの意義について理解してもらい、とくに女性の意識を高め、行動変容を促した。CHC とは、保健ケア・サービスや婦人科系の検査、産前ケア、破傷風接種それに分娩サービスを受けに行くところであるという認知度が高くなった。

しかし、IEC 資機材・教材で少数民族の言語や方言で制作したものはない。山岳民族は点在して自分たちの独自の生活と仕事の慣習を守って暮らしている上、電気が来ていないか、あっても不足しているため、彼らにむけた保健教育は今も困難である。

提　言
・少数民族グループそれぞれにむけた IEC の形態と方法を考える。音声(民族の言語で録音したカセット)媒体を中心とする。
・地理的に困難な地域では、縁日やお祭りなどの伝統的な行事を利用して保健活動をす

る。これに産前ケア、婦人科検査、家族計画サービスを抱き合わせにする。
・IEC 担当者の技能向上にむけて訓練を続ける。担当者には女性連合のメンバーや FP コラボレーターと村落ヘルス・ワーカーを含める。

6. 保健管理情報システム(HMIS)の向上

プロジェクトの一環として DHC にはコンピューターが供与され、保健担当官には保健管理情報システム(HMIS)の研修を実施した。コミューンでは、助産師むけに標準書式のデータ入力の仕方が教えられた。

HMIS は管理、モニタリング、それに下位の実施組織に指示を出すうえで役に立つ。これを活用することで、省と郡レベルの連絡調整の際によりよい MCH ケアの技術指導ができる。

コミューン・レベルで記録の記入は CHC の 77%で十分に行っている。記録は定期的に上位機関に送付しているが、フィードバックを受けているのは 88%である。この数字は山間地よりも平野部で高い。上位機関からのフィードバックの内容は、60%が専門の職業的な問題で、残りがその他の事項である。専門的なフィードバックの率はやはり平野部で高い。

担当官の技能が未熟なため、訓練コースを受けたにもかかわらず、CHC の助産師たち、なかでも山間部の助産師たちは、記入にあたって多くの困難に直面している。保健要員の中には正確なデータを記録する重要性について認識していないものもおり、結果として上位機関に送付する情報の質が悪くなる。もう一つの問題は、郡レベルでの人事異動である。新人はコンピューター技能も HMIS ソフトの訓練も受けていない。

提　言
・現状ではミスが多いので、HMIS を効率的に操作させるため、コミューンでの訓練を増大させる。訓練の改善をはかれば、助産師たちの記録精度を高めるのに役立つ。CHC 所長と医師、準医師に記録記入を手助けするよう勧める。郡担当官の月例会議での訓練を強化し、コミューンの助産師に直接教えられるようにする。
・郡ならびにコミューンで新規雇用した HMIS 担当官を対象とした追加的訓練を実施する。

ゲアン省のリプロダクティブ・ヘルス体制向上をめざした JICA プロジェクトの妥当性、有効性、効率性、インパクトおよび自立発展性の評価

妥当性
終了時アセスメントは、このプロジェクト目標が女性のリプロダクティブ・ヘルスの向上を中心とした国家リプロダクティブ・ヘルス戦略 2001－2010 と合致していることを示している。

プロジェクト運営委員会を省・郡・コミューンすべてに設置し、そこに行政、保健センター、人口家族子ども委員会、女性連合の代表を得たことは、農村部で保健プロジェクトを実施するのに適切である。これによって、地元の機関や組織の協力関係を促進できる。助産師の訓練、保健施設への医療機材の供与、地元女性連合のネットワークをとお

して IEC 資機材・教材配付とその活用に関する訓練を実施するといったプロジェクト活動は、女性のリプロダクティブ・ヘルス現状を改善するという緊急の必要性に的をしぼり、すべてのレベルの女性、とくに草の根レベルの女性に妊娠・出産ケアを提供する保健サービス提供者の技能を高め、関連組織の能力を強化した。

効率性

概して、調査した保健施設には基盤、機材、人材、クライアントに産前・産後ケアを中心とする各種 RH サービスを提供する物資管理という意味での「レディネス（万全の備え)」（パッケージアプローチとも呼ばれる）があった。

レディネス(パッケージアプローチ)は 2001 年の基礎調査と比較して大幅に改善した。調査結果から JICA の財政支援がゲアン省の地域の保健状態の向上に重要な役割を果たしており、RH ケアと家族計画に長期的な影響をおよぼしていることが見て取れる。

- 概して、適切なサービス基盤、とくに妊娠・出産ケアの必要条件を備えている。コミューン・レベルでの基盤が改善され、RH ケア・サービスを向上するための基本条件を満たすようになった。
- 保健サービス提供者のほとんどは産前ケアの技能訓練と妊娠関連の合併症治療の訓練を受けており、日常の仕事の中で生かしている。プロジェクトの中での訓練は、効果が高く、内容の質も高く、地域の要件も満たしたものである。
- 保健施設のほとんどは、家族計画、産前ケア、母乳育児、育児についての IEC 資機材・教材をそなえている。女性に清潔な分娩用具セットと鉄剤を配付する物資供給体制も 2001 年と比較して格段に向上した。
- 保健施設のほとんどは担当官の何人かに保健管理情報システム(HMIS)の研修を受けさせており、コミューンの助産師にはとくに郡に提出するデータ記録の入力の訓練を受けさせている。郡の担当官は、コミューンからのデータを結合して省 MCH/FP センターに報告するための入力と加工用のソフトウエアの操作訓練を受けている。 HMIS システムは、DHC レベルで順調に作動している。
- 地方レベルでの MCH/FP ケアについての部門間と保健、人口、女性連合その他の組織との連携は効率的かつ適切である。その最も緊密な調整の例として、人口家族子ども委員会とその他の参加組織との定期会合、ならびに避妊具の配付・支給キャンベーンでの緊密な協力をあげられる。
- 活動のモニタリング活動は、コミューンでの RH ケア・サービスの改善を助けるだけでなく、省 MCH/FP センターと DHC のモニタリング能力を増強するのに役立っている。

有効性

保健施設でのクライアントむけサービスには質的向上がみられる。レディネス（パッケージアプローチ）はサービスの質的向上の基本要因である。とくに、高い技術的能力をそなえた MCH/FP センターは省内の RH ケアに適切な技術指導をしている。

- 女性の健康に重点をおいた JICA の資金援助プロジェクトは地域住民の健康の向上と住民の意識改革、なかでも出産可能年齢の女性の健康意識の向上に多大な影響を与えている。意識の向上が RH サービスを求めて保健施設に出向くという行動変容に結びついている。母親むけ RH ケアの指標は、女性の行動に前向きの影響を与えたという意味で RH/FP 事業が効果的であることを示している。産前ケアを受ける妊婦の割合、2 回の破傷風の予防接種を受ける割合、訓練を受けた保健サービス提供者の介助を得て出産する割合のいずれも増加した。産前ケアを求めて保健施設に行く平均回数は 2001 年の調査と比べて増加した。

・基礎調査の結果と同様、終了時アセスメントでも保健サービス提供者とクライアントの関係は良好である。
・人工妊娠中絶前後のカウンセリングは、実際に手術が行われる郡の保健施設が実施している。アンケート+面接調査で、保健サービス提供者の大半が中絶低減に関するカウンセリングの訓練に参加していることがわかる。地域の担当者との面接では、個人カウンセリングと平行して、女性連合、村落保健ワーカー、人口コラボレーターのネットワークをとおした地域での IEC 活動をとおして、人工中絶を避けるための避妊具の使用を勧めていることもわかる。
・地元の担当官は JICA の貢献を高く評価している。JICA の支援があって、ゲアン省の、しかも草の根での RH ケアを飛躍的に改善したと認識されている。日本人アドバイザーと専門家が長期に滞在してベトナム側のカウンターパートたちと協力して仕事をする間に知識と経験の交流があり、それが効果的であった。
・省と郡の主要スタッフが日本で研修に行ったことは女性むけ RH サービスについて学び、ベトナムの状況にあわせて適切に応用していくのに良い機会であった。

自立発展性

この評価では、地元のリーダーとの面接の結果、プログラムの成果を維持することとサービスの質的向上をはかる活動の持続について楽観と希望をもっていることを示している。

・プロジェクト運営委員会の構成組織には保健以外にも行政当局、人口部門、女性連合があるが、女性むけの RH ケアはいずれの組織・部門にとっても活動の一部となっていることから、この運営委員会がプロジェクトの持続性を保証する助けになる。
・地元リーダーたちは、プロジェクト活動を維持継続することに強いコミットメントをもっており、実際にそのための計画も用意している。たとえば、助産師むけの技術訓練を郡の助産師の現行の定期会合に統合する、また、RH ケアのモニタリング活動を保健部門の他の技術モニタリング活動に統合することでプロジェクト活動の継続は可能になる。
・地方政府の担当官が女性むけの RH ケアの改善の便益について意識を高めたことが今後良質のサービスを提供にむけた活動を継続させる重要な基礎となる。

結論として、2005 年に実施した終了時アセスメントは、6 つのプロジェクト成果評価項目全部に改善が見られたことを示した。平野部の方が達成の度合いが高い。しかし、山間地の保健施設も当初計画で予想した以上の成果をあげている。さらに、本評価はゲアン省での RH プロジェクトは、妥当性、効果、効率が高く、地元のパートナー組織はプロジェクトを継続させることに強い意欲をもっていることを呈示した。

このプロジェクトならびに他の関連プロジェクトの今後の活動を考案する一環として、改善できるあらゆること、この評価から学んだことを考慮する必要がある。


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