



INDIA

FACILITY SURVEY

(Under Reproductive and Child Health Project)

Phase - I

1999



International Institute for Population Sciences
Govandi Station Road, Deonar
Mumbai - 400 088, India

March 2001

Contributors

D.Radha Devi

Sulabha Parasuraman

F.Ram

CONTENTS

	Page
Preface	v
Acknowledgements	vii
List of tables	ix
List of figures	xi
List of abbreviations	xiii
Definition of selected expressions	xv
SUMMARY	
a. INTRODUCTION	1
b. DISTRICT HOSPITALS, FIRST REFERRAL UNITS, COMMUNITY HEALTH CENTRES	1
c. PRIMARY HEALTH CENTRES	4
CHAPTER I	
INTRODUCTION	
1.1 BACKGROUND	13
1.2 OBJECTIVES	15
1.3 METHODOLOGY	15
1.4 DATA COLLECTION TOOLS AND TECHNIQUES	17
(a) Questionnaires, training and field work	17
(b) Coverage	18
(c) Information covered in this report	20
CHAPTER II	
DISTRICT HOSPITAL	
2.1 INTRODUCTION	23
2.2 INFRASTRUCTURE	23
(a) Water and electricity	23
(b) Telephone and vehicle	25
(c) Adequately equipped laboratory and operation theatre	25
(d) Separate aseptic labour room and delivery facility	25
(e) Out patient department for gynaecology and RTI/STI	26
(f) Linkage with district blood bank	27
2.3 STAFF POSITION	27
(a) Obstetrician/Gynaecologist	27
(b) Paediatrician, RTI/STI specialist and Pathologist	28
(c) Anaesthesiologist and general duty doctors	29
(d) Staff nurse/midwife, female health worker and laboratory technician	29
2.4 TRAINING OF MEDICAL OFFICERS	30
2.5 SUPPLY AND STOCK	
I. SUPPLY OF TUBAL RINGS AND SELECTED KITS	31
(a) Tubal rings and standard surgical kits	31
(b) Emergency obstetric care drug kit and RTI/STI laboratory kit	32
(c) IUD insertion kit, new born care equipment kit, labour room (normal delivery) kit	32

	Page
II. STOCK OF SELECTED ITEMS	32
(a) Contraceptives.....	32
(b) IFA (large) tablets, Vitamin A solution and ORS packets.....	32
(c) Vaccine.....	33
2.6 EQUIPMENTS	33
(a) Equipments in operation theatre.....	34
(b) X-ray and ECG machine.....	35
(c) Cold chain equipments.....	35
2.7 ADEQUATELY EQUIPPED DISTRICT HOSPITALS AND THOSE USED AS REFERRAL	36
 CHAPTER III	
FIRST REFERRAL UNIT	
3.1 INTRODUCTION.....	49
3.2 INFRASTRUCTURE.....	49
(a) Water and electricity.....	49
(b) Telephone and vehicle.....	50
(c) Adequately equipped laboratory and operation theatre.....	51
(d) Separate aseptic labour room and delivery facility.....	51
(e) Out patient department (OPD) for gynaecology and RTI/STI.....	52
(f) Linkage with district blood bank.....	52
3.3 STAFF POSITION.....	52
(a) Obstetrician/Gynecologist.....	53
(b) Paediatrician, RTI/STI specialist and Pathologist.....	53
(c) Anaesthesiologist and general duty doctors.....	55
(d) Staff nurse/midwife, female health worker and laboratory technician.....	55
3.4 TRAINING OF MEDICAL OFFICERS.....	56
3.5 SUPPLY AND STOCK	
I. SUPPLY OF TUBAL RINGS AND SELECTED KITS.....	56
(a) Tubal rings and standard surgical kits.....	57
(b) Emergency obstetric care drug kit and RTI/STI laboratory Kit.....	57
(c) IUD insertion kit, new born care equipment kit, labour room (normal delivery) kit.....	57
II. STOCK OF SELECTED ITEMS	57
(a) Contraceptives.....	58
(b) IFA (large) tablets, Vitamin A solution and ORS packets.....	58
(c) Vaccine.....	58
3.6 EQUIPMENTS.....	58
(a) Equipments in operation theatre.....	59
(b) X-ray and ECG machine.....	59
(d) Cold chain equipments.....	60
3.7 ADEQUATELY EQUIPPED FRUs AND THOSE USED AS REFERRAL.....	60

CHAPTER IV COMMUNITY HEALTH CENTRE

4.1	INTRODUCTION.....	73
4.2	INFRASTRUCTURE	73
	(a) Water and electricity.....	73
	(b) Telephone and vehicle.....	74
	(c) Adequately equipped laboratory and operation theatre.....	75
	(d) Separate aseptic labour room and delivery facility.....	75
	(e) Out patient department (OPD) for gynecology and RTI/STI	76
	(f) Linkage with district blood bank.....	76
4.3	STAFF POSITION	76
	(a) Obstetrician/Gynecologist.....	76
	(b) Pediatrician, RTI/STI specialist and Pathologist.....	77
	(c) Anesthesiologist and general duty doctors.....	78
	(d) Staff nurse/midwife, female health worker and laboratory technician.....	78
4.4	TRAINING OF MEDICAL OFFICERS.....	79
4.5	SUPPLY AND STOCK	
I	SUPPLY OF TUBAL RINGS AND KITS	80
	(a) Tubal rings and Standard Surgical Kits.....	80
	(b) Emergency obstetric care drug kit and RTI/STI laboratory Kit.....	81
	(c) IUD insertion kit, new born care equipment kit, labour room (normal delivery) kit	81
II	STOCK OF SELECTED ITEMS OF HEALTH CARE	81
	(a) Contraceptives.....	81
	(b) IFA (large), Vitamin A solution and ORS packet.....	82
	(c) Vaccine.....	82
4.6	EQUIPMENTS	82
	(a) Operation theatre equipments.....	82
	(b) X-ray and ECG machine.....	83
	(c) Cold chain equipments.....	83
4.7	ADEQUATELY EQUIPPED COMMUNITY HEALTH CENTRES AND THOSE USED AS REFERRAL	84

CHAPTER V PRIMARY HEALTH CENTRE

5.1	INTRODUCTION.....	97
5.2	INFRASTRUCTURE	97
	(a) Own building and toilet facility.....	98
	(b) Continuous water supply.....	98
	(c) Electricity.....	99
	(d) Labour room.....	99
	(e) Laboratory.....	100
	(f) Telephone.....	100
	(g) Vehicle.....	100
	(h) In-patient beds.....	101

	Page
5.3 STAFF	101
(a) Medical Officer.....	101
(b) Medical Officer (Female).....	102
(c) Medical Officer staying in PHC compound.....	102
(d) Health Assistant (Male).....	103
(e) Health Assistant (Female) and Female Health Worker.....	103
(f) Laboratory Technician.....	103
5.4 TRAINING STATUS OF PHC STAFF.....	104
(a) Medical Officer	104
(b) Para-medical Staff	104
5.5 SUPPLY OF KITS, CONTRACEPTIVES, VACCINES	105
5.6 STOCK OF VACCINES, CONTRACEPTIVES AND PROPHYLACTIC DRUGS	106
(a) Contraceptives.....	106
(b) Prophylactic drugs.....	107
(c) Vaccine.....	107
5.7 EQUIPMENTS	107
(a) Weighing machine	
i. Adult.....	108
ii. Infant.....	108
(b) Deep Freezer and Vaccine carrier.....	109
(c) BP instrument.	109
(d) Autoclave and Steam Sterilizer Drum.....	109
(e) MTP Suction Aspirator.....	110
(f) Labour Room Table and Equipments.....	110
5.8 CRITICAL INPUTS.....	111
5.9 PERCENT OF PHCs ADEQUATELY EQUIPPED.....	112
5.10 PUBLIC HEALTH FACILITIES/ PROGRAMMES AND FAMILY PLANNING PERFORMANCE	113
APPENDIX A-I (Questionnaire for District Hospital/FRU/CHC).....	127
APPENDIX A-II (Questionnaire for PHC).....	137
APPENDIX B (List of Districts covered in the first phase of RCH-Facility Survey).....	145

MAPS

Reproductive and Child Health Project Team

PREFACE

Reproductive and Child health (RCH) care is an essential component of the primary health care services, and India is committed to the provision of "Health for All" through primary health care approach. The RCH programme of the Government of India (GoI) aims to effectively bring all the RCH services within easy reach of the community. During the Eighth Five Year Development Plan in India emphasis was given to consolidation of existing health infrastructure with a thrust to qualitative improvement in the health services through strengthening of the physical facilities like provision of essential equipments, supply of essential drugs and consumables, construction of buildings and staff quarters, filling up of vacant posts of medical and paramedical staff and in-service training of staff.

At the district level, there is a hierarchical system of health care establishments (HCE) in India ranging from sub-centre to Primary Health Centre (PHC), to Community Health Centre (CHC)/First Referral Units (FRU) to District Hospitals (DH). Attempts have also been made to link them by appropriate referral systems.

For a thorough implementation of the RCH programme as envisaged in the Eighth Five Year Plan and the National Health Policy, it is essential to obtain knowledge of the existing situation of the facilities at different levels of HCEs in each and every district in the country. The Ministry of Health and Family Welfare, GoI, New Delhi therefore, has undertaken a facility survey at the district level to assess the availability of various facilities in terms of infrastructure, staff, equipments, supply and their utilization. So far, in this country, no survey has been made on such a large scale with these specific objectives.

The Ministry of Health and Family Welfare, GoI, New Delhi designated the International Institute for Population Sciences (IIPS), Mumbai, as the Nodal Agency for preparation of the survey instruments, planning and coordinating the Project related activities of the Regional Agencies. The data collection, tabulation of data as per the tabulation plan provided by the Nodal Agency and preparation of monthly district level reports and the six district combined reports were entrusted to seven Regional Agencies. The World Bank provided the required financial assistance.

In a given district all the government HCEs starting from PHC to DH were covered using separate questionnaires, one each for PHC and DH/FRU/CHC. All the middle level government HCEs like Taluk Hospital, Rural Hospital etc. are grouped under CHC unless they are recognized as FRU. The first phase of the Facility Survey was carried out in 1999. It covered 210 DHs, 760 FRUs, 886 CHCs and 7959 PHCs from 221 districts in India. This survey has collected a lot of information regarding the health care facilities available in the different HCEs and all are tabulated and presented in the district level reports. The focus of this report is mainly to provide the health care facility situation prevailing in India and the constituent states/UTs based on the information collected during the first phase of the RCH-Facility Survey. This report provides only the bare minimum facilities required to deliver the RCH services, and thereby avoid the presentation of a huge set of data that are available in the district level reports. This, however, does not undermine the importance of any of the items of the information collected from the different HCEs and not presented in this national report.

This report is divided into five chapters. Chapter I is introduction. Chapter II deals with the health care facilities available in the District Hospitals. Chapter III, IV and V are similar presentations respectively for FRU, CHC and PHC. A summary of the findings relating to the country as a whole assessed from the pooled data of all the health care establishments covered in the first phase of the RCH-Facility Survey is presented in the Summary chapter.

It is hoped that the MoHFW, GoI will find the data generated through the Facility Survey useful in strengthening the service units and thereby providing quality RCH service. The conscientious efforts of the Regional Agencies in data collection, tabulation and analysis and that of the Nodal Agency, IIPS, will be truly rewarded if the survey is able to effectively meet the laid out objectives.

T.K.Roy,
Director,
IIPS,
Mumbai

ACKNOWLEDGEMENTS

The Facility Survey would not have been successfully completed without the cooperation and support from various sources at different stages of the project. Although it is not possible to acknowledge each and every one involved in the survey, some organizations and individuals deserve special mention.

We wish to express our thanks to the Ministry of Health and Family Welfare (MoHFW), Government of India for giving us an opportunity to involve ourselves in this project of national importance. Our special thanks are to Shri Y. N. Chaturvedi, former Secretary and Shri A. R. Nanda, Secretary (Family Welfare) MoHFW for their valuable advice and support. We are also thankful to Shri P.K. Saha, Chief Director and Dr. K.V. Rao, Chief Director, Department of Family Welfare, MoHFW for their constant support.

We are grateful to the state Government officials of the Department of Health and Family Welfare at State, District and Block levels for providing valuable information that facilitated the survey.

The survey benefited immensely from the able guidance and advice of the World Bank Consultant Dr. Nirmala Murthy. We thank her profusely.

A more general debt of gratitude is to Dr. K.B. Pathak, former Director of IIPS and Consultant of RCH project, Prof. Sumati Kulkarni, former Officiating Director, IIPS and Prof. T.K. Roy, Director, IIPS for their valuable suggestions and guidance. Prof. Shekhar Mukherji's initial association with this project has been a great boon to us, as we could benefit from his vast knowledge on this subject. We are extremely grateful to him. We also thank Major R. Bashyam, Administrative Officer and Mrs. V. Ramakrishnan, Accounts Officer, IIPS for their help.

We appreciate the hard work of the Regional Agencies involved in the RCH-Facility Survey and their effort to complete their assignment on time.

We acknowledge with thanks the cooperation and help rendered by the RCH staff at every stage. However, special mention must be made of Ms. C.R. Deepa, and Mrs. Seema Zagade for assistance rendered at different stages of the preparation of the report, which took a great load of non-technical work off our shoulders.

Our colleagues of the RCH-Project, Research Officers Mr. Bipul Hazarika, Mr. S. Krishnaiah and Mr. Manoj Alagarajan were indispensable in the process of preparation of this report in more ways than one. As it is difficult to specify the type of help rendered by them at every stage of the preparation of this report, we want to put on record that we appreciate their hard work and are extremely grateful to them.

D.Radha Devi
Sulabha Parasuraman
F.Ram
(RCH Coordinators)

LIST OF TABLES

PAGE

SUMMARY

Table A:	Percent of health care establishments having specific infrastructural facilities.....	6
Table B:	Percent of health care establishments having specific staff and training of Medical Officers.....	7
Table C:	Supply status of kits and Percent of health care establishments having stock of specific health care items on the day of survey	8
Table D:	Percent of health care establishments having specific equipments, percent adequately equipped and percent attending referred cases	9
Table E:	Percent of Primary Health Centres having specific facilities.....	10

CHAPTER I INTRODUCTION

Table I.1	Regional agencies by states/UTs assigned to them.....	16
Table I.2	Total and completed number of districts in the first round of facility survey by States/UTs.....	19

CHAPTER II DISTRICT HOSPITAL

Table H1	Status of infrastructure in District Hospitals	38
Table H2	Staff position in District Hospitals	40
Table H3	Status of training of medical officers in District Hospitals.....	42
Table H4	Supply of Tubal ring and Kits in District Hospitals.....	43
Table H5	Stock of selected items of health care in District Hospitals.....	44
Table H6	Availability of selected equipments in District Hospitals.....	46
Table H7	Number of adequately equipped District Hospitals and those used as referral.....	48

CHAPTER III FIRST REFERRAL UNIT

Table F1	Status of infrastructure in First Referral Units.....	62
Table F2	Staff position in First Referral Units	64
Table F3	Status of training of medical officers in First Referral Units.....	66
Table F4	Supply of Tubal rings and Kits in First Referral Units	67
Table F5	Stock of selected items of health care in First Referral Units.....	68
Table F6	Availability of selected equipments in First Referral Units.....	70
Table F7	Percent of adequately equipped First Referral Units and those used as referral.....	72

CHAPTER IV COMMUNITY HEALTH CENTRE

Table C1	Status of infrastructure in Community Health Centres.....	86
Table C2	Staff position in Community Health Centres.....	88
Table C3	Status of training of medical officers in Community Health Centres.....	90
Table C4	Supply of Tubal ring and kits in Community Health Centres	91
Table C5	Stock of selected items of health care in Community Health Centres.....	92

Table C6	Availability of selected equipments in Community Health Centres.....	94
Table C7	Percent of adequately equipped Community Health Centres and those used as referral.....	96

CHAPTER V PRIMARY HEALTH CENTRE

Table P1	Status of infrastructure in Primary Health Centres.....	115
Table P2	Staff position in Primary Health Centres.....	116
Table P3	Training status of Medical Officers in Primary Health Centres.....	117
Table P4	Training status of Paramedical staff in Primary Health Centres.....	118
Table P5	Supply status in Primary Health Centres.....	119
Table P6	Stock of selected items of health care in Primary Health Centres.....	120
Table P7	Availability of selected equipments in Primary Health Centres.....	122
Table P8	Percentage distribution of PHCs having all critical inputs.....	123
Table P9	Percent of adequately equipped Primary Health Centres by specific components.....	124
Table P10	Public health facilities / Programmes and family planning performance in Primary Health Centres.....	125

LIST OF FIGURES

PAGE

CHAPTER I INTRODUCTION

Fig. 1.1	Percent share of states in enumerated FRUs.....	18
Fig. 1.2	Percent share of states in enumerated CHCs.....	18
Fig. 1.3	Percent share of states in enumerated PHCs.....	20

CHAPTER II DISTRICT HOSPITAL

Fig. 2.1	Percent of DHs having tap water facility and tank & pump facility.....	24
Fig. 2.2	Percent of DHs having electricity & generator.....	24
Fig. 2.3	Percent of DHs having separate aseptic labour room and delivery facility.....	26
Fig. 2.4	Percent of DHs having Gynecologist/Obstetrician.....	27
Fig. 2.5	Percent of DHs having Pediatrician, RTI/STI specialist and Pathologist.....	28
Fig. 2.6	Percent of sanctioned position of Gynecologist and Pediatrician not filled in DHs.....	29
Fig. 2.7	Percent of DHs having adequately equipped laboratory & Laboratory Technician.....	30
Fig. 2.8	Percent of DHs with atleast one doctor trained in new born care and emergency obstetric care.....	31
Fig. 2.9	Percent of DHs having OT and selected OT equipments.....	34
Fig. 2.10	Percent of DHs having deep freezer, OPV and measles vaccine.....	35

CHAPTER III FIRST REFERAL UNIT

Fig. 3.1	Percent of FRUs having tap water facility and tank & pump facility.....	50
Fig. 3.2	Percent of FRUs having electricity & generator.....	50
Fig. 3.3	Percent of FRUs having separate aseptic labour room and deliver facility.....	52
Fig. 3.4	Percent of FRUs having Gynecologist/Obstetrician.....	53
Fig. 3.5	Percent of FRUs having Pediatrician, RTI/STI specialist and Pathologist.....	54
Fig. 3.6	Percent of sanctioned position of Gynecologist and Pediatrician not filled in FRUs.....	54
Fig. 3.7	Percent of FRUs having adequately equipped laboratory & Laboratory Technician.....	55
Fig. 3.8	Percent of FRUs with atleast one doctor trained in new born care and emergency obstetric care.....	56
Fig. 3.9	Percent of FRU having OT and selected OT equipments.....	59
Fig. 3.10	Percent of FRUs having OPV, measles vaccine, deep freezer.....	60

CHAPTER IV COMMUNITY HEALTH CENTRES

Fig. 4.1	Percent of CHCs having tap water facility and tank & pump facility.....	74
Fig. 4.2	Percent of CHCs having electricity & generator.....	74
Fig. 4.3	Percent of CHCs having separate aseptic labour room and deliver facility.....	75
Fig. 4.4	Percent of CHCs having Gynecologist/Obstetrician.....	76
Fig. 4.5	Percent of CHCs having Pediatrician, RTI/STI specialist and Pathologist.....	77
Fig. 4.6	Percent of sanctioned position of Gynecologist and Pediatrician not filled in CHCs.....	78
Fig. 4.7	Percent of CHCs having adequately equipped laboratory & Laboratory Technician.....	79
Fig. 4.8	Percent of CHCs with atleast one doctor trained in in new born care and emergency obstetric care.....	80
Fig. 4.9	Percent of CHCs having OT and selected OT equipments.....	83
Fig. 4.10	Percent of CHCs having deep freezer OPV, measles vaccine.....	84

CHAPTER V PRIMARY HEALTH CENTRE

Fig. 5.1	Percent of PHCs having own building and toilet facilities.....	98
Fig. 5.2	Percent of PHCs having electricity and continuous water supply.....	99
Fig. 5.3	Percent of PHCs having telephone and functional vehicle.....	100
Fig. 5.4	Percent of PHCs by number of MOs.....	101
Fig. 5.5	Percent of PHCs with quarters for MO and MO staying in PHC compound.....	102
Fig. 5.6	Percent of PHCs having laboratory and laboratory technician.....	104
Fig. 5.7	Percent of PHCs having received EsOC drug kit, Oral Pills and ORS packets.....	106
Fig. 5.8	Percent of PHCs having weighing machine.....	108
Fig. 5.9	Percent of PHCs with deep freezer, OPV and measles vaccine.....	109
Fig. 5.10	Percent of PHCs having labour room and labour room table and equipments.....	111
Fig. 5.11	Percentage distribution of PHCs having all critical inputs.....	112

ABBREVIATIONS

ANM	Auxiliary Nurse Midwife
ARI	Acute Respiratory Infection
BCG	Bacillus Calmatte Guerin
BP	Blood Pressure
CDD	Control of Diarrheal Diseases
CHC	Community Health Centre
CSSM	Child Survival and Safe Motherhood
DH	District Hospital
DPT	Diphtheria Pertussis Tetanus
ECG	Electro Cardiogram
EmOC	Emergency Obstetric Care
EsOC	Essential Obstetric Care
FHW	Female Health Worker
GoI	Government of India
HA	Health Assistant
HCE	Health Care Establishment
IFA	Iron Folic Acid
IIPS	International Institute for Population Sciences
IUD	Intra Uterine Device
MO	Medical Officer
MoHFW	Ministry of Health and Family Welfare
MPW	Multipurpose Worker
MTP	Medical Termination of Pregnancy
NBCE	New Born Care Equipment
NGO	Non-Government Organization
OPD	Out Patient Department
OPV	Oral Polio Vaccine
ORS	Oral Re-hydration Salt
ORT	Oral Re-hydration Therapy
OT	Operation Theatre
PHC	Primary Health Centre
PHN	Public Health Nurse
RA	Regional Agency
RCH	Reproductive and Child Health
RMO	Resident Medical Officer
RTI	Reproductive Tract Infection
STI	Sexually Transmitted Infection
TAC	Technical Advisory Committee
TT	Tetanus Toxoid
UIP	Universal Immunization Programme
UT	Union Territory

DEFINITION OF SELECTED EXPRESSIONS

- 1 Adequately equipped
Having at least 60 percent of the critical inputs
- 2 Aseptic labour room
Clean room, free from germs of disease, for carrying out Delivery
- 3 Critical Inputs

District hospitals/ FRUs/ CHCs:

Infrastructure:

Overhead tank and pump facility, electricity in all parts of the hospital, availability of generator, telephone, functional vehicle, adequately equipped laboratory, operation theatre, separate aseptic labour room

Staff:

Gynecologist/obstetrician, anesthesiologist and laboratory technician

Supply:

Tubal rings, all six standard surgical kits, emergency obstetric care drug kit, RTI/STI laboratory kit, newborn care equipment kit and labour room (normal delivery) kit

Equipments:

Boyles apparatus, oxygen cylinder and shadowless lamp

Primary Health Centres:

Infrastructure:

Continuous water supply, electricity, labour room, laboratory, telephone and functional vehicle

Staff:

At least one medical officer, one laboratory technician and all health assistant males and females (sanctioned posts filled)

Supply:

IUD insertion kit (Kit G), normal delivery kit/labour room kit (Kit I), essential obstetric care drug kit, mounted lamp 200 w bulb, oral pill cycles, measles vaccine, IFA tablet (large) and ORS packets

Equipments:

At least one functioning deep freezer, vaccine carrier, BP instrument, autoclave, MTP suction aspirator and labour room table and equipment

Training:

At least one Medical Officer trained in laparotomy/cesarian, MTP and delivery and at least one para-medical staff trained in IUD insertion, BP checking, RCH and management of ARI

- 4 Delivery facility
All health care establishments having a separate aseptic labour room or attended atleast one delivery during the three months prior to the survey is taken as having delivery facility.
- 5 Emergency contraceptives
Emergency contraceptives are methods of *preventing pregnancy after* unprotected sexual intercourse. Emergency contraception can be used when a condom breaks, after a sexual assault, or any time unprotected sexual intercourse occurs.
- 6 Female health worker
One of the main duties of the ANM is to increase the felt need of the community for the health care services through proper counseling and education. But for this particular category of health worker the nomenclature varies from state to state. Hence the chances of ANM getting classified as any of the other female health worker cannot be ruled out. As such, under Female Health Worker category, in this study, is included Public Health Nurse, Female Health Assistant (ANM) and female Multipurpose Worker.

SUMMARY

a. INTRODUCTION

The Ministry of health and Family Welfare, Government of India has undertaken a facility survey at the district level in 1999, to assess the availability of health care facilities and their utilization in the Primary Health Centres, Community Health Centres, First Referral Units and District Hospitals under the Reproductive and Child health project. The present report is based on the data collected during the first phase of the survey covering 210 District Hospitals, 760 First Referral Units, 886 Community Health Centres and 7959 Primary Health Centres from 221 districts in India.

b. DISTRICT HOSPITALS, FIRST REFERRAL UNITS, COMMUNITY HEALTH CENTRES

The relevant information for these health care establishments is given in Tables A to D. One general observation from these tables is that all the facilities are highest in the District Hospitals and lowest in the Community Health Centres with First Referral Units falling in between, and that none of the facilities are available in all the health care establishments.

Infrastructure refers to the basic support system in the form of proper and regularly maintained building, and the basic facilities available within the building for a smooth functioning of the health care establishments. Some of the facilities included are supply of water (source and availability of over head tank and pump facility), electricity, standby facility in the form of generator, operation theatre (preferably one separately for gynecology), laboratory facility for testing blood, urine etc., telephone, functional vehicle and out patient department for gynecology and RTI/STI. Besides, Table A also shows whether in the out patient department for gynecology/obstetrics there is name plates to guide the patients, whether there is provision for privacy to examine the patients, whether facility for counseling the patients exist, whether there is separate toilet with running water, whether there is facility for sterilizing the instruments in the out patient department and also whether the health care establishment is linked with the district blood bank.

Almost all health care establishments are functioning from own building. Regularity of maintenance is at least once in three years in 72 percent of 60 percent of First Referral Units and 51 percent of Community Health Centres. Three District Hospitals, out of four District Hospitals have tap water facility and in the case of both First Referral Units and Community Health Centres the distribution by source of water is almost equal between tap and well. Facility for overhead tank and pump is found in 87 percent of District Hospitals, 82 percent of First Referral Units and 71 percent of Community Health Centres.

More than 90 percent of the District Hospitals are having electricity (in all parts of the hospital), operation theatre, telephone and functional vehicle. Four out of five District Hospitals are having adequately equipped laboratory, generator, separate operation theatre for gynaecology and gynaecology/obstetric out patient department facility. Only two-thirds of the District Hospitals have linkage with district blood bank and quarters for nurse. Slightly over half the District Hospitals have quarters for Resident Medical Officer (RMO). Wherever gynaecology/obstetric out patient department is available, two-thirds have nameplates to guide clients, privacy during examination and facility for sterilising instruments. The rest of the information given in Table A is far from satisfactory.

The facilities available in more than 90 percent of the First Referral Units are operation theatre and electricity in all parts of the hospital. Four-fifths of the First Referral Units have overhead tank and pump facility and telephone while almost three-fourths have adequately equipped laboratory, generator, functional vehicle and separate aseptic labour room. Gynaecology/obstetric out patient department facility and quarters for nurse is available in about two-thirds of the First Referral Units. The rest of the facilities are inadequate.

The proportion of Community Health Centres having different facilities is much below that of First Referral Units and District Hospitals. At least 60 percent of the Community Health Centres are having electricity in all parts of the hospital, operation theatre, adequately equipped laboratory, telephone, functional vehicle and quarters for nurse.

The staff situation provided in Table B shows that only around one-third of the District Hospitals have RTI/STI specialist, Public Health Nurse, male Health Assistant and male Multipurpose Worker. Forty to fifty percent of the District Hospitals have Pathologist, female Health Assistant and female Multipurpose Worker. At least three-fourths of the District Hospitals have Obstetrician/Gynaecologist, Paediatrician, Laboratory Technician, Staff Nurse and Pharmacist. Anaesthesiologist is available in 70 percent of District Hospitals.

Except Laboratory Technician, male Health Assistant, Staff Nurse and Pharmacist, no other staff is available in more than 60 percent of the total First Referral Units. Staff availability in Community Health Centre is much worse than that in First Referral Unit. The only staff category that is available in more than 60 percent of the Community Health Centres is Laboratory Technician, Staff Nurse and Pharmacist.

Training is an area, which is more pronounced in terms of inadequacy than adequacy. During the one year immediately preceding the survey not even one-third of the Medical Officers had in-service training in any area covered in Table B, viz. sterilization, IUD insertion, emergency contraception, RTI/STI, new born care and emergency obstetric care.

Table C, gives the supply of kits (during the last quarter preceding the survey) and stock on the day of survey of specific health care items. Supply status shows that except RTI/STI kit, the percent of District Hospitals having the kits vary from about one-third in the case of EmOC drug kit to 52 percent in normal delivery kit. Comparatively, the situation is slightly better in the case of First Referral Units except in the case of RTI/STI laboratory kit and EmOC drug kit, the latter being almost the same. Notably, all six sets of standard surgical kits, IUD insertion kit and normal delivery kit were supplied to 62 percent to 68 percent of First Referral Units. None of the kits were supplied to more than 50 percent of the Community Health Centres. All except IUD insertion kit and normal delivery kit were supplied to only less than 30 percent of the Community Health Centres.

However, stock on the day of survey paints slightly better situation. Except in the case of tubal rings, IFA large, Vitamin A solution and ORS packets in the District Hospitals and First Referral Units, all other items included are available in more than 60 percent. In Community Health Centres, besides the above mentioned ones lubricated Nirodh pieces, and DT vaccine also was not in stock in over 40 percent of the Community Health Centres.

Table D shows the situation with respect to specific equipments. More than three-fourths of the District Hospitals have all operation theatre equipments except cardiac monitor, ventilator and OT care/fumigation apparatus. Hydraulic operation table, shadowless lamp, high pressure sterilizer, X-ray machine, ice-lined freezers and deep freezers are found in at least 70 percent of the First Referral Units while none of the equipments are available in even two-thirds of the Community Health Centres except shadowless lamp, refrigerators and ice-lined freezers.

Adequacy is defined as having at least 60 percent of the critical inputs. Table D shows that adequately equipped health care establishments in supply is less than even one-third of the total. This situation in Community Health Centres is absolutely negligible with just one in ten Community Health Centres being adequately equipped in supply. Infrastructure, staff and equipment situation is fairly good in the District Hospitals. More than two-thirds of the First Referral Units are adequately equipped in infrastructure and equipments while only infrastructure is slightly better in the case of Community Health Centres.

Since the district and sub-district level health care establishments are expected to serve as referral to the lower level health care establishments, a question was asked during the survey as to whether they have attended to any referred cases during the three months preceding the survey. The results shows that 33 percent of District Hospitals, 34 percent of First Referral Units and 25 percent of Community Health Centres have attended to referred cases of delivery.

c. PRIMARY HEALTH CENTRES

Table E presents the key features of 7959 surveyed Primary Health Centres in India. Out of the total Primary Health Centres 92 percent are functioning from own building and all but 2 percent Primary Health Centres are located in pucca or semi pucca buildings. In about one in every ten Primary Health Centres maintenance is done regularly. In 79-82 percent, electricity and toilet facilities are available but continuous water supply is available only in less than two-thirds of the Primary Health Centres. In slightly more than two-thirds of the Primary Health Centres, there is a provision for admitting in-patients as they have at least one bed. About half of the Primary Health Centres have a labour room and test laboratory each. The communication and transportation facilities are available with only a small proportion of Primary Health Centres, as only 20 and 29 percent reported having telephone and functional vehicle. In only one-fourth of Primary Health Centres there is a staff quarter for medical officer.

There is not a single category of staff that is available in all the surveyed Primary Health Centres. Ninety two percent of the Primary Health Centres have at least one Medical Officer, implying that almost one in ten Primary Health Centres is functioning without a Medical Officer. In one-fifth of the Primary Health Centres there is a lady Medical Officer on the staff. In ninety percent of Primary Health Centres at least one female health worker is available. Pharmacist/compounder is available in 79 percent of the Primary Health Centres. Though, 46 percent of the Primary Health Centres have laboratory, only 39 percent have a Laboratory Technician. Primary Health Centres not only lack staff, but they also lack in trained staff. All the Primary Health Centres do not have at least one medical or paramedical staff trained in various components of RCH programme. One-fourth or lesser proportion of Primary Health Centres each have Medical Officers who are trained in conducting deliveries, laporotomy (caesarian), sterilization, MTP and treatment of RTI/ STIs. The training status of paramedical staff is comparatively better, as two-thirds or slightly more Primary Health Centres each, have at least one paramedical person trained in IUD insertion, Control of Diarrheal Diseases/ Oral Rehydration Therapy, Universal Immunization Programme, Child Survival and Safe Motherhood and Reproductive and Child Health.

Under the Reproductive and Child health programme, Primary Health Centres are given a few kits of instruments/ drugs. About half of the Primary Health Centres each had not received IUD insertion kit and Normal Delivery kit. The Essential Obstetric Care Drug kit was received by only one-fifth of the surveyed Primary Health Centres. The oral pills and measles vaccines were received by 60 percent and IFA (large) tablets were received by one-third of the Primary Health Centres.

Data on the availability of different equipments shows that 71-77 percent of Primary Health Centres each have adult and infant weighing machine. The three equipments necessary for storing and carrying the vaccines, deep freezer, vaccine carrier and refrigerator are available in 65, 87 and 16 percent of Primary

Health Centres. The autoclave and steam sterilizer drum necessary for sterilization of the needles and syringes are available in 60 percent of the Primary Health Centres each. Though Primary Health Centres are expected to provide safe abortion services the MTP suction aspirator is available in less than one-fifth of the Primary Health Centres.

All the Primary Health Centres are expected to provide contraceptive services, antenatal care, immunization and treatment of diarrhea among children. A large percent of Primary Health Centres did not have any stock of each of the contraceptives, vaccines and prophylactic drugs. Only 56-61 percent of Primary Health Centres had some stock of Nirodh, IUD and oral pills, while the different vaccines like BCG, DPT, OPV, Measles and TT were available with less than two-thirds. One-third or little more of Primary Health Centres reported having some stock of IFA tablets - large and small.

Though all the Primary Health Centres are expected to provide facilities for each of the components of RCH like, institutional delivery, safe abortion, treatment for RTI/ STIs and ARI and contraceptive services, only a small proportion of Primary Health Centres provide these services. Only one-third of the surveyed Primary Health Centres in India conduct deliveries and on an average 26 deliveries per Primary Health Centre (those which conduct) were reported during three months prior to the survey. Contraceptive services i.e. facilities for sterilization and IUD insertions are available in about two-thirds of the Primary Health Centres and an average of 65 sterilizations and 50 IUD insertions per Primary Health Centre were done. The MTP services were offered by only 3 percent of the Primary Health Centres and these 3 percent Primary Health Centres performed an average of 14 MTPs per Primary Health Centre. One-third and one-sixth of the Primary Health Centres offers treatment of ARI and RTI/ STI.

In all, only three percent of the 7959 Primary Health Centres had 80 percent or more critical inputs. About one-third of the Primary Health Centres had 60-79.9 percent and one in every ten Primary Health Centres had only 20 percent or less critical inputs. The components of critical inputs when studied separately shows that slightly over half the Primary Health Centres are adequately equipped with respect to equipments. The situation of infrastructure and staff are more or less the same with slightly over a third of the Primary Health Centres being adequately equipped. Inadequacy reigns high in training of medical and paramedical staff.

Table A: Percent of health care establishments having specific infrastructural facilities

Sl.No.		DH	FRU	CHC
<i>NUMBER SURVEYED</i>		<i>210</i>	<i>760</i>	<i>886</i>
1	Own building	98	98	96
2	Maintenance at least once in three years	72	60	51
3	Source of Water			
	Tap	72	50	46
	Well (including tube well)	27	48	51
4	Facility for overhead tank and pump	87	82	71
5	Electricity in all parts of the hospital	98	96	92
6	Operation Theatre	98	93	86
7	Separate aseptic labour room	44	36	28
8	Delivery facility	91	89	73
7	Adequately equipped laboratory	82	71	60
8	Generator	86	71	52
9	Telephone	96	80	62
10	Functional vehicle	91	73	61
11	Separate OT for Gynaecology	85	70	57
12	OPD facility for RTI/STI	50	12	7
13	Gynaecology/obstetric OPD facility	80	63	43
14	Where gynaecology/obstetric OPD facility is available	100	100	100
	Name plates to guide clients to Gyneec. OPD	71	41	25
	Privacy during examination	72	53	36
	Facility for counselling	64	48	32
	Separate toilet with running water	50	77	23
	Facility for sterilizing instruments	72	54	39
15	Linkage with district blood bank	66	17	9
16	Regular blood supply	60	12	8
17	Quarters for obstetrician/gynaecologist	38	23	15
18	Quarters for RMO	56	49	47
19	Quarters for Nurse	67	66	65
20	Accommodation facility for relatives of patients	23	10	8
21	Personal computer	21	2	2

Table B: Percent of health care establishments having specific staff and training of Medical Officers

Sl.No.		DH	FRU	CHC
NUMBER SURVEYED		210	760	886
Staff				
1	Obstetrician /Gynaecologist	78	48	28
2	Paediatrician	78	37	19
3	RTI/STI Specialist	35	8	3
4	Pathologist	45	10	6
5	Anaesthesiologist	70	22	10
6	Laboratory Technician	93	86	74
7	Public Health Nurse	30	15	13
8	Health Assistant (Male)	32	64	38
9	Health Assistant (Female)	41	45	43
10	Multipurpose worker (Male)	32	37	35
11	Multipurpose worker (Female)	40	41	40
12	Staff nurse	94	93	87
13	Pharmacist	96	92	88
Training of Medical Officers in				
1	Sterilization	32	28	21
2	IUD insertion	25	27	22
3	Emergency Contraception	19	17	11
4	RTI/STI	24	26	21
5	New born care	21	22	17
6	Emergency obstetric care	19	17	11

Table C: Supply status of kits and percent of health care establishments having stock of specific health care items on the day of survey

Sl.No.		DH	FRU	CHC
NUMBER SURVEYED		210	760	886
Supply of kits (During last quarter preceding the survey)				
1	Standard Surgical Kit (all six sets)	48	62	28
2	Emergency obstetric care drug kit	30	29	15
3	RTI/STI laboratory kit	19	11	4
4	Kit G (IUD insertion kit)	51	68	48
5	Kit for new born care equipments	35	36	15
6	Kit I (Normal delivery kit/Labour Room Kit)	52	68	48
7	Kit N (equipments for neonatal resuscitation)	41	45	15
7	Kit O (Side laboratory test and blood	43	48	17
8	Kit P (for donor blood transfusion)	42	45	16
Stock of health care items (on the day of survey)				
1	Nirodh pieces	74	67	58
2	Oral Pill Cycles	77	74	64
3	IUDs	76	75	66
4	Tubal rings	12	10	7
5	DPT	81	77	66
6	OPV	78	78	67
7	TT	74	76	65
8	BCG	75	74	60
9	Measles	82	74	65
10	DT	66	60	54
11	IFA (large)	43	44	44
12	Vitamin A solution	56	47	48
13	ORS packets	57	65	71

Table D: Percent of health care establishments having specific equipments, percent adequately equipped and percent attending referred cases

Sl.No.		DH	FRU	CHC
NUMBER SURVEYED		210	760	886
1	In operation theatre			
	Boyles apparatus	90	55	34
	Cardiac monitor	45	13	7
	Ventilator	45	20	16
	OT care/fumigation apparatus	60	47	33
	Hydraulic Operation table	90	73	44
	Oxygen Cylinder	77	62	48
	Shadow less lamp	90	82	67
	High pressure sterilizer (vertical/horizontal)	83	70	50
2	X-ray machine	97	87	59
3	ECG machine	84	54	32
4	Cold chain equipments (functional)			
	Walk-in coolers	17	5	4
	Walk-in freezers	13	5	3
	Refrigerators	82	67	67
	Ice-lined freezers	70	75	67
	Deep freezers	79	80	72
<i>Adequately equipped</i>				
1	Infrastructure	94	84	66
2	Staff	84	46	25
3	Supply	28	26	10
4	Equipments	89	69	49
Referred delivery cases attended during the three months preceding the survey		33	34	25

Table E: Percent of Primary Health Centres having specific facilities

Sl.No.		Percent Having	Sl.No.		Percent Having
NUMBER OF PHCS : 7959					
A. Infrastructure			B. Staff		
1	Own building	92	1	Medical Officer (Male)	88
2	Kachcha building	2	2	Medical Officer (Female)	20
3	Regular maintenance	12	3	Health Assistant (Male)	34
4	Water ^a	62	4	Health Assistant (Female)	53
5	Electricity	82	5	Public health nurse	11
6	Labour room	48	6	Multipurpose worker (male)	52
7	Laboratory	46	7	Multipurpose worker (female)	74
8	Telephone	20	8	Pharmacist/compunder	79
9	Toilet facility	79	9	Laboratory Technician	39
10	With at least one bed	69	10	At least one female health worker (PHN/MPW/HA)	91
11	Vehicle ^b	29	D. Equipments (Functional)		
12	Staff quarter for MO	26	1	Infant Weighing Machine	71
C. Supply			2	Adult Weighing Machine	77
1	Kit G (IUD insertion kit)	48	3	Deep freezer (any size)	65
2	Kit I (Normal delivery kit)	46	4	Vaccine Carrier	87
3	Essential Obstetric care drug kit	21	5	BP instrument	76
4	Oral Pills	61	6	Autoclave	59
5	Measles Vaccine	62	7	MTP suction aspirator	16
6	IFA Tab (large)	32	8	Labour room table/equipment	53
			9	Steam Sterilizer drum	59
			10	Refrigerator	16
			11	Examination table	80

Table E Percent of Primary Health Centres having specific facilities (continued)

Sl.No.		Percent Having	Sl.No.		Percent Having
NUMBER OF PHCS : 7959					
E. Stock on the day of survey			F. Medical officers (at least one) trained in		
1	Nirodh	56	1	Delivery	11
2	Oral pill cycle	61	2	Laparotomy/caesarean	4
3	IUD	59	3	Sterilization	16
4	BCG	57	4	MTP	13
5	DPT	63	5	RTI/STI	25
6	OPV	63	G. Paramedical staff (at least one) trained in		
7	Measles	62	1	IUD insertion	68
8	DT	49	2	Checking BP	49
9	TT	61	3	CDD/ORT	67
10	IFA (large)	33	4	UIP	69
11	IFA (small)	40	5	CSSM	75
12	Vitamin A solution	40	6	RCH	74
13	ORS packets	64	7	ARI	52
H. Having facility for			I. Having all critical inputs (%)		
1	Delivery	34	1	< 20	11
2	Laparotomy/caesarean	3	2	20-39.9	33
3	Sterilization	16	3	40-59.9	36
4	MTP	65	4	60-79.9	28
5	RTI/STI	32	5	80+	3
6	IUD insertion	72	K. Percent conducting		
J. Percent adequately equipped in			1	Delivery	34
1	Infrastructure	36	2	MTP	3
2	Staff	38	3	RTI/STI	16
3	Supply	31	4	IUD insertion	72
4	Equipments	56	5	Sterilization	65
5	Training	12	6	ARI	32

CHAPTER I

INTRODUCTION

1.1 BACKGROUND

India is a signatory to the Alma Ata Declaration of 1978 and is committed to attaining "Health for All" by 2000A.D. through Primary Health Care approach. The establishment of Primary Health Centres in India started as early as in 1952 and over the last five decades it has undergone several changes to meet the increasing demand for the health care services. Until the eighth Five Year Plan the emphasis was on expansion of the health care establishments. But during the eighth plan emphasis was mainly on consolidation of the existing health infrastructure rather than expansion. "The thrust has been on qualitative improvement in the health services through strengthening of physical facilities like provision of essential equipments, supply of essential drugs and consumables, construction of buildings and staff quarters, filling up of vacant posts of medical and paramedical staff and in-service training of staff"¹.

The National Health Policy stressed on the provision of preventive, promotive and rehabilitative health services to the people thereby making a shift from medical care to health care. The delivery of primary health care is the foundation of the rural health care system and is an integral part of the national health care system. The rural area services are provided through a network of integrated health and family welfare system. And the health programmes has been restructured and reoriented from time to time to meet the objectives of the National Health Policy.

The health care delivery system in India can be grouped into four types: (a) public sector, including Government run hospitals, dispensaries and health centres, (b) those run by non-governmental organizations (NGO), (c) organised private sector and (d) informal private sector comprising of faith healers and herbalists etc.² Studies have shown that the Government is by far the dominant source of health care, such as immunizations, antenatal care, family planning services, and infectious diseases control³.

¹ Government of India, *Bulletin on rural health statistics in India*, June 1998, Rural Health Division, Directorate General Of Health Services, Ministry of Health and Family Welfare, Government of India, New Delhi, 1998

² Bhat, Ramesh, 1995, *Private health care in India: The private/public mix in health care in India*, IHPP reprint series, International Health Policy Program, Washington, D.C. World Bank

³ World Bank, *Improving Women's Health in India*, Washington D.C. 1996

In line with this, the Ministry of Health and Family Welfare (MoHFW), Government of India (GoI) is implementing a Reproductive and Child Health (RCH) programme in the country. Under this programme, a range of reproductive and child health services is being provided through a network of Government health care establishments. The programme also aims to strengthen health infrastructure in terms of trained staff, equipments and supplies to enhance the facilities to provide good quality RCH services. In this context, the GoI has decided to undertake facility survey at the district level, in all the 25 states and 7 union territories, to assess the availability of health care facilities and their utilization in the Government Health Care Establishments (HCEs) with the financial assistance provided by the World Bank. At the district level there are sub-centres, Primary-Health Centres (PHC), Community Health Centres (CHC), First Referral Units (FRU) and District Hospitals (DH). Among the Government HCEs, all except the sub-centres are covered in the first phase of the Facility Survey.

The population norms for these HCEs are as follows:

Centre	Population norm	
	Plain area	Hilly/Tribal area
Sub-Centre	5,000	3,000
PHC	30,000	20,000
CHC	120,000	80,000

The number of different centres will vary from district to district due to the differences in the population in each district as well as due to the differences in adherence to the population norms.

Sub-centres are peripheral contact point between the Primary Health Care system and the community. One male Multipurpose Worker and one female Multipurpose Worker/ANM man it. A PHC, on the other hand, is the first contact point between the village community and the Medical Officer.

A PHC is expected to have a Medical Officer and 14 paramedical and other staff. It acts as a referral unit for 6 sub-centres. It should have 4-6 beds for patients. The activities of the PHCs involve curative, preventive, promotive and family welfare services.

CHCs are basically referral centres for PHCs at the rate of 1:4. Its manpower strength includes four medical specialists (Surgeon, Physician, Gynaecologist and Paediatrician) supported by 21 paramedical and other staff. It also should have 30 in-door beds with one OT, X-ray, labour room and laboratory facilities.

1.2 OBJECTIVES

The primary objective of the facility survey is to assess the existing situation of the health care facilities available in the government health care establishments at different levels in India in terms of infrastructure, staff, supply and equipments at the district level. The specific objectives are to assess: (i) the facilities having critical inputs as per the norms stipulated under the project, (ii) the availability of critical items against the consignee lists supplied by the districts, (iii) utilization of health care facilities for providing the RCH services and (iv) utilization of CHCs and FRUs as referral units.

1.3 METHODOLOGY

For the purpose of facility survey the states are divided into large, medium and small, based on 1991 population. Those states with a population of 20 million and above are classified as large states. Medium states are those with a population of 5 to 20 million and the remaining states (population less than five million) are grouped into the small category along with all the Union Territories (UT). In all the large states, the health facilities available were surveyed at the district level, in the medium states at the sub-divisional level and in the small states/UTs at the block level. It is a complete survey of all the Government HCEs (except sub-centres) in the chosen districts.

For data collection purposes, the whole country was divided into eight regions and each region was entrusted to one agency (hereafter referred to as Regional Agency). However, two regions covering the east and northeastern region was handled by one Regional Agency (Table 1.1). Besides data collection, each Regional Agency has to prepare the district level and combined report for six districts/sub-divisions/blocks as the case may be (hereafter referred to as combined report).

International Institute for Population Sciences (IIPS), Mumbai, India was chosen as the nodal agency for this survey by the MoHFW, GoI. IIPS, in its capacity as the nodal agency, had prepared and provided the regional agencies with questionnaires, tabulation plan and model report. IIPS also provided the software package to generate tables for the combined report.

Table 1.1 Regional agencies by the states/UTs assigned to them

Region	Regional Agency	States /Union territories
1	Administrative Staff College of India (ASCI), Centre for Social Services, Bellavista, Hyderabad - 530 049	1. Andaman & Nicobar Islands 2. Andhra Pradesh 3. Tamil Nadu 4. Pondicherry 5. Lakshadweep
2	Centre for Operations Research and Training (CORT), 402, Woodland Apartment, Race Course, Vadodara - 390007	1. Karnataka 2. Kerala 3. Goa
3	Operations Research Group (ORG), D-24, South Extension Part I, New Delhi - 110 049	1. Dadra & Nagar Haveli 2. Daman and Diu 3. Gujarat 4. Maharashtra
4	Indian Institute of Health Management (IIHMR), Research, Prabhu Dayal Marg, Sanganer Airport, Jaipur - 302 011	1. Madhya Pradesh 2. Rajasthan
5	Socio Economic Research Centre (SERC), C4D/48 - A, Janak Puri, New Delhi 110058	1. Chandigarh 2. Delhi 3. Haryana 4. Himachal Pradesh 5. Jammu & Kashmir 6. Punjab
6	MODE Research Private Ltd. (MODE) 1796 A, Kotla Mubarakpur, Behind NDSE -I, New Delhi-110003	1. Bihar 2. Uttar Pradesh
7	Economic Information Technology (EIT) S-4, Metropolitan Co-operative Housing Society Ltd., Sector - A, Lane No. 8, Kolkata - 700 039.	1. Assam 2. Orissa 3. West Bengal
8	Economic Information Technology (EIT) S-4, Metropolitan Co-operative Housing Society Ltd., Sector - A, Lane No. 8, Kolkata- 700 039.	1. Arunachal Pradesh 2. Manipur 3. Meghalaya 4. Mizoram 5. Nagaland 6. Sikkim 7. Tripura

1.4 DATA COLLECTION TOOLS AND TECHNIQUES

(a) Questionnaires, Training and Field Work

There are two types of questionnaires that were prepared (see Appendix A) and canvassed for Facility Survey. One questionnaire was for District Hospital and the other for Primary Health Centres. The questionnaire for DH was also used for all the middle level health care establishments like the First Referral Unit, Community Health Centre, Rural Hospital, Taluk Hospital etc. The overall content of the questionnaire and the format was discussed at length among the coordinators of the RCH Project at IIPS before it was presented to the RCH-Technical Advisory Committee (TAC) for a formal discussion. At every stage of the preparation of the questionnaire the Ministry of Health and Family Welfare and the World Bank consultant were involved. The questionnaires that were finalized after the detailed discussion with the TAC were sent to the MoHFW for their final approval.

After obtaining the clearance from the Ministry, the questionnaires were discussed at length in a training-cum-workshop organized at IIPS in October 1998. The workshop was attended by representatives of all Regional Agencies, viz. Administrative Staff College of India, Hyderabad; Centre for Operations Research and Training, Vadodara; Operations Research Group, New Delhi; Indian Institute of Health Management Research, Jaipur; Socio Economic Research Centre, New Delhi; MODE Research Private Ltd., New Delhi and Economic Information Technology, Kolkata. Besides, the World Bank representative and Dr. Narvekar, Joint Director, Directorate of Health Services, Government of Maharashtra, a resource person and a member of the Technical Advisory Committee also participated actively in the discussion of questionnaires.

As part of the training-cum-workshop, the participants were taken to the District Hospital and lower level health care establishments like sub-divisional hospital and PHC in Thane district in Maharashtra to acquaint themselves with various facilities available in these health care establishments.

After the training of trainers at IIPS, each Regional Agency gave training of the investigators in their respective areas followed by visits to different levels of health care establishments as part of the training.

The actual survey took off in December 1998. Except a very few cases the survey and report writing was completed by December 1999.

(b) Coverage

The Facility Survey covered a total of 221 districts in the first phase as can be seen from Table 1.2 (for names of the districts see Appendix B). This table shows that even though the number of districts covered in the major states are 12 each, in some states like Kerala, Haryana and Punjab 12 districts forms more than 70 percent of the total number of districts while in states like Madhya Pradesh, Bihar and Uttar Pradesh it formed only less than 30 percent of the total districts. Since among the smaller states and Union Territories the data were collected at different levels of areal units (sub-divisions/blocks), a stand was taken by the RCH-Facility Survey TAC to treat those districts where at least half of the total sub-visions/blocks were covered as completed. Thus, defined, the survey is taken as completed in most of the smaller states/UTs. However, the total number of HCEs in the smaller states and Union Territories could be more than what is shown this report because of the adjustment mentioned above. The number of health care establishments covered from all the 221 areal units is 210 district hospitals, 760 FRUs, 886 CHCs and 7959 PHCs. The percent share of states in the enumerated HCEs is given in Fig. 1.1, 1.2 and 1.3 respectively for FRU, CHC and PHC.

Fig.1.1 Percent share of states in enumerated FRUs

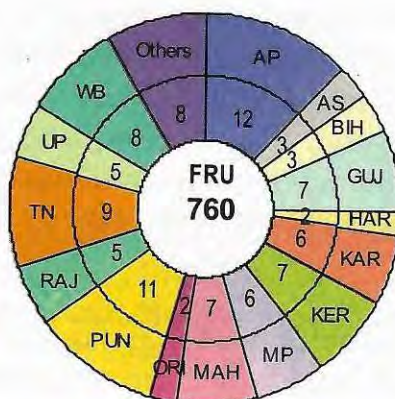


Fig.1.2 Percent share of shates in enumerated CHCs

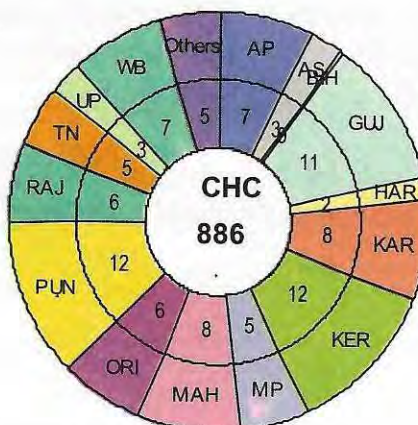


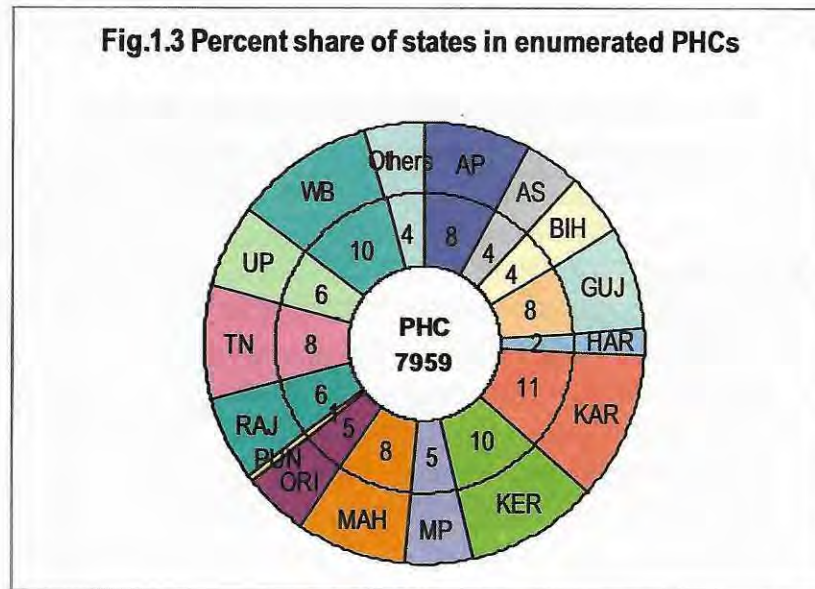
Table 1.2 Total and completed number of districts in the first round of facility survey by States/UTs

Sl.No.	State/UT	Number of districts	
		Total	Completed
MAJOR STATES			
1	Andhra Pradesh	23	12
2	Assam	23	12
3	Bihar	43	12
4	Gujarat	19	12
5	Haryana	16	12
6	Karnataka	20	12
7	Kerala	14	12
8	Madhya Pradesh	46	12
9	Maharashtra	31	13*
10	Orissa	30	9^
11	Punjab	14	12
12	Rajasthan	29	12
13	Tamil Nadu	23	13*
14	Uttar Pradesh	66	12
15	West Bengal	17	12
SMALLER STATES/UNION TERRITORIES			
16	A & N Islands	2	2
17	Arunachal Pradesh	13	3
18	Chandigarh	1	1
19	Dadra & Nagar Haveli	1	1
20	Daman & Diu	2	2
21	Delhi	1	1
22	Goa	2	2
23	Himachal Pradesh	12	3
24	Jammu & Kashmir	14	2
25	Lakshadweep	1	1
26	Manipur	8	4
27	Meghalaya	7	4
28	Mizoram	3	3
29	Nagaland	7	2
30	Pondicherry	4	4
31	Sikkim	4	4
32	Tripura	3	3
INDIA		499	221

* Assigned district was bifurcated into two

^ Three districts were badly affected by super cyclone and will be enumerated again

Fig.1.3 Percent share of states in enumerated PHCs



(c) Information covered in this report:

The facility survey covered a lot of information regarding the health care facilities available in the different levels of health care establishments of the Government. All the information collected are tabulated and presented in the district level reports. The combined reports covered most of the information collected, though not all. This national report covers only the skeleton facilities necessary for delivering reproductive and child health care in terms of infrastructure, staff, supply and equipments at each level of the health care establishments. Even among them some are considered critical and are marked by asterisk in the list.

The following information are included in this report for infrastructure in DHs, FRUs and CHCs: ownership of building, source of water supply, overhead tank and pump facility*, electricity in all parts of the health care establishment*, availability of generator*, telephone*, functional vehicle*, adequately equipped laboratory*, operation theatre (OT)*, separate aseptic labour room*, delivery facility, separate operation theatre for gynecology, OPD facility for gynecology and RTI/STI, and linkage with district blood bank.

For staff, at least one Gynecologist/Obstetrician*, Anesthesiologist*, Pediatrician, RTI/STI specialist, pathologist, general duty doctor, Staff Nurse/midwife and Laboratory Technician* are taken.

The OT equipments included are Boyles apparatus*, oxygen cylinder*, shadowless lamp*, high pressure sterilizer (vertical/horizontal), cardiac monitor, ventilator, OT care/fumigation apparatus, and hydraulic table. Besides, X-ray machine and ECG machine is also included. Cold chain equipments included are ice-lined freezer, deep freezer and refrigerator.

Supply items included are tubal rings*; all six set of standard surgical kits*, emergency obstetric care drug kit*, RTI/STI laboratory kit*, newborn care equipment kit* labour room kit* and IUD insertion kit.

The inputs used for infrastructural facilities in PHCs are: Ownership of building, availability of toilet facility, continuous water supply*, electricity*, labour room*, laboratory*, telephone*, functional vehicle* and availability of at least one bed. Staff data included at least one Medical Officer*, one female Medical Officer, one Laboratory Technician* and Health Assistants (male and female)* and Medical Officer staying in PHC compound. For supply the items included are availability of IUD insertion kit (kit G)*, normal delivery kit/labour room kit (kit I)*, essential obstetric care drug kit*, mounted lamp 200 w bulb*, oral pill cycles*, measles vaccines*, IFA tablet (large)* and ORS packets*. Equipments included are at least one infant weighing machine, one adult weighing machine, functioning deep freezer*, vaccine carrier*, BP instrument*, autoclave*, steam sterilizer drum, MTP suction aspirator* and labour room table and equipment*. Training aspects covered availability of at least one Medical Officer trained in laparotomy/ceasarian*, MTP* and delivery* and at least one para-medical staff trained in IUD insertion*, BP checking, CDD/ORT, UIP, CSSM, RCH and management of ARI*.

If any component has at least 60 percent of all the critical items included, it is taken as adequately equipped.

In this report the states Bihar, Madhya Pradesh and Uttar Pradesh referred to are the undivided states.

CHAPTER II

DISTRICT HOSPITAL

2.1 INTRODUCTION

In the hierarchical health care system of the Government of India in a district, the district hospital is the apex body, which provides specialized services to people on subsidized costs. Every district is expected to have a DH. But in some cases the Medical College Hospital or any other sub-divisional hospital is found to serve also as DHs where DH as such has not yet been established. Such hospitals are not included in the DH list in this chapter as they are primarily some other level of health care establishment. The districts without DHs are Araria and Kishanganj in Bihar; Hissar, Gurgaon and Mohindergarh in Haryana; Nanded, Sangli and Washim in Maharashtra; Udaipur, Bikaner and Jodhpur in Rajasthan; Thiruchirappally in Tamil Nadu and Bangura and Kolkata in West Bengal. Also Thoubal district in Manipur, East Khasi Hills and West Khasi Hills in Meghalaya, and South Tripura and West Tripura in Tripura do not have DHs. Valsad and Baruch districts in Gujarat and Lower Subansiri district in Arunachal Pradesh reported two DHs each while Delhi reported four, one each in North, East, West and Central zones. Thus the information collected and analysed in this chapter relates to a total of 210 DHs covered during the first phase of the RCH-facility survey.

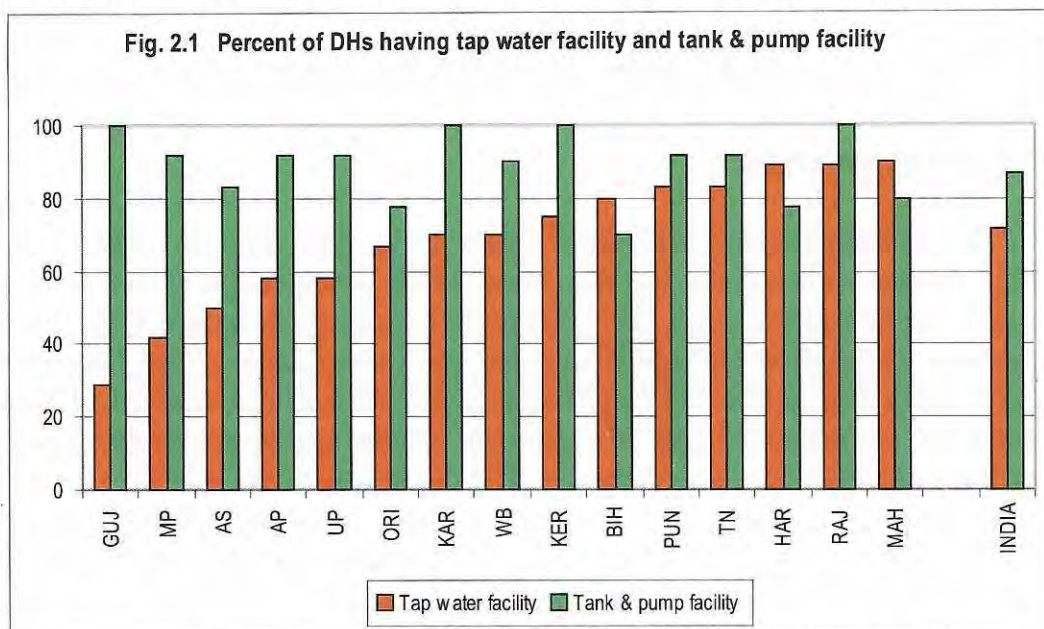
2.2 INFRASTRUCTURE (Table H1)

On the whole, excluding one or two items of infrastructure the situation is fairly satisfactory in Andhra Pradesh, Karnataka, Maharashtra, Punjab, Tamil Nadu and West Bengal. Among the smaller states/UTs all the DHs in Delhi have all the facilities examined here, except linkage with district blood bank. Besides Delhi, Chandigarh, Goa, Lakshadweep and Pondicherry are better than others.

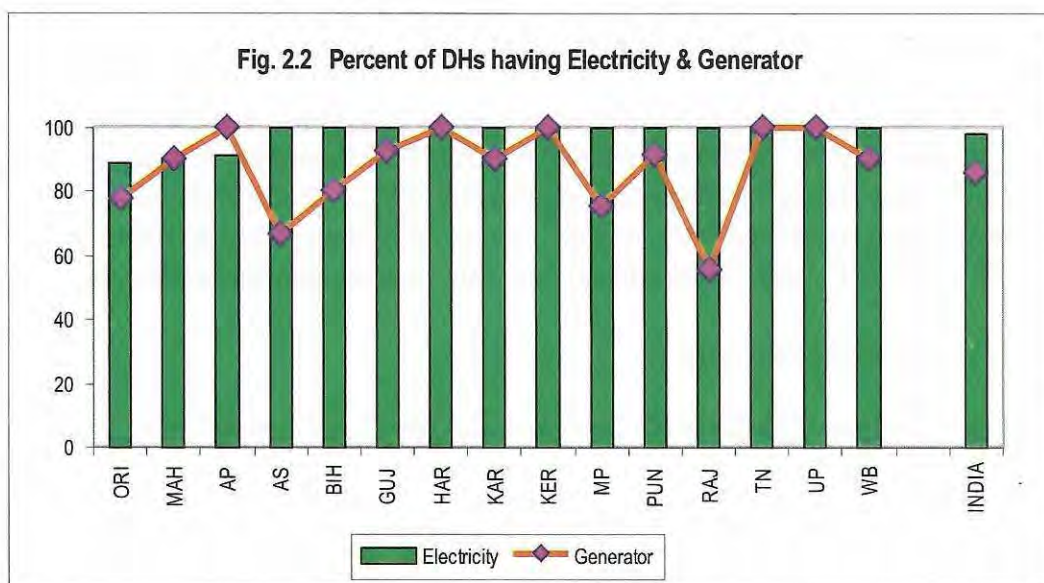
(a) Water and electricity

Of the total 210 DHs 72 percent have tap water facility and 27 percent have well (including tube well) facility to get water for the hospitals. In order to ensure continuous water supply all hospitals are expected to have tank and pump facility but this is not available in 13 percent of the cases. Most of the hospitals in all the states have tap water facility. In major states like Gujarat, Karnataka, Kerala and Rajasthan all DHs have tank and pump facility. Lack of this facility in only one DH has been reported in the case of Andhra Pradesh, Madhya Pradesh, Punjab, Tamil Nadu, Uttar Pradesh and West Bengal (see Fig.2.1). In Bihar three

out of ten hospitals do not have tank and pump facility. Almost all smaller states and UTs reported availability of tap water and tank and pump facility.



At the all-India level electricity is available in all parts of 98 percent of the 210 hospitals. But standby facility in the form of generator is available only in the case of 86 percent of the cases. It varies from 5 out of 9 hospitals in Rajasthan to all hospitals in Andhra Pradesh, Haryana, Kerala, Tamil Nadu and Uttar Pradesh among the major states (see Fig.2.2).



Of the smaller states/UTs electricity is available in all parts of the hospital except one in Manipur. Generator also is available in almost all except one each

in Himachal Pradesh, Manipur and Meghalaya and two each in Mizoram and Tripura.

(b) Telephone and vehicle

Telephone facility is available in almost all (96 %) DHs in the major states. But only 60 percent of the hospitals in Bihar reported having telephone, which is the lowest among the major states. At least one functional vehicle is available in 91 percent of the total DHs. Here again Bihar presented a very poor picture with only 30 percent having functional vehicle.

(c) Adequately equipped Laboratory and Operation Theatre

Adequately equipped laboratory is absent in 18 percent of the 210 hospitals. Bihar tops in inadequacy with 70 percent not having this facility. However, in Andhra Pradesh, Haryana, Karnataka, Maharashtra, Punjab and Uttar Pradesh all the DHs have adequately equipped laboratory. All the DHs except two in Manipur, and one in Tripura have operation theatre.

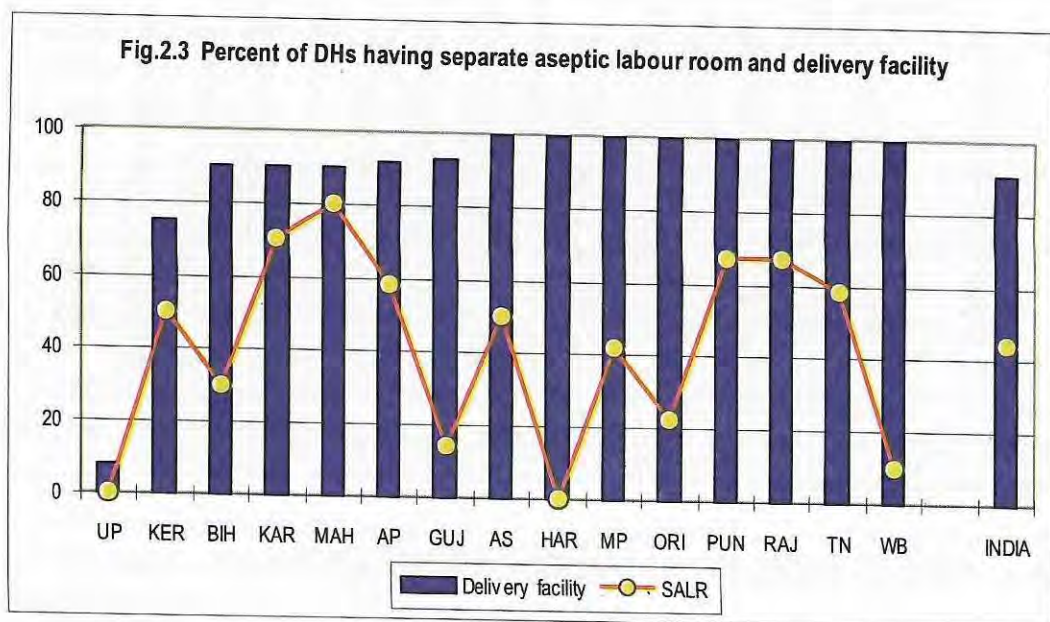
(d) Separate aseptic labour room and delivery facility

Separate aseptic labour room is found only in 44 percent of DHs. Not a single major state has all DHs with separate aseptic labour room. However, it should not be taken as not having delivery facility. The available labour room may not be clean, may be having seepage, or may be kept open for using it for other purposes when not used for delivery, thereby defying the definition of aseptic. In some cases deliveries may be taking place in the operation theatre.

Most of the hospitals do have delivery facility. Since a specific question was asked only about separate aseptic labour room, facility for delivery is assessed on the basis of whether in the DH there is a separate aseptic labour room and if none, whether any delivery took place in the DH during the three months immediately preceding the survey. If there has been at least one delivery during the reference period that hospital is taken as having delivery facility even if it does not have a separate aseptic labour room. Thus defined, all hospitals for which delivery information is available in Assam, Haryana, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, West Bengal and all smaller states/UTs have delivery facility (also see Fig. 2.3).

In Uttar Pradesh, deliveries took place only in the district women's hospital, which got classified as middle level health facility. However, the DHs at Chamouli reported having an operation theatre for gynaecology. It also reported as having a gynaecology ward with 8 beds. But during the reference period there was no delivery even in this hospital. This hospital even has a separate OPD for

Gynaecology and during the three months preceding the survey 139 antenatal cases have been checked here. Since it is known that this hospital has delivery facility though no deliveries took place during the reference period of three months and no separate aseptic labour room is available, this also is included in the category of DHs with delivery facility.



Separate OT for gynaecology is available in 85 percent of the DHs. Among the major states, all the DHs in Assam, Haryana, Madhya Pradesh, Maharashtra, Orissa, Tamil Nadu and West Bengal do have separate OT for gynaecology. One of the major states, Bihar, has only 60 percent of the hospitals with this facility while most of the smaller states and Union Territories reported having this facility in all hospitals.

(e) Out patient department (OPD) for gynaecology and RTI/STI

The proportion of DHs with OPD facility for gynaecology is found to be 82 percent. The proportion is very low in Kerala with only 58 percent of the DHs reporting this facility. All the DHs in Bihar, Haryana, Karnataka, Orissa, Tamil Nadu, West Bengal, Chandigarh, Dadra and Nagar Haveli, Delhi, Goa, Himachal Pradesh, Jammu and Kashmir, Lakshadweep, Meghalaya, Nagaland, Pondicherry and Tripura do have OPD facility for gynaecology.

Availability of OPD facility for RTI/STI is quite inadequate with only half of the total number of DHs reporting this facility. The situation is better in Tamil Nadu with 83 percent having this facility. In Delhi, Himachal Pradesh and Nagaland all the DHs have OPD for RTI/STI.

(f) **Linkage with district blood bank**

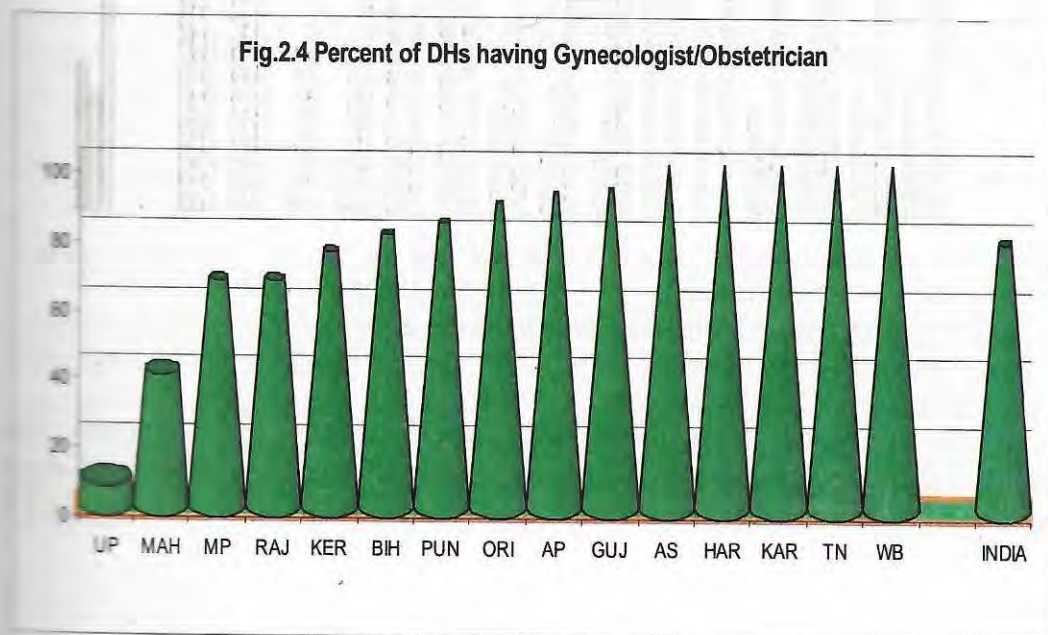
Only two out of three DHs have linkage with district blood bank. Among the major states, Rajasthan and West Bengal, are the only two with all the hospitals having linkage with district blood bank. The situation prevailing in smaller states/UTs are not any better with only Chandigarh, Delhi and Goa having hospitals with district blood bank linkage.

2.3 STAFF POSITION (Table H2)

The overall situation prevailing in the country is fairly satisfactory in the case of Gynaecologist/Obstetrician, Paediatrician and Anaesthesiologists, with at least three out of four hospitals having such specialists. General duty doctors, Staff Nurse and Laboratory Technician are available in almost all DHs.

(a) **Obstetrician/Gynaecologist**

For the provision of reproductive health particularly for females a Gynaecologist/Obstetrician is essential. But in the 210 DHs in India from where data have been collected 22 percent do not have at least one Obstetrician/Gynaecologist. However, in Assam, Haryana, Karnataka, Tamil Nadu, West Bengal, Chandigarh, Dadra and Nagar Haveli, Delhi, Goa, Himachal Pradesh, Jammu and Kashmir, Lakshadweep, Nagaland, Pondicherry and Tripura all hospitals have Gynaecologist/Obstetrician. In Andhra Pradesh, Gujarat and Orissa, leaving out one DH each, all others have Gynaecologist/Obstetrician. Leaving out Uttar Pradesh (for reasons cited earlier) the worst situation is found in Maharashtra with very few hospitals having Gynaecologist/Obstetrician (see Fig. 2.4).



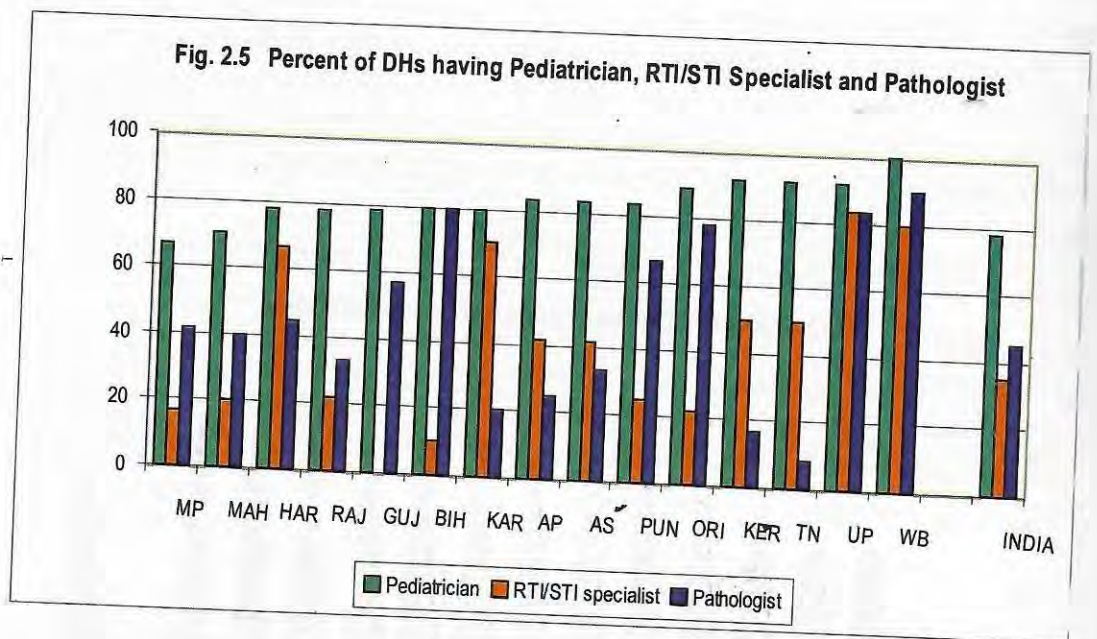
(b) Paediatrician, RTI/STI specialist and Pathologist

For childcare the importance of paediatrician cannot be underestimated. But the data from 210 DHs in India shows that 22 percent of DHs do not have at least one doctor specialised in paediatrics. Among the major states except West Bengal, none have all hospitals with paediatrician. All the hospitals in Chandigarh, Delhi, Goa, Himachal Pradesh and Tripura also have paediatrician in the DHs.

Very few hospitals have RTI/STI specialist, with only 35 percent having at least one, at all-India level. Extremes are found in Gujarat with no hospitals having this among the hospitals having information (there is no information on this in five hospitals) and Uttar Pradesh with 83 percent having this specialist. However, both the DHs in Goa and Nagaland have RTI/STI specialist.

The availability of at least one Pathologist is slightly better than that of RTI/STI specialist, but is nowhere near adequacy (45%). Again Uttar Pradesh faired well with more than 80 percent DHs having Pathologists. All the DHs in Delhi, Goa, and Himachal Pradesh, Jammu and Kashmir have Pathologist.

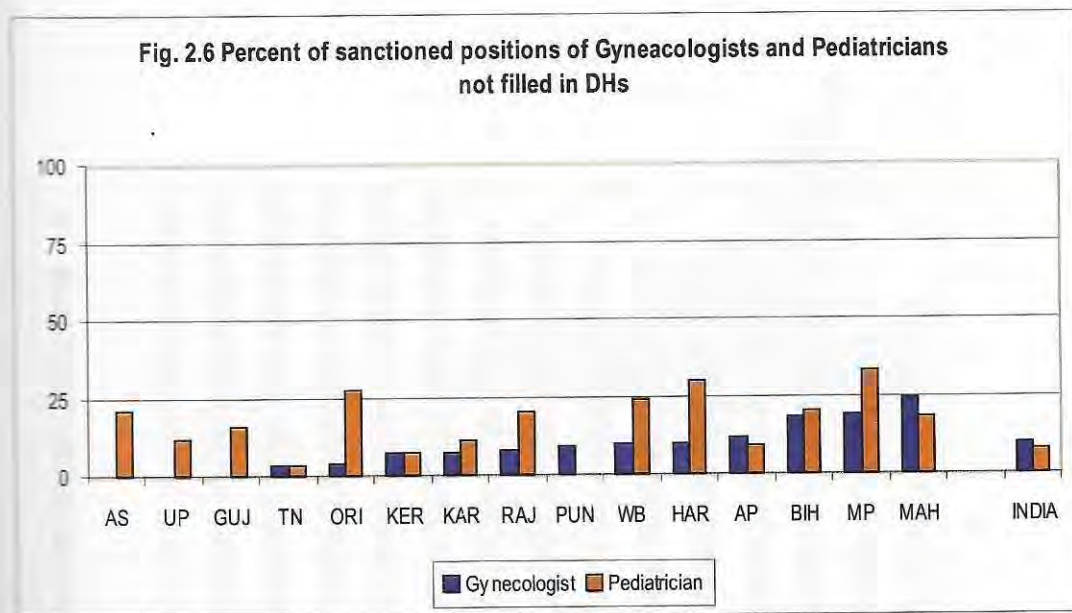
Fig. 2.5 shows the availability of at least one of these specialists in major 15 states.



For the purpose of RCH, the availability of Gynaecologist and Paediatrician is very important. The availability of at least one each of these specialists has already been shown in Fig.2.4 and Fig.2.5 respectively. Fig.2.6

shows the percent of sanctioned posts lying vacant in the case of both Gynaecologist and Paediatrician.

This proportion varies from none in the case of Gynaecologist in Assam, Uttar Pradesh and Gujarat to 24 percent in Maharashtra. Vacant positions of Paediatricians are more. In Punjab all the sanctioned posts of Paediatricians are filled while in Madhya Pradesh one-third of the sanctioned positions are lying vacant.



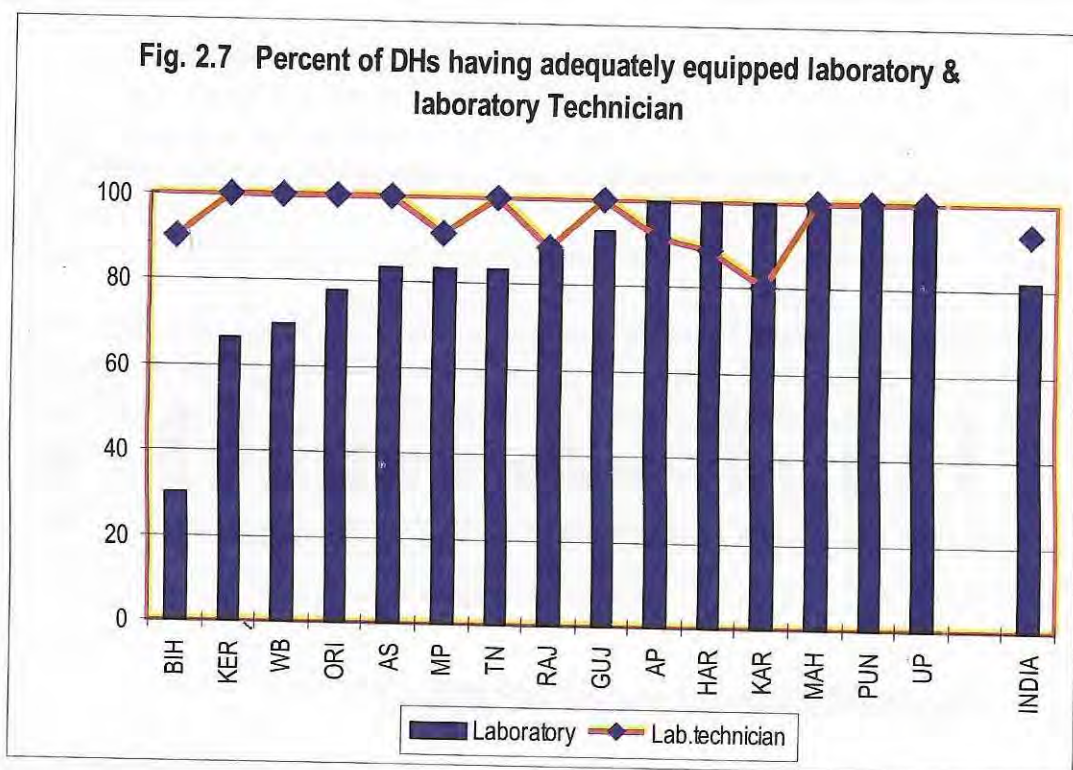
(c) Anaesthesiologist and general duty doctors

The situation of Anesthesiologist is slightly better with 70 percent of the total DHs having at least one. All the DHs in Haryana, Karnataka, Uttar Pradesh, West Bengal, Delhi, Goa, Jammu and Kashmir, Nagaland and Pondicherry have Anesthesiologist. All the DHs have general duty doctors except some hospitals in Karnataka, Madhya Pradesh, Rajasthan, Uttar Pradesh, Daman and Diu and Meghalaya.

(d) Staff Nurse/Midwife, Female Health Worker and Laboratory Technician

All the DHs in all the states/union territories except one each in Sikkim, Andhra Pradesh, Assam and Madhya Pradesh, two in Mizoram and have Staff Nurse/Midwife. In Rajasthan out of the nine DHs five did not give information on this item. That means among the DHs where information is available one does not have Staff Nurse/Midwife. Female Health Worker is found only in 65 percent of DHs, which includes all DHs of Karnataka and West Bengal. Laboratory technician is also available in all DHs in all states/union territories except one

each in Andhra Pradesh, Bihar, Haryana, Madhya Pradesh, Rajasthan, Dadra and Nagar Haveli, Daman and Diu, Meghalaya and Nagaland, two in Karnataka and three in Mizoram. For major states availability of adequately equipped laboratory and Laboratory Technician is given in Fig. 2.7. In most of the states the proportion of DHs having Laboratory Technician is higher than the proportion having adequately equipped laboratory while the reverse is true in Andhra Pradesh, Haryana and Karnataka. In Maharashtra, Punjab and Uttar Pradesh all the DHs have both laboratory and Laboratory Technician.



2.4 TRAINING OF MEDICAL OFFICERS (Table H3)

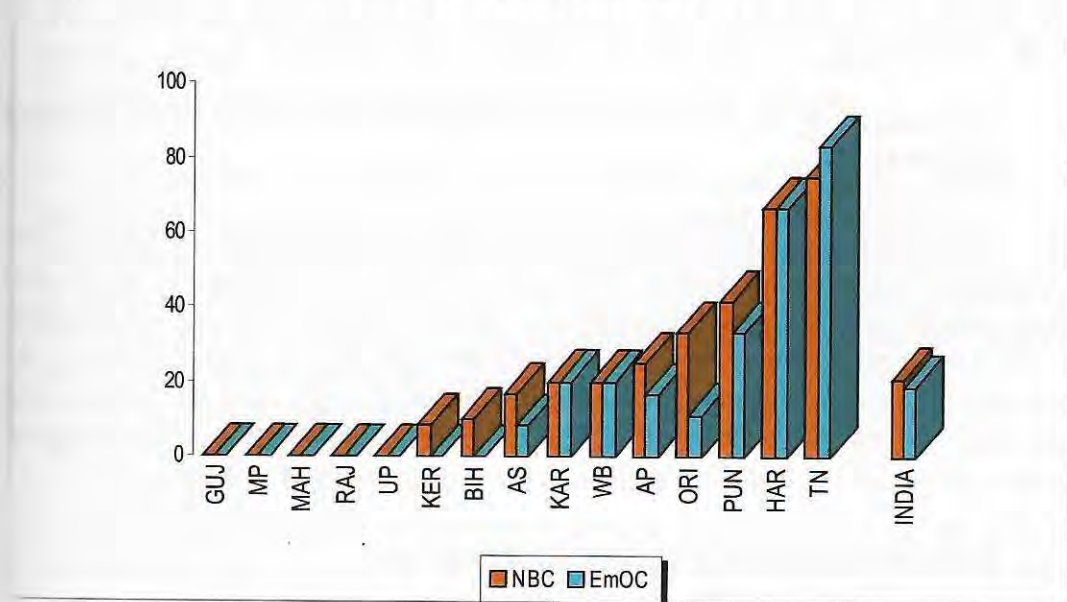
Training refers to in-service training during the full one year preceding the date of survey. The current situation is quite unacceptable in all the states. In Rajasthan not a single hospital have at least one doctor trained in any of the area covered in Table H3.

Comparatively the situation is better in the case of training in sterilization in Haryana and Tamil Nadu where three out of four DHs and in Andhra Pradesh three out of five DHs are found having Medical Officers who underwent this training during the reference period. In the case of Kerala, Orissa and Rajasthan not a single hospital has doctors trained in sterilization.

On the whole the situation in Tamil Nadu and Haryana are comparatively better than that in other major states with respect to all types of training (fig. 2.8).

Even though Kerala is referred to as a better state in health care, it paints a very poor picture with respect to training of Medical Officers

Fig. 2.8 Percent of DHs with atleast one doctor trained in New Born Care & Emergency Obstetric Care



2.5 SUPPLY AND STOCK

I. SUPPLY OF TUBAL RINGS AND SELECTED KITS (Table H4)

Table H4, where the supply of kits necessary for reproductive health care is given presents a very bleak picture. All the kits examined here are available in the District Hospital in Dadra and Nagar Haveli and all kits except RTI/STI laboratory diagnose kits are available in all the DHs in Haryana and in almost all hospitals in Punjab, Goa, Lakshadweep and Pondicherry. Tubal ring is supplied only to 12 percent of the total 210 DHs.

(a) Tubal Rings and Standard Surgical Kits

All the hospitals in Delhi, 8 hospitals in Gujarat, five in Madhya Pradesh, one each in Andhra Pradesh, Assam, Karnataka, Maharashtra and Punjab received tubal ring.

At the all-India level only 48 percent of hospitals have received all six sets of standard surgical kits. Except in Haryana, Punjab, Tamil Nadu, Chandigarh, Dadra and Nagar Haveli, Goa, Lakshadweep, Pondicherry and

Sikkim no other state/UT has all DIIs having all six sets of standard surgical kits.

(b) Emergency obstetric care drug kit and RTI/STI laboratory kit

The situation is still worse in the case of emergency obstetric care drug kit with only 30 percent of all hospitals reporting to have received it. Again all hospitals in Haryana, Tamil Nadu, Dadra and Nagar Haveli, Goa and Lakshadweep have this kit. RTI/STI laboratory diagnosis kit is available only in one in five hospitals. It is the least available kit in all states/UTs.

(c) IUD insertion kit, new born care equipment kit, labour room (normal delivery) kit

All these three kits are available in all hospitals of Haryana and all but one in Punjab and Tamil Nadu. The District Hospital(s) in Chandigarh, Dadra and Nagar Haveli, Goa and Lakshadweep have all the three kits. The IUD insertion kit and labour room kit is supplied to half the DIIs at the all-India level. In Daman and Diu and Tripura none of the two hospitals each have received any of these kits. All the hospitals in Pondicherry have IUD insertion kit and labour room kit while all the hospitals in Sikkim have received IUD insertion kit.

II. STOCK OF SELECTED ITEMS (Table H5)

Stock refers to the stock available on the day of survey irrespective of the quantity. Seventy to eighty percent of the total hospitals had some stock of Nirodh, oral pill cycles, IUD, OPV, TT and BCG vaccine. Eighty one to eighty two percent had DPT and measles vaccine. Vitamin A solution and ORS packets were found in 56-57 percent of hospitals. Two-thirds of the hospitals had DT and 43 percent had IFA (large). Among the major states, the situation in Bihar is found to be very poor. Delhi hospitals, as in the case of other aspects, are presenting a very satisfactory situation.

(a) Contraceptives

Slightly over three-fourths of the DHs reported as having lubricated Nirodh pieces, oral pill cycles and IUD on the day of survey. This includes all hospitals in Karnataka and Tamil Nadu in the case of Nirodh, Haryana, Karnataka, Maharashtra, Punjab and Tamil Nadu in the case of oral pills and IUD.

(b) IFA (large) tablets, Vitamin A solution and ORS packets

Most women are anaemic during pregnancy and they are expected to take 100 IFA tablets during pregnancy to prevent anaemia and if they are declared anaemic to take 200 tablets during pregnancy. But on the day of survey only 43

percent of the DHs had this tablet in stock. None of the major states had all the DHs with this tablet. Among smaller states/UTs Andaman and Nicobar, Lakshadweep and Sikkim had all hospitals reporting some stock of IFA tablet. Among all states the situation is slightly better in Haryana, Madhya Pradesh, Maharashtra, Orissa, Punjab and Delhi.

Trachoma and vitamin A deficiency are the common causes of night blindness among children. This can be reduced to a great extent by giving Vitamin A solution. But only 56 percent of the hospitals had this on the day of survey, which includes all hospitals in Haryana, Andaman and Nicobar, Chandigarh, Jammu and Kashmir, Lakshadweep and Sikkim.

Diarrhoea is common among children in varying degrees. Fluid replacement is the first treatment for this to avoid dehydration. For this, oral rehydration salts (ORS) is available in packets which the hospitals are expected to stock for emergency. This was available in 57 percent of the hospitals on the day of survey. Among major states, none of the states had all the DHs reporting a stock of this except Haryana.

(c) Vaccine

At least three out of four hospitals have all the vaccines except DT, which is available only in two out of three hospitals. In Haryana all had all vaccines except one in TT, in Karnataka all had DPT and TT, in Madhya Pradesh all had DPT, BCG and Measles vaccines, in Maharashtra all had DPT, Measles and DT, in Orissa all hospitals had all vaccines except some in BCG and DT, and in Punjab all had all vaccines except one hospital in the case of DT. Among smaller states/UTs all hospitals in Delhi, Tripura, Lakshadweep and Chandigarh are reported to be having some stock of all vaccines.

2.6 EQUIPMENTS (Table H6)

The equipments considered here are those that are expected to be in the operation theatre, X-ray and ECG machine, and selected cold chain equipments.

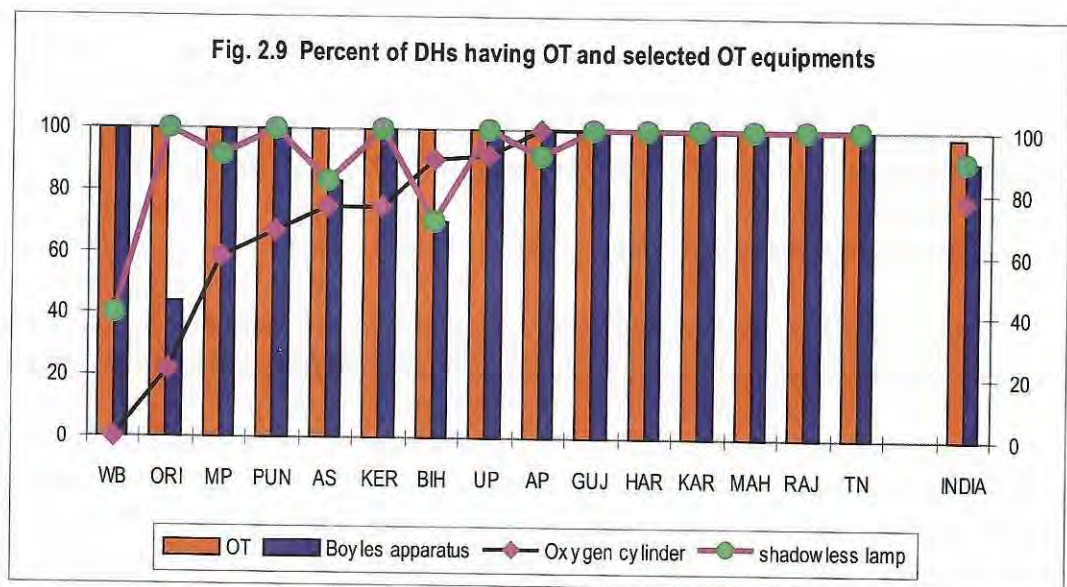
Boyle's apparatus is available in 90 percent of the DHs. Only 77 percent of the hospitals had oxygen cylinder on the day of survey. Shadowless lamp is available only in 91 percent of cases. High-pressure sterilizer (either vertical or horizontal) is available in 83 percent of all DHs while cardiac monitor was available only in 45 percent. OT fumigation apparatus necessary for disinfecting the OT is available in 60 percent of DHs. Hydraulic table in the operation theatre is available in almost all DHs (90%). Whereas X-ray machine is available in 97 percent of DHs, ECG machine is available only in 84 percent. Cold chain equipments, namely ice lined freezer, deep freezer and refrigerator are available

in 70, 79 and 82 percent of DHs respectively. It is to be noted that in Delhi all these equipments are available in all the hospitals.

(a) Equipments in operation theatre

Two hospitals each in Assam, Sikkim and Arunachal Pradesh, three each in Bihar, Manipur and Mizoram, five in Orissa, and 1 in Tripura are managing without a Boyle's apparatus. All the other hospitals in all the states have Boyle's apparatus. All the hospitals in Andhra Pradesh, Gujarat, Haryana, Karnataka, Maharashtra and Tamil Nadu have Oxygen cylinder in the OT. Similarly shadowless lamp is available in all hospitals of Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh, Orissa, Punjab, Rajasthan, Tamil Nadu and Uttar Pradesh. High-pressure sterilizer (either vertical or horizontal) is available in all DHs of Andhra Pradesh, Gujarat, Haryana, Maharashtra, Punjab, Rajasthan, Tamil Nadu and Uttar Pradesh. But none of the major states have all DHs with cardiac monitor or ventilator. OT fumigation apparatus is available in all hospitals of Andhra Pradesh and Maharashtra and most of the smaller states and UTs. Hydraulic table in the OT is reported to be available in all hospitals of Gujarat, Haryana, Madhya Pradesh, Maharashtra, Punjab, Rajasthan, Tamil Nadu and Uttar Pradesh. Bihar again shows a poor situation in all these aspects.

Availability of OT equipments in relation to availability of OT is given in Fig. 2.9.



Whereas in Gujarat, Haryana, Karnataka, Maharashtra, Rajasthan and Tamil Nadu, all the DHs do have OTs and all the selected OT equipments, there are states that lack OT equipments, particularly oxygen cylinder though they have OT.

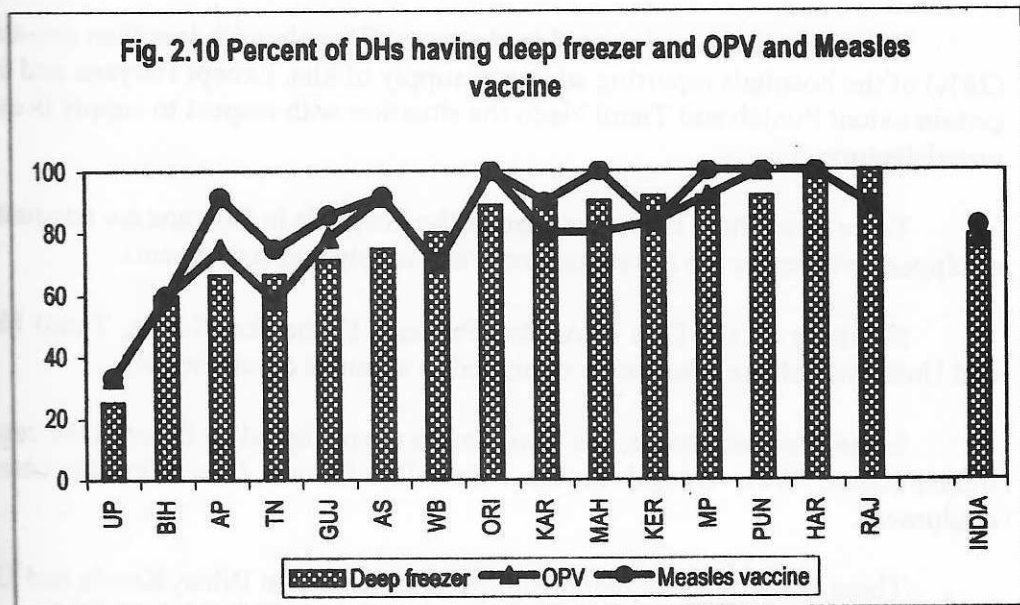
(b) X-ray and ECG machine

Whereas X-ray machine is available in all the DHs of Andhra Pradesh, Gujarat, Haryana, Karnataka, Kerala, Orissa, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal, ECG machine is available in all hospitals of all major states except some in Andhra Pradesh, Assam, Bihar Kerala, Madhya Pradesh, Orissa, Tamil Nadu and West Bengal. It is to be noted that in Delhi all these equipments are available in all the hospitals.

(c) Cold chain equipments

All the DHs in Maharashtra for which information is available do have all the 3 cold chain equipments. Similarly all the hospitals in Haryana and Rajasthan have both ice lined freezer and deep freezer. Besides these two states, all the DHs in Kerala have ice-lined freezer and all but one have deep freezer and refrigerator. The availability of ice-lined freezer varies from 40 percent in Bihar to 100 percent in Kerala, Haryana and Rajasthan. Variation in deep freezer is three out of 12 hospitals in UP to all in Haryana and Rajasthan. Refrigerator is available in all hospitals of Gujarat and Karnataka. Among the smaller states/UTs the sole hospital in Chandigarh, Lakshadweep and all hospitals in Delhi and Goa have all cold chain equipments.

Fig. 2.10 shows the availability of deep freezer in relation to availability of OPV and measles vaccine, which needs to be kept in the freezer.



In many states a higher proportion of DHs reported having a stock of OPV and measles vaccine than having deep freezer indicating that in some cases the vaccines are not kept in deep freezer as it should be.

2.7 ADEQUATELY EQUIPPED DISTRICT HOSPITALS AND THOSE USED AS REFERRAL (Table H7)

A district hospital with at least 60 percent of the critical inputs is taken as adequately equipped in that particular aspect.

Table H7 provide this information. It shows that 94 percent of the hospitals are adequately equipped with respect to infrastructure, which include all the hospitals in almost all states/UTs except one each in Assam, Madhya Pradesh, Maharashtra, Arunachal Pradesh and Meghalaya and three in Bihar and two in Mizoram.

The proportion of the total hospitals adequately equipped in staff and equipments are 84-89 percent.

Among the major states all the hospitals in Andhra Pradesh, Assam, Haryana, Karnataka, Kerala, Tamil Nadu and Uttar Pradesh are adequately equipped with respect to staff.

Similarly, all the hospitals in Andhra Pradesh, Gujarat, Haryana, Karnataka, Kerala, Maharashtra, Punjab, Rajasthan, Tamil Nadu and Uttar Pradesh are adequately equipped with respect to equipments.

The worst situation is noted in the case of supply with less than one-third (28%) of the hospitals reporting adequate supply of kits. Except Haryana and to a certain extent Punjab and Tamil Nadu the situation with respect to supply is quite unsatisfactory.

To be noted here is the fact that all the hospitals in Haryana are adequately equipped with respect to infrastructure, staff, supply and equipments.

Similarly all the DHs in Andhra Pradesh, Karnataka, Kerala, Tamil Nadu and Uttar Pradesh are adequately equipped in all areas except supply.

In the adequacy status, the lower levels are occupied by Bihar in the case of infrastructure, West Bengal in the case of staff, and Orissa in the case of equipment.

There is no DH adequately equipped in supply in Bihar, Kerala and Uttar Pradesh.

Only one-third of the DHs have attended to referred cases during the three months immediately preceding the survey. Ten out of twelve DHs each in Assam

and Tamil Nadu and 50 percent of those in Madhya Pradesh and Maharashtra is reported to have attended to referred cases. In the case of other major states the proportion is below 50 percent.

State	Proportion of referred cases attended to
Tamil Nadu	50 percent
Madhya Pradesh	50 percent
Maharashtra	50 percent
Other major states	Below 50 percent

Table H1 Status of infrastructure in District Hospitals

Sl. No.	State	No. of DHs	Number of DHs having														
			Source of water		Tank & pump facility	Electricity (In all parts the hospital)	Generator	Telephone	Vehicle (Functional)	Laboratory (Adequately equipped)	Operation theatre	Separate OT for gynecology	Separate aseptic labour room	Delivery facility	Gynec OPD facility	RTI/STI OPD facility	Linkage with district blood bank
			Tap	Well													
MAJOR STATES																	
1	Andhra Pradesh	12	7	5	11	11	12	12	12	12	12	12	12	11	4	9	
2	Assam	12	6	6	10	12	8	10	11	10	12	6	12	9	5	5	
3	Bihar	10	8	2	7	10	8	6	3	3	10	3	9	10	3	2	
4	Gujarat	14	4	10	14	14	13	14	14	13	14	11	13	13	2	7	
5	Haryana	9	8	1	7	9	9	9	6	9	9	0	9	9	6	7	
6	Karnataka	10	7	3	10	10	9	10	10	10	10	7	9	10	8	7	
7	Kerala	12	9	3	12	12	12	12	12	8	12	9	9	7	5	6	
8	Madhya Pradesh	12	5	7	11	12	9	11	10	10	12	5	12	9	7	11	
9	Maharashtra	10	9	1	8	9	9	10	10	10	10	8	9	9	7	8	
10	Orissa	9	6	3	7	8	7	9	9	7	9	2	9	9	3	7	
11	Punjab	12	10	2	11	12	11	12	12	12	11	8	12	11	5	10	
12	Rajasthan	9	8	1	9	9	5	9	9	8	9	6	9	8	3	9	
13	Tamil Nadu	12	10	1	11	12	12	12	12	10	12	7	12	12	10	7	
14	Uttar Pradesh	12	7	5	11	12	12	12	10	12	1	0	1	1	9	10	
15	West Bengal	10	7	3	9	10	9	10	9	7	10	1	10	10	8	10	

Table III Status of infrastructure in District Hospitals (continued)

Sl. No.	State	No. of DHs	Source of water		Tank & pump facility	Electricity (in all parts of the hospital)	Generator	Telephone	Vehicle (Functional)	Number of DHs having								Linkage with district blood bank
			Tap	Well						Laboratory (Adequately equipped)	Operation theatre	Separate OT for gynecology	Separate aseptic labour room	Delivery facility	Gynec OPD facility	RTI/STI OPD facility		
																	No. of DHs having	
SMALLER STATES/UNION TERRITORIES																		
16	And & Nicobar	2	2	0	2	2	2	2	2	2	2	2	2	2	1	1	0	
17	Arun. Pradesh	4	4	0	1	4	2	4	4	1	4	2	4	4	2	1	1	
18	Chandigarh	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0	1	
19	Dadra & N. Haveli	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	
20	Daman & Diu	2	2	0	2	2	2	2	2	2	2	2	2	2	1	0	1	
21	Delhi	4	4	0	4	4	4	4	4	4	4	4	4	4	4	4	4	
22	Goa	2	1	1	2	2	2	2	2	2	2	2	2	2	2	1	2	
23	Him. Pradesh	3	3	0	2	3	2	3	3	3	3	3	3	3	3	3	2	
24	Jam. & Kashmir	2	2	0	1	2	2	2	2	1	2	8	2	2	2	0	1	
25	Lakshadweep	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0	0	
26	Manipur	3	2	1	1	2	2	2	2	0	1	0	1	3	1	0	1	
27	Meghalaya	3	3	0	2	3	2	3	3	2	3	3	3	3	3	2	2	
28	Mizoram	5	5	0	2	5	3	4	5	2	5	3	1	5	3	3	3	
29	Nagaland	2	2	0	2	2	2	2	1	1	2	2	1	2	2	2	1	
30	Pondicherry	4	3	1	4	4	4	4	4	4	3	4	4	4	4	1	3	
31	Sikkim	4	4	0	4	4	4	4	4	4	3	1	1	4	2	0	1	
32	Tripura	2	2	0	2	2	0	2	2	1	1	1	1	2	2	1	1	
INDIA		210	152	57	182	206	181	201	192	173	206	179	92	191	173	104	139	
		100	72	27	87	98	86	96	91	82	98	85	44	91	82	50	66	

Table H2 Staff position in District Hospitals

Sl. No.	State	No. of DHs	Number of DHs having at least one									
			Obstetrician/ Gynecologis	Pediatrician	RTI/STI Specialist	Pathologist	Anaesthes iologist	General duty doctor	Staff nurse/ midwife	FHW	Laboratory Technician	
MAJOR STATES												
1	Andhra Pradesh	12	11	10	5	3	10	12	11	9	11	
2	Assam	12	12	10	5	4	8	12	11	4	12	
3	Bihar	10	8	8	1	8	10	10	10	4	9	
4	Gujarat	14	13	11	0	8	7	14	14	11	14	
5	Haryana	9	9	7	6	4	9	9	9	8	8	
6	Karnataka	10	10	8	7	2	10	6	10	10	8	
7	Kerala	12	9	11	6	2	9	12	12	9	12	
8	Madhya Pradesh	12	8	8	2	5	5	11	11	11	11	
9	Maharashtra	10	4	7	2	4	7	10	10	8	10	
10	Orissa	9	8	8	2	7	6	9	9	5	9	
11	Punjab	12	10	10	3	8	9	12	12	10	12	
12	Rajasthan	9	6	7	2	3	4	8	3	4	8	
13	Tamil Nadu	12	12	11	6	1	11	12	12	3	12	
14	Uttar Pradesh	12	1	11	10	10	12	8	12	2	12	
15	West Bengal	10	10	10	8	9	10	10	10	10	10	

FHW = Female health worker

Table H2 Staff position in District Hospitals (continued)

Sl. No.	State	No. of DHs	Number of DHs having at least one									
			Obstetrician/ Gynecologist	Pediatrician	RTI/STI Specialist	Pathologist	Anaesthesi- ologist	General duty doctor	Staff nurse/ midwife	FHW	Laboratory technician	
SMALLER STATES/UNION TERRITORIES												
16	And & Nicobar	2	0	0	0	0	0	2	2	1	2	
17	Arun. Pradesh	4	1	1	0	0	0	4	4	2	4	
18	Chandigarh	1	1	1	0	1	1	1	1	1	1	
19	Dadra & N.Haveli	1	1	0	0	0	0	1	1	0	0	
20	Daman & Diu	2	1	0	0	0	0	1	2	0	1	
21	Delhi	4	4	4	0	4	4	4	4	1	4	
22	Goa	2	2	2	2	2	2	2	2	1	2	
23	Him. Pradesh	3	3	3	1	3	3	3	3	3	3	
24	Jam. & Kashmir	2	2	2	0	2	2	2	2	1	2	
25	Lakshadweep	1	1	0	0	0	0	1	1	1	1	
26	Manipur	3	2	2	0	1	1	3	3	2	3	
27	Meghalaya	3	2	2	0	0	0	2	3	3	2	
28	Mizoram	5	3	2	1	2	2	5	3	4	2	
29	Nagaland	2	2	1	2	1	1	2	2	1	1	
30	Pondicherry	4	4	3	2	1	1	4	4	1	4	
31	Sikkim	4	1	1	0	0	0	1	3	4	4	
32	Tripura	2	2	2	0	0	0	1	2	2	2	
INDIA		210 100	163 78	163 78	73 35	95 45	147 70	198 94	136 65	196 93		

FHW = Female health worker

Table H3 Status of training of medical officers in District Hospitals

Sl. no	Name of the State	No. of DHs	Number of DHs with at least one doctor trained during the last one year in						
			Sterilization	IUD insertion	Emergency Contraception	RTI/STI	New born Care	EmOC*	
MAJOR STATES									
1	Andhra Pradesh	12	7	5	3	5	3	2	
2	Assam	12	4	3	2	2	2	1	
3	Bihar	10	4	4	0	1	1	0	
4	Gujarat	14	3	0	0	6	0	0	
5	Haryana	9	7	6	5	5	6	6	
6	Karnataka	10	3	3	1	2	2	2	
7	Kerala	12	0	0	0	1	1	0	
8	Madhya Pradesh	12	1	0	0	1	0	0	
9	Maharashtra	10	2	1	0	0	0	0	
10	Orissa	9	0	0	0	0	3	1	
11	Punjab	12	7	4	4	4	5	4	
12	Rajasthan	9	0	0	0	0	0	0	
13	Tamil Nadu	12	9	10	10	8	9	10	
14	Uttar Pradesh	12	5	1	2	3	0	0	
15	West Bengal	10	3	2	2	2	2	2	
SMALLER STATES/UNION TERRITORIES									
16	And & Nicobar	2	0	0	0	0	0	0	
17	Arun. Pradesh	4	2	1	1	0	1	1	
18	Chandigarh	1	0	0	0	0	0	0	
19	Dadra & N.Haveli	1	0	0	0	0	0	0	
20	Daman & Diu	2	0	0	0	0	0	0	
21	Delhi	4	1	1	0	0	1	1	
22	Goa	2	1	1	1	1	0	0	
23	Him. Pradesh	3	1	1	1	1	1	1	
24	Jam. & Kashmir	2	0	0	0	0	0	0	
25	Lakshadweep	1	0	0	0	0	0	0	
26	Manipur	3	0	0	0	0	0	0	
27	Meghalaya	3	0	1	1	0	0	1	
28	Mizoram	5	0	0	0	0	0	0	
29	Nagaland	2	1	1	1	1	1	1	
30	Pondicherry	4	2	2	2	3	2	2	
31	Sikkim	4	4	4	4	4	4	4	
32	Tripura	2	1	2	0	0	0	0	
INDIA		No.	210	68	53	40	50	44	39
		%	100	32	25	19	24	21	19

*EmOC = Emergency obstetric Care

Table H4 Supply of Tubal ring and Kits in District Hospitals

Sl. No.	State	No. of DHs	Number of DH having received							
			Tubal ring	Std. Sur. Kit ₁	EmOC ₂ drug kit	RTI/STI lab kit	IUD insertion kit	NBCE ₃ kit	Labour room kit ₄	
MAJOR STATES										
1	Andhra Pradesh	12	1	3	2	2	2	2	4	
2	Assam	12	1	8	2	1	4	3	7	
3	Bihar	10	0	2	0	0	2	0	2	
4	Gujarat	14	8	3	1	3	3	3	3	
5	Haryana	9	0	9	9	5	9	9	9	
6	Karnataka	10	1	4	4	3	5	4	3	
7	Kerala	12	0	8	0	0	8	2	6	
8	Madhya Pradesh	12	5	3	2	1	7	2	7	
9	Maharashtra	10	1	2	4	6	4	3	4	
10	Orissa	9	0	5	1	0	5	1	4	
11	Punjab	12	1	12	10	2	12	11	12	
12	Rajasthan	9	0	3	3	1	7	3	7	
13	Tamil Nadu	12	0	12	12	6	11	11	12	
14	Uttar Pradesh	12	0	0*	0*	0*	0*	0*	0*	
15	West Bengal	10	0	3	1	1		1	3	
SMALLER STATES/UNION TERRITORIES										
16	And & Nicobar	2	0	0	0	0	1	1	1	
17	Arun. Pradesh	4	0	3	0	0	2	2	4	
18	Chandigarh	1	1	1	0	0	1	1	1	
19	Dadra & N. Haveli	1	0	1	1	1	1	1	1	
20	Daman & Diu	2	0	0	0	0	0	0	0	
21	Delhi	4	4	1	1	1	3	2	1	
22	Goa	2	0	2	2	1	2	2	2	
23	Him. Pradesh	3	1	1	0	0	1	1	1	
24	Jam & Kashmir	2	0	0	0	0	1	0	1	
25	Lakshadweep	1	1	1	1	0	1	1	0	
26	Manipur	3	0	1	2	2	2	1	3	
27	Meghalaya	3	0	1	0	1	2	0	1	
28	Mizoram	5	0	3	2	1	2	1	3	
29	Nagaland	2	0	0	1	0	1	1	1	
30	Pondicherry	4	0	4	3	2	4	3	4	
31	Sikkim	4	0	4	0	0	4	2	3	
32	Tripura	2	1	0	0	0	0	0	0	
INDIA		No.	210	26	100	64	40	107	74	110
		%	100	12	48	30	19	51	35	52

1. All six sets of standard surgical kits 2. Emergency obstetric care drug kit 3. New born care equipment kit 4. Normal delivery kit

Table H5 Stock of selected items of health care in District Hospitals

Sl. No.	State	No. of DHs	Number of DHs having some stock of												
			Contraceptives etc.						Vaccine						
			Nirodh	Oral pill	IUD	IFA (large)	Vitamin A solution	ORS packet	DPT	OPV	TT	BCG	Measles	DT	
MAJOR STATES															
1	Andhra Pradesh	12	7	8	9	2	3	2	10	9	10	10	11	9	
2	Assam	12	10	11	10	3	11	6	10	11	11	9	11	9	
3	Bihar	10	4	4	3	1	1	2	4	6	5	4	6	1	
4	Gujarat	14	12	11	13	5	10	11	11	11	9	11	12	8	
5	Haryana	9	7	9	9	8	9	9	9	9	8	9	9	9	
6	Karnataka	10	10	10	10	4	7	8	10	8	10	9	9	9	
7	Kerala	12	7	8	7	5	7	10	10	10	10	8	10	10	
8	Madhya Pradesh	12	10	11	11	10	4	7	12	11	9	12	12	10	
9	Maharashtra	10	9	10	10	7	6	8	10	8	9	8	10	10	
10	Orissa	9	7	7	7	6	8	6	9	9	9	7	9	8	
11	Punjab	12	10	12	12	10	9	10	12	12	12	12	12	11	
12	Rajasthan	9	7	8	7	4	7	3	8	8	7	7	8	5	
13	Tamil Nadu	12	12	12	12	5	1	8	9	7	6	7	9	1	
14	Uttar Pradesh	12	3	2	1	2	3	3	4	4	1	4	4	1	
15	West Bengal	10	6	7	7	1	5	7	8	7	7	8	7	7	

Table 115 Stock of selected items of health care in District Hospitals (continued)

Sl. No.	State	No. of DHs	Number of DHs having some stock of												
			Contraceptives etc.						Vaccine						
			Nirodh	Oral pill	IUD	IFA (large)	Vitamin A solution	ORS packet	DPT	OPV	TT	BCG	Measles	DT	
SMALLER STATES/UNION TERRITORIES															
16	And & Nicobar	2	2	1	2	2	2	2	1	2	2	2	2	1	
17	Arun. Pradesh	4	4	4	3	3	3	3	3	3	2	2	4	3	
18	Chandigarh	1	1	1	0	1	0	1	1	1	1	1	1	1	
19	Dadra & N. Haveli	1	0	0	0	0	0	0	0	0	0	0	0	0	
20	Daman & Diu	2	0	0	0	0	0	0	0	0	0	0	0	0	
21	Delhi	4	4	4	3	3	4	4	4	4	4	4	4	4	
22	Goa	2	2	2	1	1	2	2	2	2	1	2	2	2	
23	Him. Pradesh	3	3	2	1	1	1	3	3	3	2	2	3	2	
24	Jam. & Kashmir	2	2	1	1	2	1	1	1	0	2	1	2	1	
25	Lakshadweep	1	1	1	1	1	1	1	1	1	1	1	1	1	
26	Manipur	3	2	1	0	1	0	2	2	2	2	2	1	2	
27	Meghalaya	3	3	3	1	1	1	3	3	3	2	2	3	3	
28	Mizoram	5	3	4	0	4	0	3	3	3	2	3	3	3	
29	Nagaland	2	0	0	0	0	0	1	1	1	1	1	0	1	
30	Pondicherry	4	2	2	1	1	1	3	3	3	2	3	3	2	
31	Sikkim	4	4	4	4	4	4	3	4	4	4	4	3	2	
32	Tripura	2	2	1	0	1	1	2	2	2	2	2	2	2	
	INDIA No. %	210 100	156 74	161 77	160 76	91 43	117 56	120 57	170 81	164 78	155 74	157 75	173 82	138 66	

Table H6 Availability of selected equipments in District Hospitals

Sl. No.	State	No. of DHs	Number of DHs having the following in their OT										Number of DHs having			No. of DHs having functional cold chain equipments		
			Boyles apparatus	Oxygen cylinder	Shadow less lamp	High pressure sterilizer (vertical / horizontal)	Cardiac monitor	Ventilator	OT care/fumigation	Hydraulic table	X-ray machine	ECG machine	Ice fined freezer	Deep freezer	Refrigerator			
MAJOR STATES																		
1	Andhra Pradesh	12	12	12	11	12	8	8	12	11	12	11	12	11	10	8	9	
2	Assam	12	10	10	9	2	5	2	5	8	11	8	11	6	7	9	9	
3	Bihar	10	7	7	5	1	3	1	3	9	8	9	8	5	4	6	7	
4	Gujarat	14	14	14	14	11	9	11	9	14	14	14	14	14	11	10	14	
5	Haryana	9	9	9	9	6	7	6	4	9	9	9	9	9	9	9	5	
6	Karnataka	10	10	10	9	7	4	7	9	9	10	9	10	10	8	9	10	
7	Kerala	12	12	12	11	9	3	9	8	10	12	10	12	10	12	11	11	
8	Madhya Pradesh	12	12	11	9	2	3	2	2	12	11	12	11	11	9	11	8	
9	Maharashtra	10	10	10	10	6	7	6	10	10	9	10	9	10	9	9	9	
10	Orissa	9	4	9	3	2	2	2	4	8	9	8	9	6	8	8	6	
11	Punjab	12	12	12	12	9	9	9	6	12	11	12	11	12	10	11	10	
12	Rajasthan	9	9	9	9	6	5	6	8	9	9	9	9	9	9	9	8	
13	Tamil Nadu	12	12	12	12	7	8	7	11	12	12	12	12	11	3	8	11	
14	Uttar Pradesh	12	12	12	12	4	1	4	5	12	12	12	12	12	4	3	10	
15	West Bengal	10	10	4	8	1	3	1	3	8	10	8	10	9	7	8	7	

14	Uttar Pradesh	12	12	11	12	12	4	1	3	3	8	10	9	7	8	7
15	West Bengal	10	10	0	4	8	1	3	3	3	8	10	9	7	8	7

Table 116 Availability of selected equipments in District Hospitals (continued)

Sl. No.	State	No. of DHs	Number of DHs having the following in their OT										Number of DHs having functional cold chain equipments			
			Boyles apparatus	Oxygen cylinder	Shadowless lamp	High pressure sterilizer (vertical/horizontal)	Cardiac monitor	Ventilator	OT care/fumigation	Hydraulic table	X-ray machine	ECG machine	Ice lined freezer	Deep freezer	Refrigerator	
SMALLER STATES/UNION TERRITORIES																
16	And & Nicobar	2	2	2	2	1	0	1	0	2	2	2	2	1	2	2
17	Arun. Pradesh	4	2	2	4	1	1	2	3	2	4	2	2	3	3	4
18	Chandigarh	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1
19	Dadra & N. Haveli	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1
20	Daman & Diu	2	2	2	2	2	1	0	2	2	2	2	2	1	2	2
21	Delhi	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
22	Goa	2	2	2	2	2	2	1	0	2	2	2	2	2	2	2
23	Him. Pradesh	3	3	1	3	2	0	0	2	3	3	3	2	2	2	3
24	Jam. & Kashmir	2	2	2	2	1	1	1	2	2	2	2	0	1	1	1
25	Lakshadweep	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1
26	Manipur	3	0	0	1	0	0	1	2	1	3	1	2	3	1	1
27	Meghalaya	3	3	2	2	3	0	0	2	2	3	0	0	3	2	2
28	Mizoram	5	2	1	5	3	1	1	1	4	4	3	3	4	3	3
29	Nagaland	2	2	2	1	2	0	0	0	0	2	0	0	0	2	2
30	Pondicherry	4	4	4	4	4	0	3	4	4	4	4	3	4	4	4
31	Sikkim	4	2	2	2	3	1	1	1	4	4	2	4	4	3	3
32	Tripura	2	1	1	1	1	0	0	1	1	2	2	1	2	2	2
INDIA		210	189	161	190	175	94	95	125	189	203	177	148	165	172	82
		100	90	77	90	83	45	45	60	90	97	84	70	79	82	82

Table H7 Number of adequately equipped District Hospitals and those used as referral

Sl. No.	State	No. of DHs	Number of DHs adequately equipped in*				Number of DHs utilized as referral	
			Infrastructure	Staff	Supply	Equipments		
MAJOR STATES								
1	Andhra Pradesh	12	12	12	1	12	3	
2	Assam	12	11	12	2	11	10	
3	Bihar	10	7	9	0	8	0	
4	Gujarat	14	14	13	3	14	2	
5	Haryana	9	9	9	9	9	2	
6	Karnataka	10	10	10	4	10	1	
7	Kerala	12	12	12	0	12	5	
8	Madhya Pradesh	12	11	9	2	11	6	
9	Maharashtra	10	9	8	2	10	5	
10	Orissa	9	9	8	1	4	1	
11	Punjab	12	12	11	10	12	3	
12	Rajasthan	9	9	6	3	9	3	
13	Tamil Nadu	12	12	12	11	12	10	
14	Uttar Pradesh	12	12	12	0	12	0	
15	West Bengal	10	10	1	1	9	3	
SMALLER STATES/UNION TERRITORIES								
16	And & Nicobar	2	2	0	0	2	1	
17	Arun. Pradesh	4	3	1	0	3	3	
18	Chandigarh	1	1	1	1	1	1	
19	Dadra & N. Haveli	1	1	0	1	1	1	
20	Daman & Diu	2	2	2	0	2	0	
21	Delhi	4	4	4	0	0	1	
22	Goa	2	2	2	2	2	0	
23	Him. Pradesh	3	3	3	0	3	1	
24	Jam. & Kashmir	2	2	2	0	2	0	
25	Lakshadweep	1	1	1	0	1	0	
26	Manipur	3	1	2	2	0	2	
27	Meghalaya	3	2	3	0	2	1	
28	Mizoram	5	3	2	1	3	1	
29	Nagaland	2	2	2	0	2	1	
30	Pondicherry	4	4	4	3	4	2	
31	Sikkim	4	4	1	0	2	0	
32	Tripura	2	2	2	0	1	1	
INDIA		No.	210	198	176	59	186	70
		%	100	94	84	28	89	33

* Having at least 60 percent of critical inputs

FIRST REFERRAL UNIT**3.1 INTRODUCTION**

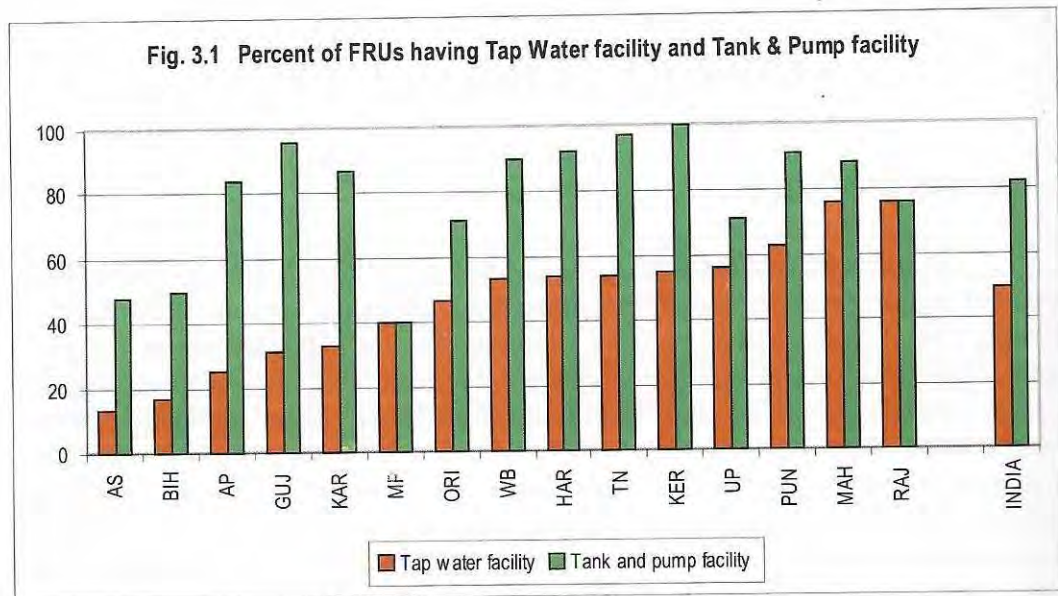
If some of the complications of pregnancy like anaemia, hemorrhage, obstructed labour, sepsis etc. are detected early and managed appropriately, maternal morbidity and mortality can be reduced substantially. But PHCs are not in a position to give complete obstetric care to the patients due to limited facilities and expertise available. Hence some of the health facilities have been identified by the Government as First Referral Units (FRU) and has been supplied with necessary equipments and kits to enable them to meet any emergency related to the health care of mother, particularly emergency obstetric care (EmOC). The personnel in PHC and sub-centres are advised to refer patients requiring EmOC to the designated FRU of that area. Hence FRUs are expected to be fully equipped with adequate manpower, materials, drugs and kits. The information collected and analyzed here relates to 760 FRUs. However, in Andaman and Nicobar islands, Dadra and Nagar Haveli and Lakshadweep there are no FRUs.

3.2 INFRASTRUCTURE (Table F1)

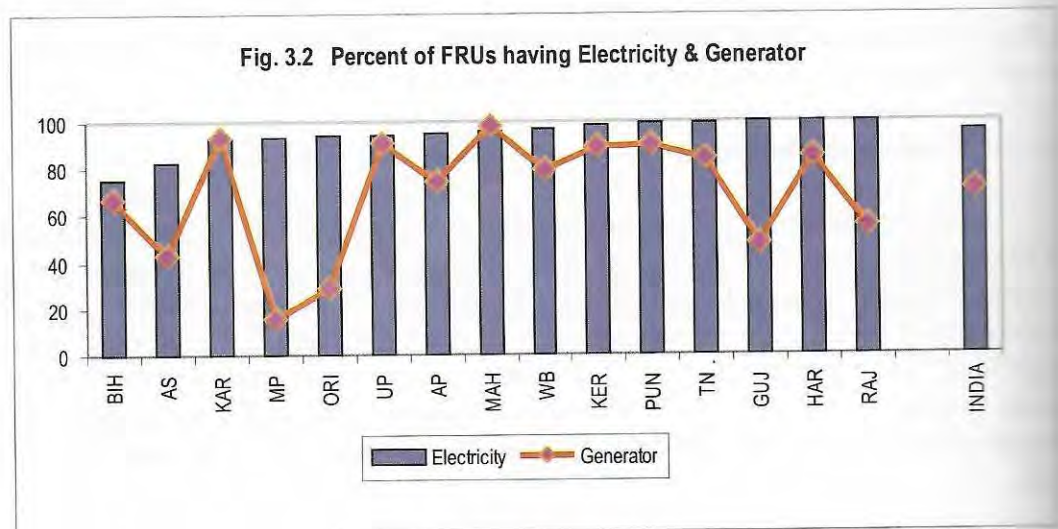
On the whole around 90 percent of the total FRUs do have delivery facility, operation theatre, as well as electricity in all parts of the hospital. Eighty two percent of FRUs have overhead tank and pump facility to facilitate continuous water supply and 80 percent have telephone facility. Availability of RTI/STI OPD facility and linkage with district blood bank is far from satisfactory. Only slightly over a third of the FRUs have separate aseptic labour room.

(a) Water and electricity

The proportion of FRUs getting water from tap and well is almost the same at the all-India level with 50 and 48 percent respectively. Among the major states, Andhra Pradesh, Assam, Bihar, Gujarat, Karnataka and Madhya Pradesh, a higher percentage of FRUs obtained water from well (including tube well). Among smaller states and UTs tap water facility is available in almost all and so is the tank and pump facility. Tank and pump facility is available in all FRUs of Kerala and in almost all FRUs in Gujarat, Haryana, Punjab, Tamil Nadu and West Bengal (see Fig. 3.1).



Though there are only very few FRUs with out electricity, electricity in all parts of the hospital is noted only in 96 percent of the 760 FRUs. Electricity availability varies from 67 percent in Nagaland to 100 percent in Gujarat, Haryana and Rajasthan. In Bihar only three out of four FRUs have electricity in all parts of the hospital. Standby facility in the form of generator is available only in the case of 71 percent of the cases. This varies from 16 percent in Madhya Pradesh to 93 percent in Karnataka among the major states (See Fig.3.2).



(b) Telephone and vehicle

Telephone facility is available only in 80 percent of FRUs. But in Assam, Bihar and Uttar Pradesh not even one-third of the FRUs have this communication facility whereas in Maharashtra all the FRUs have telephones. The states with more

than 90 percent of the FRUs having telephones are Gujarat, Haryana, Karnataka, Kerala, Maharashtra, Punjab, Tamil Nadu and West Bengal.

At least one functional vehicle is available in 73 percent of the total FRUs. Only 24 percent of FRUs in Andhra Pradesh have at least one functional vehicle where as in Karnataka, Maharashtra and Tamil Nadu more than 90 percent have this facility.

(c) Adequately equipped Laboratory and Operation Theatre

There is no adequately equipped laboratory in 29 percent of the total FRUs. Lack of this health care facility varies from 79 percent in Bihar to none in Haryana. However, in at least three-fourths of the total FRUs in Gujarat, Haryana, Madhya Pradesh, Maharashtra, Punjab and Tamil Nadu have adequately equipped laboratory facility.

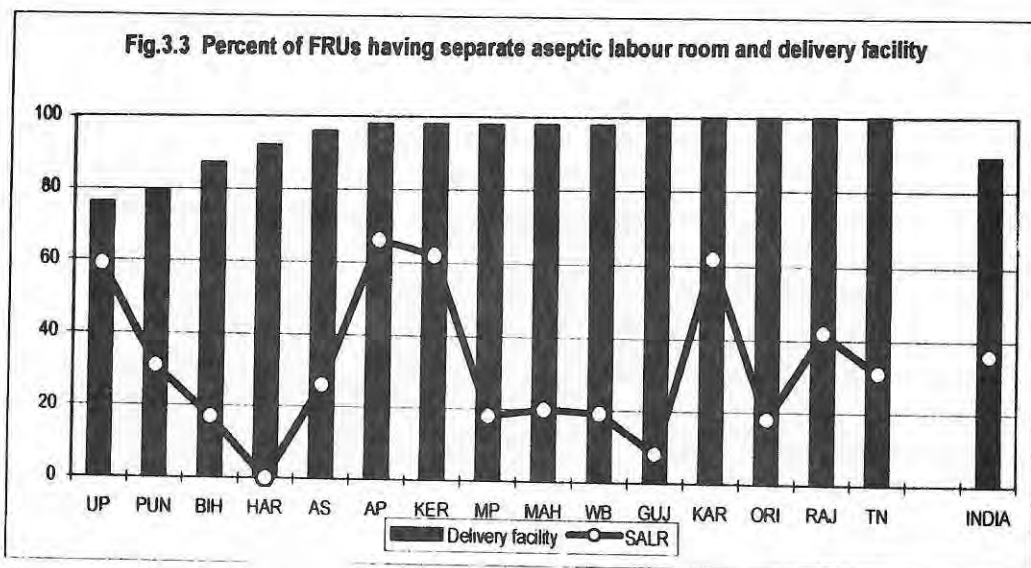
All the FRUs in Haryana, Karnataka, Kerala, Maharashtra, Rajasthan and Uttar Pradesh have operation theatre and except in the case of Assam, Bihar, Madhya Pradesh and Orissa all other states have at least ninety percent of the FRUs with OT. Among the smaller states, in Manipur, only one FRU of the total five have an OT.

Separate OT for gynaecology is available in 70 percent of the FRUs. None of the states/UTs have all the FRUs with this facility except Arunachal Pradesh, Chandigarh, Daman & Diu, Delhi, Goa and Pondicherry, Sikkim. However, this facility is available in more than 80 percent of FRUs in Haryana, Kerala, Maharashtra, Orissa, Punjab, Tamil Nadu and West Bengal.

(d) Separate aseptic labour room and delivery facility

Separate aseptic labour room helps in reducing the chances of infection during delivery and is found only in 36 percent of the FRUs. Not a single major state has all FRUs with separate aseptic labour room. At least 60-66 percent of FRUs with separate aseptic labour room is found only in Andhra Pradesh, Karnataka and Kerala among the major states. Among the smaller states and Union Territories Arunachal Pradesh, Chandigarh, Delhi, Pondicherry and Sikkim have FRUs with separate aseptic labour room.

Not having separate aseptic labour room should not be taken as not having delivery facility at all. As pointed out in the case of DHs, the available labour room may not be clean, may be having seepage, or may be kept open for using it for other purposes when no delivery takes place thereby defying the definition of aseptic. In some cases deliveries may be taking place in the operation theatre. In one way or the other, most of the FRUs do have delivery facility. Since there was no direct question on the availability of delivery facility, the same is assessed as described in the case of DHs. Thus, all FRUs (for which delivery information is available) in Gujarat, Karnataka, Orissa, Rajasthan and Tamil Nadu and all smaller states/UTs have delivery facility. In Andhra Pradesh, Kerala, Madhya Pradesh, Maharashtra and West Bengal 98 percent or more of FRUs have delivery facility. The lowest among the major states are Punjab (79%) and Uttar Pradesh (76%) (See also Fig. 3.3).



Separate OT for gynaecology is available in 70 percent of the total FRUs. This proportion is found to be fairly high in Maharashtra (96%), Punjab (95%), Orissa (88%), Haryana and West Bengal (85 % each) and Tamil Nadu (84%).

(e) Out patient department (OPD) for gynaecology and RTI/STI

The proportion of FRUs with OPD facility for gynaecology is found to be 63 percent. It varies from 16 percent in Madhya Pradesh to 96 percent in Punjab. All smaller states/UTs have this facility except some in Jammu and Kashmir, Manipur, Mizoram, Tripura, Daman and Diu and Pondicherry.

Only a very negligible proportion of the FRUs have RTI/STI OPD facility (12%). Among the major states, one-third of the FRUs have this facility only in Karnataka and West Bengal. In states like Bihar, Gujarat and Maharashtra no FRU have this facility.

(f) Linkage with district blood bank

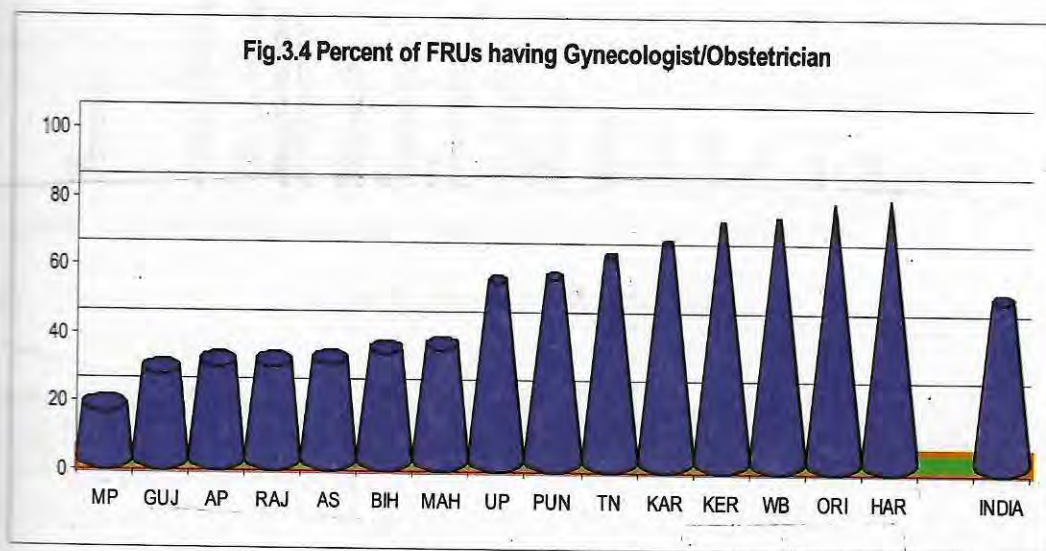
Only 17 percent of the FRUs have linkage with district blood bank and the highest proportion is found in Orissa (41%) followed by West Bengal (36%).

3.3 STAFF POSITION (Table F2)

The overall situation is fairly satisfactory in the case of Staff Nurse with 93 percent of the total FRUs having them. Eighty five to 90 percent of the FRUs do have general duty doctor and Laboratory Technician. Specialists like Gynecologist / Obstetrician, Pediatrician and Anesthesiologists are far from satisfactory. The worst situation is in the case of RTI/STI specialist and Pathologist with one in ten FRUs reporting their availability. Considering the fact that these are units that are expected to handle all referred cases especially relating to emergency obstetric care the prevailing situation is rather disturbing.

(a) **Obstetrician/Gynecologist**

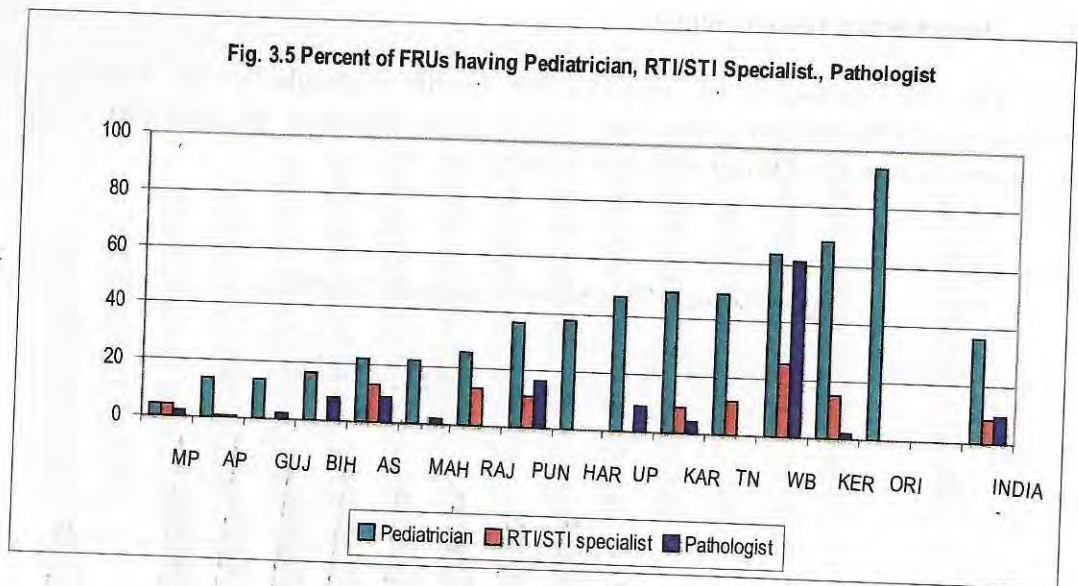
For the provision of reproductive health particularly for females a Gynaecologist/Obstetrician is essential. But only 48 percent of the total FRUs have at least one doctors specialized in this area (see Fig.3.4)



Their availability varies from 16 percent in Madhya Pradesh to 77 percent in Haryana. The situation is not any better in most of the smaller states/UTs. However, the two FRUs in Arunachal Pradesh and one each in Chandigarh and Sikkim and at least two-thirds of the FRUs in Haryana, Karnataka, Kerala, Orissa and West Bengal do have Gynaecologist/Obstetrician

(b) **Paediatrician, RTI/STI specialist and Pathologist**

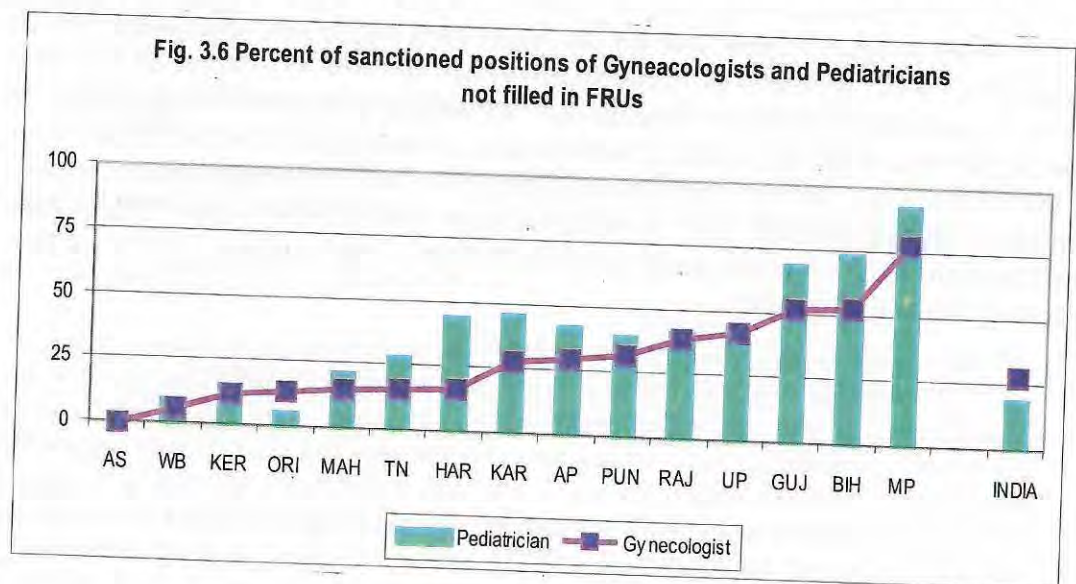
Being the first referral unit for the lower level health care establishments for childcare as well, having at least one Paediatrician only in 37 percent of the total FRUs is quite unsatisfactory. Nonetheless, in Kerala, Orissa and West Bengal at least 60 percent of the FRUs have Paediatrician. In Madhya Pradesh just 2 FRUs out of the total 45 have doctors with this speciality. In Andhra Pradesh, Assam, Bihar, Gujarat, Madhya Pradesh and Tripura not even one-fourth of the FRUs have Paediatrician. Fig. 3.5 is the graphical presentation of the situation of at least one specialist in the major states.



Very few FRUs have RTI/STI specialist, with just 8 percent having at least one, at all-India level. In Bihar, Gujarat, Haryana, Maharashtra, Orissa and Uttar Pradesh and in most of the smaller states/UTs none of the FRUs have this specialist. It is only in West Bengal where at least one-fourth of the FRUs reported as having RTI/STI specialist.

The availability of at least one Pathologist is no better. Again West Bengal shows a slightly better position with 61 percent of the 62 FRUs having Pathologist. Similarly, both the FRUs in Arunachal Pradesh and the sole FRU in Sikkim do have doctors of this speciality.

The FRUs are expected to have filled all the sanctioned posts particularly that of Gynaecologist (see Fig. 3.6).



But the above figure shows that more than half of the sanctioned positions of Gynaecologists and Paediatricians are vacant in Gujarat, Bihar and

Madhya Pradesh. In Madhya Pradesh almost all sanctioned posts of Paediatricians are lying vacant and three out of four posts of Gynaecologist is yet to be filled.

(c) Anaesthesiologist and general duty doctors

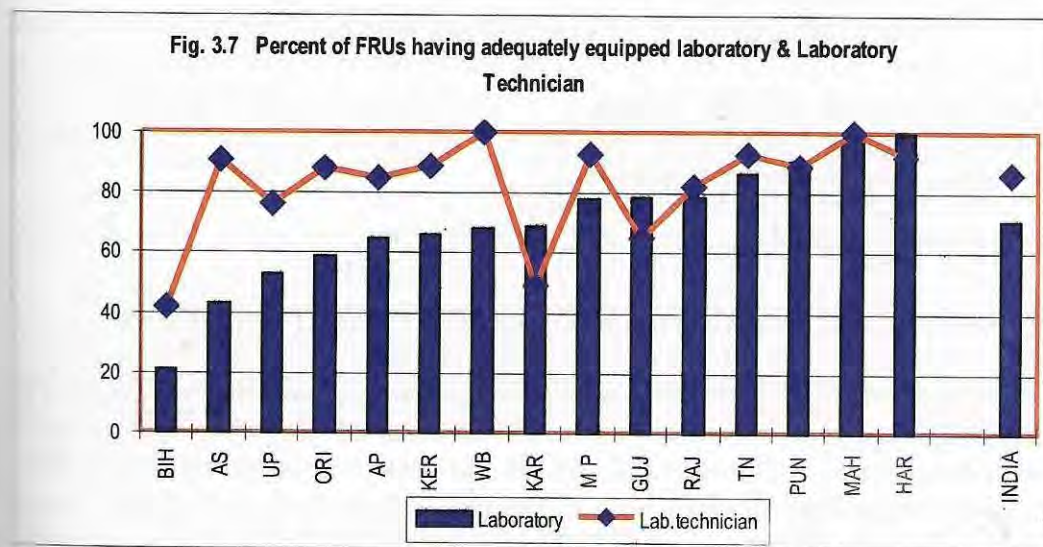
The situation of Anaesthesiologist is slightly better with one out of five FRUs having at least one. But again it is far from satisfactory. More than 40 percent of the total FRUs in Kerala, Tamil Nadu and West Bengal have Anaesthesiologist. The one FRU each available in Chandigarh and Sikkim do have Anaesthesiologist.

All the FRUs in Gujarat, Haryana, Orissa and almost all smaller states/UTs have general duty doctors. Among the major states the lowest percentage in this case is marked in Uttar Pradesh with 62 percent.

(d) Staff Nurse/Midwife, Female Health Worker and Laboratory Technician

All the FRUs in Assam, Gujarat, Haryana, Kerala, Maharashtra, and all smaller states/UTs except Jammu and Kashmir, Meghalaya and Tripura have at least one Staff Nurse/Midwife among their staff. Among major states the lowest proportion of FRUs having this category of staff is noted in Rajasthan, 53 percent.

The availability of at least one female Health Worker in the FRUs is not also satisfactory with only 64 percent having them. Not a single major state has all FRUs with this category of workers in their staff. It varies from 7 percent in Tamil Nadu to 95 percent in West Bengal. Among the states in-between these two extremes, Haryana, Karnataka, Kerala, Madhya Pradesh, Punjab and Uttar Pradesh have at least one female health worker in at least 80 percent of the FRUs. Eighty six percent of the total FRUs have Laboratory Technician (see Fig.3.7).

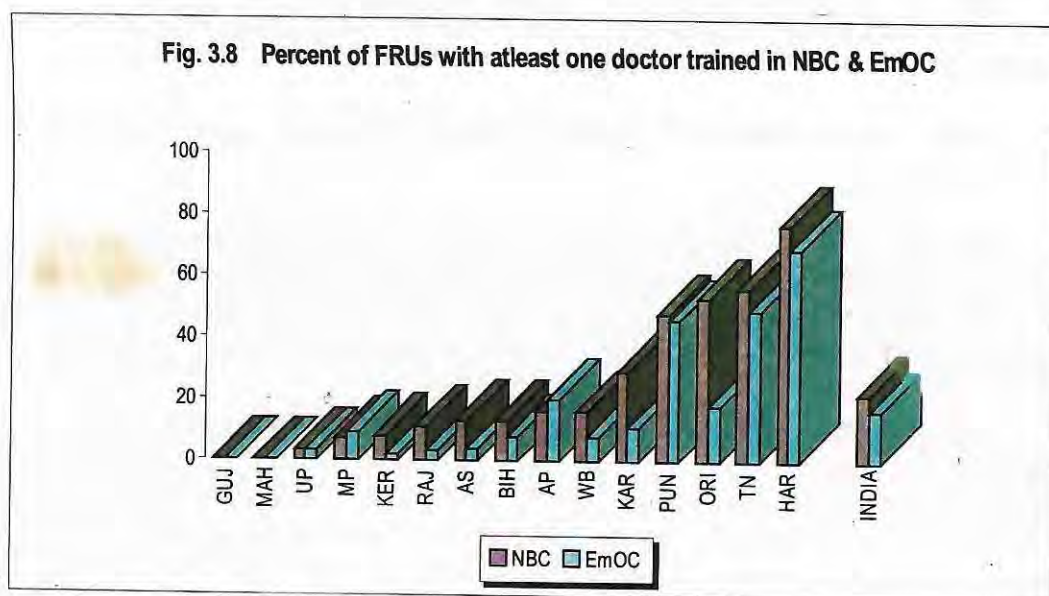


This includes all the FRUs in Maharashtra and West Bengal; and more than 80 percent in Andhra Pradesh, Assam, Haryana, Kerala, Madhya Pradesh, Orissa, Punjab, Rajasthan and Tamil Nadu. In Bihar the proportion is very low at 42.

percent. All the smaller states and UTs do have a laboratory technician in all the FRUs except in Meghalaya and Nagaland.

3.4 TRAINING OF MEDICAL OFFICERS (Table F3)

In-service training of the Medical Officers during the full one year preceding the date of survey shows that the situation is quite unacceptable in all the states/UTs except the one in Sikkim. The percent of FRUs with trained doctors in the different aspects covered in Table F3 shows Haryana at the top with the highest percentage (also see Fig. 3.8).



Sixty nine percent of FRUs in Haryana have doctors trained in sterilization. Similarly in Haryana the percentage of FRUs with trained doctors in IUD insertion is 77, emergency contraception is 62 (Tamil Nadu also shares the highest position with 62 percent), RTI/STI is 69, newborn care is 77 and emergency obstetric care is 69. Among the major states no trained doctors in NBC or EmOC is available in any FRU in Gujarat and Maharashtra and the said proportion is below ten percent in Uttar Pradesh, Madhya Pradesh and Kerala .

3.5 SUPPLY AND STOCK

I. SUPPLY OF TUBAL RINGS AND SELECTED KITS (Tables F4)

Supply situation presents a very bleak picture. Among the supply of kits necessary for reproductive health care, two-thirds of the FRUs have all six sets of standard surgical kit, IUD insertion kit and normal delivery (labour room) kit. None of the major states have all FRUs with all the supply items given in Table F3 except Haryana in the case of labour room kit. But all the kits examined here are available in the FRUs of Daman and Diu and Pondicherry. Tubal rings and RTI/STI diagnosis laboratory kit is available only in one out of ten FRUs.

(a) Tubal rings and Standard Surgical Kit

Tubal rings are available in at least one-fourth of the FRUs in Rajasthan and Uttar Pradesh. In the FRUs of Assam, Bihar, Haryana, Maharashtra and many smaller states/UTs, tubal rings are not available at all. The situation in Nagaland (1 out of 3), Arunachal Pradesh (1 out of 2) and Jammu and Kashmir (4 out of 6) is slightly better.

At the all-India level only 62 percent of the FRUs have all six sets of standard surgical kits. The variation in the availability of standard surgical kits is very high such that while in Bihar only 21 percent of FRUs reportedly have this, in Haryana the said percentage is 92. The states with at least three-fourths of the FRUs having all six sets of standard surgical kits are Gujarat, Haryana, Karnataka, Kerala, Maharashtra, Punjab, Rajasthan, and Tamil Nadu. All the FRUs in Chandigarh, Delhi, Daman and Diu and Pondicherry have all six sets of standard surgical kits.

(b) Emergency obstetric care drug kit and RTI/STI laboratory kit

The situation is still worse in the case of emergency obstetric care drug kit with only 29 percent reporting to have received this. Considering the fact that the FRUs are expected to attend to all the emergency obstetric cases that come to the hospital directly or referred to it by lower level HCEs, this is a very unsatisfactory situation. The one FRU each in Daman and Diu and in Pondicherry all kits are available. RTI/STI laboratory diagnosis kit is available only in one out of ten FRUs. It is the least available kit in all states/UTs.

(c) IUD insertion kit, new born care equipment kit, labour room (normal delivery) kit

Among the major states at least 75 percent of the FRUs have IUD insertion kit in Haryana, Karnataka, Kerala, Punjab, Rajasthan, Tamil Nadu and West Bengal.

The newborn care equipment kit is not received by most of the FRUs with only 36 percent of the total FRUs reporting to have received it. Among the major states it varies from 4 percent in Bihar to 79 percent in Tamil Nadu. In Haryana three-fourths of the FRUs and in Maharashtra and Punjab around two-thirds of the FRUs have this. The situation in the case of other states is far from satisfactory.

Labour room or normal delivery kit is received by 68 percent of the FRUs, which include the 100 percent FRUs in Haryana and a little over 90 percent of FRUs in Punjab, Rajasthan and Tamil Nadu. The lowest level is noted in Bihar (17%). Less than 60 percent of the FRUs received labour room kit in Andhra Pradesh, Assam, Bihar and Orissa.

II. STOCK OF SELECTED ITEMS (Table F5)

Seventy to eighty percent of the total FRUs had some stock of oral pill cycles, IUD, DPT, OPV, TT, BCG and measles vaccine on the day of survey. Lubricated Nirodh pieces and ORS packets were available in two-thirds of the FRUs. Vitamin A solution and IFA (large) tablet were found in 44-47 percent of

FRUs. Sixty percent of the FRUs had DT. The status of stock of all these are very poor in Bihar.

(a) Contraceptives

Among the major states the range of variation in the FRUs having some stock of Nirodh is from 21 percent in Bihar to 93 percent in Tamil Nadu. The states with more than 70 percent of the FRUs falling in this category are Haryana, Karnataka, Kerala, Punjab, Rajasthan, Tamil Nadu and West Bengal. At the other end, with less than 50 percent is found in Bihar, Maharashtra and Uttar Pradesh.

Except Bihar (25 %), Gujarat (58%), Maharashtra (54%) and Uttar Pradesh (53%) in all other major states, at least 60 percent of the FRUs had some stock of oral pill cycle, which includes all the FRUs of Haryana. In the case of IUD, in all the major states except Bihar (29%) and Andhra Pradesh (57 %) at least two-thirds of the FRUs have reported some stock on the day of survey.

(b) IFA (large) tablets, Vitamin A solution and ORS packets

On the day of survey only 44 percent of the FRUs had IFA (large) tablet in stock. In Haryana almost all FRUs had a stock though the variation among the major states is from 4 percent in Bihar to 92 percent in Haryana.

Some stock of Vitamin A solution is found only in 47 percent of the FRUs. Again Haryana stands first with all the FRUs having this, and Tamil Nadu and Bihar at the other end.

Oral Rehydration Salt (ORS) is essential for the fluid replacement of children suffering from diarrhoea to avoid dehydration. ORS is available in packets and the FRUs are expected to stock them for emergency. This was available in 65 percent of the hospitals. Again all FRUs in Haryana had ORS packets and Bihar is found at the other end, with only 33 percent of the FRUs having it.

(c) Vaccine

At least three out of four FRUs have all the vaccines except DT, which is available only in about two-thirds of the FRUs. More than 90 percent of the FRUs in Haryana, Kerala, Madhya Pradesh, Punjab, West Bengal, and Rajasthan (100%) had some stock of DPT vaccine. The situation of other vaccines also are not too bad except in the case of DT. On the whole the situation prevailing in Bihar is very unsatisfactory where none of the vaccines are available even in 50 percent of the total FRUs in that state.

3.6 EQUIPMENTS (F6)

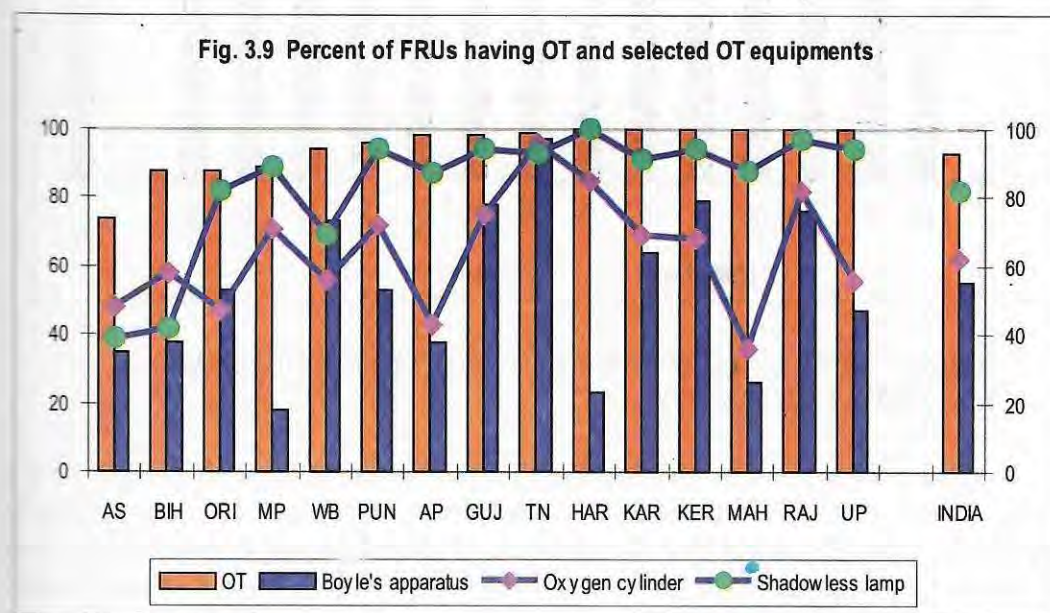
As in the case of district hospital, the equipments considered here are those that are expected to be in the operation theatre, X-ray and ECG machine, and selected cold chain equipments. Boyle's apparatus is available in 55 percent of the FRUs. Only 62 percent of the FRUs have oxygen cylinder. Shadowless lamp is available only in 82 percent of cases. High-pressure sterilizer (either vertical or

horizontal) is available in 70 percent of all FRUs while cardiac monitor is available only in a miniscule proportion (13%) and ventilator in 20 percent. OT fumigation apparatus necessary for disinfecting the OT is available in 47 percent of FRUs. The situation of hydraulic table in the operation theatre is much better with 73 percent of FRUs having it. Whereas X-ray machine is available in 87 percent, ECG machine is available in only 54 percent. Cold chain equipments, namely ice lined freezer, deep freezer and refrigerator are available in 75, 80 and 67 percent respectively.

(a) Equipments in operation theatre

Availability of Boyle's apparatus in the OT varies from 23 percent in Haryana to 97 percent in Tamil Nadu. The solitary FRU in Chandigarh, Daman and Diu, Pondicherry and Sikkim and the five FRUs in Goa have Boyle's apparatus. More than 90 percent of the FRUs in Tamil Nadu have oxygen cylinder. Shadowless lamp is available in all the FRUs of Haryana and in almost all FRUs in Gujarat, Karnataka, Kerala, Punjab, Rajasthan, Tamil Nadu and Uttar Pradesh. None of the major states have all FRUs with high-pressure sterilizer either vertical or horizontal. However, more than 75 percent of the FRUs are found having high-pressure sterilizer in Gujarat, Haryana, Karnataka, Kerala, Punjab, Tamil Nadu, Uttar Pradesh and West Bengal. Cardiac monitor and ventilator are almost absent in most of the states. Less than 60 percent of FRUs have hydraulic table only in Assam, Bihar, and Maharashtra.

Availability of OT equipments in relation to availability of OT is given in Fig. 3.9.



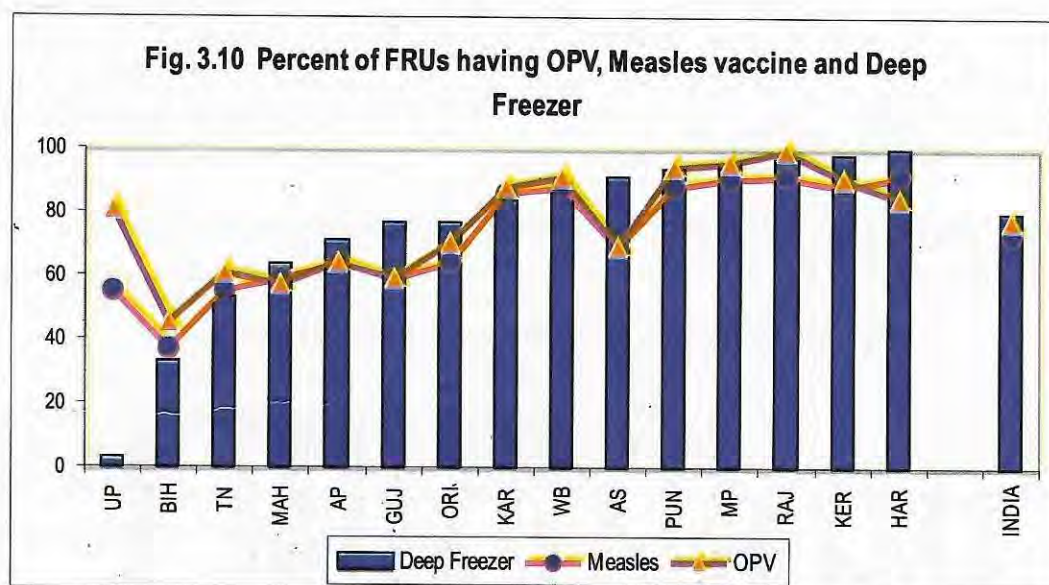
(b) X-ray and ECG machine

All the FRUs in Maharashtra and West Bengal and more than 80 percent of the FRUs in Andhra Pradesh, Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh, Punjab, Rajasthan, Tamil Nadu and Uttar Pradesh have X-ray machine. Most of the FRUs in smaller state/UTs also have this machine. However, availability

of ECG machine is not as common as is the case with X-ray machine with only 54 percent of the total FRUs reported having ECG machine. State-wise variation is more in this case as it varies from none in Bihar to 91 percent in Tamil Nadu. In most of the states only less than fifty percent FRUs have ECG machine. Exceptions are Gujarat, Karnataka, Kerala, Punjab, Rajasthan and Tamil Nadu.

(c) Cold chain equipments

Most of the smaller states/UTs have all the cold chain equipments. Among the major states, less than 70 percent of the FRUs reported the availability of ice-lined freezer only in Bihar, Tamil Nadu and Uttar Pradesh. Similar is the situation with respect to deep freezer except that in the low category Maharashtra also should be included. Refrigerator is available only in the case of 67 percent of the FRUs. This includes the 90 percent FRUs with refrigerator in Gujarat and 96 percent in Kerala. Deep freezer is used specifically to store OPV and measles vaccines besides making ice packs. Fig. 3.10 shows the availability of deep freezer in relation to the availability of OPV and measles vaccine.



3.7 ADEQUATELY EQUIPPED FRUs AND THOSE USED AS REFERRAL (Table F7)

As in the case of district hospital, if the FRU has at least 60 percent of the critical inputs that FRU is taken as adequately equipped in that particular component. Table F7 shows that the situation of infrastructure is much better than that of other components with 84 percent being adequately equipped. This includes all FRUs in Maharashtra and almost all in Gujarat, Haryana, Karnataka, Kerala, Punjab, Tamil Nadu and West Bengal.

The proportion of the total FRUs adequately equipped in staff is only 46 percent. Nonetheless, two-thirds to three-fourths of the FRUs are adequately equipped in staff in Haryana, Kerala, Orissa, Tamil Nadu and West Bengal. All FRUs in Arunachal Pradesh, Chandigarh, Delhi, Goa and Sikkim are adequately equipped in staff.

The worst situation is noted with respect to supply with only 26 percent of FRUs being adequately equipped. Except Haryana and Tamil Nadu and to a certain extent Maharashtra and Punjab the situation with respect to supply is quite unsatisfactory.

The situation of equipments is fairly satisfactory in Gujarat, Haryana, Karnataka, Kerala, Punjab, Rajasthan and Tamil Nadu with at least 80 percent being adequately equipped. Worst situation is found in Maharashtra, with only 34 percent.

To be noted here is the fact that at least two-thirds of the FRUs in Haryana and Tamil Nadu are adequately equipped with respect to infrastructure, staff, supply and equipments. Similarly, many of the FRUs in Bihar are not adequately equipped in any component considered here.

Table F1 Status of infrastructure in First Referral Units

Sl. No.	State	No. of FRUs	Percent of FRUs having														
			Source of water		Tank & pump facility	Electricity (In all parts the hospital)	Generator	Telephone	Vehicle (Functional)	Laboratory (Adequately equipped)	Operation theatre	Separate OT for gynecology	Separate aseptic labour room	Delivery facility	Gynec OPD facility	RTI/STI OPD facility	Linkage with district blood bank
			Tap	Well													
MAJOR STATES																	
1	Andhra Pradesh	92	25	72	84	95	74	79	24	65	98	50	66	98	58	22	11
2	Assam	23	13	83	48	83	43	30	65	43	74	52	26	96	52	17	22
3	Bihar	24	17	83	50	75	67	17	29	21	88	58	17	87	67	0	4
4	Gujarat	52	31	65	96	100	48	98	85	79	98	60	8	100	27	0	4
5	Haryana	13	54	46	92	100	85	92	85	100	100	85	0	92	92	8	15
6	Karnataka	45	33	67	87	93	93	96	96	69	100	60	62	100	87	31	7
7	Kerala	53	55	45	100	98	89	98	74	66	100	83	62	98	64	13	15
8	Madhya Pradesh	45	40	56	40	93	16	44	76	78	89	56	18	98	16	7	9
9	Maharashtra	50	76	22	88	96	98	100	96	98	100	96	20	98	84	0	24
10	Orissa	17	47	53	71	94	29	59	53	59	88	88	18	100	94	18	41
11	Punjab	81	63	37	91	99	90	93	84	91	96	95	31	79	96	12	24
12	Rajasthan	38	76	21	76	100	55	63	82	79	100	50	42	100	45	3	5
13	Tamil Nadu	68	54	44	97	99	84	93	93	87	99	84	31	100	50	19	22
14	Uttar Pradesh	34	56	41	71	94	91	29	53	53	100	68	59	76	59	6	3
15	West Bengal	62	53	47	90	97	79	97	82	68	94	85	19	98	76	34	36

Table F1 Status of Infrastructure in First Referral Units (continued)

Sl No.	State	No. of FRUs	Percent of FRUs having														
			Source of water		Tank & pump facility	Electricity (In all parts the hospital)	Generator	Telephone	Vehicle (Functional)	Laboratory (Adequately equipped)	Operation theatre	Separate OT for gynecology	Separate aseptic labour room	Delivery facility	Gynec OPD facility	RTI/STI OPD facility	Linkage with district blood bank
			Tap	Well													
SMALLER STATES/UNION TERRITORIES																	
16	And & Nicobar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Arun. Pradesh	2	100	0	50	100	100	100	100	100	100	100	100	100	100	50	50
18	Chandigarh	1	100	0	100	100	100	100	100	100	100	100	100	100	100	100	100
19	Dadra & N. Haveli	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Daman & Diu	1	100	0	100	100	100	100	100	100	100	100	100	100	100	0	0
21	Delhi	15	87	13	100	93	100	53	100	80	100	100	100	100	47	100	13
22	Goa	5	100	0	100	100	100	100	100	100	100	100	100	100	100	60	60
23	Him. Pradesh	1	100	0	100	100	100	100	100	0	100	0	0	100	0	0	0
24	Jam. & Kashmir	6	67	33	67	100	50	83	67	100	83	67	100	83	0	0	0
25	Lakshadweep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Manipur	5	60	20	40	80	20	20	80	40	20	60	100	20	0	0	0
27	Meghalaya	5	80	0	20	100	20	20	80	60	60	40	100	100	0	0	0
28	Mizoram	5	60	0	0	100	60	60	60	100	40	60	100	60	0	40	0
29	Nagaland	3	67	33	23	67	33	67	67	67	33	67	100	100	33	67	67
30	Pondicherry	1	100	0	100	100	100	100	100	100	0	100	100	0	0	0	0
31	Sikkim	1	100	0	100	100	100	100	100	100	100	100	100	100	100	100	100
32	Tripura	12	67	17	100	100	25	100	100	83	33	0	100	67	0	8	8
	INDIA	760	50	48	82	96	71	80	73	71	93	70	36	89	63	12	17

Table F2 Staff position in First Referral Units (FRUs)

Sl. No.	State	No. of FRUs	Percent of FRUs having at least one									
			Obstetrician/ Gynecologist	Pediatrician	RTI/STI Specialist	Pathologist	Anaesthesiologist	General duty doctor	Staff nurse/ midwife	FHW	Laboratory Technician	
MAJOR STATES												
1	Andhra Pradesh	92	29	14	1	1	10	89	96	60	85	
2	Assam	23	30	22	13	9	17	92	100	39	91	
3	Bihar	24	33	17	0	8	13	79	92	29	42	
4	Gujarat	52	27	14	0	2	4	100	100	48	65	
5	Haryana	13	77	38	0	0	8	100	100	92	92	
6	Karnataka	45	64	49	9	4	7	69	96	80	49	
7	Kerala	53	70	68	15	2	40	91	100	93	89	
8	Madhya Pradesh	45	16	4	4	2	2	87	93	84	93	
9	Maharashtra	50	34	22	0	2	16	92	100	12	100	
10	Orissa	17	76	94	0	0	0	100	94	65	88	
11	Punjab	81	54	37	11	17	22	95	94	89	89	
12	Rajasthan	38	29	26	13	0	11	74	53	68	82	
13	Tamil Nadu	68	60	49	12	0	44	85	99	7	93	
14	Uttar Pradesh	34	53	47	0	9	6	62	71	85	76	
15	West Bengal	62	71	63	26	61	58	98	98	95	100	

FHW = Female health worker

Table F2 Staff position in First Referral Units (continued)

Sl. No.	State	No. of FRUs	Percent of FRUs having at least one										Laboratory technician
			Obstetrician/ Gynecologist	Pediatrician	RTI/STI Specialist	Pathologist	Anaesthesiologist	General duty doctor	Staff nurse/ midwife	FHW			
SMALLER STATES/UNION TERRITORIES													
16	And & Nicobar	0	0	0	0	0	0	0	0	0	0	0	0
17	Arun. Pradesh	2	100	100	100	100	100	50	100	100	100	50	100
18	Chandigarh	1	100	100	0	0	0	100	100	100	100	100	100
19	Dadra & N. Haveli	0	0	0	0	0	0	0	0	0	0	0	0
20	Daman & Diu	1	0	0	0	0	0	0	0	100	100	0	100
21	Delhi	15	93	80	0	27	67	100	100	100	100	27	100
22	Goa	5	80	40	20	0	80	100	100	100	100	100	100
23	Him. Pradesh	1	0	0	0	0	0	0	100	100	100	100	100
24	Jam. & Kashmir	6	83	67	0	0	83	100	100	100	83	100	100
25	Lakshadweep	0	0	0	0	0	0	0	0	0	0	0	0
26	Manipur	5	60	200	0	0	20	100	100	100	100	100	100
27	Meghalaya	5	0	40	20	20	40	80	80	100	80	100	60
28	Mizoram	5	0	0	0	0	0	100	100	100	100	100	100
29	Nagaland	3	33	33	33	0	33	67	100	100	100	67	33
30	Pondicherry	1	0	0	0	0	0	100	100	100	100	0	100
31	Sikkim	1	100	100	100	100	100	100	100	100	100	100	100
32	Tripura	12	50	17	8	0	0	100	100	100	92	100	100
INDIA		760	48	37	8	10	22	89	93	64	86	86	

Table F3 Status of training of medical officers in First Referral Units

Sl. No.	Name of the State	No. of FRUs	Percent of FRUs with at least one doctor trained during the last one year in					
			Sterilization	IUD insertion	Emergency Contraception	RTI/STI	New born Care	EmO.C*
MAJOR STATES								
1	Andhra Pradesh	92	41	43	12	18	16	20
2	Assam	23	17	13	4	13	13	4
3	Bihar	24	17	8	8	8	13	8
4	Gujarat	52	10	2	0	42	0	0
5	Haryana	13	69	77	62	69	77	69
6	Karnataka	45	38	42	11	36	29	11
7	Kerala	53	4	2	2	8	8	2
8	Madhya Pradesh	45	9	4	4	9	7	9
9	Maharashtra	50	12	0	0	20	0	0
10	Orissa	17	48	24	0	47	53	18
11	Punjab	81	52	48	44	44	48	46
12	Rajasthan	38	11	16	5	16	11	3
13	Tamil Nadu	68	68	68	62	56	56	49
14	Uttar Pradesh	34	15	24	15	12	3	3
15	West Bengal	62	15	18	7	13	16	8
SMALLER STATES / UNION TERRITORIES								
16	And & Nicobar	0	0	0	0	0	0	0
17	Arun. Pradesh	2	50	50	50	50	50	50
18	Chandigarh	1	0	0	0	0	0	0
19	Dadra & N. Haveli	0	0	0	0	0	0	0
20	Daman & Diu	1	0	0	0	0	0	0
21	Delhi	15	13	0	0	13	0	0
22	Goa	5	60	80	60	80	60	60
23	Him. Pradesh	1	100	0	0	0	0	0
24	Jam. & Kashmir	6	0	0	0	0	0	0
25	Lakshadweep	0	0	0	0	0	0	0
26	Manipur	5	20	40	40	0	40	20
27	Meghalaya	5	0	40	0	20	20	20
28	Mizoram	5	0	20	0	20	0	0
29	Nagaland	3	33	67	67	67	67	33
30	Pondicherry	1	0	100	0	0	0	0
31	Sikkim	1	100	100	100	100	100	100
32	Tripura	12	17	33	8	8	8	8
INDIA		760	28	27	17	26	22	17

* EmOC : Emergency Obstetric Care

Table F4 Supply of Tubal ring and Kits in First Referral Units

Sl. No.	State	No. of FRUs	Percent of FRUs having received						
			Tubal ring	Std. Sur. Kit ₁	EmOC ₂ drug kit	RTI/STI lab kit	IUD insertion Kit	NBCE ₃ kit	Labour room kit ₄
MAJOR STATES									
1	Andhra Pradesh	92	2	27	12	2	7	15	35
2	Assam	23	0	48	17	13	9	26	57
3	Bihar	24	0	21	0	0	4	4	17
4	Gujarat	52	12	73	12	8	4	12	71
5	Haryana	13	0	92	85	31	15	77	100
6	Karnataka	45	16	76	36	11	0	29	71
7	Kerala	53	2	75	8	2	9	28	68
8	Madhya Pradesh	45	7	62	4	2	67	36	64
9	Maharashtra	50	0	80	52	48	80	62	78
10	Orissa	17	18	41	12	6	41	12	41
11	Punjab	81	5	88	57	6	95	64	99
12	Rajasthan	38	26	74	29	13	97	47	97
13	Tamil Nadu	68	12	87	78	22	88	79	94
14	Uttar Pradesh	34	29	62	18	6	62	24	71
15	West Bengal	62	5	52	21	6	76	24	71
SMALLER STATES / UNION TERRITORIES									
16	And & Nicobar	0	0	0	0	0	0	0	0
17	Arun. Pradesh	2	50	0	0	0	0	0	0
18	Chandigarh	1	0	100	0	0	0	0	0
19	Dadra & N.Haveli	0	0	0	0	0	0	0	0
20	Daman & Diu	1	0	100	100	100	100	100	100
21	Delhi	15	13	100	20	7	33	13	0
22	Goa	5	20	80	80	60	80	80	80
23	Him Pradesh	1	0	100	0	0	100	0	0
24	Jam & Kashmir	6	67	17	17	0	50	17	50
25	Lakshadweep	0	0	0	0	0	0	0	0
26	Manipur	5	0	20	20	0	20	20	40
27	Meghalaya	5	0	80	0	20	80	0	100
28	Mizoram	5	0	40	20	0	60	20	40
29	Nagaland	3	33	67	33	33	33	33	100
30	Pondicherry	1	0	100	100	100	100	100	100
31	Sikkim	1	0	0	0	0	0	0	0
32	Tripura	12	25	0	17	17	50	17	50
INDIA		760	9	62	29	11	68	36	68

1. Normal sets of standard surgical kits
 4. Normal delivery kit

2. Emergency obstetric care drug kit

3. New born care equipment kit

Table F5 Stock of selected items of health care in First Referral Units

Sl. No.	State	No. of FRUs	Percent of FRUs having some stock of													
			Contraceptives etc.							Vaccine						
			Nirodh	Oral pill	IUD	IFA (large)	Vitamin A solution	ORS packet	DPT	OPV	TT	BCG	Measles	DT		
MAJOR STATES																
1	Andhra Pradesh	92	52	66	57	30	30	30	37	69	65	72	67	65	40	
2	Assam	23	57	65	65	26	74	48	70	70	70	65	74	70	57	
3	Bihar	24	21	25	29	4	13	33	46	46	46	29	46	38	29	
4	Gujarat	52	58	58	64	33	31	92	58	60	50	50	56	60	29	
5	Haryana	13	77	100	92	92	100	100	92	85	92	92	85	92	92	
6	Karnataka	45	89	96	96	40	51	69	89	89	91	91	93	87	73	
7	Kerala	53	72	83	91	35	62	83	93	93	91	91	93	89	93	
8	Madhya Pradesh	45	51	71	67	69	31	71	93	96	67	84	84	91	87	
9	Maharashtra	50	44	54	50	50	42	74	58	58	62	62	56	60	44	
10	Orissa	17	65	65	65	41	59	82	65	71	65	65	53	65	41	
11	Punjab	81	75	86	96	68	80	79	91	95	94	80	80	89	86	
12	Rajasthan	38	82	92	90	34	61	55	100	100	97	90	90	92	47	
13	Tamil Nadu	68	93	87	88	62	7	79	56	62	77	59	59	56	18	
14	Uttar Pradesh	34	47	53	71	21	27	38	71	82	71	65	65	56	53	
15	West Bengal	62	73	87	84	42	63	65	94	92	90	92	92	89	87	

Table F5 Stock of selected items of health care in First Referral Units (continued)

Sl. No.	State	No. of FRUs	Percent of FRUs having some stock of												
			Contraceptives etc.						Vaccine						
			Nirodh	Oral pill	iUD	iFA (large)	Vitamin A solution	ORS packet	DPT	OPV	TT	BCG	Measles	DT	
SMALLER STATES/UNION TERRITORIES															
16	And & Nicobar	0	0	0	0	0	0	0	0	0	0	0	0	0	
17	Arun. Pradesh	2	100	100	100	0	50	0	100	100	50	100	100	50	
18	Chandigarh	1	100	100	100	0	100	0	100	100	0	100	100	100	
19	Dadra & N. Haveli	0	0	0	0	0	0	0	0	0	0	0	0	0	
20	Daman & Diu	1	0	0	0	0	0	0	0	0	0	0	0	0	
21	Delhi	15	93	93	100	93	93	93	100	93	80	87	87	93	
22	Goa	5	100	100	100	20	40	20	100	100	100	100	100	100	
23	Him. Pradesh	1	100	100	100	0	100	0	100	100	100	100	100	100	
24	Jam. & Kashmir	6	100	100	50	33	83	33	100	100	83	100	100	83	
25	Lakshadweep	0	0	0	0	0	0	0	0	0	0	0	0	0	
26	Manipur	5	60	40	60	20	60	60	80	80	80	80	80	80	
27	Meghalaya	5	80	100	100	20	40	0	80	80	60	80	80	100	
28	Mizoram	5	20	80	60	20	40	60	20	20	20	20	20	0	
29	Nagaland	3	67	0	67	0	0	0	67	67	67	67	67	33	
30	Pondicherry	1	100	100	100	0	0	100	100	100	100	100	100	0	
31	Sikkim	1	100	100	100	100	100	100	100	100	100	100	100	100	
32	Tripura	12	75	67	58	0	33	25	67	83	75	75	75	67	
	INDIA	760	67	74	77	44	47	65	77	78	76	74	74	60	

Table F6 Availability of selected equipments in First Referral Units

Sl. No.	State	No. of FRUs	Percent of FRUs having the following in their OT										Percent of FRUs having functional cold chain equipments		
			Boyles apparatus	Oxygen cylinder	Shadow less lamp	High pressure sterilizer	Cardiac monitor	Ventilator	OT care/fumigation	Hydraulic table	X-ray machine	ECG machine	Ice lined freezer	Deep freezer	Refrigerator
MAJOR STATES															
1	Andhra Pradesh	92	38	43	87	69	5	19	76	64	88	49	72	71	37
2	Assam	23	35	48	39	30	26	39	39	39	44	26	83	91	52
3	Bihar	24	38	58	42	0	42	8	8	42	58	0	33	33	25
4	Gujarat	52	78	75	94	79	14	15	29	83	98	58	77	77	90
5	Haryana	13	23	85	100	85	15	39	0	85	85	46	100	100	39
6	Karnataka	45	64	69	91	93	4	31	98	84	93	84	91	84	36
7	Kerala	53	79	68	94	87	28	19	36	85	81	74	91	98	96
8	Madhya Pradesh	45	18	71	89	36	0	4	0	89	93	36	96	96	82
9	Maharashtra	50	26	36	88	44	2	16	88	56	100	24	98	64	68
10	Orissa	17	53	47	82	53	18	18	24	71	77	47	59	77	65
11	Punjab	81	53	72	94	90	27	24	42	86	84	72	89	94	80
12	Rajasthan	38	76	82	97	61	8	26	42	71	90	76	95	97	32
13	Tamil Nadu	68	97	96	93	82	13	7	75	97	91	91	37	53	88
14	Uttar Pradesh	34	47	56	94	88	6	15	12	85	85	15	4	3	10
15	West Bengal	62	73	56	69	82	18	32	26	71	100	44	79	86	82

Table F6 Availability of selected equipments in First Referral Units (continued)

Sl. No.	State	No. of FRUs	Percent of FRUs having the following in their OT										Percent of FRUs having			Percent of FRUs having functional cold chain equipments		
			Boyles apparatus	Oxygen cylinder	Shadow less lamp	High pressure sterilizer	Cardiac monitor	Ventilator	OT carefum igation	Hydraulic table	X-ray machine	ECG machine	Ice lined freezer	Deep freezer	Refrigerator			
SMALLER STATES/UNION TERRITORIES																		
16	And & Nicobar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
17	Arun. Pradesh	2	50	50	50	50	50	50	50	50	50	50	50	100	100	100	100	
18	Chandigarh	1	100	100	100	100	0	0	0	0	100	100	100	100	100	100	100	
19	Dadra & N. Haveli	0	0	0	0	0	0	0	0	0	100	0	0	0	0	0	0	
20	Daman & Diu	1	100	100	100	100	100	100	33	100	100	100	100	100	100	0	100	
21	Delhi	15	47	73	100	53	40	40	60	67	93	100	100	100	47	100	100	
22	Goa	5	100	100	100	100	40	40	60	100	80	100	100	100	100	100	100	
23	Him. Pradesh	1	0	0	100	100	0	0	0	0	100	100	100	100	100	100	100	
24	Jam. & Kashmir	6	50	33	83	33	0	0	67	100	100	100	100	50	83	83	83	
25	Lakshadweep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
26	Manipur	5	0	0	20	0	0	0	20	0	80	20	80	20	80	40	40	
27	Meghalaya	5	0	40	20	0	0	0	20	0	80	20	80	0	100	40	40	
28	Mizoram	5	40	60	20	0	0	0	20	0	100	0	100	0	100	20	20	
29	Nagaland	3	33	33	0	0	0	0	67	100	100	100	100	0	0	67	67	
30	Pondicherry	1	100	100	100	100	0	100	100	100	100	100	100	100	100	100	100	
31	Sikkim	1	100	100	100	100	0	100	0	100	100	100	100	100	100	100	100	
32	Tripura	12	9	17	8	33	0	17	8	17	58	17	100	17	92	83	83	
	INDIA	760	55	62	82	70	13	20	47	73	87	54	75	80	80	67	67	

Table F7 Percent of adequately equipped First Referral Units and those used as referral

Sl. No.	State	No. of FRUs	Percent of FRUs adequately equipped* in				Percent of FRUs utilized as referral
			Infrastru cture	Staff	Supply	Equipments	
MAJOR STATES							
1	Andhra Pradesh	92	86	26	9	55	19
2	Assam	23	52	30	13	48	52
3	Bihar	24	29	17	0	46	17
4	Gujarat	52	96	25	8	85	15
5	Haryana	13	92	69	85	92	15
6	Karnataka	45	96	36	24	84	62
7	Kerala	53	96	72	6	83	38
8	Madhya Pradesh	45	49	16	7	67	49
9	Maharashtra	50	100	34	50	34	20
10	Orissa	17	59	65	6	59	18
11	Punjab	81	98	57	54	85	27
12	Rajasthan	38	84	26	32	97	34
13	Tamil Nadu	68	97	66	71	99	71
14	Uttar Pradesh	34	79	44	18	65	15
15	West Bengal	62	94	71	11	71	34
SMALLER STATES / UNION TERRITORIES							
16	And & Nicobar	0	0	0	0	0	0
17	Arun. Pradesh	2	100	100	0	50	0
18	Chandigarh	1	100	100	0	100	0
19	Dadra & N.Haveli	0	0	0	0	0	0
20	Daman & Diu	1	100	0	100	100	0
21	Delhi	15	47	100	0	0	13
22	Goa	5	100	100	80	100	40
23	Him. Pradesh	1	100	0	0	0	0
24	Jam. & Kashmir	6	83	83	17	67	33
25	Lakshadweep	0	0	0	0	0	0
26	Manipur	5	40	80	0	0	0
27	Meghalaya	5	40	40	0	0	60
28	Mizoram	5	100	0	20	40	60
29	Nagaland	3	33	33	33	33	100
30	Pondicherry	1	100	0	100	100	100
31	Sikkim	1	100	100	0	100	0
32	Tripura	12	67	50	8	8	33
INDIA		760	84	46	26	69	34

* Having at least 60 percent of critical inputs

COMMUNITY HEALTH CENTRE

4.1 INTRODUCTION

Though not designated as such, community health centres are also first referral units where referral cases are sent from lower level health care establishments whom they have to take care besides the usual health care activities of these centres. Note that in Bihar there are only two CHCs while in Chandigarh, Dadra and Nagar Haveli, Daman and Diu and Sikkim there are no CHCs. This chapter, thus, deals with a total of 886 CHCs.

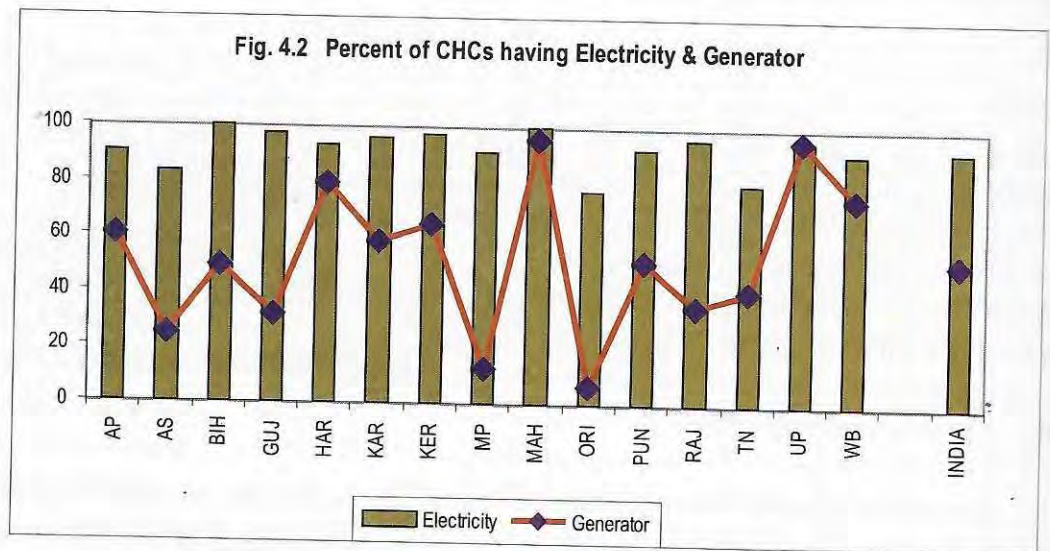
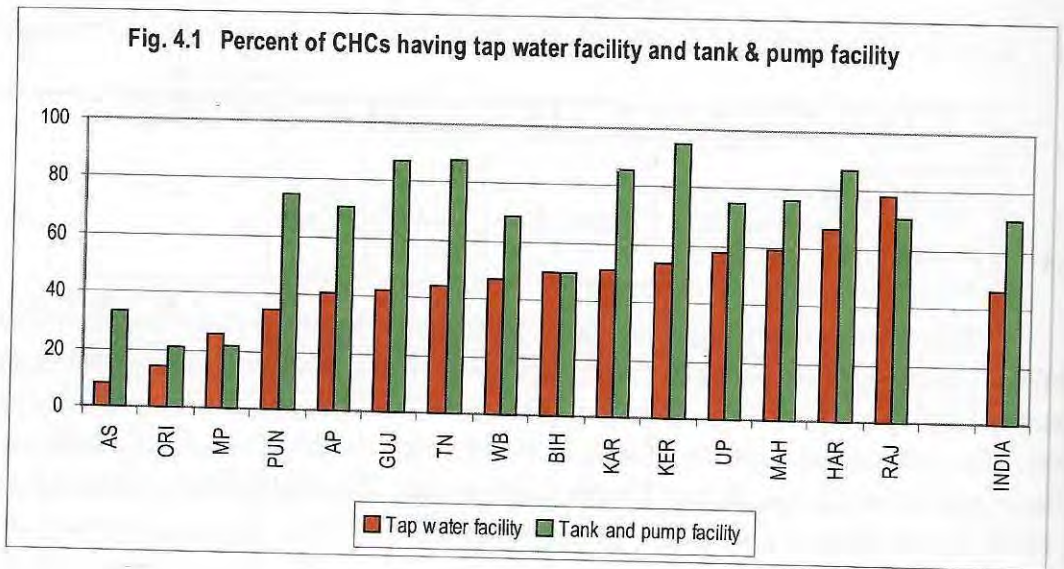
4.2 INFRASTRUCTURE (Table C1)

In general, electricity is available in all parts of the health centre in almost all CHCs (92%). Operation theatre and delivery facility is available in 86 and 84 percent of the CHCs in that order. Around sixty percent of the CHCs have telephone, functional vehicle, adequately equipped laboratory and separate OT for gynaecology. While 51 percent of the CHCs got water from well, 46 percent got it from tap indicating that almost all CHCs have water facility from one source or the other. But storage facility in the form of overhead tank and pump facility is available only in 71 percent of CHCs.

(a) Water and electricity

A higher proportion of CHCs got water from well in Andhra Pradesh, Assam, Gujarat, Madhya Pradesh, Orissa, Punjab, Tamil Nadu and West Bengal. The availability of tank and pump facility varied from 21 percent in Orissa to 95 percent in Kerala. Besides Orissa, the states with less than 50 percent (see Fig. 4.1) of the CHCs having tank and pump facility are Assam and Madhya Pradesh. Most of the smaller states/UTs have tap water facility and almost all have tank and pump facility.

Though there are only very few CHCs with out electricity, electricity in all parts of the hospitals is noted only in 92 percent of the 886 CHCs. Both the CHCs in Bihar and all the CHCs in Maharashtra have electricity in all parts of the health care establishment. But standby facility in the form of generator is available only in 52 percent of the cases. This varies from 7 percent in Orissa to 96 percent in Maharashtra and Uttar Pradesh. In Madhya Pradesh only 13 percent of the CHCs have this facility (see Fig.4.2).



(b) Telephone and vehicle

At least 60 percent of the CHCs having telephone facility are found in Andhra Pradesh, Gujarat, Haryana, Karnataka, Kerala, Maharashtra and West Bengal. Both the CHCs in Bihar do not have this facility whereas only 4 percent have telephone in Assam.

Availability of functional vehicle varies from a minimum of 29 percent in Andhra Pradesh to 80 percent in Maharashtra among the major states.

(c) Adequately equipped laboratory and operation theatre

The highest percent of CHCs with adequately equipped laboratory is found in Maharashtra (93%) and the lowest in Assam (21%). In Andhra Pradesh, Assam, Karnataka, Orissa, Tamil Nadu and West Bengal only less than 50 percent of CHCs have adequately equipped laboratories.

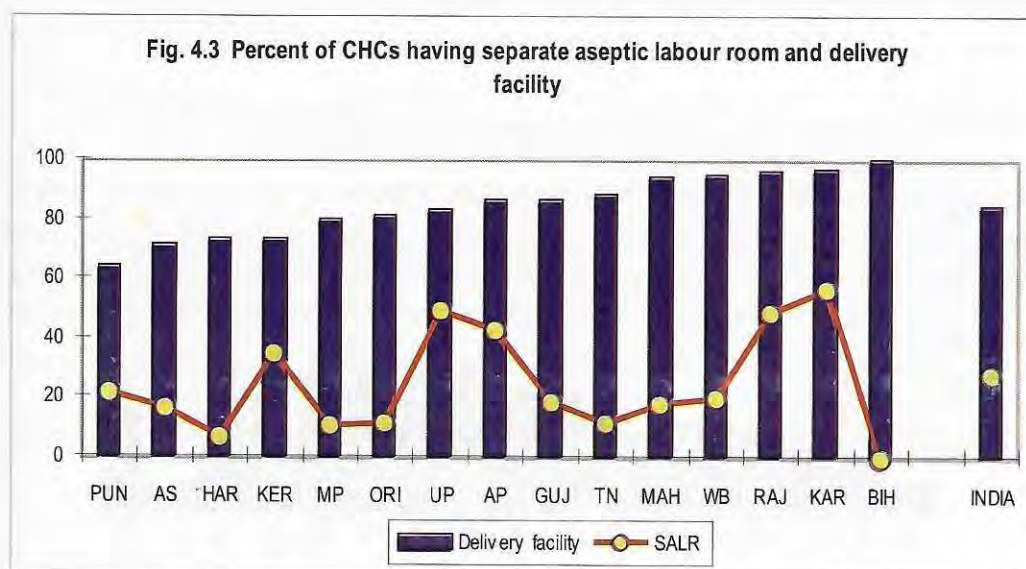
All the CHCs in Haryana and both the CHCs in Bihar have OT and almost all the CHCs in almost all the states except Assam, Gujarat, Madhya Pradesh, Orissa, Rajasthan, Tamil Nadu and West Bengal have this facility.

However, separate OT for gynaecology is available only in 57 percent of the total CHCs, which include 96 percent of the CHCs in Maharashtra, 87 percent in Haryana, 76 percent in Punjab and 71 percent in Uttar Pradesh.

(d) Separate aseptic labour room and delivery facility

Separate aseptic labour room is found only in 28 percent of the CHCs. As in the case of FRUs, not a single major state has all CHCs with separate aseptic labour room. The highest proportion of 57 percent is found in Karnataka. Among the smaller states both the CHCs in Goa, and the only CHC in Jammu and Kashmir, Meghalaya and Pondicherry have separate aseptic labour room.

As in the case of district hospital and FRUs, delivery facility was calculated for CHCs also. It shows that 84 percent of the total 886 CHCs have delivery facility. At least 70 percent of the CHCs with delivery facility are found in all major states except Punjab (see also Fig. 4.3). All smaller states/UTs except two CHCs in Delhi have delivery facility.



(e) Out patient department (OPD) for gynaecology and RTI/STI

OPD facility for gynaecology is not very common even in the major states. However, in some states like Haryana, Karnataka, Maharashtra, Orissa, Punjab and Uttar Pradesh, at least 60 percent of the CHCs have gynaecology OPD. OPD facility for RTI/STI is almost absent in CHCs from all states and the highest percent of 30 is found in Karnataka. In Bihar, Haryana, Madhya Pradesh, Maharashtra and Tamil Nadu not a single CHC has this facility.

(f) Linkage with district blood bank

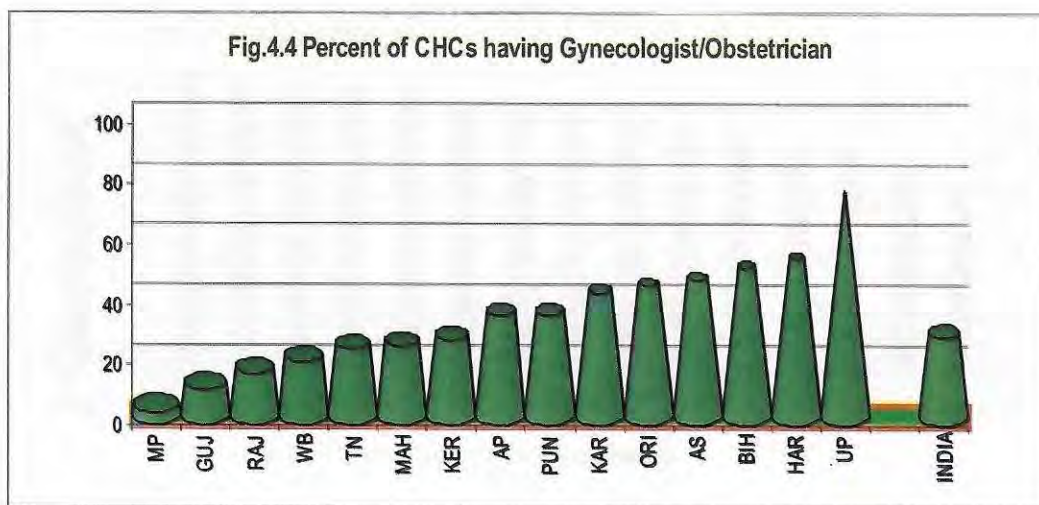
Only a miniscule proportion of CHCs have linkage with district blood bank (9%). One-third of the CHCs in Uttar Pradesh and around one-fifth in Andhra Pradesh, Assam and Haryana have this facility.

4.3 STAFF POSITION (Table C2)

The availability of any specialist is conspicuous by its absence than presence. Even Gynaecologist/Obstetrician is available in less than one-third of the CHCs (28%) while that of Paediatrician is about one in five CHCs (19%). RTI/STI specialist and Pathologist are almost absent and Anaesthesiologist is one in ten. On the whole the situation with respect to general duty doctor, Staff Nurse/Midwife and Laboratory Technician is fairly satisfactory with 81 percent, 87 percent and 74 percent respectively. About two-thirds of the total CHCs have female Health Worker.

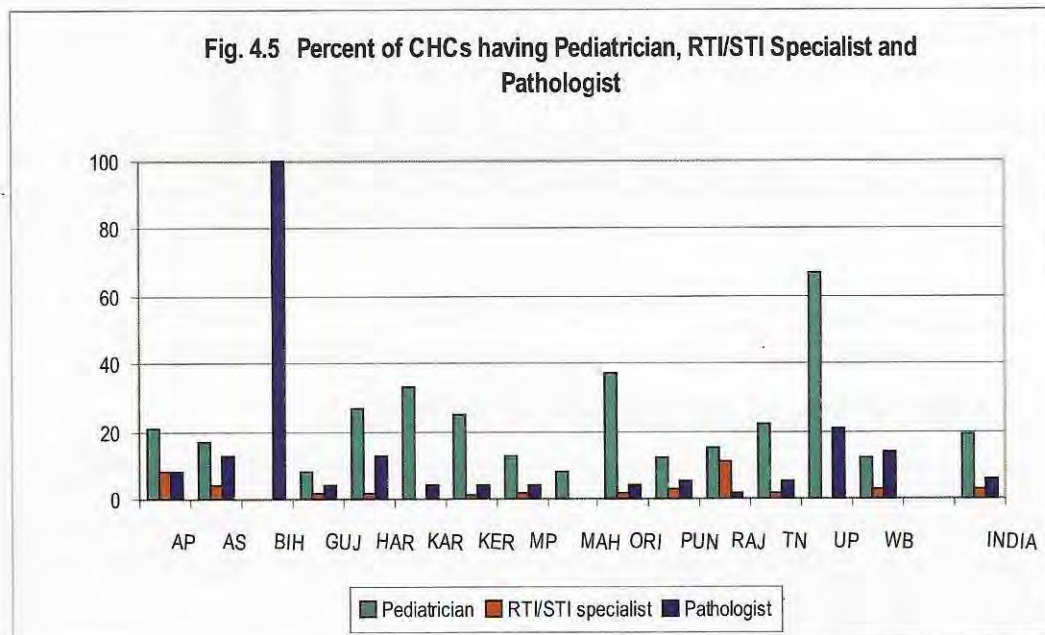
(a) Obstetrician /Gynaecologist

The availability of atleast one Gynaecologist/Obstetrician varies from 4 percent in Madhya Pradesh to 75 percent in Uttar Pradesh. (see Fig.4.4).



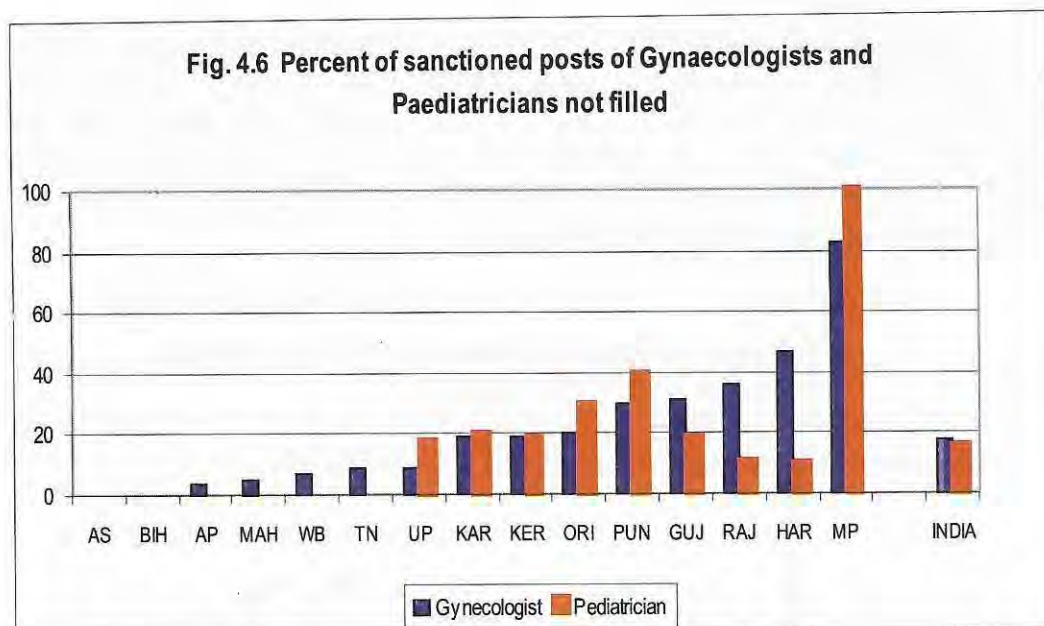
(b) Paediatrician, RTI/STI specialist and Pathologist

Having atleast one Paediatrician only in 19 percent of the total CHCs is quite unsatisfactory. It is only in Uttar Pradesh that at least two out of three CHCs have Paediatrician. While Orissa and Karnataka have around one-third CHCs with Paediatrician, the proportion is only 20 to 30 percent in Andhra Pradesh, Haryana, Kerala and Tamil Nadu. Fig. 4.5 is the graphical presentation of the situation of specialist in the major states.



The proportion of CHCs having RTI/STI specialist is absolutely ignorable in any state/UTs except in Mizoram where the solitary CHC do have atleast one doctor with this speciality. The availability of Pathologist is no better. However, the two CHCs in Bihar and the one in Mizoram have Pathologist.

CHCs also are referral centres, though not designated as such, and should have Gynaecologist/Obstetrician to take care of RCH needs. Fig.4.6 shows the percent of sanctioned positions that are not filled for these two types of specialists. In Bihar no post of Paediatrician is sanctioned and just one post of Gynaecologist is sanctioned and that is filled as well. In Madhya Pradesh 12 positions of Paediatricians are sanctioned and none of them is filled.



(c) Anaesthesiologist and general duty doctors

The situation of Anaesthesiologist is also not good with only one out of ten CHCs having at least one. Aside from the only CHC in Jammu and Kashmir not even half the CHCs have Anaesthesiologist, the highest proportion being 42 percent in Uttar Pradesh.

All the CHCs in all the smaller states/UTs and both the CHCs in Bihar have at least one general duty doctor. The situation in the major states also are not too bad except in Andhra Pradesh, Karnataka and Tamil Nadu where the proportion is less than two-thirds.

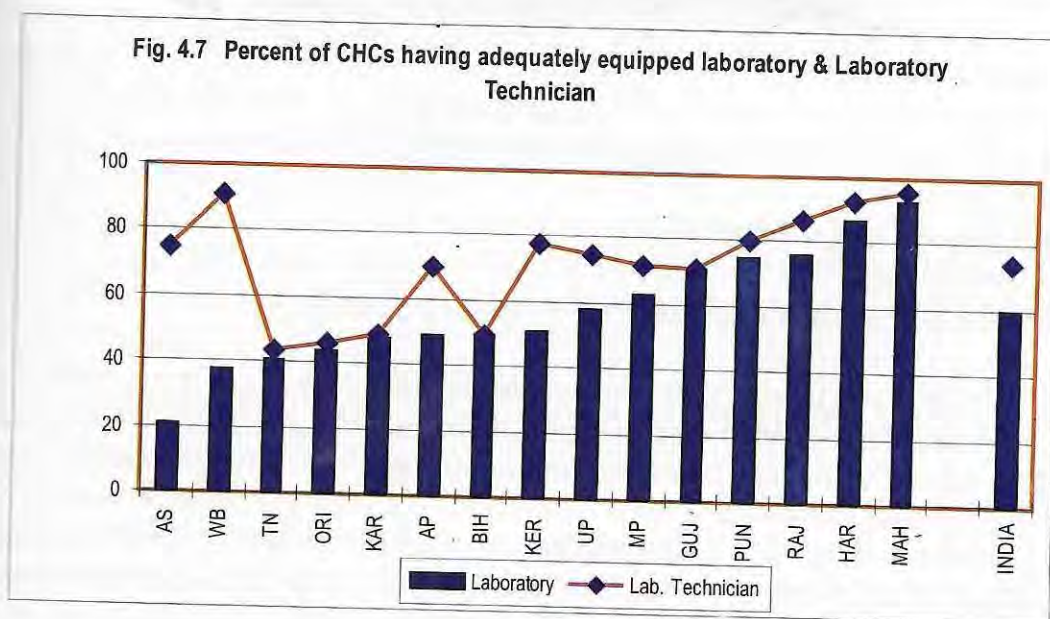
(d) Staff Nurse/Midwife, Female Health Worker and Laboratory Technician

All the CHCs in Maharashtra and all smaller states/UTs except Lakshadweep have at least one Staff Nurse/Midwife among their staff. Among major states the lowest proportion of CHCs having this category of staff is noted in Rajasthan and Bihar, 49 and 50 percent respectively. Besides these two states, the only other state/UT with less than eighty percent of CHCs reporting to have a staff nurse is found in Madhya Pradesh and Lakshadweep. In Gujarat, Haryana, Karnataka, Kerala and West Bengal more than 90 percent of CHCs have staff nurse.

The availability of at least one female Health Worker in the CHCs also is not satisfactory with only 58 percent having them. Except Bihar, not a single major state has all CHCs with this category of worker in their staff. It varies from

3 percent in Maharashtra and 5 percent in Tamil Nadu to both the CHCs (100%) in Bihar. Among the states in-between these two extremes, Haryana, Kerala, Madhya Pradesh, and West Bengal have at least one female health worker in at least 80 percent of the CHCs. In Andhra Pradesh, Assam, Gujarat, Maharashtra, Orissa, Rajasthan, Tamil Nadu and Uttar Pradesh not even two-thirds of the CHCs have a female health worker.

The availability of Laboratory Technician is better than that of female Health Worker in all major states except Bihar, Karnataka, Kerala, Madhya Pradesh and Orissa. At the all-India level three out of four CHCs have a Laboratory Technician. More than 90 percent of the CHCs have this category of staff only in Haryana, Maharashtra and West Bengal. Fig. 4.7 shows a comparison of the availability of adequately equipped laboratory and laboratory technician. In almost all states there is a higher percent of CHCs with laboratory technician than adequately equipped laboratory. The difference is found very high in Assam and West Bengal.

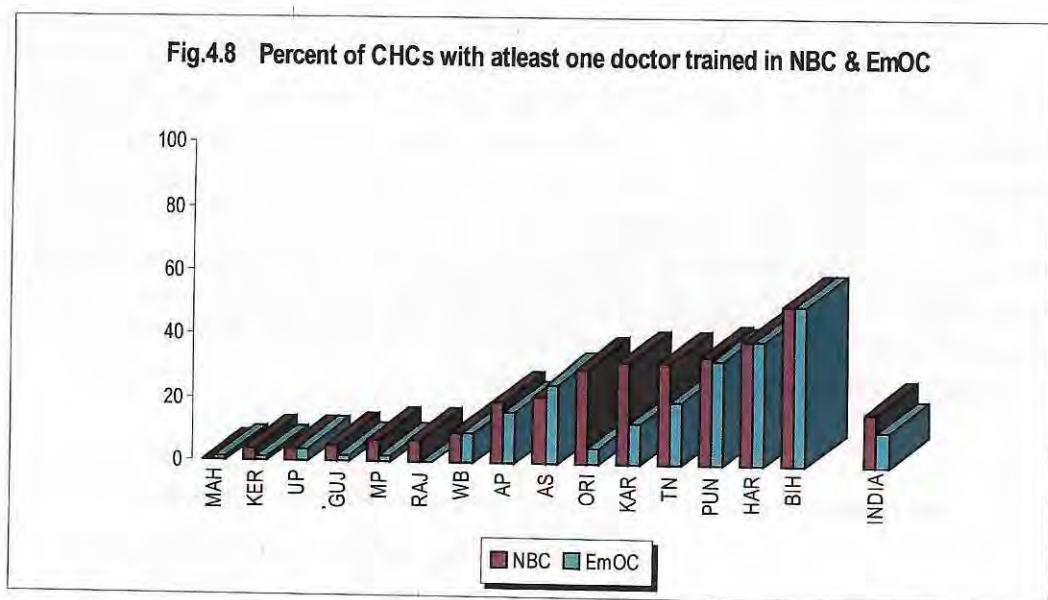


4.4 TRAINING OF MEDICAL OFFICERS (Table C3)

The percent of CHCs with at least one doctor with an in-service training in selected health care aspects given in Table C3, presents an unsatisfactory situation with very few exceptions. In Haryana 87 percent of CHCs has doctors trained in sterilisation and 80 percent of CHCs has doctors trained in IUD insertion. The situation of Andhra Pradesh and Karnataka in these two aspects is found to be better than that of other states excluding Tamil Nadu in the case of IUD insertion.

Tained doctors in emergency contraception (60%) and RTI/STI (53%) also are comparatively high in Haryana. One-third of the CHCs with doctors

trained in emergency contraception is found in Punjab and Tamil Nadu while that in RTI/STI is found in Gujarat, Karnataka and Punjab. Similarly, 30-50 percent of the CHCs has doctors trained in newborn care in Bihar, Haryana, Karnataka, Orissa, Punjab and Tamil Nadu and for emergency obstetric care only in Bihar, Haryana and Punjab (see also Fig.4.8).



4.5 SUPPLY AND STOCK

I. SUPPLY OF TUBAL RINGS AND KITS (Table C4)

Supply of kits necessary for reproductive health care is given in Table C4 and it presents a very bleak picture. There is not a single major state reporting the availability of all the kits examined here in all the CHCs. IUD insertion kit and labour room kit shows the highest percentage, but even that does not reach 50 percent level of the 886 CHCs enumerated. Tubal ring and RTI/STI kits are almost absent and emergency obstetric care drug kit and newborn care equipment kits are available only in 15 percent of the CHCs.

(a) Tubal rings and Standard Surgical Kits

The two CHCs in Goa and the one in Jammu and Kashmir have tubal rings. Among the major states the highest proportion is noted in Uttar Pradesh with 25 percent of the 24 CHCs reporting its availability.

At the all-India level only 28 percent of CHCs have all six sets of standard surgical kits. Except in Haryana, Punjab, Andaman and Nicobar Islands and Pondicherry no other state/UT has CHCs with at least 75 percent of them having all six sets of standard surgical kits.

(b) Emergency obstetric care drug kit and RTI/STI laboratory kit

The situation is still worse in the case of emergency obstetric care drug kit with only 15 percent of all CHCs reporting its supply. Eighty percent of all CHCs in Haryana, one-third of the CHCs in Punjab and Tamil Nadu received this kit. RTI/STI laboratory diagnosis kit is available in 57 percent of the PHCs in Haryana and the next closest is Maharashtra with 17 percent. The proportion is not worth mentioning in any of the other major states.

(c) IUD insertion kit, new born care equipment kit, labour room (normal delivery) kit

IUD insertion kit has been received by more than 90 percent of the CHCs in Haryana, Karnataka, Punjab and Rajasthan. Among the remaining major states two-thirds of the CHCs in Tamil Nadu and West Bengal have reported having received this kit. The CHC(s) in Andaman and Nicobar Islands, Goa, Jammu and Kashmir and Manipur has at least 75 percent of the CHCs supplied with IUD insertion kit. As for new born care equipment kit except in Haryana (87%), Andaman and Nicobar Islands (60%), Bihar (50%), Goa (50%), and Punjab (36%) none of the other state/UT is worth mentioning. At least two-thirds of the CHCs have labour room kit in Haryana, Karnataka, Punjab, Rajasthan, Tamil Nadu and West Bengal. Among the smaller states/UTs Andaman and Nicobar Islands, Goa, Himachal Pradesh, Jammu and Kashmir and Manipur falls in this category.

II. STOCK OF SELECTED ITEMS OF HEALTH CARE (Table C5)

At least two-thirds of the CHCs reporting some stock on the day of survey is found in the case of Oral Pill, IUD, ORS packets and all vaccines except DT. Some stock of IFA (large) is found in 44 percent of the CHCs while that of Vitamin A solution is found in 48 percent. Only in 58 percent of CHCs had some stock of Nirodh.

(a) Contraceptives

In general, the situation of contraceptives in Maharashtra and Andhra Pradesh is least satisfactory. Among the major states both the CHCs in Bihar had Nirodh and oral pill. All the 15 CHCs in Haryana had IUD. In Assam, Bihar, Haryana, Karnataka, Kerala, Punjab, Rajasthan, Tamil Nadu and West Bengal, at least two-thirds of the CHCs reportedly have some stock of Nirodh. Similar situation is found in the case of Oral Pill in all major states except Andhra Pradesh, Maharashtra and Uttar Pradesh, and in the case of IUD is found in all states except in Bihar, Gujarat, Maharashtra, Orissa and Uttar Pradesh.

(b) IFA (large) tablets, Vitamin A solution and ORS packet

In general the situation with respect to all three items included in this subsection, Andhra Pradesh and Uttar Pradesh has painted a very poor picture. IFA tablets were found in 44 percent of the CHCs. This situation is slightly better in Haryana (93%), Kerala (61%), Madhya Pradesh (63%) and Punjab (76%). Only in six major states (Bihar, Haryana, Kerala, Punjab and Rajasthan) at least 60 percent of CHCs have a stock of vitamin A solution. A stock of ORS packets was found in at least two-thirds of the CHCs in all major states except Andhra Pradesh, Bihar, Uttar Pradesh and West Bengal.

(c) Vaccine

All the vaccines were found in less than 60 percent of the CHCs only in Andhra Pradesh, Gujarat, Maharashtra and Tamil Nadu. It is surprising considering the fact that these states, particularly Maharashtra and Tamil Nadu, are generally good in provision of health care.

4.6 EQUIPMENTS (Table C6)

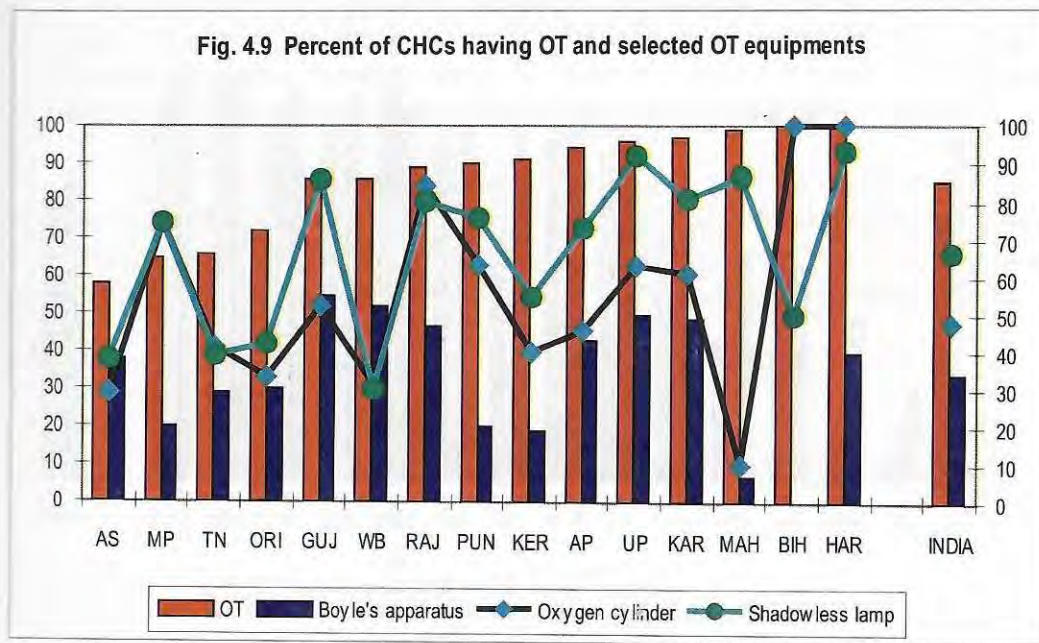
Most of the CHCs do not have many of the equipments considered here. The highest proportion is found in the case of deep freezer where 72 percent of the CHCs have it. Similarly 67 percent of the CHCs have Shadowless lamp, ice lined freezer and refrigerator. Cardiac monitor and ventilator are almost absent with just 7 percent and 16 percent respectively having it.

(a) Operation theatre equipments

Boyle's apparatus is available in 34 percent of CHCs. Except Gujarat, Uttar Pradesh and West Bengal not even 50 percent of the CHCs have Boyle's apparatus. The situation of oxygen cylinder is slightly better as more states (Bihar, Gujarat, Haryana, Karnataka, Madhya Pradesh, Punjab, Rajasthan and Uttar Pradesh) have more than 50 percent of the CHCs with this life saving equipment. The states with less than 50 percent of CHCs having shadowless lamp are Assam, Orissa, Tamil Nadu and West Bengal.

High-pressure sterilizer, vertical or horizontal, is found in more than 50 percent of the CHCs of Bihar, Gujarat, Haryana, Karnataka, Punjab, Rajasthan, Tamil Nadu and Uttar Pradesh. Cardiac monitor is almost absent in CHCs of all states; the highest percent observed being 21 in Assam. The situation is almost the same in the case of ventilator, even though the percentage level is slightly high in most states. Fumigation apparatus in OT is available in two-thirds of the CHCs in Andhra Pradesh, Bihar (all), Karnataka, Maharashtra, Delhi and Jammu and Kashmir. In Madhya Pradesh, just two percent of the 46 CHCs have this. Hydraulic table in OT also is not very common except in Bihar where both the CHCs have it and Gujarat, Karnataka, Punjab and Uttar Pradesh where at least 50

percent of CHCs reportedly have this. Availability of OT equipments in relation to availability of OT is given in Fig. 4.9.

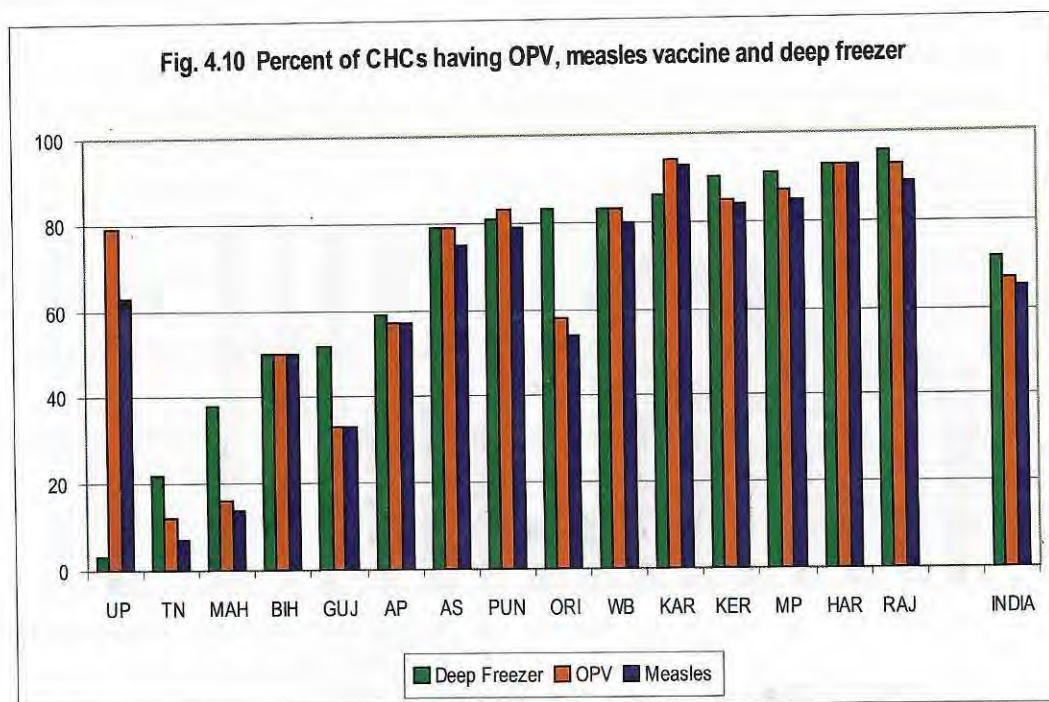


(b) X-ray and ECG machine

In Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Punjab, Rajasthan and West Bengal at least 60 percent and in all smaller state/UTs 100 percent of CHCs have X-ray machine. ECG machine is available in at least half of the total CHCs only in Karnataka and Rajasthan. Among smaller states and UTs, Andaman and Nicobar Islands, Delhi, Jammu and Kashmir, Lakshadweep, Manipur and Pondicherry fall in this category.

(c) Cold chain equipments

All least two-thirds of the CHC have all cold chain equipments given here. The one CHC each in Mizoram and Pondicherry have all three equipments. Among the major states, however, the availability of ice-lined freezer varies from 4 percent in Uttar Pradesh to 95 percent in Rajasthan. The states with more than 90 percent of CHCs having ice-lined freezer is found in Haryana, Kerala, Madhya Pradesh and Rajasthan. Deep Freezer is available in 72 percent of the total CHCs, which includes more than 80 percent of the CHCs in Haryana, Karnataka, Kerala, Madhya Pradesh, Orissa, Punjab, Rajasthan and West Bengal. Deep freezer is used specifically to store OPV and measles vaccines besides making ice packs. Fig. 4.10 shows the availability of deep freezer in relation to the availability of OPV and measles vaccine.



Except in Uttar Pradesh, the percent of CHCs with some stock of vaccines is either equal or less than the percent of CHCs with deep freezer.

Refrigerator is available only in 66 percent of the CHCs. State-wise more than 70 percent of the CHCs having refrigerator is found only in Gujarat, Kerala and Punjab. In Uttar Pradesh any cold chain equipments given in Table 4.6 is available only in a negligible proportion of CHCs. At the same time a large proportion of CHCs do have a stock of OPV and measles vaccine (Table C.5).

4.7 ADEQUATELY EQUIPPED COMMUNITY HEALTH CENTRES AND THOSE USED AS REFERRAL (TABLE C7)

Table C7 shows that 66 percent of the CHCs are adequately equipped with respect to infrastructure. There is no state with all the CHCs adequately equipped in terms of infrastructure, staff, supply or equipments. At least three-fourths of the CHCs are adequately equipped with respect to infrastructure in Gujarat, Haryana, Karnataka, Kerala, Maharashtra, Rajasthan, Uttar Pradesh and West Bengal.

One half of the 886 CHCs are adequately equipped in equipments. At least 60 percent of the CHCs falling in this category are found only in Gujarat, Haryana, Karnataka, Punjab, Rajasthan and Uttar Pradesh. Only 10 percent of the CHCs in Maharashtra were adequately equipped in equipment.

The situation of staff and supply are really poor with just 25 percent of CHCs being adequately equipped in staff and an absolutely negligible proportion of 10 percent being adequately equipped with supply. At least 50 percent of CHCs adequately equipped in staff is found only in Bihar, Haryana, and Uttar Pradesh. Excluding Haryana, where 12 of the 15 CHCs are found to be adequately equipped in supply, none of the other major states needs special mention.

Both the CHCs in Bihar have attended to referred cases during the last three months. More than 40 percent of CHCs falling in this category is found only in Assam and Tamil Nadu (42% each) and Karnataka (59%). Only less than 10 percent of CHCs in Maharashtra and Uttar Pradesh served as referral centres.

Table C1 Status of infrastructure in Community Health Centres

Sl. No.	State	No. of CHCs	Percent of CHCs having														Linkage with district blood bank
			Source of water		Tank & pump facility	Electricity (In all parts the hospital)	Generator	Telephone	Vehicle (Functional)	Laboratory (Adequately equipped)	Operation theatre	Separate OT for gynecology	Separate aseptic labour room	Delivery facility	Gynec OPD facility	RTI/STI OPD facility	
			Tap	Well													
MAJOR STATES																	
1	Andhra Pradesh	63	41	52	71	90	61	65	29	49	94	37	43	86	41	16	18
2	Assam	24	8	92	33	83	25	4	46	21	58	42	17	71	46	17	17
3	Bihar	2	50	50	50	100	50	0	50	50	100	0	0	100	0	0	0
4	Gujarat	100	42	56	87	97	32	88	73	71	86	41	19	86	16	1	6
5	Haryana	15	67	33	87	93	80	100	60	87	100	87	7	73	87	0	20
6	Karnataka	69	51	49	86	96	59	77	67	48	97	54	57	97	64	30	9
7	Kerala	107	54	41	95	97	65	77	77	51	91	61	35	73	17	1	5
8	Madhya Pradesh	46	26	63	22	91	13	22	67	63	65	43	11	80	4	0	0
9	Maharashtra	71	59	37	76	100	96	90	80	93	99	96	18	94	75	0	10
10	Orissa	57	14	84	21	77	7	14	44	44	72	60	12	81	63	7	16
11	Punjab	107	35	65	75	92	52	49	33	75	90	76	22	64	70	3	8
12	Rajasthan	55	78	20	71	96	36	44	67	76	89	44	49	96	16	5	4
13	Tamil Nadu	41	44	54	88	80	41	34	41	41	66	34	12	88	20	0	2
14	Uttar Pradesh	24	58	42	75	96	96	58	42	58	96	71	50	83	79	4	33
15	West Bengal	64	47	53	69	91	75	89	91	38	86	59	20	95	44	13	9

Table C1 Status of infrastructure in Community Health Centres (continued)

Sl. No.	State	No. of CHCs	Percent of CHCs having														
			Source of water		Tank & pump facility	Electricity (In all parts the hospital)	Generator	Telephone	Vehicle (Functional)	Laboratory (Adequately equipped)	Operation theatre	Separate OT for gynecology	Separate aseptic labour room	Delivery facility	Gynec OPD facility	RTI/STI OPD facility	Linkage with district blood bank
			Tap	Well													
SMALLER STATES/UNION TERRITORIES																	
16	And & Nicobar	5	100	0	100	100	100	100	100	100	100	100	100	20	20	0	20
17	Arun. Pradesh	2	100	0	0	100	0	50	0	50	0	0	100	0	0	0	0
18	Chandigarh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Dadra & N. Haveli	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33
20	Daman & Diu	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Delhi	3	100	0	100	100	67	100	100	100	68	33	33	100	68	0	0
22	Goa	2	100	0	100	100	100	50	100	100	100	100	100	0	0	0	0
23	Him. Pradesh	4	75	25	25	100	50	75	100	75	75	25	100	100	20	0	0
24	Jam. & Kashmir	1	100*	0	100	100	100	100	100	100	100	100	100	100	0	0	0
25	Lakshadweep	4	50	50	100	100	75	100	100	75	75	50	100	50	0	0	0
26	Manipur	4	25	50	50	75	0	0	25	25	0	0	100	0	0	0	0
27	Meghalaya	1	100	0	100	100	0	100	0	0	0	100	100	0	0	0	0
28	Mizoram	1	100	0	0	100	100	0	100	100	100	0	100	0	100	0	0
29	Nagaland	4	50	50	0	50	0	0	25	0	50	25	100	100	100	0	0
30	Pondicherry	1	0	0	0	100	100	100	100	100	0	100	100	0	0	0	0
31	Sikkim	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Tripura	9	67	33	67	89	33	67	67	56	11	0	100	44	0	0	11
	INDIA	886	46	51	71	92	52	62	61	60	57	28	84	43	7	9	

Table C2 Staff position in Community Health Centres

Sl. No.	State	No. of CHCs	Percent of CHCs having at least one									
			Obstetrician/ Gynecologist	Pediatrician	RTI/STI Specialist	Pathologist	Anaesthesiologist	General duty doctor	Staff nurse/ midwife	FHW	Laboratory technician	
MAJOR STATES												
1	Andhra Pradesh	63	35	21	8	8	8	17	64	83	51	70
2	Assam	24	46	17	4	13	8	83	83	38	75	
3	Bihar	2	50	0	0	100	0	100	50	100	50	
4	Gujarat	100	11	8	2	4	9	98	97	21	71	
5	Haryana	15	53	27	2	13	13	93	93	87	93	
6	Karnataka	69	42	33	0	4	12	61	90	75	49	
7	Kerala	107	27	25	1	4	11	89	94	85	78	
8	Madhya Pradesh	46	4	13	2	4	2	74	72	98	72	
9	Maharashtra	71	25	8	0	0	11	93	100	3	96	
10	Orissa	57	44	37	2	4	2	76	81	53	46	
11	Punjab	107	35	12	3	5	3	80	88	79	80	
12	Rajasthan	55	16	15	11	2	4	84	49	62	87	
13	Tamil Nadu	41	24	22	2	5	10	59	83	5	44	
14	Uttar Pradesh	24	75	67	0	21	42	88	88	63	75	
15	West Bengal	64	20	12	3	14	12	89	94	88	91	

FHW = Female health worker

Table C2 Staff position in Community Health Centres (continued)

Sl. No.	State	No. of CHCs	Percent of CHCs having at least one											
			Obstetrician/ Gynecologist	Pediatrician	RTI/STI Specialist	Pathologist	Anaesthesiologist	General duty doctor	Staff nurse/ midwife	FHW	Laboratory Technician			
SMALLER STATES/UNION TERRITORIES														
16	And & Nicobar	5	20	20	20	20	20	20	20	20	100	100	80	100
17	Arun. Pradesh	2	0	0	0	50	0	0	0	100	100	0	0	50
18	Chandigarh	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Dadra & N.Haveli	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Daman & Diu	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Delhi	3	100	33	0	0	67	100	33	100	100	33	67	67
22	Goa	2	50	0	0	0	0	100	0	100	100	5	50	50
23	Him. Pradesh	4	0	0	0	0	0	100	0	100	100	75	100	100
24	Jam. & Kashmir	1	100	100	0	0	100	100	100	100	100	100	100	100
25	Lakshadweep	4	0	0	0	0	0	100	0	100	75	25	100	100
26	Manipur	4	0	50	0	0	0	100	0	100	100	75	100	100
27	Meghalaya	1	0	0	0	0	0	100	0	100	100	100	100	100
28	Mizoram	1	0	0	100	100	0	0	0	0	0	0	100	0
29	Nagaland	4	0	0	0	0	0	0	0	0	0	0	0	50
30	Pondicherry	1	0	0	0	0	0	100	0	100	100	0	0	100
31	Sikkim	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Tripura	9	22	33	0	11	11	100	11	100	100	100	100	100
INDIA		886	28	19	3	6	10	81	87	58	74			

Table C3 Status of training of Medical Officers in Community Health Centres

Sl. no	Name of the State	No. of CHCs	Percent of CHCs with at least one doctor trained during the last one year in					
			Sterilization	IUD insertion	Emergency Contraception	RTI/STI	New born Care	EmOC
MAJOR STATES								
1	Andhra Pradesh	63	54	41	13	10	19	16
2	Assam	24	25	33	17	21	21	25
3	Bihar	2	0	0	0	0	50	50
4	Gujarat	100	13	7	0	46	5	2
5	Haryana	15	87	80	60	53	39	39
6	Karnataka	69	39	48	14	35	32	13
7	Kerala	107	4	4	2	4	4	1
8	Madhya Pradesh	46	9	9	4	9	7	2
9	Maharashtra	71	7	1	1	23	0	1
10	Orissa	57	4	4	0	4	30	5
11	Punjab	107	33	33	31	31	34	33
12	Rajasthan	55	4	15	0	16	7	0
13	Tamil Nadu	41	29	56	37	20	32	20
14	Uttar Pradesh	24	25	21	4	8	4	4
15	West Bengal	64	16	27	5	17	9	9
SMALLER STATES / UNION TERRITORIES								
16	And & Nicobar	5	20	20	40	40	0	20
17	Arun. Pradesh	2	50	0	0	0	0	0
18	Chandigarh	0	0	0	0	0	0	0
19	Dadra & N. Haveli	0	0	0	0	0	0	0
20	Daman & Diu	0	0	0	0	0	0	0
21	Delhi	3	33	100	0	0	0	0
22	Goa	2	50	50	50	50	50	0
23	Him. Pradesh	4	50	0	0	0	0	0
24	Jam. & Kashmir	1	0	0	0	0	0	0
25	Lakshadweep	4	25	0	0	25	25	0
26	Manipur	4	0	50	25	25	25	0
27	Meghalaya	1	0	0	0	0	0	0
28	Mizoram	1	100	100	100	0	100	100
29	Nagaland	4	0	25	0	0	25	0
30	Pondicherry	1	100	100	100	100	100	100
31	Sikkim	0	0	0	0	0	0	0
32	Tripura	9	22	33	22	22	0	22
INDIA		886	21	22	11	21	17	11

EmOC = Emergency obstetric Care

Table C4 Supply of Tubal ring and Kits in Community Health Centres

Sl. No.	State	No. of CHCs	Percent of CHCs having received						
			Tubal ring	Std.Sur. Kit ₁	EmOC ₂ drug kit	RTI/STI lab kit	IUD insertion kit	NBCE ₃ kit	Labour room kit
MAJOR STATES									
1	Andhra Pradesh	63	5	30	10	3	33	16	38
2	Assam	24	0	38	25	8	25	29	50
3	Bihar	2	0	50	0	0	50	50	50
4	Gujarat	100	7	7	2	1	10	2	12
5	Haryana	15	7	87	80	57	93	87	93
6	Karnataka	69	13	45	22	6	71	28	64
7	Kerala	107	2	10	1	0	23	4	16
8	Madhya Pradesh	46	11	22	2	0	57	7	46
9	Maharashtra	71	0	13	17	17	18	11	17
10	Orissa	57	0	14	12	2	32	11	37
11	Punjab	107	7	76	36	0	91	36	91
12	Rajasthan	55	13	25	7	11	95	20	91
13	Tamil Nadu	41	0	27	34	2	66	12	76
14	Uttar Pradesh	24	25	13	8	0	33	0	33
15	West Bengal	64	6	17	6	2	70	5	67
SMALLER STATES / UNION TERRITORIES									
16	And & Nicobar	5	0	80	60	60	80	60	80
17	Arun. Pradesh	2	50	0	0	0	0	0	0
18	Chandigarh	0	0	0	0	0	0	0	0
19	Dadra & N. Haveli	0	0	0	0	0	0	0	0
20	Daman & Diu	0	0	0	0	0	0	0	0
21	Delhi	3	33	0	0	0	0	0	0
22	Goa	2	100	50	50	50	100	50	100
23	Him Pradesh	4	0	25	0	0	25	0	75
24	Jam. & Kashmir	1	100	0	0	0	100	0	100
25	Lakshadweep	4	0	25	0	0	0	0	25
26	Manipur	4	0	25	25	25	75	0	75
27	Meghalaya	1	0	0	0	0	0	0	0
28	Mizoram	1	0	0	0	0	0	0	0
29	Nagaland	4	0	25	25	0	50	25	50
30	Pondicherry	1	0	100	0	0	0	0	0
31	Sikkim	0	0	0	0	0	0	0	0
32	Tripura	9	22	0	0	0	0	0	22
INDIA		886	7	28	15	4	48	15	48

1. All six sets of standard surgical kits
3. Emergency obstetric care drug kit

2. New born care equipment kit
4. Normal delivery kit

Table C5 Stock of selected items of health care in Community Health Centres

Sl. No.	State	No. of CHCs	Percent of CHCs having on the day of survey some stock of													
			Contraceptives etc.							Vaccine						
			Nirodh	Oral pill	IUD	IFA (large)	Vitamin A solution	ORS packet	DPT	OPV	TT	BCG	Measles	DT		
MAJOR STATES																
1	Andhra Pradesh	63	49	52	64	18	18	27	59	57	52	54	57	38		
2	Assam	24	63	75	63	50	75	79	79	79	79	75	75	71		
3	Bihar	2	100	100	50	50	100	0	50	50	50	100	50	0		
4	Gujarat	100	28	96	28	26	15	87	32	33	32	29	33	15		
5	Haryana	15	73	93	100	93	93	100	87	93	93	87	93	93		
6	Karnataka	69	80	87	86	41	46	75	91	94	91	93	93	75		
7	Kerala	107	66	77	83	61	69	83	86	85	84	83	84	82		
8	Madhya Pradesh	46	50	63	67	63	28	63	85	87	37	50	85	76		
9	Maharashtra	71	11	16	18	17	30	78	14	16	17	13	14	11		
10	Orissa	57	53	83	53	42	56	74	63	58	61	49	54	47		
11	Punjab	107	69	82	89	76	88	84	81	83	81	73	79	78		
12	Rajasthan	55	86	89	84	36	71	66	93	93	89	75	89	40		
13	Tamil Nadu	41	78	78	73	44	5	71	12	12	51	10	7	5		
14	Uttar Pradesh	24	46	58	58	38	25	42	71	79	75	67	63	67		
15	West Bengal	64	78	75	78	34	41	56	83	83	81	80	80	77		

Table C5 Stock of selected items of health care in Community Health Centres (continued)

Sl. No.	State	No. of CHCs	Percent of CHCs having on the day of survey some stock of													
			Contraceptives etc.							Vaccine						
			Nirodh	Oral pill	IUD	IFA (large)	Vitamin A solution	ORS packet	DPT	OPV	TT	BCG	Measles	DT		
SMALLER STATES/UNION TERRITORIES																
16	And & Nicobar	5	100	80	100	60	60	60	60	100	100	100	100	60	100	60
	Arun. Pradesh	2	0	50	0	0	100	50	50	50	50	50	50	50	50	0
18	Chandigarh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Dadra & N. Haveli	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Daman & Diu	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Delhi	3	100	100	67	67	67	100	100	100	100	100	100	67	100	100
22	Goa	2	100	100	100	50	100	100	100	100	100	100	100	100	100	100
23	Him. Pradesh	4	75	75	100	50	100	100	75	100	75	100	75	100	100	50
24	Jam. & Kashmir	1	100	100	100	100	100	100	100	100	100	100	100	100	100	100
25	Lakshadweep	4	50	25	50	0	0	0	0	50	50	50	50	50	50	50
26	Manipur	4	50	75	50	25	50	50	0	75	100	75	75	75	75	75
27	Meghalaya	1	100	100	0	0	0	0	0	100	100	100	0	0	100	100
28	Mizoram	1	0	0	100	0	0	0	100	100	100	100	100	100	100	100
29	Nagaland	4	50	25	75	0	0	0	0	25	75	75	25	25	25	50
30	Pondicherry	1	100	100	100	100	100	100	100	100	100	100	100	100	100	0
31	Sikkim	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Tripura	9	78	78	89	78	78	67	89	89	89	89	89	89	89	89
	INDIA	886	58	64	66	44	48	71	66	67	65	60	65	60	65	54

Table C6 Availability of selected equipments in Community Health Centres

Sl. No.	State	No. of CHCs	Percent of CHCs having the following in their OT										Percent of CHCs having functional cold chain equipments			
			Boyles apparatus	Oxygen cylinder	Shadowless lamp	High pressure sterilizer	Cardiac monitor	Ventilator	OT care/umigation	Hydralic table	X-ray machine	ECG machine	Ice lined freezer	Deep freezer	Refrigerator	
MAJOR STATES																
1	Andhra Pradesh	63	43	46	73	44	13	22	64	54	41	32	57	59	30	
2	Assam	24	38	29	38	21	29	29	29	30	25	4	75	79	33	
3	Bihar	2	0	100	50	0	50	100	100	100	50	0	50	50	50	
4	Gujarat	100	55	52	86	8	7	35	62	84	38	46	52	84		
5	Haryana	15	40	100	93	0	33	20	23	60	40	93	93	20		
6	Karnataka	69	49	61	81	7	20	77	71	68	59	86	86	35		
7	Kerala	107	19	40	55	8	9	9	31	19	15	90	90	82		
8	Madhya Pradesh	46	20	74	74	2	7	2	20	80	33	94	91	37		
9	Maharashtra	71	7	10	87	0	17	83	7	85	16	27	38	47		
10	Orissa	57	30	33	42	11	23	11	37	30	19	74	83	46		
11	Punjab	107	20	63	76	9	13	27	57	60	33	65	81	73		
12	Rajasthan	55	47	84	80	7	15	46	47	80	78	95	96	33		
13	Tamil Nadu	41	29	41	39	2	10	10	39	32	39	15	22	66		
14	Uttar Pradesh	24	50	63	92	0	25	17	88	46	17	4	3	10		
15	West Bengal	64	52	31	30	2	22	6	23	80	17	77	83	69		

Table C6 Availability of selected equipments in Community Health Centres (continued)

Sl. No.	State	No. of CHCs	Percent of CHCs having the following in their OT										Percent of CHCs having functional cold chain equipments		
			Boyles apparatus	Oxygen cylinder	Shadow less lamp	High pressure sterilizer (vertical/horizontal)	Cardiac monitor	Ventilator	OT care/fumigation	Hydraulic table	X-ray machine	ECG machine	Ice lined freezer	Deep freezer	Refrigerator
SMALLER STATES/UNION TERRITORIES															
16	And & Nicobar	5	20	40	80	40	20	20	40	60	100	80	100	100	80
17	Arun. Pradesh	2	0	0	0	0	0	0	0	0	0	0	100	50	0
18	Chandigarh	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Daadra & N. H. Haveli	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Daman & Diu	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Delhi	3	68	100	100	100	67	67	67	100	100	67	0	0	100
22	Goa	2	100	50	100	100	50	50	50	50	0	0	50	50	50
23	Him. Pradesh	4	0	0	50	50	0	0	50	75	100	25	75	100	100
24	Jam. & Kashmir	1	100	100	100	100	100	100	100	100	100	100	0	0	100
25	Lakshadweep	4	25	25	75	25	0	0	25	75	75	75	75	75	50
26	Manipur	4	0	0	0	25	0	0	50	75	100	50	75	75	50
27	Meghalaya	1	0	0	0	0	0	0	0	0	0	0	100	100	0
28	Mizoram	1	0	0	100	100	0	0	0	100	0	0	100	100	100
29	Nagaland	4	0	0	0	25	0	0	0	0	0	0	0	0	75
30	Pondicherry	1	0	0	0	0	0	0	0	0	0	0	100	100	100
31	Sikkim	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Tripura	9	11	11	22	11	0	0	11	11	0	0	78	89	56
INDIA		886	34	48	67	50	7	16	33	44	59	32	67	72	67

Table C7 Percent of adequately equipped Community Health Centres and those used as referral

Sl. No.	State	No. of CHCs	Percent of CHCs adequately equipped in				Percent of CHCs utilized as referral
			Infrastructure	Staff	Supply	Equipments	
MAJOR STATES							
1	Andhra Pradesh	63	62	32	11	52	22
2	Assam	24	25	38	25	33	42
3	Bihar	2	50	50	0	50	100
4	Gujarat	100	82	12	2	62	12
5	Haryana	15	80	53	80	93	20
6	Karnataka	69	81	26	17	68	59
7	Kerala	107	79	27	1	41	22
8	Madhya Pradesh	46	26	2	4	57	37
9	Maharashtra	71	97	28	8	10	9
10	Orissa	57	21	33	4	32	18
11	Punjab	107	57	33	30	61	16
12	Rajasthan	55	75	16	9	78	33
13	Tamil Nadu	41	39	20	2	34	42
14	Uttar Pradesh	24	79	58	0	67	8
15	West Bengal	64	80	20	2	41	19
SMALLER STATES / UNION TERRITORIES							
16	And & Nicobar	5	100	20	60	20	20
17	Arun. Pradesh	2	0	0	0	0	0
18	Chandigarh	0	0	0	0	0	0
19	Dadra & N. Haveli	0	0	0	0	0	0
20	Daman & Diu	0	0	0	0	0	0
21	Delhi	3	67	100	0	0	0
22	Goa	2	100	0	50	100	50
23	Him. Pradesh	4	75	0	0	0	50
24	Jam & Kashmir	1	100	100	0	100	0
25	Lakshadweep	4	100	0	0	25	50
26	Manipur	4	0	0	0	0	50
27	Meghalaya	1	0	0	0	0	100
28	Mizoram	1	100	0	0	0	100
29	Nagaland	4	0	0	0	0	50
30	Pondicherry	1	100	0	0	0	0
31	Sikkim	0	0	0	0	0	0
32	Tripura	9	56	22	0	11	56
INDIA		886	66	25	10	49	25

* Having at least 60 percent of critical inputs

CHAPTER V

PRIMARY HEALTH CENTRE

5.1 INTRODUCTION

The Primary Health Centers have the major responsibility of providing both preventive and curative health care services in the area. This includes delivery of Reproductive and Child Health services like antenatal care and immunization in addition to routine inpatient and out patient services. Compared to either District Hospital or Sub-divisional Hospitals, PHCs are accessible to a larger population as one PHC is expected to serve 30,000 population. However, just the availability of PHC is not sufficient for the effective delivery of these services. They should also have essential infrastructure, staff, equipments and supplies. This chapter presents the status of the 7959 PHCs in surveyed districts of India with respect to the availability of selected infrastructure, staff, equipments and supplies, besides training of medical and para-medical staff.

5.2 INFRASTRUCTURE (Table P1)

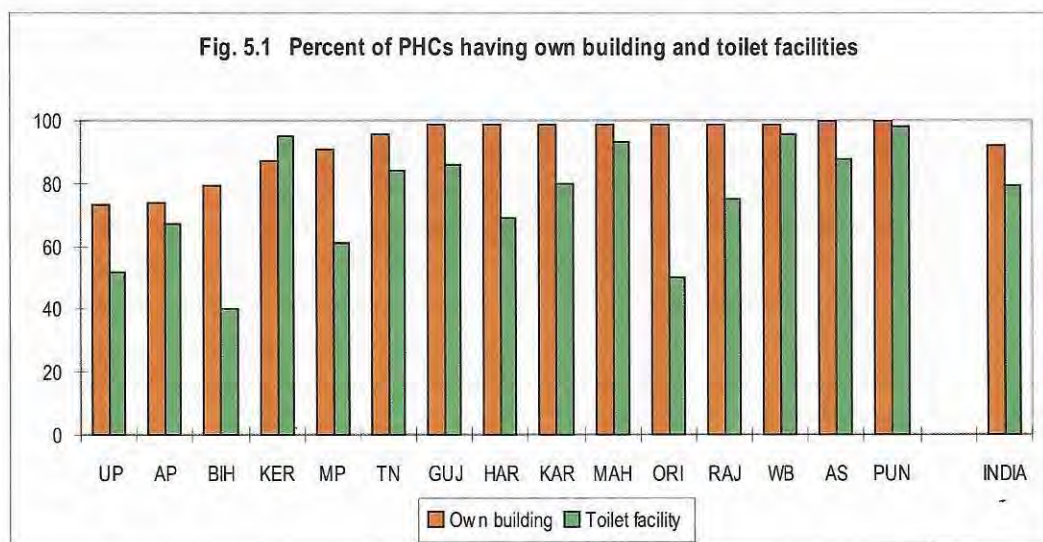
Table P1 presents the percent of PHCs having selected infrastructural facilities like own building, toilet, continuous supply of water, electricity, labour room, laboratory, telephone, functional vehicle and beds for in-patients in each state/union territory. In India, out of 7959 surveyed PHCs 92 percent are functioning from own building and only 79 percent have at least one toilet. Sixty two percent and 82 percent of the PHCs respectively have water and electricity, while slightly less than 50 percent have laboratory and labour room. Telephone facility and functional vehicles are not very common with 20 percent of the total PHCs having the former and 29 percent having the latter. At least one bed also is not available in 31 percent of the PHCs. An examination of the availability of selected infra-structure facilities shows that among the selected facilities own building, electricity, toilet, beds and continuous supply of water are available with comparatively larger percent of PHCs, but the facilities of labour room, laboratory, telephone connection and vehicle are available with only limited number of PHCs. Among all the major states PHCs from Gujarat, Haryana, Maharashtra and Punjab are better equipped with the infrastructure facilities, but majority of the PHCs from Assam, Bihar, Madhya Pradesh and Uttar Pradesh lack all the infrastructure facilities. The PHCs from union territories are better with all the facilities but PHCs from the smaller states of northeastern areas are comparatively poor.

(a) Own building and toilet facility

In most of the states/ union territories more than 95 percent of the PHCs are functioning from own building. However, there are few states like Andhra Pradesh, Uttar Pradesh, Chandigarh, Himachal Pradesh and Jammu & Kashmir where more than one-fourth of the PHCs do not have own building whereas in Assam, Punjab, Andaman and Nicobar, Dadra and Nagar Haveli, Daman and Diu, Delhi Lakshadweep, Mizoram and Sikkim all the PHCs are functioning from own building.

In PHCs where women are expected to get services like antenatal and postnatal check-ups including internal examination, IUD insertions etc. and where women get admitted for delivery, sterilization or MTP the need of at least one toilet is crucial. However, only 79 percent of the PHCs in India have at least one toilet. Among the major states only in Kerala, Maharashtra, Punjab and West Bengal 90 percent or more PHCs have toilet facilities but in no major state all the PHCs have at least one toilet. In Bihar, Orissa and Uttar Pradesh majority of the PHCs do not have toilet facility. In most of the smaller states and union territories with the exception of Himachal Pradesh, Jammu & Kashmir, Manipur, Nagaland and Delhi the situation is satisfactory as 95 or more percent of PHCs have toilet facility.

Fig.5.1 shows the percent of PHCs having own building and toilet facility.



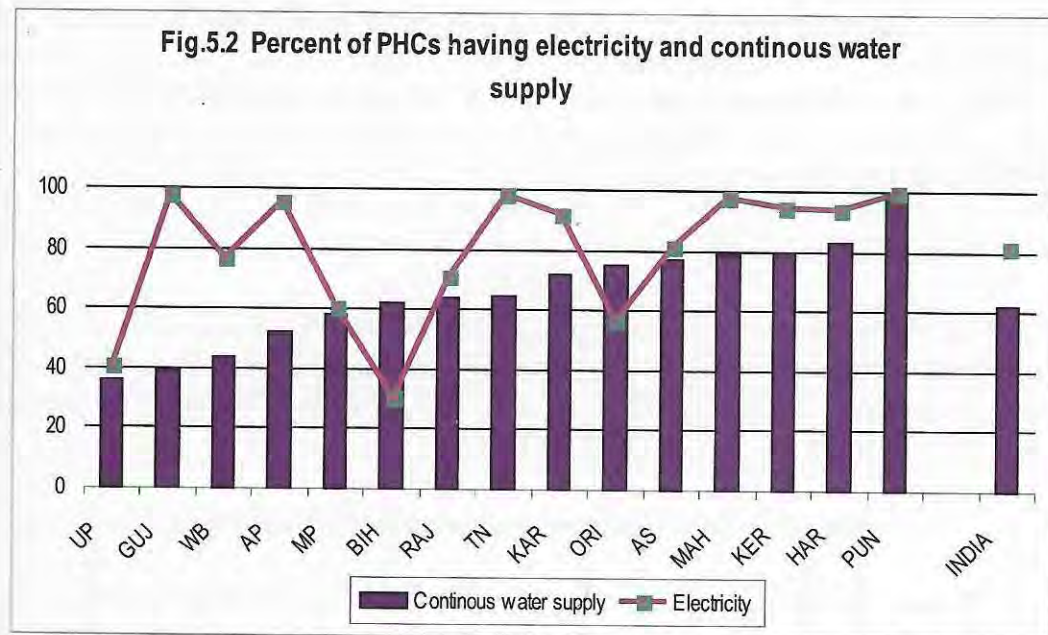
(b) Continuous water supply

In any health facility continuous supply of water is one of the critical inputs. However, only little less than two-thirds of the surveyed PHCs have continuous supply of water. With the exception of Punjab where all the surveyed PHCs have continuous supply of water, in no other major state even 85 percent of the PHCs have this facility. The condition is particularly worse in Gujarat (39

%), Uttar Pradesh (36 %) and West Bengal (44 %). In the smaller states from northeast more than 50 percent of the surveyed PHCs do not have continuous water supply. In union territories most of the PHCs have continuous supply of water.

(c) Electricity

Provision of immunization to children and pregnant women is one of the important functions of the PHC. For the storage of vaccines at specified temperature in refrigerators/ freezers as well as for the operation of many other equipments besides lighting purpose PHCs need electric supply. Eighty Two percent of the PHCs in India do have electricity. In other words, one in every five PHC in India is functioning without electricity. Again in Punjab and in all the union territories all the surveyed PHCs do have electric supply. In Andhra Pradesh, Gujarat, Kerala, Maharashtra, Tamil Nadu, Himachal Pradesh, Jammu & Kashmir and Tripura slightly over 95 percent PHCs have electricity. The situation is particularly worse in Bihar and Uttar Pradesh where more than half of the surveyed PHCs are functioning without electricity. Percent of PHCs having continuous water supply and electricity is shown in Fig.5.2.



(d) Labour room

In the context of National Population Policy, 2000 goal of Ninety percent institutional deliveries, availability of labour room is a critical facility for PHC. However, only 48 percent of the PHCs in India have labour room. The percent of PHCs having labour room in major states ranges from the highest of 86 percent in Maharashtra to the lowest of 15 percent in Bihar. Besides Maharashtra, the states with at least 60 percent of PHCs reporting to have a labour room is Punjab, Tamil Nadu and West Bengal. Along with Bihar the states with 25 percent or less

of PHCs reporting to have a labour room is found in Haryana, Kerala, Madhya Pradesh, and Uttar Pradesh. In union territories the situation is slightly better.

(e) Laboratory

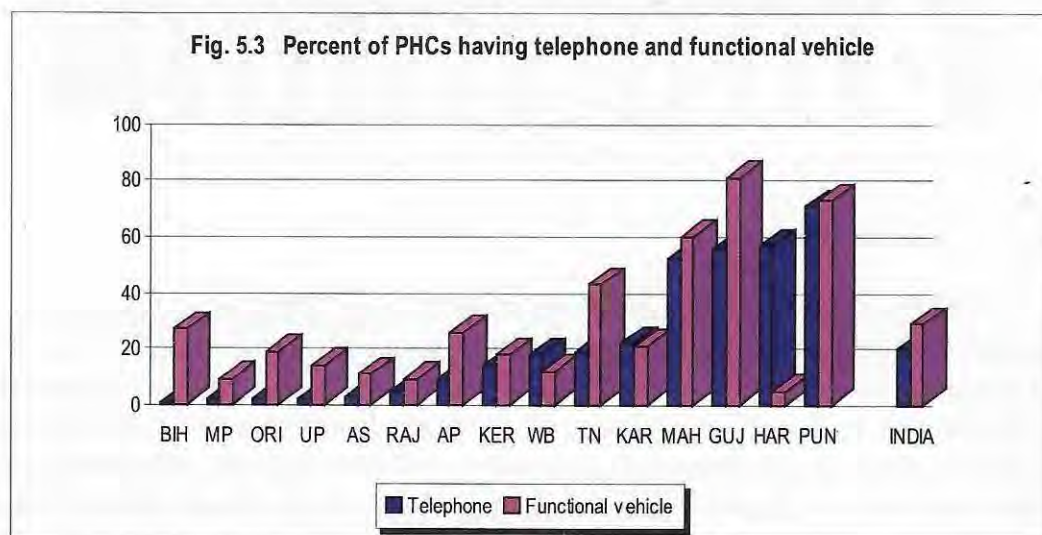
In the context of provision of RCH services the availability of laboratory in PHC to test blood and/or urine of the women seeking antenatal care as well as for the diagnosis of RTI/ STI among men and women is critical. Out of the 7959 PHCs surveyed all over the country, only 46 percent have laboratory. In Gujarat, Haryana, Maharashtra and Punjab 90 percent or more PHCs have laboratory. On the contrary, in Assam, Bihar, Kerala, Madhya Pradesh and West Bengal not even one-fifth of the surveyed PHCs have laboratory. Again, in this regard, the situation of union territories is better whereas that in the smaller states from northeast is bad.

(f) Telephone

For communication purpose, especially as the PHCs are supposed to refer the complicated cases to higher health facilities, the telephone facility in PHC is very important but it is a scarce facility in PHC. Only one in every five PHCs in India has a telephone connection. Among the major states only in Gujarat (56 %), Haryana (57 %), Maharashtra (52 %) and Punjab (71 %) more than half of the PHCs have telephone connection and at the same time in Assam, Bihar, Madhya Pradesh, Orissa, Rajasthan, and Uttar Pradesh only 5 or less percent of the PHCs have telephone facility.

(g) Vehicle

In the context of out-reach programme of the PHCs and referral of the complicated cases to higher health facilities, the availability of a vehicle in running condition becomes a critical input in PHC. But only twenty nine percent of the PHCs in India have a functional vehicle.



In all the major states, with the exception of Gujarat, Maharashtra and Punjab, only less than 50 percent of PHCs have any vehicle. Availability of telephone and functional vehicle is shown in Fig.5.3 for the 15 major states in India.

(h) In-patient Beds

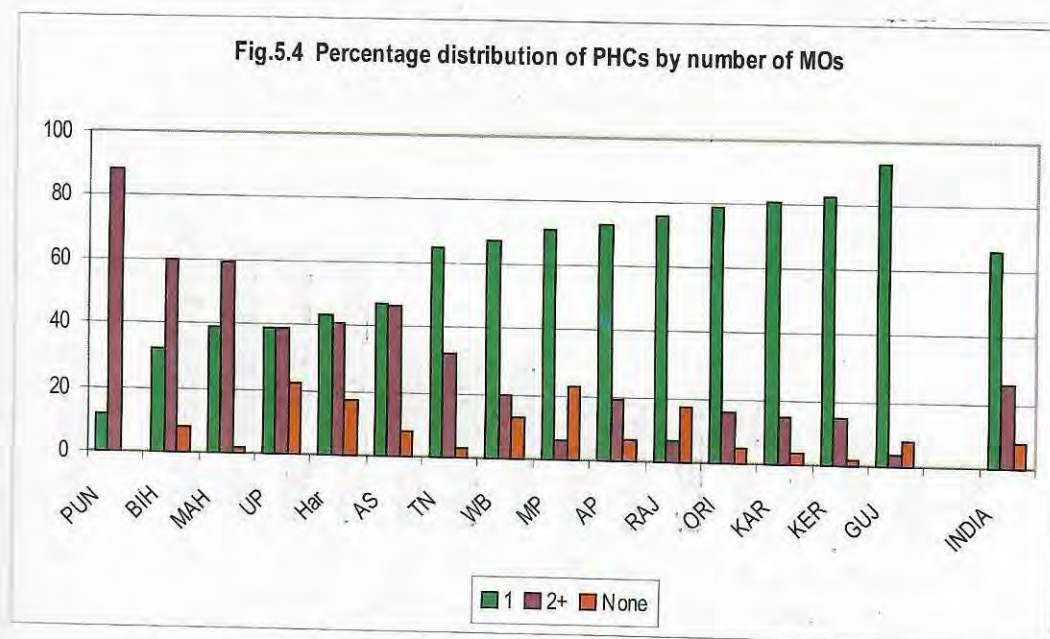
PHCs are supposed to provide medical services for in-patients and hence are expected to have at least six beds. Little more than two-thirds of the PHCs in India have at least one bed. In Haryana and Punjab every PHC has a bed and in Gujarat, Maharashtra, Rajasthan and Uttar Pradesh more than 90 percent of the PHCs have beds. But in Kerala, Madhya Pradesh and Orissa even 50 percent of the PHCs do not have a single bed.

5.3 STAFF (Table P2)

Only selected staff is given in Table P2. At least one medical officer is available in 92 percent of the total PHCs, which includes 20 percent having female medical officer. Male Health Assistant is not as common as female Health Assistant as at least one of the former is available only in 34 percent of the PHCs and the latter in 53 percent.

(a) Medical Officer

The availability of at least one Medical Officer (MO) on the roll of PHC is absolutely essential. However, almost one in every ten PHCs in India is functioning without any doctor while some are functioning with more than one (see Fig.5.4).



In Punjab every PHC has MO and in Kerala and Maharashtra 98 percent of the PHCs have at least one MO. At the same time, in Madhya Pradesh and Uttar Pradesh 22-23 percent PHCs do not have a single MO. In southern states, though some PHCs do not have MO on their regular staff, they hire the services of private doctors on a contract basis. With the exception of Himachal Pradesh, Arunachal Pradesh, Meghalaya and Nagaland, in all the smaller states and union territories 95 percent or more PHCs do have at least one MO.

In Punjab almost all PHCs have more than two MOs and there are no PHCs with not MO. The percent of PHCs with out any MO varies from none in Punjab to 23 percent in Madhya Pradesh.

(b) Medical Officer (Female)

The availability of lady medical officer on PHC staff has an added advantage for the supply of maternal care services, as women can confide with lady doctor easily. However, only 20 percent of PHCs (having at least one MO) in India have at least one lady medical officer. In Tamil Nadu 50 percent of the PHCs with at least one MO have lady MO. In Andhra Pradesh, Haryana, Karnataka, Kerala and Maharashtra 20 to 30 percent of PHCs and in Orissa, Rajasthan and Uttar Pradesh only 5 percent or less of PHCs have a lady medical officer.

(c) Medical Officer staying in PHC compound

For attending the emergency cases round the clock, availability of MO in PHC compound is necessary. But this is determined by the availability of staff quarters as well as MOs' desire to stay in the quarter. Fig.5.5 shows that in no state there are quarters for MO in all the PHCs. However, even the available quarters are not fully used in any of the states.

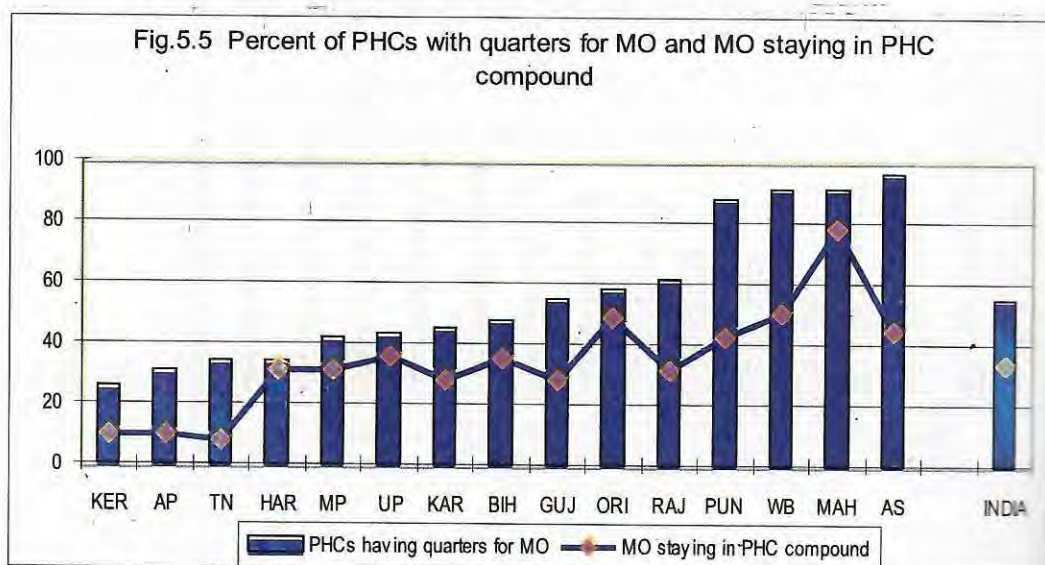


Table P2 shows that in 34 percent of PHCs MO stays in PHC compound. In Maharashtra, Andaman & Nicobar, Mizoram, Sikkim and Tripura in 75 to 80 percent PHCs MO stays in PHC compound but in Andhra Pradesh, Kerala and Tamil Nadu in 9-11 percent PHCs MO is available in PHC compound.

(d) Health Assistant (Male)

As far as the implementation of RCH programme is concerned, male health workers have a role in popularizing the male methods of family planning among men and educating as well as counseling men on RTI/ STI and HIV (AIDS). They also are expected to help female health workers in immunization sessions. The staffing pattern of PHC includes male health worker, though only one-third of PHCs in India have at least one male health worker. In most of the states 50 percent or more PHCs do not have a single male health assistant. The exceptions are Haryana (71 %), Kerala (59 %), Maharashtra (68 %), Punjab (67 %) and Tamil Nadu (51 %) where 50 percent or more PHCs have male health worker on their staff.

(e) Health Assistant (Female) and Female Health Worker

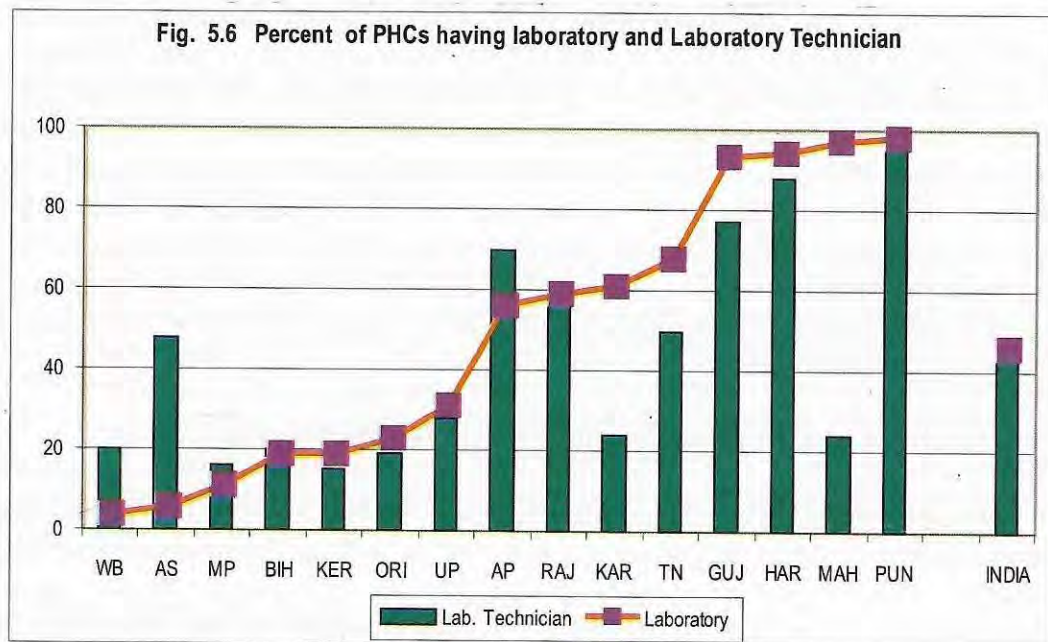
Health assistant (female) also known as ANM has a key role to play in the implementation of RCH programme at the PHC as well as in out reach activities of PHCs. Their availability varies from 6 percent in Bihar to 78 percent in Gujarat. Atleast two-thirds of the PHCs having an ANM in the PHC staff is found in Andhra Pradesh, Gujarat, Haryana, Maharashtra, Punjab, Tamil Nadu and West Bengal. Because of the differences in nomenclature of PHC staff in different states and because of the possibility of some of the ANMs getting classified in some other category of female Health Worker, a new category called Female Health Worker (FHW) is created taking all the Public Health nurses, female health assistants and female Multipurpose Workers. This shows that in most of the states and union territories more than 90 percent of PHCs have FHWs. In fact in Gujarat, Maharashtra, Punjab and Tamil Nadu and in all the union territories (except in Pondicherry) every PHC has at least one FHW. Only in Orissa and Uttar Pradesh one-third of the PHCs do not have any FHW.

(f) Laboratory Technician

Along with the laboratory for Pathological test the availability of Laboratory Technician on PHC staff is necessary. In India though 46 percent of the PHCs have test laboratory only 39 percent have Laboratory Technician on their staff. In Punjab 98 percent of the PHCs have test laboratory and the same percent of the PHCs have Laboratory Technician also. However, in many states in spite of large percent of PHCs having laboratory, there are only few PHCs having Technician. For example, in Gujarat and Maharashtra 94 and 97 percent of PHCs have laboratories, but only 77 and 24 percent PHCs have Laboratory Technician. At the same time in many states the percent of PHCs with Technician is substantially higher than the percent of PHCs having test

laboratory. In Assam and West Bengal only 6 and 4 percent PHCs have laboratory but 48 and 20 percent PHCs have Laboratory Technician respectively.

Percent of PHCs with laboratory and with laboratory technician is given in Fig. 5.6. In West Bengal, Assam and Andhra Pradesh, there are more PHCs with technicians than PHCs with laboratories.



5.4 TRAINING STATUS OF PHC STAFF

(a) Medical Officer (Table P3)

In-service training in various components of RCH enhances the skills and utility of medical and paramedical staff in PHCs.

Though, PHCs are expected to provide facilities for conducting normal deliveries, MTP, sterilization and treatment of RTI/ STI, very few PHCs have doctors trained in them. In India 11, 3, 16, 13 and 25 percent of PHCs have at least one MO trained in conducting deliveries, laparotomy/caesarian, sterilization, MTP and RTI/ STI respectively. In majority of the PHCs from every major state MOs do not have any in-service training. In most of the states comparatively larger percent of PHCs have MOs who are trained in performing sterilization or treating RTI/ STIs. Among all the major states the status of Medical staff's training is better in Andhra Pradesh, Gujarat, Karnataka, Maharashtra and Tamil Nadu.

(b) Para- medical staff (Table P4)

Table P4 presents the percent of PHCs having at least one paramedical staff trained in IUD insertion, checking blood pressure, control of diarrhoeal

diseases (CDD)/Oral Rehydration Therapy (ORT), Universal Immunization Programme (UIP), Child Survival and Safe Motherhood (CSSM) programme, RCH programme and Acute Respiratory Infection (ARI). It is necessary to mention here that there are a number of training programmes for the paramedical staff, and some of them have overlapping contents.

On the whole the training status of paramedical staff is much better in comparison to that of medical staff. In two-thirds or more of the surveyed PHCs in India there is at least one paramedical person on the staff who is trained in IUD insertion, CDD/ORT, UIP, CSSM and RCH. Comparatively lesser percent of PHCs have paramedical person trained in checking BP and ARI. However in CSSM training these two components are also included. In Maharashtra, Goa and few of the union territories every PHC has at least one paramedical person trained in each of the above mentioned training programme. The status of paramedical staff's training is better in Andhra Pradesh, Gujarat, Haryana and Tamil Nadu where at least 90 percent of PHCs have at least one paramedical person trained in all the above mentioned training programmes. In Bihar, Orissa, Punjab and Rajasthan majority of the paramedical staff of PHCs lack any kind of training.

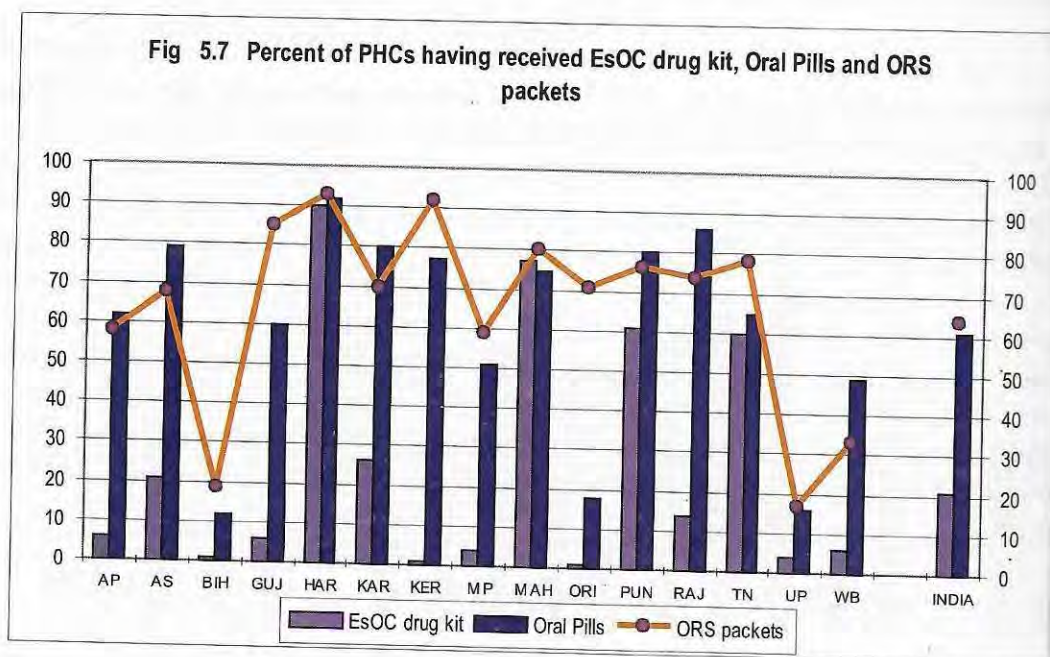
5.5 SUPPLY OF KITS, CONTRACEPTIVES, VACCINES (Table P5)

Under the RCH programme, PHCs in India are provided with a few instrumental/ medicinal kits. PHCs also receive regular supply of contraceptives, vaccines and medicines. The survey reveals that less than 50 percent of PHCs were supplied with IUD insertion kit (kit G), normal delivery kit (kit I) and Essential Obstetric Care Drug kit. The mounted lamp (200 W) essential for the treatment of hypothermia, a common health problem among neo-natals, is supplied to only 4 percent of PHCs in India. The oral pills, measles vaccine and ORS packets were supplied to 61-64 percent of PHCs and IFA tablets (large) were supplied to slightly less than one-third of the PHCs.

Similar to the pattern of supply at the national level, in most of the states and union territories the least supplied items are mounted lamp, Essential Obstetric Care Drug kit and IFA (large), in that order. The condition of supply of kits G and I, as well as pills, measles vaccine and ORS packets is comparatively better.

As in the case of all other inputs with regards to the supply of these critical kits/ vaccines/ contraceptive there is a large state level variation. Among the major states, in Haryana, Maharashtra and Punjab 90 percent or more PHCs have received kits G and I, and only in Haryana as high as 90-94 percent PHCs received EmOC kit, IFA (large), ORS packets and oral pills. Ninety percent or more PHCs from Gujarat, Maharashtra and Tamil Nadu received supply of measles vaccine. At the same time only 20 percent or less PHCs from Bihar and Uttar Pradesh received supply of each of the above mentioned kits, vaccines, contraceptives and medicines. Among the smaller states and union territories in

Andaman & Nicobar Islands, Goa, Himachal Pradesh, Lakshadweep, Pondicherry and Sikkim comparatively larger proportion of PHCs have received above mentioned supplies. Percent of PHCs with EsOC drug kit, oral pills and ORS packets is shown in Fig. 5.7.



5.6 STOCK OF VACCINES, CONTRACEPTIVES AND PROPHYLACTIC DRUGS (Table P6)

The information on whether PHCs were supplied with necessary contraceptives, vaccines, drugs and kits is supplemented with data on the availability of stock of these items on the survey date. Table P6 presents the percent of PHCs which had some stock of each of the contraceptives (Nirodh, Oral Pills, IUD), vaccines (BCG, DPT, DT, OPV, Measles, TT), vitamin A, IFA tablets, (small and large) and ORS packets.

(a) Contraceptives

In India 56-61 percent of the PHCs had stock of each of the three contraceptives. Among all the major states only in Haryana (94-97 %) almost all the PHCs reported stock of each of the three contraceptives. In Karnataka, Kerala, Maharashtra, Punjab, Rajasthan and Tamil Nadu 60 percent or more PHCs had some stock of each of the contraceptives. The position of stock is particularly worse in Bihar, Orissa and Uttar Pradesh where less than one-fifth of the PHCs reported having stock of each of the three contraceptives. The position of stock of contraceptives is comparatively better in smaller states and union territories with the exception of Dadra and Nagar Haveli and Nagaland.

(b) Prophylactic Drugs

About 33-40 percent of the surveyed PHCs in India reported having some stock of each of the IFA (large), IFA (small) and Vitamin A solutions. The ORS packets were available with 64 percent of the PHCs. Haryana is the only state where as high as 98-99 percent PHCs had stock of each of IFA-large and small, vitamin A and ORS packets. In Kerala, Punjab, Andaman and Nicobar Islands, Delhi, Himachal Pradesh, Lakshadweep and Sikkim 60 percent or more of PHCs had each of the above mentioned four items of drugs. Like all other inputs these four inputs were available with only 20 percent or less PHCs from Bihar and Uttar Pradesh.

(c) Vaccines

About 57-63 percent of the PHCs in India reported having some stock of the BCG, DPT, OPV, Measles and TT vaccines. DT vaccine was in stock only in 49 percent of the PHCs.

Ninety percent or more PHCs in Gujarat, Maharashtra and Tamil Nadu had some stock of DPT, OPV, Measles and TT vaccine. With the exception of Arunachal Pradesh, Bihar, Madhya Pradesh, Manipur, Mizoram, Orissa, Uttar Pradesh and West Bengal in every state and union territory at least 50 percent PHCs had a stock of DPT, OPV, Measles and TT vaccine. The condition is particularly a matter of concern in Bihar, Madhya Pradesh, Orissa, Uttar Pradesh and Mizoram where 80 percent or more PHCs did not have any stock of the above mentioned four vaccines.

5.7 EQUIPMENTS (Table P7)

There are certain equipments that are essential for the delivery of RCH services. This section discusses the status of PHCs with respect to the availability of these inputs. At the all India level at least three-fourths of the PHCs have infant and adult weighing machine, vaccine carrier and BP instrument. Deep freezer and steam sterilizer drum is available in two-thirds of the PHCs and slightly over half of the PHCs have autoclave and labour room table and equipments. MTP suction aspirator is almost absent with just 16 percent of PHCs reporting its availability.

A large proportion of PHCs in Andhra Pradesh, Gujarat, Haryana, Punjab and Tamil Nadu and most of the small states and union territories also possess the necessary equipments. However, the situation in Bihar, Orissa and Uttar Pradesh is a matter of concern.

(a) Weighing machine

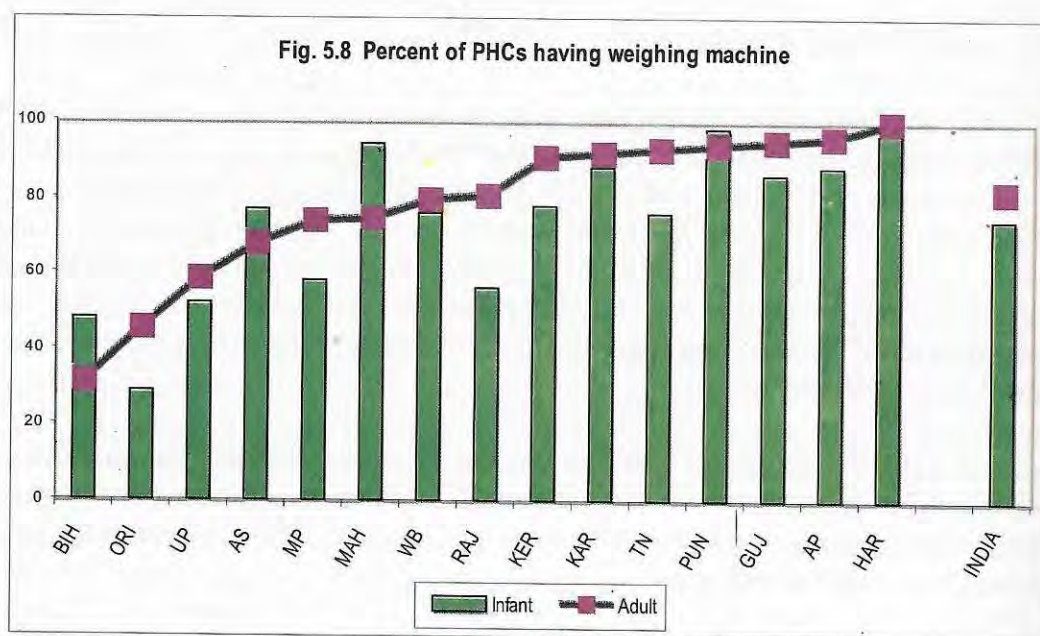
i. Adult

During ante-natal care visit, it is expected that the weight of the women be taken, as it needs constant monitoring. At the all-India level 18 percent of the PHCs are working without a functional weighing machine for the adults. Among major states, except in Haryana, no other state has all the PHCs with a functional weighing machine, while in Andhra Pradesh, Gujarat, Karnataka, Kerala, Punjab and Tamil Nadu 92-96 percent of the PHCs fall into this category. Most of the smaller states/UT are in a better situation in this regard.

ii. Infant

For the identification of low birth weight babies as well as for assessing the nutritional status of the infants and monitoring their growth infant weighing machine in PHC is essential. In seventy four percent of the PHCs such machine is available which implies that in one-fourth of the PHCs baby cannot be weighed at the time of birth. In Haryana, Maharashtra, Meghalaya and Punjab and in Dadra & Nagar Haveli, Daman & Diu and Delhi 94 to 100 percent of the PHCs have infant weighing machine but in Bihar, Orissa, Pondicherry and Tripura at least 50 percent of PHCs do not have infant weighing machine.

A comparison of the percent of PHCs with adult and infant weighing machine can be obtained from Fig. 5.8.

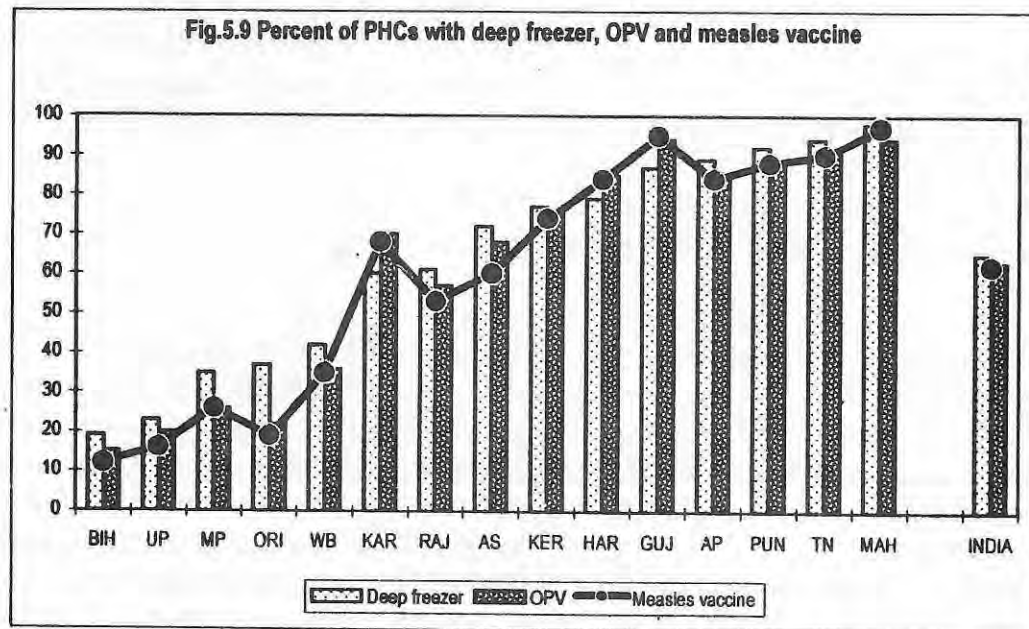


(b) Deep Freezer and vaccine carrier

Deep freezer is needed in PHC for the storage of vaccines in PHC. There is substantial variation in the availability of deep freezer among the states. In Maharashtra, Punjab, Tamil Nadu, Goa, Sikkim and in Dadra & Nagar Haveli, Lakshadweep and Pondicherry 90 percent or more of the PHCs have deep freezer but in Bihar, Madhya Pradesh, Uttar Pradesh, Arunachal Pradesh, Jammu & Kashmir and Nagaland only 35 percent or less of PHCs have deep freezer.

While conducting the immunization camp PHC staff need vaccine carriers to carry vaccine from PHC to the site of camp. Eighty Seven percent of the surveyed PHCs reported the availability of vaccine carriers. In fact, vaccine carrier is the only item available with most of the PHCs in every state/ union territory, though the percentage is very low in Bihar and Uttar Pradesh.

Fig.5.9 gives the availability of deep freezer in relation to the stock of OPV and measles vaccine in the major 15 states in India.



(c) BP instrument

Three-fourths of the surveyed PHCs reported having at least one BP instrument. This is an essential component of antenatal care. In Punjab and in most of the union territories all the surveyed PHCs and in Assam and Bihar only 40 percent of the PHCs have BP instrument.

(d) Autoclave and Steam Sterilizer Drum

Though for sterilizing needles, syringes and other instruments, autoclave

or steam sterilizer drum is absolutely essential, only 59 and 66 percent of the PHCs in the surveyed districts in India have these two equipments respectively. Though, in most of the PHCs steam sterilizer drum is comparatively more commonly available, in Andhra Pradesh, Gujarat, Maharashtra and Tamil Nadu autoclave is more common than steam sterilizer drum and in Karnataka and Punjab both are equally available. In Bihar and West Bengal both of these equipment are not available in a large proportion of PHCs.

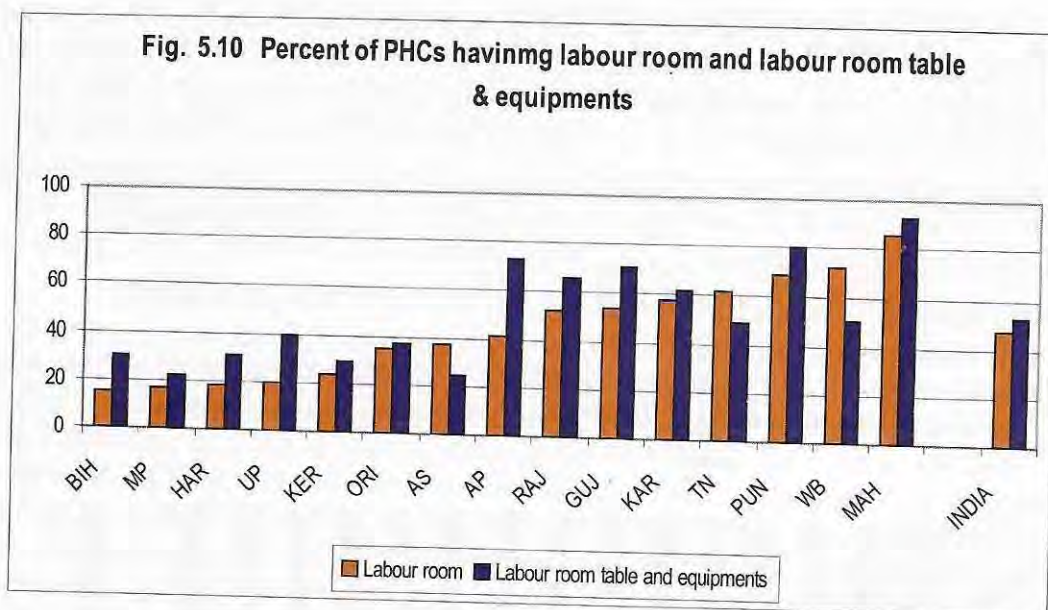
(e) MTP Suction Aspirator

The provision of safe abortion services for women having unwanted pregnancy is one of the functions of PHC. For conducting abortions PHCs are expected to have MTP suction aspirator. Among all the equipments for which data are presented in the Table P7, MTP suction aspirator is the least available equipment, as only 16 percent of the surveyed PHCs do possess this. Only in Punjab (49 %), Gujarat (40 %) and Maharashtra (28 %) more than one fourth of the PHCs reported having MTP suction aspirator. In many states like Assam, Bihar, Kerala, Madhya Pradesh and West Bengal not even 10 percent of PHCs possess this equipment. Compared to PHCs from major states a larger percent of PHCs from the smaller states and union territories reported availability of MTP suction aspirator.

(f) Labour Room Table and Equipments

In the context of provision of services of institutional deliveries the availability of labour room table and equipments in PHC is essential. In Fifty three percent of the surveyed PHCs in India labour room table and equipments are available, which implies that almost half of the PHCs in India do not possess necessary equipment to conduct deliveries. The availability of labour room table and equipment ranges from the highest in Maharashtra (93%) to the lowest in Madhya Pradesh (22%). In Andhra Pradesh, Gujarat, Maharashtra, Punjab, Rajasthan, Andaman and Nicobar Islands, Daman & Diu, Goa, Lakshadweep, Meghalaya, Mizoram, Sikkim and Tripura slightly over two-thirds of PHCs possess labour room table and equipments. Fig.5.10 shows clearly that there is no one to one correspondence between availability of labour room and the availability of labour room table and equipments.

In Bihar, Maharashtra, Madhya Pradesh, Haryana, Uttar Pradesh, Andhra Pradesh, Rajasthan, Gujarat and Punjab there is a higher percentage of PHCs with labour room table and equipments than labour room where as in Assam, Tamil Nadu and West Bengal the reverse situation exist.



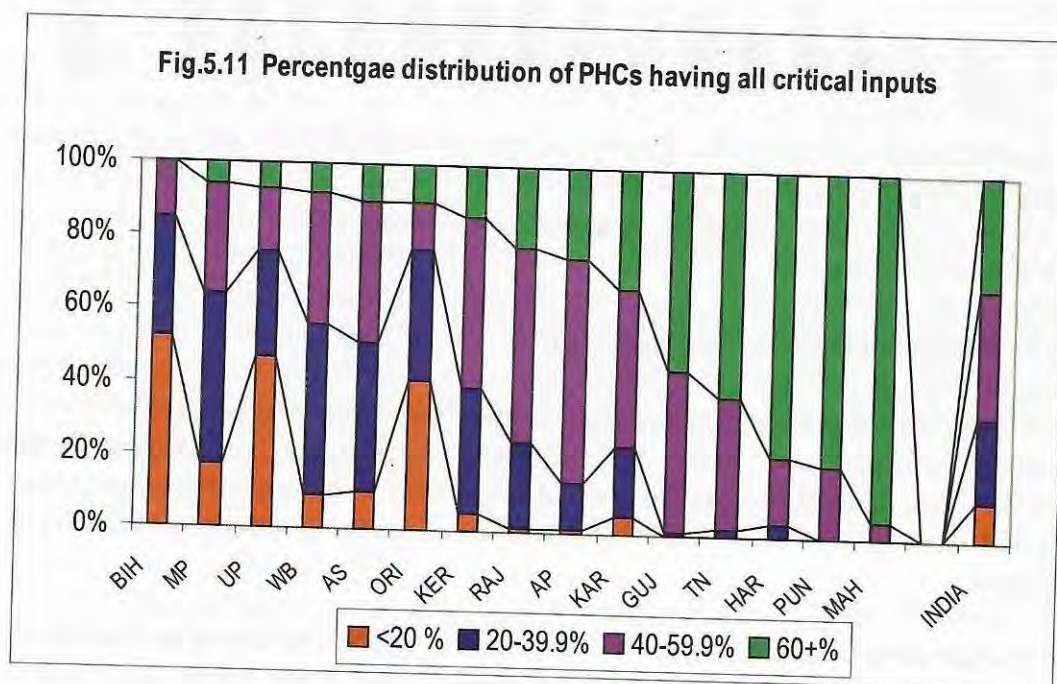
5.8 CRITICAL INPUTS (Tables P8)

For the effective implementation of RCH programme certain inputs regarding infrastructure, staff, trained staff, equipments and supplies are absolutely essential. Based on the availability of these individual critical inputs (described in chapter 1) the overall availability of critical inputs in each PHC is estimated.

Out of the 7959 surveyed PHCs in India nearly one-third of the PHCs each have less than 40 percent, 40 to 60 percent and above 60 percent critical inputs (Fig. 5.11).

Though the availability of 100 percent of all the inputs is essential, the availability of 60 percent critical inputs is considered as adequate. Table P8 provides the distribution of PHCs by availability of overall critical inputs. In only Goa and Andaman and Nicobar Islands every surveyed PHC was found to have adequate critical inputs. On the other hand, in Bihar out of 339 PHCs surveyed, not a single PHC had adequate inputs. No major state in India has 100 percent PHCs with adequate inputs, though Maharashtra comes closer with 95 percent. In Gujarat (54 %), Haryana (77%), Punjab (81%) and Tamil Nadu (61%), Dadra & Nagar Haveli (84%), Daman & Diu (67%), Lakshadweep (75%) and Sikkim (92%) also majority of the PHCs have adequate critical inputs. The condition is particularly bad in Assam, Bihar, Madhya Pradesh, Orissa, Uttar Pradesh and west Bengal where only 10 percent or less PHCs have adequate inputs.

In case of 11 percent of the PHCs only 20 percent or less critical inputs are available. In other words, one-tenth of the PHCs in India are very poorly equipped as far as the inputs for provision of RCH services is concerned. Extremely ill equipped PHCs are from three states, Bihar, Orissa and Uttar Pradesh accounting for two-thirds of PHCs in this group. In all, 31 percent of the PHCs in India have 60 percent or more inputs (28 % with 60- 79.9% and 3 percent with 80+% critical inputs). Sixty percent of the PHCs in this group are from four states viz. Gujarat, Karnataka, Maharashtra and Tamil Nadu.



5.9 PERCENT OF PHCs ADEQUATELY EQUIPPED (Table P9)

Table P9 shows state-wise adequacy of each component of critical inputs. In India 36, 38, 31, 56 and 12 percent of PHCs have adequate critical inputs in infrastructure, staff, supply, equipment and training respectively. More than half of the PHCs are adequate in equipments but only about 31-38 percent are found adequate in infrastructure, staff and supplies. In most of the states and union territories the pattern of adequacy is the same. A larger percent of PHCs have adequate equipments and most of them lack trained medical and paramedical staff.

Specifically, among the states Maharashtra has the highest percent of PHCs having adequate equipments.

Punjab ranks first in infrastructure (92%) and staff (84%). Haryana and Tamil Nadu respectively top in supply and training status of staff. Two-thirds or more PHCs in Assam, Bihar, Madhya Pradesh, Orissa, Uttar Pradesh and Arunachal Pradesh lack adequate critical inputs in each category examined here.

5.10 PUBLIC HEALTH FACILITIES/ PROGRAMMES AND FAMILY PLANNING PERFORMANCE (Table P10)

PHCs are expected to provide various services in the area of maternal and child health care, family planning, treatment of RTI/ STI etc. As seen in Table P10, out of 7959 surveyed PHCs, the highest percent of PHCs provide family planning services (72 % IUD insertion and 65 % sterilization). About one-third of the PHCs each conduct deliveries and treat cases of ARI, one-sixth of the PHCs treat cases of RTI/ STI and only 3 percent of the PHCs conduct MTP. It is to be noted that though 48 percent of the PHCs have labour room, 53 percent of PHCs have labour room table and equipment and in 46 percent PHCs normal delivery kits were supplied only 34 percent of the PHCs conduct deliveries. Furthermore, only 11 percent of the PHCs have MO trained in conducting delivery. Aside from not having all the necessary inputs for conducting deliveries, it is also possible that the people prefer either private health facilities or higher level health care establishments for delivery as was reported by some health personnel in Kerala.

As in the case of India as a whole every state has a higher percent of PHCs giving family planning services. In Andhra Pradesh, Gujarat, Haryana, Karnataka and Maharashtra 90 percent or more PHCs provide each of these two family planning services. On the contrary in Assam, Bihar, Orissa and Uttar Pradesh not even one-third of the PHCs provide these services. In smaller states and union territories IUD insertion services are provided in only few PHCs. Only in Dadra & Nagar Haveli more than 50 percent PHCs conduct IUD insertions. Except Mizoram and Tripura in no smaller state from northeast more than 50 percent PHCs do sterilizations.

Even though 65 percent of the PHCs in India provide sterilization services, all of them do not conduct male sterilizations. During the three months prior to the survey, only 7 percent of PHCs conducted male sterilizations and on an average, 16 sterilizations per PHC (those which conducted sterilizations) were performed. Only in Andhra Pradesh (39 %), Haryana (54 %), Maharashtra (11%) and Punjab (14%) more than 10 percent PHCs performed male sterilizations and only in Andhra Pradesh 30 sterilizations per PHC were performed. In most of the states/ union territories only small percent of PHCs conducted male sterilizations and that too less than 5 sterilizations per PHC.

In India, during the three months prior to the survey, on an average, 57 female sterilizations per PHC were performed. Andhra Pradesh (102), Punjab (134) and West Bengal (106) have the highest number of sterilizations per PHC. In many other states like, Gujarat, Haryana, Karnataka, Maharashtra, Orissa, Tamil

Nadu, Uttar Pradesh and Himachal Pradesh 50 or more sterilization per PHC were performed.

During the period of three months prior to the survey in the surveyed districts in India 50 IUD insertions per PHC (conducting IUD insertions) were performed. In Punjab, Orissa and Uttar Pradesh on an average 434, 107 and 387 IUD insertions per PHC respectively were performed.

Table P1 Status of Infrastructure in Primary Health Centres

Sl. No.	State	No. of PHCs	Percent of PHCs having								Percent of PHCs with at least one bed
			Own building	Toilet facility	Water @	Electricity	Labour room	Laboratory	Telephone	Vehicles	
MAJOR STATES											
1	Andhra Pradesh	622	74	67	52	96	41	56	9	26	77
2	Assam	333	100	88	77	82	37	6	3	11	59
3	Bihar	339	79	40	62	31	15	19	1	27	56
4	Gujarat	614	99	86	39	98	54	93	56	81	90
5	Haryana	115	99	69	83	94	18	94	57	5	100
6	Karnataka	854	99	80	72	92	58	61	22	21	73
7	Kerala	790	87	95	80	95	24	19	14	18	30
8	Madhya Pradesh	386	91	61	58	61	17	11	2	9	34
9	Maharashtra	645	99	93	79	98	86	97	52	60	93
10	Orissa	364	99	50	75	57	35	23	2	19	48
11	Punjab	51	100	98	100	100	69	98	71	73	100
12	Rajasthan	484	99	75	64	71	52	59	5	9	90
13	Tamil Nadu	672	96	84	65	99	62	68	19	43	60
14	Uttar Pradesh	486	73	52	36	41	20	31	2	14	90
15	West Bengal	825	99	96	44	77	72	4	18	12	63
SMALLER STATES/UNION TERRITORIES											
16	And & Nicobar	17	100	100	100	100	94	100	82	88	94
17	Arun. Pradesh	21	95	100	57	90	19	33	19	61	50
18	Chandigarh	2	50	100	100	100	50	100	50	50	0
19	Dadra & N.Haveli	6	100	100	83	100	83	83	33	100	100
20	Daman & Diu	3	100	100	100	100	67	67	100	100	100
21	Delhi	5	100	80	60	100	40	40	100	40	100
22	Goa	17	94	100	94	100	65	100	94	100	71
23	Him. Pradesh	22	41	64	82	95	27	59	36	27	59
24	Jam. & Kashmir	38	66	76	50	95	26	39	0	29	92
25	Lakshadweep	4	100	100	100	100	75	100	100	100	100
26	Manipur	31	84	58	35	77	39	39	6	0	90
27	Meghalaya	55	98	100	53	76	93	20	2	27	93
28	Mizoram	43	100	98	12	84	88	37	23	79	98
29	Nagaland	16	94	56	38	88	38	25	6	44	75
30	Pondicherry	19	84	100	95	100	68	32	74	42	79
31	Sikkim	24	100	100	92	100	100	96	50	100	100
32	Tripura	56	98	96	57	95	82	63	25	36	95
INDIA		7959	92	79	62	82	48	46	20	29	69

@ Continuous supply of water

\$

Functional vehicle

Table P2 Staff position in Primary Health Centres

Sl. No.	State	No. of PHCs	Percent of PHCs having at least one						
			Medical officer			Health Assistant		Female Health Worker	Laboratory Technician
			All	Medical officer (Female)*	Staying in PHC compound	Male	Female		
MAJOR STATES									
1	Andhra Pradesh	622	77	32	11	22	73	99	70
2	Assam	333	92	8	45	23	22	79	48
3	Bihar	339	92	13	36	7	6	79	20
4	Gujarat	614	92	8	29	40	78	100	77
5	Haryana	115	83	34	32	71	65	99	88
6	Karnataka	854	96	24	29	19	45	95	24
7	Kerala	790	98	33	11	59	55	93	15
8	Madhya Pradesh	386	72	7	32	37	63	89	16
9	Maharashtra	645	98	26	79	68	76	100	24
10	Orissa	364	95	5	50	8	13	68	19
11	Punjab	51	100	27	43	67	73	100	98
12	Rajasthan	484	82	3	32	19	43	92	58
13	Tamil Nadu	672	79	50	9	51	75	100	50
14	Uttar Pradesh	486	78	5	37	17	9	66	28
15	West Bengal	825	87	8	51	24	67	94	20
SMALLER STATES/UNION TERRITORIES									
16	And & Nicobar	17	100	71	77	29	47	100	100
17	Arun. Pradesh	21	90	19	52	62	24	62	29
18	Chandigarh	2	100	50	0	0	50	100	50
19	Dadra & N.Haveli	6	100	17	33	100	100	100	83
20	Daman & Diu	3	100	33	0	0	100	100	100
21	Delhi	5	100	100	60	0	80	100	60
22	Goa	17	100	59	6	41	100	100	88
23	Him. Pradesh	22	82	23	32	45	45	96	55
24	Jam. & Kashmir	38	97	61	16	5	0	100	58
25	Lakshadweep	4	100	75	0	50	50	100	100
26	Manipur	31	100	39	16	74	81	94	65
27	Meghalaya	55	87	40	75	51	55	93	78
28	Mizoram	43	95	14	79	72	60	95	33
29	Nagaland	16	94	6	40	25	31	63	31
30	Pondicherry	19	63	47	21	84	21	95	21
31	Sikkim	24	96	54	75	33	50	100	96
32	Tripura	56	96	16	83	50	25	88	82
INDIA		7959	88	20	34	34	53	91	46

* Included in Medical Officer category

Table P3 Training status of Medical Officers in Primary Health Centres

Sl. No.	State	No. of PHCs	Percent of PHCs having at least one medical officer trained in				
			Deliveries	Laparotomy/ caesarian	Sterilization	MTP	RTI/STI
MAJOR STATES							
1	Andhra Pradesh	622	29	5	32	14	17
2	Assam	333	14	5	8	14	15
3	Bihar	339	11	4	8	6	4
4	Gujarat	614	2	1	17	14	43
5	Haryana	115	3	2	3	4	7
6	Karnataka	854	10	3	11	10	24
7	Kerala	790	3	2	8	18	29
8	Madhya Pradesh	386	5	3	8	3	8
9	Maharashtra	645	1	2	48	17	48
10	Orissa	364	13	4	13	9	11
11	Punjab	51	6	2	6	10	0
12	Rajasthan	484	3	1	1	2	15
13	Tamil Nadu	672	24	9	21	35	55
14	Uttar Pradesh	486	5	4	20	4	15
15	West Bengal	825	6	1	3	3	10
SMALLER STATES/UNION TERRITORIES							
16	And & Nicobar	17	47	0	23	29	53
17	Arun. Pradesh	21	52	29	33	33	14
18	Chandigarh	2	0	0	0	0	0
19	Dadra & N.Haveli	6	0	0	17	17	50
20	Daman & Diu	3	0	0	0	0	100
21	Delhi	5	0	0	0	0	40
22	Goa	17	83	35	47	59	71
23	Him. Pradesh	22	9	9	14	14	36
24	Jam. & Kashmir	38	79	16	32	53	39
25	Lakshadweep	4	100	0	50	25	25
26	Manipur	31	52	35	42	58	65
27	Meghalaya	55	40	0	4	9	46
28	Mizoram	43	31	19	40	51	44
29	Nagaland	16	63	50	50	56	56
30	Pondicherry	19	0	11	16	21	42
31	Sikkim	24	71	17	25	25	63
32	Tripura	56	31	5	13	30	21
INDIA		7959	11	4	16	13	25

Table P4 Training status of Paramedical Staff in Primary Health Centres

Sl. No.	State	No. of PHCs	Percent of PHCs having at least one Paramedical staff trained in						
			IUD insertion	checking BP	CDD/ORT	UIP	CSSM	RCH	ARI
MAJOR STATES									
1	Andhra Pradesh	622	81	30	89	90	90	97	80
2	Assam	333	33	37	54	56	69	55	32
3	Bihar	339	22	15	20	19	49	71	18
4	Gujarat	614	98	97	98	99	99	95	96
5	Haryana	115	98	80	94	93	99	96	93
6	Karnataka	854	71	51	67	83	83	78	39
7	Kerala	790	55	7	83	76	88	83	19
8	Madhya Pradesh	386	61	17	32	39	70	86	30
9	Maharashtra	645	99	98	100	100	100	100	100
10	Orissa	364	29	14	27	26	38	23	16
11	Punjab	51	41	39	39	41	43	41	39
12	Rajasthan	484	63	43	42	31	25	71	52
13	Tamil Nadu	672	99	96	96	97	98	56	79
14	Uttar Pradesh	486	56	44	46	54	57	57	25
15	West Bengal	825	62	33	48	53	56	62	40
SMALLER STATES/UNION TERRITORIES									
16	And & Nicobar	17	100	100	100	100	100	100	100
17	Arun. Pradesh	21	38	52	67	52	38	24	19
18	Chandigarh	2	50	50	50	50	50	50	0
19	Dadra & N. Haveli	6	100	100	100	100	100	100	100
20	Daman & Diu	3	67	100	100	100	100	67	100
21	Delhi	5	40	40	60	60	80	0	20
22	Goa	17	35	100	100	100	100	94	100
23	Him. Pradesh	22	86	73	82	86	91	73	73
24	Jam. & Kashmir	38	58	57	79	79	68	42	50
25	Lakshadweep	4	50	50	50	50	50	50	50
26	Manipur	31	77	94	84	97	94	42	74
27	Meghalaya	55	56	51	58	67	47	93	44
28	Mizoram	43	63	47	44	47	44	37	33
29	Nagaland	16	38	63	50	56	50	56	44
30	Pondicherry	19	84	100	100	100	89	89	79
31	Sikkim	24	100	100	96	100	96	96	96
32	Tripura	56	14	21	45	63	45	38	16
INDIA		7959	68	49	67	69	74	74	52

Table P5 Supply status in Primary Health Centres

Sl. No.	State	No. of PHCs	Percent of PHCs having							
			Kit G ₁	Kit I ₂	EsOC drug kit ₃	Mounted Lamp 200W	Oral pills	Measles Vaccine	IFA Tab (large)	ORS packets
MAJOR STATES										
1	Andhra Pradesh	622	32	45	6	9	62	84	25	58
2	Assam	333	27	37	21	1	79	60	41	68
3	Bihar	339	4	8	1	1	12	12	4	19
4	Gujarat	614	17	17	6	1	60	95	11	85
5	Haryana	115	94	93	90	0	92	78	94	93
6	Karnataka	854	73	52	26	13	80	68	34	70
7	Kerala	790	18	11	1	1	77	74	64	92
8	Madhya Pradesh	386	35	29	4	3	51	26	50	59
9	Maharashtra	645	98	98	77	1	75	97	43	80
10	Orissa	364	5	10	1	1	18	19	13	71
11	Punjab	51	96	92	61	4	80	88	65	76
12	Rajasthan	484	81	71	14	6	86	54	41	74
13	Tamil Nadu	672	87	85	60	3	65	90	28	78
14	Uttar Pradesh	486	8	14	4	4	16	16	10	17
15	West Bengal	825	68	62	6	1	49	35	23	33
SMALLER STATES/UNION TERRITORIES										
16	And & Nicobar	17	41	53	65	12	65	94	88	71
17	Arun. Pradesh	21	14	29	14	0	62	43	24	38
18	Chandigarh	2	50	100	0	50	100	50	100	50
19	Dadra & N.Haveli	6	100	100	100	0	0	100	0	100
20	Daman & Diu	3	100	67	100	33	67	67	0	67
21	Delhi	5	20	80	20	0	100	100	100	100
22	Goa	17	82	76	59	29	100	71	12	82
23	Him. Pradesh	22	50	64	9	36	68	50	59	77
24	Jam. & Kashmir	38	18	29	8	3	76	63	42	76
25	Lakshadweep	4	25	100	100	0	75	100	75	75
26	Manipur	31	55	52	19	0	39	45	10	23
27	Meghalaya	55	4	29	5	4	87	62	24	27
28	Mizoram	43	35	44	7	0	65	19	33	51
29	Nagaland	16	25	44	19	0	31	56	25	13
30	Pondicherry	19	84	90	74	0	79	79	42	58
31	Sikkim	24	38	54	13	42	88	79	67	71
32	Tripura	56	13	27	0	0	68	61	20	34
INDIA		7959	48	46	21	4	61	62	32	64

1 IUD Insertion Kit
2 Normal Delivery Kit

3 Essential Obstetric Care drug kit

Table P6 Stock of selected items of health care in Primary Health Centres

Sl. No.	State	No. of PHCs	Percent of PHCs having some stock on the day of survey						
			Contraceptives			Prophylactic drugs			
			Nirodh	Oral Pill	IUD	IFA (Large)	IFA (Small)	Vit A Solution	ORS Packet
MAJOR STATES									
1	Andhra Pradesh	622	53	62	60	25	29	29	58
2	Assam	333	68	79	46	41	68	81	68
3	Bihar	339	11	12	18	4	15	12	19
4	Gujarat	614	57	60	64	11	26	23	83
5	Haryana	115	94	97	96	99	99	98	98
6	Karnataka	854	73	80	81	34	52	53	70
7	Kerala	790	64	77	78	64	77	79	92
8	Madhya Pradesh	386	47	51	52	50	40	46	59
9	Maharashtra	645	61	75	82	43	29	24	80
10	Orissa	364	18	18	18	13	15	16	71
11	Punjab	51	69	80	88	65	73	77	77
12	Rajasthan	484	84	86	78	41	68	67	74
13	Tamil Nadu	672	67	65	69	28	25	21	78
14	Uttar Pradesh	486	15	16	15	10	11	8	17
15	West Bengal	825	48	49	44	23	25	31	33
SMALLER STATES/UNION TERRITORIES									
16	And & Nicobar	17	65	65	94	88	94	82	71
17	Arun. Pradesh	21	86	62	48	24	67	48	38
18	Chandigarh	2	50	100	100	100	100	50	50
19	Dadra & N.Haveli	6	0	0	50	0	0	0	100
20	Daman & Diu	3	67	67	67	0	0	0	67
21	Delhi	5	100	100	100	100	80	100	100
22	Goa	17	94	100	94	12	53	47	82
23	Him. Pradesh	22	91	82	77	73	73	68	96
24	Jam. & Kashmir	38	82	76	40	42	74	61	76
25	Lakshadweep	4	75	75	75	75	100	100	75
26	Manipur	31	48	89	42	10	42	45	23
27	Meghalaya	55	66	87	44	24	38	38	27
28	Mizoram	43	67	65	51	33	63	51	51
29	Nagaland	16	13	31	69	25	19	19	13
30	Pondicherry	19	74	79	79	42	53	47	58
31	Sikkim	24	92	88	79	67	67	88	71
32	Tripura	56	63	79	61	25	57	54	41
INDIA		7959	56	61	59	33	40	40	64

Table P6 Stock of selected items of health care in Primary Health Centres (Continued)

Sl. No.	State	No. of PHCs	Percent of PHCs having some stock on the day of survey					
			Vaccine					
			BCG	DPT	OPV	Measles	DT	TT
MAJOR STATES								
1	Andhra Pradesh	622	79	85	85	84	58	83
2	Assam	333	67	69	68	60	60	65
3	Bihar	339	14	15	15	12	10	12
4	Gujarat	614	80	95	94	95	66	93
5	Haryana	115	83	83	85	84	80	83
6	Karnataka	854	63	68	70	68	48	67
7	Kerala	790	68	75	76	74	76	75
8	Madhya Pradesh	386	24	26	26	26	22	22
9	Maharashtra	645	85	96	94	97	75	89
10	Orissa	364	18	21	22	19	12	20
11	Punjab	51	73	88	88	88	77	24
12	Rajasthan	484	49	53	57	53	24	55
13	Tamil Nadu	672	89	91	92	90	79	90
14	Uttar Pradesh	486	14	19	20	16	14	18
15	West Bengal	825	36	33	36	35	34	34
SMALLER STATES/UNION TERRITORIES								
16	And & Nicobar	17	88	94	94	94	53	77
17	Arun. Pradesh	21	19	33	43	43	24	48
18	Chandigarh	2	0	50	50	50	100	100
19	Dadra & N.Haveli	6	100	100	100	100	100	100
20	Daman & Diu	3	67	67	67	67	67	67
21	Delhi	5	18	100	100	100	100	100
22	Goa	17	82	88	88	71	77	71
23	Him. Pradesh	22	64	59	64	59	14	59
24	Jam. & Kashmir	38	58	71	61	63	50	71
25	Lakshadweep	4	100	100	100	100	100	100
26	Manipur	31	42	39	42	45	19	39
27	Meghalaya	55	49	62	66	62	64	62
28	Mizoram	43	21	12	19	19	16	19
29	Nagaland	16	44	63	63	56	25	31
30	Pondicherry	19	42	79	79	79	16	63
31	Sikkim	24	88	79	92	79	67	88
32	Tripura	56	63	70	70	71	68	63
INDIA		7959	57	63	63	62	49	61

Table P7 Availability of selected equipments in Primary Health Centres

Sl. No.	State	No. of PHCs	Percent of PHC having functional								
			Weighing machine		Deep freezer	Vaccine carrier	BP instrument	Autoclave	Steam sterilizer drum	MTP suction aspirator	labour room table and equipment
			Adult	Infant							
MAJOR STATES											
1	Andhra Pradesh	622	96	88	89	97	84	79	34	15	73
2	Assam	333	68	77	72	95	41	23	66	7	25
3	Bihar	339	32	48	19	54	40	43	52	7	30
4	Gujarat	614	95	86	87	99	91	85	76	40	71
5	Haryana	115	100	99	79	93	99	32	90	21	31
6	Karnataka	854	92	88	60	95	89	65	68	13	62
7	Kerala	790	91	78	77	93	81	45	64	8	29
8	Madhya Pradesh	386	74	58	35	87	67	50	64	3	22
9	Maharashtra	645	75	94	98	100	85	94	85	28	93
10	Orissa	364	46	29	37	36	63	58	67	21	37
11	Punjab	51	94	98	92	98	100	94	94	49	80
12	Rajasthan	484	81	56	61	93	83	49	81	18	66
13	Tamil Nadu	672	93	76	94	98	73	68	56	17	49
14	Uttar Pradesh	486	59	52	23	54	79	63	71	19	40
15	West Bengal	825	80	76	42	81	64	29	58	3	51
SMALLER STATES/UNION TERRITORIES											
16	And. & Nicobar	17	100	78	59	100	100	65	77	24	94
17	Arun. Pradesh	21	71	52	19	67	95	19	48	10	29
18	Chandigarh	2	100	50	0	100	100	50	100	0	50
19	Dadra & N. Haveli	6	100	100	100	100	100	67	100	33	50
20	Daman & Diu	3	100	100	67	67	100	67	100	33	67
21	Delhi	5	100	100	80	100	100	100	80	20	40
22	Goa	17	100	88	94	100	100	71	94	35	65
23	Him. Pradesh	22	77	68	50	77	82	45	73	18	45
24	Jam. & Kashmir	38	84	61	32	92	100	63	87	39	29
25	Lakshadweep	4	100	75	100	100	75	100	75	25	100
26	Manipur	31	84	61	71	84	68	65	74	29	39
27	Meghalaya	55	98	96	69	93	89	45	64	18	89
28	Mizoram	43	81	88	42	91	81	58	81	23	79
29	Nagaland	16	56	56	31	88	75	19	38	13	38
30	Pondicherry	19	100	32	95	95	100	53	74	11	63
31	Sikkim	24	100	58	100	96	100	92	96	79	100
32	Tripura	56	71	48	68	75	61	23	63	11	71
INDIA		7959	82	74	65	87	76	59	66	16	53

Table P8 Percentage distribution of PHCs having all critical inputs

Sl. No.	State	No. of PHCs	Percentage					Total
			< 20	20-39.9	40-59.9	60-79.9	80+	
MAJOR STATES								
1	Andhra Pradesh	622	1	13	62	24	1	100
2	Assam	333	10	41	39	10	0	100
3	Bihar	339	52	33	15	0	0	100
4	Gujarat	614	0	1	44	53	1	100
5	Haryana	115	0	4	18	74	3	100
6	Karnataka	854	5	19	43	32	2	100
7	Kerala	790	5	34	47	14	0	100
8	Madhya Pradesh	386	17	47	30	5	1	100
9	Maharashtra	645	0	0	5	81	14	100
10	Orissa	364	41	36	13	9	0	100
11	Punjab	51	0	0	20	59	22	100
12	Rajasthan	484	1	24	53	20	0	100
13	Tamil Nadu	672	0	2	36	53	8	100
14	Uttar Pradesh	486	47	29	17	8	0	100
15	West Bengal	825	9	47	36	8	0	100
SMALLER STATES/UNION TERRITORIES								
16	And & Nicobar	17	0	0	0	88	12	100
17	Arun. Pradesh	21	10	38	38	14	0	100
18	Chandigarh	2	0	0	50	50	0	100
19	Dadra & N.Haveli	6	0	0	17	67	17	100
20	Daman & Diu	3	0	0	33	67	0	100
21	Delhi	5	0	0	60	40	0	100
22	Goa	17	0	0	0	59	41	100
23	Him. Pradesh	22	14	18	18	41	9	100
24	Jam. & Kashmir	38	0	21	66	14	0	100
25	Lakshadweep	4	0	0	25	25	50	100
26	Manipur	31	3	16	52	29	0	100
27	Meghalaya	55	0	18	73	9	0	100
28	Mizoram	43	5	14	58	23	0	100
29	Nagaland	16	13	31	31	25	0	100
30	Pondicherry	19	0	0	58	37	5	100
31	Sikkim	24	0	0	8	63	29	100
32	Tripura	56	5	30	57	7	0	100
INDIA		7959	11	23	36	28	3	100

Table P9 Percent of adequately equipped* Primary Health Centres by specific components

Sl. No.	State	No. of PHCs	Percent of PHCs adequately equipped in				
			Infrastru cture	Staff	Supply	Equipm ents	Training
MAJOR STATES							
1	Andhra Pradesh	622	32	50	16	84	21
2	Assam	333	9	21	26	23	12
3	Bihar	339	10	4	0	25	3
4	Gujarat	614	73	71	11	88	15
5	Haryana	115	49	78	94	47	3
6	Karnataka	854	47	24	45	64	7
7	Kerala	790	19	46	10	44	3
8	Madhya Pradesh	386	6	31	15	28	3
9	Maharashtra	645	88	60	87	96	18
10	Orissa	364	18	13	4	32	6
11	Punjab	51	92	84	78	92	6
12	Rajasthan	484	26	32	47	59	4
13	Tamil Nadu	672	52	55	65	67	39
14	Uttar Pradesh	486	13	12	4	34	4
15	West Bengal	825	15	28	19	30	3
SMALLER STATES/UNION TERRITORIES							
16	And & Nicobar	17	100	53	53	76	47
17	Arun. Pradesh	21	33	29	5	14	33
18	Chandigarh	2	50	0	50	0	0
19	Dadra & N.Haveli	6	83	100	100	83	17
20	Daman & Diu	3	100	100	67	67	0
21	Delhi	5	60	60	80	80	0
22	Goa	17	100	88	59	88	65
23	Him. Pradesh	22	45	36	64	55	18
24	Jam. & Kashmir	38	16	0	13	45	55
25	Lakshadweep	4	100	75	75	100	50
26	Manipur	31	13	81	0	65	61
27	Meghalaya	55	20	56	5	78	31
28	Mizoram	43	42	65	5	65	30
29	Nagaland	16	25	25	13	38	56
30	Pondicherry	19	58	21	63	68	21
31	Sikkim	24	100	63	46	100	67
32	Tripura	56	52	48	0	50	11
INDIA		7959	36	38	31	56	12

* Having at least 60 percent of critical inputs

Table P9 Percent of adequately equipped* Primary Health Centres by specific components

Sl. No.	State	No. of PHCs	Percent of PHCs adequately equipped in				
			Infrastru cture	Staff	Supply	Equipm ents	Training
MAJOR STATES							
1	Andhra Pradesh	622	32	50	16	84	21
2	Assam	333	9	21	26	23	12
3	Bihar	339	10	4	0	25	3
4	Gujarat	614	73	71	11	88	15
5	Haryana	115	49	78	94	47	3
6	Karnataka	854	47	24	45	64	7
7	Kerala	790	19	46	10	44	3
8	Madhya Pradesh	386	6	31	15	28	3
9	Maharashtra	645	88	60	87	96	18
10	Orissa	364	18	13	4	32	6
11	Punjab	51	92	84	78	92	6
12	Rajasthan	484	26	32	47	59	4
13	Tamil Nadu	672	52	55	65	67	39
14	Uttar Pradesh	486	13	12	4	34	4
15	West Bengal	825	15	28	19	30	3
SMALLER STATES/UNION TERRITORIES							
16	And & Nicobar	17	100	53	53	76	47
17	Arun. Pradesh	21	33	29	5	14	33
18	Chandigarh	2	50	0	50	0	0
19	Dadra & N.Haveli	6	83	100	100	83	17
20	Daman & Diu	3	100	100	67	67	0
21	Delhi	5	60	60	80	80	0
22	Goa	17	100	88	59	88	65
23	Him. Pradesh	22	45	36	64	55	18
24	Jam. & Kashmir	38	16	0	13	45	55
25	Lakshadweep	4	100	75	75	100	50
26	Manipur	31	13	81	0	65	61
27	Meghalaya	55	20	56	5	78	31
28	Mizoram	43	42	65	5	65	30
29	Nagaland	16	25	25	13	38	56
30	Pondicherry	19	58	21	63	68	21
31	Sikkim	24	100	63	46	100	67
32	Tripura	56	52	48	0	50	11
INDIA		7959	36	38	31	56	12

* Having at least 60 percent of critical inputs

Table P10 Public health facilities / programmes and family planning performance in Primary Health Centres

Sl. No.	State	No. of PHCs	Percent of PHCs giving services in					Last three months preceding the survey					
			Delivery	MTP	RTI/ STI	ARI	Percent of PHCs conducting			Average number conducted			
							Total	Sterilization		Male	Female		
								IUD					
MAJOR STATES													
1	Andhra Pradesh	622	42	2	34	16	98	39	96	91	30	102	49
2	Assam	333	36	8	7	52	4	0	4	31	1	23	20
3	Bihar	339	18	1	1	27	21	2	20	30	17	46	97
4	Gujarat	614	23	1	16	16	98	7	98	98	5	60	90
5	Haryana	115	7	1	2	62	97	54	97	100	2	59	62
6	Karnataka	854	54	8	47	63	94	1	94	94	2	54	44
7	Kerala	790	3	4	11	18	86	4	86	86	2	25	15
8	Madhya Pradesh	386	21	2	7	36	54	4	54	76	2	45	48
9	Maharashtra	645	72	1	1	12	93	11	92	97	2	63	45
10	Orissa	364	41	1	12	63	25	5	24	25	7	67	107
11	Punjab	51	31	22	20	53	88	14	41	49	3	134	434
12	Rajasthan	484	26	4	8	45	80	2	80	83	2	22	28
13	Tamil Nadu	672	61	2	35	50	86	3	86	92	1	50	42
14	Uttar Pradesh	486	9	1	1	32	22	7	22	21	10	72	387
15	West Bengal	825	37	1	1	12	38	1	38	76	3	106	23

Table P10 Public health facilities / programmes and family planning performance in Primary Health Centres (Continued)

Sl. No.	State	No. of PHCs	Percent of PHCs giving services in						Last three months preceding the survey							
			Delivery	MTP	RTI/STI	ARI	Percent of PHCs conducting			Average number conducted						
							Sterilization	IUD		Sterilization	IUD					
								Total	Male		Female	Male	Female			
SMALLER STATES/UNION TERRITORIES																
16	And & Nicobar	17	94	0	65	47	47	6	47	47	6	47	94	2	13	9
17	Arun. Pradesh	21	57	14	33	52	5	0	5	48	0	18	8	0	18	8
18	Chandigarh	2	0	0	0	50	100	0	100	100	0	7	20	0	7	20
19	Dadra & N.Haveli	6	33	0	0	17	83	33	83	100	2	17	14	2	17	14
20	Daman & Diu	3	33	0	0	0	100	0	100	100	0	39	11	0	39	11
21	Delhi	5	40	20	20	80	100	20	100	100	1	35	69	1	35	69
22	Goa	17	47	18	30	18	88	0	88	82	0	27	20	0	27	20
23	Him. Pradesh	22	41	14	27	68	55	14	55	77	1	65	32	1	65	32
24	Jam. & Kashmir	38	29	18	39	97	87	0	87	84	0	18	13	0	18	13
25	Lakshadweep	4	100	0	0	50	0	0	0	50	0	0	3	0	0	3
26	Manipur	31	19	35	32	52	13	0	13	52	0	23	26	0	23	26
27	Meghalaya	55	25	0	24	33	5	0	5	25	0	3	4	0	3	4
28	Mizoram	43	79	19	28	63	72	0	72	58	0	7	6	0	7	6
29	Nagaland	16	31	25	63	69	13	7	13	63	25	6	15	0	6	15
30	Pondicherry	19	37	0	53	79	89	0	89	94	0	39	24	0	39	24
31	Sikkim	24	83	0	17	88	33	25	17	83	21	18	14	0	18	14
32	Tripura	56	66	39	20	46	54	0	54	57	0	18	11	0	18	11
	INDIA	7959	34	3	16	32	65	7	65	72	16	57	50	16	57	50

APPENDIX A-I

REPRODUCTIVE AND CHILD HEALTH (RCH) PROJECT FACILITY SURVEY (DISTRICT HOSPITAL/SUB-DIVISIONAL HOSPITAL/RH/CHC/FRU) 1998-99

IDENTIFICATION	
<p>STATE _____</p> <p>DISTRICT _____</p> <p>TEHSIL/TALUK/BLOCK _____</p> <p>TYPE OF HEALTH FACILITY</p> <p style="padding-left: 40px;">DISTRICT HOSPITAL 1</p> <p style="padding-left: 40px;">SUB DIVISIONAL HOSPITAL2</p> <p style="padding-left: 40px;">COMMUNITY HEALTH CENTRE3</p> <p style="padding-left: 40px;">RURAL HOSPITAL4</p> <p style="padding-left: 40px;">COTTEGE HOSPITAL5</p> <p style="padding-left: 40px;">ANY OTHER _____ .. 6</p> <p style="padding-left: 80px;">(SPECIFY)</p> <p>IS THIS HEALTH FACILITY RECOGNIZED AS FRU?</p> <p style="padding-left: 40px;">YES.....1</p> <p style="padding-left: 40px;">NO.....2</p> <p>NAME & ADDRESS OF THE HOSPITAL _____</p> <hr/> <p>IS POST PARTUM CENTER ATTACHED TO THIS HOSPITAL ?</p> <p style="padding-left: 40px;">YES.....1</p> <p style="padding-left: 40px;">NO.....2</p> <p>NAME OF THE OFFICER IN-CHARGE _____</p> <p>DESIGNATION _____</p> <p>DESIGNATION OF THE RESPONDENT (IF MORE THAN ONE RESPONDENT, CIRCLE THE NUMBER AGAINST ALL RESPONDENTS)</p> <p style="padding-left: 40px;">DOCTOR IN-CHARGE.....1</p> <p style="padding-left: 40px;">ADMINISTRATIVE OFFICER.....2</p> <p style="padding-left: 40px;">DOCTOR.....3</p> <p style="padding-left: 40px;">ADMINISTRATIVE PERSONNEL.....4</p> <p style="padding-left: 40px;">ANY OTHER.....5</p> <p>DATE OF DATA COLLECTION</p> <p>DAY MONTH YEAR</p> <p>NAME AND SIGNATURE OF THE PERSON COLLECTING DATA</p>	

1. INFRASTRUCTURE

1.1.	Compound Wall/ Fencing		
	All around		1
	Partial		2
	None		3
1.2.	Water Supply		
	a. Source :		
	Piped		1
	Bore Well/Hand pump/Tube Well		2
	Well		3
	Other _____		4
		(Specify)	
	b. Whether overhead tank and pump exist		
	Yes		1
	No		2
	If Yes,		
	i. Whether overhead tank capacity is adequate		
	Yes		1
	No		2
	ii. Is the pump in working condition?		
	Yes		1
	No		2
1.3.	Electricity :		
	a. Is there electric line in all parts of the hospital?		
	In all parts		1
	In some parts		2
	None		3
	b. Regularity of Supply:		
	Power supply continuous		1
	Power supply fails occasionally		2
	Power cut in summer only		3
	Regular power cuts		4
	No power supply		5
	c. Stand by Facility (generator) available?		
	Yes		1
	No		2
1.4.	Sewerage		
	Soak Pit		1
	Connected to Municipal Sewerage		2
1.5.	Disposal of waste:		
	a. Is there an incinerator?		
	Yes		1
	No		2
	b. If yes, type		
	Electric		1
	Other _____		2
		(Specify)	
1.6.	Building		
	a. Ownership		
	Own		1
	Rented		2

- b. Maintenance
- i. Condition of painting/white washing
 - Good 1
 - Fair 2
 - Poor 3
 - ii. Frequency of painting/white washing
 - Once in a year 1
 - Once in three years 2
 - Once in more than three years 3
 - c. Condition of plaster on walls
 - Well plastered with plaster intact every where 1
 - Plaster coming off in some places 2
 - Plaster coming off in many places or no plaster 3
 - d. Condition of Floor
 - Floor in good condition 1
 - Floor coming off in some places 2
 - Floor coming off in many places or no proper flooring 3

1.7. Whether the cleanliness of _____ is Good/Fair/Poor? (OBSERVE)

OPD	OT	Rooms	Wards	Toilets	Premises (Compound)
G/F/P	G/F/P	G/F/P	G/F/P	G/F/P	G/F/P

1.8. Are any of these close to the hospital? (OBSERVE)

	Yes	No
a. Garbage dump	1	2
b. Cattle Shed	1	2
c. Stagnant pool	1	2
d. Pollution from industry	1	2

1.9 Staff Quarters

Category of Staff	Number of units		
	Available	Occupied by same group	Occupied by others
Doctors			
In-charge			
Obstetrician/Gynaecologist			
Paediatrician			
Duty Doctor (RMO)			
Anesthesiologists			
Others			
Paramedical			
Phar			
X-ray technician			
Laboratory technician			
Class IV			
Ambulance Driver			
Attendant			

1.10. Communication Facilities:

a. Telephone	Yes	1
	No	2
b. Personal Computer	Yes	1
	No	2

c.	NIC Terminal	Yes	1
		No	2
d.	E-mail	Yes	1
		No	2
e.	Is Hospital accessible by:		
	i. Rail	Yes	1
		No	2
	ii. Road	Yes	1
		No	2
	iii. Others _____		
		[Specify]	
		Yes	1
		No	2

2. VEHICLES

Type of vehicles	Number of vehicles			If vehicle is not running			
	Sanctioned	Available	On Road	Since when? (in months)	Reason		
					Driver not available	Money for POL not available	Money for repairs not available
Ambulance							
Jeep							
Car							

3. STAFF AND TRAINING

3.1 Staff

	Number of posts				
	Sanctioned	Filled	If Vacant, since when (in months)		
			I	II	III
1. Doctor in-charge					
2. Gynecologist & Obstetrician					
3. Paediatrician					
4. Anesthesiologist					
5. Specialist in RTI/STI (STD Officer)					
6. Pathologist					
7. General duty doctors					
8. Staff Nurse/Nurse midwife			x	x	x
9. Additional Staff for conducting delivery					
(a) Staff Nurse			x	x	x
(b) ANM			x	x	x
10. Pharmacist/Compounder			x	x	x
11. Lab technician/Lab Assistant			x	x	x
12. Radiographer			x	x	x
13. Computer/Clerk			x	x	x
14. Public Health Nurse (PHN)			x	x	x
15. Health Assistant - Male			x	x	x
16. Health Assistant - Female			x	x	x
17. Multipurpose Worker - Male			x	x	x
18. Multipurpose Worker - Female			x	x	x
19. Group C/category III staff			x	x	x
20. Group D/category IV staff			x	x	x

3.2. Training of MOs during previous (full) year

Availed training in	Number of MOs trained
Sterilizations	
IUD Insertions	
Emergency contraception	
RTI/STI	
Newborn care	
Emergency obstetric care	
Others subjects (mention)	

4. AVAILABILITY OF FACILITIES FOR OUT PATIENT DEPARTMENT IN GYNECOLOGY/OBSTETRIC/RTI/STI (OBSERVE)

Sr. No.	Availability of facility	Gynecology/Obstetric		RTI/STI	
		Yes = 1	No = 2	Yes = 1	No = 2
	If Yes				
		Yes	No	Yes	No
1.	Boards/Name Plates to guide the clients	1	2	1	2
2.	Adequate Working Space	1	2	1	2
3.	Privacy during Examination	1	2	1	2
4.	Facility for Counselling	1	2	1	2
5.	Separate Toilet with running water	1	2	1	2
6.	Facilities for Sterilizing instruments	1	2	1	2
7.	Male Specialist	1	2	1	2
8.	Female Specialist	1	2	1	2

5. SERVICE AVAILABILITY

5.1.

Number of days (in a month) the services are available:

- a. Ante-natal Clinics _____
- b. Post-natal Clinics _____
- c. Immunization Sessions _____
- d. Mother Child Protection Sessions _____

5.2. Counter near entrance of hospital to obtain contraceptives, ORS packets, Vitamin A, and Vaccination.

- Available 1
- Not available 2

5.3 Is counter functioning regularly?

- Yes 1
- No 2

6. TEST LABORATORY

6.1. Are adequate equipment and chemicals available ?

- Yes 1
- No 2

6.2. Is laboratory maintained in orderly manner? (OBSERVE)

- Yes 1
- No 2

7. **WARDS/CLINICS**

Sr. No.	Item Description	Total Number
1.	Number of wards	
2.	Number of beds	
3.	Number of (a) Maternity wards	
	(b) Gynecological wards	
	(c) Maternity beds	
	(d) Gynecological beds	
4.	Number of maternity cases admitted during the last 3 months? (Note down from the record)	
5.	Number of cases of normal delivery	
6.	Number of cases of caeserian delivery	
7.	Average duration(in days) of stay for normal delivery cases	
8.	Average duration(in days) of stay for caeserian delivery cases	
9.	Total number of paediatric beds	
10.	Number of children admitted in paediatric beds during the last three months	
11.	Average No. of days a bed in paediatric ward is occupied	
12.	Is separate septic labour room available	Yes.....1 No.....2

8. **ACCOMMODATION FACILITY FOR FAMILIES OF ADMITTED PATIENTS**

8.1.	Facility for stay available	Yes	1
		No	2
8.2.	Cooking facility available	Yes	1
		No	2

9. **OPERATION THEATRE**

1.	No. of operation theatres (OT) available	
2.	No. of OT used for obstetric/gynecological purpose	
	a. Has O.T. enough space ?	Yes.....1 No.....2
	b. Is OT fitted with air conditioner ?	Yes.....1 No.....2
	c. Is the air conditioner working?	Yes.....1 No.....2
	d. Is generator available for OT ?	Yes.....1 No.....2
	e. Is emergency light available in OT ?	Yes.....1 No.....2
	f. Is fumigation done regularly ? (Check the records)	Yes.....1 No.....2
	g. Is the days of sterilization in a week displayed on the public notice on O.T.?	Yes.....1 No.....2

10. OPERATION THEATRE EQUIPMENT

Items		Available Yes = 1 No = 2	Working Yes = 1 No = 2
1	Boyles Apparatus		
2	E M O Machine		
3	Cardiac Monitor for OT		
4	Defibrillator for OT		
5	Ventilator for OT		
6	Horizontal High Pressure Sterilizer		
7	Vertical High pressure Sterilizer 2/3 drum capacity		
8	Shadowless Lamp Ceiling Trak mounted		
9	Shadowless Lamp Pedestal For Minor OT		
10	OT Care/Fumigation apparatus		
11	Gloves & dusting Machine		
12	Oxygen Cylinder 660 Ltrs 10 Cylinders for 1 Boyles Apparatus		
13	Nitrous Oxide Cylinder 1780 Ltr. 8 for one Boyles Apparatus		
14	Hydraulic Operation Table		

11. OTHER EQUIPMENTS

Items		Available Yes = 1 No = 2	Working Yes = 1 No = 2
1.	X-ray machine		
2.	ECG machine		

12. COLD CHAIN AND BLOOD BANK

12.1. Cold Chain

Sr. No.	Availability of	In working condition Yes = 1 No = 2	Temperature maintained Yes = 1 No = 2	If not in working order since when (In months)
1.	Walk-in coolers			
2.	Walk-in freezers			
3.	Icelined freezers			
4.	Deep freezers			
5.	Refrigerators			

12.2. Is the hospital having linkage with district blood bank?

Yes 1
No 2

12.3. Is established and regular blood supply available?

Yes 1
No 2

13. CONTRCEPTIVES, VACCINES, DRUGS

Sr. No.	Items	Quantity			No of Samples	
		Supplied during last quarter	Present Stock	Estimated Quarterly Requirement	Sent for testing in last 3 months	Result Fit = 1 Unfit = 2
A	Contraceptives					
1.	Lubricated Nirodh pieces					
2.	Oral pill Cycles					
3.	IUDs				x	x
4.	Tubal rings					

CONTRACEPTIVES, VACCINES, DRUGS (Continued)

Sr. No.	Items	Quantity			No of Samples	
		Supplied during last quarter	Present Stock	Estimated Quarterly Requirement	Sent for testing in last 3 months	Result Fit = 1 Unfit = 2
B	Vaccine Doses					
1.	DPT					
2.	OPV					
3.	TT					
4.	BCG				x	x
5.	Mcasles				x	x
6.	DT				x	x
C	Prophylactic Drugs					
1.	IFA Tab. Large				x	x
2.	IFA Tab. Small				x	x
3.	Vitamin A Solution				x	x
4.	ORS Packets				x	x
D	Cotromoxazole					
1.	Tab. Paediatric				x	x
E	RTI/STI drugs				x	x

14. SUPPLY OF KITS

Sr. No.	Type of Kit	Supplied Yes = 1 No = 2	If Yes, Is it in use ? Yes = 1 No = 2
1.	Standard Surgical Set I - Kit E		
2.	Standard Surgical Set II - Kit F		
3.	Standard Surgical Set III - Kit H		
4.	Standard Surgical Set IV - Kit J		
5.	Standard Surgical Set V - Kit K		
6.	Standard Surgical Set VI - Kit L		
7.	IUD Insertion Kit - G		
8.	Normal Delivery Kit - I		
9.	Kit Equipment for Anaesthesia - M		
10.	Kit Equipment for Neo-Natal Resuscitation - N		
11.	Kit for Side Laboratory Test & Blood Transfusion - O		
12.	Kit for Donor Blood Transfusion - P		
13.	Kit for New Born Care Equipments		
14.	Kit with Emergency Obstetric Care Drugs		
15.	Kit with Consumable items for RTI/STI Laboratory diagnosis		

15. STOCK MAINTENANCE (OBSERVE)

15.1. Is there a store room to keep stock of drugs, vaccines, contraceptives and equipments ?

Yes 1
No 2

If Yes,

i. Is the store room properly lighted and ventilated?

Yes 1
No 2

ii. Is the size of store room sufficient for keeping stock?

Yes 1
Somewhat inadequate 2
Grossly inadequate 3

- iii. Are the stocks stored in orderly manner
 Yes 1
 No 2
- iv. Are stock registers maintained regularly
 Yes 1
 No 2

16. PERFORMANCE

(To be copied from Records & all performance refer to last completed three months prior to date of survey.)

Sr. No.	Type	Services utilized	Number
1.	Antenatal care	Examined at OPD	
		Admitted	
2.	Postnatal care	Examined at OPD	
		Admitted	
3.	Total deliveries conducted		
4.	Complicated deliveries	Direct admission	
		Referred	
5.	Caesarian sections	Direct admission	
		Referred	
6.	Medical termination of pregnancy		
7.	M T P with sterilization		
8.	M T P with IUD		
9.	Male Sterilization		
	a) Vasectomy		
	b) No scalpel vasectomy		
10.	Female Sterilization		
	a) Tubectomy		
	b) Laparoscopic		
	c) Mini-lap		

17.1. Need assessment under CNA manual for the year sent to State Government on _____ and to District Medical Officer on _____

17.2. Monthly report mentioned in CNA manual for preceding month sent on _____

18. NUMBER OF CASES OF DIARRHOEA/PNEUMONIA/RTI/STI

Diarrhoea (Children below age 5)		Males	Females	Total
	Admitted			
	Treated at OPD			
	Total			
Pneumonia (Children below age 5)	Admitted			
	Treated at OPD			
	Total			
RTI/STI	Admitted			
	Treated at OPD			
	Total			

**REPRODUCTIVE AND CHILD HEALTH (RCH) PROJECT
FACILITY SURVEY
(PRIMARY HEALTH CENTRE)
1998-99**

IDENTIFICATION	
STATE _____	
DISTRICT _____	
TAHSIL/TALUK/BLOCK _____	
LOCATION OF THE PHC _____	
SINCE WHEN THE PHC IS FUNCTIONING (YEAR) _____	
NO. OF SUB-CENTRES ATTACHED TO THE PHC _____	
NUMBER OF VILLAGES COVERED BY THE PHC _____	
POPULATION COVERED BY THE PHC (1991 CENSUS) _____	
DISTANCE (in KM) BETWEEN PHC AND CHC HQ/BLOCK/RH _____	
NEAREST SUB-CENTRE _____	
FARTHEST SUB- CENTRE _____	
NO. OF VILLAGES IN PHC AREA ACCESSIBLE THROUGH OUT THE YEAR _____	
NAME OF THE DOCTOR IN-CHARGE _____	
DESIGNATION OF THE RESPONDENT _____	
(IF MORE THAN ONE RESPONDENT, CIRCLE THE NUMBER AGAINST ALL RESPONDENTS)	
	DOCTOR IN-CHARGE.....1
	SECOND DOCTER.....2
	CLERK/HEALTH ASSISTANT.....3
	NURSE.....4
	COMPOUNDER.....5
	ANY OTHER.....6
DATE OF DATA COLLECTION	
DAY MONTH YEAR	
NAME AND SIGNATURE OF THE PERSON COLLECTING DATA	

I. INFRASTRUCTURE

1.1. PHC Building

- a. Ownership of PHC building
 - Own 1
 - Rented 2
 - Donated/Rent Free 3
- b. Type of PHC building (OBSERVE)
 - Pucca 1
 - Semi-Pucca 2
 - Kachcha 3
- c. Whether in independent building?
 - Yes 1
 - No 2
- d. Is compound wall/fence available ?
 - Yes 1
 - No 2
- e. Maintenance
 - Regular 1
 - Occasional 2
 - Only on request 3
 - Never done so far 4

1.2. Staff Quarters

a.

Category of Staff	Number Available
Medical Officer-in-charge	
Medical Officer	
Health Assistant/ Nurse/ANM	
Pharmacist/Compounder	
Sweeper/Attendant	
Driver	

- b. Where does MO stay ?
 - Quarter in PHC compound 1
 - Outside PHC but in the same village 2
 - Outside PHC village 3

1.3. Water Supply

- a. Main Source:
 - Tap 1
 - Tube Well /Hand Pump/Bore Well 2
 - Well 3
 - Other _____ 4
 - (Specify)
- b. Is water supply continuous?
 - Yes 1
 - No 2
- c. If water supply is not continuous, whether overhead tank is available?
 - Yes 1
 - No 2

1.4.	Electricity			
	a.	Availability of Electricity		
		Yes		1
		No		2
	b.	If electricity is available, regularity of electricity		
		Continuous		1
		Fails occasionally		2
		Power cut in summer		3
		Regular power cut, daily		4
		Regular power cut, weekly		5
	c.	If electricity is not continuous, is generator available		
		Yes, generator on kerosene		1
		Yes, generator on diesel		2
		No		3
1.5.	Telephone Facility			
		Yes		1
		No		2
1.6.	Toilet Facility		Staff	Patients
	a.	No. of Toilets	-----	-----
		If toilet is available		
	b.	Type of toilet		
		Flush	1	1
		Pit	2	2
	c.	Condition of toilet (OBSERVE)		
		Good	1	1
		Fair	2	2
		Poor	3	3
1.7.	Vehicle (Jeep/Ambulance)			
			Sanctioned	Available
	a.	Vehicle sanctioned/available?		
		Yes	1	1
		No	2	2
	b.	If available, since when? (Year)	
	c.	On road		
		Yes		1
		No		2
	d.	If off road, since when		
		Less than 15 days		1
		More than 15 days		2
	e.	Log book maintained?		
		Yes		1
		No		2
	f.	is driver available for emergency duty?		
		Yes		1
		No		2
	g.	Supply of petrol/diesel		
		Sufficient		1
		Insufficient		2

2. FACILITIES AVAILABLE

Sr. No.	Facilities	Available Yes - 1 No - 2	Utilized Yes - 1 No - 2
1	Is Operation Theater (O.T.) available?		
2	If there is O.T., is it fitted with AC?		
3	If there is AC, is it in working condition?		
4	Is generator available in O.T.?		X
5	Labour Room/ IUD Room		X
6	Is Fumigation done regularly in O.T.?		
7	Is Fumigation done regularly in Labour Room/ IUD Room?		X
8	Out Patient Department		X
9	Dispensing Room		
10	Doctors' Room		
11	Store-Room		
12	Basic Laboratory Services for		
	(a) Blood test - routine		
	(b) Blood test - VDRL		
	(c) Urine test		
	(d) Stool test		
13	Whether daily sweeping / mopping is done?		X

14. No. of beds available -----

15. No. of beds available with mattress, sheet, blankets etc. -----

3. STAFF POSITION

Sr.No.	Category of Staff	Number of Posts					
		Sanctioned	Filled	On duty	If vacant/on leave/ deputation, since when (in months)		
					Vacant	Leave	Deputation
1.	Medical Officer (MO)						
2.	MO - Female (a)	X					
3.	Malaria Supervisor						
4.	Public Health Nurse				X	X	X
5.	Block extn. Educator				X	X	X
6.	Health Assistant - Male				X	X	X
7.	Health Assistant - Female				X	X	X
8.	Multi Purpose Worker - Male				X	X	X
9.	Multi Purpose Worker - Female				X	X	X
10.	Pharmacist/Compounder				X	X	X
11.	Lab. Technician				X	X	X
12.	Computer / Clerk				X	X	X
13.	Driver				X	X	X
14.	Class IV Staff				X	X	X
15.	Any other (Specify)				X	X	X

(a) Item 2 refers to the presence or absence of a lady medical officer among the sanctioned and available medical officers

4. IN-SERVICE TRAINING AND PRACTICE STATUS

Staff Position	Category of Training	Number of persons	
		Trained	Trained and Practicing
Medical Officer	1. Deliveries		
	2. Laparotomy/Caesarean		
	3. Sterilization		
	4. Medical Termination of Pregnancy (MTP)		
	5. RTI/STI		

IN-SERVICE TRAINING AND PRACTICE STATUS (continued)

Staff Position	Category of Training	Number of persons	
		Trained	Trained and Practicing
Para Medical Staff	1. Intra Utrine Device (IUD) Insertion		
	2. Checking Blood Pressure		
	3. CDD/ORT		
	4. Universal Immunization Programme (UIP)		
	5. Child Survival and Safe Motherhood (CSSM)		
	6. Reproductive and Child Health (RCH)		
	7. Acute Respiratory Infection (ARI)		

5. EQUIPMENTS

Sr. No.	Items	Number Available	Number Functioning	If out of order, since how many months ?
1.	Refrigerator			
2.	ILR 300			
3.	ILR 140			
4.	Deep Freezer 300			
5.	Deep Freezer 140			
6.	Cold Box			
7.	Vaccine/Day Carrier			
8.	X-Ray machine			
9.	Examination Table			
10.	Weighing Machine (Infant)			
11.	Weighing Machine (Adult)			
12.	B.P. Instrument			
13.	Stethoscope			
14.	Autoclave			
15.	Steam Sterilizer Drum			
16.	MTP Suction Aspirators			
17.	Microscope & Lab. Equipment			
18.	Oxygen Cylinder			
19.	Labour Room Table & Equipment			
20.	O.T. table			

5.1. Adequacy of

a.	Needles	
	Adequate	1
	Inadequate	2
b.	Syringes	
	Adequate	1
	Inadequate	2

6. LIST OF KITS WITH EQUIPMENTS/DRUGS

Sr. No.	Kits	Supplied Yes - 1 No - 2	Distributed Yes - 1 No - 2	Utilized Yes - 1 No - 2
1.	Kit A Drugs (Sub-Centre)			
2.	Kit B Drugs (Sub-Centre)			
3.	Kit C Equipments (Sub-Centre)			
4.	Kit D Equipments		x	
5.	Kit G IUD insertion		x	
6.	Kit I Normal delivery kit		x	
7.	Kit of Essential obstetric care drugs		x	

LIST OF KITS WITH EQUIPMENTS/DRUGS (conynued)

Sr. No.	Kits	Supplied Yes - 1 No - 2	Distributed Yes - 1 No - 2	Utilized Yes - 1 No - 2
8.	New born care equipments:			
a.	Infant resuscitation bag with mask (capacity 700 ml with safety valve set to 70 cm of water)	1.	1. x	
b	Weighing machine (Pan type 0-10 Kg with 50 gm sensitivity)	2.	2. x	
C	Paddle operated suction machine	3.	3. x	
D	Mounted lamp with 200 w bulb (warming device)	4.	4. x	
E	Baby bassinet \$	5.	5. x	4.

\$ A basket with a hood over one end, for use as a baby's cradle

7. CONTRACEPTIVES, VACCINES AND DRUGS

Type	Quantity		
	Supplied (last month)	In Stock (on the day of survey)	Required for next one month
Contraceptives			
Lubricated Nirodh Piece			
Oral Pill Cycles			
IUDs			
Tubal Rings			
Vaccine Doses			
BCG			
DPT			
OPV			
Measles			
DT			
TT			
Prophylactic Drugs			
IFA Tab. (Large)			
IFA Tab. (Small)			
Vit. A Solution			
ORS Packets			
Disposable Delivery Kit			

8. Is OPV send for testing in last 3 months

Yes 1
No 2

If yes, what was the result ?

Fit 1
Unfit 2

9. MAINTENANCE OF COLD CHAIN EQUIPMENTS

(Ice Lined Refrigerator/deep freezer) (OBSERVE)

(Ask this section only if '1' in any of the items in 2-5 in section 5)

9.1. Whether dial thermometer is available ?

Yes 1
No 2

If Yes,

a. Whether the dial thermometer is functioning ?

Yes 1
No 2

- b. Whether dial thermometer is kept in ILR ?
 Yes 1
 No 2

- 9.2. Is daily temperature chart maintained ? (observe chart)
 Yes 1
 No 2

- 9.3. Number of times the temperature was out of range of 2° - 8° during the last one week

10. PERFORMANCE

Services	Performance in the last quarter
1. Antenatal Care (ANC)	
Total No. of ANC cases registered in the PHC area (at PHC & SCs)	
2. No. of high risk pregnant women	
1. Treated	
2. Referred to FRU	
3. No. of TT doses given	
1. TT1	
2. TT2	
3. Booster	
4. No. of pregnant women with anaemia treated	
5. No. of pregnant women given prophylaxis with IFA tablets	
6. Natal Care	
1. Total no. of deliveries in the PHC area	
2. No. of home deliveries attended by	
a) ANM/LHV	
b) Trained birth attendant	
c) Untrained birth attendant	
3. No. of institutional deliveries	
a) At PHC	
b) At Sub-centres	
7. No. of pregnant women referred to FRU for delivery	
8. Neo-natal Care	
1. No. of new born babies weighed	
2. No. of low birth weight babies	
a) Treated at PHC	
b) Referred to FRU/DH	
9. No. of sick children (age 1 week or less)	
1. Treated at PHC	
2. Referred to FRU/DH	
10. Immunization	
1. No. of infants immunized (0-1 years)	
OPV-0	
BCG	
DPT-1	
DPT-2	
DPT-3	
OPV-1	
OPV-2	
OPV-3	
Measles	
2. No. of children immunized (18 months to 5 years)	
DPT Booster	
OPV booster	
3. No. of children immunized (5 years to 10 years)	
DT	
4. No. Of children immunized (10 years to 16 years)	
TT	

Services	Performance in the last quarter
5. No. Of children immunized (16 years & above)	
TT	
11. Iron and Folic Acid (IFA) tablet	
No. of children (below 5 years) given small IFA tablets	
12. Vit-A	
No. of children administered Vit-A (9 months to 3 years)	
a) Dose-1	
b) Dose-2	
c) Dose 3-5	
13. Acute Respiratory Infection (ARI)	
No. of children under age 5 with pneumonia	
a) Identified by ANM	
b) Treated at PHC	
c) Referred to PHC	
i) Treated with Cotrimoxazole	
ii) Referred	
14. Acute diarrhoeal diseases	
No. of diarrhoeal cases among children under age 5	
a) Identified by ANM	
b) Treated at PHC	
i) Treated with ORS	
ii) Referred	
15. Family Planning	
1. No. of male sterilization	
a) Conventional Vasectomy	
b) No Scalpel Vasectomy	
2. No. female sterilizations	
a) Abdominal	
b) Laproscopic	
3. No. of IUD Insertions	
a) by ANM	
b) by PHC Doctor	
4. No. of Oral Pill users	
5. No. of Condom users	
16. RTI/STI	
No. of cases	
a) Identified by ANM	
b) Treated at PHC	
c) Referred to FRU/CHC	
17. Medical Termination of Pregnancy (MTP)	
No. of MTP	
a) Conducted at PHC	
b) Referred to FRU/DH	

Appendix B

LIST OF DISTRICTS COVERED IN THE RCH - FACILITY SURVEY

(1998-1999 : FIRST PHASE)

Sl.No.	Name of district	State/UT
1	Ananthapur	Andhra Pradesh
2	Cuddappa	Andhra Pradesh
3	Guntur	Andhra Pradesh
4	Hyderabad	Andhra Pradesh
5	Karimnagar	Andhra Pradesh
6	Krishna	Andhra Pradesh
7	Kurnool	Andhra Pradesh
8	Medak	Andhra Pradesh
9	Nalgonda	Andhra Pradesh
10	Nizamabad	Andhra Pradesh
11	Vishakapattanam	Andhra Pradesh
12	Warangal	Andhra Pradesh
13	Barpeta	Assam
14	Cachar	Assam
15	Dhemaji	Assam
16	Dibrugarh	Assam
17	Goalpara	Assam
18	Golaghat	Assam
19	Jorhat	Assam
20	Karbianglong	Assam
21	Morigaon	Assam
22	Nalbari	Assam
23	Sibsagar	Assam
24	Tisukia	Assam
25	Araria	Bihar
26	Bhojpur	Bihar
27	Deoghar	Bihar
28	Giridih	Bihar
29	Gopalganj	Bihar
30	Hazaribag	Bihar
31	Katihar	Bihar
32	Kishanganj	Bihar
33	Madhepura	Bihar
34	Munger	Bihar
35	Nalanda	Bihar
36	Palamu	Bihar
37	Ahmedabad	Gujarat
38	Amreli	Gujarat

Appendix B (continued)

Sl.No.	Name of district	State/UT
39	Bharuch	Gujarat
40	Gandhinagar	Gujarat
41	Junagadh	Gujarat
42	Kheda	Gujarat
43	Panchmahals	Gujarat
44	Rajkot	Gujarat
45	Sabarkantha	Gujarat
46	Surat	Gujarat
47	Surendranagar	Gujarat
48	Valsad	Gujarat
49	Ambala	Haryana
50	Bhiwani	Haryana
51	Gurgaon	Haryana
52	Hissar	Haryana
53	Kaithal	Haryana
54	Kurukshetra	Haryana
55	Mohindargarh	Haryana
56	Paniput	Haryana
57	Rewari	Haryana
58	Rohtak	Haryana
59	Sonepat	Haryana
60	Yamunanagar	Haryana
61	Bangalore	Karnataka
62	Belgaum	Karnataka
63	Bidar	Karnataka
64	Chikmagalur	Karnataka
65	Dakshin Kannada	Karnataka
66	Gulbarga	Karnataka
67	Kodagu	Karnataka
68	Kolar	Karnataka
69	Mandya	Karnataka
70	Mysore	Karnataka
71	Raichur	Karnataka
72	Tumkur	Karnataka
73	Allappuzha	Kerala
74	Earnakulam	Kerala
75	Idukki	Kerala
76	Kannur	Kerala
77	Kasargod	Kerala
78	Kollam	Kerala
79	Kottayam	Kerala

Appendix B (continued)

Sl.No.	Name of district	State/UT
80	Kozhikode	Kerala
81	Malappuram	Kerala
82	Thiruvananthapuram	Kerala
83	Trissur	Kerala
84	Waynad	Kerala
85	Balaghat	Madhya Pradesh
86	Betul	Madhya Pradesh
87	Bhopal	Madhya Pradesh
88	Chhatrapur	Madhya Pradesh
89	Damoh	Madhya Pradesh
90	Durg	Madhya Pradesh
91	Hoshangabad	Madhya Pradesh
92	Jabalpur	Madhya Pradesh
93	Mandla	Madhya Pradesh
94	Sagar	Madhya Pradesh
95	Shahdol	Madhya Pradesh
96	Surguja	Madhya Pradesh
97	Akola	Maharashtra
98	Aurangabad	Maharashtra
99	Beed	Maharashtra
100	Chandrapur	Maharashtra
101	Gadchiroli	Maharashtra
102	Jalgaon	Maharashtra
103	Kolhapur	Maharashtra
104	Nagpur	Maharashtra
105	Nanded	Maharashtra
106	Parbhani	Maharashtra
107	Raigarh	Maharashtra
108	Sangli	Maharashtra
109	Washim	Maharashtra
110	Bargarh	Orissa
111	Boudha	Orissa
112	Deogarh	Orissa
113	Ganjam	Orissa
114	Jharsuguda	Orissa
115	Kalahandi	Orissa
116	Mayurbhanj	Orissa
117	Nabarangpur	Orissa
118	Nuapada	Orissa
119	Amritsar	Punjab
120	Bhatinda	Punjab

Appendix B (continued)

Sl.No.	Name of district	State/UT
121	Farikot	Punjab
122	Ferozpur	Punjab
123	Gurdaspur	Punjab
124	Hoshiarpur	Punjab
125	Jalandhar	Punjab
126	Kaporthala	Punjab
127	Ludhiana	Punjab
128	Patiala	Punjab
129	Rupnagar	Punjab
130	Sangrur	Punjab
131	Ajmir	Rajasthan
132	Banswara	Rajasthan
133	Barmer	Rajasthan
134	Bharatpur	Rajasthan
135	Bikanir	Rajasthan
136	Dholpur	Rajasthan
137	Ganganagar	Rajasthan
138	Jaisalmar	Rajasthan
139	Jodhpur	Rajasthan
140	Sawai madhopur	Rajasthan
141	Sirohi	Rajasthan
142	Udaipur	Rajasthan
143	Caddalore (old Chidamabaram)	Tamil Nadu
144	Coimbatore	Tamil Nadu
145	Dindigul Anna	Tamil Nadu
146	Erode (old Periyar)	Tamil Nadu
147	Kancheepuram(Part of old Chengalpattu)	Tamil Nadu
148	Kanyakumari	Tamil Nadu
149	Nilagiris	Tamil Nadu
150	Ramanathapuram	Tamil Nadu
151	Thiruvallur (Part of Chengalpattu)	Tamil Nadu
152	Tiruvannamalai	Tamil Nadu
153	Triruchirapalli	Tamil Nadu
154	Vellur (old North Arcot Ambedkar)	Tamil Nadu
155	Villupuram (old South Arcot)	Tamil Nadu
156	Almora	Uttar Pradesh
157	Baharaich	Uttar Pradesh
158	Bareilly	Uttar Pradesh
159	Bulandshahar	Uttar Pradesh
160	Chamoli	Uttar Pradesh

Appendix B (continued)

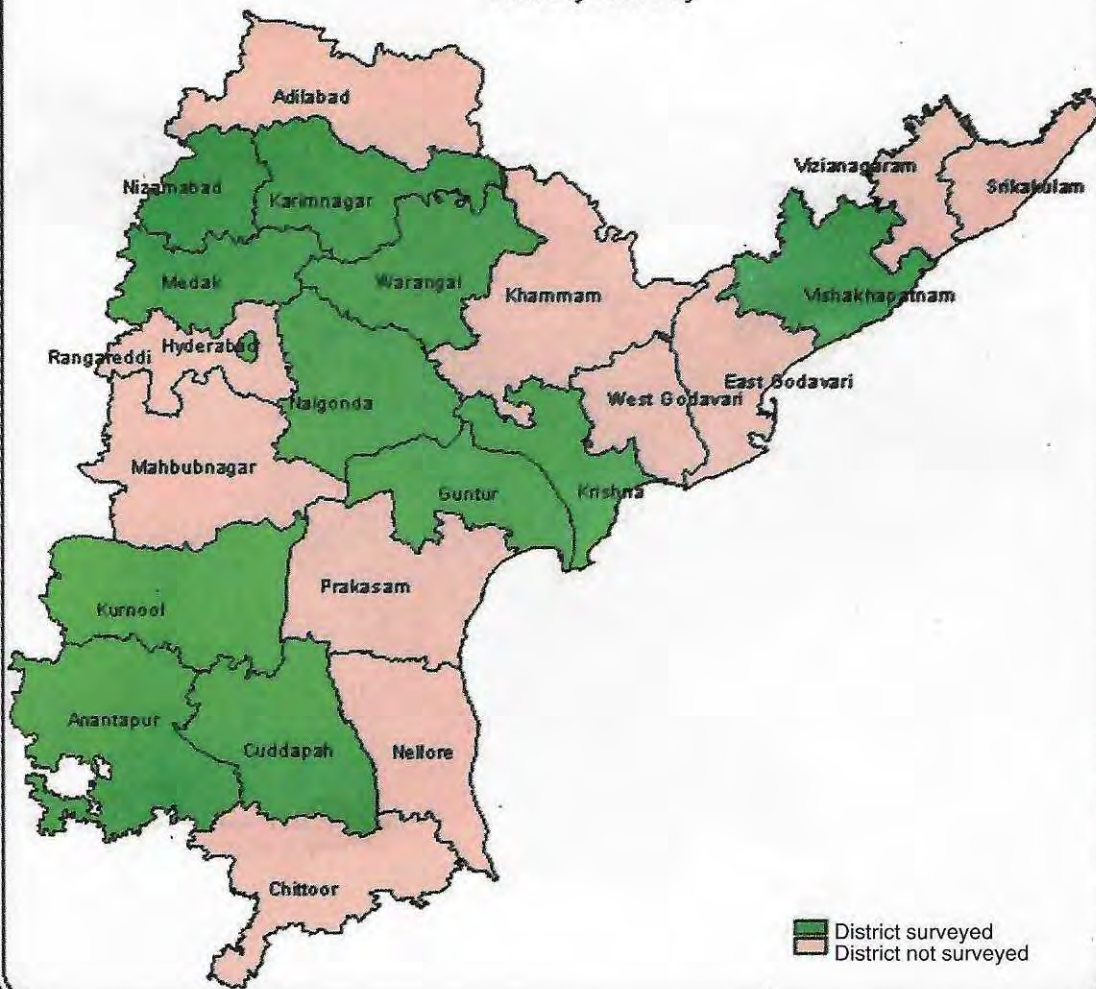
Sl.No.	Name of district	State/UT
161	Dehradun	Uttar Pradesh
162	Garwal	Uttar Pradesh
163	Hardoi	Uttar Pradesh
164	Kanpur Nagar	Uttar Pradesh
165	Mathura	Uttar Pradesh
166	Nainital	Uttar Pradesh
167	Unnao	Uttar Pradesh
168	Nadia	West Bengal
169	Bankura	West Bengal
170	Birbhum	West Bengal
171	Burdwan	West Bengal
172	Calcutta	West Bengal
173	Darjiling	West Bengal
174	Haora	West Bengal
175	Hugli	West Bengal
176	Koch Bihar	West Bengal
177	Mednapur	West Bengal
178	Purulia	West Bengal
179	West Dinajpur	West Bengal
180	Andaman	And. & Nicobar
181	Nicobar	And. & Nicobar
182	Changlang	Arun. Pradesh
183	East siang	Arun. Pradesh
184	Lower Sabansiri	Arun. Pradesh
185	Chandigarh	Chandigarh
186	Dadra & Nagar Haveli	Dadra & Nagar Haveli
187	Daman	Daman & Diu
188	Diu	Daman & Diu
189	Delhi	Delhi
190	North Goa	Goa
191	South Goa	Goa
192	Bilaspur	Himachal Pradesh
193	Hamirpur	Himachal Pradesh
194	Una	Himachal Pradesh
195	Jammu	Jammu & Kashmir
196	Kargil	Jammu & Kashmir
197	Lakshadweep	Lakshadweep
198	Bishnuppur	Manipur
199	Chandel	Manipur
200	Imphal	Manipur

Appendix B (continued)

Sl.No.	Name of district	State/UT
201	Thoubal	Manipur
202	East garo Hills	Meghalaya
203	East Ghasi Hills	Meghalaya
204	Jainta Hills	Meghalaya
205	West Ghasi Hills	Meghalaya
206	Aizawl	Mizoram
207	Chhimituipui	Mizoram
208	Lunglei	Mizoram
209	Kohima	Nagaland
210	Mokokochung	Nagaland
211	Karikal	Pondicherry
212	Mahe	Pondicherry
213	Pondicherry	Pondicherry
214	Yanam	Pondicherry
215	East Sikkim	Sikkim
216	North Sikkim	Sikkim
217	South Sikkim	Sikkim
218	West Sikkim	Sikkim
219	North Tripura	Tripura
220	South Tripura	Tripura
221	West Tripura	Tripura

ANDHRA PRADESH



Facility Survey



ASSAM

Facility Survey



 District surveyed
 District not surveyed

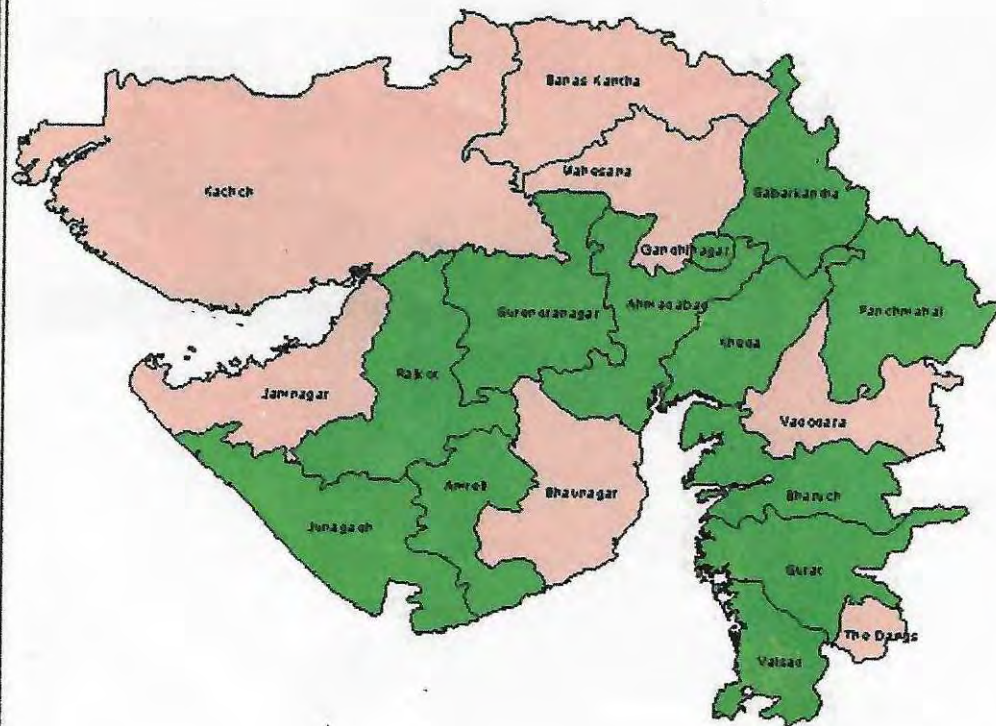
BIHAR

Facility Survey



GUJARAT

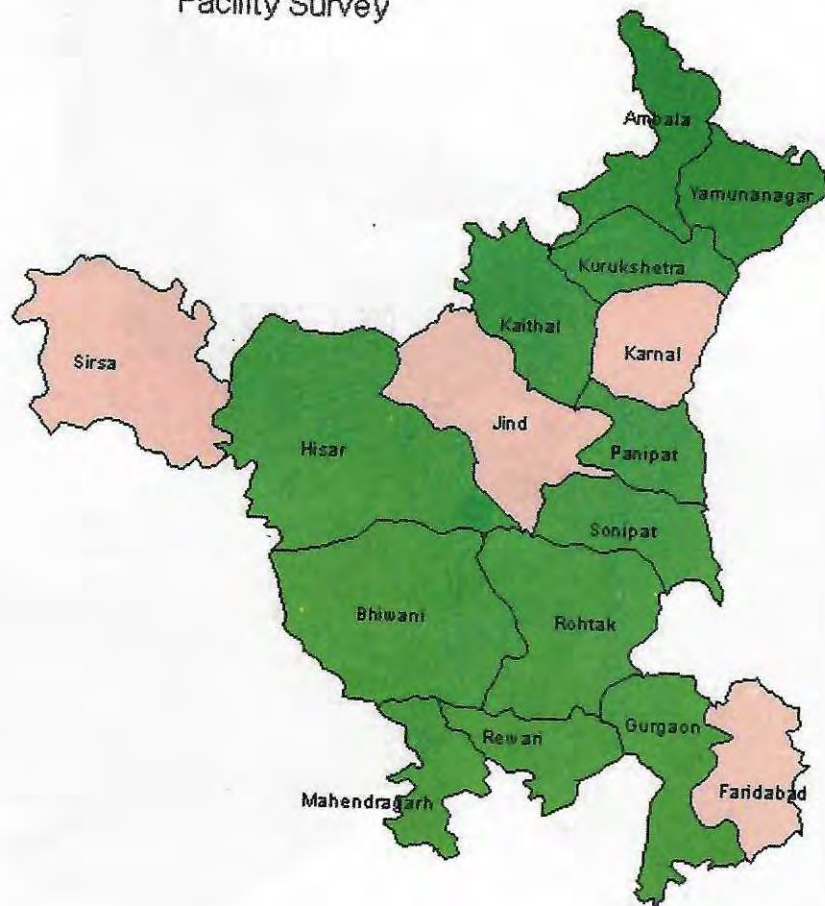
Facility Survey



■ District surveyed
■ District not surveyed

HARYANA

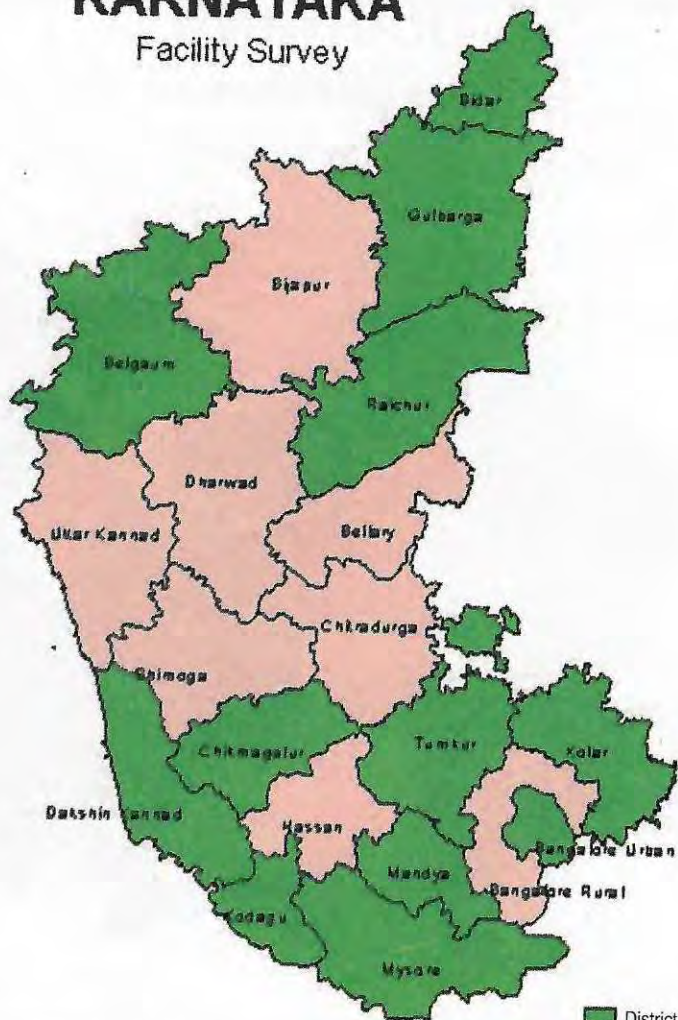
Facility Survey



■ District surveyed
■ District not surveyed

KARNATAKA

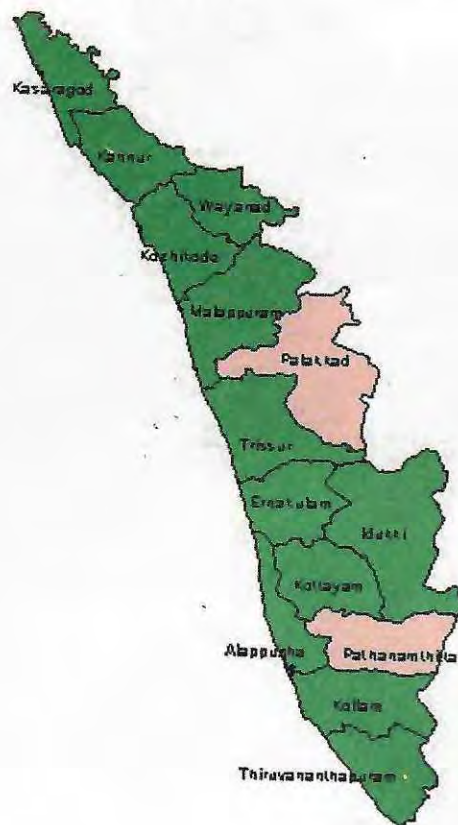
Facility Survey



■ District surveyed
■ District not surveyed

KERALA

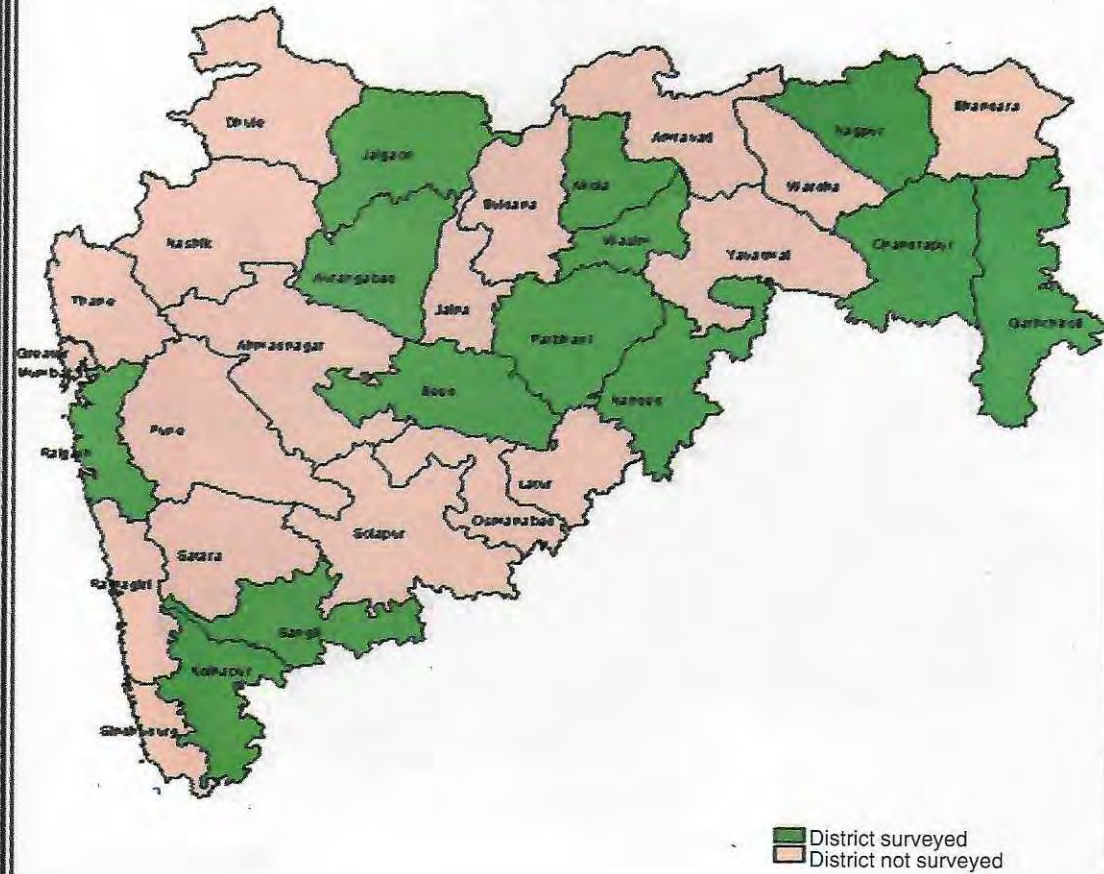
Facility Survey



■ District surveyed
■ District not surveyed

MAHARASHTRA

Facility Survey



PUNJAB

Facility Survey



■ District surveyed
■ District not surveyed

RAJASTHAN

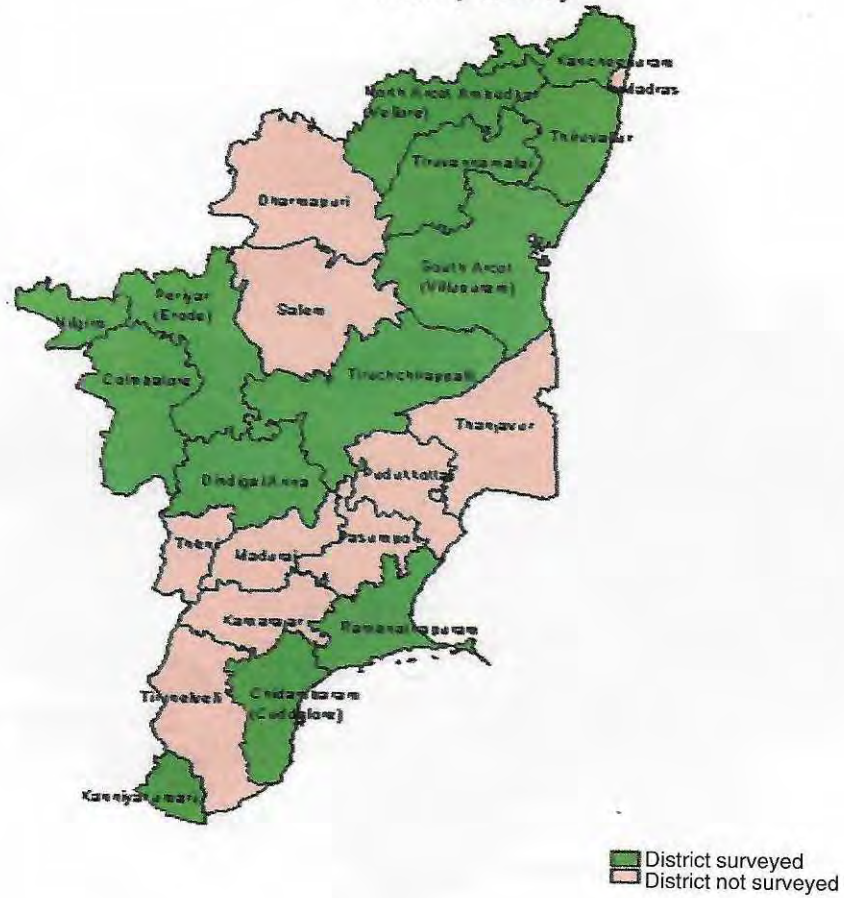
Facility Survey



■ District surveyed
■ District not surveyed

TAMIL NADU

Facility Survey



UTTAR PRADESH

Facility Survey



WEST BENGAL

Facility Survey



REPRODUCTIVE AND CHILD HEALTH PROJECT TEAM

Coordinators

F.Ram
D.Radha Devi
Sulabha Parasuraman

Research officers

Currently involved

Bipul Hazarika
Kirti Mishra
Krishnaiah, S.
Manoj Alagarajan
Pramod Kumar Gupta
Rajiv Ranjan
Saket Kumar
Suhas J. Narkhede

Previously involved*

Ajay Kumar Mishra
Anil Kumar, I.K.
Annamma K.I.
Anup Murari Rajan
Dipankar Bhattacharya
Faizi, A.A
Janardan Warvadekar
Kailash Chandra Das
Latashori K.
Manishankar Kumar
Mathuranayagam S.
Nandakumar Reddy, Y.
Rajna, P.N.
Ranjan Kumar Panda
Sanjay Kumar Mohanty
Satyajeet Nanda
Shrabanti Sen
Vishal Dev Shastri
Vivek K. Sharma

Administrative Staff

Sunil Adavade	(Sr. Accountant)
Seema V. Zagade	(Office Assistant)
Deepa C. R.	(Data Entry Operator)
Chandra Singh Thapa	(Peon)
Ravindra P. Gawade	(Peon)

* Involved some time or the other during the project period