



# Final Report-Volume II

Study on Health Infrastructure in NCR

December 2015

National Capital Region Planning Board



# Final Report-Volume II

Study on Health Infrastructure in NCR

December 2015

National Capital Region Planning Board

Core-IV-B, 1st Floor, India Habitat Centre, Lodhi Road, New Delhi – 110 003

# Issue and Revision Record

Revision	Date	Originator	Checker	Approver	Description
00	02.06.2011	Moumita Biswas Nabaneeta Rudra Ruchi Bhargava Sanghamitra Sinharay	Anisur Rahman	Shoma Majumdar	Draft Report
01	04.06.2011	Nabaneeta Rudra Sanghamitra Sinharay	Anisur Rahman	Shoma Majumdar	Draft Final Report
02	28.8.2011	Nabaneeta Rudra Sanghamitra Sinharay	Anisur Rahman	Shoma Majumdar	Draft Final Report ( Revision 1)- after first CRC meeting
03	11.6.2012	Ruchi Bhargava	Nabaneeta Rudra	Shoma Majumdar	Draft Final Report ( Revision 2)- after second CRC meeting
04	10.07. 2015	Nabaneeta Rudra	Nabaneeta Rudra	Shoma Majumdar	Draft Final Report ( Revision 3)- after the meeting with MS on 15 <sup>th</sup> April 2015
01	25.08.2015	Nabaneeta Rudra	Nabaneeta Rudra	Shoma Majumdar	Final Report
02	15.09.2015	Nabaneeta Rudra	Nabaneeta Rudra	Shoma Majumdar	Final Report-V2
03	09/10/2015	Nabaneeta Rudra	Nabaneeta Rudra	Shoma Majumdar	Final Report – V2(R)
03	20/12/2015	Nabaneeta Rudra	Nabaneeta Rudra	Shoma Majumdar	Final Report – V4

This document is issued for the party which commissioned it and for specific purposes connected with the above-captioned project only. It should not be relied upon by any other party or used for any other purpose.

We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties

This document contains confidential information and proprietary intellectual property. It should not be shown to other parties without consent from us and from the party which commissioned it.

# Content

<b>Chapter</b>	<b>Title</b>	<b>Page</b>
	<b>Appendices</b>	<b>7</b>
Appendix A.	Hospital Fact sheets _____	8
A.1.	Fact sheets of Referral Hospitals contacted _____	8
Appendix B.	Terms of Reference V/S Scope of Work Addressed _____	27
Appendix C.	Performa of Collection of Information & Questionnaires _____	28
C.1.	Checklist for Mapping _____	28
C.2.	Checklist of Chief District Medical & Health Officer /Chief Medical Officer _____	29
C.3.	Tool for Hospital Administration of Tertiary & Super Speciality Hospitals _____	30
C.4.	Tool for Doctors Referral Hospitals _____	31
C.5.	In Patient Schedule _____	32
Appendix D.	GIS Maps _____	33
Appendix E.	Contact details of Medical Officials Contacted _____	34

# Appendices

Appendix A. Hospital Fact sheets _____	8
Appendix B. Terms of Reference V/S Scope of Work Addressed _____	27
Appendix C. Performa of Collection of Information & Questionnaires _____	28
Appendix D. GIS Maps _____	33
Appendix E. Contact details of Medical Officials Contacted _____	34

## Appendix A. Hospital Fact sheets

### A.1. Fact sheets of Referral Hospitals contacted

#### A.1.1. Kailash Hospital and Heart Institute

Name of the Facility	Kailash Hospital and Heart Institute , H -33, Sector -27 NOIDA-201301
Type of facility	Private- Super-speciality
Contact Details	<ul style="list-style-type: none"> <li>▪ Dr Mahesh Sharma</li> <li>▪ Chairman &amp; Managing Director</li> <li>▪ Dr A K Choturvedi</li> <li>▪ Group Medical Director</li> <li>▪ Dr Vijay Ganju, Medical Superintendent - Mob 09871295311</li> </ul>
Brief about the hospital	<p>This 325 bed Super-speciality multi services hospital, accredited by NABH is the largest private hospital in Uttar Pradesh. The hospital caters to patients from all over UP, Delhi and other NCR towns.</p> <p>The salient features of this hospital are the specialized OPD with over 160 specialists and super specialists in various fields aided by a team of over 1200 staff members. The hospital has round the clock availability of a host of facilities such as Ambulance Services, Mobile CCU, Casualty and Emergency Services, Lab and Diagnostic Services, Chemist Shop and Blood Bank ensuring smooth and efficient patient care.</p> <p>The Hospital is on the panel of CGHS, ECHS, and other government departments; large public sector corporations such as BHEL, NTPC, BSNL, NHPC, etc. and a number of organizations in the private sector for providing health care to their employees</p> <p>The hospital is accredited from NABH and ISO 9001- 2008 certified</p>
Number of beds available (Total in the Facility)	325
Room Charges per bed per day	INR 255 to INR 8685 depending upon the category of room
Availability of Doctors/ Medical Category staff at the Facility	200
Availability of Para Medical staff at the Facility	500

Availability of Diagnostics at the Facility	<ul style="list-style-type: none"> <li>▪ Ultrafast M.R.I. 1.5 Tesla from Phillips, Netherlands</li> <li>▪ Whole Body Multi slice Spiral CT Scanner from Siemens, Germany</li> <li>▪ Computed Radiography System</li> <li>▪ Color Doppler,</li> <li>▪ Ultra Sound</li> <li>▪ Fully Auto Lab Analyser</li> <li>▪ Dialysis</li> <li>▪ EEG, PFT, TMT, Uroflowmetry, Mammography, etc.</li> <li>▪ Bone densitometry (BMD)</li> </ul>												
Area of Super Specialisation for which patients are referred IN to the facility	<p>Cardiothoracic &amp; Vascular Surgery (CTVS)</p> <p>Neruro</p> <p>Burn Unit</p>												
Percentage of patients referred IN from other region	<table border="1"> <caption>Percentage of patients referred IN from other region</caption> <thead> <tr> <th>Region</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Delhi</td> <td>5%</td> </tr> <tr> <td>NCR (UP)</td> <td>15%</td> </tr> <tr> <td>NCR (Haryana)</td> <td>15%</td> </tr> <tr> <td>NCR (Rajasthan)</td> <td>15%</td> </tr> <tr> <td>Other States</td> <td>50%</td> </tr> </tbody> </table>	Region	Percentage	Delhi	5%	NCR (UP)	15%	NCR (Haryana)	15%	NCR (Rajasthan)	15%	Other States	50%
Region	Percentage												
Delhi	5%												
NCR (UP)	15%												
NCR (Haryana)	15%												
NCR (Rajasthan)	15%												
Other States	50%												
Major ailments for which patients are referred IN to the facility	Cardio, Neuro, Gynaecology												
The major ailments for which patients are referred OUT from facility to other facilities	No												
Comments	It was reported by the hospital administration that they are facing a lot of problem due to unavailability of trained paramedical staffs and Doctors												

Source: Findings of this study

**A.1.2. Narinder Mohan Hospital**

Name of the Facility	Narinder Mohan Hospital, Mohan Nagar, Ghaziabad
Type of facility	Private- Super-speciality
Contact Details	Brig (Rerd.) Dr KBNS Dod Medical Superintendent Mob 09868994095
Brief about the hospital	The hospital is named as Narinder Mohan Hospital which is a charitable institution. The founder of this hospital is Late Padamshri Narinder Nath Mohan, who was the then Managing Director of Mohan Meakins Limited. He started the construction of this hospital in the year 1969. The hospital started functioning in the year 1974. The land area of the hospital is about 17 acres, which consists of hospital premises and the residential campus also. The total construction area of our hospital building, apart from residential area, is about 200 thousand Sq. Ft. which consists of all the departments i.e. OPD's, Indoor and Investigations etc. within the same premises. The hospital is located in Ghaziabad, at the eastern border of Delhi and is hardly 18 Kms from Delhi (i.e. Connaught Place). It is situated on the main G.T. Road going towards Ghaziabad.
Number of beds available (Total in the Facility)	300
Room Charges per bed per day	INR 1800 to INR 4620 depending upon the category of room. These charges include food, nursing and RMO visit.
Availability of Doctors/ Medical Category staff at the Facility	40
Availability of Para Medical staff at the Facility	303
Availability of Diagnostics at the Facility	<ul style="list-style-type: none"> <li>▪ Hematology</li> <li>▪ Biochemistry, Immunology, Microbiology.</li> <li>▪ Histopathology &amp; Cytology</li> <li>▪ AngioGraphy(Coronary, Carotid, Peripheral)</li> <li>▪ Angioplasty (Coronary, Carotid, peripheral)</li> <li>▪ Balloon Valvuloplasty</li> <li>▪ Electrophysiology</li> <li>▪ Pacemaker Implantation: Temporary Pacing, Permanent Pacemaker</li> <li>▪ ECG</li> <li>▪ TMT</li> <li>▪ Echo Colour Doppler Study of Heart, TEE</li> <li>▪ Stress ECHO</li> <li>▪ Holter Monitoring</li> <li>▪ Pulmonary Function Test</li> <li>▪ Doppler Study of Carotid Vessels</li> <li>▪ Peripheral Vascular Doppler</li> </ul>
Area of Super Specialisation for which patients are referred IN to the facility	<ul style="list-style-type: none"> <li>▪ Burns &amp; Plastic Surgery</li> <li>▪ Full fledged CARDIAC CENTRE</li> <li>▪ Cardiac Surgeries</li> <li>▪ Diabetes &amp; Endocrinology</li> </ul>

## Study on Health Infrastructure in NCR

	<ul style="list-style-type: none"> <li>▪ Gastroenterology Medicine</li> <li>▪ Gastroenterology Surgical</li> <li>▪ Geriatric Medicine</li> <li>▪ Nephrology</li> <li>▪ Neurology</li> <li>▪ Neurosurgery</li> <li>▪ Oncology Medicine</li> <li>▪ Paediatric Surgery</li> <li>▪ Urology ( with Lithotripsy)</li> </ul>										
Percentage of patients referred IN from other region	<table border="1"> <caption>Percentage of patients referred IN from other region</caption> <thead> <tr> <th>Region</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Delhi</td> <td>15%</td> </tr> <tr> <td>NCR (UP)</td> <td>60%</td> </tr> <tr> <td>NCR (Haryana)</td> <td>10%</td> </tr> <tr> <td>NCR (Rajasthan)</td> <td>15%</td> </tr> </tbody> </table>	Region	Percentage	Delhi	15%	NCR (UP)	60%	NCR (Haryana)	10%	NCR (Rajasthan)	15%
Region	Percentage										
Delhi	15%										
NCR (UP)	60%										
NCR (Haryana)	10%										
NCR (Rajasthan)	15%										
Major ailments for which patients are referred IN to the facility	<ul style="list-style-type: none"> <li>▪ Cardiology</li> <li>▪ Dermatology</li> <li>▪ Ear-Nose-Throat</li> <li>▪ Eye</li> <li>▪ Internal Medicine</li> <li>▪ Obstetrics and Gynaecology</li> <li>▪ Orthopaedics</li> <li>▪ Paediatrics</li> </ul>										
The major ailments for which patients are referred OUT from facility to other facilities	AIIMS, GTB, Ram Manohar Lohia - poor patients only										
Comments	This hospital is facing a major problem of lack of adequate manpower and because of this they are not able to run some specialisations.										

Source: Findings of this study

**A.1.3. Fortis Escorts Hospital**

Name of the Facility	Fortis Escorts Hospital Neelam Bata Road , Faridabad
Type of facility	Private -Multi Specialty hospital
Contact Details	Dr Pinak Moudgil Medical Superintendent Mob 09818590011
Brief about the hospital	Fortis Escorts Hospital Faridabad is a 210 bedded, Multi Specialty hospital providing primary to tertiary medical care in all departments of medicine. It has a modern and superbly functional ambience along with technically superior & high quality competent Medicare. The services of this leading health care facility are sought by more than 100,000 patients every year. Fortis Escorts Hospital is also the first in the country to hold stringent ISO 9001-2000 status. It is the first hospital in Haryana to run comprehensive cardiac care program. It is also the first hospital in Haryana to run DNB Program of post graduate medical education in various specialisations.  Moreover this hospital is also approved for institutions like ECHS, CGHS, Public sector companies and Insurance companies along with various government and private corporate.
Number of beds available (Total in the Facility)	210
Room Charges per bed per day	INR 1500 to INR 6500 depending upon the category of room.
Availability of Doctors/ Medical Category staff at the Facility	91
Availability of Para Medical staff at the Facility	345
Availability of services at the Facility	<ul style="list-style-type: none"> <li>▪ Ultra Modern, Zero infection Operation Theatre dedicated for Cardiac Surgeries Post Operative Cardiac recovery room (with 5 Isolation beds, nurse : patient ratio of 1:1 , along with round the clock availability of cardiologist)</li> <li>▪ Well equipped cardiac care unit with 16 beds dedicated for cardiac patients.</li> <li>▪ Dedicated cardiac ward with 8 beds.</li> <li>▪ State of the art instrumentation including Image Intensifier ,</li> <li>▪ Most Advanced Super Speciality Dental Clinic,</li> <li>▪ Advanced Gynaecological Laparoscopy including fertility enhancing surgery Managing Infertility, Adolscnt &amp; Menopause Clinics</li> </ul>
Area of Super Specialisation for which patients are referred IN to the facility	<ul style="list-style-type: none"> <li>▪ Heart and Vascular Surgery</li> <li>▪ Nephrology and Urology Gastroenterology</li> <li>▪ Orthopaedics &amp; Joint Replacement</li> <li>▪ Paediatric Cosmetic &amp; Reconstructive Surgery</li> <li>▪ Ophthalmology</li> <li>▪ Neurology &amp; Neurosurgery</li> </ul>

## Study on Health Infrastructure in NCR

Percentage of patients referred IN from other region	<p>A 3D pie chart illustrating the distribution of patient referrals. The largest segment, colored blue, represents the Faridabad District at 85%. A smaller red segment represents the NCR region at 10%, and a yellow segment represents areas outside the NCR at 5%. A legend at the bottom identifies the colors: blue for Faridabad District, red for NCR, and yellow for Out side NCR.</p> <table border="1"> <thead> <tr> <th>Region</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Faridabad District</td> <td>85%</td> </tr> <tr> <td>NCR</td> <td>10%</td> </tr> <tr> <td>Out side NCR</td> <td>5%</td> </tr> </tbody> </table>	Region	Percentage	Faridabad District	85%	NCR	10%	Out side NCR	5%
Region	Percentage								
Faridabad District	85%								
NCR	10%								
Out side NCR	5%								
Major ailments for which patients are referred IN to the facility	<ul style="list-style-type: none"> <li>▪ Few from Iraq and African country</li> <li>▪ Heart</li> <li>▪ Gynec</li> <li>▪ Paediatric</li> <li>▪ Obstetrics and Gynaecology</li> <li>▪ Dental</li> <li>▪ Neuro</li> </ul>								
The major ailments for which patients are referred OUT from facility to other facilities	<ul style="list-style-type: none"> <li>▪ Safdarjung hospital burn case (more then 30% burn)</li> <li>▪ B K Hospital ,District Hospital for TB</li> <li>▪ Forties NOIDA for onco -surgery cases</li> </ul>								
Comments	The hospital has faced shortage of space and is coming up with extension and upgradation in the facility available.								

Source: Findings of this study

**A.1.4. Dharamshila Hospital**

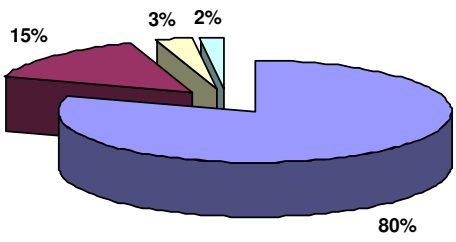
Name of the Facility	Dharamshila Hospital, Dharamshila Marg, Vasundhara, Delhi
Type of facility	Private - Specialty hospital
Contact Details	Dr Raja Dutta Medical Superintendent Mob- 09560450172
Brief about the hospital	Dharamshila hospital is the first and only cancer hospital of India accredited by NABH not only for cancer but all other allied specialities. Dharamshila Labs are also accredited by NABL. This hospital provides preventive, diagnostic, therapeutic, rehabilitative, palliative and support services under one roof. Responding to the healthcare needs of the community all other allied services like Neurosurgery, Cosmetic and Plastic Surgery, Dental and Faciomaxillary Surgery, Orthopaedics, Gastroenterology, Nephrology and Urology etc. have been added over a period of time. Dharamshila hospital was first in India to start three years full time doctorate course - DNB Medical Oncology in 2002, DNB Surgical Oncology in 2003 and Post Basic Diploma in Oncology Nursing in 2010. First private sector Blood Bank of North India with cold room storage facilities for 8000 fresh frozen plasma and 2000 blood units.
Number of beds available (Total in the Facility)	299
Room Charges per bed per day	Not provided
Availability of Doctors/ Medical Category staff at the Facility	118
Availability of Para Medical staff at the Facility	396
Availability of services at the Facility	<ul style="list-style-type: none"> <li>▪ Radiation Oncology at Dharamshila Hospital and Research Centre is one of the busiest departments servicing 50-60% of cancer patients. It provides facilities for IGRT, IMRT, SRS, SRT and SBRT using volumetric Arc Therapy (VMAT), Conventional 3D Radiation. The facility provides</li> <li>▪ Therapy and Brachytherapy.</li> <li>▪ IMRT (Intensity Modulated Radiation Therapy)</li> <li>▪ IGRT (Image Guided Radiation Therapy)</li> <li>▪ Stereotactic Radio surgery (SRS)</li> <li>▪ Stereotactic Body Radiation Therapy (SBRT)</li> <li>▪ Brachytherapy</li> </ul>
Area of Super Specialisation for which patients are referred IN to the facility	<ul style="list-style-type: none"> <li>▪ Cancer</li> </ul>

## Study on Health Infrastructure in NCR

Percentage of patients referred IN from other region	<p>A 3D pie chart illustrating the distribution of patients referred from different regions. The chart is divided into four segments: a large blue segment representing Delhi at 40%, a large maroon segment representing NCR (UP) at 45%, a smaller yellow segment representing NCR (Haryana) at 10%, and a very small cyan segment representing Other states at 5%. A legend at the bottom identifies the colors: blue for Delhi, maroon for NCR (UP), yellow for NCR (Haryana), and cyan for Other states.</p> <table border="1"> <thead> <tr> <th>Region</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Delhi</td> <td>40%</td> </tr> <tr> <td>NCR (UP)</td> <td>45%</td> </tr> <tr> <td>NCR (Haryana)</td> <td>10%</td> </tr> <tr> <td>Other states</td> <td>5%</td> </tr> </tbody> </table>	Region	Percentage	Delhi	40%	NCR (UP)	45%	NCR (Haryana)	10%	Other states	5%
Region	Percentage										
Delhi	40%										
NCR (UP)	45%										
NCR (Haryana)	10%										
Other states	5%										
Major ailments for which patients are referred IN to the facility	Cancer										
The major ailments for which patients are referred OUT from facility to other facilities	No Referral										
Comments	Lack of trained manpower is a major problem this hospital is facing. They are also facing problem of staff retention as staff after training leave the hospital for better salary.										

Source: Findings of this study

**A.1.5. St.Stephen's Hospital**

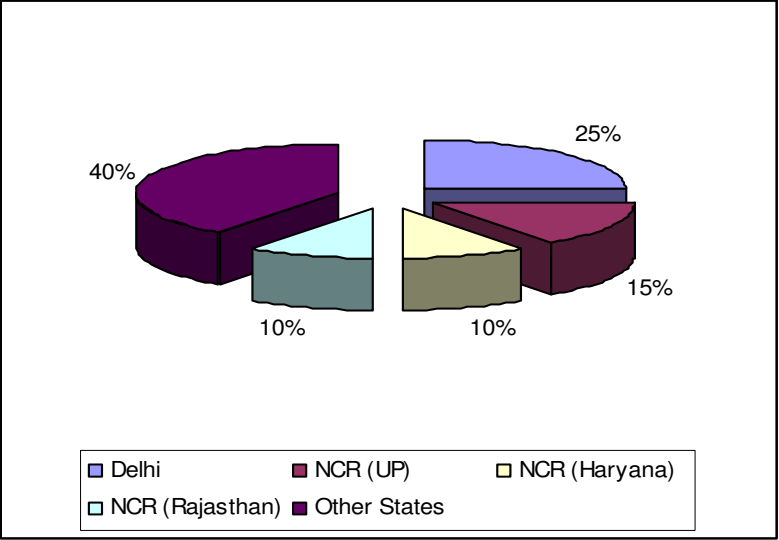
Name of the Facility	St.Stephens Hospital, Delhi										
Type of facility	Super speciality										
Contact Details	Dr. Grace Cheriyan, Deputy Director Mob. 09868399103										
Brief about the hospital	<p>St Stephen's Hospital is the oldest and one of the largest private Hospitals run in charitable mode in Delhi. Established in 1885, it has a capacity of about 600 beds, and is a super speciality tertiary care Hospital offering care in all Specialities and most super specialities.</p> <p>Apart from treating patients, the Hospital runs training programmes in various Speciality and Super speciality courses affiliated to the National Board of Examinations and recognized by the Medical Council of India</p>										
Number of beds available (Total in the Facility)	724										
Room Charges per bed per day	Not Provided										
Availability of Doctors/ Medical Category staff at the Facility	284										
Availability of Para Medical staff at the Facility	 <table border="1"> <thead> <tr> <th>Region</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Delhi</td> <td>80%</td> </tr> <tr> <td>NCR (UP)</td> <td>15%</td> </tr> <tr> <td>NCR (Haryana)</td> <td>3%</td> </tr> <tr> <td>Other states</td> <td>2%</td> </tr> </tbody> </table>	Region	Percentage	Delhi	80%	NCR (UP)	15%	NCR (Haryana)	3%	Other states	2%
Region	Percentage										
Delhi	80%										
NCR (UP)	15%										
NCR (Haryana)	3%										
Other states	2%										
Availability of services at the Facility	<ul style="list-style-type: none"> <li>▪ Gynaecology</li> <li>▪ Neonatology</li> <li>▪ Paediatrics</li> <li>▪ Cardiology</li> <li>▪ Cardiac Surgery</li> <li>▪ Neurology</li> <li>▪ Orthopaedics</li> </ul>										
Area of Super Specialisation for which patients are referred IN to the facility	<ul style="list-style-type: none"> <li>▪ Paediatric surgery</li> <li>▪ Orthopaedic disorders</li> </ul>										
Percentage of patients referred IN from other region											
Major ailments for which patients are referred IN to the facility	<ul style="list-style-type: none"> <li>▪ Paediatric surgery</li> <li>▪ Orthopaedic disorders</li> <li>▪ Cardiac Surgery</li> <li>▪ Paediatric</li> </ul>										
The major ailments for which patients are referred OUT from	No referral										

facility to other facilities	
Comment	Lack of trained manpower is a major problem this hospital is facing. They are also facing problem in staff retention as this is a charitable hospital and their salary structure is lower than even Government hospitals.

Source: Findings of this study

**A.1.6. Govind Ballabh Pant Hospital**

Name of the Facility	Govind Ballabh Pant Hospital, Delhi
Type of facility	Government
Contact Details	Dr. H.P. Singh Addl. Medical Superintendent Ph. No. 9718599004
Brief about the hospital	<p>The Foundation stone of Pt. Govind Ballabh Pant Hospital was laid in October 1961 and inaugurated by the then Prime Minister late Pundit Jawaharlal Nehru on 30th April 1964. Today it is a nationally recognized tertiary care institution for Heart, Brain and Gastrointestinal disorders. It offers specialized medical and surgical treatment to about 3 lakh patients in the OPD and almost 15,000 patients in General and Private wards every year.</p> <p>The institution offers post-doctoral D.M. degrees in Cardiology, Neurology and Gastroenterology and M.Ch. degrees in Cardio thoracic Surgery, Neuro Surgery and Gastrointestinal Surgery. The students are also admitted in M.D. courses in the fields of Microbiology, Pathology, Psychiatry and Radio-Diagnosis - in association with Maulana Azad Medical College - a sister institution. In addition, many departments are recognized for PhD. courses and active research work is going on under their supervision. New proposal for expansion of 99 beds is under process.</p>
Number of beds available (Total in the Facility)	629
Room Charges per bed per day	A/C private room is chargeable (@ INR 600 + INR 50 for food. Other all beds are free
Availability of Doctors/ Medical Category staff at the Facility	At present out of 80 sanctioned posts, 57 are working as faculty members, 17 General Duty Medical Officers (G.D.M.O), 1 Specialist., 131 Senior Residents (S.R.) and 90 Junior Residents are also working there.
Availability of Para Medical staff at the Facility	371 technical staff, 1042 Nursing Staff
Availability of services at the Facility	<ul style="list-style-type: none"> <li>▪ Neuropathology,</li> <li>▪ Cardiovascular pathology,</li> <li>▪ Gastrointestinal pathology,</li> <li>▪ Cytology,</li> <li>▪ Clinical pathology and hematology.</li> </ul>
Area of Super Specialisation for which patients are referred IN to the facility	<ul style="list-style-type: none"> <li>▪ Cardiology</li> </ul>

Percentage of patients referred IN from other region	 <p>■ Few from Bangladesh and Pakistan</p>
Major ailments for which patients are referred IN to the facility	Cardiology
The major ailments for which patients are referred OUT from facility to other facilities	Guru Nanak Eye hospital for Eye
Comment	Problem of retention of staff due to lower salary levels.

Source: Findings of this study

**A.1.7. Guru Teg Bahadur Hospital**

Name of the Facility	Guru Teg Bahadur Hospital, Dilshad Garden, Delhi
Type of facility	Government – Tertiary care
Contact Details	Dr. P. K. Malik Deputy Medical Superintendent Mob. – 9868399512
Brief about the hospital	The University College of Medical Sciences (UCMS)s was established in 1971 as a Constituent College of University of Delhi. It imparts various medical and paramedical courses. Guru Teg Bahadur Hospital is the associated teaching hospital with 1000 beds.
Number of beds available (Total in the Facility)	1014
Room Charges per bed per day	Private rooms – INR 300 per day + Diet INR 50 per day + drugs and procedures and tests as per govt rates Semi private – INR 150 per day + Diet INR 50 per day + drugs and procedures and tests as per govt rates General & staff – all free of cost
Availability of Doctors/ Medical Category staff at the Facility	Total 199 out of which 63 (grade A) are staff of GTB. There are 160 senior residents & 59 junior residents too.
Availability of Para Medical staff at the Facility	1251 (982 permanent + 269 contractual staffs)

Availability of services at the Facility	<ul style="list-style-type: none"> <li>▪ Gynaecology</li> <li>▪ Paediatrics &amp; neonatal</li> <li>▪ Ophthalmic</li> <li>▪ Medicine</li> <li>▪ Orthopaedic</li> <li>▪ Surgery</li> <li>▪ Dermatology</li> <li>▪ Dental</li> <li>▪ ENT</li> <li>▪ Neurosurgery</li> <li>▪ Neurology</li> <li>▪ Accident &amp; Emergency</li> <li>▪ Burns and plastics</li> <li>▪ Apart from the above, the facility has OPD for urology, psychiatry, anti retroviral diseases, pain clinic, anti-rabies clinic and ayurveda, homoeopathy and yoga.</li> </ul>										
Area of Super Specialisation for which patients are referred IN to the facility	No Specialisation										
Percentage of patients referred IN from other region	<table border="1"> <caption>Patient Referral Data</caption> <thead> <tr> <th>Region</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Delhi</td> <td>70%</td> </tr> <tr> <td>NCR (UP)</td> <td>20%</td> </tr> <tr> <td>NCR (Haryana)</td> <td>5%</td> </tr> <tr> <td>Other States</td> <td>5%</td> </tr> </tbody> </table>	Region	Percentage	Delhi	70%	NCR (UP)	20%	NCR (Haryana)	5%	Other States	5%
Region	Percentage										
Delhi	70%										
NCR (UP)	20%										
NCR (Haryana)	5%										
Other States	5%										
Major ailments for which patients are referred IN to the facility	<ul style="list-style-type: none"> <li>▪ Surgical</li> <li>▪ Neurosurgical</li> <li>▪ Neurological</li> <li>▪ Burns and plastics</li> <li>▪ Obstetrics &amp; Gynaecological</li> <li>▪ Paediatrics and Neonatal</li> <li>▪ Eye</li> <li>▪ ENT</li> </ul>										
The major ailments for which patients are referred OUT from facility to other facilities	For cardiac, vascular, facio-maxillary surgeries and for in-vitro fertilization, patients are referred out to GB Pant Hospital, AIIMS and Safdarjung Hospital										
Comment	Problem of retention of staff due to lower salary levels.										

Source: Findings of this study

**A.1.8. Post Graduate Institute of Medical Education & Research, Rohtak**

Name of the Facility	Post Graduate Institute of Medical Education & Research, Rohtak
Type of facility	Government –Medical College
Contact Details	Dr Chand S Dhull Director Mob- 09896091449
Brief about the hospital	<p>Pt. B.D.Sharma, PGIMS, Rohtak is located at a distance of about 240 km from Chandigarh and about 70 km from Delhi on Delhi-Hissar-Sirsa-Fazilka National Highway (NH-10). It is the only major Institution for Medical Education and Research and a tertiary care centre for provision of specialized health care services not only to the people of the State of Haryana, but also to those from Punjab, Rajasthan, Delhi and western U.P. The Institute has a remarkably well developed campus spread over an area of 350 acres of land THE INSTITUTE COMPLEX houses the following buildings</p> <ul style="list-style-type: none"> <li>▪ Medical College</li> <li>▪ Well Equipped Hospital of 1597 beds</li> <li>▪ Super-specialty Centre</li> <li>▪ Multislice whole body CT Scan building</li> <li>▪ De-addiction centre</li> <li>▪ Dental College and Hospital</li> <li>▪ Pharmacy College</li> <li>▪ College of Nursing</li> <li>▪ Future plan for the year 2011-2012</li> <li>▪ Trauma centre -40 bed</li> <li>▪ Mother and child care centre – 200 bed</li> <li>▪ State Institute of Mental Health under construction</li> </ul>
Number of beds available (Total in the Facility)	1597
Room Charges per bed per day	A/C private room is chargeable `400. Other all beds are free
Availability of Doctors/ Medical Category staff at the Facility	195
Availability of Para Medical staff at the Facility	-
Availability of services at the Facility	All facilities
Area of Super Specialisation for which patients are referred IN to the facility	General

Percentage of patients referred IN from other region	<p>A 3D pie chart illustrating the distribution of patients referred from various regions. The chart is divided into five segments: Delhi (20%, blue), NCR (UP) (10%, red), NCR (Haryana) (30%, yellow), NCR (Rajasthan) (10%, green), and Other States (30%, purple). A legend at the bottom identifies the colors for each region.</p>
Major ailments for which patients are referred IN to the facility	General
The major ailments for which patients are referred OUT from facility to other facilities	<ul style="list-style-type: none"> <li>▪ Kidney transplant</li> <li>▪ Nephrology</li> <li>▪ Neurology</li> </ul>
Comment	Problem of retention of staff due to lower salary levels.

Source: Findings of this study

**A.1.9. Medanta – The Medicity**

Name of the Facility	Medanta – The Medicity
Type of facility	Private – Multi speciality
Contact Details	Dr Nalini Kaul Senior Consultant – Medical Affairs Mob- 9999921968
Brief about the hospital	Medanta - The Medicity is a multi speciality hospital located in Gurgaon Sector 38.
Number of beds available (Total in the Facility)	497 (including 100 ICU beds)
Room Charges per bed per day	A/C private room is chargeable (@ INR 400. Other all beds are free
Availability of Doctors at the Facility	486
Availability of Para Medical staff at the Facility	380 (excluding staff nurse)
Availability of services at the Facility	All facilities
Area of Super Specialisation for which patients are referred IN to the facility	<ul style="list-style-type: none"> <li>▪ Renal and Liver Transplant</li> <li>▪ Gastro and Gastro Intestinal</li> <li>▪ Oncology</li> <li>▪ Cardio Thoracic Vascular Surgery (CTVS)</li> <li>▪ Cardiology</li> <li>▪ Neurology &amp; neurosurgery</li> <li>▪ Nephrology &amp; Urology</li> <li>▪ Orthopaedics</li> <li>▪ Internal Medicine</li> </ul>

	<ul style="list-style-type: none"> <li>■ Obstetrics and Gynaecology</li> <li>■ Respiratory and Sleep</li> <li>■ Vascular</li> <li>■ Rheumatology</li> <li>■ Plastic Surgery</li> <li>■ ENT</li> </ul>
Percentage of patients referred IN from other region	<p>Legend: Outside Country (blue), NCR (Haryana) (red), Gurgaon (yellow), Other states (cyan), NCR Rajasthan (purple), Delhi (dark red)</p>
Major ailments for which patients are referred IN to the facility	This hospital is promoting itself for medical tourism
The major ailments for which patients are referred OUT from facility to other facilities	No referral
Comment	There is shortage of trained paramedical staff in the facility. Lack of communication with international patients due to language barrier is another problem being faced by the paramedical staff and ward attendants.

Source: Findings of this study

**A.1.10. Vardhaman Mahavir Safdarjung Hospital**

Name of the Facility	Vardhaman Mahavir Safdarjung Hospital
Type of facility	Government – Super speciality
Contact Details	Safdarjung Hospital, New Delhi - 110 029, EPABX: 26165060, 26165032, 26168336, FAX: 011-26163072
Brief about the hospital	Safdarjung Hospital started as an American Army Base Hospital during the II World war. In 1947 it was made annexe to Irwin Hospital (Presently LNJP Hospital). It was taken over by the Central Government in 1954 and named as Safdarjung Hospital. Until the inception of All India Institute of Medical Science in 1956, Safdarjung Hospital was the only tertiary care hospital in South Delhi.
Number of beds available (Total in the Facility)	1576
Room Charges per bed per day	<ul style="list-style-type: none"> <li>■ There are a total of 34 wards providing free indoor patient care</li> <li>■ Free diet is provided to all patients in General Wards</li> <li>■ Investigations like CAT scan, Ultrasound, Barium Meal, ECHO, TMT etc are charged for as per Govt. approved rates.</li> <li>■ For poor patients, these charges can be waived partially</li> </ul>

	<p>or fully by the Additional Medical Superintendent on the recommendations of the H.O.D.</p> <ul style="list-style-type: none"> <li>▪ In case of emergency C.M.O on duty may waive off these charges.</li> </ul>
Availability of Doctors at the Facility	352 Grade A + 550 Senior residents & Junior residents
Availability of Para Medical staff at the Facility	1896 (1122 nursing staffs + 774 paramedical staffs)
Availability of services at the Facility	<ul style="list-style-type: none"> <li>▪ Coronary Artery Bypass Surgery</li> <li>▪ Heart Valves Replacement and repair Surgery</li> <li>▪ Congenital Heart Disease Repair Surgeries</li> <li>▪ Angiography and Angioplasty</li> <li>▪ Total Hip Replacement surgery</li> <li>▪ Knee Replacement Surgery</li> <li>▪ Arthroscopies and Arthroscopy assisted surgery of joints</li> <li>▪ Sports Injury Clinic</li> <li>▪ Lithotripsy for Kidney stones</li> <li>▪ Dialysis for Kidney Failure patients</li> <li>▪ Laparoscopic Chole-cystectomy</li> <li>▪ Radiotherapy</li> <li>▪ Cancer Surgery</li> <li>▪ Artificial Limb Implant Facility</li> <li>▪ Antiretroviral therapy for AIDS patients</li> <li>▪ DOTS for TB patients</li> <li>▪ Ayurveda, Homeopathy &amp; Unani treatment Centres</li> <li>▪ Advanced Diagnostics like Blood Tests by Fully automated Machines, Mammography, MRI, Digital X-Ray, OPG, Whole Body Spiral CT Scan etc</li> </ul>
Area of Super Specialisation for which patients are referred IN to the facility	<ul style="list-style-type: none"> <li>▪ Cardiac Surgery (CTVS)</li> <li>▪ Cardiology</li> <li>▪ Neurology</li> <li>▪ Nephrology</li> <li>▪ Nuclear medicine</li> <li>▪ Medical Oncology</li> <li>▪ Neurosurgery</li> <li>▪ Respiratory Medicine</li> <li>▪ Endocrinology</li> <li>▪ Haematology</li> <li>▪ Gastroenterology</li> <li>▪ Urology</li> <li>▪ Cancer Surgery</li> <li>▪ Burns and Plastic surgery</li> <li>▪ Paediatric Surgery</li> </ul>

Percentage of patients referred IN from other region	<table border="1"> <caption>Percentage of patients referred IN from other region</caption> <thead> <tr> <th>Region</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Delhi</td> <td>60%</td> </tr> <tr> <td>NCR (UP)</td> <td>12%</td> </tr> <tr> <td>NCR (Haryana)</td> <td>15%</td> </tr> <tr> <td>Other States</td> <td>10%</td> </tr> <tr> <td>NCR (Rajasthan)</td> <td>3%</td> </tr> </tbody> </table>	Region	Percentage	Delhi	60%	NCR (UP)	12%	NCR (Haryana)	15%	Other States	10%	NCR (Rajasthan)	3%
Region	Percentage												
Delhi	60%												
NCR (UP)	12%												
NCR (Haryana)	15%												
Other States	10%												
NCR (Rajasthan)	3%												
Major ailments for which patients are referred IN to the facility	For all facilities especially Burns and Plastic												
The major ailments for which patients are referred OUT from facility to other facilities	Does not refer out patients												
Comment													

Source: Findings of this study

**A.1.11. All India Institute of Medical Sciences (AIIMS)**

Name of the Facility	All India Institute of Medical Sciences (AIIMS)
Type of facility	Government – Super Specialty
Contact Details	AIIMS Main Hospital is located at Ansari Nagar, in front of Safdarjung Hospital at the crossing of Ring Road and Aurobindo Marg. Main entrance is on Aurobindo Marg
Brief about the hospital	<p>All-India Institute of Medical Sciences was established as an institution of national importance by an Act of Parliament with the objects to develop patterns of teaching in Undergraduate and Post-graduate Medical Education in all its branches so as to demonstrate a high standard of Medical Education in India; to bring together in one place educational facilities of the highest order for the training of personnel in all important branches of health activity; and to attain self-sufficiency in Post-graduate Medical Education.</p> <p>The Institute has comprehensive facilities for teaching, research and patient-care. As provided in the Act, AIIMS conducts teaching programs in medical and para-medical courses both at undergraduate and postgraduate levels and awards its own degrees. Teaching and research are conducted in 42 disciplines. In the field of medical research AIIMS is the lead, having more than 600 research publications by its faculty and researchers in a year. AIIMS also runs a College of Nursing and trains students for B.Sc.(Hons.)</p>

	<p>Nursing post-certificate) degrees.</p> <p>Twenty-five clinical departments including four super specialty centers manage practically all types of disease conditions with support from pre- and Para-clinical departments. However, burn cases, dog-bite cases and patients suffering from infectious diseases are not entertained in the AIIMS Hospital. AIIMS also manages a 60-bedded hospital in the Comprehensive Rural Health Centre at Ballabgarh in Haryana and provides health cover to about 2.5 lakh population through the Centre for Community Medicine.</p>
Number of beds available (Total in the Facility)	1803 beds (including newly constructed Emergency & Private wards)
Room Charges per bed per day	<p><b>General Ward - currently Rs. 375</b> - the rates approved by Government (to be deposited in advance of 10 days). This entitles them for doctor's consultations, certain basic investigations, life saving medicines and surgical items, diet, linen, I.V. fluids etc.</p> <p><b>Private Wards:</b> The hospitalization charges (Inclusive of doctors visit fee and routine investigation, diet etc.) of private room are as under:-</p> <p><b>Deluxe (A Class) - Rs. 1700/- per day</b>  <b>Semi Deluxe (B Class) - Rs. 1100/- per day</b></p>
Availability of Doctors/ Medical Category staff at the Facility	1323 doctors (incl. Faculty members, Sr. and Jr. Residents).
Availability of Para Medical staff at the Facility	1810 Nurses
Availability of services at the Facility	<ul style="list-style-type: none"> <li>• Anaesthesiology</li> <li>• Anatomy</li> <li>• Biochemistry</li> <li>• Biomedical Engineering</li> <li>• Biophysics</li> <li>• Biostatistics</li> <li>• Biotechnology</li> <li>• Cardiology</li> <li>• Centre for Community Medicine</li> <li>• College of Nursing</li> <li>• Dermatology &amp; Venereology</li> <li>• Endocrinology, Metabolism &amp; Diabetes</li> <li>• Forensic Medicine</li> <li>• Gastroenterology and Human Nutrition</li> <li>• Gastrointestinal Surgery</li> <li>• Nephrology</li> <li>• Nuclear Medicine</li> <li>• Nuclear Magnetic Resonance Imaging</li> <li>• Obstetrics and Gynaecology</li> <li>• Orthopaedics</li> <li>• Otorhinolaryngology</li> <li>• Paediatrics</li> <li>• Paediatric Surgery</li> <li>• Pathology</li> <li>• Pharmacology</li> <li>• Physiology</li> <li>• Physical Medicine &amp; Rehabilitation</li> <li>• Psychiatry</li> <li>• Radio Diagnosis</li> <li>• Reproductive Biology</li> <li>• Surgical Disciplines</li> <li>• Transplant Immunology &amp; Immunogenetics</li> <li>• Transfusion Medicine</li> </ul>

	<ul style="list-style-type: none"> <li>• Haematology (Blood Bank)</li> <li>• Hospital Administration</li> <li>• Laboratory Medicine</li> <li>• Medicine</li> <li>• Microbiology</li> <li>• Urology</li> </ul>														
Other facilities available	<ul style="list-style-type: none"> <li>• Medical Social &amp; Welfare Services</li> <li>• National Poisons Information Centre</li> <li>• Organ Retrieval Banking Organisation</li> <li>• Patent Cell</li> <li>• Stem Cell Facility</li> <li>• Telemedicine Facility</li> </ul>														
Area of Super Specialisation for which patients are referred IN to the facility	<ul style="list-style-type: none"> <li>▪ Cardio Thoracic and Neuro Sciences Centre.</li> <li>▪ Dr. Rajendra Prasad Centre for Ophthalmic Sciences.</li> <li>▪ Dr. B.R. Ambedkar Institute Rotary Cancer Hospital.</li> <li>▪ National Drugs Dependency Treatment Centre, Ghaziabad</li> </ul>														
Specialty Centres	<ul style="list-style-type: none"> <li>▪ Centre for Dental Education and Research</li> <li>▪ Neurosciences Centre</li> <li>▪ Jai Prakash Narayan Apex Trauma Center</li> </ul>														
Percentage of patients referred IN from other region	<table border="1"> <thead> <tr> <th>Region</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Other States</td> <td>45%</td> </tr> <tr> <td>Delhi</td> <td>20%</td> </tr> <tr> <td>NCR (UP)</td> <td>15%</td> </tr> <tr> <td>NCR (Haryana)</td> <td>10%</td> </tr> <tr> <td>NCR (Rajasthan)</td> <td>5%</td> </tr> <tr> <td>Other Countries</td> <td>5%</td> </tr> </tbody> </table>	Region	Percentage	Other States	45%	Delhi	20%	NCR (UP)	15%	NCR (Haryana)	10%	NCR (Rajasthan)	5%	Other Countries	5%
Region	Percentage														
Other States	45%														
Delhi	20%														
NCR (UP)	15%														
NCR (Haryana)	10%														
NCR (Rajasthan)	5%														
Other Countries	5%														
Major ailments for which patients are referred IN to the facility	All facilities														
The major ailments for which patients are referred OUT from facility to other facilities	None														
Comment															

Source: Findings of this study

## Appendix B. Terms of Reference V/S Scope of Work Addressed

Sl.No.	Scope of Work	Chapters No
1	Literature survey – a brief discussion of previous works related to various aspects of health infrastructure in NCR	Collected data provide as Appendix C
2	Assessment of existing infrastructure facilities as per level of care (primary, secondary, tertiary including super-speciality) at different hierarchical levels in government sector, like sub centre, primary health centre, community health centre, govt hospital, sub-divisional hospital, and non-govt sector, like dispensary, nursing home, clinic, hospital and referral facilities in both government and private sector. The information to be provided on a map (GIS). Assessment of health care related services such as ambulance, no. of beds, etc.	Chapter 2
3	Primary survey in major referral hospital to assess the number of patients, types of diseases, no. of patients referred to hospitals from outside NCR/ by location.	Chapter 3
4	Indian systems of medicine (AYUSH) in NCR – facilities available, relevance, etc. Needs assessment and study of population characteristics and assessment of current & future needs on the basis of population projection (demand-supply gap).	Chapter 2 Section -2.6  Chapter-5
5	Needs assessment and study of population characteristics and assessment of current & future needs on the basis of population projection.	Chapter 5
6	Study of norms and policies of WHO, IPHS norms, Government of India and constituent states of NCR i.e. beds/population ratio, doctor/population ratio (i.e. population norms), accessibility norms, etc. and prepare a comparative and accordingly recommend optimum norms for NCR for urban and rural areas.	Chapter 4
7	Identification of sub-region wise & district-wise issues, problems and future health infrastructure requirements to meet likely demand.	Chapter 6
8	Preparation of action plan, identification of projects in different Sub-regions/districts of NCR and possibility of public-private partnership for provision of new facilities.	Chapter 6 & 7
9	Conducting a workshop (about 100 participants) with the participating States and concerned stakeholders before finalizing the report.	Organised on August 2015

## Appendix C. Performa of Collection of Information & Questionnaires

### **C.1. Checklist for Mapping**

## Checklist for Mapping Health Facilities

<b>For All Facilities</b>			
<b>Name of the Facility:</b>			
<b>Type of Health Facility:</b>		District Hospital <input type="checkbox"/> CHC <input type="checkbox"/> PHC <input type="checkbox"/> Sub-centre <input type="checkbox"/> Private Hospital <input type="checkbox"/> Private Nursing Home <input type="checkbox"/>	
<b>Address of the Facility:</b>			
<b>Information to be collected</b>			
<b>S.No.</b>	<b>Particulars</b>	<b>Details</b>	
1.	Covered area of the facility/ building (approximate)		
2.	No. of OPDs functioning		
3.	Types of OPDs functioning:	Yes-1, No-2	
		General Medicine	Paediatrics
		General Surgery	Paediatric Surgery
		Neuro-Surgery	Cardiac Surgery
		Obstetric & Gynaecology	Eye
		ENT	Skin
		Urology	Cardiology
		Psychiatry	Radiotherapy
		Neurology	Orthopaedics
		Burns & plastics	Dental OPD
		Ayurveda	Yoga
		Unani	Siddha
		Homeopathy	Any other (specify .....)
4.	Inpatient facility available (Yes-1, No-2)		
5.	Number of Beds available		
6.	Number of Beds Occupied presently		
7.	Average occupancy rate		
8.	Percentage Patients from	District <input type="checkbox"/> NCR <input type="checkbox"/> Outside NCR <input type="checkbox"/> Abroad <input type="checkbox"/>	
9.	Total number of Ambulance available	General <input type="checkbox"/> Trauma <input type="checkbox"/>	
10	Are the following facilities available:	Yes-1, No-2	
		Blood test	Histopathology test
		Urine test	Radiological test
		Operation facility	Emergency care facility
		CSSD	Blood Storage Facility
		Blood Bank Facility – with component	Blood Bank Facility – without component
		Kitchen	Laundry
11	Total Number of Doctors available		
12	Number of following human resources available:		
		General Physicians	General Surgeons
		Obstetrician & Gynaecologists	Paediatricians
		Paediatric Surgeon	Cardiologists
		Cardio-thoracic Vascular Surgeons	Gastro-enterologists
		Nephrologists	Urologists
		Neurologists	Neurosurgeons
		Oncologists	Endocrinologists
		Ayurveda	Yoga
		Unani	Siddha
		Homeopathy	Anaesthetists
		Paramedical staffs	

**C.2. Checklist of Chief District Medical & Health Officer /Chief Medical Officer**

### Checklist of Chief District Medical & Health Officer /Chief Medical Officer – Information Status

[illegible]

Checklist of District Medical Officer

Q No	Faridabad	Gurgaon,	Rohtak	Sonepat	Rewari,	Jhajjar	Mewat	Panipat	Palwal	Alwar	Meerut,	Ghaziabad	Gautam Buddha Nagar	Bulandshahr	Baghpat	Delhi
2022																
2023																
2024																
2025																
Meeting with IMA																

**Note**

**Information collected put -Yes**

**Partly collected put - Part**

**Not available put- NA**

**Not collected put– No**

**C.3. Tool for Hospital Administration of Tertiary & Super Speciality Hospitals**

## Tool for Hospital Administration of Tertiary & Super Speciality Hospitals

### SECTION –I- Identification

1001	State		
1002	District		
1003	Name of the health facility		
1004	Type of Facility Government-----1 Private-----2		Go to 1005 Go to 1006
1005	If Government District Hospital-----1 CHC-----2 Others-----3		
1006	If Private Hospital General-----1 Speciality-----2 Super Speciality -----3 Nursing Home-----4 Others (Specify)		
1007	Name of the interviewee		
1008	Contact Address		
1009	Tel No.		
1010	Mobile No.		
1011	Email if any		

**SECTION –II- Basic Information**

Number of beds available (Total in the Facility)							
2001	Name of Ward	Male	Female	Total	Total number of patient admitted during last year	Average number of stay per patient	Unit cost/day
2002	Delivery room (including pre and post delivery)						
2003	<i>Deluxe Suits</i>						
2004	<i>Deluxe Room</i>						
2005	<i>Double Bed</i>						
2006	<i>General</i>						
2007	Intensive Care Unit (ICU)						
2008	<i>Deluxe Suits</i>						
2009	<i>Deluxe Room</i>						
2010	<i>Double Bed</i>						
2011	<i>General</i>						
2012	Surgical Wards						
2013	<i>Deluxe Suits</i>						
2014	<i>Deluxe Room</i>						
2015	<i>Double Bed</i>						
2016	<i>General</i>						
2017	Gynaecology Wards						
2018	<i>Deluxe Suits</i>						
2019	<i>Deluxe Room</i>						
2020	<i>Double Bed</i>						
2021	<i>General</i>						
2022	Paediatric Wards						
2023	<i>Deluxe Suits</i>						
2024	<i>Deluxe Room</i>						
2025	<i>Double Bed</i>						
2026	<i>General</i>						
2027	General Wards						
2028	<i>Deluxe Suits</i>						
2029	<i>Deluxe Room</i>						
2030	<i>Double Bed</i>						
2031	<i>General</i>						
2032	<b>Availability of different facility at the Hospital</b>						
2033	<b>Availability of Doctors/</b>	<b>Regular</b>	<b>Contract</b>	<b>Total</b>			

Tool for Hospital Administration of Tertiary & Super Speciality Hospitals

	<b>Medical Category staff at the Facility</b>			
2034	Chief Medical Superintendent			
2035	Medical Specialist			
2036	Surgery Specialists			
2037	O&G specialist			
2038	Psychiatrist			
2039	Dermatologist / Venereologist			
2040	Paediatrician			
2041	Anaesthetist (Regular / trained)			
2042	ENT Surgeon			
2043	Ophthalmologist			
2044	Orthopaedician			
2045	Radiologist			
2046	Microbiologist			
2047	Pathologist and Blood Bank In-charge			
2048	Casualty Doctors / General			
2049	Dental Surgeon			
2050	Forensic Specialist			
2051	Public Health Manager			
2052	AYUSH Physician			
2053	Environmental Officer			
2054	Waste Management Officer			
2055	<b>Availability of Para Medical staff at the Facility</b>			
2056	Staff Nurse			
2057	Infection Control Nurse			
2058	Hospital worker (OP/ward +OT+ blood bank)			
2059	Sanitary Worker			
2060	Ophthalmic Assistant / Refractionist			
2061	Social Worker / Counsellor			
2062	Dermatology/STD/Leprosy Technician			
2063	AIDS/STD Counsellor cum field Support			
2064	Cytotechnician			
2065	ECG Technician			
2066	ECHO Technician			

Tool for Hospital Administration of Tertiary & Super Speciality Hospitals

2067	Audiometrician				
2068	Laboratory Technician ( Lab + Blood Bank)				
2069	Laboratory Attendant (Hospital Worker)				
2070	Dietician				
2071	PFT Technician				
2072	Maternity assistant (ANM)				
2073	Radiographer				
2074	Dark Room Assistant				
2075	Pharmacist				
2076	Matron				
2077	Physiotherapist				
2078	Statistical Assistant				
2079	Medical Records Officer / Technician				
2080	Electrician				
2081	<b>Availability of Equipments at the Facility -</b>	<b>Functional</b>	<b>Non Functional</b>	<b>Total</b>	<b>Unit cost</b>
2082	Imaging equipments				
2083	X Ray Room Accessories				
2084	Cardiac Equipments				
2085	Labour ward & Neo Natal Equipments				
2086	Ear Nose Throat Equipments				
2087	Eye Equipments				
2088	Dental Equipments				
2089	Operation Theatre Equipment				
2090	Laboratory Equipments				
2091	Surgical Equipment Sets				
2092	Physio Therapy Equipments				
2093	Endoscopy Equipments				
2094	Anaesthesia Equipments				
2095	Furniture & Hospital Accessories				
2096	PM equipments				
2097	Linen				
2098	Teaching Equipments				
2099	Administration				
2100	Refrigeration & AC				
2101	Hospital Plants				

Tool for Hospital Administration of Tertiary & Super Speciality Hospitals

2102	Hospital Fittings & Necessities				
2103	Transport				
2104	<b>Availability of Diagnostics at the Facility</b>				
2105	<b>CLINICAL PATHOLOGY</b>		Yes-1, No-2	If Yes Unit Cost	
2106	Haematology				
2107	Urine Analysis				
2108	Stool Analysis				
2109	Semen Analysis				
2110	CSF Analysis				
2111	Aspirated fluids				
2112	Pathology				
2113	PAP smear				
2114	Sputum				
2115	Haematology				
2116	Histopathology				
2117	Microbiology				
2118	Serology				
2119	Endoscopy				
2120	Physiology				
2121	Radiology				
2122	X Ray				
2123	ECG				
2124	Ultra Sound				
2125	C Scan				
2126	Water Supply Yes-1, No-2		If Yes Source of supply		
2127	Electricity Yes-1, No-2				
2128	Power Backup (Generator, Inverter, etc.) Yes-1, No-2				
2129	Sewage/Drainage Yes-1, No-2				
2130	System of Biomedical Waste Handling & Disposal: Yes-1, No-2				
2131	If Yes				
2132	whether it is 'Segregated in Separate bins and Mutilated before Disposal' following the prescribed methods (Yes-1, No-2)				
2133	System of Disposal (Buried in a Pit-1, Collected by an Agency-2, Others (specify)-3)				

Tool for Hospital Administration of Tertiary & Super Speciality Hospitals

### SECTION –III- Information on Medicine

3001	Whether medicine available in the facility Yes-1, No-2		If No go to 3002
3002	If Yes ,Condition of availability of Medicines in general (Generally availability -1, Some are in short supply-2, Many are in short supply-3)		
3003	Whether there is any shortage of Medicines (Yes-1, No-2)		
3004	If Yes , specify the name of medicines in Short Supply		

### SECTION –IV- Information on Referral System

4001	Do you have Referral facility Yes -1, No-2		If No Go to 4004
4002	If Yes Please give the number of patients referred IN from other health facilities situated in	Name	In Number
		Delhi	
		NCR (UP)	
		NCR (Haryana)	
		NCR (Rajasthan)	
		Other States	
		Other Country	
4003	Which are the countries, where patients are generally referred from?		
4004	What are the major ailments for which patients are referred IN to your facility?		
4004	Do you refer patients OUT to other facility? Yes -1, No-2		If No Go to 5001
4005	Where do you refer OUT your patients?	Other facility in Delhi Yes-1, No- 2	
		Other facility in NCR. Yes-1, No- 2	
		Other state Yes- 1, No-2	
		Other country Yes-1, No-2	

Tool for Hospital Administration of Tertiary & Super Speciality Hospitals

4006	Please name the facilities where you refer OUT your patients	Other facility in Delhi		
		Other facility in NCR .		
		Other state		
		Other country		
4007	What are the major ailments for which patients are referred OUT from your facility to other facilities?			

**SECTION –V- Suggestion**

5001	Please provide us suggestion for better utilisation of the following in any health facility on	
5002	Infrastructure	
5003	Human Resource	
5004	Equipments	
5005	Medicine	

**Signature of the Researcher**  
Date:

**Signature of the Supervisor**  
Date:

#### **C.4. Tool for Doctors Referral Hospitals**

## Tool for Doctors Referral Hospitals

### SECTION –I- Identification

1001	State		
1002	District		
1003	Name of the health facility		
1004	Type of Facility Government-----1 Private-----2		Go to 1005 Go to 1006
1005	If Government District Hospital-----1 CHC-----2 Others-----3		
1006	If Private Hospital General-----1 Speciality-----2 Super Speciality -----3 Nursing Home-----4 Others (Specify)		
1007	Name of the interviewee		
1008	Contact Address		
1009	Tel No.		
1010	Mobile No.		
1011	Email if any		
1012	Association with the hospital Regular-----1 Visiting Doctor-----2		
1013	Professional qualification		
1014	Specialisation Physician-----1 Surgeon- -----2 Specialization (if any)-----3		
1015	Years of Experience		

**SECTION –II- General Information**

SI No	Questions	Responses		Skip to
2001	What is the average working hours in a week			
2002	What is the frequency of emergency ward duty			
2003	What is the frequency of night shifts			
2004	What is the average hours rendered in OPD in a week			
2005	How would you rate the work load Yes-1, No-2	Highly demanding		
		Bearable		
		Comfortable		

**SECTION –III- Quality of Service**

3001	How do you rate the performance of?	Nursing staff	Attendant and Ward boys	Paramedical staffs	Others	
3002	Excellent					
3003	Very good					
3004	Good					
3005	Average					
3006	How do you rate the performance of facilities as per the following scale Excellent -1, Very good- 2, Good-3, Average- 4, Poor- 5, Not applicable- 0					
3007	Name of facility	Rate	Name of facility	Rate		
3008	OPD Rooms		Laboratory			
3009	In patient wards		X-ray			
3010	Maternity ward		Ultra Sound Facility			
3011	Child care		Pharmacy			
3012	ICCU Ward		Ambulance			
3013	Neonatal care ward		Generator			
3014	Availability of Beds		Telephone or other communication			
3015	Minor Operation theatre		Accommodation facility for medical staff			

Tool for Doctors of Referral Hospitals

3016	Major operation theatre		Electricity supply			
3017	Medicine		Water supply at your cabin			
3018	Blood Bank		Other			
3019	Other					
3020						
3021						
3022						
3023	How many patients visit OPD per day					
3024	Total number of patients admitted as inpatients in last month -TELL US TENTATIVELY					
3025	What is the impact of work load on quality service rendered by medical staff	High	1			
		Significant	2			
		Moderate	3			
		Little	4			
		No effect	5			
3026	Please give the number of patients referred IN from other health facilities situated in Yes-1, No-2	Delhi				
		NCR (UP)				
		NCR (Haryana)				
		NCR (Rajasthan)				
		Other States				
		Other Country				
3027	Does the facility have adequate supply of life saving medicine? Yes-1, No-2, Partly -3					
3028	How many life support systems are available in this facility? Yes-1, No-2, Partly -3					

## SECTION –IV- Suggestion

4001	What assistance is required for further improvement of this facility?	
4002	Infrastructure	
4003	Human Resource	
4004	Equipments	
4005	Medicine	

**Signature of the Researcher**  
Date:

**Signature of the Supervisor**  
Date:

#### **C.5. In Patient Schedule**

## In Patient Schedule

### In Patient Schedule

#### SECTION –I- Identification – Facility Attended by the In Patient

(Information to be collected from In Patients (or Relative or Friends accompanying the In Patient) who are currently admitted in the Facilities at the time of the visit in the facilities)

1001	In Patient Schedule No		
1002	Location of the Facility admitted in ( <i>Rural-1, Urban-2</i> )		
1003	District (Name)		
1004	Type of the Facility ( <i>DH-1, CHC-2, Private Hospital-3, Others-4</i> )		
1005	Name & Address of the Facility		
1006	Respondent ( <i>Self-1, Relative-2, Friends/Others-3</i> )		
1007	Have you been referred from other health facility Yes-1, No-2		
1008	If Yes Nature of referee health facility Government----1 Private-----2		
1009	If Government Type of referee health facility	District hospital	1
		Sub-division level hospital	2
		Primary Health Centre	3
		Others	4
1010	If Private Hospital Type of referee health facility	Dispensary	1
		Clinic	2
		Nursing Home	3
		Hospital	4
1011	What is the cause of referral	Treatment not available in previous hospital	1
		Better provision of treatment in this facility	2
		Critical condition of patient	3
		Others (please specify)	
1012	Region where you are coming from	Delhi	1
		NCR (UP)	2
		NCR (Haryana)	3
		NCR (Rajasthan)	4
		Other countries (please specify)	
		Other states (please specify)	

## In Patient Schedule

### SECTION –II- Background Information of the In Patient

2001	Name	
2002	Location ( <i>Rural-1, Urban-2</i> )	
2003	Village/Town	
2004	Gram Panchayat/Municipality	
2005	Tehsil / Taluka / Block	
2006	District	
2007	Sex ( <i>Male-1 Female-2</i> )	
2008	Age (in complete years)	
2009	Patient Staying in NCR ( <i>Yes-1, No-2</i> )	
2010	Marital Status ( <i>Unmarried-1, Married-2, Widowed-3, Divorced/Separated-4</i> )	
2011	Highest level of Schooling/ Education Attainment ( <i>Not literate-00, Literate but never attended school-01; Attended school but not beyond that: Specify the highest Class attended (Class I-XII); Attended above School Education Programme: specify the Degree/Diploma</i> )	
2012	Employment Status ( <i>Employed-1, Unemployed-2, Out of Labour Force-3</i> )	
2013	If 1 in Q.2.12, Mention the Principal Employment Status ( <i>Self-employed in Non-Ag-1, Ag Labour-2, Casual Labour-3, Self-employed in Ag-4, Others (specify)-9</i> )	
2014	Whether the Patient's family/In patient has BPL Card: ( <i>Yes-1, No-2</i> )	
2015	Average Monthly Income (Rs) of the patient's family ( <i>less than 5000-1, 5000~10000-2, 10000~15000-3, 15000~20000-4, 20000~25000-5, more than 25000-9</i> )	
2016	Reason for being admitted in the Facility ( <i>describe the ailment</i> ):	
2017	Type of Ward Admitted in ( <i>General-1, Surgery-2, Gynaecology-3, Paediatric-4, Others (specify)-9</i> )	
2018	From where this patient is referred here/who has referred: ( <i>DH-1, CHC-2, PHC-3, Pvt. Doctor/Clinic-5, Self/Family-6, Others (specify)-7</i> )	
2019	Reason for getting treatment from/visiting this particular Facility ( <i>On recommendation-1, Closest to own dwelling-2, No other facility in the area -3, Facility well equipped-4, Particular specialist available-5, Others (specify)-9</i> )	
2020	Is this your (patient) first visit to this facility ( <i>Yes-1, No-2</i> )	
2021	If Yes, no of times visited	

**SECTION –III- Information on Accessibility**

3001	Distance of the visited health facility from residence (in km)				
3002	Mode of transport used for reaching the health facility Yes-1, No-2 (Encircle All Applicable Responses)	Ambulance	1	2	
		Public Transport	1	2	
		Private vehicle	1	2	
		Free Vehicle arranged by some trust/NGOs	1	2	
		Local health centre's transport	1	2	
		On foot / rickshaw	1	2	
		Others			
3003	What is the distance of the mentioned types of health facilities (government sector) from your residence and facilities to reach there? (give distance in km)	Facility	Distance in KM.	Available public facility to Reach (Auto/bus)	Time required for that in mint.
		District level hospital			
		Sub-division level hospital			
		Rural hospital			
		Primary Health Centre			
		Sub-centre			
		Dispensary/ Clinic			
		Nursing Home			
		Other (specify)			

**SECTION –IV-Quality of Services**

4001	What do you think about the waiting time of the following places? Mention Average time in minutes	
	Registration	
	Doctor's Call	
	Examination Time	
	Getting Injection / Medicines	
	Dressings	
	Laboratory/pathology Test	
	X Ray	
	Paying Bills	
4002	Are you satisfied with the behaviour of Codes: 1-very dissatisfied, 2-dissatisfied, 3-average, 4-good, 5-highly satisfied	
	Doctor	
	Nurse	
	Pharmacist	
	Technical staff	
	Ward Boys	
	Others Specify	
4003	Did the doctor listen to your (patient's)	

## In Patient Schedule

	complaints?  Yes-1, patiently Yes-2, somewhat patiently-3 did not listen -4, did not interact / Not applicable-5		
4004	Did the doctor let you ask questions?  Yes-1, always Yes-2, sometimes-3, did not interact / Not applicable -5, No-5		
4005	Did the doctor respond to your (patient's) questions  Yes-1, patiently Yes-2, somewhat patiently-3, did not respond Did not interact / Not applicable		
4006	Did the doctor discuss with you (patient) about ailment and recovery  Yes-1, No-2, did not interact / Not applicable-3		
4007	Over all, were your patient/you satisfied with the treatment To answer the above question use the following codes: 1-very dissatisfied, 2-dissatisfied, 3-average, 4-good, 5-highly satisfied		
4008	If very dissatisfied and dissatisfied what was the reasons Lack of facilities -1, poor quality of service -2, bad experience with doctor-3, Charges too high-4, others-5		
4009	Would you like to visit this facility again Yes-1, No-2		If Yes go to 4012
4010	If yes give reason  This gives best available treatment-1,The doctors are very good -2,Other services are very good-3, The charges are affordable we get value for money-4, I get all services at one place-5, The facility has reputation-6, This facility is close to my residence-7		
4011	If No give reason		
4012	Would you recommend this facility to others Yes-1, No-2		
4013	Would you (patient) come to this facility even if the treatment purpose is served at a place closer to your residence Yes-1, No-2, Cant say-3		
4015	Did you find proper instructions to find the services Yes, always-1, Yes, sometimes-2, No-3		

**SECTION –V- Affordability**

5001	Did you find the service expensive in comparison to other facilities visited earlier  Yes, very expensive-1, Yes, somewhat expensive-2, Same as others-3, No, less expensive -4 , No-5, very economical – 6, Don't know / can't say -7		
5002	Did you find the service affordable in comparison to other facilities visited earlier  Yes, very much-1, Yes, somewhat-2, Same as others -3, No, less-4, Don't know / can't say-5.		
<b>5003</b>	<b>Diet</b>		
5004	Whether the Facility provides Diet to In Patients (Yes-1, No-2)		If Yes go to 5005 If No go to 5012
5005	If Yes Whether the In Patient consuming the food supplied by the facility? (Yes-1, No-2)		If Yes go to 5006 If No go to 5011
5006	Type of Diet provided (Multiple response possible) Yes-1, No-2	Breakfast	
		Lunch	
		Tea/Snacks	
		Dinner	
5007	Quantity of Food (Sufficeint-1, Somewhat sufficient-2, Not sufficient-3)		
5008	Quality of Food (Satisfactory-1, Somewhat satisfactory-2, Not Satisfactory-3)		
5009	If Diet is not Free of Cost, Specify Amount (Rs) Spent on Diet/Day for the In Patient only (Leave the Box 'Blank', if Diet is Free of Cost)		
5010	If the In Patient has to pay any extra money to get Food/ Better Quality Food, even if Diet is Free of Cost (Rs), specify the Amount/Day (Leave the Box 'Blank', if No extra money is paid)		
5011	Reason for not consuming food provided by the facility Yes-1, No-2 (Multiple response possible)	Poor Quality	
		Insufficient quantity	
		Facility staff non cooperative	
		Expensive	
		Others (specify)	
5012	If Diet is not provided by the Facility at all ('No' in Q. 7.1), Specify Amount (Rs) Spent on Diet/Day for the In Patient only		

In Patient Schedule

**SECTION –VI-Perception about the services available at the location  
/district of patient**

6001	Perception about the facility available at their district/location (Encircle All Applicable Responses)	Yes	No
	Availability of good doctors	1	2
	Availability of good paramedical staff	1	2
	Availability of good quality of medicine paramedical staff	1	2
	Availability of beds in the hospital	1	2
	Availability of good quality and latest equipment at the facility	1	2
	Availability of multi speciality hospital	1	2
	Not easily accessibility	1	2
	Others specify		

**SECTION –VII-Suggestion for future improvement of this facility**

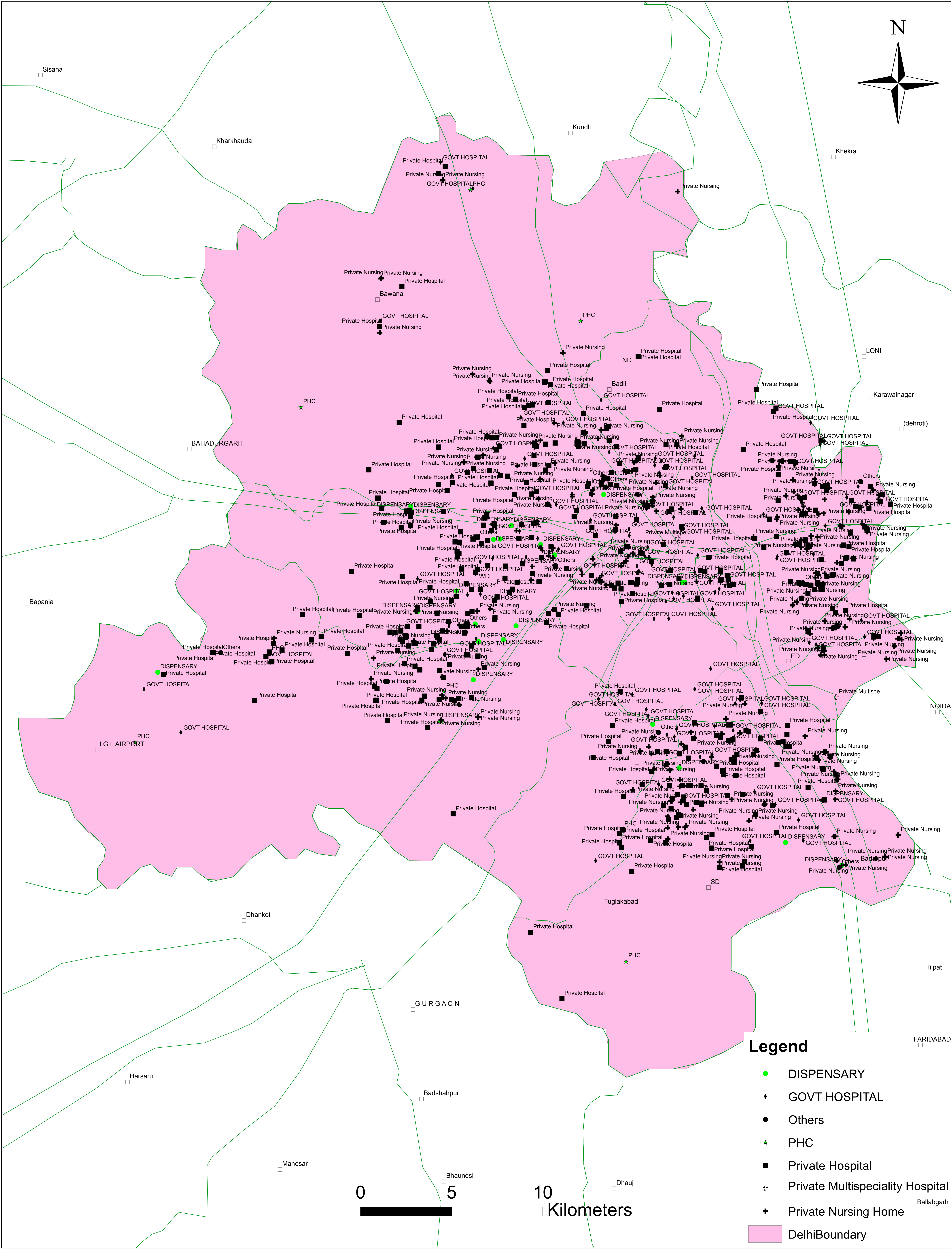
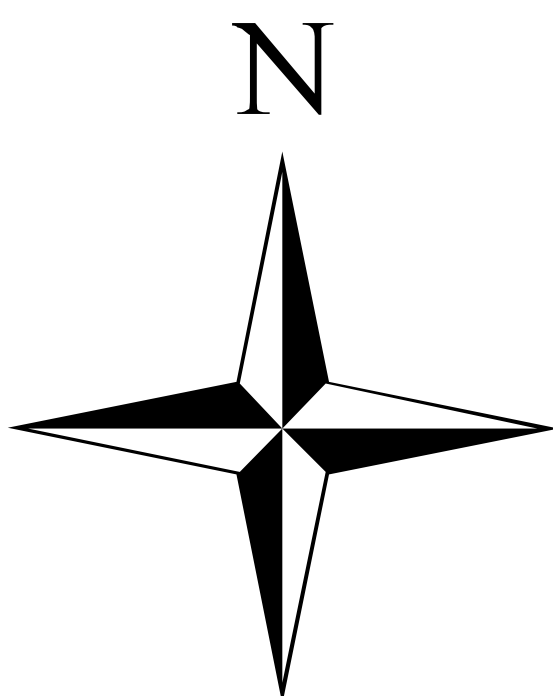
7001	What suggestion do you have for upgradation of this facility	
7002	If you (patient) are coming from a distant place, what problems did you face outside the health facility?	
7003	What suggestion do you have for availability of diet of this facility	

**Signature of the Researcher**  
Date:

**Signature of the Supervisor**  
Date:

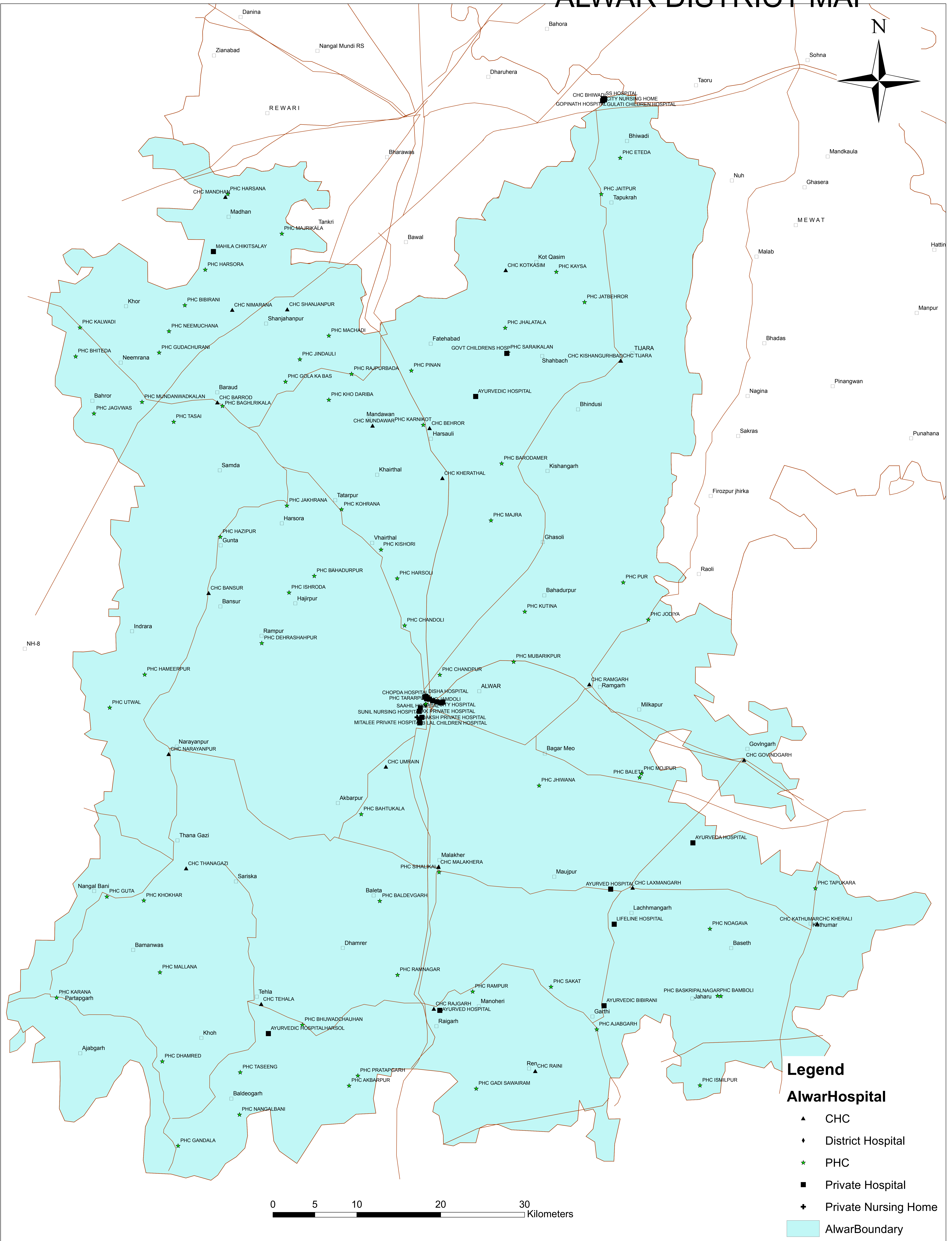
## Appendix D. GIS Maps

# DELHI DISTRICT MAP

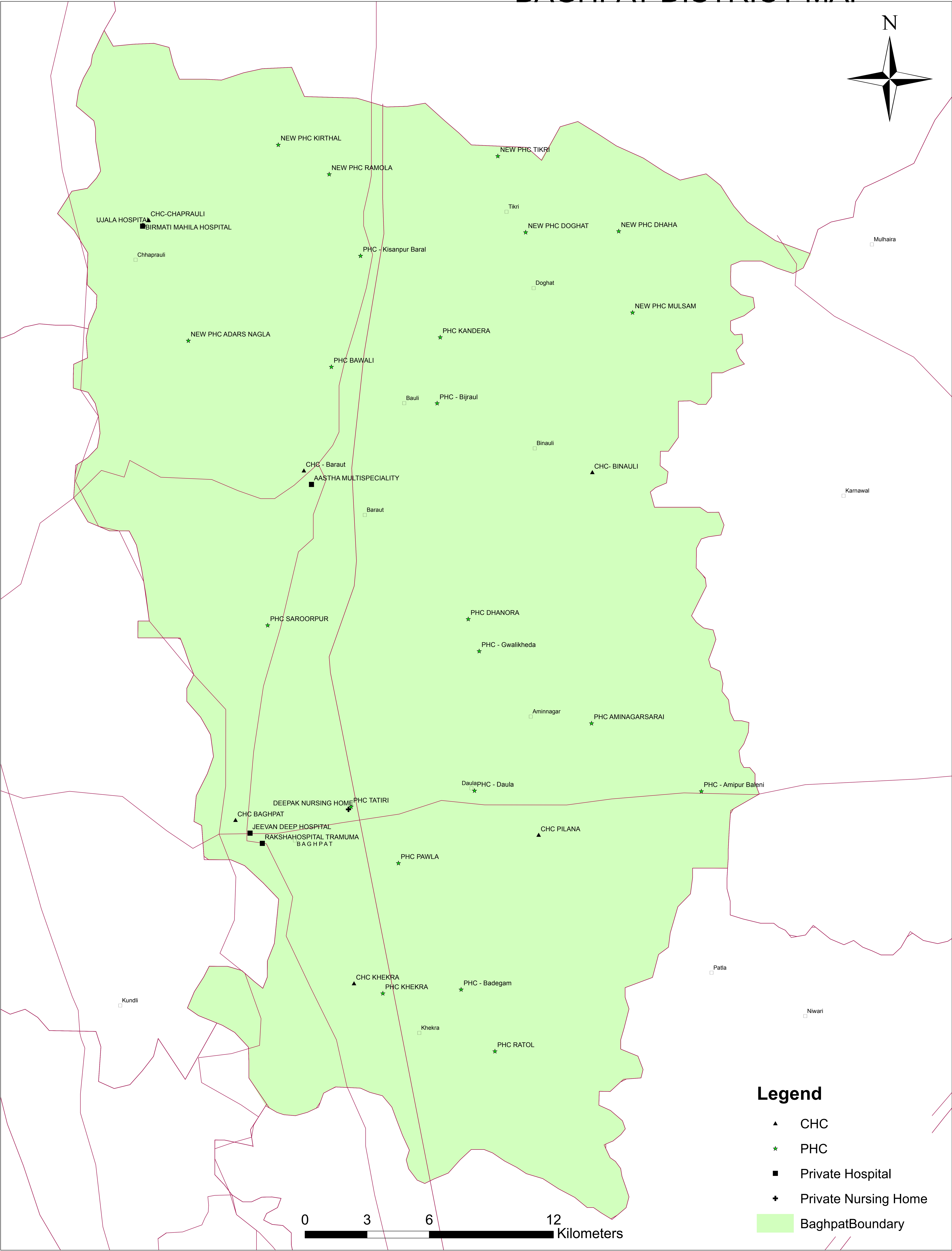
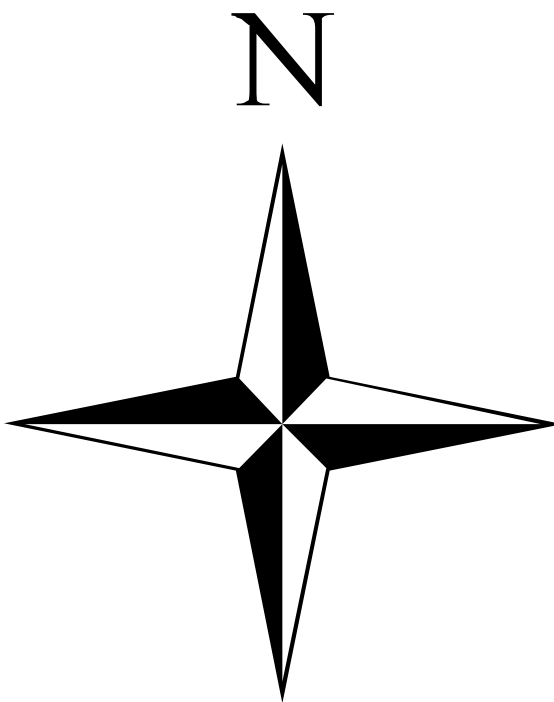


## Legend

- DISPENSARY
- ◆ GOVT HOSPITAL
- Others
- ★ PHC
- Private Hospital
- ⊕ Private Multispeciality Hospital
- + Private Nursing Home
- DelhiBoundary



# BAGHPAT DISTRICT MAP

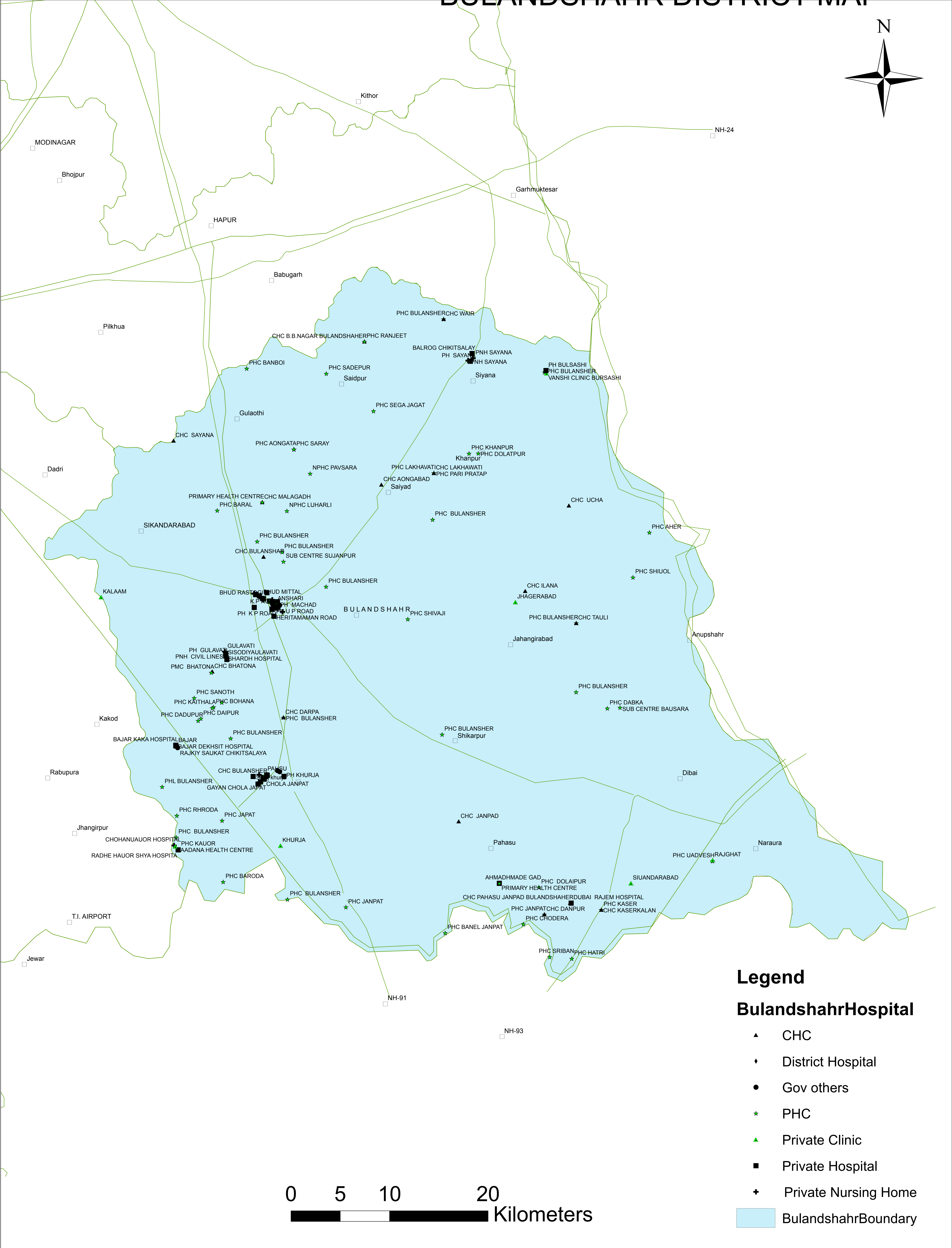
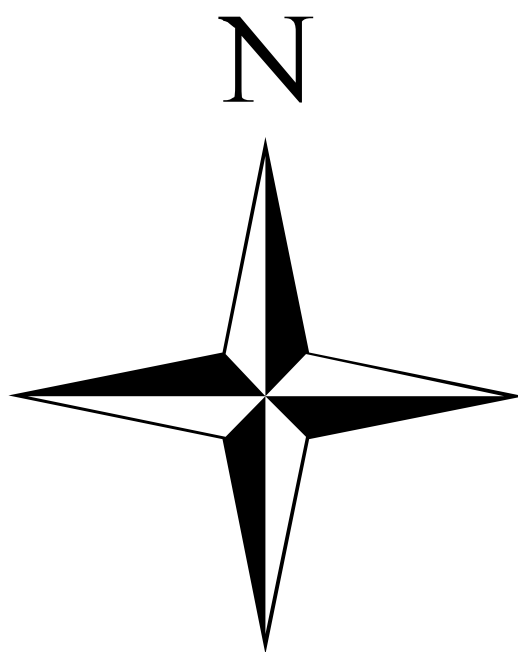


## Legend

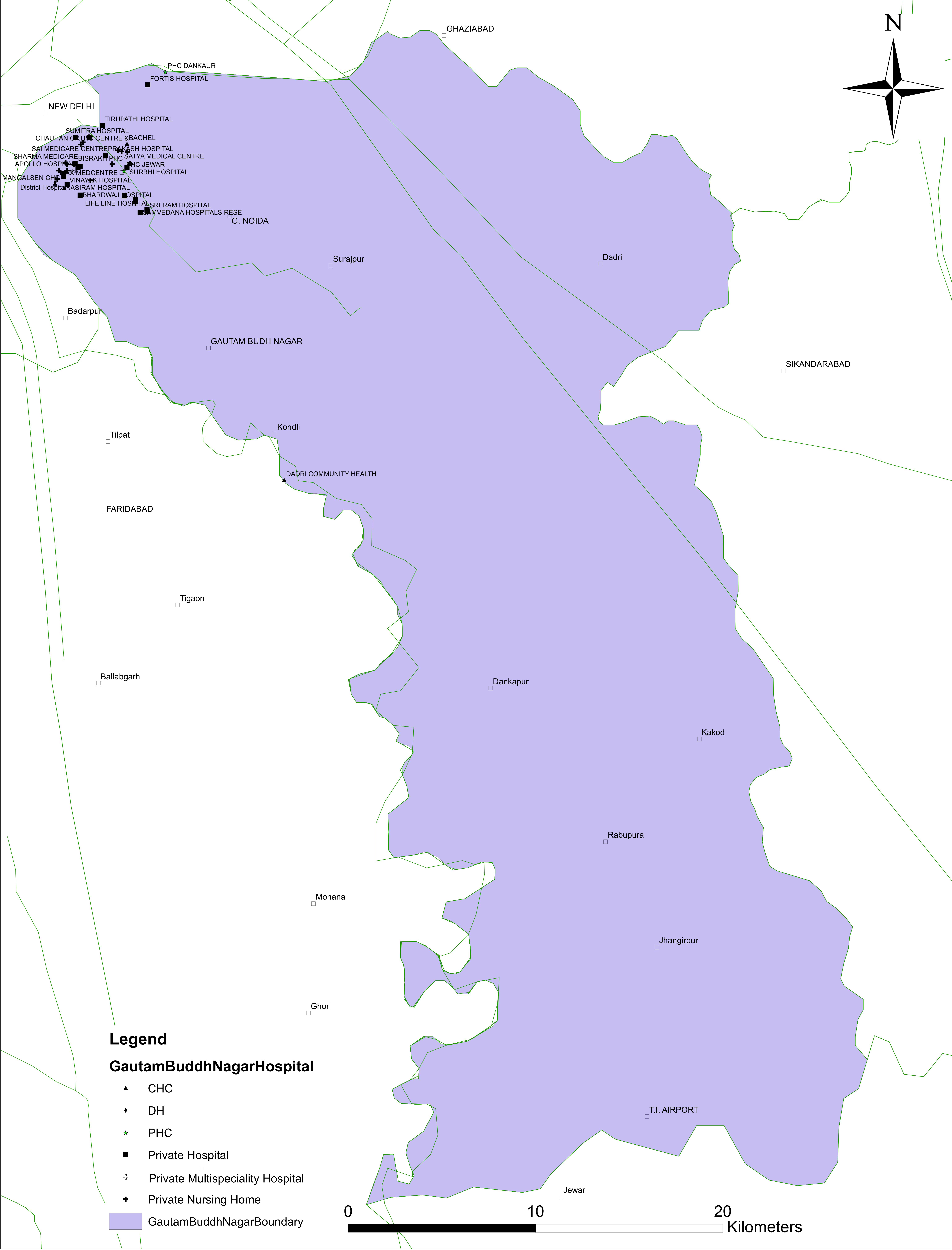
- ▲ CHC
- ★ PHC
- Private Hospital
- + Private Nursing Home
- BaghpatBoundary

0 3 6 12 Kilometers

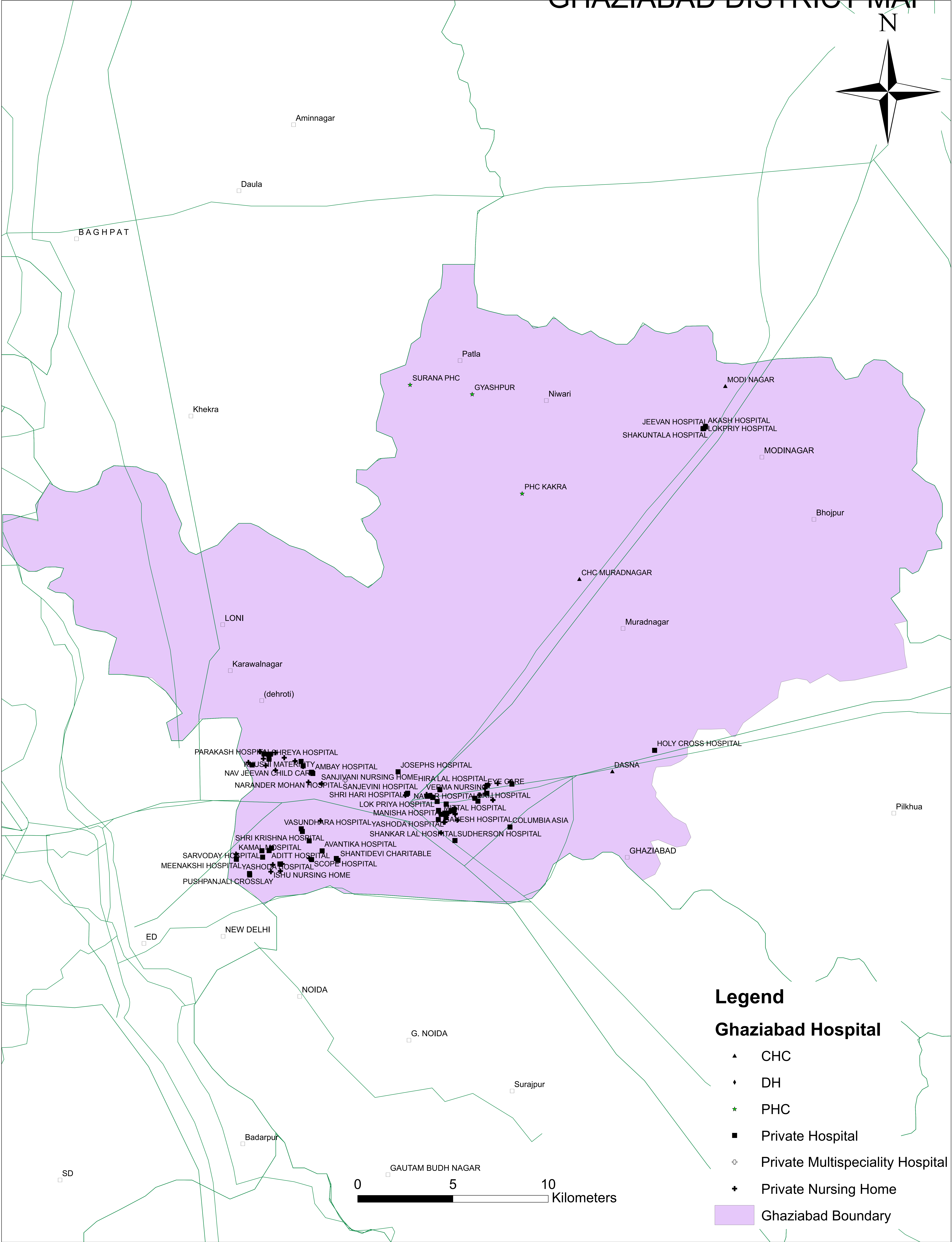
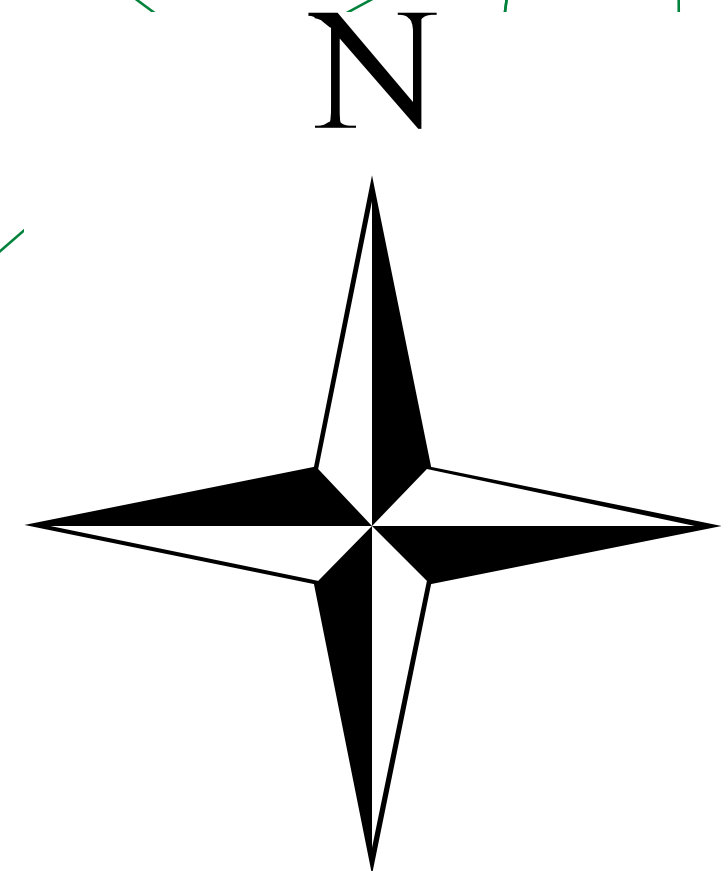
# BULANDSHAHR DISTRICT MAP



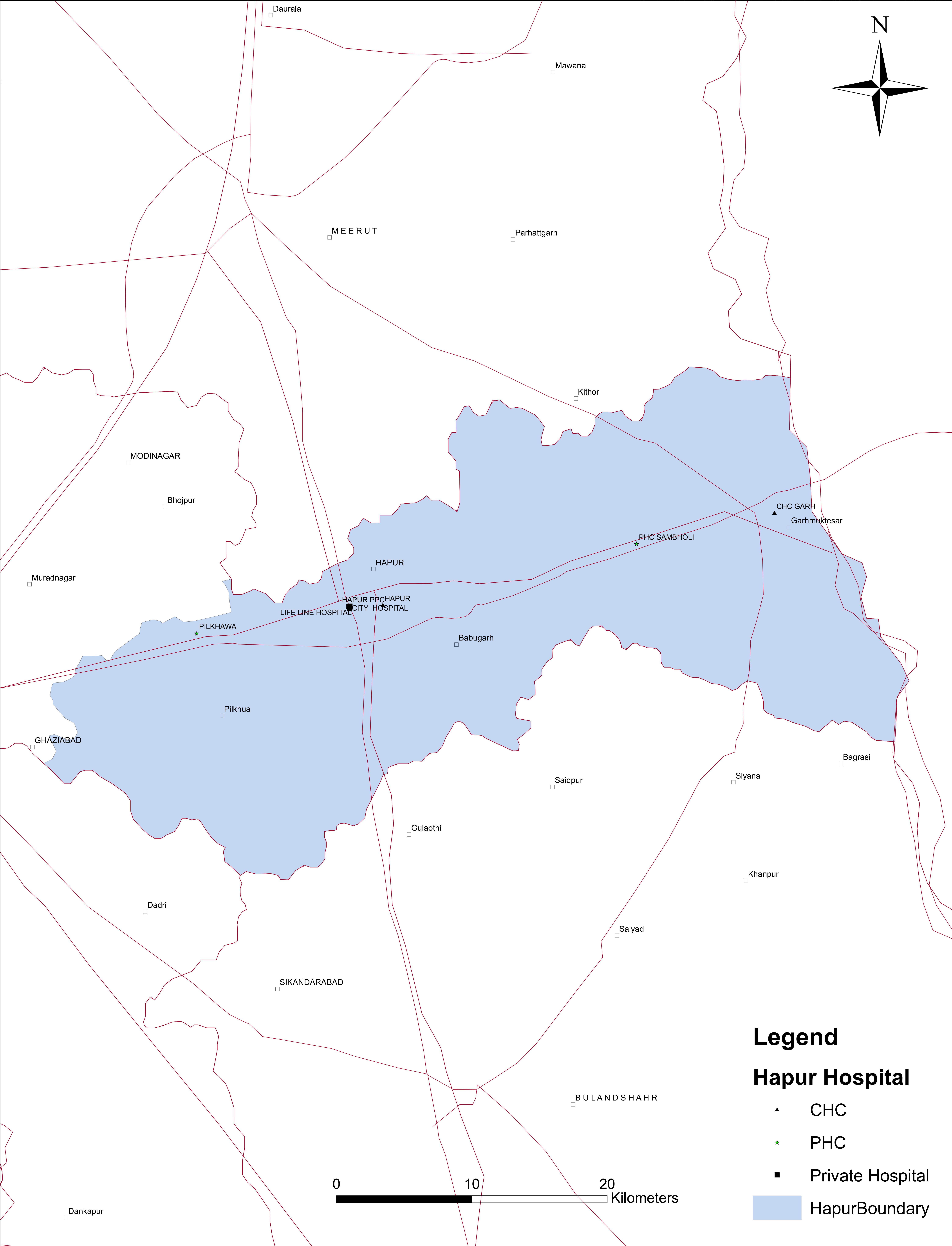
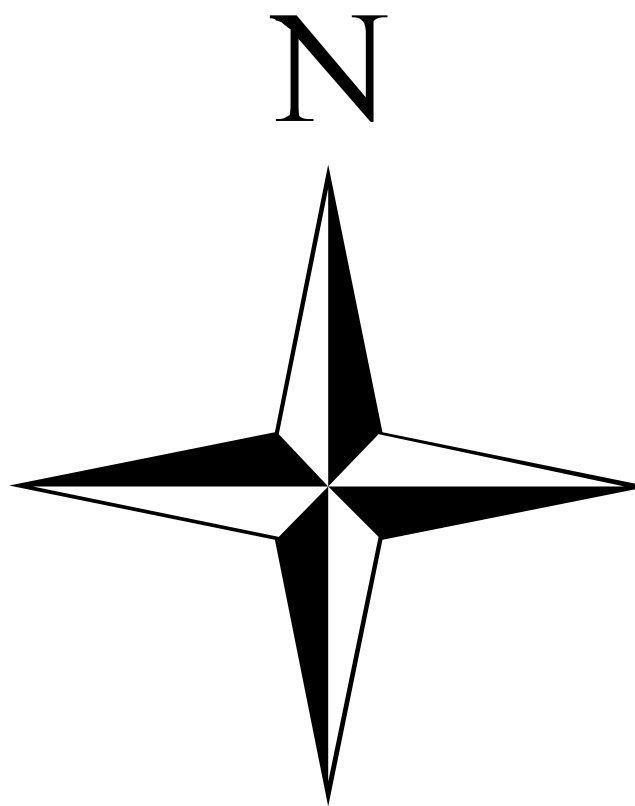
# GAUTAM BUDDH NAGAR DISTRICT MAP



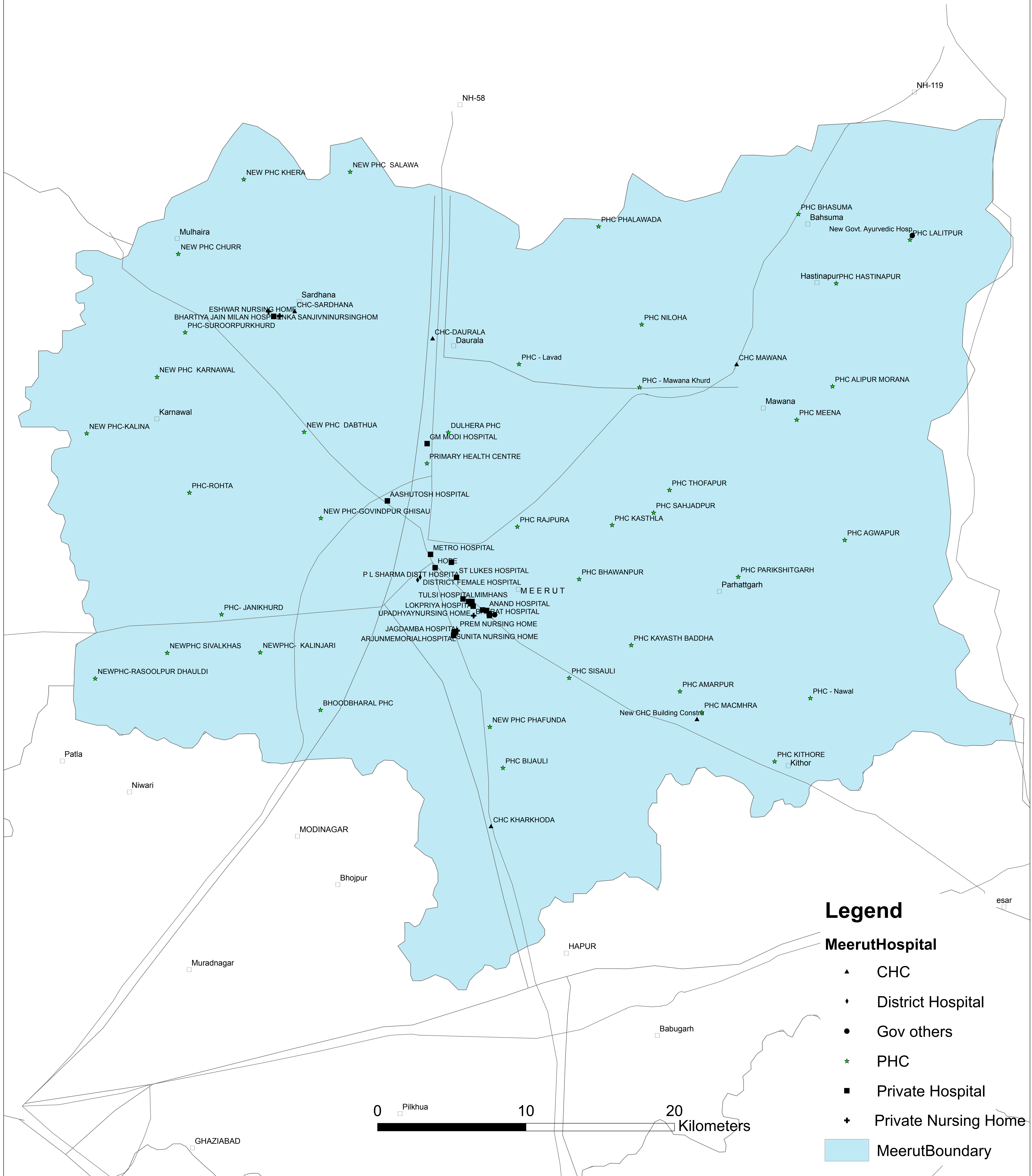
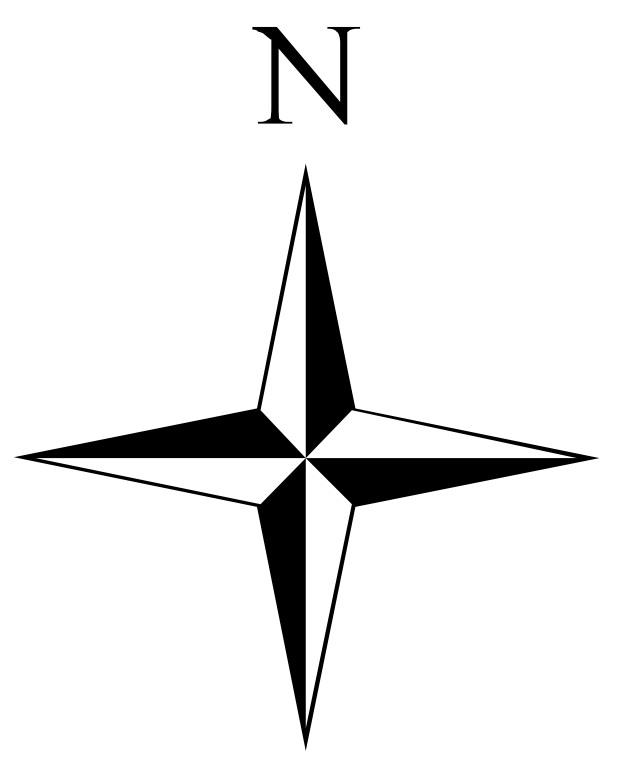
# GHAZIABAD DISTRICT MAP



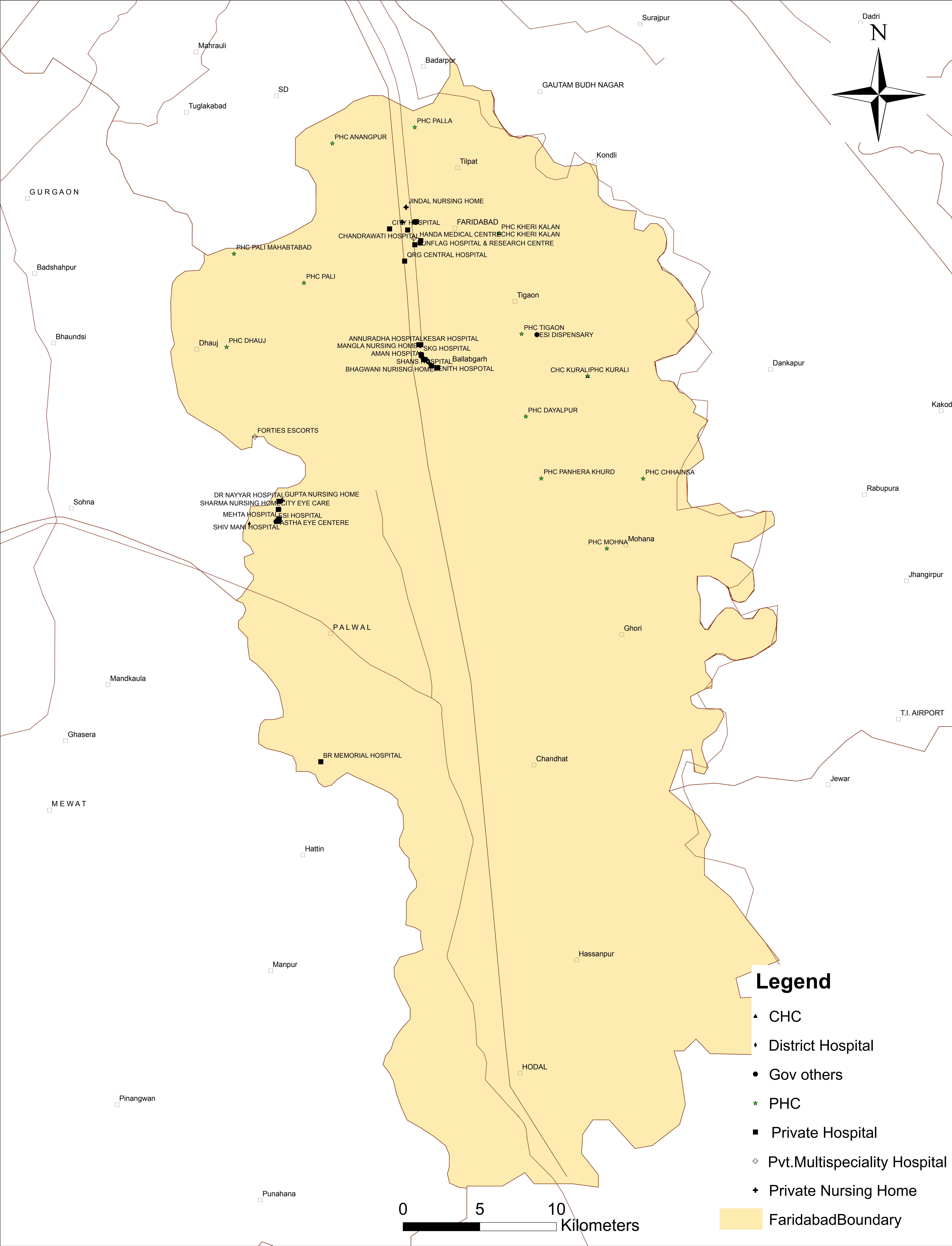
# HAPUR DISTRICT MAP



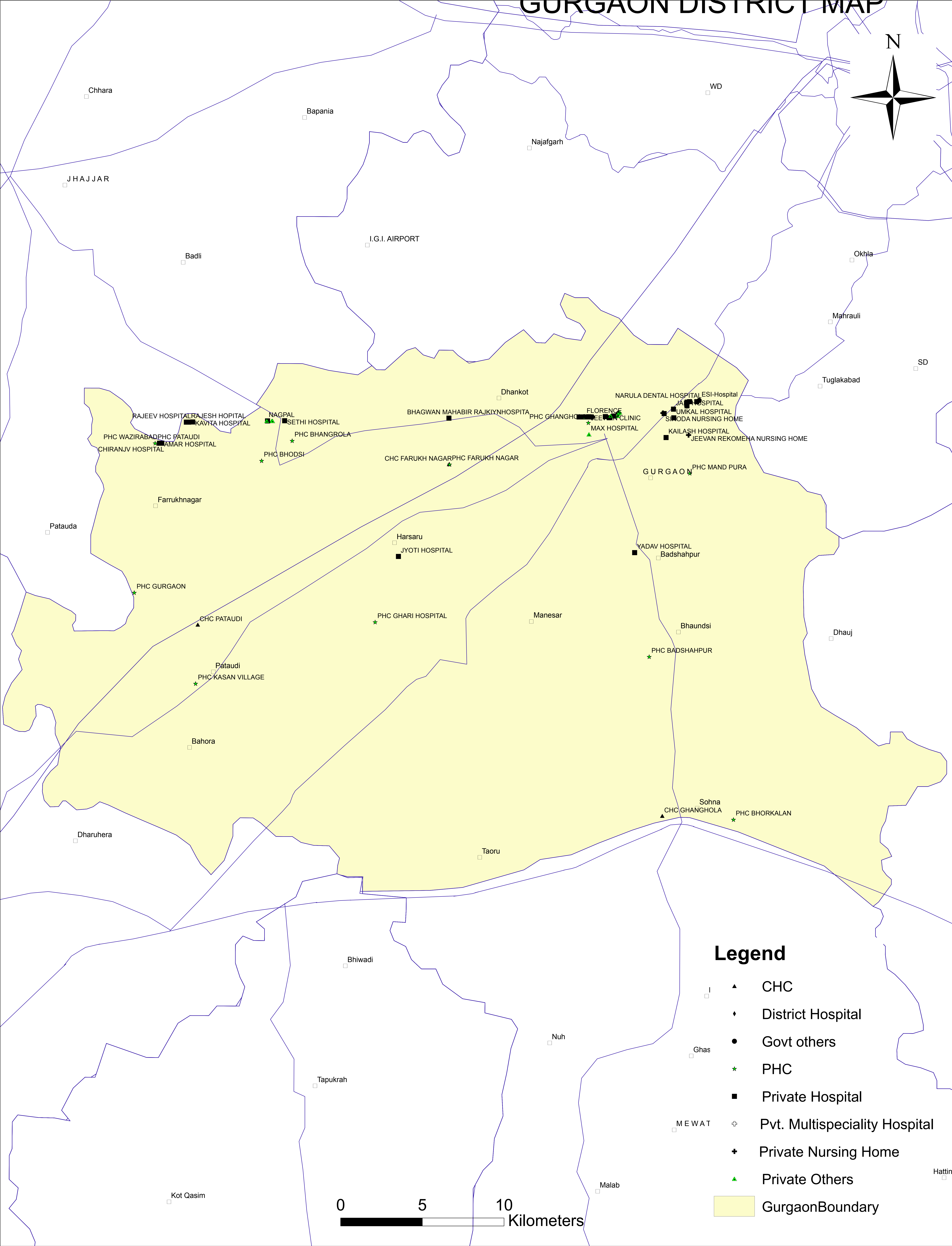
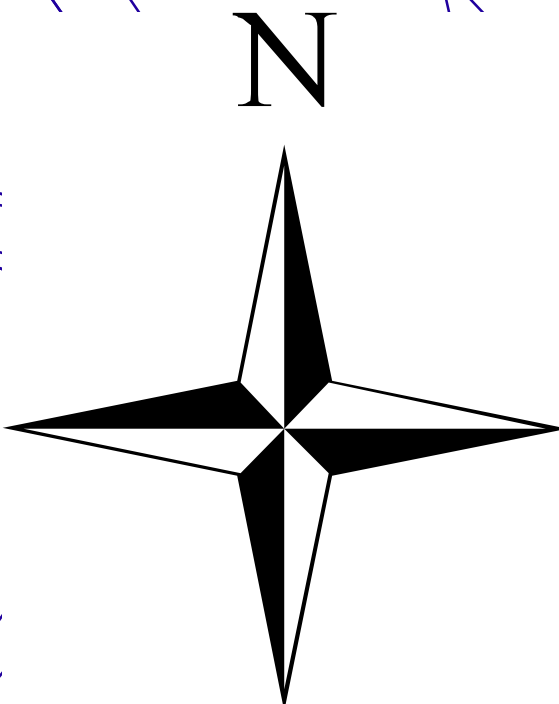
# MEERUT DISTRICT MAP



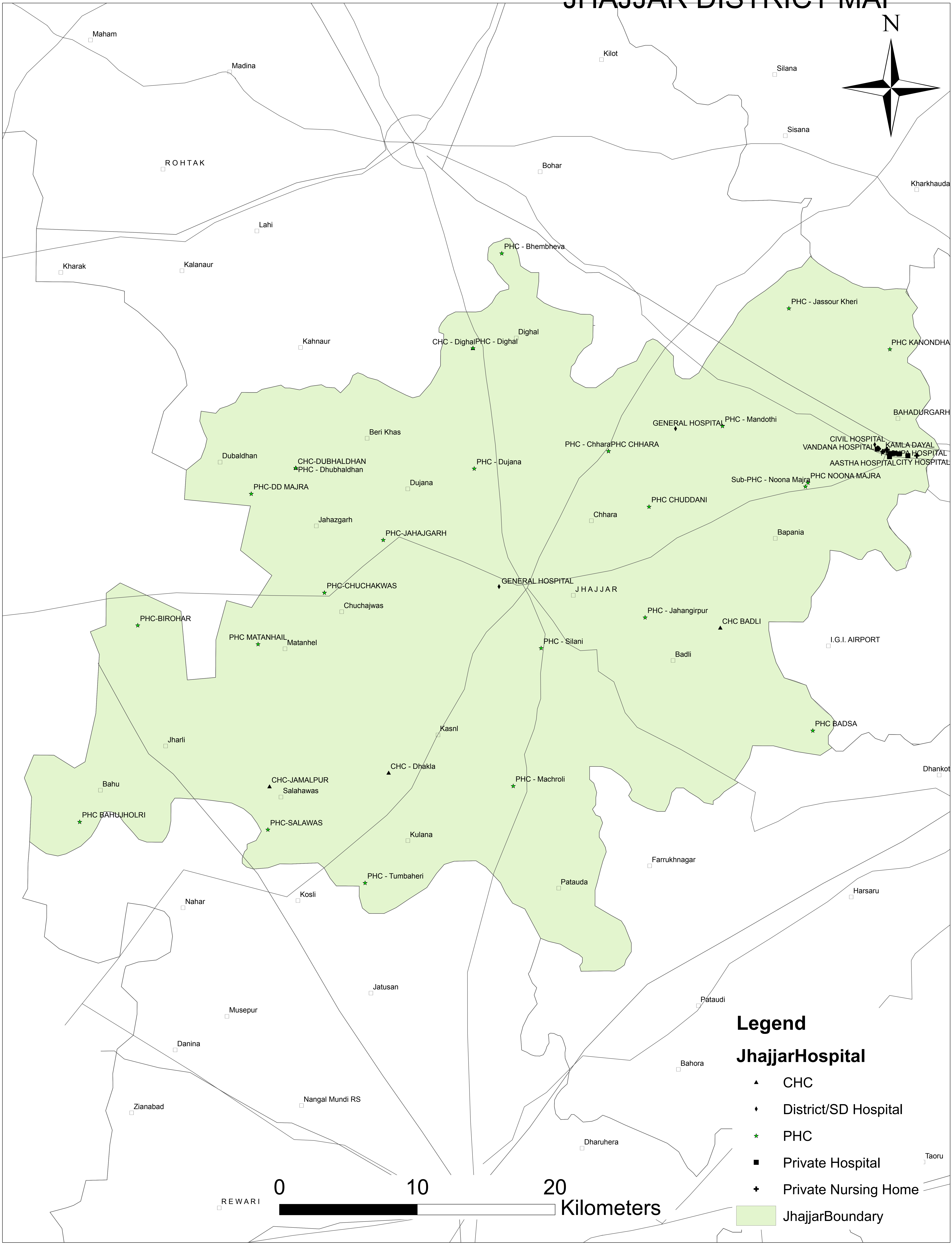
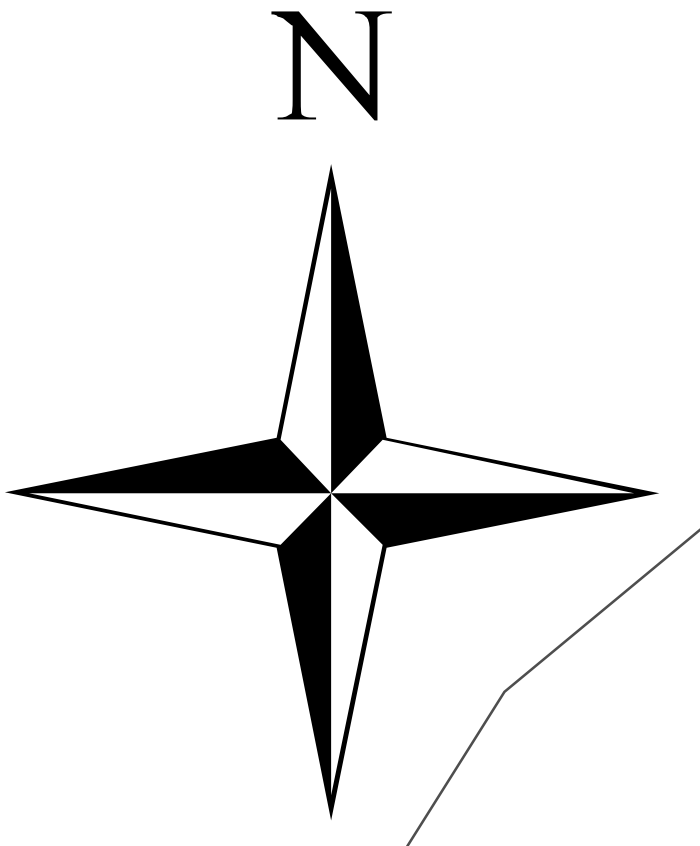
# FARIDABAD DISTRICT MAP



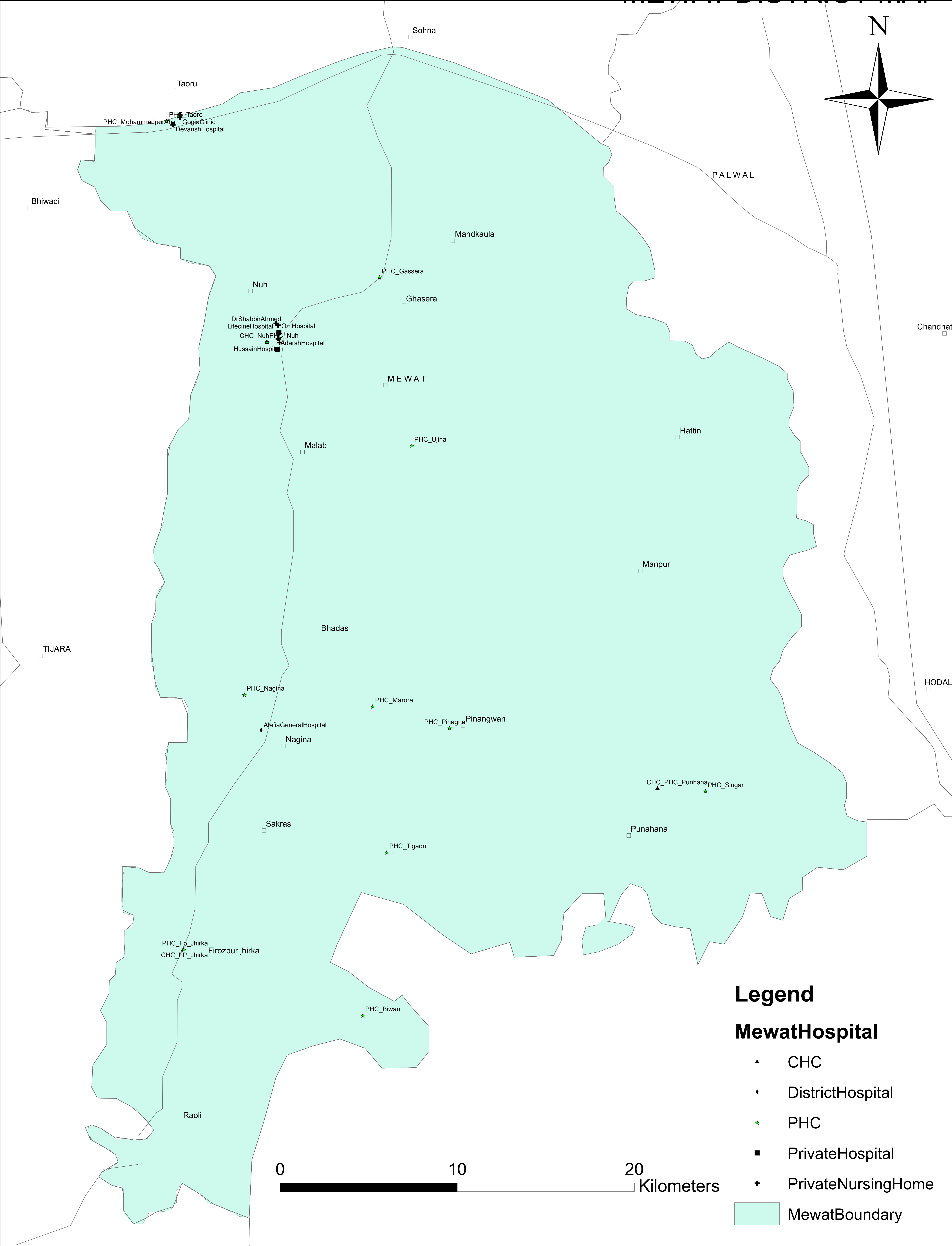
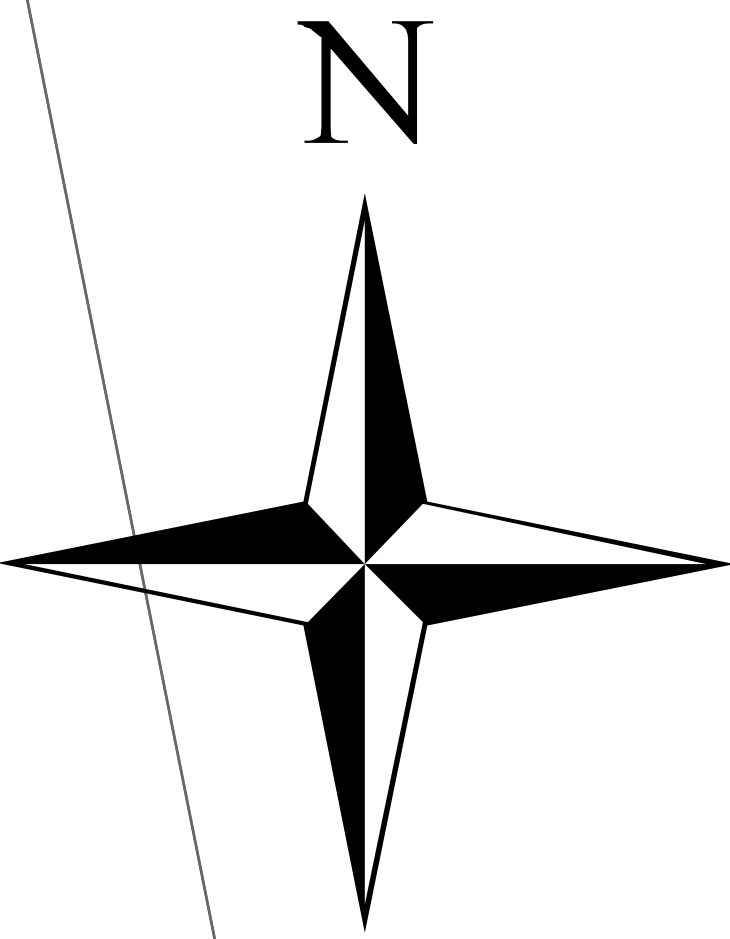
# GURGAON DISTRICT MAP



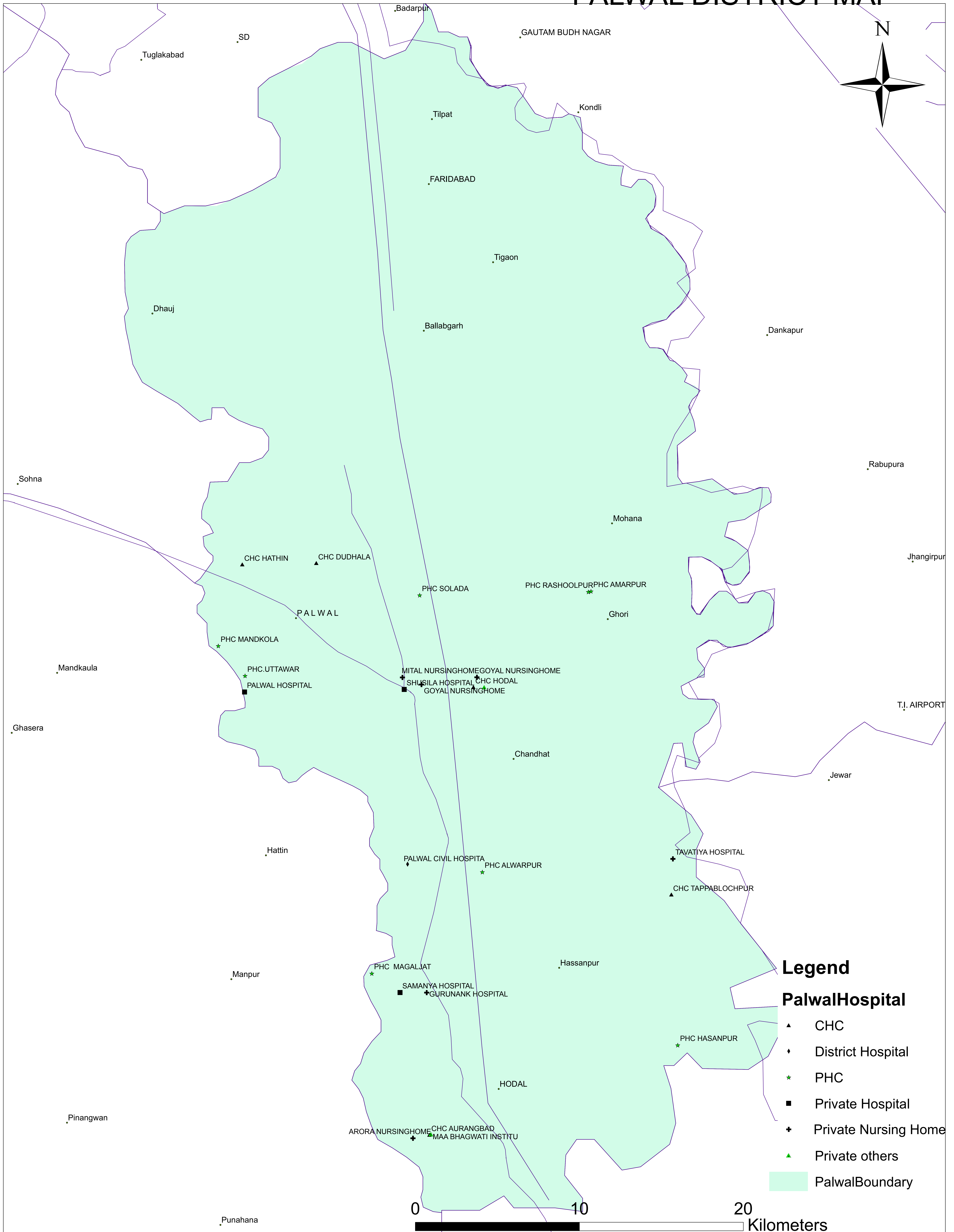
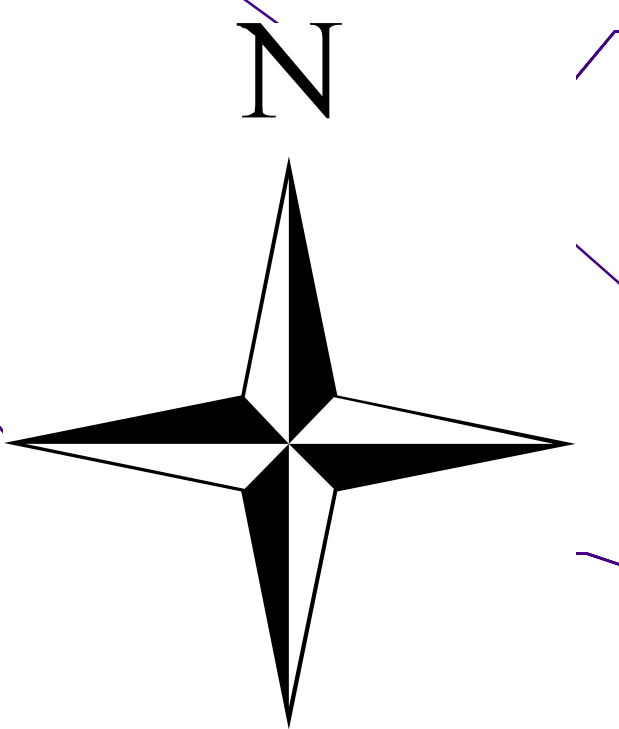
# JHAJJAR DISTRICT MAP



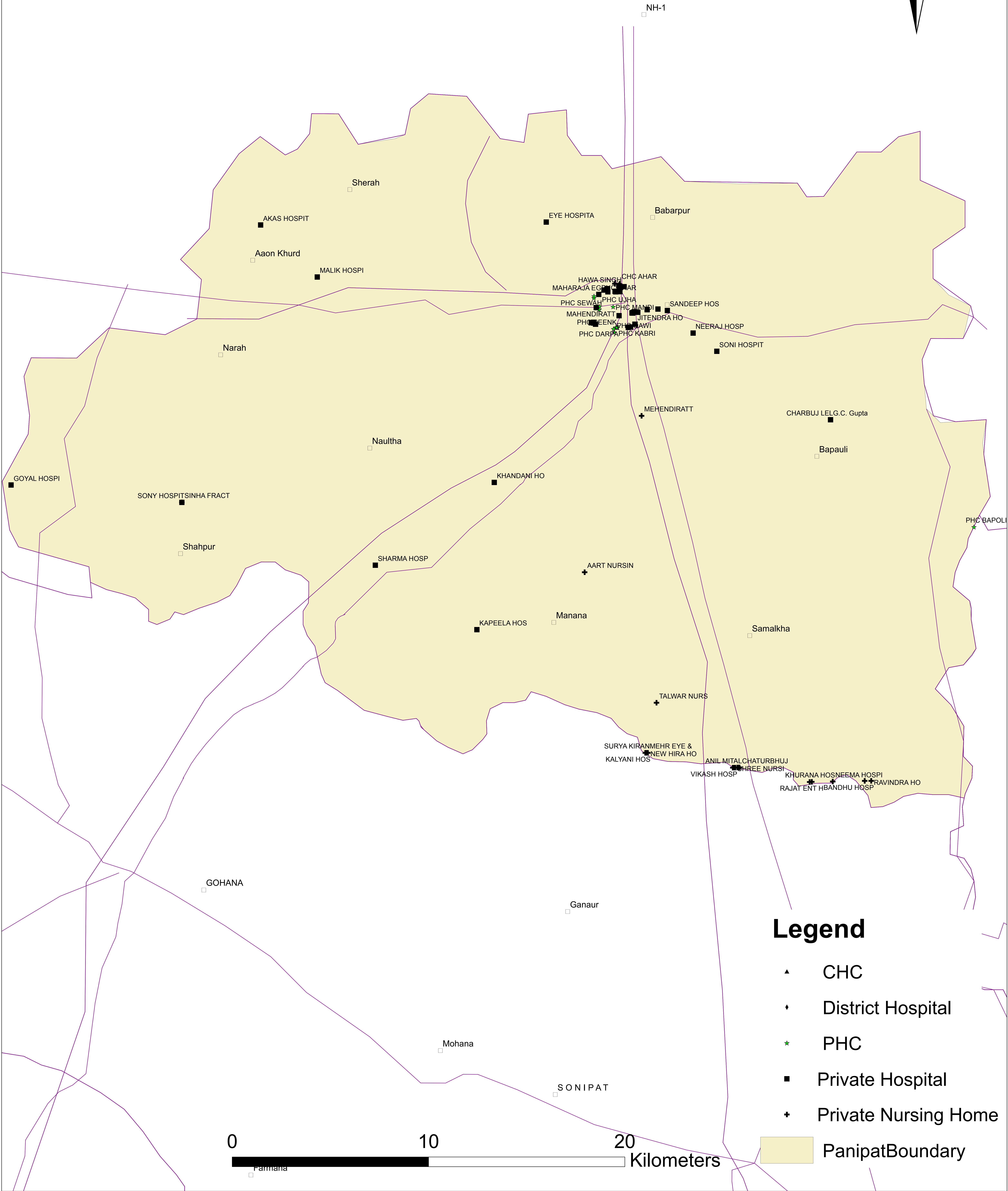
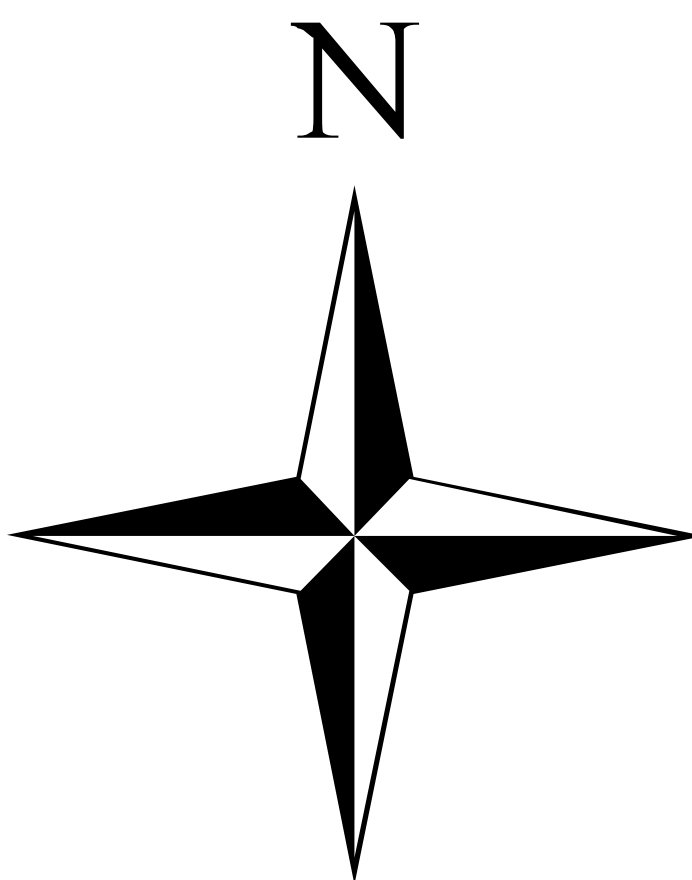
# MEWAT DISTRICT MAP



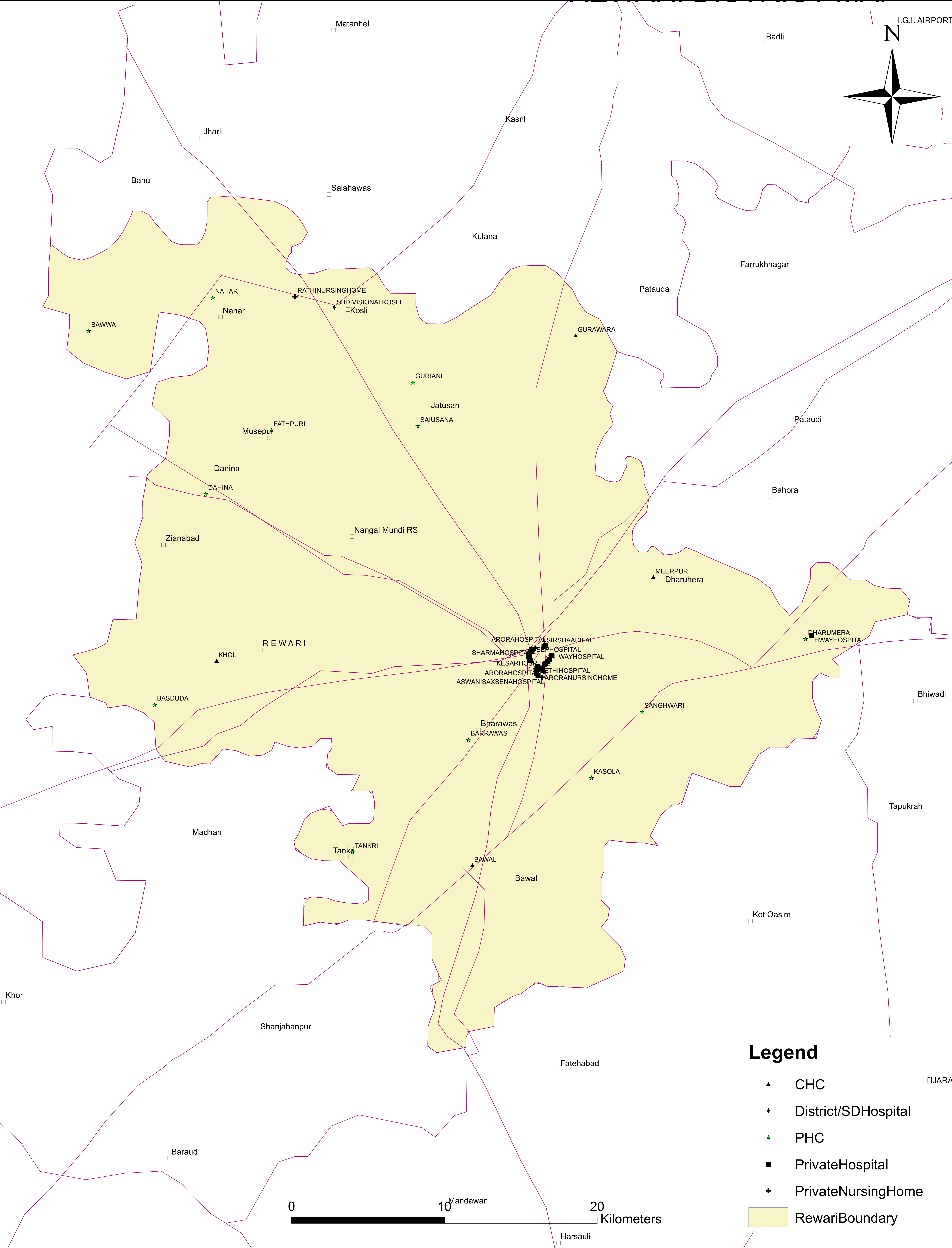
# PALWAL DISTRICT MAP



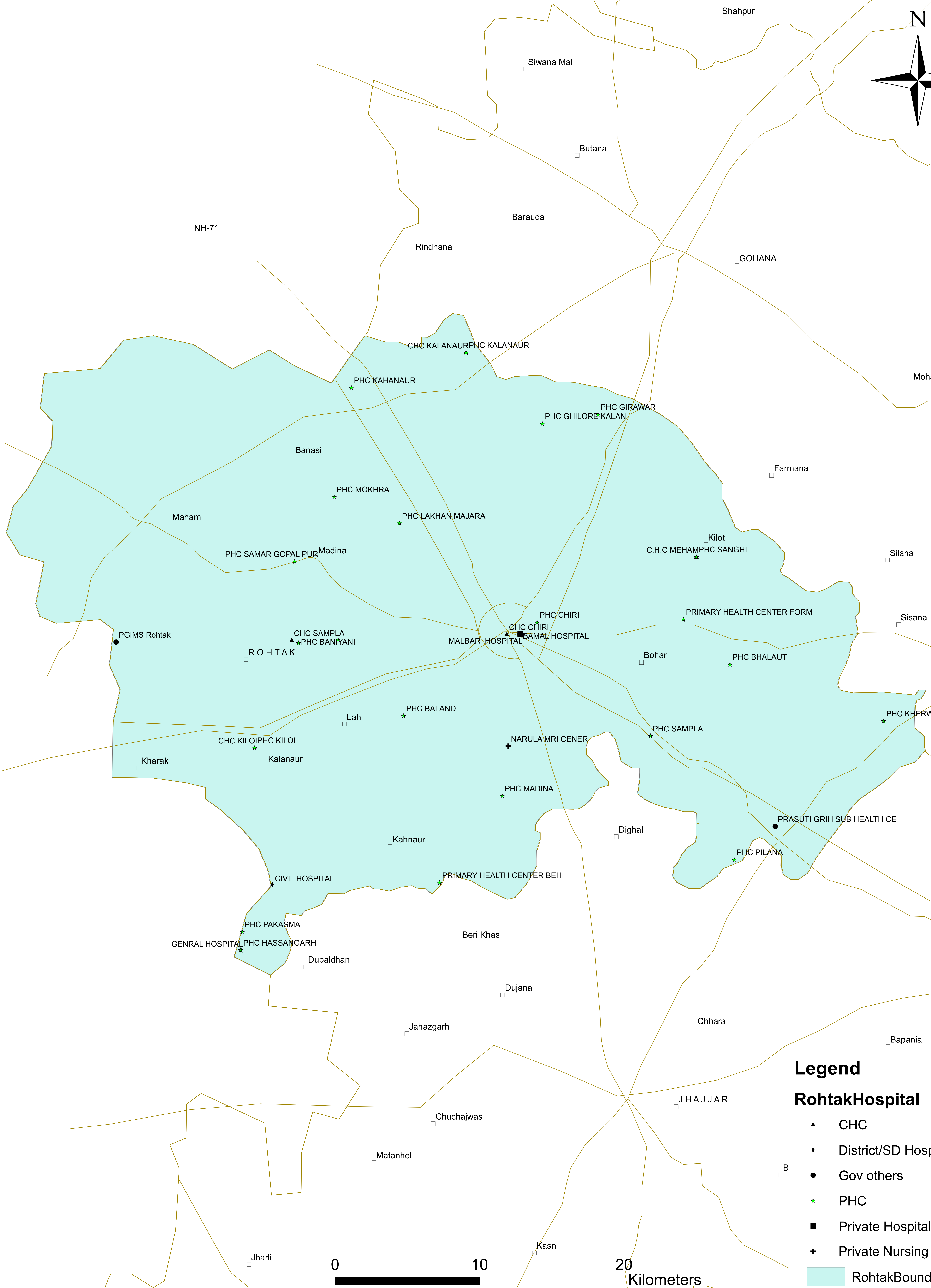
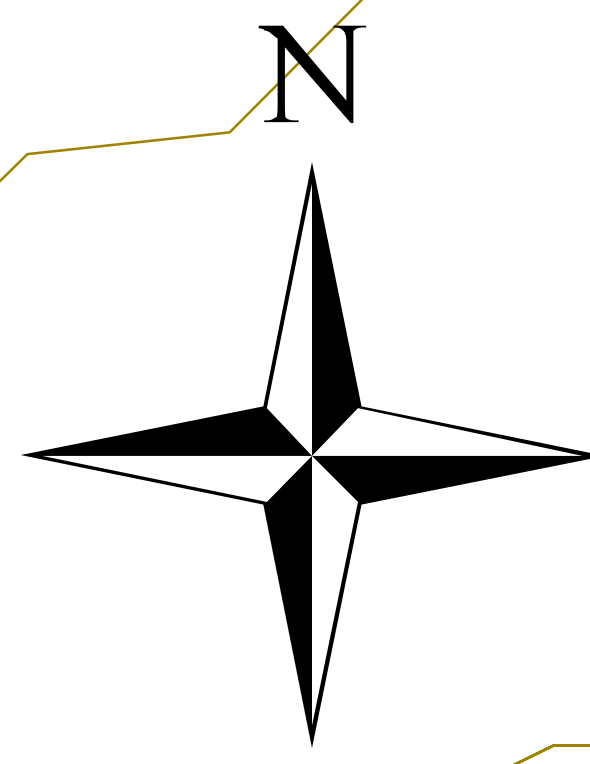
# PANIPAT DISTRICT MAP



# REWARI DISTRICT MAP



# ROHTAK DISTRICT MAP



**Legend**

**Rohtak**

▲

CHC

◆

District/SD Hospital

●

Gov others

★

PHC

■

Private Hospital

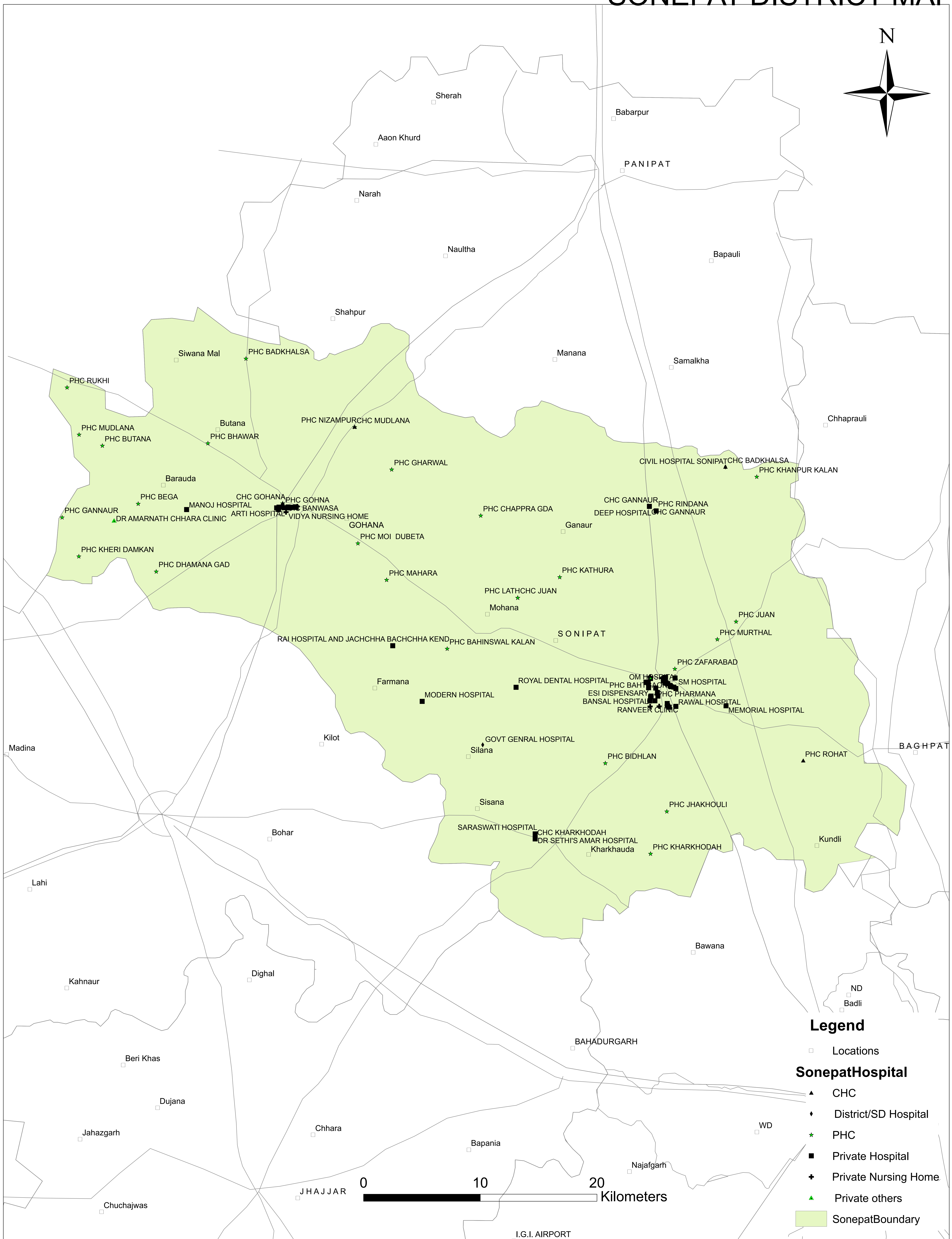
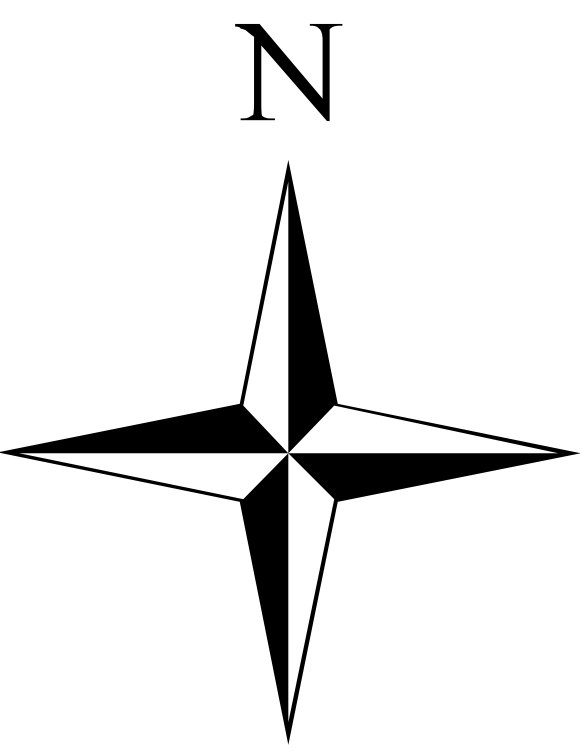
+

Private Nursing Home

RohtakBoundary



# SONEPAT DISTRICT MAP



## Appendix E. Contact details of Medical Officials Contacted

S. No	District	State	Name	Designation	Contact No
1	Central(Paharganj)	Delhi	Dr. Bansal	Add.CDMO	9868110801
2	East(Surajmal Viahar)	Delhi	Dr. Rajendra Midha	CDMO	9811031656
3	South (Malviya Nagar)	Delhi	Dr. Meera Hajerla	CDMO	011-26693339
			Dr. Jyoti Sachdeva	Add.CDMO	011-26682061
4	North(Gulabi Bagh)	Delhi	Dr. Archana Rai	CDMO	9999360639/ 9654100322/ 23653176
5	North West(Rajori Garden)	Delhi	Dr. A.K.Saini	Add.CDMO	011- 27861592,27516640
6	South West (Dwarka)	Delhi	Dr. Sonia Gupta	Dept CDMO	011- 25082969,25089596
7	West(Paschim Vihar)	Delhi	Dr. Sunil Bhatnagar	Dept CDMO	9810012026
8	North East(Dilshad Garden)	Delhi	Dr. Rajesh Kumar	Add.CDMO	9811720485
9	Sonepat	Haryana	Dr. J.S.Punia	Dept. Civil Surgeon	9813065161
10	Panipat	Haryana	Anuj Tondan	Head, DPMU, NRHM	9896436361
11	Gurgaon	Haryana	Dr. V.K. Singhal	Dept. Civil Surgeon	2322413/
12	Faridabad	Haryana	Dr. Anup Kumar	Dy Civil Surgeon	9999455641
			Dr. Anu Gupta		9810423471
13	Palwal	Haryana	Dr Aditya Chaudhary	Civil Surgeon	01275-242102
			Dr.Vaid prakesh Gupta	SMO	9254255371
			Lok veer singh		9254255372
14	Mewat	Haryana	Dr.C.Rao/ kuldeep rao	Civil Surgeon	9254321102,01268-273010
15	Rohtak	Haryana	Dr.V.K Govilla	CDMO	9215156185
			Kuldeep		9315431453
			USHA / Mani ram		8950344330/ 92551243071
16	Jhajjar	Haryana	Dr.Bharat singh Bishnoi	CDMO	9215156177
			Suneeta	DPM	8053111505
17	Rewari	Haryana	Dr.Rajeev	CDMO	9416245274
			DPM- Manish	DPM	9416891311
18	Bagpat	U P	Dr. M L Arya	CDMO	9415409010
			Suresh Jayant		9412834184
19	Bulandshaher	U P	Dr Deelip Singh	DPO	
20	Meerut	U P	Dr Dinesh	Add Director	9412321566
			Dr Badri Vishal		9415461731
21	Ghaziabad	U P	Dr.AK Dhawan	CDMO	9899971014
			R.P Chawhan		0120-2850780
22	Gautam Budhnagar	U P	Anu Radha		2502023

## Study on Health Infrastructure in NCR

S. No	District	State	Name	Designation	Contact No
			Dr Meena Mishra	DGO	9582793059
23	Alwar	Rajistan	Dr. C.B Dhanawat	CDMO	9414152941/ 0144-2340145
			Dr. S K Taygi		9560272190
			Dr. subodh kr Tewari		945073424 / 0120-2540055
24	Dharamshila Cancer Hospital	Delhi	Dr Raja Dutta	Medical Superintendent	9560450172
25	Fortis Escort Hospital	Haryana	Dr Pinak Moudgil	Medical Superintendent	9818590011
			Rajani	Asst Manager-Quality	
26	GB Panth Hospital	Delhi	Dr Veena Chowdhury	Director	
			Dr H P Singh	Asst Medical Superintendent	9718599004
			Dr Ashok Sharma	Director-Professor Redio-Dignosis	9811111933
27	Guru Teg Bahadur	Delhi	Dr U C Varman	Medical Superintendent	
			Dr P K Malik	CMO	9868399512
28	Kailash Hospital and Heart Institute	NOIDA	Dr. Mahesh Sharma,	Chairman & Managing Director	9990-444444
			Dr Vijay Ganju	Medical Superintendent	9871295311
			Dr A K Chaturvedi	Group Medical Director	95-1202444444
			Mr P UNNIKRISHNAN	Asst. General Manager	95-1202444444
			Mr Parveen Kumar Jha	Manager HR and Personal	9711918258
29	Medanta Medicity	Harayana	Dr Naresh Trehan	Chairman and Managing Director	9971698163
30	Narendermohan Hospital and Heart Centre	Ghaziabad	Brig (Retd.) Dr KBNS Dod	Medical Superintendent	9868994095
31	Post Graduate Institute of Medical Education & Research , Rohatak	Rohatak	Mr C S Dhulla	Director	9896091449
			Dr Amit Lathwa	Dy Medical Superintendent	9315642062
32	Safdarjung Hospital	Delhi	Dr N K Mohanty	Medical Superintendents	
33	St Stephens Hospital	Delhi	Dr. Sudhir Cecil Joseph	Director	
			Dr. Grace Cheriyan	Deputy Director	9868399103
			Mr Balbir Singh	Public Relation cum Promotional Officer	9868399104
34	Delhi	Delhi	Dr. R. N. Sharma	Dr R N Sharma Deputy Director Planning DHS	011-22306226/ 9654100301

## Study on Health Infrastructure in NCR

S. No	District	State	Name	Designation	Contact No
				(HQ)	
35	Panchkula	Haryana	Dr. Rajesh Bali	Nodal Officer (Infrastructure), Health Department, Government of Haryana, Swasthaya Bhawan, Sector-06, Panchkula, Haryana	0172-2585501/5
36	Delhi	Delhi	Sh. Rajesh Bhatia	Director (Statistics), Ministry of Health and Family Welfare, Room No. 512-A, Nirman Bhawan, New Delhi - 110108	011-23062647
37	Delhi	Delhi	Dr. S. Khanna	Executive Director Dharamshila Cancer Hospital	09810050395