

No. 3

JAPAN INTERNATIONAL COOPERATION AGENCY
MINISTRY OF HEALTH AND FAMILY WELFARE
REPUBLIC OF INDIA

BASIC DESIGN STUDY REPORT
ON
THE PROJECT FOR IMPROVEMENT
OF
MEDICAL EQUIPMENT
AT
OSMANIA GENERAL HOSPITAL
IN
INDIA

MARCH 1995

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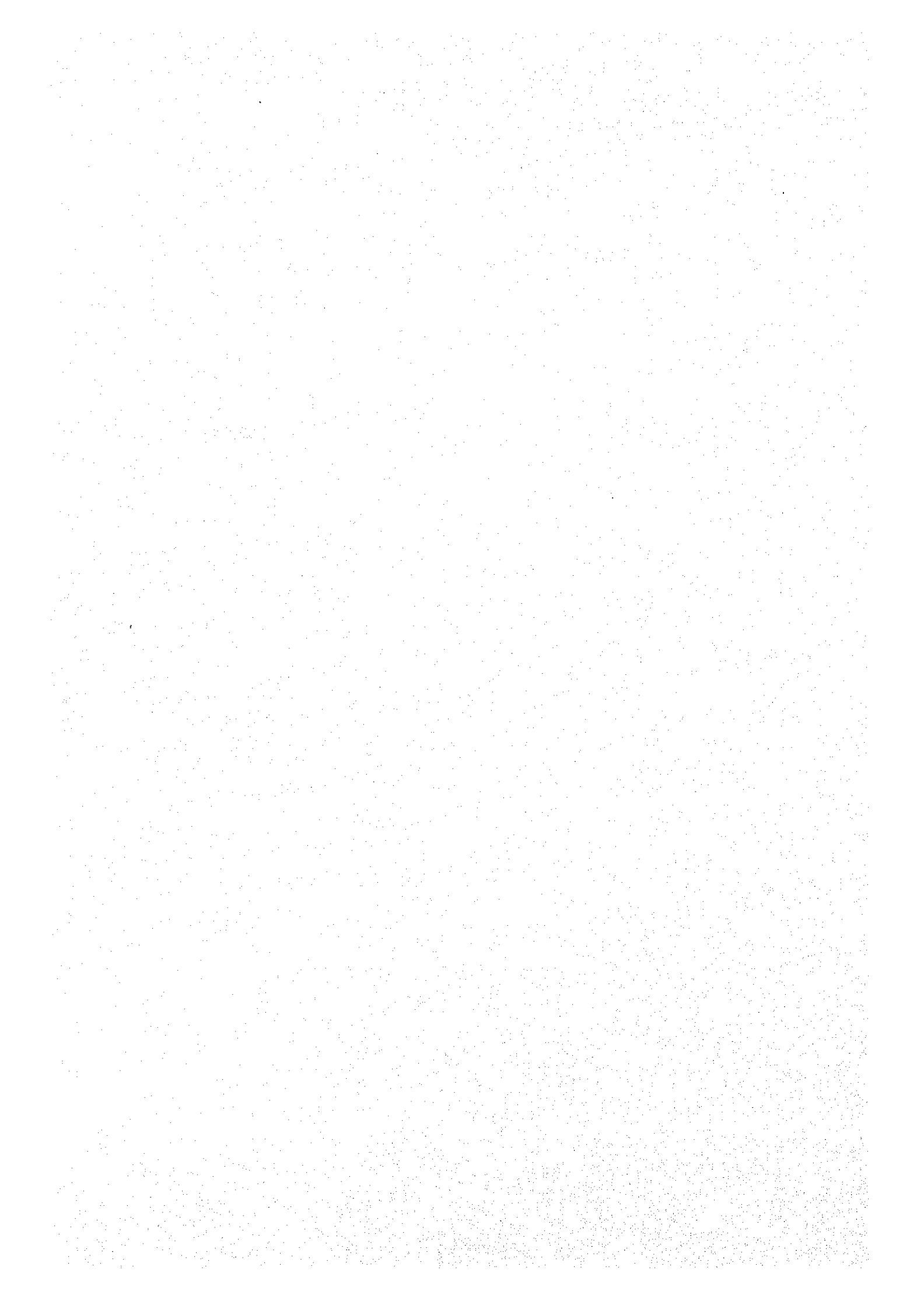
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JICA BASIC DESIGN STUDY REPORT ON THE PROJECT FOR IMPROVEMENT OF MEDICAL EQUIPMENT AT OSMANIA GENERAL HOSPITAL IN INDIA
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PREFACE

In response to a request from the Government of the Republic of India, the Government of Japan decided to conduct a basic design study on the Project for the Improvement of Medical Equipment at Osmania General Hospital in India and entrusted the study to the Japan International Cooperation Agency (JICA).

JICA sent to India a study team headed by Dr. Seiki Tateno, Bureau of International Cooperation, International Medical Center of Japan and constituted by members of Daiichi Health Care Facility Consultants, Inc., from October 1 to 21, 1994.

The team held discussions with the officials concerned of the Government of India, and conducted a field study at the study area. After the team returned to Japan, further studies were made. Then, a mission was sent to India from December 7 to 17, 1994 in order to discuss a draft report, and as this result the present report was finalized.

I hope that this report will contribute to the promotion of the project and to the enhancement of friendly relations between our two countries.

I wish to express my sincere appreciation to the officials concerned of the Government of the Republic of India for their close cooperation extended to the teams.

March, 1995



Kimio Fujita

President

Japan International Cooperation Agency

March , 1995

Mr. Kimio Fujita,
President
Japan International Cooperation Agency
Tokyo, Japan

Letter of Transmittal

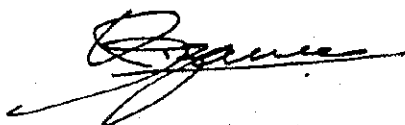
We are pleased to submit to you the basic design study report on the Project for the Improvement of Medical Equipment at Osmania General Hospital in the Republic of India.

This study was conducted by Daiichi Health Care Facility Consultants, Inc., under a contract to JICA, during the period from September 16, 1994 to March 28, 1995. In conducting the study, we have examined the feasibility and rationale of the project with due consideration to the present situation of India and formulated the most appropriate basic design for the project under Japan's grant-in-aid scheme.

We wish to take this opportunity to express our sincere gratitude to the officials concerned of JICA, the Ministry of Foreign Affairs, and the Ministry of Health and Welfare. We would also like to express our gratitude to the officials concerned of Health, Medical & Family Welfare Department, the Government of Andhra Pradesh, the JICA India office, the Embassy of Japan in India for their cooperation and assistance throughout our field survey.

Finally, we hope that this report will contribute to further promotion of the project.

Very truly yours,



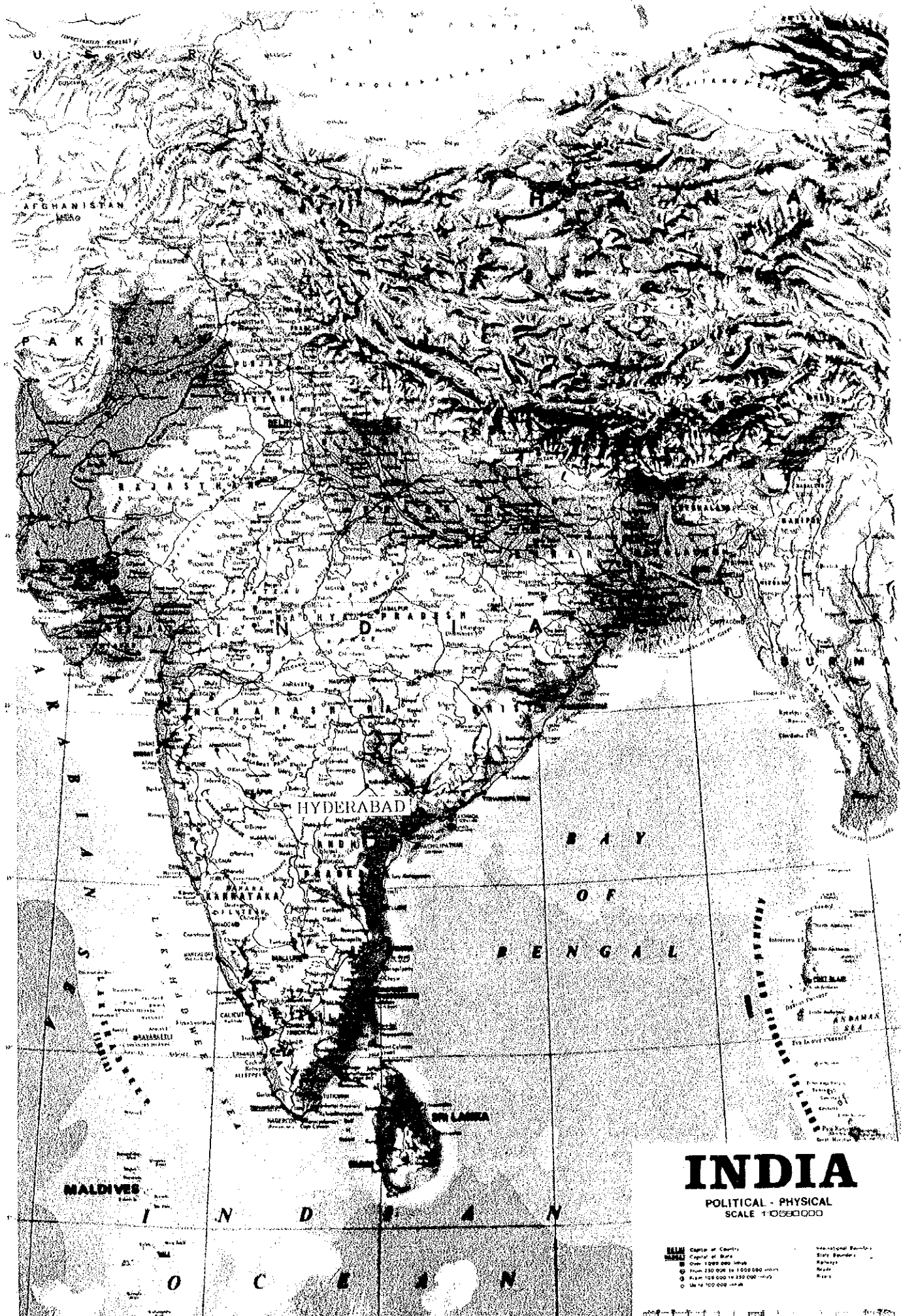
K. Izawa

Project Manager

Basic Design Study Team on the Project

for the Improvement of Medical Equipment at Osmania General Hospital in India

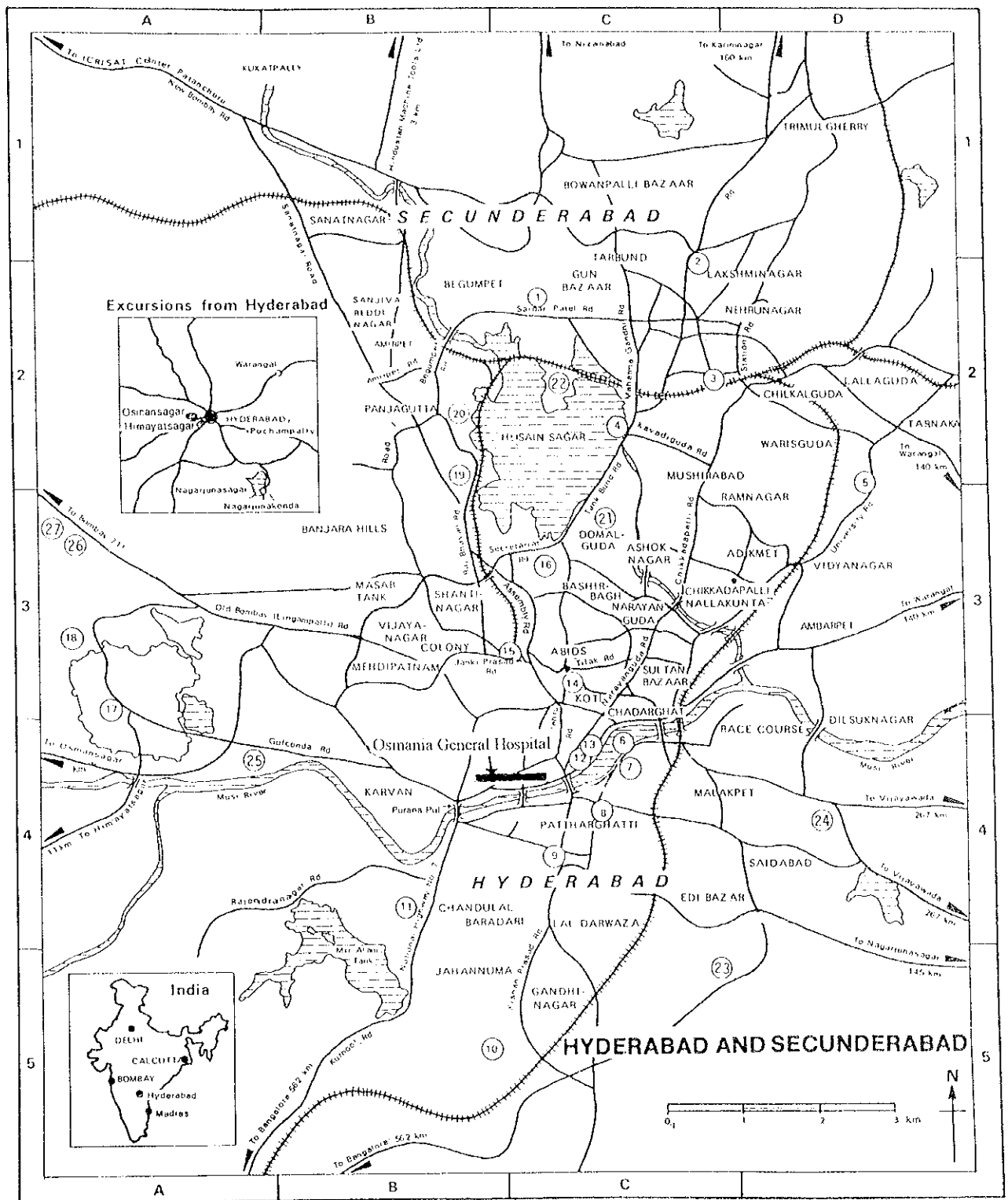
Daiichi Health Care Facility Consultants, Inc.



INDIA

POLITICAL - PHYSICAL
SCALE 1:10,000,000

- | | | |
|--------------|--------------------------------|------------------------|
| INDIA | Capital of India | International Boundary |
| ■ | Over 1,000,000 pop. | State Boundary |
| □ | From 250,000 to 1,000,000 pop. | Railway |
| ○ | From 100,000 to 250,000 pop. | Road |
| ○ | Up to 100,000 pop. | Canal |



Adapted from the map produced in December 1978 for the Department of Tourism, Government of India by Tourism Development Corporation and printed by G. Claridge & Co. Ltd.



HYDERABAD

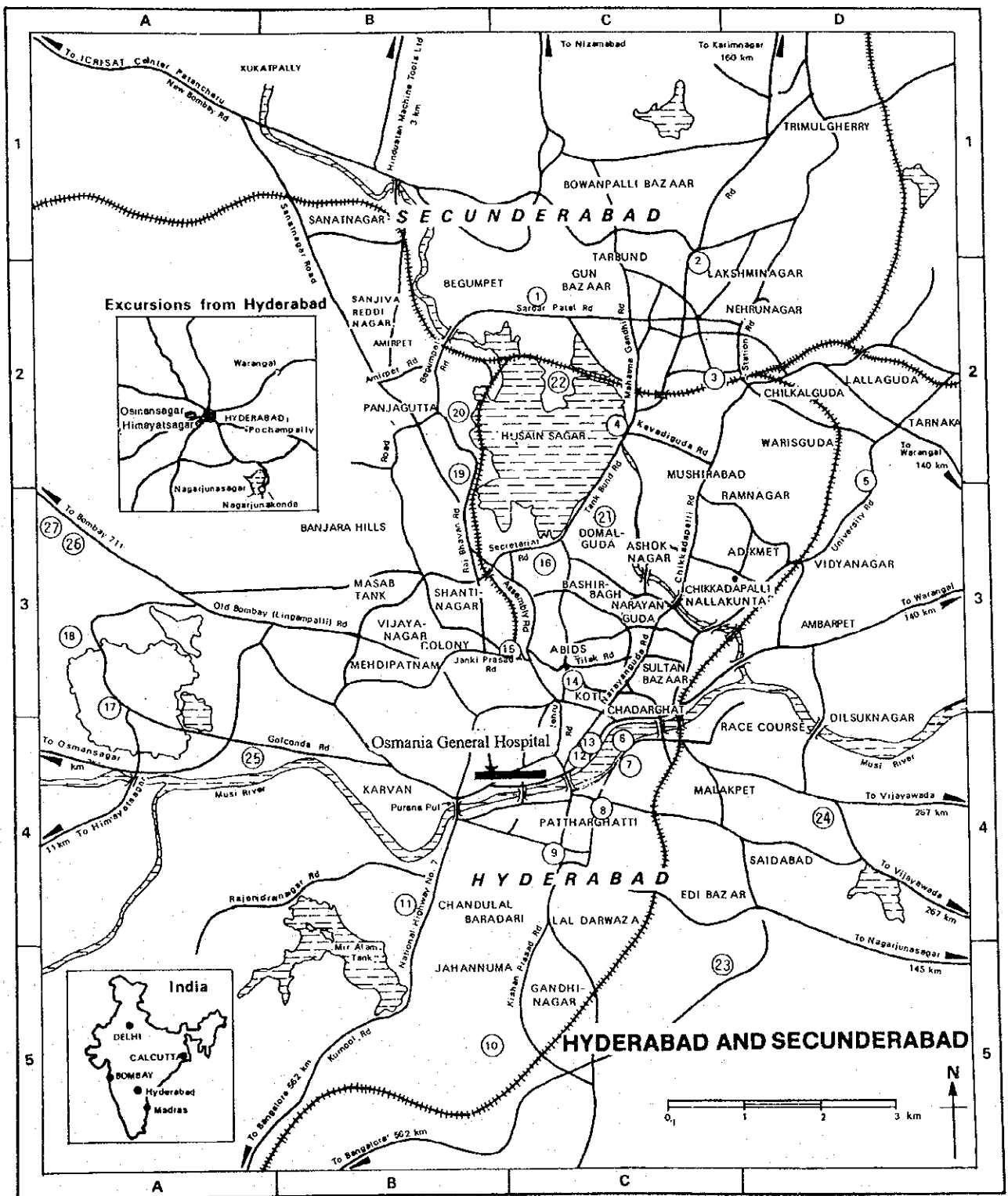
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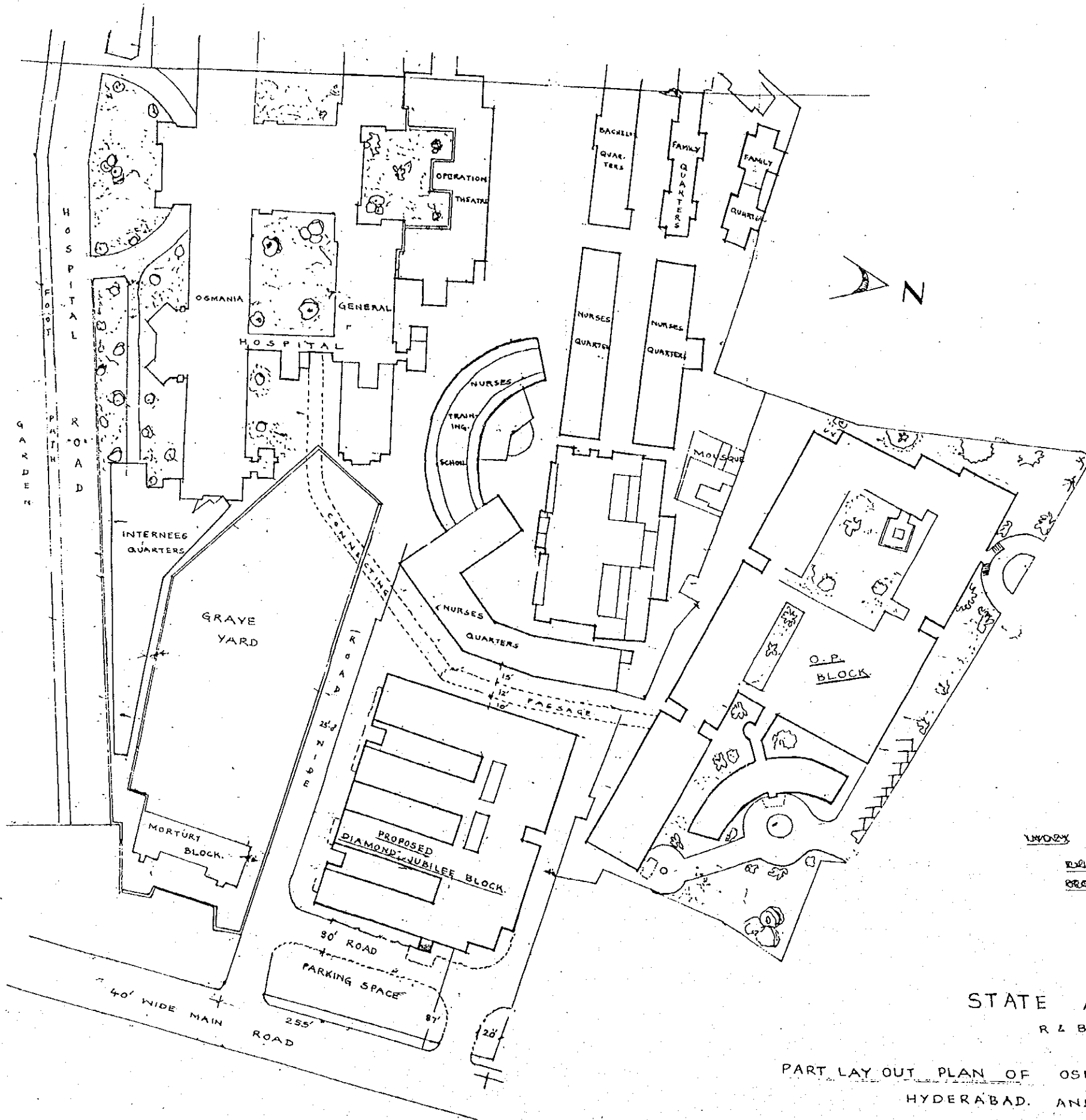
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| <ul style="list-style-type: none"> ■ Capital of State ■ City ● From 100,000 to 1,000,000 ● From 50,000 to 100,000 ● From 10,000 to 50,000 ● From 1,000 to 10,000 | <ul style="list-style-type: none"> International Boundary State Boundary Railway Road Canal |
|--|--|



MADE IN ITALY



Adapted from the map produced in December 1978 for the Department of Tourism, Government of India, by Tourism Development Corporation and printed by G. Claridge & Co. Ltd.



ONE	18-10-84	LOCATION OF PROPOSED DIAMOND-JUBILEE BUILDING REVISED.	
REVISION	DATE	DESCRIPTION	INITIAL

REFERENCE

- READ THIS DRAWING ALONG WITH DRAWING NOS.
- ① DRG. NO. SA/62/86-87 DL. 4-6-1986 F.F.
 - ② DRG. NO. SA/63/86-87 DL. 4-6-1986 S.F.
 - ③ DRG. NO. SA/64/86-87 DL. 4-6-1986 T.F.
 - ④ DRG. NO. SA/82/86-87 DL. 23-6-1986 R.F.
 - ⑤ DRG. NO. SA/84/86-87 DL. 23-6-1986 FIFTH F.
 - ⑥ DRG. NO. SA/103/84-87 DL. 30-6-1986 CELLAR FLOOR

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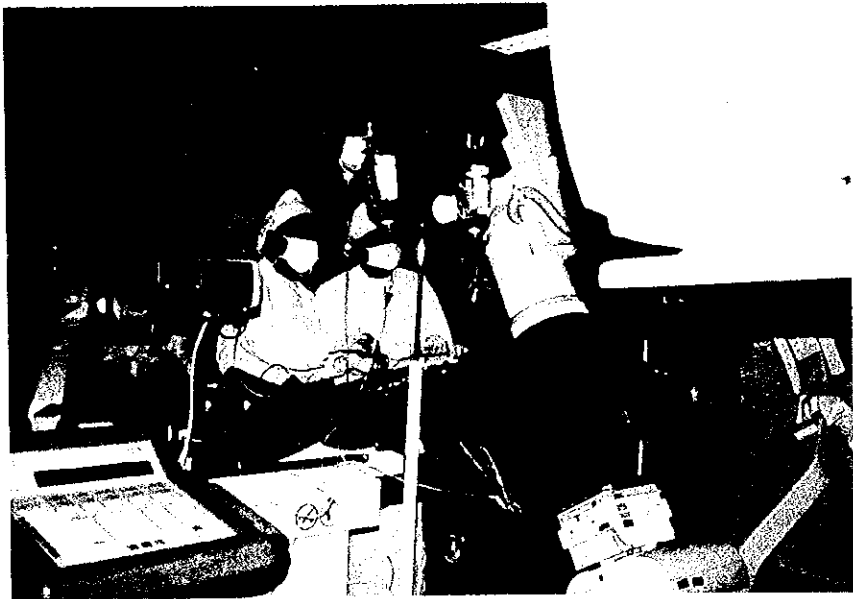
- O.P. BLOCK (GOLDEN JUBILEE BLOCK)
- NURSES HOSTEL BLOCK
- Q.D.C. (DIAMOND JUBILEE BUILDING)
- OLD BUILDING

STATE ARCHITECT SECTION

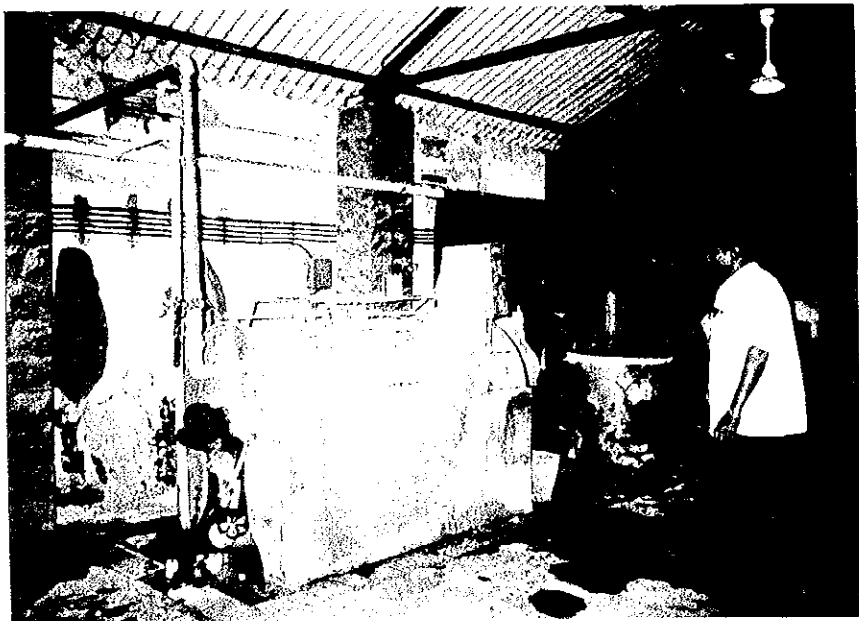
R & B DEPARTMENT

PART LAY OUT PLAN OF OSMANIA GENERAL HOSPITAL
HYDERABAD. ANDHRA PRADESH

Angiograph
Room



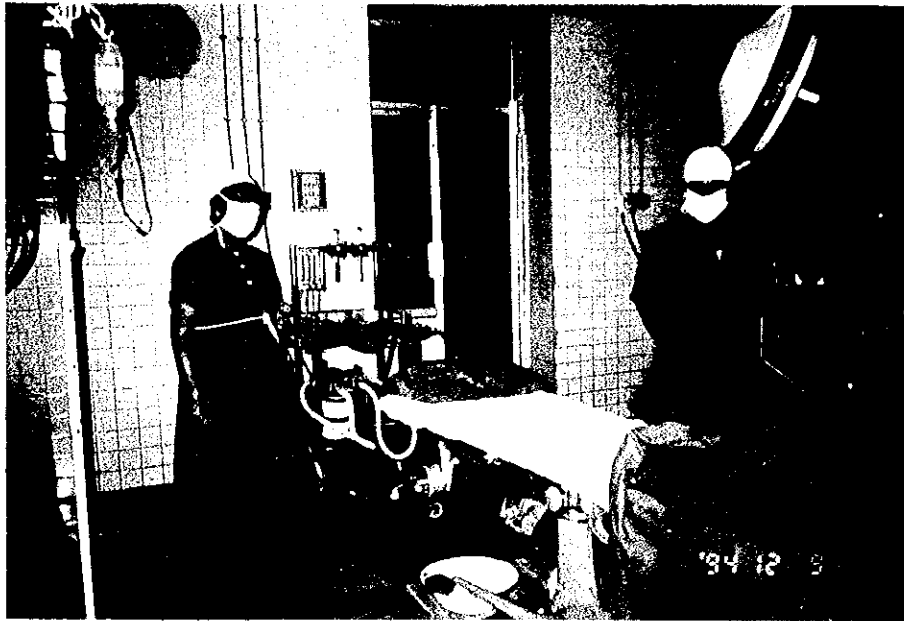
Laundry



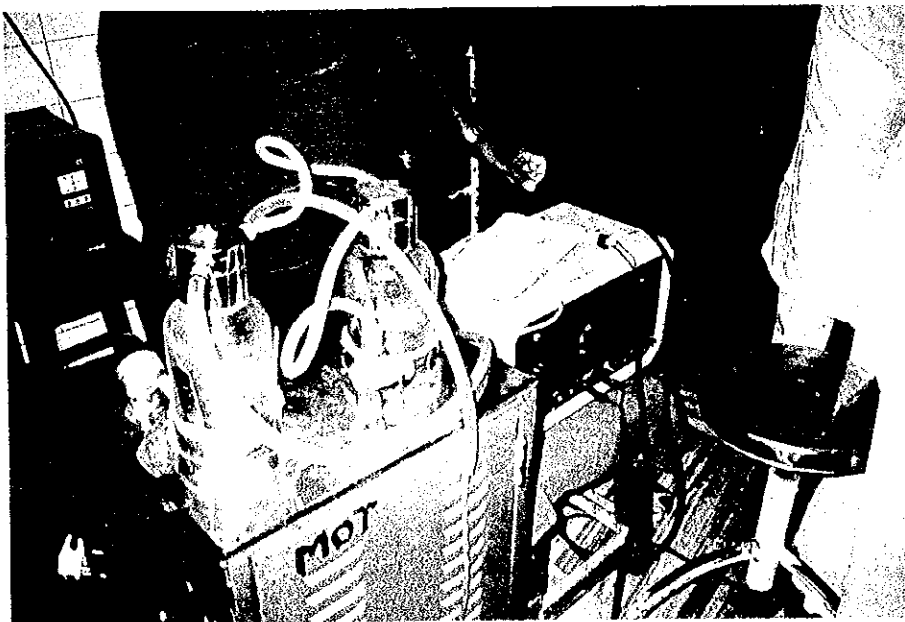
C,S,S,D,



Operation
Theater



Operation
Theater



Ward



SUMMARY

The Republic of India has been forwarding the implementation of the eighth five-year plan (1992-1997), embracing four objectives; 1) smooth operation of development projects pertinent to finance, trade, industry, and human resources, 2) effective operation of prioritized projects, 3) establishment of social security with the provision of educational opportunity, employment creativeness, and health care services, 4) appropriate allocation of social welfare.

India is a multi-ethnic, multi-religious, and multi-linguistical nation, complicated with problems of inequality between classes in terms of economy, education and culture. The caste system practiced by Hinduists, though it begins to be fading away in urban area where more educational opportunities are available and industrialization is proceeding, may be considered as one of the dragging factors resulting in the underdevelopment of people's life in rural area.

Andhra Pradesh is the fifth largest state in India with a total population of 66.3 million, 17.6 million constituting 26.84% of the population is urban of which nearly 80% are spread over 66 towns having a population of more than 50,000. The state has 23 districts and three distinct regions, Coastal, Telengana and Rayalseema. The urban/rural population (in millions) of the three regions is as follows.

REGION	NO. DISTRICTS	RURAL	URBAN	TOTAL	% URBAN
Coastal	9	21.5	7.4	28.9	25.6
Telengana	10	18.1	7.7	25.8	29.8
Rayalseema	4	8.9	2.7	11.6	22.3
Total	23	48.5	17.8	66.3	26.8

* State capital of Hyderabad and the adjoining district of Ranga Reddy account for 4.2 million.

The percentage distribution of population by age group indicates that nearly 47.6% of the population are below 19 years, 34.3% are between 20-44 years and 18.2% are between 44-60 and over. The female to male population ration is 973/1000.

The number of persons living below the poverty line are estimated to be 30%: 42% in rural and 35.3% in urban with the largest number in the Telangana region which is the more backward in terms of social development. While the coastal plains are the most developed part of the state, the Rayalseema region is highly droughtprone entailing problems of chronic hunger among the larger number of the population are agricultural labor. The percentage of literate constitute 45.11% of the population of whom 56.2% are males and 33.7% are females.

Osmania General Hospital, that is the project hospital of the proposed project (1,280 beds, 3,000 outpatients per day) is designated as a teaching hospital attached to Osmania Medical College (150 students per grade), and additionally it plays an important role as a main top-referral hospital in the state of Andhra Pradesh. However, its facility constraints of the deterioration of buildings and medical equipment hinders the optimal realization of its given functions to render appropriate medical care to the public and educational services with the standard modern technology. Under this circumstances, the hospital has designed and request for a Japanese grant-aid to support the project of strengthening its required functions by the construction of a diagnostic Centre and the supply of medical equipment to meet increasing needs of the people.

In response to this request, Japanese government had carried out a Project Formulation Study from 20th of July to 10th of August, 1993, and a preliminary study of the hospital together with Kalawati Saran Children's Hospital for 22 days from 3rd of July 1995, with the help of Dr. Katsuhiko Yoshitake, Bureau of International Cooperation, International Medical Center of Japan, Ministry of Health. The result of the studies indicated that the project had high viability since it would contribute to the improvement of health care status of most poor people who are likely to come to hospitals for the cases of emergency or acute diseases, and this met the requirement of Japanese Grant-Aid policy for Basic Human Needs.

Under this circumstances, Japanese government has decided to proceed a basic design study to be undertaken by Japan International Cooperation Agency (JICA). In this regard, JICA conducted a field study from 1st of October to 21st of October 1994.

Consequently a minute of discussions which reflected the contents of agreement was duly signed by two parties on 13th of October 1994. After the completion of the site survey, further review and examination of collected documents and materials were made

in Japan. The results of the study had been summarized in a draft of Basic Design Report, and the team and Indian side scrutinized and discussed the contents with full care.

The report concludes that the project should be implemented for the reason that the supply of medical equipment to Osmania General Hospital, which plays an important role to render tertiary health care services in the state of Andhra Pradesh, would lead to the overall improvement of health care status of the state.

With presentation of the report, the rationale of the basic design was explained that the improvement of primary and secondary health care services of Osmania General Hospital, which is the prime imperative, would ultimately lead to the strengthening of tertiary health care services of the hospital.

The discussions were focused on the following agenda, which reflect the team's design policy.

- 1) A provisional equipment plan prepared prior to the site study was presented, listing the most demanded medical equipment which are helpful for the improvement of medical services of the hospital, such as treatment, research, training, and preventive activities.
- 2) The agenda of the meeting was explained to the hospital that the discussion should be focused primarily on the rationale of the above pre-tailored equipment list, which reflected the team's design policy of giving high priority to the equipment used for general diagnosis and treatment of common diseases: though it is understandable that some equipment seems necessary to be used for advanced medical services for special and uncommon diseases, such equipment should be given low priority since they could hardly meet the criteria of Japanese grant-aid policy, which stresses the supply of most useful equipment.
- 3) The equipment to be used for tertiary health care services, such as cardiosurgery and neurosurgery should not be included as these treatment, which sometimes regarded as cost-intensive treatment, will produce low cost effectiveness.
- 4) The equipment used for the diagnosis and treatment of non-communicable diseases such as cancer and aging diseases should be given low priority. This may be legitimized from a result of the study that most of patients coming to the outpatient department need diagnosis and treatment for emergent and acute diseases and trauma.

The equipment requested from the hospital are as follows.

- ① Equipment for Image diagnosis
 - MRI
 - X-ray CT Scanner
 - Angiography with DSA
 - X-ray Photographic System with DSA
 - Color Doppler USG
 - Sonography
 - Endoscopy set
 - ECG Stress Test system
 - EEG
 - EMG
 - Gamma Camera System
- ② Equipment for Clinical Laboratory
 - Autoanalyzer
 - Electron Microscope
 - Electrophoresis Scanner
 - Tissue Processor
 - Bacteria Test Utensil
 - Microscope
 - Centrifuge
 - Blood Gas Analyzer
 - Liquid/Gas Chromatography
- ③ Equipment for Operation Theatre
 - Operation Theatre Light
 - Operating Table
 - Orthopedic Operation Table
 - Operating Microscope
 - Laser CO2 & Nd Yag
 - Heart Lung Machine
 - Laser Lithotripter
 - Diathermy Machine
 - Anesthesia Apparatus
 - C.U.S.A.
- ④ Equipment for Specialized Treatment
 - Hemodialysis Machine

I.C.C.U. Patient Monitor

Ventilator

E.S.W.L.

⑤ Equipment for Medical Education

TV Microscope

TV Video Endoscopy Set

Personal Computer

A brief review of the hospital's request including the equipment classified in the above five categories shows that it is rather designed for the provision of highly advanced medical treatment services.

In accordance with the design policy of Japanese grant-aid, the following criteria should be applied for designing an appropriate equipment plan.

The criteria should

- 1) focus on the improvement of the urgently needed medical services.
- 2) be oriented to the improvement of the "essential diagnosis and treatment for common diseases."
- 3) primarily give low priority to specialized equipment for tertiary health care services, which produce low-cost-effectiveness.
- 4) give high priority to essential medical equipment for urgent treatment such as accidental trauma, which occupy the major cases in the hospital.

With full consideration of the above criteria, the study team analyzed the statistics and information collected in the site survey in terms of the technical and financial sustainability, and designed an appropriate equipment plan which produce cost-effective by marking three priorities as classified below.

- A. First Priority
- B. Second Priority
- C. Third Priority

The equipment plan is attached in the section "3-3 Basic Plan" of this report.

The ultimate objective of this project is to provide inexpensive medical services in order to meet increasing needs of the poor people, which occupy 80% of the all population of

the state, with maintaining the same quality with that of private hospitals. In the short and long-term programmes of India, the objectives set out are to provide modern and essential health services to the people with the improvement of medical equipment, and consequently to strengthen medical manpower and upgrade the medical skills of nurse and medical technicians (e.g. X-ray technicians, laboratory technicians, biomedical engineers, etc.) so that the overall improvement of health care services of the state would be achieved. The historical background of the hospital leads us to assume that in general the hospital could maintain the continuous supports from the government of Andhra Pradesh in future. It can follow from all of this that the implementation of a Japanese grant-aid for this project is reasonably appraisal.

The conditions for the cost estimation are set out according to the scope of works and the specifications of equipment. These conditions are;

- i) Full consideration should be given to the viability and efficacy of current medical and diagnostic services.
- ii) Higher priority should be given to the essential equipment which is needed for urgent medical treatment.
- iii) The conditions of manpower quality-level, maintenance ability and the disease pattern of the hospital services should be taken into consideration.
- iv) For the maintenance of the major equipment such as X-ray Apparatus and Ultrasound Unit, the conditions of after sales services by manufacturers are inevitable. The conditions of maintenance contract should be examined thoroughly.
- v) Necessary equipment for sterilization, laundry, hospital sewage processing system, and other supporting services should be included in the plan.
- vi) Stabilization apparatus should be provided for some equipment. Stability of the power source and voltage is a fundamental condition to ensure the smooth operation of medical equipment.

Total period required for the detailed design will be 5 months and 6 months for the procurement of the equipment. While, the project costs incurred for the scope of works undertaken by the government of India will be approximately Rupees.1,562,500.

It follows from the above that this project will contribute to achieve the Basic Human Needs of local people, step by step medical equipment renovation plan from essential equipment such as Sterilization Apparatus and Microscope to tertiary care equipment such as MRI, X-ray CT Scanner as future target.

The following points are recommended to optimize the effect of this project.

- 1) In general the administration of Osmania General Hospital is not fully systematized as such each department of the hospital keeps autonomy in terms of the provision of the educational services to Osmania Medical College. In fact there is a special staff under the director who is assigned to handle the administration of the hospital as a whole. However the actual hospital administration is managed by the residential medical officer at each department (there are 6 officer for departments and 1 for general) of electricity, mechanics, telephone operator, storage, laundry and CSSD respectively. Meanwhile the administration of nursing services is controlled at each specialty department, and not controlled by the hospital as a whole. This situation entails the low status of nurses in the hospital, which subsequently leads to their low technical skills. In addition a particular attention should be drawn to the problems of sanitation as well as the mal-management of storage section, which should be given remedial actions immediately.

- 2) An observation was made on the administration of medical records. The section handles all medical records coming from all departments despite a lack of sufficient manpower. The categorization system of medical records taken in the hospital follows the standard of WHO. Medical records can be borrowed out from the section for the purpose of research by medical doctors. However a fact that results of the research have been rarely given back to the medical record section legitimizes the situation that the data available in the section are hardly updated, and we could not obtain adequate basic data (e.g. current disease pattern at each department) for the study and selection of appropriate medical equipment - for example, the details of operations are kept confidential and only the number of operation classified in major, minor and intermediate is given). Therefore we recommend that a system should be established to make use of medical records for the betterment of hospital administration.

- 3) There are some problems observed in relation to the facilities of the hospital as follows.
1. The garbage and medical wastes disposed in the hospital is not systematically treated. Necessary measures should be taken, such as the establishment of a segregated disposal system for medical wastes, the systematic treatment of ordinary garbage discharged from inpatient wards, and the establishment of a drainage system at laundry section.
 2. Sterilization facilities of the operating theatres must be improved. The hospital side explained that there are no cases of in-hospital infection. Practices of washing and cleaning presently done at the operating theatres when people go in and out seemed not adequate. Japanese team advised the hospital some necessary action should be taken urgently.
 3. Cleaning is incomplete in some sections in the hospital. It may be true that the more people clean the hospital the more people are likely to keep its cleanness. Since no additional cost is necessary for the improvement of this cleaning standard, an immediate practice is expected.
 - 4) The improvement of budgetary arrangement for a incremental recurrent cost is a salient matter for the hospital to secure the financial management. Though the three-tiered charging system is proposed for the most recommended system for the tertiary health care, it is unexpected that the hospital would charge the fee to the poor patients. This entails a pessimistic perspective that the hospital might soon or later face financial crisis. Sound budget allocation therefore, should be reconfirmed to ensure the financial sustainability by state government of Andhra Pradesh.
 - 5) The establishment of a maintenance system is an urgent issue. With full consideration of this, we may include the equipment in the Project. However, since this leads to the additional increase of the project budget, the Indian side should make clear picture of the finance plan.

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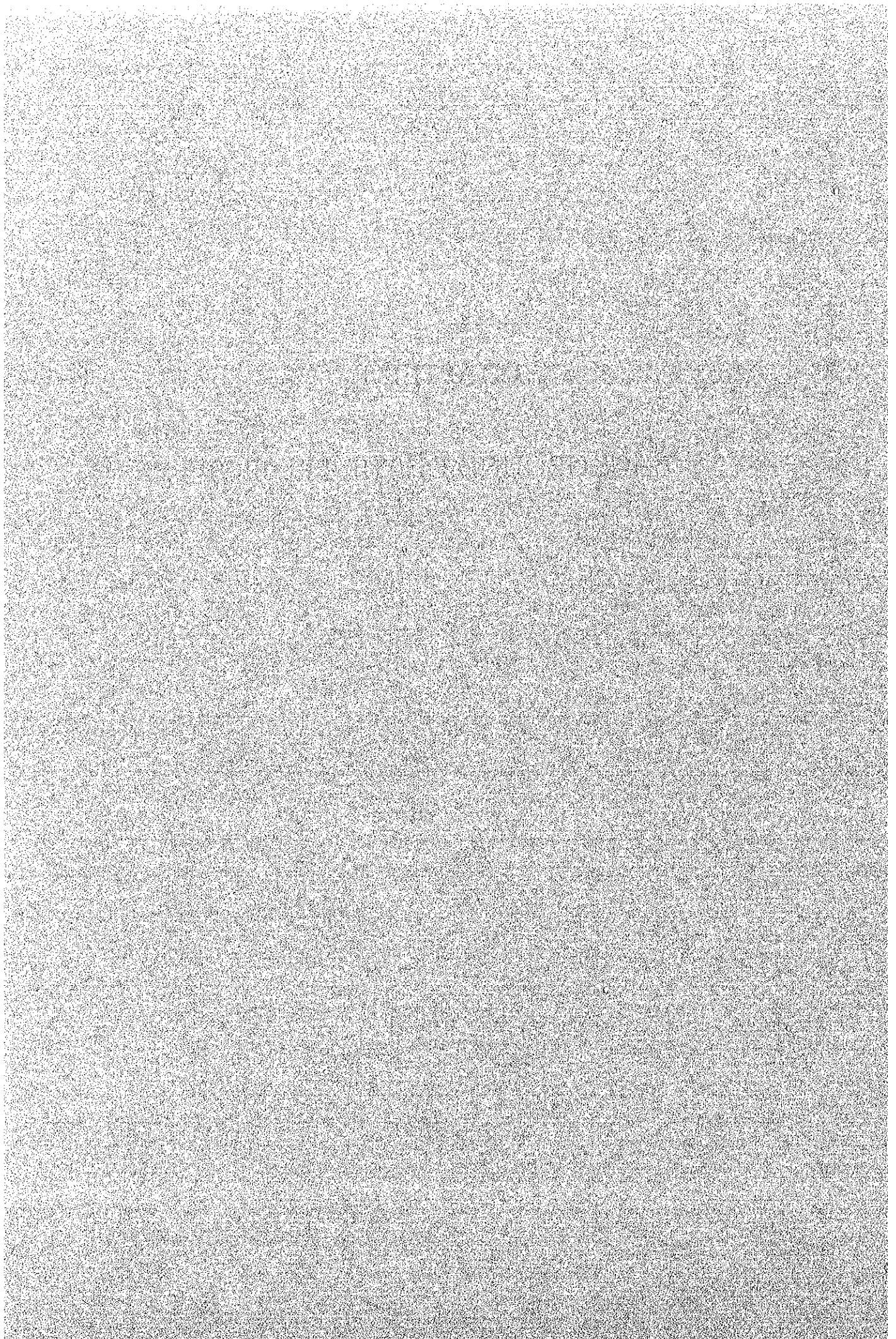
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CHAPTER 1

BACKGROUND OF THE PROJECT

CHAPTER 1

BACKGROUND OF THE PROJECT



CHAPTER1 BACKGROUND OF THE PROJECT

1-1 Background of the Project

The Republic of India has been proceeding the implementation of the eighth five-year plan (1992-1997), embracing four objectives; 1) smooth operation of development projects pertinent to finance, trade, industry, and human resources, 2) effective operation of prioritized projects, 3) establishment of social security with the provision of educational opportunity, job opportunity, and health care services, 4) appropriate allocation of social welfare.

Background of Health Care Programmes

The National Health Policy (1983) reiterated India's commitment to attain "Health for All by 2000". Primary health care has been accepted as the main instrument for achieving this goal. Accordingly, a vast network of institutions at primary, secondary and tertiary levels have been established. Control of communicable diseases through national programmes and development of trained health manpower have received special attention.

In the light of the approach of the Eighth Five Year Plan, the following objectives will be accorded priority:

- (i) Generation of adequate employment to achieve near full employment level by the turn of the century;
- (ii) Containment of population growth through active people's cooperation and an effective scheme of incentives and disincentives;
- (iii) Universalisation of elementary education and complete eradication of illiteracy among the people in the age group of 15 to 35 years;
- (iv) Provision of safe drinking water and primary health care facilities, including immunization, accessible to all the villages and the entire population, and complete elimination of scavenging;
- (v) Growth and diversification of agriculture to achieve safe-sufficiency in food and generate surpluses for exports;
- (vi) Strengthening the infrastructure (energy, transport, communication, irrigation) in order to support the growth process on a sustainable basis;

Osmania General Hospital, the project hospital of this proposed project (1,280 beds, 3,000 outpatients per day) is designated as a teaching hospital attached to Osmania

Medical College (150 students per grade), and additionally it plays an important role as a main top-referral hospital in the state of Andhra Pradesh. However, the facility constraints of the hospital hinders the optimal realization of its given functions. Under this circumstances, the hospital has proposed and designed a project of strengthening its functions by the construction of a diagnostic centre and the supply of medical equipment to meet rising expectations of the people.

The project has already been commenced with the help of financial support of graduates of Osmania Medical College and the subsidiaries from the central government. As a continuation of this, the hospital made a request to Japan for a grant-in-aid to be used for the procurement of necessary medical equipment.

1-2 Outline of the Request and Main component

Following Department of Clinical Laboratory, Radiology, General Surgery, ICCU, Administration including Ward will be provided at New Diagnosis Center upon provision of the newly requested Equipment described hereunder:

① Equipment for Image diagnosis

MRI

X-ray CT Scanner

Angiography with DSA

X-ray Photographic System with DSA

Color Doppler USG

Sonography

Endoscopy set

ECG Stress Test system

EEG

EMG

Gamma Camera System

② Equipment for Clinical Laboratory

Autoanalyzer

Electron Microscope

Electrophoresis Scanner

Tissue Processor

Bacteria Test Utensil

Microscope

- Centrifuge
- Blood Gas Analyzer
- Liquid/Gas Chromatography
- ③ Equipment for Operation Theater
 - Operation Theater Light
 - Operating Table
 - Orthopedic Operation Table
 - Operating Microscope
 - Laser CO2 & Nd Yag
 - Heart Lung Machine
 - Laser Lithotripter
 - Diathermy Machine
 - Anesthesia Apparatus
 - C.U.S.A.
- ④ Equipment for the Specialized Treatment
 - Hemodialysis Machine
 - I.C.C.U. Patient Monitor
 - Ventilator
 - E.S.W.L.
- ⑤ Equipment for Medical Education
 - TV Microscope
 - TV Video Endoscopy Set
 - Personal Computer

The above-mentioned equipment are aiming at the provision of the modern sophisticated medical services.

1-3 Project and/or Program of Other Donors

The Project Formation Study Report explains what is the essential field of the Japanese grant aid cooperation. In addition to this report, we justified the improvement of First Line Referral Hospitals viewing from the health conditions in rural areas. The information given by WHO and UNICEF can be summarized as follows:

- (1) In India, the health care referral system is not properly functioning, such as primary, secondary and tertiary. Tertiary care hospitals are crowded with patients who

could be treated in less costly and more accessible district hospitals. Therefore the importance of establishing first line referral hospitals can be recognized.

- (2) In India, the income gap between a doctor and para-medical staff is very remarkable. The shortage of medical manpower is very serious problem and it must be considered as a main factor for implementing the hospital planning.
- (3) The social and economic condition has wide variation among each state level. Therefore, the improvement plan must be adopted carefully depending on each state and it is inevitable to draw an appropriate plan to each state.
- (4) Since 1960s, WHO and UNICEF have developed cost-effective activities such as giving protective inoculation to infants with giving priority to the improvement of ingestion and the treatment to disease of diarrhea and that of respirator. The aid activity has been implemented, in particular, to so-called poverty-ridden states in north-east area of India called Hindi spoken region.
- (5) Total number of primary health centre were established enough in quantity. But there remain qualitative problems, such as the shortage of individually established facilities and medical staff. UNICEF has made aid cooperation by offering refrigerators, freezers and related equipment for vaccine storage as one cooperation plan for EPI.
- (6) Since 1991, MCH programme has been newly implemented in order to reduce infant mortality and maternal mortality at child birth.
- (7) WHO and UNICEF must pay careful attention to adjust good balance among primary, secondary and tertiary health services when preparing and implementing the detailed plan of providing medical equipment to rural area.

1-3-1 International Cooperation

In 1987, WHO granted US\$100,000 to the Ministry of Health and Family Welfare of the Central Government in order to prepare educational documents regarding cancer. WHO recently paid \$30,000 in order to held training conference, of which purpose was prophylaxis and control against cancer, for the medicines in charge of primary medical service and the surgeons in rural area. There is the South-East Asian department of WHO in Deli and special engineers have been dispatched from foreign countries including Japan. WHO aids to "National Cancer Control Programme" which is now in progress. By developing and organizing the accommodation system of hospitals such as the cancer center, WHO grasp the accurate number of cancer patients, the variety of

disease and the change of disease, so that the national cancer control programme can be effectively implemented.

(a) Multilateral Cooperation

WHO

Project Cost: US\$13,810,100.00

Purpose: Supporting of the initial cost required for the 55 new health programming

Period: 1990-1991

Project Cost: US\$15,287,800.00

Purpose: same as above

Period: 1992-1993

World Bank

Project Cost: Rs.2,250,000,000.00

Purpose: Supporting of the implementation of AIDS Control Programme under 8th National 5 Year Plan

Project Cost: Rs.2,870,000,000.00

Purpose: Supporting of Leprosy Control Programme

Project Cost: Rs.5,000,000,000.00

Purpose: Supporting of Blind Control Programme

Project Cost: Rs.2,190,450,000.00

Purpose: Supporting of First Line Referral Hospitals in Andhra Pradesh

Project Cost: Rs.4,390,000,000.00

Purpose: Supporting of the improvement of the existing 9,651 beds in First Line Referral Hospitals,

Supporting of the supply of 4,349 beds in First Line Referral Hospitals

(b) Bilateral Cooperation

USAID

Project Cost: US\$65,000,000.00

Purpose: Supporting of clinical services for endemic diseases and its epidemiological field works

DANIDA

Project Cost: Rs.222,450,000.00

Purpose: Supporting of the implementation of blind control programme

SIDA

Project Cost: Rs.25,000,000.00

Purpose: Supporting of TV Control Programme

NORAD

Project Cost: Crw.215,000,000.00

Purpose: Supporting of improvement of Post-delivery care management of all hospitals of sub-district level

Project Cost: Rs.5,000,000.00

Purpose: Supporting of Leprosy Control Programme

ODA

Project Cost: L500,000.00

Purpose: Supporting of Health Engineering Education of All India Institute of Medical Sciences

Project Cost: L263,210.00

Purpose: Supporting of control of Cancer of Breast tip/neck

Project Cost: L89,658.00

Purpose: Supporting of Infectious Diseases Control Programme

Project Cost: L8,000,000.00

Purpose: Supporting of Child Health Promotion Programme in Andhra Pradesh