

## 7.7 Maintenance and Management Plan

### 7.7.1 Facilities

The maintenance work of public facilities such as government hospitals, CHCs, is carried out by the PWD (Public Works Department), except for cleaning. The PWD is composed of architectural, structural, electrical and mechanical departments. PWD staff members are stationed at Bhuj office, and they are in charge of maintaining the facilities and repairing furniture. Since, the CHC Anjar and CHC Mundra are also government facilities, their maintenance after completion will be done by the PWD.

### 7.7.2 Medical Equipment

The maintenance work of medical equipment of CHC facilities is divided into daily maintenance and repairing of broken equipment. Since, no maintenance staff are stationed at either CHC Anjar or CHC Mundra, maintenance staff such as engineers or supervisors under the government will be dispatched from the RAJKOT office depending upon requests from the CHC. The manufacturer's or agent staff will be required to do some repairs depending upon the conditions of damage. Since, a maintenance contract is required for equipment such as the X -ray machine, the contract fee should be prepared.

### 7.7.3 Maintenance and Management Expenses

The operating and management costs consist of personal expenditure, administration cost, maintenance cost for facilities and equipment, etc. For the tentative calculation of operating and management cost, as the QRS project is a re-construction of the existing facilities and the number of staff is almost the same, only the maintenance cost is calculated after completion the of facilities. But, the cost for staff quarters is not included. Table 7-5 shows a tentative calculation of the maintenance and management expenses required annually after completion of the QRS project.

**Table 7-5 Maintenance and Management Expenses**

No.	Items	Annual Expenses	
		CHC Anjar	CHC Mundra
(1)	Electricity	1,051,200	315,360
(2)	Telephone	277,400	77,380
(3)	Water	0	0
(4)	Medical Gas	100,000	25,000
(5)	Fuel of Generator	248,400	37,260
(6)	Facilities	72,000	18,000
(7)	Medical Equipment	400,000	125,000
Total		2,149,000	598,000

(unit:Rs)

(1) Electricity

The average power consumption is estimated at about 20 % of the total capacity. According to the regulation of GEB, the power rate system consists of basic and meter rates, but a unit rate which includes basic and meter rates is to be used for estimates for this QRS project.

**CHC Anjar**

- $100 \text{ kw} \times 0.2 \times 24 \text{ h/day} \times 365 \text{ day/year} = 175,200 \text{ kwh/year}$
- $6 \text{ Rs} \times 175,200 \text{ kwh/year} = \underline{1,051,200 \text{ Rs/year}}$

**CHC Mundra**

- $30 \text{ kw} \times 0.2 \times 24 \text{ h/day} \times 365 \text{ day/year} = 52,560 \text{ kwh/year}$
- $6 \text{ Rs} \times 52,560 \text{ kwh/year} = \underline{315,360 \text{ Rs/year}}$

(2) Telephone

The frequency of the use of the telephone line is assumed as follows,

Local	Anjar	200 calls/day
	Mundra	40 calls/day
Long distance (e.g., Delhi)	Anjar	50 calls/day
	Mundra	15 calls/day

The unit rate of telephone call is as follows,

Local	0.8 Rs/1 call (3 min.)
Long distance (e.g., Delhi)	12 Rs/1 call (1 min.)

**CHC Anjar**

- Local :  $200 \text{ calls/day} \times 365 \text{ day/year} = 73,000 \text{ calls/year}$
- $0.8 \text{ Rs/call} \times 73,000 \text{ calls/year} = 58,400 \text{ Rs/year}$
- Long distance :  $50 \text{ calls/day} \times 365 \text{ day/year} = 18,250 \text{ calls/year}$
- $12 \text{ Rs/call} \times 18,250 \text{ calls/year} = 219,000 \text{ Rs/year}$
- Total :  $58,400 + 219,000 = \underline{277,400 \text{ Rs/year}}$

**CHC Mundra**

- Local :  $40 \text{ calls/day} \times 365 \text{ day/year} = 14,600 \text{ calls/year}$
- $0.8 \text{ Rs/call} \times 14,600 \text{ calls/year} = 11,680 \text{ Rs/year}$
- Long distance :  $15 \text{ call/day} \times 365 \text{ day/year} = 5,475 \text{ call/year}$
- $12 \text{ Rs/call} \times 5,475 \text{ call/year} = 65,700 \text{ Rs/year}$

- Total :  $1,680+65,700=\underline{77,380}$  Rs/year

(3) Water expenses

Since the water expenses for the government facilities are free of charge, these expenses are not calculated.

(4) Medical gas

Medical gas expenses for the CHC Anjar and CHC Mundra will be estimated based on the existing conditions.

**CHC Anjar**

- 100,000 Rs/year

**CHC Mundra**

- 25,000 Rs/year

(5) Fuel Generator

The fuel of the emergency generator is diesel oil. The frequency of electrical power shut down is estimated as one time/day of three hours.

**CHC Anjar**

- $10 \text{ l/h} \times 90 \text{ h/month} \times 12 \text{ month/year} = 10,800 \text{ l/year}$
- $23 \text{ Rs/l} \times 10,800 \text{ l/year} = \underline{248,400 \text{ Rs/year}}$

**CHC Mundra**

- $1.5 \text{ l/h} \times 90 \text{ h/month} \times 12 \text{ month/year} = 1,620 \text{ l/year}$
- $23 \text{ Rs/l} \times 1,620 \text{ l/year} = \underline{37,260 \text{ Rs/year}}$

(6) Building Maintenance

Building maintenance expenses for repairs to interior and exterior finishing, mechanical and electrical installations and for the purchase of spare parts are estimated at 60 Rs/m<sup>2</sup>/year.

**CHC Anjar**

- $60 \text{ Rs/m}^2/\text{year} \times 1,200 \text{ m}^2 = \underline{72,000 \text{ Rs/year}}$

### **CHC Mundra**

- $60 \text{ Rs/m}^2/\text{year} \times 300 \text{ m}^2 = \underline{18,000 \text{ Rs/year}}$

#### (7) Medical Equipment

The annual maintenance expenses are estimated at about 5 % of total equipment cost. The expenses of consumables are estimated based on the existing condition.

### **CHC Anjar**

- Maintenance expenses :  
 $2,000,000 \text{ Rs} \times 0.05 / \text{year} = 100,000 \text{ Rs/year}$
- Consumables expenses :  
300,000 Rs/year
- Total :  $100,000 + 300,000 = \underline{400,000 \text{ Rs/year}}$

The expenses for CHC Mundra are estimated based on the proportional ratio of floor area.

### **CHC Mundra**

- Maintenance expenses :  
 $100,000 \text{ Rs/year} \times 300 \text{ m}^2 / 1,200 \text{ m}^2 = 25,000 \text{ Rs/year}$
- Consumables expenses :  
100,000 Rs/year
- Total :  $25,000 + 100,000 = \underline{125,000 \text{ Rs/year}}$

**7.8 Implementation Method**

**7.8.1 Work flow from Design to Completion**

As described in Chapter 6, sub-clause 6.4, the Project Team worked in an effective manner in association with local consultants and engineers from design stage to completion of the construction work in order to construct the requested educational and healthcare facilities in the devastated areas as early as possible.

The Project Team executed each of the tasks itemized below for smooth implementation of the healthcare facilities’ construction in the same way as the Project Team worked for the educational facilities.

[Site survey]	<ul style="list-style-type: none"> <li>* Topographical surveying on each site of both Anjar and Mundra and production of their site survey drawings</li> <li>* Geological surveys and soil investigations at both Anjar and Mundra.</li> </ul>
[Plan and design]	<ul style="list-style-type: none"> <li>* Selection of local consultancy firm</li> <li>* Planning and designing of required facilities with the determined design conditions at the allotted sites.</li> <li>* Planning of medical equipment procurement</li> <li>* Planning of construction method and materials</li> </ul>
[Bid and contract]	<ul style="list-style-type: none"> <li>* Preparation of bidding documents, evaluation and contracting</li> </ul>
[Supervision]	<ul style="list-style-type: none"> <li>* Supervision of construction works</li> </ul>

**7.8.2 Topographical and Geological Survey**

The Project Team conducted topographical and geological surveys, including soil investigations, with the assistance of K.C.T Consultancy Services who also executed the topographical surveys on the sites of the educational facilities, at both Anjar and Mundra sites. Then, the Project Team produced site surveying drawings and technical investigation reports prior to planning / designing the required facilities.

**7.8.3 Selection of Local Consultancy Firm**

Dalal Consultants and Engineers Limited (DCEL) was selected as the local consultants, whose local knowledge and experience is vital for the QRS project as stated before, through an examination of their experience, competence and adaptation ability to swift work. The Project Team worked in association with DCEL for the healthcare facilities as well as for the educational facilities throughout the QRS project implementation from design stage to completion.

The scope of services to be rendered included architectural, civil/structural, mechanical and electrical engineering works, assistance in the selection process of a contractor and a supplier, supervisory works during the construction and procurement stage of the QRS project, for both the building construction and medical equipment procurement.

#### **7.8.4 Planning and Designing of Required Facilities**

The Project Team proceeded the planning and designing of the healthcare facilities in association with the above-mentioned consultants, at each of the allotted sites, at Anjar and Mundra, within the time constrained schedule by concurrently visiting sites and by identifying the design conditions. During the Plan/Design stage the Project Team consulted the Commissioner of Health, Medical Services and Medical Education; the Government of Gujarat, Gandhinagar; and the District Health Officer, Kutch, and submitted the structural design calculations (based on designing to seismic zone-V), for the Commissioner's approval.

The Project Team also notified the Commissioner the probable time of commencement and completion of the construction work. The QRS project was acknowledged and approved. Regarding the statutory applications, building permissions were not required prior to commencement of the construction for the QRS project, except the above-mentioned calculations for the Commissioner's approval.

#### **7.8.5 Planning of Medical Equipment Procurement**

The medical equipment and furniture for the healthcare facilities were selected and finalized in consultation with the Commissioner of Health, Medical Services and Medical Education, Gandhinagar. The disposition of these equipment were planned along with the design of the facilities and were drawn in the plans in order to examine whether or not the equipment would fit within the space effectively and also to determine the location of electrical outlets in each room. There was no difficulty to obtain the equipment, which comprised a mixture of Indian-made and imported items, through local suppliers in terms of type, quantity and quality. The consumables and dispensable materials were not included within the equipment list.

#### **7.8.6 Planning of Construction Method and Materials**

The healthcare facilities at both Anjar and Mundra are to be built using conventional construction methods with reinforced concrete moment frame structures, which are designed to seismic zone-V of

the project area. External and internal walls were made of non-structural brickwork. These structures and other materials to be used for the facilities are all Indian-made. It was possible to procure these materials since their supply situation was normal, and was of an adequate standard to meet the required specifications.

### **7.8.7 Bidding and Contracting**

#### **(1) Facilities**

The Project Team prepared a set of documents necessary to conduct competitive bidding for the selection of the contractor who would take charge of the construction including the necessary dismantling works for the QRS project. These documents were handed to three selected contractors for their bidding on 13<sup>th</sup> August 2001. The three were contractors who had sufficient experience of the same kind and were able to carry out the work in the project area. The bidding form was made for a lump sum contract including the facilities at both Anjar and Mundra, including demolition works. As a result of the bidding and also as a result of the technical examination, the Project Team selected the contractor for the QRS project for healthcare facilities. The bids were opened on 29<sup>th</sup> August 2001 and the construction contract for the healthcare facilities was signed on 1<sup>st</sup> September 2001.

#### **(2) Medical Equipment**

The Project Team prepared a set of documents necessary to conduct competitive bidding for the selection of a supplier who would take charge of supply and installation of medical equipment and medical furniture for the QRS project. These documents were handed to three selected suppliers for their bidding on 7<sup>th</sup> September 2001. The three were suppliers who were registered to the GOG and were able to supply to the CHC at Anjar. The bidding form was made for a lump sum contract. As a result of the bidding and technical examination, the Project Team selected the Supplier for the QRS project. The bids were opened on 17<sup>th</sup> September 2001 and the contract for medical equipment supply was signed on 3<sup>rd</sup> October 2001.

### **7.8.8 Supervision of Works**

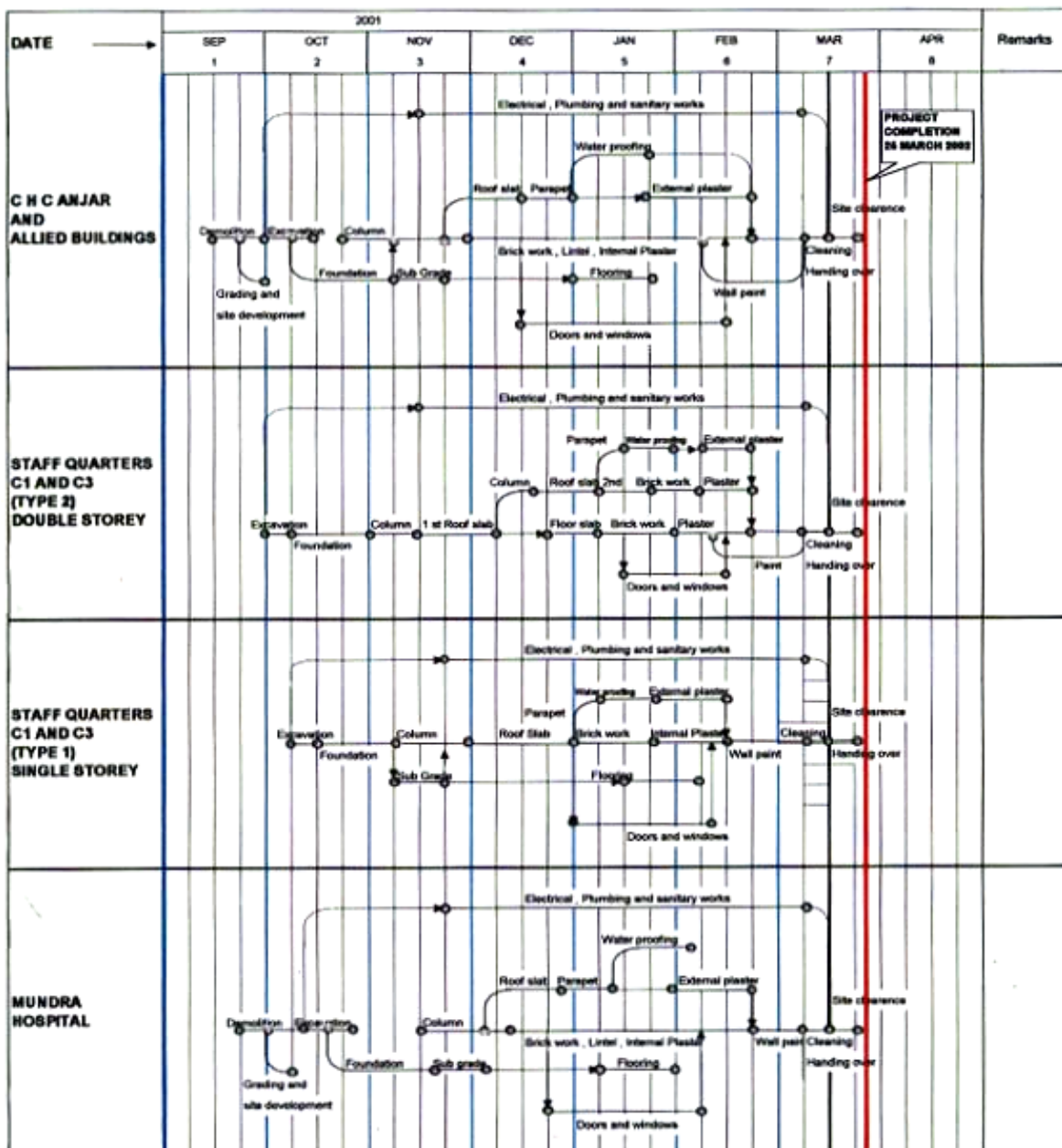
The architect/engineers of the Project Team in association with the local consultancy firm, DCEL, supervised the work at both Anjar and Mundra sites at regular intervals and also at specific necessary times during the construction period. The monthly progress reports were submitted to the GOG counterparts and JICA. The objectives of the construction supervision work were, in the same way

for the educational facilities, to ensure that the construction works were carried out in accordance with the drawings and specifications and to maintain a high quality of the works by giving guidance and coordination to the contractor. The supervision works also included the following tasks,

- examination and approval of the working drawings and any manufacturing drawings.
- confirmation and approval of the building materials and the basic equipment.
- reporting on the progress of the construction work.
- final inspection of the completed facilities in order to issue the certificate of completion.

The Project Team and the local consulting firm also supervised the procurement and the installation of the medical equipment.

### 7.8.9 Proposed Construction Schedule





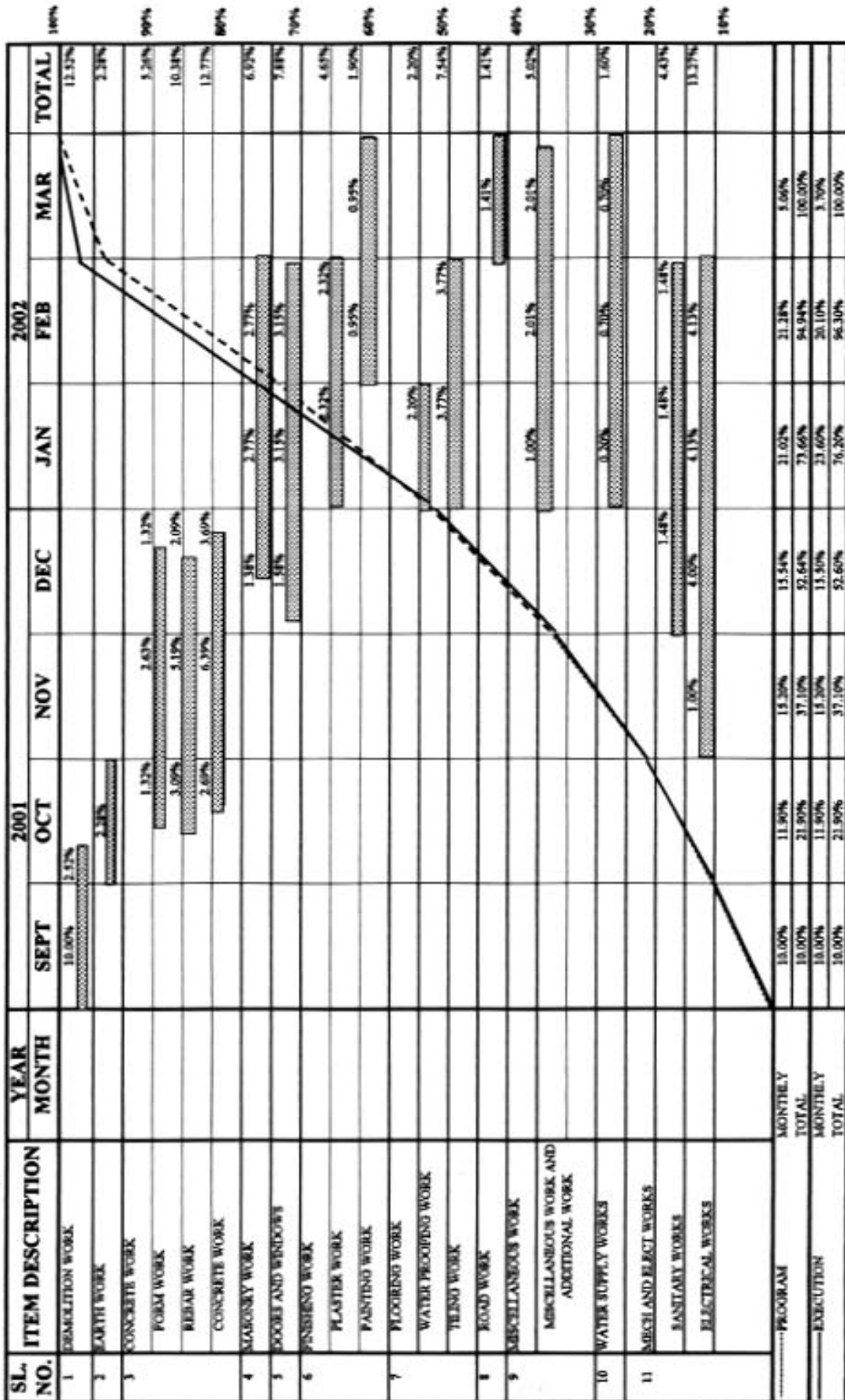
## 7.9 Construction Report

### 7.9.1 Summary of the Project

<b>(1) Summary of the Project</b>		<b>1</b>
PROJECT NAME	:	THE WORK OF CONSTRUCTION OF COMMUNITY HEALTH CENTRE FACILITIES AT ANJAR AND MUNDRA IN KUTCH DISTRICT AS A PART OF THE RECONSTRUCTION SUPPORT FOR THE GUJARAT-EARTHQUAKE DISASTER IN THE DEVASTATED AREAS IN INDIA
CONSTRUCTION SITE	:	ANJAR IN KUTCH DISTRICT (SITE AREA: 40,665m <sup>2</sup> ) MUNDRA IN JUTCH (SITE AREA: 22,608m <sup>2</sup> )
EMPLOYER	:	THE CONSORTIUM OF YAMASHITA SEKKEI INC. & NIHON SEKKEI, INC.
ENGINEER	:	THE CONSORTIUM OF YAMASHITA SEKKEI INC. & NIHON SEKKEI, INC. IN ASSOCIATION WITH DALAL CONSULTANTS & ENGINERS LTD.
CONTRACTOR	:	MITSUI KENSETSU INDIA LTD.
CONTRACT DATE	:	SEPTEMBER 1, 2001
COMMENCEMENT	:	SEPTEMBER 8, 2001
GOG. DEMOLITION ORDER	:	SEPTEMBER 11, 2001
GOG. BLDG. APPROVAL	:	SEPTEMBER 30, 2001
EXPECTED COMPLETION	:	MARCH 25, 2002

<b>(2) Outline Of Building</b>		<b>2</b>
BUILDING COVERAGE AREA (ANJAR)	:	2,533m <sup>2</sup>
BUILDING COVERAGE AREA (MUNDRA)	:	306m <sup>2</sup>
TOTAL FLOOR AREA (ANJAR)	:	2,735m <sup>2</sup>
Hospital Bldg.	:	1,313m <sup>2</sup> RCC, 1 Story, Split Foundation
Generator/Garage Bldg.	:	48m <sup>2</sup> RCC, 1 Story, Split Foundation
Postmortem Bldg.	:	30m <sup>2</sup> RCC, 1 Story, Split Foundation
Pump House	:	9m <sup>2</sup> RCC, 1 Story, Split Foundation
Staff Quarters C-I & Bldg. A	:	372m <sup>2</sup> RCC, 2 Story, Split Foundation
Staff Quarters C-I & Bldg. B	:	193m <sup>2</sup> RCC, 1 Story, Split Foundation
Staff Quarters C-III & Bldg. A	:	462m <sup>2</sup> RCC, 2 Story, Split Foundation
Staff Quarters C-III & Bldg. B	:	308m <sup>2</sup> RCC, 1 Story, Split Foundation
TOTAL FLOOR AREA (MUNDRA)	:	300m <sup>2</sup>
Maternity Bldg.	:	296m <sup>2</sup> RCC, 1 Story, Split Foundation
Maternity Generator House	:	4m <sup>2</sup> RCC, 1 Story, Split Foundation
ELECTRICAL	:	GEB Power + DG Power 415V/220V, DG Set (40KVA for Anjar, 4KVA for Mundra) Telephone EPABX (Anjar), Extension from Existing EPABX (Mundra)
PLUMBING	:	Water City + Well (Anjar), city (Mundra), Drainage, Septic Tank + Soak Well (Anjar, Mundra)
MECHANICAL	:	Air Conditioning, RM, for O.T., ICU, Superintendent (Anjar) RM for O.T. (Mundra)

7.9.2 Progress of Works



**PHOTOGRAPHS OF INJH P/J**

**BEFORE DEMOLITION**



**FRONT VIEW**



**EAST SIDE**





**SOUTH SIDE**



**SOUTH SIDE**



**MAIN HOSPITAL BUILDING**



**SAFETY MEASURES**





**EASTERN SIDE**



**WESTERN SIDE**





**AFTER DEMOLITION**



**DISPOSAL WORK**

**MUNDRA SITE**

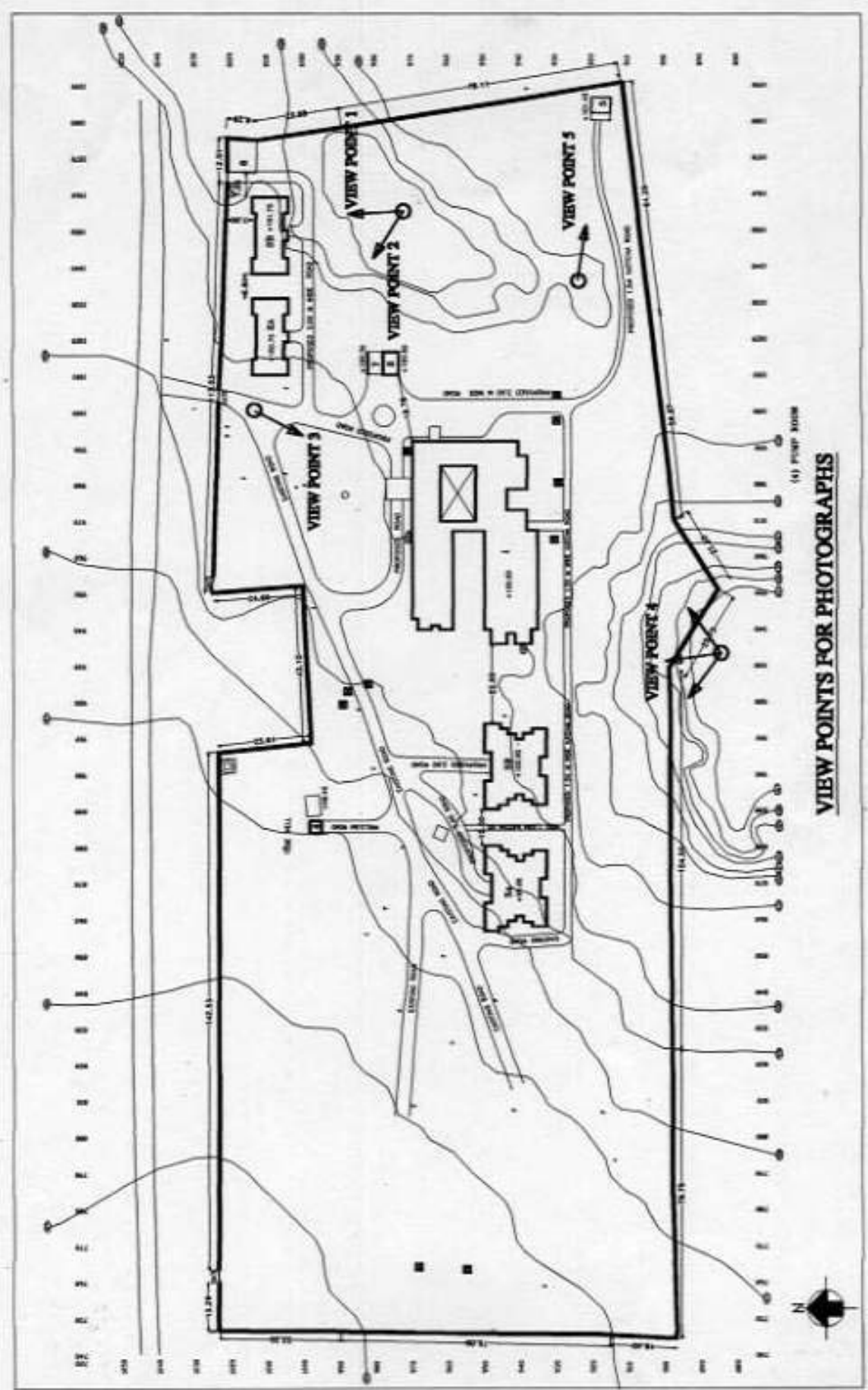


**FRONTO VIEW**



**BACK SIDE**





**VIEW POINTS FOR PHOTOGRAPHS**



**C3 TYPE STAFF QUARTERS**

**MAIN HOSPITAL BUILDING**

**C1 TYPE STAFF QUARTERS**

**VIEW POINT 4 (31/12/01)**

**ANJAR SITE**



**VIEW POINT 1 (31/12/01)**



**VIEW POINT 2 (31/12/01)**





**VIEW POINTS 3 (31/12/01)**



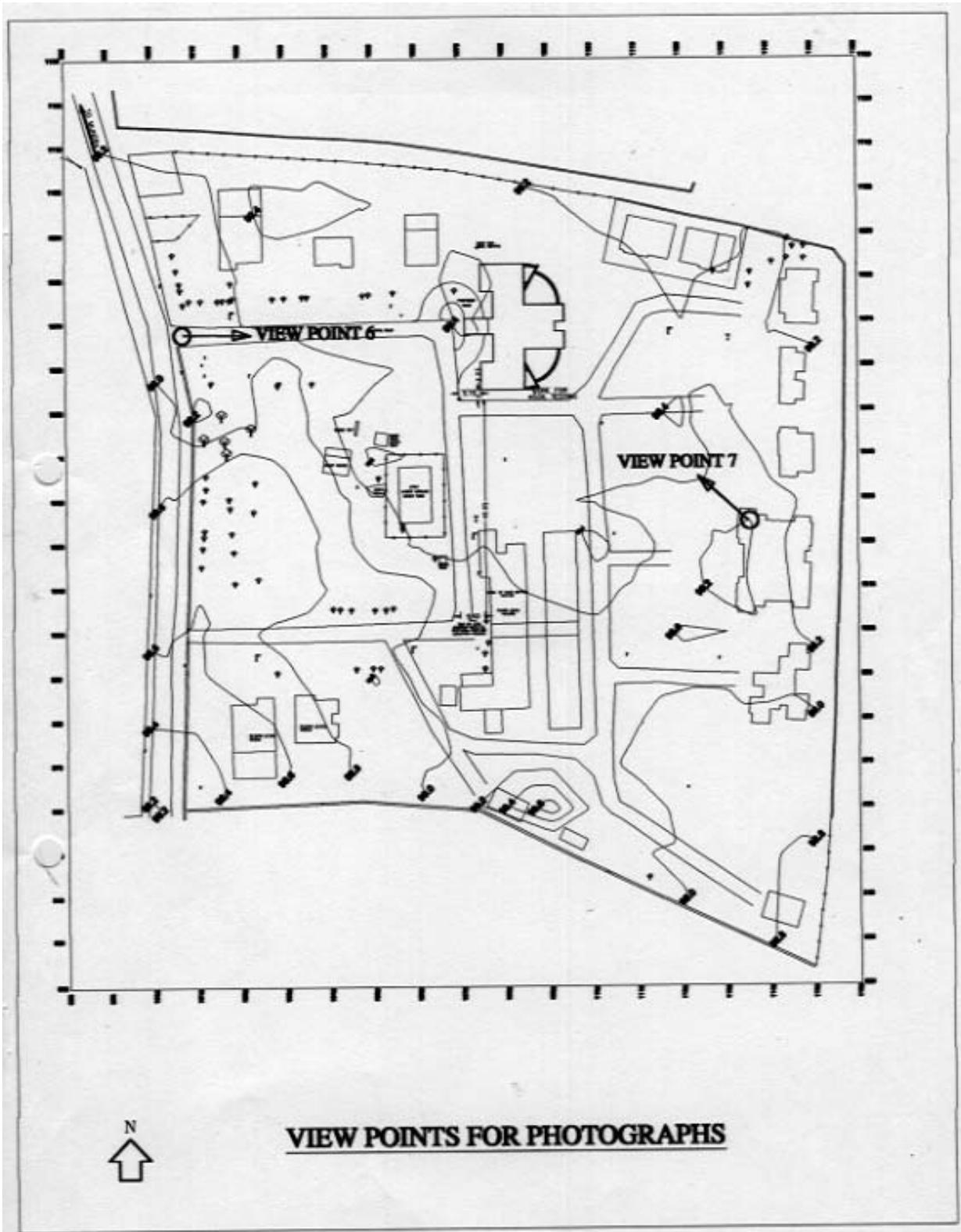
**VIEW POINT 5 (31/12/01)**



**ROOF SLAB CASTING IN BLOCK 3 (07/12/01)**



**ROOF SLAB PREPARATION FOR AMBULANCE ROOM / D G ROOM (31/12/01)**





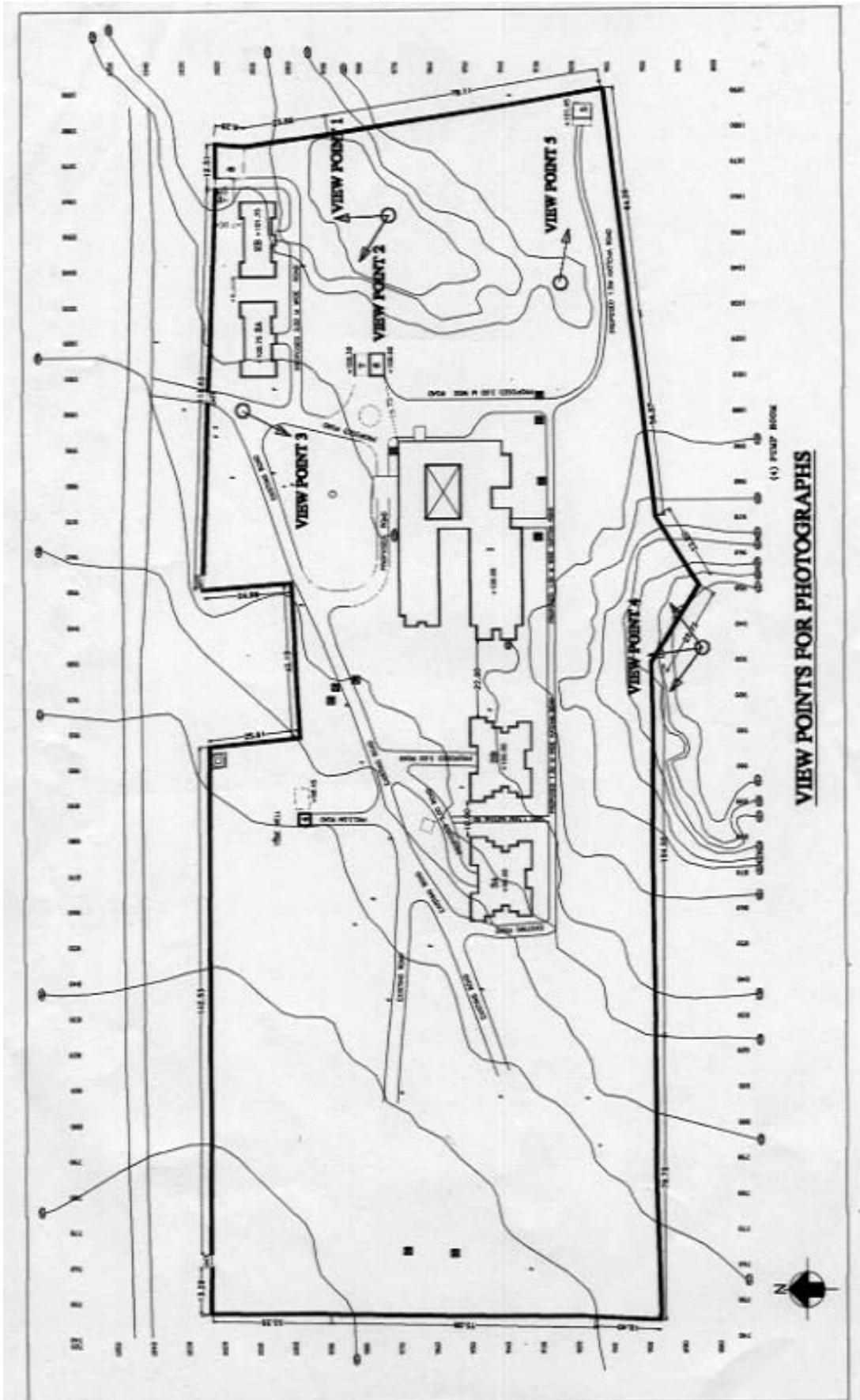
**MUNDRA SITE**



**VIEW POINT 6 (31/12/01)**



**VIEW POINT 7 (31/12/01)**







**C3 TYPE STAFF QUARTERS**



**MAIN HOSPITAL BUILDING**



**C1 TYPE STAFF QUARTERS**

**VIEW POINT 4 (31/12/01)**



**VIEW POINT 1 (31/1/02)**



**VIEW POINT 2 (31/1/02)**





**VIEW POINT 3 (31/1/02)**



**VIEW POINT 5 (31/1/02)**



**KOTA STONE FIXING – MAIN HOSPITAL (24/01/02)**



**FLOORING WORK – C1 TYPE STAFF QUARTERS (18/01/02)**

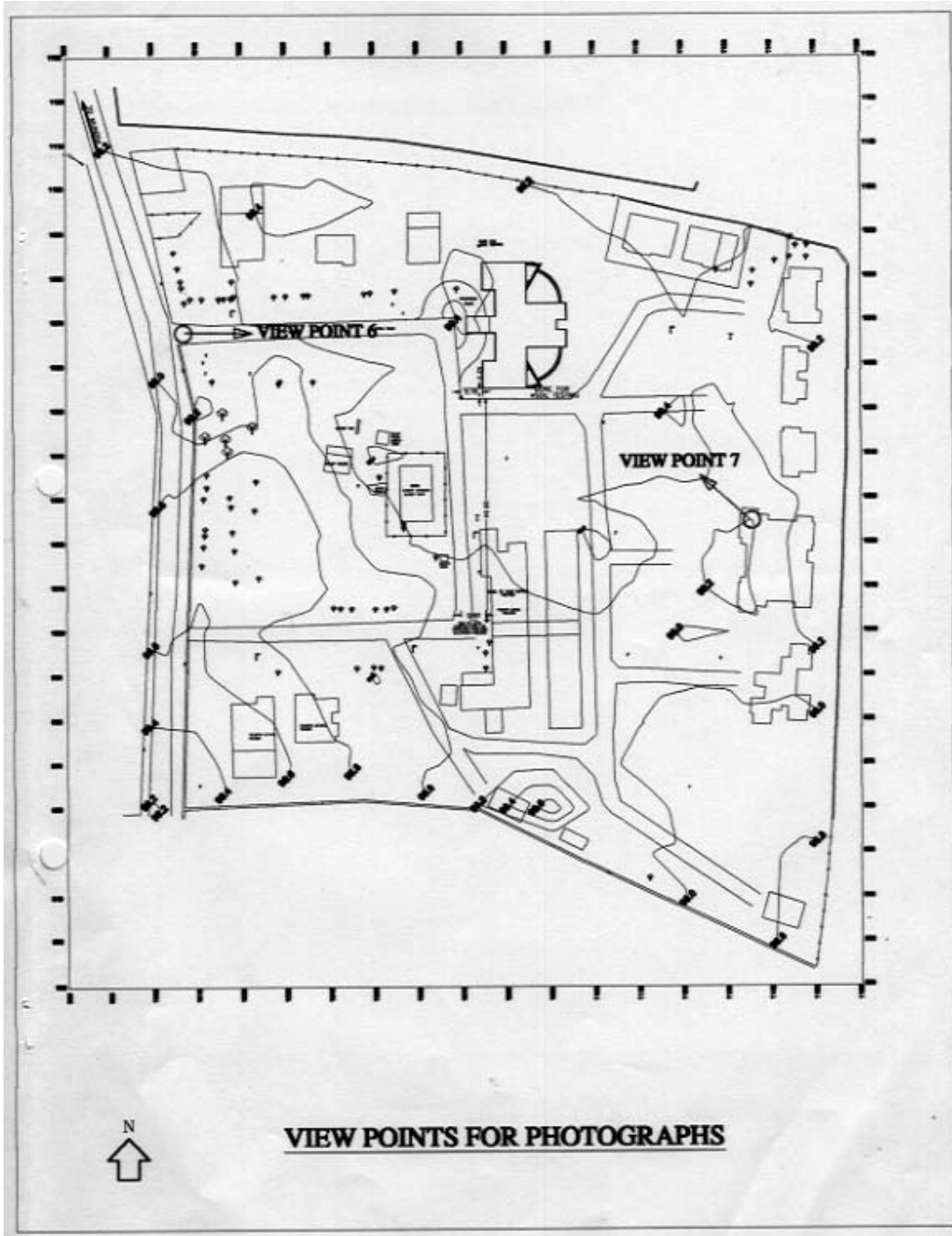




**WATERPROOFING WORK (07/01/02)**



**WATERPROOFING WORK (07/01/02)**



**MUNDRA SITE**

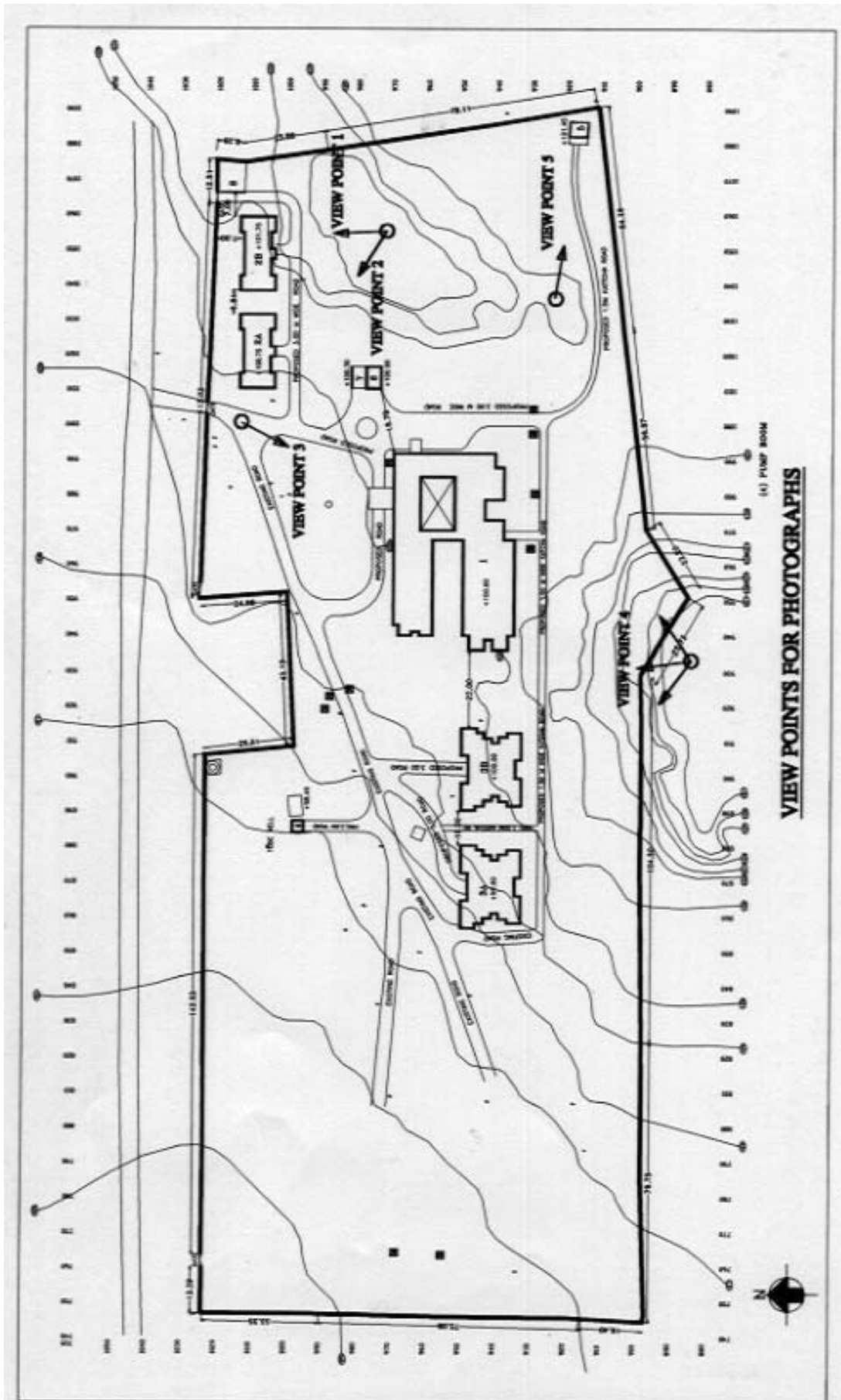


**VIEW POINT 6 (31/01/02)**



**VIEW POINT 7 (31/01/02)**





**VIEW POINTS FOR PHOTOGRAPHS**





**C3 TYPE STAFF QUARTERS**



**MAIN HOSPITAL BUILDING**



**C1 TYPE STAFF QUARTERS**

**VIEW POINT 4 (24/03/02)**

**ANJAR SITE**



**VIEW POINT 1 (24/03/02)**



**VIEW POINT 2 (24/03/02)**



**VIEW POINT 3 (24/03/02)**



**VIEW POINT 5 (24/03/02)**

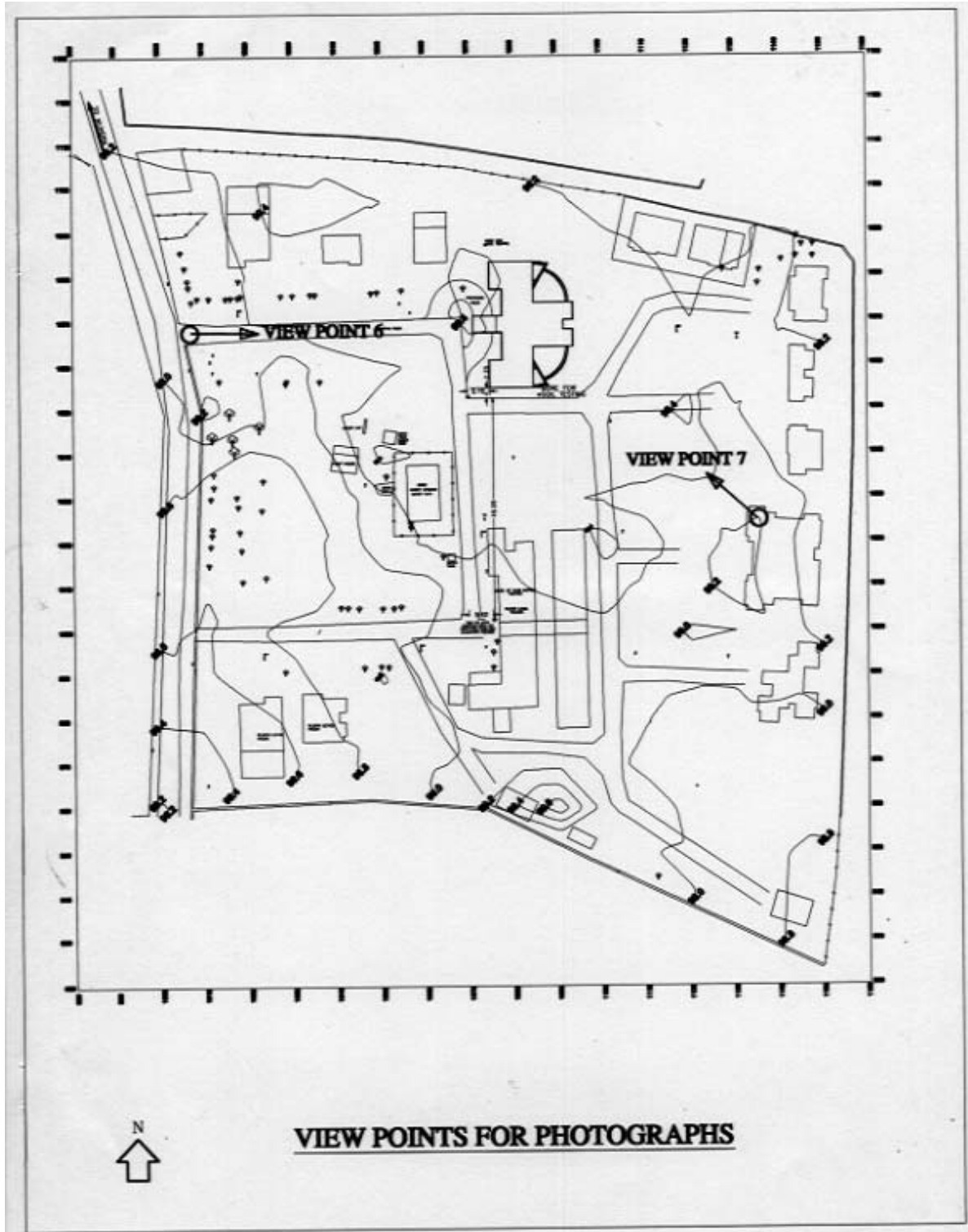




**PUMP ROOM (24/03/02)**



**CORRIDOR MAIN HOSPITAL (24/03/02)**





**VIEW POINT 6 (24/03/02)**



**VIEW POINT 7 (24/03/02)**

### **7.9.3 Issues Occurred During the Construction Stage**

#### **(1) Medical Equipment**

Feb. 01, 2002

A coordination meeting was held among the Supplier, the building Contractor and the Engineer regarding installation work preparation that need to be incorporated in the building work.

Equipment installation is scheduled to start from March 1, 2002.

Feb. 16, 2002

Installation of the arm for the shadowless lamp in the OT was completed.

Feb. 27, 2002

The communal riot of Gujarat began in Ahmedabad and curfew was imposed.

March 4, 2002

The Supplier reported that except for the hospital furniture all other items were ready to be delivered as soon as the riot situation in town and between the cities settles down.

The factory for the hospital furniture is in the riot affected area and thus it would take at least 5 days after the situation settles down and 10 days for delivery.

March 6, 2002

The factory as well as the Supplier's office was still closed due to the riot.

March 12, 2002

The factory started operation 3-4 hours/day. The Supplier's office was still closed.

March 17, 2002

The Supplier reported that their office area had been under curfew since March 14 and no business could be carried out. They could not tell when they could start business until March 19, 2002.

March 18, 2002

A meeting held for clarifying the present situation and possible implementation schedule

March 23: X-ray machine installation

March 27: Delivery of the items No. F1-15 & F16(Hospital Furniture), H19-31(Medical Equipment), L1-5(Lab. Equipment)

Schedule for the items H1-15, H17, H18 could not be made due to uncertainty of the situation around the manufacturing factory which was located in a sensitive area. On the assumption that the situation

stabilize to the operational level of the factory by 19<sup>th</sup> March, then it could be possible to deliver all the items by the end of the month.

March 19, 2002

The Supplier was instructed to consider alternative manufacturers for the supply of delayed items in case the present manufacturer would not be able to supply due to prolonging riot situation.

March 24, 2002

About 70 % of the equipment was delivered to the site and the remaining items were being manufactured.

April 2, 2002

The remaining items' item Nos. were as follows;

H-4, 7, 8, 10, 14, 16, 17, 18, 29 (ready to be delivered as soon as the situation improves)

L- 1, 3, 4, 5 (ready to be delivered as soon as the situation improves)

F-3, 7 (ready to be delivered as soon as the situation improves)

F-11, H-1 (will be ready for deliver by April 4)

H-2, 3, 5, 6, 9, 11, 12, 13, 15 (will be ready for deliver by April 5)

Underlined items might be delayed depends of the situation

April 7, 2002

Installation of X-ray machine was completed and instructions were given to the X-ray technician on April 6, 2002. The Supplier reported that delivery of the following items would be delayed due to unexpected accidents at the factory.

H-2, 3, 5, 6, 8, 11, 17, 18

April 11, 2002

All the items except for the following ones were delivered to the site.

H-2, 3, 5, 6, 8, 11, 12, 18 (expected to be delivered on April 17 and the final inspection to be carried out on April 18, 2002)

April 18, 2002 Final Inspection

All the items were jointly checked and confirmed by the Supplier, the Engineer, the Employer and the Superintendent of Anjar CHC and thereafter handed over.



## **PART 4**

## **Chapter 8. Evaluation of the QRS Project**

### **8.1 Effects of the QRS project**

The Project involves the restoration of educational and healthcare facilities which were damaged in the earthquake which struck the west of Gujarat State in India. Following studies on the rehabilitation and reconstruction plan of the GOG and for the QRS project, it was decided to reconstruct a total of 35 classrooms at 5 primary school locations, a hospital building plus related staff quarters buildings etc. at Anjar CHC, and the maternity building at Mundra CHC in Kutch district.

The QRS project for the healthcare sector and primary educational sector were completed on February 21st, 2002 and May 23rd, 2002 and were handed over to the GOG on April 9th, 2002 and May 24th, 2002 respectively. The expected effects of the QRS project are described below. As the QRS project involves the reconstruction of healthcare and primary educational facilities which collapsed in the earthquake, the basic aim was to restore the facilities to their original status, and improvements or enlargements to account for affected population increases etc. were not the key objectives.

#### **(1) Primary School Classrooms**

##### **1) Improvement of educational environment**

The 5 primary schools included in this QRS project were almost completely destroyed by the earthquake, or else were so severely damaged that even though some parts did not collapse, the resulting damage left them in such a dangerous condition that they could no longer be used. As a result, classes were either held in temporary tent-like structures or else outdoors in the open, and so classes could not be held in times of scorching sun and heavy rains and the like. The new classrooms built as part of this QRS project are earthquake-resistant, ventilated and lighted etc. and so satisfies all minimum requirements and are thus a significant improvement on the current environment outside.

As the educational environment are improved, it can also be expected that educational standards will also improve.

##### **2) Improvement of Quality of Education**

The classrooms being built as part of this QRS project, allows each classroom to be equipped

with document/book shelves. This allows the storage of existing educational materials, and also new materials, and thus facilitates a noticeable improvement to the quality and content of education as compared to the temporal outdoor situation.

### 3) Improvement of Promotion of Health and Sanitation Education

Of the 5 primary schools of this QRS project, only one previously had any form of toilet, and basically it can be considered that no toilet facilities were provided. Before, one can only imagine that both staff and pupils had to endure this situation as best they could. For this QRS project, and in particular consideration of the increasing number of both female teachers and female pupils, each school shall be equipped with separate male and female toilets. Even in the near future, it is difficult to envisage that all houses will have their own toilets, and thus the primary school toilets will for many be their first experience of hygienic toilets. This will allow them to learn about personal hygiene and sanitation, including the washing of hands after use of toilets etc, and thus in the long term will allow the improvement in use and knowledge of health and hygiene.

### 4) Improvement of Community Activities

After the construction of the classrooms, it will be possible that they can be used for a variety of functions for the village use. They could be used as local assembly halls for the villagers, as conference rooms, for the exchange of information, as inoculation centers and several other uses. This would allow the community activities of the local inhabitants to be enlivened, and improvements to the general living atmosphere of the effected villages can be expected.

### 5) Use as Local Disaster Centers

As the new classrooms built in the villages are made of earthquake-resistant concrete prefab structures, which are also fireproof, they can be generally be expected to be safer structures than those of the surrounding buildings, and thus in times of future emergencies or disasters, they could be used as disaster centers for the local inhabitants.



## (2) Community Health Centers

### 1) Improvement of healthcare service

Although the main purpose of this QRS project is to rebuild the earthquake damaged hospital building at Anjar CHC and the maternity building at Mundra, and not to increase the level of healthcare as such, the improved efficiency of the new plans within the outpatient, diagnostic and operation departments, and the improved connecting relationship between them. It is thought that effect will be to allow an increase in the number of patients that can be treated.

Furthermore at Anjar, as new medical equipment replaced some of the old ones lost or damaged in the earthquake, improvements in the diagnostic and treatments standards could be expected.

### 2) Decreased burden on higher-referral hospitals

A typical CHC has approx. 30 beds, but the number of beds of this QRS project at Anjar CHC is 50 beds, and thus able to respond to a larger population in the Anjar area. Whilst it is normal that heavily injured or severely ill patients would be taken to the district hospital at Bhuj, the fact that the rebuilt CHC at Anjar has 20 beds more than normal CHCs, means that this greater capacity places a reduced burden on higher-referral hospitals.

### 3) Use as local disaster centre

As the previous CHC buildings of this QRS project did not have adequate structural seismic resistance, they suffered severe earthquake damage, resulting in their loss of healthcare function and being unable to act as an emergency center. For this QRS project, however, the new structures have been designed to withstand Zone 5 seismic forces, the highest and most stringent requirements in India, and thus should be able to maintain their functions in the event of an earthquake.

## **8.2 Appropriateness of the Project**

### **Time Frame and Progress of the Project**

The time frame of the Project was 12 months starting June of 2001 and ending in May 2002. The Project covered various activities such as the following;

- (a) study for the Rebuilding Plan, which involves 1) scrutinizing the rehabilitation and reconstruction plan of the GOG, and its background data, 2) research on other assistance agencies'/organizations' programs/activities, 3) survey and assessment of actual activities taking place in the fields, etc., and
- (b) implementation of the QRS project, which involves 1) selection of the QRS project sites for/of the primary educational facilities and regional healthcare facilities, 2) obtaining consent for execution of the project from all parties concern, e.g. the GOG, local community, and teachers and doctors of each institution, 3) site survey and analysis of the QRS project sites by the Project Team and the local survey consultant who were selected through bidding process, 4) selection of a local consulting firm for design and supervision assistance through bidding process, 5) design of primary educational and healthcare facilities, 6) obtaining approval/confirmation of the design for construction from the concerned authorities of the GOG, 7) preparation of bidding documents for construction work of the primary schools, CHCs and supply & installation work of medical equipment, and carrying out of bidding for selection of two contractors, one each for educational and healthcare sectors, and a supplier, 8) supervision of the construction work and equipment supply & installation work, 9) reporting of the progress of each work to the GOG and JICA, 10) handing over of the QRS project to the GOG after completion of each work.

Carrying out all the above activities and accomplishing the Project within the limited time frame considering the chaotic situation due to the earthquake are to be taken as unprecedented and remarkable from the Japanese side point of view. There were many factors that made the Project's completion within the time frame possible. Firstly, the sectors to which the Project to be applied were properly selected. Next, within the sectors, the type of facilities was properly selected. In addition, the construction sites for the facilities were properly selected. Also, the timely request for inclusion of the higher technical educational sector, requested by GSDMA, into the Rebuilding Plan made it possible to study the items and incorporate them into the Rebuilding Plan. Thus it can be said that this Project, from the viewpoint of selected application, was suitable for the relief assistance. This suitability appraisal is here analysed in three matrices.

## **Theory of Specifying Application**

The first process of specifying application for the Project was the selection of the 35 classrooms for the 5 primary educational facilities and the 2 CHCs. The primary educational facilities suffered destruction from the earthquake, and as part of the basic public social infrastructure in the region, after housing, their restoration was an urgent matter. Similarly for the regional healthcare facilities, their disaster recovery was very important.

In any case, one can say that the assistance provided by Japan for the recovery support, and its application within Kutch district, which is close to the epicentre, was well formed and highly rated. However, within the same area there were many other support organizations also active in similar applications, and the problems of selecting and obtaining the items of application was an obstacle which needed to be faced.

The objectives of this Project were in the areas of educational and healthcare, and in geographical terms, within a radius of approx. 100km of the Bhuj-Anjar area. The epicentre of the earthquake was situated about 300km from the State capital Gandhinagar, and in addition, the time available from the start of the assignment to the completion of the new facilities was only 12 months. This would necessitate considerable tenacity, dedication and the resolution of numerous problems. The objectives however would ensure that efforts would be continuously followed zealously. This appraisal gives an outline of this eventuation procedure.

## **Outline Explanation of Matrices**

The three matrices are those adopted by JICA for carrying out work appraisals. They are based on Project Cycle Management Methodology and to be used for this Project with some amendments.

Firstly in Table 8-1, the Preliminary Stage Process Evaluation Chart is used as it is directly from the JICA Project Management Matrix. From the Project prerequisites, to the high-ranking objectives, each stage of the work is analysed prior to the work, and the Evaluation Table for the pre-start project stage appraises the interrelationship structure.

Next, on Tables 8-2, 8-3, the 5-Item Mid-Project Evaluation Chart is from JICA project appraisal guidelines, and adopts 5-items for appraising the Project in mid-term. Then, on Table 8-4, the Post-Project Evaluation Chart is adopted from the JICA model guidelines for project evaluation at completion stage. For this Project, an additional item for the Rebuilding Plan has been included in the Project appraisal.



Thus from these three matrices, the overall appraisal for the Project was carried out.

### **Preliminary Stage Process Evaluation**

This Matrix uses the Preliminary Project Evaluation Method. The arrows in the chart show the direction of analysis, and at any stage of the project, the spiral staircase layered process allows the analysis of the mutual interrelation structure to be done. Each item of the analysis is explained in outline below.

Firstly, as in point 1) in the chart, the Project can be started on condition that the Project Preconditions are well prepared through the process in the chart. For the earthquake disaster recovery, the GOG is responsible. The GOI is the support side based on the amount of assistance financing available, from the National Budget and the Prime Ministers Basic Funds etc. In addition, the primary educational and regional healthcare sectors were under the jurisdiction of the GOG from before the earthquake disaster. Recently, there is further decentralization strategy, and on many items the State government has more control than the Central government. Generally speaking, through the cooperative experiences of both central governments of India, and Japan, in deciding on the assistance works, complicated processes may arise to be resolved. For this Project, close cooperation was needed between the State government finance department and the Central government Ministry of Finance. This issue arises in the Rebuilding Plan process, in the case where continued assistance would occur, and the State and Central governments would make urgent arrangements to solve the issue in line with the request of the State government. For this disaster recovery support, there were many organizations from many countries which could become mixed up, and thus it was an important issue for the specified application to be arranged. Throughout the implementation of the Project, various problems were encountered and continuous adjustments and effective/efficient solutions were made for continuous progress until completion. The valuable experiences recorded in this report are to be utilized for future projects' smooth execution.

Next, working to 2) in the chart, once the external conditions are fixed, the Project results are reached. At the time of preliminary study, the Project scope of work forms the base of the Project's first stage meetings. The specified applications were made through meetings with each related department, actual site condition surveys carried out, and once the actual construction work for the Project starts, the basic social infrastructure pre-disaster situation, the disaster situation, main government measures, recovery support elements and other investigative studies were simultaneously to be made, so

decisions on the Rebuilding Plan could progress.

Furthermore, from 3) in the chart, once the Project results and external conditions are fixed, the Project objectives are reached. From the damaged basic social infrastructure, the building of 5 primary educational facilities, 2 regional healthcare centres, orderly went ahead, and all were complete by the end of May. In that time, difficult external obstacles were overcome, all issues resolved, which were difficult and confusing, but possible to achieve. In order to provide emergency facilities, the partner countries organizations, cities, buildings, structure standards and the like would need to be studied and actual response actions sought. Going higher, on the stage of engineering technical transfer, this topic still remains. The Rebuilding Plan will be one of the most important for this issue.

Also, as shown in 4), if the Project objectives and external conditions are fixed, then the Project higher-ranking objectives can be reached. The upper-ranking objectives are the recovery of the earthquake damaged social infrastructure, and the State government hopes to complete these by 2003. However, looking at the current situation of the recovery work, this may take until 2010, and if is so, then steps should be taken to ensure the social infrastructure is there by 2010. Thus social infrastructure of education and healthcare should be planned for up to around 2020 in investigation studies.

The supply of facilities is a high-ranking objective of this Project in terms of quantity, quality and donation, and receives a high appraisal from the respective organizations and regional applications. However, it seems as though the response to the needs of Gujarat State and also that of Kutch district may not be enough, and that for the Rebuilding Plan, further assistance is probably necessary.

### **Ongoing Project 5 Item Evaluation Chart**

Tables 8-2 and 8-3 were used during the Project to highlight the appraisal results of the relevance, effectiveness, efficiency, impact and self-sustainability of the Project.

For “Relevance”, we can first say that the suitability of the Project in itself was proper. The earthquake damage restoration required large international assistance, and the recovery work needed to be carried out as quickly as possible, and also to bring as much aid as possible. For the relevance of the Japanese aid work, Japan could sympathize with the devastation, and has experience of disaster damage, so its assistance was considered as particularly valuable. Furthermore, since the USA became involved in numerous terrorist-related events, Japan is assisting Pakistan, India and now

Afghanistan, as the donations for concurrent regional political and economic stability to eliminate terrorism by making up the global strategic environment. These circumstances now make this Project even more significant.

Regarding “Effectiveness”, the primary educational facilities are each centrally located in the cores of their respective villages, and they will have the effect of not only improving the regional educational environment, but also the regional public space environment. For the regional healthcare facilities, they are situated in Anjar and Mundra, which after Bhuj are the next major centres, and thus can be said to be in secondary centre cities. In terms of the healthcare service referral system of the government, they are the next most important healthcare facilities after Bhuj General Hospital in the district, and so their prompt reconstruction would be significant to the system. Because this Project basically is humanitarian support there will be no negative effect.

Regarding “Efficiency”, the results of the invested resources can be evaluated, but this is also an emergency development Project, and the justification of results is hoped for in terms of the aptness of the amount of investment, utilizing the effective use of local human and industrial resources. However, at the same time, the non-productivity of the human and industrial resources must also be overcome by every possible effort and means the team can provide. On this point as well, this Project has achieved a good result.

For the “Impact”, it can also be said that, as the indirect and ripple effect of the results for the overall earthquake disaster recovery programme, this Project is to be evaluated based on inducing and triggering results. Regarding the Japanese assistance, it was not well known in this region, and there were no great expectations, but through the course of the work, the aptness and appropriateness of the JICA work has been well appraised and the trust related to Japan’s assistance has grown larger. As a result, the Rebuilding Plan, which is for continuous assistance of the primary educational, technical educational and regional healthcare sectors, was discussed and expectations for realization of the Rebuilding Plan grew.

According to the GOG regarding self-sustainability, there will not be any problems for the facilities and equipment provided under the QRS project.

The results of the 5-item project assessment clearly show that the Project has been particularly worthy.

### **Appraisal after Project Completion**

This matrix is used for after the completion of the Project and evaluates the overall Project record and work process.

Firstly, as the results, 35 classrooms in 5 schools for the primary educational facilities and 64 beds in 2 community health centres (CHC) for the regional healthcare facilities were completed. And this forms restored basic social infrastructure in an area close to the earthquake epicentre.

Next, for the appraisal of the work process, it can be evaluated that the QRS project was carried out over a wide and dispersed area, covering various disciplines, and completed in a short time achieving the target dates, with many problems being overcome. Furthermore, local materials, local structural methods, local equipment materials, local contractors were effectively used so forming an efficient and effective use of resources. At the same time, engineering knowledge and management technique were transferred and other desirable indirect and ripple results achieved. Additionally, after completion, with maintenance management and the contribution of local companies, one can say that the Project is both sustainable and secure.

In addition, for the Rebuilding Plan, meetings with the heads of the primary educational and regional healthcare sectors were held in order to discuss and confirm the needs of each sector so that the kind of the aid term, which could be applied to, could be selected. Furthermore, through the progress of this Project, together with the increased trust of the counterparts of the Project Team, GSDMA has come to persuade the Project Team to contact to the technical educational sector to be included in the Rebuilding Plan.

It can thus be seen from the above, that the record and work process appraisals show that the Project was shown to be exactly apt.

### **Appraisal of the Overall Project**

This Project was conducted in a short time frame, covering many sectors, many localities and consisted of a diverse mixture of planning studies and actual building construction. It also involved many organizations, collaborations with local enterprises, and numerous local matters, all carried out in one study work. This is a courageous achievement, as many obstacles had to be overcome, and can be considered as a high-level and difficult project. It is explained how this Project was carried



out in the most apt and successful way as follows.

Firstly, the Background Survey and the Preparatory Study were accurate, and the target sector and scope of works were decided in a timely manner. The specified objectives of the assistance were properly analysed in line with local factors and the Scope of Works was agreed in the Preparatory Study, and after certain details were adjusted at the Inception Report Meeting, thereafter the Project progressed by overcoming problems one by one.

The Project Team has a long experience in the field of study and analysis of educational and healthcare facilities in the South Asia region. With the accumulated knowledge, in particular knowing how to respond to local situations/issues, it was possible to overcome many difficulties in timely manner. In addition, the Project Team possessed the necessary expertise in the respective fields of rebuilding planning, building planning, equipment planning, cost estimation, contract administration, construction supervision. The formation of the Project Team by selecting such personnel with expertise allowed each member to do ones own work well and as a result achieved a successful overall result at the end.

The support of the people of India, the willing participation of the relevant people from the organizations concerned and with the helpful response of the authorities of each area and the management of the relevant sectors, despite the disorder due to the chaotic situation of disaster recovery work, problems were voluntarily solved. This was most appreciated for the smooth progress of the work. The Director of the Central Government Ministry of Finance, Mr. Mulay; the Principal Secretary of the Gujarat State Government Department of Finance, Mr. Mankad; the Secretary, Mr. Mukim; the Joint Secretary, Ms. Aparna; the Director of PE, Mr. Chaudhari, the Director of DPEP, Mr. Josh; Mr. Bhad; Dr. J. I. Chenath, Dr. RN Shah, Dr. Bhatt, Dr. V.T. Javali of DHMS & ME; the Director Technical Education Directorate, Mr. Kapadia; and others; and also the Collector of Kutch district, Mr. Chhibber and his staff, the DPEO, Dr. P. T. Pandya and the CDMO, Dr. L.M. Chandana, Dr. S. Bheda and also to all other key persons, from the Japanese assistance side, we wish to extend our deepest gratitude for their earnest and energetic response and cooperation.

The effective utilisation of local enterprises was an important matter for this Project. In particular, the consultant firms were an important element to the progress the Project. The work of Dr. Takka of KCT Surveyors and Mr. Shah, Mr. Manan Thakore, Mr. Prashant Thakore of Dalal Consultants also were major and positive contributions.

The Draft Final report was presented to the GOI/GOG on August 6<sup>th</sup>, 2002, and after meetings and discussions, the Final Report was prepared.

The overall appraisal is that Project has been exceedingly appropriate, effective, efficient, and the QRS project has considerable indirect and ripple effects and realisation of the Rebuilding Plan for continuous support could also lead to effective results.

**Table-8-1 Project Overall Assessment Matrix for the Project Assessment at Pre-Project Stage**

The preliminary assessment evaluates the mutual interrelation issues at each stage of the process.

<b>Narrative Summary</b>	<b>Objectivity Verifiable Indicators</b>	<b>Means of Verification</b>	<b>Important Assumptions</b>
<b>Overall Goal Indirect and long term</b> - Restoration of Kutch BHN - Reconstruction of Social Infrastructure in Kutch - Rebuilding Planning of Kutch Education & Health	<b>Attainment Index of the Project</b> - Recover the Pre-earthquake Condition of Education - Recover the Pre-earthquake Conditions of Health - Recover the Pre-earthquake Conditions of T.E. (Technical Education) All; until 2003	<b>Resources of Index of the Project</b> - GOG, DPEP Packages for Rehabilitation - GOG, DHMS&ME Packages for Rehabilitation - GOG, DH&TE Packages for Rehabilitation	<b>Unstable Factors Affection to the effect</b> - Continuation of Human Resources Supply by GOG - Continuation of maintenance - Development of Social Infrastructure by GOG - Development of Economic Infrastructure by GOG - Participation of people
<b>Project Target Purpose of the Project</b> - Provision of 5 Primary schools in the affected center - Provision of 2 CHCs in the affected center - Study of more needs for the educational and health infrastructure assistance	<b>Attainment Index of the Project</b> - 35 seismic resistant classrooms by 2002/3 - 50 bed CHC and 14 bed maternity building of CHC by 2002/3 - Needed assistance for Teachers' Training Center, 100 bed General Hospital, Institute of Technology and others	<b>Resources of Index of the Project</b> - Data from Urgent Relief Mission of JICA as of Feb. - Data of Background Survey of JICA as of Mar., 2001 - Data of Preparatory Study of JICA as of April, 2001 - Identify the Targets by study of the Team on Inception Report and Meetings with GOG	<b>Uncertain Factors of the Project</b> - Design Certification - Building Permission - Local Firms' Capacity - Local Technology Level - Local Workmanship - Standards of Local Materials and Products - Boundaries Confirmation - Lifeline Confirmation
<b>Outputs Facilities and Services</b> - Fix the Agreeable Target in Detail of Education Sector - Fix the Agreeable Target in Detail of Healthcare Sector - Fix the Agreeable Target in Detail of the Needs for more Support to Education and Healthcare Sectors	<b>Output Index Benefit for the affected</b> - 1400 Children a Year of Important 4 Villages - 64 Inpatients and 600 Outpatients of 2 Important Talukas - Study of Rebuilding Plan for Important Education and Healthcare Infrastructure	<b>Resources of Index of the Project</b> - 2001/04/26 M/M, S/W - 2001/06/26 M/M - 2001/07/05 L/C Letter of Confirmation for CHCs - 2001/07/06 L/C Letter of Confirmation for schools - 2001/10/01 S/D of the Needs of More Assistance	<b>External Factors for the Implementation</b> - Ongoing Process of newly Establishing Building Codes and Standards - Ongoing Process of newly Establishing Earthquake-resistant Design Standards - Ongoing Process of newly Establishing Urban Design
<b>Activities Design and construction</b> - Study 1. Damage Situation 2. Restoration Programme -Implementation 1. Basic Design 2. Contract Document 3. Contract 4. Construction Management 5. Completion 6. Handing over 7. Follow-up study	<b>Input of GOJ Resources (human, money, and material) for the activities</b> - Required Resources 1. Dispatch of Project Team (01/06/06-02/05/29, 02/08/04-02/08/18) 2. Construction of 5 schools and 2 CHCs 3. Study of Future Needs for Education and Health Sectors	2	<b>External Conditions to keep effects</b> - Broadness of the Areas - Distance of the Villages - Very Urgent Short Term - No Experiences of the Villages, Taluka and State for Restoration with assistance
	<b>Input of GOG Resources essential for the activities</b> Required Resources - Counterpart Organization of GOG - Local Portion of Equipment and Facilities - Maintenance Cost and Manpower		1

Once **preconditions** are fixed, move into **Inputs**

Once **external conditions** and **activities** are fixed, aim to project **output**

**Output** and **external factors** are fixed, aim to **project target**

Project target and uncertain factors are fixed, overall goal will be achieved

Notes: DPEP; District Primary Education Program (Division); DHMS&ME; Department of Health, Medical Services & Medical Education; DH&TE; Department of Higher & Technical Education; CHC; Community Health Center; M/M; Minutes of Meetings, S/W; Scope of Works; L/C; Letter of Certification; S/D; Summary of Discussions

**Table-8-2 Five Overall Evaluation Views Matrix 1 5 items Evaluation at Project Stage**

Appraising the contents of this Project using the 5 main items, as described below.

Views	Items	Evaluation
<b>Relevance</b> Adaptability to the needs of GOG and Validity to the Grant by GOJ	1. Is the Project relevant to the needs of Recipient Country? <b>1) Selection of objectives</b> Correctness of Selection (Target, Scale)? <b>2) Objectives adaptability</b> Match to the Needs? <b>3) Consistency to GOG policy</b> Consistency to GOG/GOI policy?  2. Consistent to GOI Assistance Programme? <b>4) Consistency to GOJ policy</b> Meet to GOJ cooperation policy, Diplomatic Tie, Programmes to India? <b>5) Fairness to other sectors</b> Fair and Impartial? (Benefit and Effect) <b>6) Transferable technology</b> Any Transferable Technology?  <b>7) Good and bad to relevance</b> Any Influential Matters?	1. As Governmental Programme/ODA of Japan, Assistance to India, Response to Indian Request, Transferring of Technology <b>1) Right in terms of target and scope</b> Correct Type, Number and Scale in right places of important Talukas and Villages <b>2) Very Urgent Needs</b> Demands must be quickly met as Very Urgent Support <b>3) Directly in line with the GOG Rehabilitation Policy</b> Follow to GSDMA Programme 2. To JICA's Country Strategy, GOJ's Diplomatic Stand and, National Posture of Mutual Economic and Cultural Exchange <b>4) Accord to the Support Policy of Japan</b> GOJ as No. 1 Support Nation to India, GOI as No. 4 of GOJ International Cooperation, <b>5) Fair as Reconstruction of Social Infrastructure</b> Contribution to Restoration of Collapsed Primary Education and Basic Healthcare Facilities as Social Infrastructures <b>6) Earthquake-resistant Design Methodology</b> Hanshin-Awaji Earthquake Experiences will be utilized for Seismic Structure of the Facilities <b>7) No assistance experiences in West India</b> Small Expectation and then Big Expectation by appreciating the Works done by the Team
<b>Effectiveness</b>  Expected effect by the project	Can expected Result be obtained from this Project? <b>1. Attainment of satisfactory effect</b> Can expected objectives be attained? <b>2. Sole effect by the Project</b>  Will this depend on the sole Result? <b>3. Outer influences to the effect</b> What are the External Influences? <b>4. Good and bad influences to this</b> What are the hindering factors?	Logic of the Plan, Accuracy of the Target, Conditions of Success, Reliability <b>1. Expectable</b> Confirming the Right Target, Number, Scale and Ways <b>2. The effect is to be comprehensive, complicated and multi-organizational/national</b> No, it will be an integration of various support <b>3. No negative influences</b> No negative conditions <b>4. Too many number and types of donors</b> Confusion from various support
<b>Efficiency</b> Input/output ratio Project effectiveness Negative and affirmative factors	With the input of resources will the result be as expected and the Project efficient? <b>1. Balance of input/output</b> Satisfactory Output? <b>2. Utilization of input resources</b> Adequate Input? fully utilized? <b>3. Timing of Commitment</b> Right? <b>4. Quality/quantity appropriateness</b> Input Quantity/Quality is right?  <b>5. Alternatives possibility</b> More efficient alternatives? <b>6. Outer influences to the process</b> From Start to End, any outer factors?  <b>7. Influences of pre-requisites</b> Any pre-requisite affect? <b>8. Good and bad affect to this</b> Negative affect to the effect?	Appraising if the Input resources is put to maximum effect 2 Evaluation Methods; Output/Input Rate: Result/Plan Rate <b>1. Appropriate balance is to be achieved</b> Appropriate Input and Expected Result <b>2. Perfectly utilized by the children, community and GOG</b> Whole affected Society can utilize the facilities extended <b>3. Just in time despite of slow start</b> Start slowly: complete quickly <b>4. Minimum input for maximum output in urgent case</b> Right, by minimizing the input with maximum utilization of local manpower and resources <b>5. No alternatives at that time</b> No Target Alternatives, no other Implementing <b>6. Programmes Confusion on site adoption affected by other NGOs</b> Village Adoption, Sector Adoption, Facilities Adoption <b>7. Capacity of local construction industries</b> By supporting Local Firms, no negative affection <b>8. Project/Construction management ability of local firms</b> Resolve the Problem with good cooperation of the Team and Local Firms



**Table-8-3 Five Overall Evaluation Views Matrix 2 5 items Evaluation at Project Stage**

Appraising the contents of this Project using the 5 main items, as described below.

Views	Items	Evaluation
<p><b>Impact</b> Indirect impact Ripple effect</p> <p><i>Negative and affirmative</i></p>	<p>Were there direct and indirect impacts of the Project?</p> <ol style="list-style-type: none"> <li><b>1. Overall goal</b> Clear the aim for the Overall Goal?</li> <li><b>2. Impact directly to the goal</b> Is the Overall Goal achieved only by the Project?</li> <li><b>3. Outer influences to the process</b> Any obstacles to the Overall Goal?</li> <li><b>4. Unexpected factors</b> Unexpected + &amp; -?  <ol style="list-style-type: none"> <li><b>1) Affect to the policy</b> + Effect?</li> <li><b>2) Economic effect</b> + Effect?</li> <li><b>3) Administrative/Jurisdiction</b> Affect to the Institutional, Legal, and Administrative Matters?</li> <li><b>4) Technology break-through</b> Any Technology Transferring?</li> <li><b>5) Women, human rights, poverty</b> Any Influences to Women's Status, Human Right and Poverty?</li> <li><b>6) Environmental issues</b> Any Influence to the Community Environment?</li> </ol> </li> <li><b>5. Good and bad affect to this</b> Positive/Negative Affects?</li> </ol>	<p>Expected Longer Term, Indirect Impacts and Ripple effects by the Project</p> <ol style="list-style-type: none"> <li><b>1. Partial contribution to the full restoration of earthquake-destruction</b> Do a Part of Social Infrastructure Restoration Goal until 2003</li> <li><b>2. Very small portion but substantial and speedy support</b> Only 0.6% of Restoration of Primary Schools and 15% Restoration of Basic Healthcare Facilities, but good impact to all</li> <li><b>3. Too much damages, to be well managed by GOG</b> Low Growth of State Economy: Negative Legacy of Numerous Natural Disasters: No Pre-established Disaster Managing System</li> <li><b>4. Not very much</b> Project Process is appreciated by GOG on the way of Finalizing  <ol style="list-style-type: none"> <li><b>1) Significance of JICA/GOJ urgent support is understood</b> Good effect to the Project</li> <li><b>2) 100% support system of JICA is appreciated</b> Generally NGOs' Support are 50% of Total Budget, other 50% will be provided by GOG</li> <li><b>3) GOG/GSDMA initiatives are to be strengthened</b> Quick Progress of this Project affects the Quick Re-establishing of Institutional, Legal and Administrative System of Disaster Restoration</li> <li><b>4) Seismic resistant permanent pre-fabrication structure</b> Experiences of earthquake is utilized</li> <li><b>5) The project will affect effectively to those humanitarian problems</b> Primary Education and Basic Healthcare Environment are crucial conditions to those problems as social infrastructure</li> <li><b>6) Very small impact</b> Low Environmental Impact Materials, Products and Equipment are used to lessen the impact to the surroundings</li> </ol> </li> <li><b>5. Institutional and organizational inefficiency</b> Institutional/Administrative Matters were considered to be negative, but developed to be progressive</li> </ol>
<p><b>Sustainability</b></p> <p>Is it sustainable?</p> <p>Succeeding effect</p> <p>Negative and Affirmative Factors</p>	<p>Can the effects of the Project be continued after completion of the works?</p> <ol style="list-style-type: none"> <li><b>1. Continuity</b> Will the Effects be sustained?</li> <li><b>2. Affirmative &amp; negative factors</b> <ol style="list-style-type: none"> <li><b>1) Political back up</b> State Policy succeed</li> <li><b>2) Administrative Capacity</b> Capacity of human, budgetary and decision making process?</li> <li><b>3) Juridical matters</b> Basic Standards established and being under re-establishing</li> <li><b>4) Financial Capacity</b> Financial Sustainability?</li> <li><b>5) Maintainability</b> Technical Sustainability?</li> <li><b>6) Socio-cultural barriers</b> Socio-cultural Factors? Women and Poverty Factors?</li> <li><b>7) Environmental problems</b> Bad Effect?</li> </ol> </li> <li><b>3. Good and bad affect</b> To sustainability?</li> </ol>	<p>The Project is for Restoration of Public Facilities for self-sustainable institutions to have enough administrative, monetary, and human resources</p> <ol style="list-style-type: none"> <li><b>1. Expected</b> Recovering programme will have no problem of sustaining</li> <li><b>2. Strategy wise affirmative and finance wise negative</b> <ol style="list-style-type: none"> <li><b>1) Continuity is secured</b> Each is major Rehabilitation projects of the GOG (DOE and DOH)</li> <li><b>2) Shortage of human resources and budget</b> Pre-earthquake education and health facilities were 80% of National Standards and almost all were destroyed by the earthquake. Complete rehabilitation may not end until 2010.</li> <li><b>3) Now being re-establishing</b> Urban/Architectural planning, design and construction codes and standards are well organized, but earthquake resistant regulations are to be developed</li> <li><b>4) Maintainable</b> Major State Programme must be maintained</li> <li><b>5) Problems of scarcity and social structure</b> No problem</li> <li><b>6) Town planning should manage</b> Participatory Planning Methodology will be adopted for Village and Town Management to solve Problems of Culture, Woman, Child, Castes/Tribes, and Poverty</li> <li><b>7) Natural ventilation and natural lighting</b> Low impact facilities</li> </ol> </li> <li><b>3. Social conditions</b> Low Enrolment, High Drop-out, Low Hospitalization, Low Labor Standards and others to be improved</li> </ol>

**Table-8-4 Overall Implementing Assessment Matrix on the Project at Post-Project Stage**

From the Matrices above, assessing actual construction this evaluation is made.

Items	Subjects	Evaluation
<b>Achievement</b>  <b>Result</b>	Evaluation of the actual work achieved in the Project  <b>1. Input, quantity/quality</b> Total of Input (Including all Input)?  <b>2. Output attainment</b> Achieved Portion?  <b>3. Project objectives</b> Achieved Study?  <b>4. Goal attainment</b> Final Goal?	It is difficult to make an evaluation of the actual benefits by the Project, but the assumed benefits may be evaluated  <b>1. 5 schools with 35 classrooms and 2 CHCs with 64 beds</b> Together with Implementing services  <b>2. 100% to be used as Village Community Meeting Spaces</b> Completion before 2001/03/31  <b>3. 100% but still many more need to be built</b> Target Areas/Target Institutions have much more to be built  <b>4. Difficulty of complete reconstruction of all collapsed</b> Total Devastation Rehabilitation is difficult to be achieved
<b>Process</b>  <b>Actual Process</b>	There are influential factors affecting to this Project to be described below  <b>1. Activities as planned</b> Have activities been realized as planned? (Including later arrangement to plans)  <b>2. Project Monitoring</b> Any Monitoring Procedures?  <b>3. Counterpart formation</b> Relationship of GOJ Consultant and GOG Counterparts?  <b>4. Commitment of beneficiary</b> Beneficiaries' Relationship to this Project?  <b>5. Ownership of recipient organization</b> Have the Ownership of the Recipient Country's Organizations been established?  <b>6. Project implementing methodology</b>  Any Special Idea/Methodology taken for Enhancement of the Effect of the Project?	This Project is Special Case of Social Development Study on the Reconstruction Support for the earthquake-devastation in India with facilities provision for the Educational and Health Sectors and study for continual assistance to the sectors as Rebuilding Plan  <b>1. Achieved as planned</b> After Explanation of the Preliminary Inception Report, agreed on some modification and fixed the Scope of Works, and then study and Implementation were carried out  <b>2. No third party monitoring except GSDMA and UNDP</b> Advisory Mission/JICA, (01/11/18-11/26) Chancellor's Visit/Japanese Embassy, India, (01/12)  <b>3. No steering committee issues but key personnel issues</b> Due to wide dispersion of organizations concerned across the affected areas, key personnel should be responsible on the consensus within respective department  <b>4. Not directly but through GOG/DPEP</b> As this Project is quite urgent and complicated, the Participatory Relationship of Direct Beneficiaries is difficult.  <b>5. Ministry of education and medical and villages</b> All assistance is managed by Public Sectors which will be responsible for the establishment of the Ownership  <b>6. Utilization of local consultants, institutions and contractors</b>  Making effective use of Local Materials, Local Construction Methods, Local Equipment, Local Survey/Design Firms, Local Contractors, etc. to achieve Low Prices for the Facilities and to benefit Local Industrial Society
<b>Study</b>  <b>Rebuilding Plan</b>	For this Project there are facilities to be provided and Rebuilding Plan to be studied. Below are the steps for the planning  <b>1. Cooperation</b> Organizations concerned  <b>2. Resources</b> Basic Resources for the Rebuilding Plan  <b>3. Design Process</b> Study in Design Phase  <b>4. Fieldwork</b> Study on Site  <b>5. Discussion</b> Discussions with officials concerned  <b>6. Summary</b> Summary of Discussions for Identification  <b>7. Construction Process</b> Additional Study in Construction Phase	The appropriate Facilities are actually built for the Education and Health Sectors and the Rebuilding Targets were also selected for the two Sectors. Furthermore, GSDMA suggested the Plan should cover the Technical Education Sector as well  <b>1. GOG, GSDMA, DPEP, DOH&amp;ME, DOH&amp;TE</b> Directors of concerned Directorates/Commission rates  <b>2. GOG, GSDMA, UNICEF, UNDP, WB, ADB, and Books</b> Web sites of WB, ADB, UN, UNDP, GSDMA and MOFA/JICA of GOJ and Embassy of Japan in India  <b>3. DPEP and DOH&amp;ME</b> Director of DPEP and Director of DOH&ME  <b>4. Kutch District</b> Sites of Primary Schools, CHCs and Technical Education in Kutch District  <b>5. Directors of Directorates/Commissionerates and MOF of GOG</b> Mr. Josh, Mr. Bhatt, Mr. Kapadia and Ms. Apalna  <b>6. Secretary of Finance</b> Mr. Mukim, Secretary of Finance Department, GOG  <b>7. Continuous discussion</b> Additional Studies and Additional Discussions

### 8.3 Recommendation

The Project for the Reconstruction Support for the Gujarat-Earthquake Disaster in the Devastated Areas in India is to urgently provide the social infrastructure in the primary educational sector and basic healthcare sector (QRS project) and to study the Rebuilding Plan in those sectors to be hopefully finalized by year 2003. The recommendation will be studied by assessing and evaluating all procedures of the project implementation for 5 schools and 2 CHCs and by discussing the urgent need of devastated educational and healthcare sectors with officials concerned of the GOG.

A matrix of studying system is adopted for the assessment and evaluation of the Project based on the JICA Project Cycle Management Programme. The Project Design Matrixes, the Five Implementing Views Matrixes and the Implementing Assessment Matrixes are used for the study on the QRS project in the primary educational sector and basic healthcare sector. The Project Study Matrix, Five Pre-implementing Views Matrix and the Pre-implementing Assessment Matrix are used for the potential projects in technical educational sector introduced by GSDMA.

A lot of potential projects were studied in the meetings for the QRS project. Finally 8 projects were short-listed as in the Minutes of Meeting (M/M) between the GOG and the Project Team for the Rebuilding Plan on August 14<sup>th</sup>, 2002. Table 8-5 is based on the M/M. The priorities in each sector are expressed in the table and the priority of all will be studied by using the Matrixes.

In the final discussion for the Rebuilding Plan the followings were mentioned of further action of JICA/GOJ.

1. All needs are simply from financial difficulties of the GOG/GOI
2. There are four categories listed in the Rebuilding Plan:
  - 1) Primary education
  - 2) Technical education
  - 3) Basic healthcare
  - 4) Community Training
3. The priority of each category is decided in consultation with the concerned sectors in the GOG
4. If two or more projects are to be implemented, there will be three types of patterns:
  - Series type of cooperation (one by one)
  - Parallel type of cooperation (one with one)

Comprehensive type of cooperation (one in one)

5. All the scope of works and terms of references of the projects have not been fixed yet
6. All projects have not yet been adopted by JICA assistance programmes and are subject to further discussion between the GOG/GOI and the GOJ.

The last two columns in the **Table-8-5** are additional ones to show value and priority.

**Table-8-5 Priority Matrix for Potential Rebuilding Projects**

No.	Priority Matrix	Five Evaluation Views 20 point will be for the best					Value (100 max.)	Priority (in order)
	Institutions	Relevance	Effect	Efficiency	Impact	Sustainability		
<b>Primary education</b>								
1	Equipment/Material Supply	5	10	20	20	5	60	5
2	More Classrooms	20	15	15	5	20	75	3
<b>Technical Education</b>								
3	Institute of Seismology, Bhuj	20	20	20	20	15	95	1
4	Engineering College, Bhuj	20	15	20	20	15	90	2
5	Vocational Training Centre, Bhuj	10	10	10	5	10	45	6
6	Pharmacy College, Lakhtar	5	10	10	5	10	40	7
<b>Basic Healthcare</b>								
7	A Package Project 1) Mental Care and Rehabilitation Centre, Bhuj 2) Expansion of Anjar CHC 3) Regional Logistic Medical Store Centre, Bhuj 4) Six PHCs 5) Five Allopathic Dispensaries and three Sub Centres	20	20	20	20	15	95	1
<b>Community Training</b>								
8	Knowledge Transfer via GSDMA	15	15	10	15	10	65	4

20; excellent 15; better than average 10; average 5lower than average

### Process of Rebuilding Plan

The aid to primary educational and regional medical facilities from Japan is implemented from the humanitarian point of view and for the necessity of contribution to the earthquake disaster restoration based on the experiences and compassion of an earthquake-prone country.

As it can be seen in many reports, the large magnitude of disaster has caused enormous damage. Despite many can-do intents to the aid, the implementation is not going as well as expected and the assistance is still not sufficient enough, and it requires further assistance from Japan.



As already mentioned, even before the disaster, for both the healthcare and primary education, the Human Development Index (HDI) of India is 115th in the world as reported in the Human Development Report 2001 by UNDP, and Gujarat State which has a higher level compared with other States, still does not achieve the expected level.

However, this type of upgrading should be more the objective of other aid concepts rather than the objective of the urgent aid for earthquake disaster restoration.

Especially in the field of education, the improvement of the deteriorated basic educational structure is, as Dr. Alexander appealed, not following to the stipulation of the nation constitution of India, and it is an important key element.

Dr. Alexander pointed out also that through the domino effect the deteriorated basic educational structure is causing the decrease of higher education level.

However, the primary educational facilities are being assisted by many foreign organizations and international and domestic NGOs with their various activities. While it is, of course, still necessary to do, in order for Japanese assistance to be strongly impressed, a large-scale assistance needs to be considered as mentioned separately.

With respect to the above, the higher technical education field is being highlighted in the extent of objectives of educational aid, and it is a meaningful indication for Japanese assistance.

Firstly, for the request of primary education aid, the consultation is, if anything, started from the pointing out of the insufficient areas of the aid, which the Project Team felt during implementation.

Secondary, for the regional healthcare, the selection of aid items is discussed based on the understanding of the current situation and the questionnaires for any aid request items sent from the Project Team to the State government.

For the higher education aid, the consultation started on the strong request from the high technology education authority of the Department of Education of the State Government.

In any case, during implementation of the Project, the trust and expectation to the JICA assistance grew gradually, so it becomes a basis of the request of various aid items.

In order to select the items for Japanese aid from the various items, the most important conditions are, whether it will produce a preferable result for Japan, whether it is suitable for Japan rather than other countries, whether Japan can do it well and whether the recipient will greatly appreciate it, and it has to fulfil the 5 so-called aid evaluation items.

### **Assistance Request for Primary Education**

Generally, the assistance request for the reconstruction of primary education facilities does not seem to be very serious.

As already analyzed, the present rate of sufficiency of assistance is to be sufficient if ignoring the increase of population.

It is a matter of concern that the impression of small-scale aid will be faint compared with the Netherlands aid, an overwhelmingly large-scale aid of approximate 5 billion yen.

The primary education facilities aid is suitable for NGO objectives as the scale of each project is relatively small.

From the above-mentioned point of view, the requirements of aid in this field are not necessarily so much. However, the experience of 5 school buildings construction should be valued, and as a practicable assistance target it has a great value in terms of the effectiveness of such experience.

### **Assistance Request for High Technological Education**

Because there is a great expectation of Japanese technology for the assistance for high technological education, this field is considered as a major objective in terms of effectiveness and existence.

The case of Institute of Technology, Bhuj is the reconstruction of total destruction and is not of too large a scale. The amount of the State government project budget for that is approximately 1.11 billion yen as shown in Table 8-6.

The cost for the Institute of Seismology, Bhuj is estimated as approximately 0.74 billion yen and is much smaller. As for the concept of the Institute, Bhuj City is the suitable place as it is the center of disaster, however the central government is also considering it and the State government is proceeding with a study of it as the expansion of GSDMA. The case of Bhuj might be considered as a decentralized core of such facilities.

For the vocational training centre, despite its lower priority and less practicability, the intention from the State government is not negligible.

The pharmaceutical college has been considered as part of healthcare aid implementation, while it is categorized under the technical education in India.

Among the different areas, the technical education has the highest demand of assistance.

## **Assistance Request for Basic Healthcare**

Considering the hardship that the people of catchment area of each healthcare facility listed, realization of this package project is urgently needed and will be appreciated by all those suffering after the earthquake.

Further, because all the facilities are situated in Katch district, the ripple effect of realization of this package project along with the QRS project will create significant impact on the people of Katch district.

Moreover, conditions of each item of the package project are identical to that of either Anjar CHC or Mundra CHC, e.g. restricted time and budget, needs to be designed for local medical standards level and self-sustainable operation, etc. Therefore, the experience from implementation of the QRS project can be fully utilized for efficient and effective realization of the package project.

## **Concept of Priority Matrix**

The matrix evaluation items are explained hereunder.

Relevancy is to evaluate the consistency with the needs of the recipient country and the value as Japanese aid.

Effectiveness is to evaluate the possibility of the expected effect.

Efficiency is to evaluate the possibility of the expected output according to the input resources.

Impact is to evaluate the possibility of the ripple effects.

Sustainability is to confirm the continuous maintainability.

Each of the above 5 items is to be evaluated, then the priority ranking is to be indicated according to the sum of points.

## **Matrix**

The following is a summary of the features of evaluation result.

For the relevance, the aid programs of the more classrooms, Institute of Seismology and Institute of Technology, Bhuj, healthcare package project, received a high evaluation score.

For the effectiveness, the programs of the Institute of Seismology and healthcare package project received a high evaluation score.

For the efficiency, the programs of the education equipment, Institute of Seismology, Institute of Technology, Bhuj, healthcare package project received a high score.

For the impact from indirect ripple effects, the programs of the education equipment, Institute of Seismology, Institute of Technology, Bhuj, healthcare package project received a high score.

For the self-development and sustainability, the programs of the more classroom received a high score.

For the overall evaluation result, as shown in Table 8-6, the Institute of Seismology and healthcare package project are in the first highest scores and Engineering College is in the secondary highest, followed by the more classrooms.

In reality, the evaluation result will be different depending on what JICA programmes will be taken for the technical assistance and grant aid and also what periods such as the short, middle and long term will be applied to the programs pre-determined by the aid organizations.

Moreover, similarly the result will be different depending on the stands of the recipient country and/or the donor country.

### **Suggestion to Assistance Continuity**

Based on Tables 8-5, 8-6 and the matrices, the priority-ranking matrix is to indicate the result of the analyses on the implementation of projects in various fields, the evaluations of studies for before, during and after the implementation and also the effects of overall studies for social development.

As the high technology education aid is found as a new item in those studies as highlighted in the priority ranking, it calls for the expansion of the original aid objectives, the background of such will be mentioned.

While India has made various efforts to break through the economic crisis of Asia, historically the high education system of India is mainly the general education course, and according to Dr. Alexander, 80% of students are in such non-special general education courses and of the rest 5.3% are in technical, 4.9% in pharmacy, 3.4% in education, 2.3% in agriculture and 1.1% in dairy.

For the so-called Research and Development, only 0.27% is engaged in this, and this is a small rate in comparison with that of the developed countries.

The above matter is due to the dated education program of India, and this is a major reason why the economy of India has been hovering around, while other Asian countries have been through the crisis within a few years.

As mentioned above, the technical education is a crucial subject in India, thus this Project from Japan,



which has achieved great success in that field and has kept providing aid to India, will be a great asset to India.

For the primary education, the aid in this field as a social contribution, to say nothing of the fact that the improvement of the poor educational environment is the most urgent subject to the regional society, should be implemented by living together with people, considering the village structure in view of the cultural anthropology and its reflection, the village structure of community space and establishing the ideal village structure with the cooperation with people. Nevertheless, this recommended procedure does not fit the nature of urgent aid, technical assistance and/or grant.

For the healthcare field, all the items included in the package fit well with the nature of Japan's aid policy though further clarification of each item is needed for realization of the package.

For the high technology field, as previously repeated, it is suitable for the object of aid but needs many studies as it is more for the middle or long-term aid than the short term aid.

However, because the campus area of Institute of Technology, Bhuj is large enough, it is not difficult to allocate the site and there is enough area for the Institute of Seismology.

Moreover, the functional linking cooperation with the Vocational Training Center can be expected because they are located nearby.

While the precondition of the priority-ranking matrix is explained above, the important preconditions of various determinations for the aid, i.e. the sector, method, duration, budget, etc., have not been established.

Upon such establishment of the preconditions, the evaluation for the establishment of the priority ranking has to be conducted.

This report is to be the basic information for such establishment of preconditions.

Table 8-6 shows a summary of the overall proposals of the aid.

It shows the matters to be discussed, such as the State budget, project scale profile, project duration, completion time, method of aid and priority ranking in each field, and the evaluated priority ranking of the report.

**Table-8-6 Items of the Rebuilding Plan**

No	Institution	Cost in Rs. crores	Area in ha.	Periodical Term	Open	Program	Priority in each sector	Priority in all sector
<b>Primary educational Sector</b>								
1	Equipment/Material Supply for the Project and others	01.0	0.18	Short	2001	Support	1	5
2	More Classrooms	01.0	0.18	Short	2001	Support	2	3
<b>Technical Education Sector</b>								
3	Institute of Seismology, Bhuj	26.4	1.56	Medium	2003	Pro Grant	1	1
4	Engineering College, Bhuj	39.7	5.44	Long	2006	Pro Grant	2	2
5	Vocational Training Centre, Bhuj	02.0	0.20	Short	2002	Support	3	6
6	Pharmacy College, Lakhtar	04.6	5.40	Long	2006	Pro Grant	4	7
<b>Basic Healthcare Sector</b>								
7	A Package Project 1) Mental Care and Rehabilitation Centre, Bhuj 2) Expansion of Anjar CHC 3) Regional Logistic Medical Store Centre, Bhuj 4) Six PHCs 5) Five Allopathic Dispensaries and three Sub Centres	TBD	TBD	Short	2002	Support	1	1
<b>Community Training</b>								
8	Knowledge Transfer via GSDMA	TBD	N/A	Long	N/A	Tech	1	4

Pro : Project Type Technical Cooperation, Grant : Grant Aid Project, Support : Disaster Urgent Support, Tech : Technical Cooperation  
TBD : To Be Determined, N/A : Not Applicable

All sectors in the priority list are studied by using the Matrixes hereunder shown and will be subject to further discussions by the GOG/GOI and the GOJ.

## 1. Primary Education Sector

As shown in **Table-8-7, 8, 9**, the QRS project to the 5 primary schools with 35 classrooms extends a small share in the needed reconstruction of 6,974 collapsed classrooms.

### Project Design Matrix for the Primary Educational Facilities

<b>Narrative Summary</b>	<b>Objectively Verifiable Indicators</b>	<b>Means of Verification</b>	<b>Important Assumptions</b>
<b>Overall Goal</b> Indirect and long term 1. Restoration of pre-earthquake quantity and quality	<b>Attainment Index</b> S/W in M/M 1. India 5 Year Plans 2. The GOG Rehab. Package No53.	<b>Resources of Index</b> Inception Report 1. The GOI 2. The GOG 3. GSDMA 4. WB/ADB 5. UN/UNDP 6. the GOJ Pre-studies	<b>Unstable Factors</b> Affection to the effect 1. Human resources 2. Social infrastructure 3. Other disaster 4. Scarcity
<b>Project Purpose</b> Target of the Project 1. Construction of 5 schools 2.	<b>Attainment Index</b> Inception Report 1. Discussion with the GOG 2. Site Survey 3. DPEP Decision	<b>Resources of Index</b> DPEP/GSDMA 1. Letters 2. Minutes of Discussion 3. Amend of S/W	<b>Uncertain Factors</b> The GOG policy 1. Budget shortage 2. Capacity 3. Community support
<b>Outputs</b> Facilities and Services 1. 35 classrooms 2. 1,400 children	<b>Output Index</b> Scope of Design 1. From 60 to 35 2. In Kutch district	<b>Resources of Index</b> Fixed in the M/M 1. M/M with the GOG	<b>Factors to be fixed</b> Sustainability 1. Maintenance budget 2. Renewal budget 3. Payment budget
<b>Activities</b> Design and construction 1. Basic Design 2. Contract Document 3. Contract 4. Construction Management 5. Completion 6. Handing over 7. Follow-up study	<b>Input of the GOJ</b> Resources (man, money, and material) for the activities 1. Equipment (IT) 2. Educational material 3. IT re-training  IT; Information Technology		<b>External Factors</b> To keep effective 1. Urban infrastructure 2. Social infrastructure
	<b>Input of the GOG</b> Resources essential for the activities GSDMA support DPEP support District organization support 4. Village support		<b>Precondition</b> Start and re-start 1. Counterpart committee 2. Counter Budget

As in the table above the overall goal of this Project for this sector is to assist the restoration of the pre-earthquake quantity and quality of the primary educational facilities in the affected areas.

The information released by GSDMA in the Weekly Report as of 01/02/2002 says 1,723 classrooms for the primary schools have been reconstructed out of 6,974 destroyed in all around Gujarat State. The overall goal has not yet been reached and is still faraway to get to.

As a means to rebuilding the devastated basic social infrastructure, the QRS project to the primary education is still significant in terms of humanitarian support for affected children, women and communities.

**Table-8-7 Five Implementing Views Matrix for the Primary Educational Facilities**

Views	Items	Evaluation
<b>Relevance</b> Adaptability to the needs of the GOG and Validity to the Grant by GOJ	<ol style="list-style-type: none"> <li>1. Selection of objectives</li> <li>2. Objectives adaptability</li> <li>3. Consistency to the GOG policy</li> <li>4. Consistency to GOJ policy</li> <li>5. Fairness to other sectors</li> <li>6. Transferable technology</li> </ol>	<ol style="list-style-type: none"> <li>1. Right in terms of target and scope</li> <li>2. Urgent needs</li> <li>3. Directly in line with the GOG policy</li> <li>4. In accord with the urgent support policy</li> <li>5. Fair as reconstruction of social infrastructure</li> <li>6. Earthquake-resistant design methodology</li> </ol>
<b>Effectiveness</b> Expected effect by the Project	<ol style="list-style-type: none"> <li>1. Attained satisfactory effect</li> <li>2. Sole effect by the Project</li> <li>3. Outer influences to the effect</li> </ol>	<ol style="list-style-type: none"> <li>1. Expectable</li> <li>2. The effect is to be comprehensive and multi-organizational</li> <li>3. No negative influences</li> </ol>
<b>Efficiency</b> Input/output ratio Project effectiveness Negative and affirmative factors	<ol style="list-style-type: none"> <li>1. Balance of input/output</li> <li>2. Utilization of input resources</li> <li>3. Timing of Commitment</li> <li>4. Quality/quantity appropriateness</li> <li>5. Alternatives possibility</li> <li>6. Outer influences to the process</li> <li>7. Influences of pre-requisites</li> </ol>	<ol style="list-style-type: none"> <li>1. Appropriate balance is to be achieved</li> <li>2. Fully utilized by the children, community and the GOG</li> <li>3. Just in time despite of slow start</li> <li>3. Minimum input for maximum output in urgent conditions</li> <li>5. No alternatives at that time</li> <li>6. Confusion on site adoption affected by other NGOs</li> <li>7. Capacity of local construction industries</li> </ol>
<b>Impact</b> Indirect impact Ripple effect  <i>Negative and affirmative</i>	<ol style="list-style-type: none"> <li>1. Overall goal</li> <li>2. Impact to the goal</li> <li>3. Outer influences to the process</li> <li>4. Unexpected factors                             <ol style="list-style-type: none"> <li>1) Affect to the policy</li> <li>2) Economic effect</li> <li>3) Administrative/Jurisdiction</li> <li>4) Technology break-through</li> <li>5) Women, human rights, poverty</li> <li>6) Environmental issues</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>1. Partial contribution to the full restoration of earthquake-destruction</li> <li>2. Small portion but substantial and speedy</li> <li>3. Too much damages to be well managed by the GOG</li> <li>4. Not very much                             <ol style="list-style-type: none"> <li>1) Significance of JICA/GOJ urgent support is understood</li> <li>2) 100% support system of JICA is appreciated</li> <li>3) The GOG/GSDMA initiatives are to be strengthened</li> <li>4) Seismic resistant permanent pre-fabrication structure</li> <li>5) The Project will affect effectively to those issues</li> <li>6) Negligible impact</li> </ol> </li> </ol>
<b>Sustainability</b> Succeeding effect  Negative and affirmative	<ol style="list-style-type: none"> <li>1. Continuity</li> <li>2. Affirmative &amp; negative factors                             <ol style="list-style-type: none"> <li>1) Political back up</li> <li>2) Administrative/legal ability</li> <li>3) Maintainability</li> <li>4) Socio-cultural barriers</li> <li>5) Environmental problems</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>1. Expected</li> <li>2. Strategy wise affirmative and finance wise negative                             <ol style="list-style-type: none"> <li>1) Continuity is secured</li> <li>2) Shortage of human resources and budget</li> <li>3) Maintainable</li> <li>4) Problems of scarcity and social structure</li> <li>5) Town planning should manage</li> </ol> </li> </ol>

**Table-8-8 Implementing Assessment Matrix on Primary Educational Facilities**

Items	Subjects	Evaluation
<b>Achievement</b>	<ol style="list-style-type: none"> <li>1. Input, quantity/quality</li> <li>2. Output attainment</li> <li>4. Project objectives</li> <li>5. Goal attainment</li> </ol>	<ol style="list-style-type: none"> <li>1. 5 schools and 35 classrooms</li> <li>2. 1400 children a year village community meeting spaces</li> <li>3. 100% but still many need to be built</li> <li>4. Difficulty of complete reconstruction</li> </ol>
<b>Process</b>	<ol style="list-style-type: none"> <li>1. Activities as planned</li> <li>2. Project Monitoring</li> <li>3. Counterpart formation</li> <li>4. Commitment of beneficiary</li> <li>5. Ownership of recipient organization</li> <li>6. Project implementing methodology</li> </ol>	<ol style="list-style-type: none"> <li>1. Achieved as planned</li> <li>2. No third party monitoring except GSDMA and UNDP</li> <li>3. No steering committee issues but key personnel issues</li> <li>4. Not directly but through the GOG/DPEP</li> <li>5. Ministry of education and villages</li> <li>6. Utilization of local consultants, institutions and contractors</li> </ol>

The Gujarat council of primary education released a report recently regarding the progress of school repair and reconstruction. According to the report, numerous NGOs and voluntary organizations have come forward to take up reconstruction of schools on their own as registered with the earthquake bureau at the State Education Department. 43 NGOs will bear 100% of the expenditure for

reconstruction of 1,803 classrooms while 25 NGOs will bear 50% of expenditure for reconstruction of 4,676 classrooms. The total number of adopted classrooms by NGOs is 6,479 which covers almost all of the 6,974 collapsed classrooms. The report also states the Government of Netherlands has already signed the final agreement to finance Rs. 172.88 crores (around 4.6 billion yen) in 7 districts including the Kutch district. The GOI will finance Rs. 95.45 crores and the GOG will finance 10.00 crores. The total amount of Rs. 278.33 crores falls short of Rs. 372.00 crores estimated by WB/ADB in their damage assessment report.

The Project Team has experienced some difficulties in finalizing the site to be adopted by its programme at the early stage of implementation due to confusion of the site selection. There were too many enthusiastic and energetic NGOs coming in to adopt schools for the GOG officials to smoothly allocate sites satisfactorily, resulting in NGOs butting into each other at the site. There was lack of information with regard to the size of school premises and the required numbers of classrooms that could be built in the premises as well.

In the note from DPEP in September 2001, the GOG expressed their needs of IT (Information Technology) equipment for the primary schools in the affected areas. 30,165 computers for the districts and municipality primary schools and 3,164 computers for 3,164 Cluster Resources Centres in the State are requested. At the Cluster Resources Centres training of teachers of nearby villages will be conducted.

Originally, permanent pre-fabricated classrooms only would be provided under the QRS project. However, it was intimated during a course of discussions that a group of classrooms only does not form a primary school and some other facilities to be integrated such as sanitary facilities, teachers' offices, laboratories, meeting rooms, boundary walls, computer facilities, etc. As a result of discussions, sanitary facilities and boundary walls were included in the QRS project.

In line with the context above, two (2) projects were proposed.

If only one project was to be selected for implementation, the one for 'more class rooms' will be preferable, as it will be able to make use of the experiences of the Project Team on all procedures in this country, this State and this district. The Project Team has also experienced some other difficulties during the implementation stage; such as other NGO's starting construction within the same premises or insisting that JICA support to move away; Village people demanding some layout changes and requesting more classrooms, etc. However most of these difficulties were overcome with the assistance of DDO, DPEO and DPEP.



## 2. Basic Healthcare Sector

A 50 bed CHC in Anjar and a 14 bed maternity building of Mundra CHC will be built.

**Table-8-9 Project Design Matrix for the Basic Healthcare Facilities**

<b>Narrative Summary</b>	<b>Objectively Verifiable Indicators</b>	<b>Means of Verification</b>	<b>Important Assumptions</b>
<b>Overall Goal</b> <b>Indirect and long term</b> 1. Restoration of pre-earthquake quantity and quality 2. Optimization of basic healthcare facilities	<b>Attainment Index</b> <b>S/W in M/M</b> 1. Number of basic healthcare facilities 2. Number of beds 3. Number of out patients.	<b>Resources of Index</b> <b>Inception Report</b> 1. The GOI 2. The GOG 3. GSDMA 4. WB/ADB 5. Published resources	<b>Unstable Factors</b> <b>Affection to the effect</b> 1. Human resources 2. Equipment supply 3. Social infrastructure 4. Other disaster 5. Scarcity
<b>Project Purpose</b> <b>Target of the Project</b> 1. Construction of 2 CHCs 2. Equipment	<b>Attainment Index</b> <b>Inception Report</b> 1. Discussion with the GOG 2. Site Survey 3. Commissioner/the GOG	<b>Resources of Index</b> <b>The GOG/GSDMA</b> 1. S/W of April 26, 2001 2. M/M of June 26, 2001 3. M/D 4. WHO 5. UNICEF 6. GSDMA	<b>Uncertain Factors</b> <b>The GOG policy</b> 1. Future budget shortage 2. Human resources capacity 3. Community support
<b>Outputs</b> <b>Facilities and Services</b> 1. Construction of 50 bed CHC in Anjar 2. Construction of 14 bed CHC maternity ward in Mundra	<b>Output Index</b> <b>Scope of Design</b> 1. Anjar out-patients will be 500 2. Mundra out-patients will be 300	<b>Resources of Index</b> <b>Fixed in the M/D</b> 1. M/D the GOG	<b>Factors to be fixed</b> <b>Sustainability</b> 1. Maintenance budget 2. Operation budget 3. Payment budget
<b>Activities</b> <b>Design and construction</b> 1. Basic Design 2. Contract Document 3. Contract 4. Construction Management 5. Completion 6. Handing over 7. Follow-up	<b>Input of GOJ</b> <b>Resources (man, money, and material) for the activities</b> 1. Dispatch of Project Team 2. Implementation of the Project		<b>External Factors</b> <b>To keep effective</b> 1. Urban infrastructure 2. Social infrastructure
	<b>Input of the GOG</b> <b>Resources essential for the activities</b> 1. Site preparation 2. Human resources arrangement 3. Human resources training 4. Additional materials 5. Maintenance cost 6. Additional living quarters		<b>Precondition</b> <b>Start and re-start</b> 1. Counterpart committee 2. Counter Budget

Speedy reconstruction of the basic healthcare facilities at Anjar and Mundra was made possible by effectively and efficiently utilizing the urgent support programme of Japan.

The Project Team has not come across much difficulty in implementing the QRS project for the sector except the initial stage of obtaining a building permit. However, with the cooperation of GSDMA as well as the DH&FW, the permit was obtained just in time in order to complete within the scheduled period.

It is hoped that the result of the Project will be appreciated by the GOG/GOI, as well as by the respective communities. As a result of the successful implementation of the QRS project, further support to rebuild healthcare infrastructure mentioned in the Table-8-5 has been called for.

The weekly report of GSDMA dated 01/02/2002 states that a 281 bed district hospital and a 16 bed mental hospital in Bhuj, 45 Primary Health Centres, 181 Sub-centres, 13 Community Centres, 1,006

Anganwadis and many other structures were destroyed by the earthquake.

Thus, in view of the extent of damages in healthcare infrastructure, the total number of 64 beds being provided under the QRS project will have a substantial impact in the restoration of healthcare services in the earthquake affected areas.

**Table-8-10 Five Implementing Views Matrix for the Basic Healthcare Facilities**

Views	Items	Evaluation
<b>Relevance</b> Adaptability to the needs of the GOG and Validity to the Grant by the GOJ	<ol style="list-style-type: none"> <li>1. Selection of objectives</li> <li>2. Objectives adaptability</li> <li>3. Consistency to the GOG policy</li> <li>4. Consistency to GOJ policy</li> <li>5. Fairness to other sectors</li> <li>6. Transferable technology</li> </ol>	<ol style="list-style-type: none"> <li>1. Right in terms of target and scope</li> <li>2. Very urgent needs</li> <li>3. Directly in line with the GOG policy</li> <li>4. Accord to the urgent support policy</li> <li>5. Fair as reconstruction of social infrastructure</li> <li>6. Earthquake-resistant design methodology</li> </ol>
<b>Effectiveness</b> Expected effect by the project	<ol style="list-style-type: none"> <li>1. Attained satisfactory effect</li> <li>2. Sole effect by the project</li> <li>3. Outer influences to the effect</li> </ol>	<ol style="list-style-type: none"> <li>1. Expectable</li> <li>2. The effect is to be comprehensive and significant</li> <li>3. No negative influences</li> </ol>
<b>Efficiency</b> Input/output ratio Project effectiveness Negative and affirmative factors	<ol style="list-style-type: none"> <li>1. Balance of input/output</li> <li>2. Utilization of input resources</li> <li>3. Timing of Commitment</li> <li>4. Quality/quantity appropriateness</li> <li>5. Alternatives possibility</li> <li>6. Outer influences to the process</li> <li>7. Influences of pre-requisites</li> </ol>	<ol style="list-style-type: none"> <li>1. Appropriate balance is to be achieved</li> <li>2. Perfectly utilized by the community and the GOG</li> <li>3. Just in time despite of slow start</li> <li>4. Minimum input for maximum output in urgent conditions</li> <li>5. No alternatives at that time</li> <li>6. No outer negative influences</li> <li>7. Capacity of local construction industries</li> </ol>
<b>Impact</b> Indirect impact Ripple effect  <i>Negative and affirmative</i>	<ol style="list-style-type: none"> <li>1. Overall goal</li> <li>2. Impact to the goal</li> <li>3. Outer influences to the process</li> <li>4. Unexpected factors               <ol style="list-style-type: none"> <li>1) Affect to the policy</li> <li>2) Economic effect</li> <li>3) Administrative/Jurisdiction</li> <li>4) Technology break-through</li> <li>5) Women, human rights, poverty</li> <li>6) Environmental issues</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>1. Significant contribution to the damage of earthquake-devastation</li> <li>2. Very small portion but substantial and urgent</li> <li>3. Vast damages to increase the cost</li> <li>4. Almost affirmative               <ol style="list-style-type: none"> <li>1) Significance of JICA/GOJ urgent support is understood</li> <li>2) 100% support system of JICA is appreciated</li> <li>3) The GOG/GSDMA initiatives are to be strengthened</li> <li>4) Seismic resistant reinforced concrete framed structure</li> <li>5) The project will affect effectively to those problems</li> <li>6) Very small impact</li> </ol> </li> </ol>
<b>Sustainability</b> Succeeding effect  Negative and affirmative	<ol style="list-style-type: none"> <li>1. Continuity</li> <li>2. Affirmative &amp; negative factors               <ol style="list-style-type: none"> <li>1) Political back up</li> <li>2) Administrative/legal ability</li> <li>3) Maintainability</li> <li>4) Socio-cultural barriers</li> <li>5) Environmental problems</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>1. Expected</li> <li>2. Strategy wise affirmative and finance wise negative               <ol style="list-style-type: none"> <li>1) Continuity is secured</li> <li>2) Shortage of human resources and budget</li> <li>3) Maintainable</li> <li>4) Problems of scarcity and social structure</li> <li>5) Town planning should manage</li> </ol> </li> </ol>

**Table-8-11 Implementation Assessment Matrix on Basic Healthcare Facilities**

Items	Subjects	Evaluation
<b>Achievement</b>	<ol style="list-style-type: none"> <li>1. Input, quantity/quality</li> <li>2. Output attainment</li> <li>3. Project objectives</li> <li>4. Goal attainment</li> </ol>	<ol style="list-style-type: none"> <li>1. 2 CHCs and 64 beds</li> <li>2. 600 outpatients a day village community healthcare activity base</li> <li>3. 100% achieved but still many need to be built</li> </ol> Still there are many hospitals and CHCs destroyed and not reconstructed
<b>Process</b>	<ol style="list-style-type: none"> <li>1. Activities as planned</li> <li>2. Project Monitoring</li> <li>3. Counterpart formation</li> <li>4. Commitment of beneficiary</li> <li>5. Ownership of recipient organization</li> <li>6. Project implementing methodology</li> </ol>	<ol style="list-style-type: none"> <li>1. Achieved as planned</li> <li>2. No third party monitoring except GSDMA and UNDP</li> <li>3. No steering committee issues but key personnel issues</li> <li>3. Not directly but through the GOG</li> <li>4. The GOG</li> <li>6. Utilization of local consultants, institutions and contractors</li> </ol>

**Table-8-12 Project Study Matrix for the Technical Educational facilities**

<b>Narrative Summary</b>	<b>Objectivity Verifiable Indicators</b>	<b>Means of Verification</b>	<b>Important Assumptions</b>
<b>Overall Goal Indirect and long term</b> 5. Restoration of pre-earthquake quantity and quality	<b>Attainment Index M/D (Part 5 Appendix-1)</b> 1. India 5 Year Plans 2. The GOG Rehab. Package No53. 6. Directorate of Technical Education Overview	<b>Resources of Index Inception Report</b> 1. The GOI 2. The GOG 3. GSDMA 4. WB/ADB 5. UN/UNDP 6. The GOJ Pre-studies	<b>Unstable Factors Affection to the effect</b> 1. Human resources 2. Social infrastructure 3. Other disaster 4. Scarcity
<b>Project Purpose Target of the Project</b> 4. Construction of Technical institutes in Bhuj	<b>Attainment Index Inception Report</b> 1. Discussion with the GOG 2. Site Survey	<b>Resources of Index M/D</b> 1. Letters 2. Minutes of Discussion	<b>Uncertain Factors The GOG policy</b> 1. Budget shortage 2. Capacity of management 3. GOI understanding
<b>Outputs Facilities and Services</b> 1. Bhuj engineering College 2. Institute of Seismology	<b>Output Index Scope of Design</b> 1. 2 schools; 35 classes 2. In Kutch district	<b>Resources of Index Fixed in the M/M</b> 1. M/D with the GOG	<b>Factors to be fixed Sustainability</b> 1. Maintenance budget 2. Renewal budget 3. Payment budget 4. Counter budget
<b>Activities Design and construction</b> 1. Technical cooperation project 2. Preliminary Study 3. Basic design study 4. Construction 5. Completion 6. Handing over 7. Follow-uo study	<b>Input of GOJ Resources (man, money, and material) for the activities</b> 1. Dispatch of Project Finding Mission 2. Dispatch of Study Team of Technical cooperation 3. Dispatch of Project Preliminary Study Team 4. Dispatch of Basic Design Study Team		<b>External Factors To keep effective</b> 1. Urban infrastructure 2. Social infrastructure
	<b>Input of the GOG Resources essential for the activities</b> 1. Project proposal/steering committee 2. Site preparation 3. Counter budget 4. Counterpart 5. Security of the GOJ Mission		<b>Precondition Start and re-start</b> 1. The GOG request 2. The GOI agreement 3. The GOI request 4. The GOJ agreement 5. The GOJ budget

### 3. Technical Educational Sector

This sector was not originally included in the Project, however, as a part of the Rebuilding Plan, reconstruction of completely collapsed technical education institutes has been included in order to contribute to the human resources development of the earthquake affected areas.

The present situation and propositions of hopeful supports in the sector are described in the previous chapters.

The most preferable within the Rebuilding Plan for this sector is the Engineering College, Bhuj with the Institute of Seismology, Bhuj as a comprehensive pattern of plural projects.

This Project, which is an urgent support project, is a special version of the JICA programme not fitting in the categories of the medium nor long term project. Changing the version of the programmes may take time and complicated procedures may entail, but the GOG/GOI has expressed their strong needs of the assistance.

**Table-8-13 Five Pre-implementing Views Matrix for the Technical Educational Facilities**

Views	Items	Evaluation
<b>Relevance</b> Adaptability to the needs of the GOG and Validity to the Grant by GOJ	<ol style="list-style-type: none"> <li>1. Selection of objectives</li> <li>2. Objectives adaptability</li> <li>3. Consistency to the GOG policy</li> <li>4. Consistency to the GOJ policy</li> <li>5. Fairness to other sectors</li> <li>6. Transferable technology</li> </ol>	<ol style="list-style-type: none"> <li>1. Right in terms of target and scope prepared by the GOG</li> <li>2. Urgent needs no WB support and the GOG budget</li> <li>3. Directly in line with the GOG policy for the technical education</li> <li>4. Accord to the urgent support policy for earthquake-devastation</li> <li>5. Fair as reconstruction support of social infrastructure</li> <li>6. Earthquake-resistant design methodology and other hi-tech</li> </ol>
<b>Effectiveness</b> Expected effect by the project	<ol style="list-style-type: none"> <li>1. Attained satisfactory effect</li> <li>2. Sole effect by the project</li> <li>3. Outer influences to the effect</li> </ol>	<ol style="list-style-type: none"> <li>1. Expectable</li> <li>2. The effect is to be comprehensive and significant</li> <li>3. No negative influences but possible multi-national support</li> </ol>
<b>Efficiency</b> Input/output ratio Project effectiveness Negative and affirmative factors	<ol style="list-style-type: none"> <li>1. Balance of input/output</li> <li>2. Utilization of input resources</li> <li>3. Timing of Commitment</li> <li>4. Quality/quantity appropriateness</li> <li>5. Alternatives possibility</li> <li>6. Outer influences to the process</li> <li>7. Influences of pre-requisites</li> </ol>	<ol style="list-style-type: none"> <li>1. Appropriate balance is to be achieved</li> <li>2. Perfectly utilized by the technical institutions of the GOG</li> <li>3. Just in time as urgently proposed</li> <li>4. Minimum input for maximum output in urgent conditions</li> <li>5. S/W is appropriate</li> <li>6. Confusion on site adoption by other NGOs</li> <li>7. Capacity of local construction industries</li> </ol>
<b>Impact</b> Indirect impact Ripple effect  Negative and affirmative	<ol style="list-style-type: none"> <li>1. Overall goal</li> <li>2. Impact to the goal</li> <li>3. Outer influences to the process</li> <li>4. Unexpected factors                             <ol style="list-style-type: none"> <li>1) Affect to the policy</li> <li>2) Economic effect</li> <li>3) Administrative/Jurisdiction</li> <li>4) Technology break-through</li> <li>5) Women, human rights, poverty</li> <li>6) Environmental issues</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>1. Partial contribution to the full restoration of earthquake-destruction</li> <li>2. Small portion, but substantial and speedy</li> <li>3. Too much damages to be well managed by the GOG</li> <li>4. Not very much                             <ol style="list-style-type: none"> <li>1) Significance of JICA/GOJ urgent support is understood</li> <li>2) 100% support system of JICA is appreciated</li> <li>3) The GOG/GSDMA initiatives are to be strengthened</li> <li>4) Seismic resistant pre-cast framed structure</li> <li>5) The project will affect effectively to those problems</li> <li>6) Small impact</li> </ol> </li> </ol>
<b>Sustainability</b> Succeeding effect  Negative and affirmative	<ol style="list-style-type: none"> <li>1. Continuity</li> <li>2. Affirmative &amp; negative factors                             <ol style="list-style-type: none"> <li>1) Political back up</li> <li>2) Administrative/legal ability</li> <li>3) Maintainability</li> <li>4) Socio-cultural barriers</li> <li>5) Environmental problems</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>1. Expected</li> <li>2. Strategy wise affirmative and finance wise negative                             <ol style="list-style-type: none"> <li>1) Continuity is secured</li> <li>2) Shortage of human resources and budget</li> <li>3) Maintainable</li> <li>4) Problems of scarcity and social structure</li> <li>5) Town planning should manage</li> </ol> </li> </ol>

**Table-8-14 Pre-Implementing Items Matrix on Technical Educational Facilities**

Items	Subjects	Evaluation
<b>Achievement</b>	<ol style="list-style-type: none"> <li>1. Input, quantity/quality</li> <li>2. Output attainment</li> <li>3. Project objectives</li> <li>4. Goal attainment</li> </ol>	<ol style="list-style-type: none"> <li>1. 5 schools; 35 classrooms</li> <li>2. 1400 children a year; (40 x 35 = 1,400) Village community spaces</li> <li>3. 100% completed, but still many need to be built</li> <li>4. Difficulty of complete reconstruction of classrooms affected</li> </ol>
<b>Process</b>	<ol style="list-style-type: none"> <li>1. Activities as planned</li> <li>2. Project Monitoring</li> <li>3. Counterpart formation</li> <li>4. Commitment of beneficiary</li> <li>5. Ownership of recipient organization</li> <li>6. Project implementing methodology</li> </ol>	<ol style="list-style-type: none"> <li>1. Achieved as planned</li> <li>2. No third party monitoring except GSDMA and UNDP</li> <li>3. No steering committee issues but key personnel issues</li> <li>4. Not directly but through the GOG</li> <li>5. Ministry of education</li> <li>6. Utilization of local consultants, institutions and contractors</li> </ol>

## **8.4 Conclusion**

### **Meaning of Study**

The managing director of the Toshi-Mirai (Progressive City) Development Organization, Mr. Mizuo Kishita commented in a seminar, based on his experience on the project in the Training Institute of Thailand by JICA, regarding the most desirable process of international aid project, that:

The counterpart team start saying that they will make their most endeavour on the project because it is “Our Project” while they initially say that they do cooperation to “Your Project.”

In the initial stage of the Aid Project, due to the lack of understanding to the intention, the counterpart team normally just show their cooperative stance, i.e. the stance to lead “Your Project” to success.

However, in knowing our enthusiasm and capability to execute the project, they start having sincere willingness to cope with the job upon understanding the aim of the project as “My Project”, viz. the job for themselves or their own country.

Nevertheless, the Aid Project should be meaningful for both countries and people eventually. Thus, it is desirable that the project becomes “The Work of Yours and Mine” (Our Project).

This Project is, as part of International Aid, a socio-development study and a Study on Urgent Development for Reconstruction Aid for Earthquake Disaster. In another words, this Project provides, under the title of social development study, both the physical aid and the analysis and study on the status of reconstruction of the disaster area, and this Project aims to be the evaluation of Our Project for Both Countries.

### **Human Aid or Regional Reconstruction**

In view of the human resources development sector and the basic healthcare sector, which are identified as major areas for international aid objects of Japan, the physical aid objects are to be Primary Educational Facilities and Regional Healthcare Facilities. Both were seriously damaged and, for humanitarian reasons, the reconstructions of these items were urgent matters.

However, in the selection of items for the aid, the urgent rehabilitation of these essential facilities for sufferers could be merely the restoration of the past insufficient basis and it could not be the basic structure for future development of the suffered area.

Within such limited conditions, this Project is presenting the most possible model cases whereas there would be further proposals, which can have an intensive impact on the future development of the community or city. Among the reconstruction plans, such a proposal came out based on the



above-mentioned thoughts. It is expected that such a proposal of model case will be presented through the re-arrangement of basic conditions.

### **Participation or Presentation**

While the reconstruction of either a community or city should be basically executed in the manner of participation, the urgent aid program tends to be executed in the manner of presentation due to the time restriction.

In the case of participation manner, it is normally a long and hard process from the identification of problems to the achievement of the solution that requires unremitting and bilateral discussions in cooperation with the people of the community and the voluntary aids, and it has a similar nature to the activities of NGOs.

Moreover, in Kutch district of Gujarat State, there are many discriminated tribes and minority races, and there exists the distorted invisible constitution in the regional community or city.

There are also many problems of children and women and there exists certain peculiarities in their custom, therefore, in order to indicate the future of the community or city, the participation manner shall be concerned.

The State government recommended, for a method of regional community reconstruction, to establish the committee for regional development based on the principle of the participation manner. However, anyhow this should be discussed in conjunction with the aid methodology.

### **Consideration on Decentralization of Authority**

Worldwide, decentralization has recently become a major factor to consider for international aid.

The physical aid of this Project such as for the primary educational and regional healthcare sectors are both under the State government management and it is advantageous in the process of the Project because the authorities in charge can be identified.

On the other hand, because the reconstruction of these sectors requires a definite initiative of the regional government, it causes less relation with the central government and it barely produces bilateral understanding between both countries.

Moreover, in the event that the request for the continuity of aid is raised by the regional government, i.e. the State government, such request might not always be part of the requests of the central government of India to Japan.

It is a matter of course that the central government, having 32 regional governments, faces the difficulty to make a priority order among the many requests for aid raised by each regional government in trouble.

The State government desires the aid to be given directly to the State, and further the authority of sector concerned prefers to receive the aid directly.

However, the principal of this Project is Japan and the discussion between two countries is the basic condition of agreement of the Project.

### **Meaning of Unremitting Discussion**

In order to identify the objects of the aid for the reconstruction program, study on the time-factored items such as urgent aid, mid-term aid or long-term aid and the study on the aid methodological features such as urgent physical aid, socio-development including physical aid, grant, grant with technical cooperation or loan, are the preconditions of Japanese aid in future.

In the study, the internal guideline of the Japanese government is an important item, and the consensus of intention in the Indian government, in the Gujarat State, and between the country and the State is an essential item together with its declaration.

### **Epilogue**

This Project has achieved success which was more than that expected mainly because of the friendship, expectation and trust to Japan of the people of India, Gujarat State, Kutch district and each rural districts (Taluka) whoever are related to.

It is anticipated that the outcome of this Project will result effectively in the continuity of the friendship between Japan and India and be a milestone of further extension and development of the aid.

## **Appendix**

## **Appendix**

### **Index**

Appendix-1 Minutes of Meeting and Summary of Discussions

Appendix-2 Tables and Figures

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Table-A-2 List of Worst Affected Villages of Kutch District

Table-A-3 NGO-Adopted Villages in Kutch

Table-A-4 NGO-Adopted Villages in Other Districts

Table-A-5 NGOs India

Fig.-A-1 Organizational Chart of State government Administration

Fig.-A-2 Organizational Chart of Project Implementation

Fig.-A-3 Working Group as Counterpart to JICA Project Team

**Appendix-1      Minutes of Meeting and  
Summary of Discussions**



MINUTES OF MEETING

ON

THE RECONSTRUCTION SUPPORT OF THE GUJARAT-EARTHQUAKE

DISASTER IN THE DEVASTATED AREAS IN INDIA

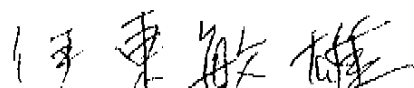
AGREED UPON BETWEEN

GOVERNMENT OF GUJARAT

AND

JAPAN INTERNATIONAL COOPERATION AGENCY

14 AUGUST, 2002



Mr. Toshio ITO  
Team Leader  
Project Team  
Japan International  
Cooperation Agency



Mr. S. G. MANKAD  
Principal Secretary  
Finance Department  
Government of Gujarat

Witness



Mr. Toru TAKE  
Dy. Resident Representative  
Japan International Cooperation Agency  
India Office

## 1. INTRODUCTION

In accordance with the SCOPE OF WORK FOR THE RECONSTRUCTION SUPPORT FOR THE GUJARAT-EARTHQUAKE DISASTER IN THE DEVASTATED AREAS IN INDIA AGREED UPON AMONG GOVERNMENT OF GUJARAT, MINISTRY OF FINANCE, MINISTRY OF AGRICULTURE AND JAPAN INTERNATIONAL COOPERATION AGENCY dated 26 April, 2001 (hereinafter referred to as the "Project"), Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched a Project Team to carry out the Project from 6 June, 2001 to 28 May, 2002. The Team completed construction of two Community Health Centres and five primary schools and handed them over to the Government of Gujarat (hereinafter referred to as the "GOG") on 9 April and 24 May, 2002 respectively. As a part of the Project, the Team also produced a Draft Final Report describing assessment of the situation after the earthquake, the process of the quick reconstruction support project of CHCs and primary schools, and evaluation of the project including recommendation.

The Project Team explained the Draft Final Report, exchanged views and had a series of discussions on the Project with the officials concerned of the GOG.

This Minutes of Meeting has been prepared in consultation with the Commissionerate and Directorates concerned.

## 2. SUMMARY OF DISCUSSIONS

The contents of the Draft Final Report were basically accepted by the GOG. The list of possible future supports for the three sectors, Primary Education, Healthcare and Technical Education sectors, were reviewed, revised and another item for possible cooperation was introduced reflecting the present situation. The following points were confirmed by both parties.

### (1) Primary Education Sector

1) Item No. 1, Equipment/Materials supply for the Project and Others, was described in detail as follows.

- ① I.T. equipment (Computer): 5 Nos./School
- ② Equipment for Physical Education (extra curriculum for child friendly activities)
- ③ Drinking water facilities
- ④ Teachers' room which also be used as a library, teaching material store, etc.
- ⑤ Low height desks for children (sufficient height for sitting position on the

floor)

- 2) The needs for item No. 2, More Classrooms, was clarified and stressed strongly as a recent survey carried out to find out number of school age children in Kutch revealed that the number of classrooms indicated at the beginning of the Project was no longer relevant because the number of school age children was greater than DPEP's previous record.
- 3) Item No. 3, Progressive Model of Primary School, could be replaced with the schools equipped with the equipment and facilities indicated in item No. 1 and thus the item No. 3 is to be deleted from the list.
- 4) Item No. 4, Teacher Retraining Centre, has been taken up by the DPEP and already in process of establishment. Thus the item No. 4 is to be deleted from the list.

## (2) Healthcare Sector

Previous list of possible future supports for the Healthcare sector has been replaced with a Package Project for Rehabilitation of Healthcare Sector in the District of Kutch. The items in the package are as follows.

- 1) Mental Care and Rehabilitation Centre at Bhuj (a part of Bhuj Mental Hospital)
  - ① Halfway Home  
To accommodate 20 occupants(10 Male+10 Female) with utility equipments and hospital furniture
  - ② Shelter Rehabilitation Workshop  
To accommodate 30-40 patients, with equipments and appliances for workshop
- 2) Expansion of Anjar CHC
  - ① Construction of 15 bedded Orthopedic Ward
  - ② Construction of 10 bedded Rehabilitation & Physiotherapy Centre
  - ③ Equipments and Instruments for Rehabilitation Physiotherapy Centre
  - ④ Well equipped Mobile Van (Ambulance)
  - ⑤ Construction of additional 32 Staff Quarters (ClassIII:12, ClassIV:20)
- 3) Regional Logistic Medical Store Centre at Bhuj
- 4) 6 Primary Health Centres & 7 Staff Quarters in each PHC
  - ① Vanki (Mundra Taluka)
  - ② Nirona (Nakhatrana Taluka)
  - ③ Bhimasar (Anjar Taluka)
  - ④ Mothara (Abdasa Taluka)

- ⑤ Dhori (Bhuj Taluka)
- ⑥ Adesar (Rapar Taluka)
- 5) 5 Allopathic Dispensaries with 5 Staff Quarters in each Dispensary and 3 Sub Centres

Dispensaries

- ① Dumara (Abdasa Taluka)
- ② Nudhatad (Abdasa Taluka)
- ③ Nani Tumbadi (Mundra Taluka)
- ④ Vadala (Mundra Taluka)
- ⑤ Rav (Rapar Taluka)

Sub Centres

- ① Bitta (Abdasa Taluka)
- ② Rampar (Abdasa Taluka)
- ③ Bondh – 3 (Bhachau Taluka)

(3) Technical Education Sector

- 1) Item No. 3, Polytechnic, Bhuj, shall be deleted as it has been taken by Kerala State Government.
- 2) The needs for other items in the list, 1) Institute of Seismology in Bhuj, 2) Engineering College in Bhuj, 4) Vocatinal Training Centre in Bhuj, and 5) Pharmacy College in Lakhtar, along with the needs for technical cooperation for knowledge/skill transfer were strongly expressed.

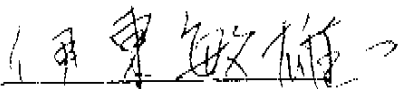
(4) Exploration of possibilities of participating in long term disaster management capacity building of communities through community trainings in collaboration with GSDMA


It is understood that the intentions of the Government of Gujarat must officially be conveyed to the Government of Japan by the Government of India for realization of any of above mentioned possible future supports.

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SUMMARY OF DISCUSSIONS  
ON  
PRIMARY EDUCATION SECTOR REBUILDING PLAN  
OF  
THE RECONSTRUCTION SUPPORT OF THE GUJARAT-EARTHQUAKE  
DISASTER IN THE DEVASTATED AREAS IN INDIA  
AGREED UPON BETWEEN  
GOVERNMENT OF GUJARAT  
AND  
JAPAN INTERNATIONAL COOPERATION AGENCY

9 AUGUST, 2002

  
Mr. Toshio ITO  
Team Leader  
Project Team  
Japan International Cooperation Agency

  
Mr. J. P. Gupta  
State Project Director  
District Primary Education Programme  
Government of Gujarat

## 1. INTRODUCTION

In accordance with the SCOPE OF WORK FOR THE RECONSTRUCTION SUPPORT FOR THE GUJARAT-EARTHQUAKE DISASTER IN THE DEVASTATED AREAS IN INDIA AGREED UPON AMONG GOVERNMENT OF GUJARAT, MINISTRY OF FINANCE, MINISTRY OF AGRICULTURE AND JAPAN INTERNATIONAL COOPERATION AGENCY dated 26 April, 2001 (hereinafter referred to as the "Project"), Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched a Project Team to carry out the Project from 6 June, 2001 to 29 May, 2002. The Team completed construction of two Community Health Centres and five primary schools and handed them over to the Government of Gujarat (hereinafter referred to as the "GOG") on 9 April and 24 May, 2002 respectively. As a part of the Project, the Team also produced a Draft Final Report describing assessment of the situation after the earthquake, the process of the quick reconstruction support project of CHCs and primary schools, and evaluation of the Project including recommendation.

The Project Team explained the Draft Final Report, exchanged views and had a series of discussions on the Project with the officials concerned of the GOG.

This Summary of Discussions summarizes the discussions regarding the Primary Education Sector Rebuilding Plan of the Draft Final Report with revisions being made to the "SUMMARY OF DISCUSSIONS OF THE PREPARATION OF REBUILDING PLAN IN THE RECONSTRUCTION SUPPORT FOR THE GUJARAT-EARTHQUAKE DISASTER IN THE DEVASTATED AREAS IN INDIA" agreed and signed by and between the State Project Director of District Primary Education Programme (hereinafter referred to as the "DPEP") and the Project Team Leader on 28 September, 2001.

## 2. SUMMARY OF DISCUSSIONS

The contents of the Draft Final Report were basically accepted by the DPEP. The list of possible future supports for the Primary Education Sector were reviewed and revised reflecting the present situation of the State. The following points were confirmed by both parties.

1) Item No. 1, Equipment/Materials supply for the Project and Others, was described in detail as follows.

- ① I.T. equipment (Computer): 5 Nos./School
- ② Equipment for Physical Education (extra curriculum for child friendly activities)
- ③ Drinking water facilities
- ④ Teachers' room which also be used as a library, teaching material store, etc.
- ⑤ Low height desks for children (sufficient height for sitting position on the floor)



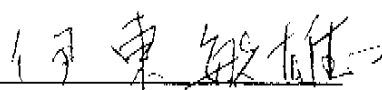


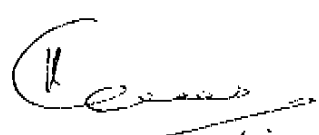
- 2) The needs for item No. 2, More Classrooms, was clarified and stressed strongly as a recent survey carried out to find out number of school age children in Kutch revealed that the number of classrooms indicated at the beginning of the Project was no longer relevant and the number of school age children were greater than DPEP's previous record.
- 3) Item No. 3, Progressive Model of Primary School, could be replaced with the schools equipped with the equipment and facilities indicated in item No. 1 and thus the item No. 3 is to be deleted from the list.
- 4) Item No. 4, Teacher Retraining Centre, has been taken up by the DPEP and already in process of establishment. Thus the item No. 4 is to be deleted from the list.

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SUMMARY OF DISCUSSIONS  
ON  
HEALTHCARE SECTOR REBUILDING PLAN  
OF  
THE RECONSTRUCTION SUPPORT OF THE GUJARAT-EARTHQUAKE  
DISASTER IN THE DEVASTATED AREAS IN INDIA  
AGREED UPON BETWEEN  
GOVERNMENT OF GUJARAT  
AND  
JAPAN INTERNATIONAL COOPERATION AGENCY

9 AUGUST, 2002

  
\_\_\_\_\_  
Mr. Toshio ITO  
Team Leader  
Project Team  
Japan International  
Cooperation Agency

  
\_\_\_\_\_  
Dr. V. T. Jawali  
Deputy Director  
Commissionerate of Health,  
Medical Services & Medical Education  
Government of Gujarat

## 1. INTRODUCTION

In accordance with the SCOPE OF WORK FOR THE RECONSTRUCTION SUPPORT FOR THE GUJARAT-EARTHQUAKE DISASTER IN THE DEVASTATED AREAS IN INDIA AGREED UPON AMONG GOVERNMENT OF GUJARAT, MINISTRY OF FINANCE, MINISTRY OF AGRICULTURE AND JAPAN INTERNATIONAL COOPERATION AGENCY dated 26 April, 2001 (hereinafter referred to as the "Project"), Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched a Project Team to carry out the Project from 6 June, 2001 to 29 May, 2002. The Team completed construction of two Community Health Centres and five primary schools and handed them over to the Government of Gujarat (hereinafter referred to as the "GOG") on 9 April and 24 May, 2002 respectively. As a part of the Project, the Team also produced a Draft Final Report describing assessment of the situation after the earthquake, the process of the quick reconstruction support project of CHCs and primary schools, and evaluation of the Project including recommendation.

The Project Team explained the Draft Final Report, exchanged views and had a series of discussions on the Project with the officials concerned of the GOG.

This Summary of Discussions summarizes the discussions regarding the Healthcare Sector Rebuilding Plan of the Draft Final Report with revisions being made to the "SUMMARY OF DISCUSSIONS OF THE PREPARATION OF REBUILDING PLAN IN THE RECONSTRUCTION SUPPORT FOR THE GUJARAT-EARTHQUAKE DISASTER IN THE DEVASTATED AREAS IN INDIA" agreed and signed by and between the Project Director of Commissionerate of Health, Medical Services & Medical Education (hereinafter referred to as the "CH,MS&ME") and the Project Team Leader on 28 September, 2001.

## 2. SUMMARY OF DISCUSSIONS

The contents of the Draft Final Report were basically accepted by the CH,MS&ME. The list of possible future supports for the Basic Healthcare Sector were reviewed and revised reflecting the present situation of the State based on a recent survey carried out by the CH,MS&ME. The following points were confirmed by both parties.

The list of potential projects indicated in the Summary of Discussions is no longer adequate and shall be replaced by the following project that is urgently required for trauma/mental healthcare as well as physical healthcare to rehabilitate the mental/physical health of people of Gujarat after the devastation. The CH,MS&ME, therefore, proposes a Package Project for Rehabilitation of Healthcare Sector in the District of Kutch to tackle the present urgent needs in the State. The items of the

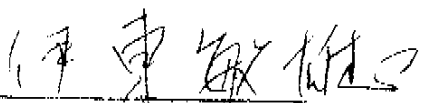


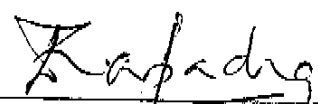
package are as follows.

No.	Item	Time Frame
1	Mental Care and Rehabilitation Centre at Bhuj ( Bhuj Mental Hospital) a) Halfway Home To accommodate 20 occupants(10 Male+10 Female) with utility equipments and hospital furniture b) Shelter Rehabilitation Workshop To accommodate 30-40 patients. with equipments and appliances for workshop	Urgent
2	Expansion of Anjar CHC a) Construction of 15 bedded Orthopedic Ward b) Construction of 10 bedded Rehabilitation & Physiotherapy Centre c) Equipments and Instruments for Rehabilitation Physiotherapy Centre d) Well equipped Mobile Van (Ambulance) e) Construction of additional 32 Staff Quarters (ClassIII:12, ClassIV:20)	
3	Regional Logistic Medical Store Centre at Bhuj	
4	6 Primary Health Centres & 7 Staff Quarters in each PHC 1. Vanki (Mundra Taluka) 2. Nirona (Nakhatrana Taluka) 3. Bhimasar (Anjar Taluka) 4. Mothara (Abdasa Taluka) 5. Dhori (Bhuj Taluka) 6. Adesar (Rapar Taluka)	
5	5 Allopathic Dispensaries with 5 Staff Quarters in each Dispensary and 3 Sub Centres Dispensaries 1. Dumara (Abdasa Taluka) 2. Nudhatad (Abdasa Taluka) 3. Nani Tumbadi (Mundra Taluka) 4. Vadala (Mundra Taluka) 5. Rav (Rapar Taluka) Sub Centres 1. Bitta (Abdasa Taluka) 2. Rampar (Abdasa Taluka) 3. Bondh - 3 (Bhachau Taluka)	

SUMMARY OF DISCUSSIONS  
ON  
TECHNICAL EDUCATION SECTOR REBUILDING PLAN  
OF  
THE RECONSTRUCTION SUPPORT OF THE GUJARAT-EARTHQUAKE  
DISASTER IN THE DEVASTATED AREAS IN INDIA  
AGREED UPON BETWEEN  
GOVERNMENT OF GUJARAT  
AND  
JAPAN INTERNATIONAL COOPERATION AGENCY

9 AUGUST, 2002

  
Mr. Toshio ITO  
Team Leader  
Project Team  
Japan International Cooperation Agency

  
Mr. D.T. Kapadia  
Director  
Directorate of Technical Education  
Government of Gujarat

## 1. INTRODUCTION

In accordance with the SCOPE OF WORK FOR THE RECONSTRUCTION SUPPORT FOR THE GUJARAT-EARTHQUAKE DISASTER IN THE DEVASTATED AREAS IN INDIA AGREED UPON AMONG GOVERNMENT OF GUJARAT, MINISTRY OF FINANCE, MINISTRY OF AGRICULTURE AND JAPAN INTERNATIONAL COOPERATION AGENCY dated 26 April, 2001 (hereinafter referred to as the "Project"), Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched a Project Team to carry out the Project from 6 June, 2001 to 29 May, 2002. The Team completed construction of two Community Health Centres and five primary schools and handed them over to the Government of Gujarat (hereinafter referred to as the "GOG") on 9 April and 24 May, 2002 respectively. As a part of the Project, the Team also produced a Draft Final Report describing assessment of the situation after the earthquake, the process of the quick reconstruction support project of CHCs and primary schools, and evaluation of the Project including recommendation.

The Project Team explained the Draft Final Report, exchanged views and had a series of discussions on the Project with the officials concerned of the GOG.

This Summary of Discussions summarizes the discussions regarding the Technical Education Sector Rebuilding Plan of the Draft Final Report with revisions being made to the "SUMMARY OF DISCUSSIONS OF THE PREPARATION OF REBUILDING PLAN IN THE RECONSTRUCTION SUPPORT FOR THE GUJARAT-EARTHQUAKE DISASTER IN THE DEVASTATED AREAS IN INDIA" agreed and signed by and between the Director of Directorate of Technical Education (hereinafter referred to as the "DTE") and the Project Team Leader on 28 September, 2001.

## 2. SUMMARY OF DISCUSSIONS

The contents of the Draft Final Report were basically accepted by the DTE. The list of possible future supports for the Technical Education Sector were reviewed and revised reflecting the present situation of the State. The following points were confirmed by both parties.

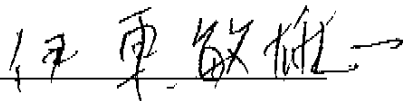
- 1) Item No. 3, Polytechnic, Bhuj, shall be deleted as it has been taken by Kerala State Government.
- 2) The needs for other items in the list, 1) Institute of Seismology in Bhuj, 2) Engineering College in Bhuj, 4) Vocational Training Centre in Bhuj, and 5) Pharmacy College in Lakhtar, along with the needs for project-type cooperation for technical knowledge/skill transfer were strongly expressed.





*SUMMARY OF DISCUSSIONS  
OF  
THE PREPARATION OF REBUILDING PLAN  
IN THE RECONSTRUCTION SUPPORT  
FOR THE GUJARAT-EARTHQUAKE DISASTER  
IN THE DEVASTATED AREAS IN INDIA  
BETWEEN  
FINANCE DEPARTMENT  
OF  
GOVERNMENT OF GUJARAT  
AND  
JAPAN INTERNATIONAL COOPERATION AGENCY PROJECT TEAM  
FOR  
THE RECONSTRUCTION SUPPORT FOR THE GUJARAT-EARTHQUAKE  
DISASTER  
IN  
THE DEVASTATED AREAS IN INDIA*

*1 OCTOBER, 2001*



*Mr. TOSHIO ITO*

*LEADER,  
PROJECT TEAM,  
JAPAN INTERNATIONAL  
COOPERATION AGENCY*



*Ms. S. APARNA, IAS  
JOINT SECRETARY,*

*FINANCE DEPARTMENT  
GOVERNMENT OF GUJARAT*

*Mr. ANIL MUKIM  
SECRETARY,  
(ECONOMIC AFFAIRS)*

According to the Scope of Works for the Reconstruction Support for the Gujarat-earthquake Disaster in the Affected Areas in India, the JICA project team for the Project submitted an inception report to GOG/GOI which has been basically agreed upon. The Team has been implementing the reconstruction of 5 schools and 2 CHCs and simultaneously studying the rebuilding plan for educational and healthcare facilities ( Target year 2003 ) in cooperation with concerned officers.

The Project will be finalized before the end of March 2002 with the submission of a final report to describe all about the project implementation in line with the Scope of Works.

As mentioned in the Scope of Works, as a part of the Works, the Team will submit an interim report explaining the process of the reconstruction works and what has been studied to date and the potential future rebuilding plans will have to be reported as well in this Interim report.

The Team has been striving to formulate the plan and has had meetings several times with concerned officers in order to find the needs and possibility for the potential projects to be assisted by the JICA programmes.

This summary of discussions has been prepared in consultation with the Commissionerate and Directorates concerned.

#### I . INTRODUCTION

#### II . SUMMARY OF DISCUSSIONS

#### III. ANNEX

#### I . INTRODUCTION

As a preparatory study for the further Reconstruction Support for the Gujarat-Earthquake Disaster in the Devastated Areas in India the Team has been studying possibilities of the further supports from JICA for the devastated basic educational and healthcare facilities. The Team has been implementing the reconstruction of 2 CHCs and 5 schools in Kutch District. The CHCs and schools are now under construction, all in accordance with the implementing programme in the Inception Report.

The concerned officers and the Team have discussed about the needs of further JICA support many times at the meetings for the reconstruction of the CHCs and schools.

The following are the summary of the discussions.

#### II . SUMMARY OF DISCUSSION

There are three sectors for the study of possible future supports:

Primary Education Sector

Basic Healthcare Sector

Technical Education Sector

Basically the assistance for the technical education sector is included in the education sector in the JICA programmes.

The Directorates and the Commissionerate have been making their utmost effort to help implement the reconstruction projects utilizing the help of NGOs and WB/ADB loan or GOG/GOI budget. However on account of the financial difficulties of GOG/GOI the Directorates and Commissionerate have come to recognize the needs to make use of JICA programmes for realization of its target to completely restore the basic educational and healthcare infrastructures until 2003 year.

The Secretary of the Finance Department recognizes the potential projects to be studied as follows.

The projects appear according to the priorities which were decided in consultation with the concerned sectors in GOG.

### 1. Basic Educational Sector

No.	Project	Cost in Rs. crores	Areas In ha	Periodical Term	Completion	Program
1	Equipment/Materials supply for the Project and others	1.0	0.18	Short	2001	Support
2	More classrooms	1.0	0.18	Short	2001	Support
3	Progressive Model of Primary School	2.0	0.15	Medium	2003	Grant
4	Teacher Retraining Centre	4.0	0.50	Long	2006	Grant Pro.

Pro. : Project Type Technical Cooperation Grant : Grant Aid Project Support : Disaster Urgent Support

### 2. Basic Healthcare Sector

No.	Project	Cost in Rs. crores	Areas In ha	Periodical Term	Completion	Program
1	More CHC	4.0	0.28	Short	2002	Support
2	CHC, Anjar Expansion Project	4.0	0.28	Medium	2003	Grant
3	General Hospital Mandvi	10.0	0.56	Long	2006	Pro. Grant

Pro. : Project Type Technical Cooperation Grant : Grant Aid Project Support : Disaster Urgent Support

### 3. Technical Education Sector

No.	Institution	Cost in Rs. crores	Area in ha.	Periodical Term	Completion	Program
1	Institute of Seismology, Bhuj	26.4	1.56	Medium	2003	Pro. Grant
2	Engineering Collage, Bhuj	39.7	5.44	Long	2006	Pro. Grant
3	Polytechnic, Bhuj	23.6	2.97	Medium	2003	Support
4	Vocational Training Centre, Bhuj	02.0	0.20	Short	2002	Support
5	Pharmacy Collage, Lakhtar	04.6	5.40	Long	2006	Pro. Grant

Pro. : Project Type Technical Cooperation Grant : Grant Aid Project Support : Disaster Urgent Support

There may well be three patterns in JICA support such as series base cooperation, parallel base cooperation and comprehensive base cooperation to cope with the needs to be supported as much projects as possible.

It should be understood that, at this stage, the scope of works and terms of reference have not been fixed yet so that every items, especially the estimation of the direct cost of each programme in the tables above, are approximate and uncertain figures.

It should also be understood that every project and its scope of works are subject to further discussions and study by both GOG/GOI and GOJ whether to be adopted as a JICA assistance programme by making use of this report and the final report of the project.

### III. ANNEX

A part of draft interim report:

Implementing Procedures of JICA Assistance Programme

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*SUMMARY OF DISCUSSIONS  
OF  
THE PREPARATION OF REBUILDING PLAN  
IN THE RECONSTRUCTION SUPPORT  
FOR THE GUJARAT-EARTHQUAKE DISASTER  
IN THE DEVASTATED AREAS IN INDIA  
AGREED UPON AMONG  
STATE PROJECT DIRECTOR,  
DISTRICT PRIMARY EDUCATION PROGRAMME  
OF  
GOVERNMENT OF GUJARAT  
AND  
JAPAN INTERNATIONAL COOPERATION AGENCY PROJECT TEAM  
FOR  
THE RECONSTRUCTION SUPPORT FOR THE GUJARAT-EARTHQUAKE  
DISASTER  
IN  
THE DEVASTATED AREAS IN INDIA*

*28 SEPTEMBER, 2001*



*Mr. TOSHIO ITO  
LEADER,  
PROJECT TEAM,  
JAPAN INTERNATIONAL  
COOPERATION AGENCY*



*A.P. JOSHI  
STATE PROJECT DIRECTOR,  
DISTRICT PRIMARY EDUCATION PROGRAMME  
GOVERNMENT OF GUJARAT*

According to the Scope of Works for the Reconstruction Support for the Gujarat-earthquake Disaster in the Affected Areas in India, a JICA project team for the project submitted a inception report to GOG/GOI which has been basically agreed upon, the team has been implementing the reconstruction of 5 schools and 2 hospitals and simultaneously studying the rebuilding plan for educational and health facilities ( target year 2003 ) in cooperation with very enthusiastic and capable officials concerned

The Project will be finalized before the end of March 2002 with the submission of a final report to describe all about the project implementation in line with the Scope of Works.

As in the Scope of Works, as a part of Works, the team will submit an interim report to explain how the implementation is going on and what has been studied so far and so on. In the interim report the rebuilding plan will have to be reported as well

The team has been striving to formulate the plan and has had meetings several times with officials concerned in order to assess the needs and possibility for the potential projects to be hopefully assisted by the JICA programmes.

This summary of discussions summarizes major points of discussions in the meetings to date between officials concerned and the project team with clauses as follows:

#### I . INTRODUCTION

#### II . SUMMARY OF DISCUSSIONS

#### III . ANNEX

#### I . INTRODUCTION

As a case study for the further Reconstruction Support for the Gujarat-Earthquake Disaster in the Devastated Areas in India the team has been studying the possibility of the further support from JICA for the devastated primary education facilities.

The team has been implementing 5 schools with 35 classrooms in Kutch District as reported in other section.

The classrooms are now under construction according to the implementing programme in the Inception Report.

The director and the team have discussed about the needs of further JICA support many times so far at the meetings for the reconstruction of the schools.

The followings are the summary of the discussions.



## II. SUMMARY OF DISCUSSION

Almost 90 % of classrooms in Kutch District collapsed or damaged by the 2001 republic day quake. And the teaching in the area have been utilizing the tents or temporary facilities mainly provided by NGOs / international agencies. The DPEP (District Primary Education Programme) has been making its utmost effort to help implement the reconstruction project with utilizing the help of NGOs and WB/ADB loan or GOG/GOI budget. However on account of the financial difficulties of GOG/GOI the DPEP has come to recognize the needs to make use of JICA programmes for the realization of its target to completely restore the primary education infrastructure until 2003. The potential projects to be studied are figured out below in an order following the priority of needs in accordance with the summary of the meetings.

No.	Project	Cost in Rs. crores	Areas In ha	Periodical Term	Completion	Program
1	Equipment/Materials supply for the Project and others	1.0	0.18	Short	2001	Support
2	More classrooms	1.0	0.18	Short	2001	Support
3	Progressive Model of Primary School	2.0	0.15	Medium	2003	Grant
4	Teacher Retraining Centre	4.0	0.50	Long	2006	Grant Pro.

Pro. : Project Type Technical Cooperation Grant : Grant Aid Project Support : Disaster Urgent Support

There may well be one-by-one base cooperation or parallel base cooperation as GOG would like to be supported as much projects as possible.

## III. ANNEX

Apart of draft interim report

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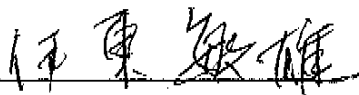




*SUMMARY OF DISCUSSIONS  
OF  
THE PREPARATION OF REBUILDING PLAN  
IN THE RECONSTRUCTION SUPPORT  
FOR THE GUJARAT-EARTHQUAKE DISASTER  
IN THE DEVASTATED AREAS IN INDIA  
AGREED UPON AMONG  
PROJECT DIRECTOR,  
COMMISSIONERATE OF HEALTH & MEDICAL SERVICE  
AND MEDICAL EDUCATION  
OF  
GOVERNMENT OF GUJARAT  
AND  
JAPAN INTERNATIONAL COOPERATION AGENCY PROJECT TEAM  
FOR  
THE RECONSTRUCTION SUPPORT FOR THE GUJARAT-EARTHQUAKE  
DISASTER  
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THE DEVASTATED AREAS IN INDIA*

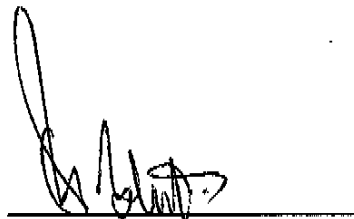
*28 SEPTEMBER, 2001*

*Signed sub. to govt approval.*



*Mr. TOSHIO ITO  
LEADER,  
PROJECT TEAM,*

*JAPAN INTERNATIONAL  
COOPERATION AGENCY*



*Dr. DHANANJAI BHATT  
PROJECT DIRECTOR,  
COMMISSIONARAT OF HEALTH &  
MEDICAL SERVICE & MEDICAL EDUCATION,  
GOVERNMENT OF GUJARAT*

According to the Scope of Works for the Reconstruction Support for the Gujarat-earthquake Disaster in the Affected Areas in India, a JICA project team for the project submitted a inception report to GOG/GOI which has been basically agreed upon, the team has been implementing the reconstruction of 5 schools and 2 hospitals and simultaneously studying the rebuilding plan for educational and health facilities ( target year 2003 ) in cooperation with very enthusiastic and capable officials concerned

The Project will be finalized before the end of March 2002 with the submission of a final report to describe all about the project implementation in line with the Scope of Works.

As in the Scope of Works, as a part of Works, the team will submit an interim report to explain how the implementation is going on and what has been studied so far and so on. In the interim report the rebuilding plan will have to be reported as well

The team has been striving to formulate the plan and has had meetings several times with officials concerned in order to assess the needs and possibility for the potential projects to be hopefully assisted by the JICA programmes.

This summary of discussions summarizes major points of discussions in the meetings to date between officials concerned and the project team with clauses as follows:

#### I . INTRODUCTION

#### II . SUMMARY OF DISCUSSIONS

#### III . ANNEX

#### I . INTRODUCTION

As a preparatory study for the further Reconstruction Support for the Gujarat-Earthquake Disaster in the Devastated Areas in India the team has been studying the possibility of the further support from JICA for the devastated basic healthcare facilities.

The team has been implementing 2 CHCs in Kutch District as reported in other section.

The CHCs are now under construction according to the implementing programme in the Inception Report.

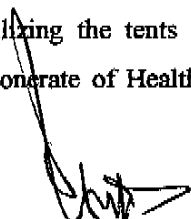
The director and the team have discussed about the needs of further JICA support many times so far at the meetings for the reconstruction of the CHCs.

The followings are the summary of the discussions.

#### II . SUMMARY OF DISCUSSION

Almost all hospitals in kutch district, Approximately 17 % of the CHCs, 4 % of the PHCs and 3 % of the sub-centers in the State of Gujarat collapsed or damaged by the 2001 republic day quake. And the healthcare in the area have been utilizing the tents or temporary facilities mainly provided by NGOs / international agencies. The Commissionerate of Health, Medical Services and Medical Education has been

T.



making its utmost effort to help implement the reconstruction project with utilizing the help of NGOs and WB/ ADB loan or GOG/GOI budget. However on account of the financial difficulties of GOG/GOI the Commissionerate has come to recognize the needs to make use of JICA programmes for the realization of its target to completely restore the basic healthcare infrastructure until 2003. The potential projects to be studied are figured up below in an order following the priority of needs in accordance with the summary of the meetings:

No.	Project	Cost in Rs. crores	Areas In ha	Periodical Term	Completion	Program
1	More CHC	4.0	0.28	Short	2002	Support
2	CHC, Anjar Expansion Project	4.0	0.28	Medium	2003	Grant
3	General Hospital Mandvi	10.0	0.56	Long	2006	Pro. Grant

Pro. : Project Type Technical Cooperation Grant : Grant Aid Project Support : Disaster Urgent Support

There may well be one-by-one base cooperation or parallel base cooperation as GOG would like to be supported as much projects as possible.

### III. ANNEX

Apart of draft interim report:

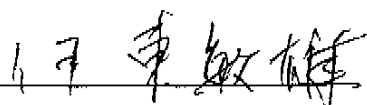
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*Sub. to Holmwood approval*

T. d

*SUMMARY OF DISCUSSIONS  
OF  
THE PREPARATION OF REBUILDING PLAN  
IN THE RECONSTRUCTION SUPPORT  
FOR THE GUJARAT-EARTHQUAKE DISASTER  
IN THE DEVASTATED AREAS IN INDIA  
AGREED UPON AMONG  
DIRECTORATE OF TECHNICAL EDUCATION,  
DEPARTMENT OF HIGHER AND TECHNICAL EDUCATION  
OF  
GOVERNMENT OF GUJARAT  
AND  
JAPAN INTERNATIONAL COOPERATION AGENCY PROJECT TEAM  
FOR  
THE RECONSTRUCTION SUPPORT FOR THE GUJARAT-EARTHQUAKE  
DISASTER  
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THE DEVASTATED AREAS IN INDIA*

*28 SEPTEMBER, 2001*



*Mr. TOSHIO ITO  
LEADER,  
PROJECT TEAM,  
JAPAN INTERNATIONAL  
COOPERATION AGENCY*



*Mr. D.T. KAPADIA  
DIRECTOR,  
DIRECTORATE OF TECHNICAL EDUCATION,  
GOVERNMENT OF GUJARAT*

According to the Scope of Works for the Reconstruction Support for the Gujarat-earthquake Disaster in the Affected Areas in India, a JICA project team for the project submitted a inception report to GOG/GOI which has been basically agreed upon, and the team has been implementing the reconstruction of 5 schools and 2 hospitals and simultaneously studying the rebuilding plan for educational and health facilities ( target year 2003 ) in cooperation with very enthusiastic and capable officials concerned

The Project will be finalized before the end of March 2002 with the submission of a final report to describe all about the project implementation in line with the Scope of Works.

As in the Scope of Works, as a part of Works, the team will submit an interim report to explain how the implementation is going on and what has been studied so far and so on. In the interim report the rebuilding plan will have to be reported as well

The team has been striving to formulate the plan and has had meetings several times with officials concerned and carried out site survey for the assessment of the needs and possibility for the potential projects to be hopefully assisted by JICA programmes.

This summary of discussions summarizes major points of discussions in the meetings to date between officials concerned and the project team with clauses as follows:

#### I. INTRODUCTION

#### II. SUMMARY OF DISCUSSIONS

#### III. ANNEX

#### I. INTRODUCTION

As a case for further Reconstruction Support for the Gujarat-Earthquake Disaster in the Devastated Areas in India, there will be a possibility of the support for the a project based on a proposal for the re-establishment of the whole technical education facilities in Bhuj having been prepared by the Directorate of Technical Education, Ministry of Education, GOG.

GSDMA introduced the project to the team when it visited the office on July 23<sup>rd</sup> and discussed about the future possibilities of JICA support, other than the team is now being in charge of, with the Director (Social and Community Development), V. Thiruppugaqzh. The Director arranged a meeting on July 24<sup>th</sup> with the officials in the Directorate of Technical Education after getting the understanding (permission) of Secretary to Government (Higher & Technical Education), Gauri Kumar, IAS. The meeting was held at the Secretary's office with Director, Directorate of Technical Education, D.T. Kapadia. The Director stressed the urgent need of some support to the reconstruction and rehabilitation of technical education facilities, Bhuj and informed the team the outline of the proposal with some other data. From the time the director and the team have had several discussions and the team carried out site survey and study of the comprehensive project so far in corporation with officials of the Directorate concerned. The followings are the summary of the discussions.

## II. SUMMARY OF DISCUSSION

The technical education facilities in Bhuj were completely destroyed by the 2001 republic day quake. And education and study have been utilizing the temporary facilities and other non-affected facilities in some other district. The directorate has been making its utmost effort to help implement the restoration project with WB/A DB loan or GOG/GOI budget. However on account of WB/ADB policy not to support the advancement of academic programmes but only to support restoration of urgent needs and the financial difficulties of GOG/GOI. The directorate has been coming to make use of JICA programmes for the realization of its proposal figured up below in an order following the priority of needs:

No.	Institution	Cost in Rs. crores	Area in ha.	Periodical Term	Completion	Program
1	Institute of Seismology, Bhuj	26.4	1.56	Medium	2003	Pro. Grant
2	Engineering Collage, Bhuj	39.7	5.44	Long	2006	Pro. Grant
3	Polytechnic, Bhuj	23.6	2.97	Medium	2003	Support
4	Vocational Training Centre, Bhuj	02.0	0.20	Short	2002	Support
5	Pharmacy Collage, Lakhtar	04.6	5.40	Long	2006	Pro. Grant

Pro. : Project Type Technical Cooperation Grant : Grant Aid Project Support : Disaster Urgent Support

There may well be one-by-one base cooperation or parallel base cooperation as GOG would like to be supported as much projects as possible.

If the comprehensive educational complex be realized in one compound in Bhuj as one of the center of excellence in Gujarat including Institute of Seismology and Engineering Collage with tight relation to Polytechnic and Vocational Training Centre, technical educational environment of the affected area will be prominently advanced to help vitalize the industries with its enhanced manpower supply and sophisticated technology research/development. Pharmacy Collage, Lakhtar may be studied in future.

## III. ANNEX

Apart of draft interim report

6.3.11.4 4.6.3



MINUTES OF MEETING

ON

THE RECONSTRUCTION SUPPORT OF THE GUJARAT-EARTHQUAKE

DISASTER IN THE DEVASTATED AREAS IN INDIA


AGREED UPON BETWEEN


GOVERNMENT OF GUJARAT

AND


JAPAN INTERNATIONAL COOPERATION AGENCY

26 JUNE, 2001

  
\_\_\_\_\_  
Mr. Toshio ITO  
Team Leader  
Project Team  
Japan International  
Cooperation Agency

  
\_\_\_\_\_  
Mr. S. G. MANKAD  
Principal Secretary  
Finance Department  
Government of Gujarat

Witness

  
\_\_\_\_\_  
Mr. Osamu YAMADA  
Leader  
Advisory Team  
Japan International  
Cooperation Agency



## 1. INTRODUCTION

In accordance with the SCOPE OF WORK FOR THE RECONSTRUCTION SUPPORT FOR THE GUJARAT-EARTHQUAKE DISASTER IN THE DEVASTATED AREAS IN INDIA AGREED UPON AMONG GOVERNMENT OF GUJARAT, MINISTRY OF FINANCE, MINISTRY OF AGRICULTURE AND JAPAN INTERNATIONAL COOPERATION AGENCY dated 26 April, 2001, the Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched the Project Team to carry out the Project on 6 June, 2001.

The Project Team explained the Draft Inception Report and exchanged views and had a series of discussions on the Project with the officials concerned of the Government of Gujarat (hereinafter referred to as the "GOG").

This Minutes of Meeting summarizes the discussions.

## 2. SUMMARY OF DISCUSSIONS

The contents of the Draft Inception Report were basically accepted by the GOG. The following points were confirmed by both parties.

### (1) Construction of classrooms for primary schools

The structure of the classrooms will be of permanent-prefabrication and the selected schools are as follows:

- 1) Bhadreshwar, Mundra
- 2) Bhadreshwar Kanya, Mundra
- 3) Dhamadka, Anjar
- 4) Mathak, Anjar
- 5) Loriya, Bhuj
- 6) Sumarasar, Bhuj

These schools have been selected in consultation with the Director of Primary Education, G.S., Gandhinagar.

Basic educational furniture will be provided in each classroom.

### (2) Construction of health facilities

- 1) Anjar Community Health Centre (CHC)
  - CHC main building with 50 beds
  - Staff quarters (six (6) class-I&II units, ten (10) class-III units)
  - Medical equipment and medical furniture for an ordinary CHC
- 2) Mundra CHC
  - Maternity building

*hw*

*g*

*ch*

The contents of the health facilities have been decided in consultation with the Commissioner of Health, Medical Services & Medical Education, Gandhinagar.

3. OTHER RELEVANT ISSUES

- (1) The GOG confirmed that all the project sites are owned by the GOG.
- (2) The total number of classrooms is expected to be maximum of 42 at present, however, the number should be finalized prior to the construction of the classrooms in order to avoid duplication of classrooms by other assistance.
- (3) The educational equipment will be such as teacher's desk and chair, cupboard, and blackboard.
- (4) The items of medical equipment to be provided in the Project will not include consumables and dispensable materials.

*js*

*g*

*AT*

Date: July 6, 2001

Mr. Avinash Joshi, IAS  
State Project Director  
DPEP  
Chief Coordinator for Working Group  
For the JICA Project  
Gandhinagar

Letter of Confirmation

Sub: Regarding the Reduction of the Construction Sites for the Reconstruction Support for the Gujarat-Earthquake Disaster in the Devastated Areas in India

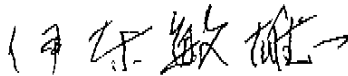
Dear Sir,

With reference to the letter issued by Dr. P.T. Pandya, District Primary Education Officer, Kachchh-Bhuj dated July 3, 2001 regarding the captioned matter, the circumstances of reduction of the construction sites are understandable, thus the JICA Project Team would like to confirm the schools for the Project as follows;

- 1) Bhadreshwar Kumar, Mundra
- 2) Bhadreshwar Kanya, Mundra
- 3) Mathak, Anjar
- 4) Sumarasar Shekh, Bhuj
- 5) Dhamadka, Anjar

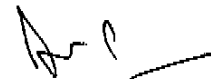
A copy of Dr. Pandya's letter is attached herewith for your reference.

Yours faithfully,



Toshio Ito  
Team Leader  
JICA Project Team

Received and confirmed by



Avinash Joshi  
State Project Director  
DPEP

c.c.: Mr. S.G. Mankad, Principal Secretary, Finance Dept., GOG  
Mr. R.K. Chaudhari, Director, Primary Education, G.S., Gandhinagar  
Dr. P.T. Pandya, District Primary Education Officer, Kachchh-Bhuj  
Mr. M.N. Bhad, Secretary, State Project Office, DPEP

**Appendix-2 Tables and Figures**

**Table-A-1-1 Chronicle of Japanese Assistance-1 Preparatory Phase**

Year/Month/date/ Time	Japanese Assistance to the restoration of the 2001 Gujarat Earthquake in India	Other Movement/Activities 1 = 1 Million dollar
1952	Treaty of Peace Between Japan and India	
1956	Agreement Between Japan and India for Air Service	
1956	Cultural Agreement Between Japan and India	
1958	Agreement on Commerce Between Japan and India	
1960	Agreement Between GOJ and GOI for avoidance of Double Taxation	
1985	Agreement Between GOJ & GOI on Cooperation in the Field of S&T	
1997	Indo Japan Symposium – Vision 2000 and Beyond	<b>Japanese Economic Assistance 1997; Grant 7.00 Loan 1021.00</b>
2001/01/26/12:30	<b>Gujarat Earthquake</b>	
2001/01/30-02/12	Disaster Relief Team; Secretariat of Japan Disaster Relief Team – JDR medical Team to provide emergency supplies	Set up of Emergency Response Centre in Ministry of Agriculture
2001/02/06-08	Large-scale Disaster Relief Team; Japan Self-Defence Forces for carrying tents and blankets	Indian Army and Navy Action
2001/02/26-3/05	JICA Mission for Background Survey for Earthquake Disaster Rehabilitation - Devastation Survey, needs of assistance study	<b>Japanese Emergency Assistance of Total 32.00 including Relief goods and equipment with JDR 2001/02/12-02/17 Oyo Chishitsu (Private Soil Research Firm) Study Team</b>
	<b>JICA Assistance to India at 2001/03</b>	
	The study of Reproductive Health in Madhya Pradesh	Members of the Firm and
	Submission of Final Report on Expressway	Risk Management Solution (US)
	Field Demonstration of New Technology	Stanford University
	Medical Research Project: First Domestic Programme	Universitat Karlsruhe (Germany)
	Kalawati Saran Children Hospital; Expert	Australian Geological Survey
	Agriculture Development Experts	R. M. Software India Pvt. Ltd
	Experts on Highways, Port, WTO	<b>2001/04/27 Japan Society of Civil Engineers Study Team</b>
	Experts to Third Countries	Tokyo Univ., Tokai Univ., Kyoto Univ., and others
	Training Program	
	Youth Invitation Program	<b>2001/03/04-14 Japanese Ministry of Education and Science 2001 Special Study Project on Gujarat Earthquake</b>
	And others	
2001/04/08-05/05	JICA Preparatory Survey Team for the Reconstruction Support for the Gujarat-Earthquake Disaster in the Devastated Areas in India Leader; Osamu Yamada: Institute of International Cooperation, JICA Project Planning; Tomohiro Ono: Social Development Study Dept. Construction Study; Shiro Sasaki: Sekkei Keikaku Inc. - Preparatory Study on Devastation, Assistance Domain, Methods of Support, Scope of Works and others <b>2001/04/26 M/M, S/W were agreed by GOG/GOI and GOJ</b>	Architectural Institute of Japan Japan Society of Civil Engineers Earthquake Disaster Mitigation Centre of MOES, Japan
<p>GOJ; Government of Japan GOI; Government of Japan GOG; Government of Gujarat CHC; Community Health Centre P / D; Facilities Planning and Design C; Contracting CS; Construction Supervision Div.; Division AW; Day Nursing Centre DPEP; District Primary Education Programme COH&amp;MS; Commissionerate of Health and Medical Services NGO; Non-Governmental Organization Div; Division Dept; Department GOJ; Government of Japan GOI; Government of India GOG; Government of Gujarat S&amp;T; Science and Technology JDR; Japan Disaster Relief Team MOES; Ministry of Education and Science JICA; Japan International Cooperation Agency WTO; World Trade Organization</p>		

**Table-A-1-2 Chronicle of Japanese Assistance-2 Study**

Year / Month / Date / Time	Japanese Assistance to the restoration of the 2001 Gujarat Earthquake in India	Other Movement/Activities 1 = 1 Million dollar
2001/06/01	<p>The Reconstruction Support for the Gujarat-Earthquake Disaster in the Devastated Areas in India Team was set up</p> <p>Team Leader; Toshio Ito: Yamashita Sekkei Inc.: Rebuilding Plan</p> <p>Team Member ;Motohiro Okada: Nihon Sekkei Inc: P/D (Health) ; Mineo Nagaoka: Yamashita Sekkei Inc.: P/D (School) ; Minoru Tanaka: Yamashita Sekkei Inc.: Structure P/D ; Mark Lenczner: Nihon Sekkei Inc.: Structure P/D, C ; Tomoyoshi Kato: Nihon Sekkei Inc.: Cost Estimation ; Yoshikazu Shimada: Yamashita Sekkei Inc.: P/D, CS</p> <p>- Analysis of Preparatory Study, Data assessment in Japan, and Inception Report Preparation</p>	
2001/06/05	<p>Work/Services inspection committee</p> <p>- Izumi, Vice President, JICA: Hirai, Director of SDS Div., JICA: Umenaga As. Director of SDS Div.: Yamada, Senior Advisor, Institute for International Cooperation: Ono, SDS Div.:</p>	
2001/06/06		<p><b>2001/06/07</b> GOG send a letter of detailed request for health facilities (CHCs)</p>
2001/06/07	<p>- Study Plan, Study Methods, Scope of Works and Implementation Indication</p>	
2001/06/08	<p>Study in India, Delhi; Embassy, JICA India, Mr. Mulay, Director of Ministry of Finance Delhi; Mr. Gilmartin of UNICEF Gandhinagar; Kick-off Meeting with counterparts</p>	<p><b>2001/06/12 News Report</b></p>
2001/06/09	<p>- Mr. Joshi of DPEP, Dr. R. N. Shah of COH&amp;MS, and others</p> <p>- Discussion on the Inception Report Bhuj; Site Survey: Kick-off Meeting with local counterparts</p> <p>- Discussion on Inception Report</p>	<p>Only 130 of 350 NGOs listed were working</p> <p><b>2001/06/13 News Report</b></p> <p>9 dead in caste disturbance at Rapar</p>
2001/06/12	<p>- Schools' priority for the assistance</p> <p>- CHCs' scope of works</p>	<p><b>2001/06/15 School opened</b></p> <p>UNICEF Aid; 6,000 tents: 750 classrooms: 189 AW</p>
2001/06/13	<p>Bhuj; Izumi, Vice President of JICA visited Bhuj: Meeting with the local counterparts: Site Visit</p> <p>- Amendment of the scope of works based on the recent request</p>	<p><b>2001/06/20 News Report</b></p> <p>A NGO, SOS, Declared to donated Bhuj Children's Village for 1,000 affected children</p>
2001/06/19	<p>Gandhinagar; Izumi, Vice President, and the Team visited Mr. Mankad, Secretary of Finance Department and Ms. Aparna, Joint Secretary, and agreed on the basic assistance figure</p> <p>Gandhinagar; Discussion with Mr. Desai, Principal of Sansakr Bharati</p> <p>- Schools to be supported identified</p>	<p><b>2001/06/22 News Report</b></p> <p>Aftershock, 4.5 Magnitude, in Kutch</p>
<p>GOJ; Government of Japan GOI; Government of Japan GOG; Government of Gujarat CHC; Community Health Centre P / D; Facilities Planning and Design C; Contracting CS; Construction Supervision Div.; Division AW; Day Nursing Centre DPEP; District Primary Education Programme COH&amp;MS; Commissionerate of Health and Medical Services NGO; Non-Governmental Organization Div; Division Dept; Department</p>		

**Table-A-1-3 Chronicle of Japanese Assistance-3 Contracts of Local Firms**

Year/Month/Date /Time	Japanese Assistance to the restoration of the 2001 Gujarat Earthquake in India	Other Movement/Activities 1 = 1 Million dollar
2001/06/21-26	Advisory Team dispatched Leader; Osamu Yamada: Institute of International Cooperation, JICA Member; Satoshi Umenaga: Deputy Director of SDS Div., JICA - Present Situation Study: <b>06/23-24</b> Site Visit - Assessment of on-going project - Confirmation of Healthcare assistance with COH&MS, <b>06/25</b> - Agreed upon detailed scope of work with COH&MS, <b>06/26</b>	<b>2001/06/25 News Report</b> Hingaria Quake-resistant Village Plan was started:106 houses: School: Library: Hospital <b>2001/06/26</b> Ex-president of America, Clinton, was reported to have visited Bhuj
2001/06/26	Interim agreement of amended scope of works with Secretary of Finance Dept. of GOG, <b>06/26</b> - 5 schools and 2 CHCs - Toilets and boundary wall added in the scope - Inception Report was basically accepted	
2001/07/02	Survey of Political, Economical Situation in Gujarat at Dalal Office	
2001/07/02	Site Survey Firm Contract was fixed as local partner - Through 3 firms tender , KCT Constancy Services was awarded	<b>2001/07/04 News Report</b> Russian Mission
2001/07/02	Design and Supervision Firm was fixed as local Partner - Through 3 firms tender, Dalal Consultants and Engineers Ltd. was awarded	<b>2001/07/09 News Report</b> Minister of Education announced Primary Education Rebuilding Plan
2001/07/17	Attended Commissioner's Party of COH&MS for Medical Reconstruction Support NGOs/Agencies · 16 organizations, 12 attendants, lunch of local meal	ADB Mission reminded rehabilitation Programme to be carried out in time
2001/07/24	Started Hearing on Reconstruction Study GSDMA - Meeting with Mr. Thiruppugazh, Director of GSDMA needs of support for Technical Education was discussed - Meetings with Mr. Josh, Project Director of DPEP, Dr. R. N. Shah, Jt. Director of COH&MS and Mr. Kapadia, Director of Technical Education on Query of Reconstruction for respective sectors	<b>2001/07/10 News Report</b> Minister of Finance reported GOG Budget2001-02 with over burden of Rehabilitation
2001/07/26	Discussion with Bhachau city planning staff of Dalal Office	<b>2001/07/18 News Report</b> GSDMA Restructure Plan
2001/08/16	Contractor for Primary Education Facilities was fixed - Through 3 contractors Bid, Stresscrete India Ltd. Was awarded - Contracted Completion date <b>2002/03/25</b>	<b>2001/07/20 News Report</b> WB Strategy might change from Loan to Grant
2001/08/25	Meeting with Mr. Bimal H Patel, CEO of EPC, planner of Bhuj Urban Design - Visit to GSDMA; Meting for Rebuilding Plan - Meeting with Director of Technical Education - Visit to Ahmedabad Polytechnic	<b>2001/07/23 News Report</b> 6298 classrooms collapsed: 1740 of them were adopted by 40 100% support NGOs: 24 50% support NGOs: 800 under construction: 150 completed
GOJ; Government of Japan GOI; Government of Japan GOG; Government of Gujarat CHC; Community Health Centre P / D; Facilities Planning and Design C; Contracting CS; Construction Supervision Div.; Division AW; Day Nursing Centre DPEP; District Primary Education Programme COH&MS; Commisionerate of Health and Medical Services NGO; Non-Governmental Organization Div; Division Dept; Department		



**Table-A-1-4 Chronicle of Japanese Assistance-4 Rebuilding Plan Study**

Year / Month / Date / Time	Japanese Assistance to the restoration of the 2001 Gujarat Earthquake in India	Other Movement/Activities 1 = 1 Million dollar
2001/08/31	Contractor for Community Health Centres was fixed - Through 3 contractors Bid, Mitsui Kensetsu India Ltd. was awarded - Contracted Completion date <b>2002/03/25</b>	<b>2001/08/20 News Report</b> General Hospital, Bhuj will be completed at 2003 with a Central Relief Fund of 32 million dollar
2001/09/05	Rebuilding Plan Meetings - Mr. Arvind Josh, Director of GSDMA, Mr. Josh, Director of DPEP, Dr. Bhatt, Director of COH&MS	<b>2001/08/21 News Report</b>
2001/09/07	Rebuilding Plan Meeting - Mr. Kapadia, Director of Technical Education; Rebuilding Plan Report of Technical Education by GOG	Netherlands' Grant will be 40 million dollar: 13 had already extended
2001/09/13-14	Bhuj; Site Survey of Technical Education Facilities in Bhuj - Engineering College, Polytechnic, Vocational Training Centre, Bhuj - Meeting with the Rector and Ex-rector, Principal and Headmaster	<b>2001/09/11 TV Report</b> <b>WTC, New York, attacked</b>
2001/09/25	Rebuilding Plan Meeting for preparatory discussion - Ms. Aparna, Joint Secretary of finance - Mr. Josh of DPEP and Mr. Bhatt of COH&MS	
2001/09/27	Contractor for Equipment of Anjar CHC was fixed - Through 3 contractors Bid, Sun Surgical Ltd. was awarded - Contracted Completion date <b>2002/03/25</b>	
2001/09/28	Agreement on the Summary of Discussion of 3 Sectors' Rebuilding Plan with the consent of Commissioners/Secretaries responsible for each directorates - Primary Education Sector; Signer: Mr. Josh, Director of DPEP - Healthcare Sector; Signer: Dr Bhatt of DOM&MS (Ms. Aparna joined) - Technical Education Sector; Signer: Mr Kapadia, Director of Technical Education	
2001/10/01	Final Agreement on the Summary of Discussion with the GOG and the Project Team on the Rebuilding Plan for all sectors - Signed by Mr. Mukim, Secretary of Finance Dept. - Attended by Ms. Aparna, Joint Secretary of Finance Dept.	
2001/10/04	Report to Embassy of Japan, India and JICA India Office	
2001/10/06	Study, Planning and Design staff left for Japan - A supervision staff is staying in Gujarat to the end of works	<b>2001/10/07 News Report</b>
2001/11/18-27	On site work inspection by Yamada of Institute of International Cooperation, JICA - Present situation of Implementing, technical relevance, quake rehabilitation situation and needs of potential assistance	Afghanistan attacked
2002/08/04-18	Draft Final Report Explanation Trip	<b>2002/02/27 News Report</b> Communal Riot in Gujarat began
2002/08/07	Explanation of Draft Final Report to the GOG and discussion on the Rebuilding Plan at GSDMA with concerned officers from each sector, including the Secretaries of each sector	
2002/08/08,09	Discussion on revisions of the items for the Rebuilding Plan and signing of Summary of Discussions with the each sector	
2002/08/14	Signing of the Minutes of Meeting on the revised Rebuilding Plan - Signed by Mr. Mankad, Principal Secretary of Finance Dept., Mr. Ito, Team Leader of the Project Team and witnessed by Mr. Take, Deputy Representative of JICA India office	
<p>GOJ; Government of Japan GOI; Government of Japan GOG; Government of Gujarat CHC; Community Health Centre P / D; Facilities Planning and Design C; Contracting CS; Construction Supervision Div.; Division AW; Day Nursing Centre DPEP; District Primary Education Programme COH&amp;MS; Commisionerate of Health and Medical Services NGO; Non-Governmental Organization Div; Division Dept; Department GOJ; Government of Japan GOI; Government of Japan GOG; Government of Gujarat S&amp;T; Science and Technology JDR; Japan Disaster Relief Team</p>		

**Table-A-1-5 Chronicle of Japanese Assistance-5 QRS Project**

Year / Month / Date / Time	Japanese Assistance to the restoration of the 2001 Gujarat Earthquake in India	Other Movement/Activities 1 = 1 Million dollar
2001/08/29	Contract for Primary School signed. - Through Bidding process, Stresscrete India Ltd. selected - Contracted Completion date 2002/02/25	<b>2001/08/20 News Report</b> General Hospital, Bhuj will be completed at 2003 with a Central Relief Fund of 32 million dollar
2001/08/31	Contract for CHCs at Anjar and Mundra signed - Through Bidding process, Mitsui Kensetsu India Ltd. selected - Contracted Completion date 2002/03/25	<b>2001/08/21 News Report</b> Netherlands' Grant will be 40 million dollar: 13 had already extended
2001/09/01	The work for the Primary schools commenced	<b>2001/09/11 TV Report</b>
2001/09/08	The work for the CHCs commenced	<b>WTC, New York, attacked</b>
2001/09/11	Demolition order for the CHCs by the GOG issued	
2001/09/12	Earthquake zone-V certificate for primary school obtained	
2001/09/27	Contract for Supply of Medical Equipment signed - Through Bidding process, Sun Surgical selected - Contracted Completion date 2002/03/25	
2001/09/30	Building permit for CHCs by the GOG issued	
2001/10/01 - 2002/02/01	Construction work of the primary schools and CHCs was supervised by the Engineer	<b>2001/10/07 News Report</b> Afghanistan attacked
2002/02/01	Coordination meeting regarding Med. Equipment installation held among the Engineer, the Supplier, the Contractor of CHC	
2002/02/16	Installation of a shadowless lamp (Med. Equipment) in the OT completed	
2002/02/19	Final inspection of C-1&2 staff quarters at Anjar CHC carried out	
2002/02/27	Final inspection of C-3 staff quarters at Anjar CHC carried out	<b>2002/02/27 News Report</b>
2002/02/28 onward	The Contractors' works, the Supplier's work and the Engineers' work were hindered due to the communal riot.	Communal Riot in Gujarat began Various parts of Gujarat State went under curfew on and off for over 3 months
2002/03/12	Final inspection for the remaining facilities of CHCs at Anjar and Mundra carried out	
2002/03/21	The Construction work of CHC completed	
2002/04/08	Major part of the Equipment work completed	
2002/04/09	CHCs were handed over to the GOG	
2002/04/18	Inaugural ceremony for the CHCs held at Anjar CHC by Hon. Health Minister shri Ashokbhai Bhatt	
2002/04/18	Supply of Medical Equipment completed	
2002/05/17	Primary schools at Sumarasar Sheikh and Dhamadka completed	
2002/05/19	Primary school at Mathak completed	
2002/05/23	Primary schools at Bhadreshwar (Kumar and Kanya) completed	
2002/05/24	Primary schools handed over to the DPEO, Bhuj, the GOG	

GOJ; Government of Japan GOI; Government of Japan GOG; Government of Gujarat CHC; Community Health Centre P / D; Facilities Planning and Design C; Contracting CS; Construction Supervision Div.; Division AW; Day Nursing Centre DPEP; District Primary Education Programme COH&MS; Commissionerate of Health and Medical Services NGO; Non-Governmental Organization Div; Division Dept; Department GOJ; Government of Japan GOI; Government of Japan GOG; Government of Gujarat S&T; Science and Technology JDR; Japan Disaster Relief Team

**Table-A-2 List of Worst Affected Villages of Kutch District- gujaratindia.com**

Abbreviations : A1 : Worst affected population more then 1000. A2 : Worst affected population less then 1000.

No.	Taluka	Village	Population	Status
1	Anjar	Ajapar	611	A2
2	Anjar	Ambapar	1284	A1
3	Anjar	Amrapar	451	A2
4	Anjar	Bhadroi	750	A2
5	Anjar	Bhimasar	2505	A1
6	Anjar	Budharmora	1281	A1
7	Anjar	Chandirani	1428	A1
8	Anjar	Devisar	140	A2
9	Anjar	Dhamadka	2489	A1
10	Anjar	Dudhai	3591	A1
11	Anjar	Hirapar	738	A2
12	Anjar	Jagatpar	263	A2
13	Anjar	Jaru	803	A2
14	Anjar	Khambhara	1833	A1
15	Anjar	Khengarpar	130	A2
16	Anjar	Khirsara	1426	A1
17	Anjar	Khokhra	971	A2
18	Anjar	Kotda	1444	A1
19	Anjar	Lakhpar	1305	A1
20	Anjar	Mindiala	1240	A1
21	Anjar	Modsar	918	A2
22	Anjar	Nagalpar [ Moti]	3661	A1
23	Anjar	Nagalpar [ Nani]	844	A2
24	Anjar	Navgam	1141	A1
25	Anjar	Ningal	1876	A1
26	Anjar	Pashuda	539	A2
27	Anjar	Pashwadi [ Khara]	536	A2
28	Anjar	Pashwadi [ Mitha]	568	A2
29	Anjar	Patniya	-	A2
30	Anjar	Rapar	904	A2
31	Anjar	Ratnal	4640	A1
32	Anjar	Sapeda/Sapera	1621	A1
33	Anjar	Satapar	1426	A1
34	Anjar	Sinugra	2506	A1
35	Anjar	Sugariy	730	A2
36	Anjar	Tapar	2369	A1
37	Anjar	Vada	558	A2
38	Anjar	Varasmedi	2204	A1
39	Anjar	Vidi	1903	A1
40	Bhachau	Adhoi	8470	A1
41	Bhachau	Amaliyara	1736	A1
42	Bhachau	Amardi	1534	A1
43	Bhachau	Bandhadi	805	A2
44	Bhachau	Baniari	1020	A1

45	Bhachau	Bharudia	2586	A1
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No.	Taluka	Village	Population	Status
46	Bhachau	Bhujpar	466	A2
47	Bhachau	Chandrodi	641	A2
48	Bhachau	Chhadavada	2253	A1
49	Bhachau	Chirari Moti		A1
50	Bhachau	Chirari Nani	3195	A1
51	Bhachau	Chobari	6299	A1
52	Bhachau	Chopadva	1101	A1
53	Bhachau	Gamdu	304	A2
54	Bhachau	Ganeshpar	945	A2
55	Bhachau	Gharana	2471	A1
56	Bhachau	Godpar	414	A2
57	Bhachau	Halra	740	A2
58	Bhachau	Jadsa	603	A2
59	Bhachau	Jangi	4625	A1
60	Bhachau	Kabrau	1236	A1
61	Bhachau	Kadol	1368	A1
62	Bhachau	Kakarva	1380	A1
63	Bhachau	Kankhol	1211	A1
64	Bhachau	Kanthkot	2808	A1
65	Bhachau	Karmariya	929	A2
66	Bhachau	Katariya Juna	3039	A1
67	Bhachau	Katariya Nava	530	A2
68	Bhachau	Kharai	1560	A1
69	Bhachau	Khodasar	439	A2
70	Bhachau	Kumbharadi	896	A2
71	Bhachau	Kunjisar [ Meghpar]		A2
72	Bhachau	Lakadiya	6431	A1
73	Bhachau	Lakhdhargadh [ Alepar]	-	A2
74	Bhachau	Lakhpar	480	A2
75	Bhachau	Lakhpat	925	A2
76	Bhachau	Laliana	2695	A1
77	Bhachau	Lunva	1040	A1
78	Bhachau	Manfara	2781	A1
79	Bhachau	May	2051	A1
80	Bhachau	Modpar	303	A2
81	Bhachau	Morgar	1150	A1
82	Bhachau	Nara	438	A2
83	Bhachau	Narasari	449	A2
84	Bhachau	Ner	1035	A1
85	Bhachau	Rajansar	570	A2
86	Bhachau	Rajthali	40	A2
87	Bhachau	Rampar	1404	A1

88	Bhachau	Samakhiali	5041	A1
89	Bhachau	Shikarpur	4365	A1

No.	Taluka	Village	Population	Status
90	Bhachau	Shivlakha	1761	A1
91	Bhachau	Sikara	2069	A1
92	Bhachau	Sukhpar	866	A2
93	Bhachau	Toraniya	824	A2
94	Bhachau	Umarpar	1276	A1
95	Bhachau	Vandhiya	3313	A1
96	Bhachau	Vamka	1755	A1
97	Bhachau	Vasatva	328	A2
98	Bhachau	Vijpar	1908	A1
99	Bhachau	Vondh	6885	A1
100	Bhachau	Vondhada	1171	A1
101	Bhachau	Meghpar	743	A2
102	Bhachau	Piprapati	10	A2
103	Bhuj	Berdo	434	A2
104	Bhuj	Chapereli	1313	A1
105	Bhuj	Chubdak	334	A2
106	Bhuj	Dagala	1725	A1
107	Bhuj	Dhaneti	2213	A1
108	Bhuj	Dhonsa	85	A2
109	Bhuj	Dhori	3619	A1
110	Bhuj	Dhrang	685	A2
111	Bhuj	Gado	343	A2
112	Bhuj	Habay	991	A2
113	Bhuj	Jadura	588	A2
114	Bhuj	Jawaharnagar	1268	A1
115	Bhuj	Jikadi	1299	A1
116	Bhuj	Juriya	4231	A1
117	Bhuj	Kaderai	593	A2
118	Bhuj	Kanaiyabe	1158	A1
119	Bhuj	Kera	6575	A1
120	Bhuj	Kotay	871	A2
121	Bhuj	Kukma	3300	A1
122	Bhuj	Ler	164	A2
123	Bhuj	Lodai	3835	A1
124	Bhuj	Loria	1831	A1
125	Bhuj	Makanpar	143	A2
126	Bhuj	Mirjhapar	4266	A1
127	Bhuj	Misariyado	553	A2
128	Bhuj	Nadara	1209	A1
129	Bhuj	Nagor	1693	A1
130	Bhuj	Nokhaniya	468	A2
131	Bhuj	Padhar	2115	A1

No.	Taluka	Village	Population	Status
132	Bhuj	Paiya	505	A2
133	Bhuj	Raiyada	531	A2
134	Bhuj	Ratiya	933	A2
135	Bhuj	Sanosara	754	A2
136	Bhuj	Sedata	1269	A1
137	Bhuj	Sunarasar Shekhva	4476	A1
138	Bhuj	Trambau	425	A2
139	Bhuj	Vadva	416	A2
140	Bhuj	Vantra	256	A2
141	Bhuj	Vavdi	20	A2
142	Rapar	Badargadh	2799	A1
143	Rapar	Bhimasar	7850	A1
144	Rapar	Chitrod	4179	A1
145	Rapar	Dabhunda	1154	A1
146	Rapar	Deshaltar	-	A1
147	Rapar	Fathehgadh	5501	A1
148	Rapar	Gedi	4661	A1
149	Rapar	Ghanithal	1491	A1
150	Rapar	Gavaripar	916	A1
151	Rapar	Hamirpar [ Moti]	3021	A1
152	Rapar	Hamirpar [ Nani]	1411	A1
153	Rapar	Jadavas	231	A2
154	Rapar	Jesda	1235	A1
155	Rapar	Kanpar	1144	A1
156	Rapar	Karuda	628	A2
157	Rapar	Khirai	1380	A1
158	Rapar	Kidiyanagar	6288	A1
159	Rapar	Lakda Vandh	436	A2
160	Rapar	Naliya Timbo	505	A2
161	Rapar	Nandasar	1915	A1
162	Rapar	Nilpar	2028	A1
163	Rapar	Palanpar	523	A2
164	Rapar	Pragpar	3163	A1
165	Rapar	Sai	3384	A1
166	Rapar	Sany	674	A2
167	Rapar	Sarasal	231	A2
168	Rapar	Selari	3371	A1
169	Rapar	Sudana Vandh	85	A2
170	Rapar	Surba Vandh	205	A2
171	Rapar	Suvai	2605	A1
172	Rapar	Trambau	2211	A1
173	Rapar	Umaiya	2775	A1
174	Rapar	Vekra	176	A2

**Table-A-3 NGO-Adopted Villages in Kutch district -Based on GSDMA**

(Position as on 24/7/2001)				
No.	Taluka	District	Village	Name of NGO
1	Abdasa	Kutch	Ashapar	VRTI(K.A.)
2	Abdasa	Kutch	Bara	VRTI(K.A.)
3	Abdasa	Kutch	Bhimpar	Vibhas Trust (Ms Urvashi Devi)
4	Abdasa	Kutch	Hingaria	Vibhas Trust (Ms Urvashi Devi)Village Completed
5	Abdasa	Kutch	Kuvapaddhar	SEWA
6	Abdasa	Kutch	Lakhaniya	VRTI(K.A.)
7	Abdasa	Kutch	Mota Karodia	VRTI(K.A.)
8	Abdasa	Kutch	Nana Karodia	Rotary Club Bombay South (KA)
9	Abdasa	Kutch	Naredi	VRTI(K.A.)
10	Abdasa	Kutch	Sujapar	SEWA
11	Abdasa	Kutch	Sukhpar Bara	VRTI(K.A.)
12	Abdasa	Kutch	Tera	VRTI(K.A.)
13	Anjar	Kutch	Ajapar	NARSOC
14	Anjar	Kutch	Ambapar	FICCI-CARE
15	Anjar	Kutch	Amrapar	Shree Vallabhacharya Vishvakalyan Trust
16	Anjar	Kutch	Bhavanipur	Vallabh Foundation
17	Anjar	Kutch	Chandiyā	Government of M.P.
18	Anjar	Kutch	Chandrani	Ramkrishna Mission Ashram
19	Anjar	Kutch	Devisar	Swaminarayan Aksharpurshotam
20	Anjar	Kutch	Dhrangawadi	Swaminarayan Aksharpurshotam
21	Anjar	Kutch	Dudhai	Rashtriya Swabhimān
22	Anjar	Kutch	Khambara	Word & Deed India
23	Anjar	Kutch	Khirsara	Jamiat E Ulma I Hind
24	Anjar	Kutch	Khirsara Nana	Swaminarayan Aksharpurshotam
25	Anjar	Kutch	Maringana	GSPCL
26	Anjar	Kutch	Mathak	Good Samartians (Shri D J Pandyan)
27	Anjar	Kutch	Mithapasvaria	Sewa Bharti
28	Anjar	Kutch	Modsar	Kisan Sewa Fund.C/o IFFCO
29	Anjar	Kutch	Navagam	Santram Janseva Trust
30	Anjar	Kutch	Sugariya	Global Source Net
31	Anjar	Kutch	Valadiya Bitta (East)	EFICOR
32	Anjar	Kutch	Valadiya Bitta (West)	EFICOR
33	Anjar	Kutch	Vershana	Avas Vikas Limited. C/o Government of Rajasthan
34	Bhachau	Kutch	Adhoi (Pasakayara)	Government of Maharashtra
35	Bhachau	Kutch	Bandhadi	Shree Vallabhacharya Vishvakalyan Trust
36	Bhachau	Kutch	Bhujpar	Rashtriya Swabhimān
37	Bhachau	Kutch	Chirai Moti	FICCI-CARE
38	Bhachau	Kutch	Deshalpar	Tibetian Government in Exile
39	Bhachau	Kutch	Dholavira	Rambhau Mahalgi Pravhodhini (Shri P Mahajan)
40	Bhachau	Kutch	Ekal Vandh	FICCI-CARE
41	Bhachau	Kutch	Gemerāu	Discipleship - World Relief
42	Bhachau	Kutch	Godpar	Kutch Yuvak Sangh (KA)
43	Bhachau	Kutch	Kabrau	Vallabh Foundation
44	Bhachau	Kutch	Kakarava	Jai Prakash Industries
45	Bhachau	Kutch	Kharoi	FICCI-CARE
46	Bhachau	Kutch	Lakadiya	Government of Maharashtra
47	Bhachau	Kutch	Lakdhirgadh	FICCI-CARE
48	Bhachau	Kutch	Nilpara	FICCI-CARE
49	Bhachau	Kutch	Parkara Vandh	FICCI-CARE

No.	Taluka	District	Village	Name of NGO
50	Bhachau	Kutch	Rajansar	Kutch Yuvak Sangh
51	Bhachau	Kutch	Surajbari	Caritas India
52	Bhachau	Kutch	Vondh	Government of Maharashtra
53	Bhuj	Kutch	Andhau	Sahjeevan (KA)
54	Bhuj	Kutch	Banda	Jamiat E Ulma I Hind
55	Bhuj	Kutch	Bandha Navasas	Sahjeevan (KA)
56	Bhuj	Kutch	Bhujodi	Caritas India
57	Bhuj	Kutch	Chapereli	Sewa Bharti
58	Bhuj	Kutch	Dagala	Mata Amrutaanadmai Math
59	Bhuj	Kutch	Dhaneti	Ramkrishna Mission Ashram
60	Bhuj	Kutch	Dhrobana	Kutch Mahila Vikas Sangathan (KA)
61	Bhuj	Kutch	Dinara	Kutch Mahila Vikas Sangathan M-Sahjeevan N (KA)
62	Bhuj	Kutch	Gado	Divine Life-Suchak Hospital
63	Bhuj	Kutch	Jam Kunariya	Kutch Mahila Vikas Sangathan (KA)
64	Bhuj	Kutch	Jawaharnagar	Government of Delhi
65	Bhuj	Kutch	Juna	Kutch Mahila Vikas Sangathan (KA)
66	Bhuj	Kutch	Kalyanpar	Caritas India
67	Bhuj	Kutch	Kaniyabe	Avas Vikas Limited. C/o Government of Rajasthan
68	Bhuj	Kutch	Kotay	Government of M.P.
69	Bhuj	Kutch	Ludiya	Manav Sadhana
70	Bhuj	Kutch	Modsar	Mata Amrutaanadmai Math
71	Bhuj	Kutch	Mokhana	Mata Amrutaanadmai Math
72	Bhuj	Kutch	Moti Rohatad	Kutch Mahila Vikas Sangathan (KA)
73	Bhuj	Kutch	Nani Rohtad	Kutch Mahila Vikas Sangathan (KA)
74	Bhuj	Kutch	Padhar	Rotary Gujarat Earthquake Rebuild Trust
75	Bhuj	Kutch	Paiya	Catholic Relief Service
76	Bhuj	Kutch	Pirvadi	Dewakinandanacharya Smarak Nidhi
77	Bhuj	Kutch	Ratiya	Caritas India
78	Bhuj	Kutch	Raydhanpar	Caritas India
79	Bhuj	Kutch	Sarspar	MARTHOMA
80	Bhuj	Kutch	Ukhad Mora	Swaminarayan Aksharpurshotam
81	Bhuj	Kutch	Umedpar	Caritas India
82	Bhuj	Kutch	Vinchiya	VRTI (KA)
83	Gandhidham	Kutch	Padana	Kisan Sewa Fund.C/o IFFCO
84	Lakhpat	Kutch	Kotda Madh	VRTI(K.A.)
85	Lakhpat	Kutch	Matana Madh	SEWA
86	Lakhpat	Kutch	Naredi	Ashapara Foundation (KA)
87	Mandvi	Kutch	Ajapar	Rural Development Trust
88	Mandvi	Kutch	Bhada	VRTI (KA)
89	Mandvi	Kutch	Bhadai Mota	Catholic Relief Service
90	Mandvi	Kutch	Bhadia Nana	VRTI (KA)
91	Mandvi	Kutch	Guniasar Moti	VRTI (KA)
92	Mandvi	Kutch	Guniasar Nani	VRTI(K.A.)
93	Mandvi	Kutch	Kotdi	Catholic Relief Service
94	Mandvi	Kutch	Mau Nani	Swaminarayan Aksharpurshotam
95	Mandvi	Kutch	Ratadiya Mota	Catholic Relief Service
96	Mandvi	Kutch	Ratadiya Nana	Catholic Relief Service
97	Mandvi	Kutch	Tragadi	VRTI(K.A.)
98	Mandvi	Kutch	Undoth Moti	VRTI(K.A.)
99	Mundra	Kutch	Bagada	VRTI (KA)
100	Mundra	Kutch	Bocha	Kutch Yuvak Sangh(K.A.)
101	Mundra	Kutch	Depa	VRTI (KA)

No.	Taluka	District	Village	Name of NGO
102	Mundra	Kutch	Kandagara Nana	VRTI (KA)
103	Mundra	Kutch	Pawadiyara	VRTI(K.A.)
104	Mundra	Kutch	Ramaniya	VRTI (KA)
105	Mundra	Kutch	Viraniya	VRTI (KA)
106	Nakhatrana	Kutch	Aral Moti	Catholic Relief Service
107	Nakhatrana	Kutch	Bhadali	Shrujan Trust (K.A.)
108	Nakhatrana	Kutch	Bharapar	Catholic Relief Service
109	Nakhatrana	Kutch	Bhimsar	Catholic Relief Service
110	Nakhatrana	Kutch	Jiyapar	Swaminarayan Aksharpurshotam
111	Nakhatrana	Kutch	Lifri	SEWA
112	Rapar	Kutch	Bela	Rotary Gujarat Earthquake Rebuild Trust
113	Rapar	Kutch	Dabhunda	FICCI-CARE
114	Rapar	Kutch	Davri	FICCI-CARE
115	Rapar	Kutch	Khirai	L & T Ltd.
116	Rapar	Kutch	Nilpar	L & T Ltd.
117	Rapar	Kutch	Sangadh	Akhil Vishwa Gayatri Parivar
118	Rapar	Kutch	Sangramsar Wat	Swaminarayan Gurukul Kheda
119	Rapar	Kutch	Saranvadi	FICCI-CARE
120	Rapar	Kutch	Sarenshtar	Sawan Kirpal Ruhani Mission
121	Rapar	Kutch	Vekra	Sawan Kirpal Ruhani Mission
122	Rapar	Kutch	Vijaypar	FICCI-CARE

In-Principal Approvals have been given for the following villages in ten talukas of Kutch District

Sr. No.	Taluka	District	Village	Name of the NGO
1	Abdasa	Kutch	Aida	VRTI(K.A.)
2	Abdasa	Kutch	Balachod Moti	VRTI(K.A.)
3	Abdasa	Kutch	Bandiya	KFFF-VRTI
4	Abdasa	Kutch	Buta	VRTI(K.A.)
5	Abdasa	Kutch	Duphi Nani	VRTI(K.A.)
6	Abdasa	Kutch	Jangadiya	VRTI(K.A.)
7	Abdasa	Kutch	Jat Vandh	VRTI(K.A.)
8	Abdasa	Kutch	Karaiya	VRTI(K.A.)
9	Abdasa	Kutch	Karmata	VRTI(K.A.)
10	Abdasa	Kutch	Laiyari	VRTI(K.A.)
11	Abdasa	Kutch	Nangia	VRTI(K.A.)
12	Abdasa	Kutch	Ustia	VRTI(K.A.)
13	Anjar	Kutch	Satapar	IFFCO
14	Anjar	Kutch	Vidi	FICCI-CARE
15	Bhachau	Kutch	Kujisar	CARE
16	Bhachau	Kutch	Sukhpar	Bhansali Trust
17	Bhuj	Kutch	Habai	Caritas India
18	Mundra	Kutch	Gelda	VRTI(K.A.)
19	Mundra	Kutch	Ghogha	VRTI(K.A.)
20	Mundra	Kutch	Goyasangh	Rural Agro Research & Development Society
21	Mundra	Kutch	Kara Ghoga	Rural Agro Research & Development Society
22	Mundra	Kutch	Samaghogha	VRTI(K.A.)

Confederation of Indian Industry(CII) has decided to fully fund & reconstruct Physical & Social Infrastructure in 25 villages of Bhachau Taluka. CII proposes to complete the project in three phases: 1) Community Assets & Social Infrastructure (Starting date - 26th July, 2001 and to be completed latest by 4th week of December, 2001. 2) Other Infrastructure (Scope of work under preparation by CEPT) and 3) Economic Rehabilitation ( Planning in conjunction with expert agencies including Abhiyan members, Development Alternatives - Delhi, IMRB, ORG and MARG). The list of 25 villages where CII will work is as shown :

1	Amaliyara	14	Laliana
2	Amardi	15	May
3	Baniari	16	Morgar
4	Chhadavada	17	Nara
5	Chopadva	18	Rajthali
6	Chirai Nani	19	Rampar
7	Gharana	20	Shikarpar
8	Halra	21	Shivlakha
9	Kadol	22	Sukhpar
10	Kankhot	23	Vamka
11	Katariya Juna	24	Vandhiya
12	Katariya Nava	25	Vasatva

**Table-A-4 NGO-Adopted Villages in Other District –Based on GSDMA**

Position as on 24/07/2001				
. No.	District	Taluka	Village	Name of the NGO
1	Jamnagar	Dhrol	Jaliya Devani	CASA
2	Jamnagar	Jodiya	Fadsar	CASA
3	Jamnagar	Jodiya	Fatsar	CASA
4	Jamnagar	Jodiya	Kerali	CASA
5	Jamnagar	Jodiya	Koyli	CASA
6	Jamnagar	Jodiya	Mavrugam	CNI - Gujarat Diocese
7	Jamnagar	Jamnagar	Moda	Indian Navy
8	Jamnagar	Jamnagar	Nani Mati	Rotary Club Baroda
9	Patan	Raydhanpur	Agichana	Gems & Jewellery NRF
10	Patan	Santalpur	Babra	SEWA
11	Patan	Santalpur	Bakutra	SEWA
12	Patan	Santalpur	Bavarda	SEWA
13	Patan	Santalpur	Chhansara	SEWA
14	Patan	Santalpur	Jakhotra	Sewa Bharti
15	Surendranagar	Halvad	Mayapur	Shakti Pratisthan
16	Surendranagar	Dasada	Visnagar	Sewa Bharti
17	Surendranagar	Dasada	Surel	Valani Charitable Trust
18	Surendranagar	Dasada	Vachharajpura	Sewa Bharti
19	Surendranagar	Sayla	Ninama	International Institute for Sustainable Future (IISF)
20	Rajkot	Wankaner	Gariya	Swaminarayan Akshapurshottam
21	Rajkot	Maliya	Bhavpar	Central Chinmaya Mission
22	Rajkot	Morbi	Billiya	Navjeevan Trust
23	Rajkot	Morbi	Juna Sadulka	Vadilal Gandhi Foundation
24	Rajkot	Morbi	Modpar	Swaminarayan Akshapurshottam
25	Rajkot	Morbi	Pipaliya	Government of Chattisgarh
26	Rajkot	Morbi	Sokhda	GNFC Ltd



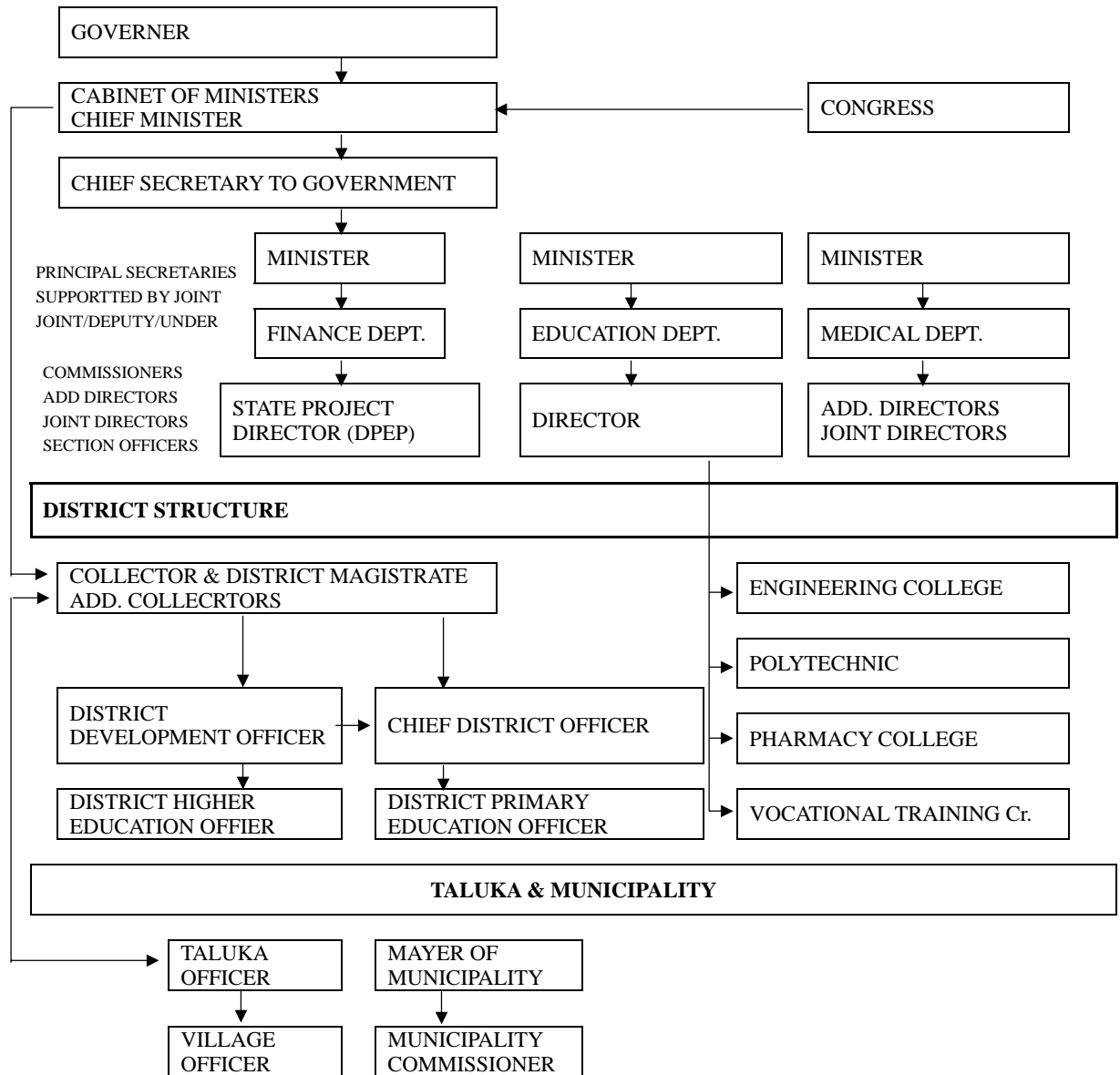
**Table-A-5 NGOs Idnia**

Sr No	Organisation	Name & Address	Designation	Contact Info
1	Acil – Navasarjan Rural Dev Foundation	Yogendra Parikh Add-1 : - 409 New Udyog Bhavan Moghul Lane 2 Mahim (w)	Mg Trustee	City : -Mumbai Phone No. : -022 4469341 Fax No. : -022 4452573 E-mail ID : -amtortho@bom5.vsnl.net.in
2	Akhil Vishwa Gayatri Parivar	Add-1: - Sri Vedmata Gayatri Trust Shanti Kunj	Trustee	City : -Haridwar Phone No. : -0133 -40602 Fax No. : -0133-423866 E-mail ID : -Sahil@del2.vsnl.net.in
3	AMRUT	Nirmohanana-nd Avdut Add-1: - 349,A1 Shah & Nahar ,1/E Parel		City : -Mumbai Phone No. : - 022 493 6110 Fax No. : -022 493 1692
4	Ashapura Foundation	Tusharbai Dedhiya Add-1: - Banker Colony		City : - Bhuj Phone No. : - 02832 20975
5	Baif Dev Res Foundation	B R Patil Add-1: - 3 <sup>rd</sup> Floor Indra Complex Nr Amarjot Soc. Manjalpur	President	City : - Baroda Phone No. : - 0265 654097 Fax No. : - 0265 651802
6	Bansal Charitable Trust	P R Bansal Add-1: - 25/26 Sector 10 B Light Industrial Area		City : - Gandhidham Phone No. : - 02836 34729 Fax No. : - 02836 39713 E-mail ID : - pushpendrab@hotmail.com
7	Bhagwatiba Gandhi Gram Udyog	M V Parmar Add-1: - Old Bus Stand Bayad		City : - SabharKanta Phone No. : - 02779-22244 Fax No. : - 02779-87339
8	BILT Ltd	Manoj Dutt Add-1: - 35,Himmat nagar revenue Colony		City : - Bhuj Phone No. : - 02832 54252 Fax No. : - 02832-53386 E-mail ID : - <a href="mailto:unitkhavda@bilt.com">unitkhavda@bilt.com</a>
9	Caritas India	Arockiam Add-1: - C.B.C.I Centre Ashok Place		City : - New Delhi Phone No. : - 011-363390 Fax No. : - 011-3715416 E-mail ID : -caritasindia@vsnl.com
10	CASA	RSR Selwine Add-1: - 21,YMCA Road, Methodist Centre Mumbai Central		City : - Mumbai Phone No. : - 98201 57209 Fax No. : - 022-3085400 E-mail ID : - <a href="mailto:selwine@cas-india.org">selwine@cas-india.org</a>
11	Catholic Relif Service	Bhavana Patel Add-1: - Kutch Vikas Trust Raidhanpur Nagor	Coordinator	City : - Bhuj Phone No. : - 02832-74252 Fax No. : - 02832 74253
12	Central Chinmay Mission	Narin Bhatiya Add-1: - Shakti vihar Road Powai		City : - Mumbai Phone No. : - 022 8572367 Fax No. : - 022 8573065 E-mail ID : - <a href="mailto:ccmt@vsnl.com">ccmt@vsnl.com</a>
13	CNI – Gujarat Diocese	M S Prakash Add-1: - JP Mission Compound Ellisbridge	Treasurer	City : - Ahmedabad Phone No. : - 079-6569567 Fax No. : - 079-6561950
14	Confederation Of Indian Industry	Sunil R Parikh Add-1: - 203/4,SEARS Towers Gulbai Tekara Panchwati		City : - Ahmedabad Phone No. : - 0796468872 Fax No. : - 0796462878 E-mail ID : - <a href="mailto:ciiguj@ad1.vsnl.net.in">ciiguj@ad1.vsnl.net.in</a>
15	Delhi Municipal Corporation	Add-1: - MCD,Town Hall Chandni Chowk	Municipal Commissioner	City : - Delhi

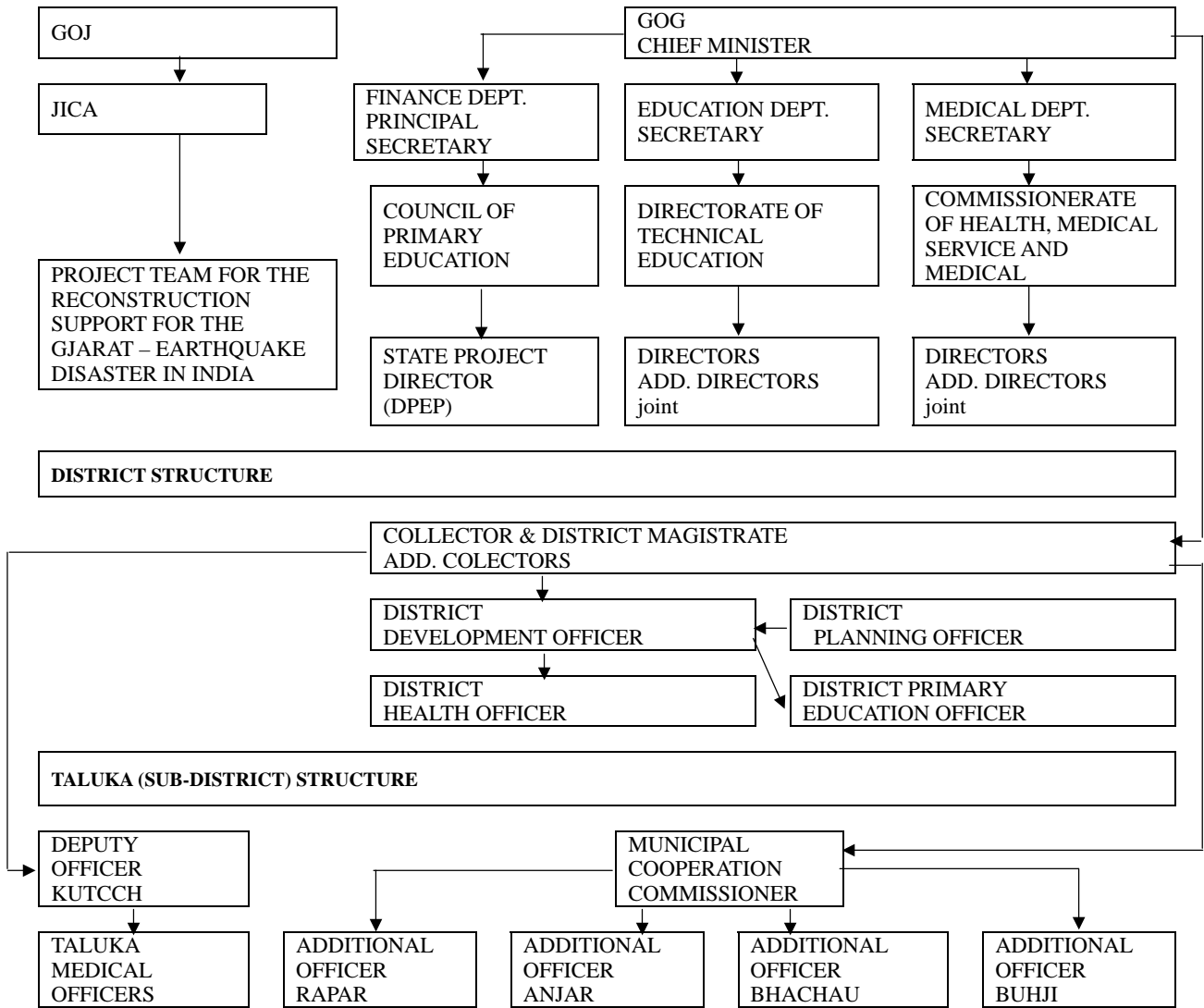
Sr No	Organisation	Name & Address	Designation	Contact Info
16	Dewakinand-anacharya Smarak Nidhi	Jitendra Shah Add-1: - Shree Vallabh Lalji Maharajshree Kamvan	Trustee	City : - Vidhyanagar Fax No. : - 026888998
17	Discipleship Centre – World Relief	Stephen Houston Add-1: 222, ward 12/c Lilasha Nagar	Director	City : - Gadhidham Phone No. : - 02836-26724 Fax No. : - 02836-30521 Mobile No :- 98240 83435
18	Divine Life- Suchak Hospital	Anil Suchak Add-1 Satsang Hall,186 Manchubhai Road, Malad(E)		City : - Mumbai Phone No. : - 022-8891484 Fax No. : - 022-8890821 E-mail ID : <a href="mailto:suchak@vsnl.com">suchak@vsnl.com</a>
19	Diya Jot Foundation	Add-1 Shrima Anantaanand Institute of cancer Opp Munciple Garden Paldi	President	City : - Ahmedabad Phone No. : - 079-6581036 Fax No. : - 0796309880 E-mail : <a href="mailto:divyajot@yahoo.com">divyajot@yahoo.com</a>
20	EFICOR	D Kennedy Add-1 Parivarthan Building Main Road	Manager (Prog)	City : - New Delhi Phone No. : - 011-678439 Fax No. : - 011-6784604 E-mail : <a href="mailto:eficorhq@vsnl.com">eficorhq@vsnl.com</a>
21	ESSAR Ltd	K V Sukhdevsinghji Add-1 Premchand House Annexe Asharam Road		City : - Ahmedabad Phone No. : - 079-6580277 Fax No. : - 079-6581917
22	FICCI -CARE	Amit Mitra /Tom Alcedo Add-1 Federation House Tansen Marg		City : - New Delhi Phone No. : - 011-3315442 Fax No. : - 011-3320714 / 6564081
23	Gems & Jewellery NRF	Ketan Parikh Add-1 501,Prasad Chambers Tata Road-2 Opera House		City : - Mumbai Phone No : - 022-3634565 Fax No. : - 022-3632061
24	Ghatkopar Citizen Relief Fund	J L Parikh Add-1 Hirji Bharmal Trust Bldg Mahatma Gandhi Road		City : - Mumbai Phone No. : - 022-5163434 Fax No. : - 022-515448
25	Global Source net	RT Buckley Jr		City : - Gandhidham Phone No. : - 0283621524 Fax No. : - 02836-34702 Mobile No. : - 98211610330
26	Good Samaritians	Emil Jebasingh Add-1 L-15, Green Park		City : - New Delhi Phone No. : - 011-6855674 Fax No. : - 011-68555436
27	Gospel Of Asia	J A George Add-1 P O Box:-7, Sunva Tal : Petlad		City : - Anand Phone No. : - 02697-35371 Fax No. : - 02697-35784
28	Government Of Chattisghar	Harshad Mehta Add-1 Bastar Road Dhamtri	MLA & Chairman Bhukamp Rahat Samitti	City : - Chattisghar Phone No. : - 07722-37071 Fax No. : - 07722-41020 Mobile No. : - 98271-646472
29	Government Of Delhi	P S Bhatnagar Add-1 Delhi Secretariate I P Estate	CS	City : - Delhi Phone No. : - 011-3392100 Fax No. : - 011-3392102
30	Government Of Maharashtra	R K Bharghav Add-1 5 <sup>th</sup> floor, Mantralay	Prin Sec	City : - Mumbai
31	Government Of MP	Mala Shrivastava Add-1 Mantralay Vallabh Bhavan	Relief Commissioner	City : - Bhopall Phone No. : - 0755-551442 Fax No. : - 0755-553574

Sr No	Organisation	Name & Address	Designation	Contact Info
32	Government Of Rajasthan	C K Mathews Add-1 Mantralay	Sec To CM	City : - Jaipur Phone No. : - 0141-380934 Fax No. : - 0141-380934
33	Govt Of Jharkhand	Sir Add-1 Project Bulding HEC	Chief Secretary	City : - Ranchi Phone No. : - 0651-403250/40 Fax No. : - 06541-403255
34	Gram Swaraj Sangh	Rameshbhai Sanghvi		
35	GSPCL	Sanjay Gupta Add-1 2 <sup>nd</sup> floor,Block 15 Sector 11	MD	City : - Gandhinagar Phone No. : - 02712-36372 Fax No. : - 02712-3637
36	Gujarat Narmada Valley Fertilizers Co. Ltd	A D Desai Add-1 Narmada Nagar		City : - Bharuch Phone No. : - 02642-7001 Fax No. : - 02642-47057 E-mail : - <a href="mailto:addesai@gnvfc.guj.nic.in">addesai@gnvfc.guj.nic.in</a>
37	Gujarat Institute Of Amateur Radio	J G Pandya Add-1 299/1,Sec.7A Sector 7A	Gen Secretary	City : - Gandhinagar Phone No. : - 079-3226574 Fax No. : - 079-3226574 E-mail : - <a href="mailto:pandyaajg@123india.com">pandyaajg@123india.com</a>
38	Helpage India	Ashok Rawat Add-1 Samarphan Vidhyapith Campus Sattelite Road		City : - Ahmedabad Phone No. : - 079-3226574 Fax No. : - 079-6756146 Mobile No. : - 98250-12239
39	ICICI Ltd	Abhitab Chaturvedi Add-1 ICICI Tower Bandra Kurla Complex Bandra (E)	Dy GM	City : - Mumbai Phone No. : - 022-653 8309 Fax No. : -022-653 1265 E-mail : - <a href="mailto:chaturvedi@icici.com">chaturvedi@icici.com</a>
40	IFFCO	US Awasthi Add-1 32,Nehru Place		City : - New Delhi Phone No. : - 011-6486894 Fax No. : - 011-6489376   02836-70648 E-mail : - <a href="mailto:mdoffice@iffco.nic.in">mdoffice@iffco.nic.in</a>
41	Indian Navy	T S Ganeshan Add-1 INS Valsura		City : - Jamnagar Phone No. : - 0288-551053 Fax No. : - 0288-550825 E-mail : - <a href="mailto:sparks@wilnetonline.net.in">sparks@wilnetonline.net.in</a>
42	International Institute for Sustainable Future	Priyavadhan Shah Add-1 73-A Mittal Towers Add-2 Nariman Point	Chairman (Gujarat)	City : - Mumbai Phone No. : - 022-2045758 Fax No. : - 022-2871250 E-mail : - <a href="mailto:iisfb@giasbmo1.vsnl.net.in">iisfb@giasbmo1.vsnl.net.in</a>
43	J B Chemical & Pharmaceutical	J B Mody Add-1 Neelam Centre, B-wing 4 <sup>th</sup> floor Hind Cycle Road,warli		City : - Mumbai Phone No. : - 022-4930918 Fax No. : - 022-4930534 E-mail : - <a href="mailto:mody@jbcpl.com">mody@jbcpl.com</a>
44	Jai Prakash Industries	Rakesh Sharma Add-1 Narmada Project Kevadia Colony		City : - Bharuch Phone No. : - 02640-32060 Fax No. : - 02640-32160 E-mail : -
45	Jamiat Ulama I Hind	Maulana A Madni Add-1 1, Bahadur Shah Jafar Marg		City : - New Delhi Phone No. : - 011- Fax No. : - E-mail : -

**Fig.-A-1 Organizational Chart of State Government Administration**



**Fig.-A-2 Organizational Chart of Project Implementation**





**Fig.-A-3 Working Group as Counterpart to JICA Project Team**

CHIEF CORDINATER FOR WORKING GROUP MEMBER SECRETARY OF THE WORKING GOUP	AVINASH JOSHI, DIRECTOR (DPEP) M.N. BHAD, SECRETARY (DPEP)
MEMBER OF THE W.G.	R.N. SHAH, JOINT DIRECTOR, COMMISSIONERATE OF HEALTH & MEDICAL SERVICES
MEMBER FROM DISTRICT	P.T. PANDYA, DISTRICT PRIMARY EDUCATION OFFICER, KUTCCH D.P. SOLANKI, DISTRICT HEALTH OFFICER
MEMBER FROM KUTCCH	M.A. SAIYED, DEPUTY DISTRICT DEVELOPMENT OFFICER
MEMBERS FROM TALUKAS	MANUBHAI PATEL, ADDITIONAL PLANNING OFFICER, PAPAR N.K. RAVAL, ADDITIONAL PLANNING OFFICER, ANJAR I.M. PATEL, ADDITIONAL PLANNING OFFICER, BHACHAU N.A. HARYANI, ADDITIONAL PLANNING OFFICER, BUUJI
MEMBERS FROM TALUKAS	TALUKA MEDICAL OFFECERS