

4.3 Scheme of execution

4.3.1 Situation of the construction industry and work execution plan

Generally speaking, the technical level of construction workers of Sri Lanka is not so high, and furthermore there is shortage of skilled workers. Whenever good quality of work execution is desired in Sri Lanka, experienced foremen and/or a group of skilled workers are usually hired from neighboring countries in order to make up for the aforesaid manpower and technical deficiencies to have them supervise the skill and work of the local workers to secure the required technical level. An arrangement such as this may be conceivable in executing this project, too. It would also be necessary to dispatch technicians from Japan to work on, assemble, install, and adjust the materials and equipment procured in Japan.

The production of construction materials in Sri Lanka is limited to just a few fields, and they rely mostly on imports because items suited for use are very rare. Therefore, it is particularly important to accurately identify the period of time required from the order to the delivery when procuring construction materials on the domestic market.

The scheme of execution of the construction work of this project will be drawn up by taking into consideration such factors as the work capacity of the local workers, time required to procure imported construction materials, weather conditions at the work site, and other pertinent factors, and the implementation schedule will be prepared accordingly.

4.3.2 Scope of Undertakings

Scope of the work to be undertaken by the Government of Sri Lanka and the Government of Japan are listed as follows:

Item	Sri Lanka	Japan
(1) Infrastructure		
1. Site development	<ul style="list-style-type: none"> ◦ To demolish, remove existing buildings ◦ To clear, level the site 	
2. Water Supply	<ul style="list-style-type: none"> ◦ To lead city water supply pipe into the site 	<ul style="list-style-type: none"> ◦ To provide water supply system within the site
3. Drainage	<ul style="list-style-type: none"> ◦ To connect drainage and sewage pipe to street main 	<ul style="list-style-type: none"> ◦ To provide drainage and sewage system within the site
4. Electric Power	<ul style="list-style-type: none"> ◦ To lead electric power supply line into the transformer sub-station in the site 	<ul style="list-style-type: none"> ◦ To provide electric power distribution system within the site
5. Telephone	<ul style="list-style-type: none"> ◦ To lead telephone line to the main terminal panel ◦ To bear the charges in connection with the above 2. 3. 4. 5. requested by the authorities concerned 	<ul style="list-style-type: none"> ◦ To provide main terminal panel and telephone system within the site
(2) Building	<ul style="list-style-type: none"> ◦ To bear expenses and charges required to obtain the building permission ◦ To construct facilities other than those to be undertaken by Japan 	<ul style="list-style-type: none"> ◦ To construct the facility with required utilities which is described in Article 4.2.2
(3) Outdoor	<ul style="list-style-type: none"> ◦ To construct gate and fence ◦ To construct guard's house 	<ul style="list-style-type: none"> ◦ To construct, pave the road and parking yard within the site
(4) Equipment	<ul style="list-style-type: none"> ◦ To prepare the equipment other than those to be undertaken by Japan 	<ul style="list-style-type: none"> ◦ To provide the equipment which is listed in Article 4.2.3

Item	Sri Lanka	Japan
(5) Furnitures and Fittings	<ul style="list-style-type: none"> ◦ To prepare general furnitures such as tables, chairs, carpet, curtain etc. 	
(6) Transportation of Construction material and Equipment	<ul style="list-style-type: none"> ◦ To ensure tax exemption and customs clearance at port of disembarkation 	<ul style="list-style-type: none"> ◦ To ensure marine transportation from Japan to Sri Lanka and internal transportation from port of disembarkation to the site
(7) Others	<ul style="list-style-type: none"> ◦ To bear advising commission of A/P and payment commission for the banking services based upon the B/A ◦ To accord Japanese consultant and constructor such facilities as may be necessary for their entry into Sri Lanka and stay therein for the performance of their work 	

4.3.3 Scheme for supervision of the work

(1) Scheme for supervision of the work

After the conclusion of the construction contract, the project manager and the field supervisor should go to the construction site in order to give the contractor the pertinent instructions, to conduct consultations and verifications related to the execution scheme, and to carry out all other necessary formalities.

After the commencement of the work, the supervisor should be permanently stationed at the project site to supervise the work. Moreover, the supervisor should present periodic reports on the state of execution of the work to the Embassy of Japan and the JICA office in Sri Lanka, as well as to the institutions concerned of the Government of Sri Lanka, and should take the initiative to coordinate the views of the parties concerned with this project, including the contractor, as well as to attain a complete understanding between them.

The project manager and the engineers in charge of the structure, utilities and equipment should go to the project site during the various stages of work in order to carry out spot supervision. The field supervisor should be stationed at the work site until the completion of the delivery procedure of the facilities and equipment.

The actual affairs of the supervision will be carried out by paying utmost attention to such aspects as the natural conditions, religion, customs and system prevailing in Sri Lanka, and by accurately identifying the technical level of the local workers. The supervision of the work is aimed at realizing a smooth progress of the construction with the best results, and at completing the project within the prescribed period of time.

The execution scheme should be drawn up after a minute examination of the steps of work by taking into consideration the construction

technique and capacity of the local industry, as well as the period of term for arrival of the construction materials procured in Japan at the proposed site, and the pertinent adjustments and approvals should be given on the basis of the results of the said examination. The items of supervision to be carried out in connection with this project are listed in the followings.

1. Advice and guidance related to the construction contract

To examine the qualification of the firms participating in the bid, to prepare and execute the bid, to evaluate the detailed statements of the offers, to recommend the contractor, to attend at the signing of the construction contract.

2. Inspection and approval of the execution drawings and the like

To inspect and approve the execution drawings, samples of materials, equipment, etc., submitted by the contractor.

3. Instruction and inspection of the work

To examine and instruct the execution scheme and steps of work, to identify and instruct the state of progress of the work, to conduct inspections required during the execution of the work.

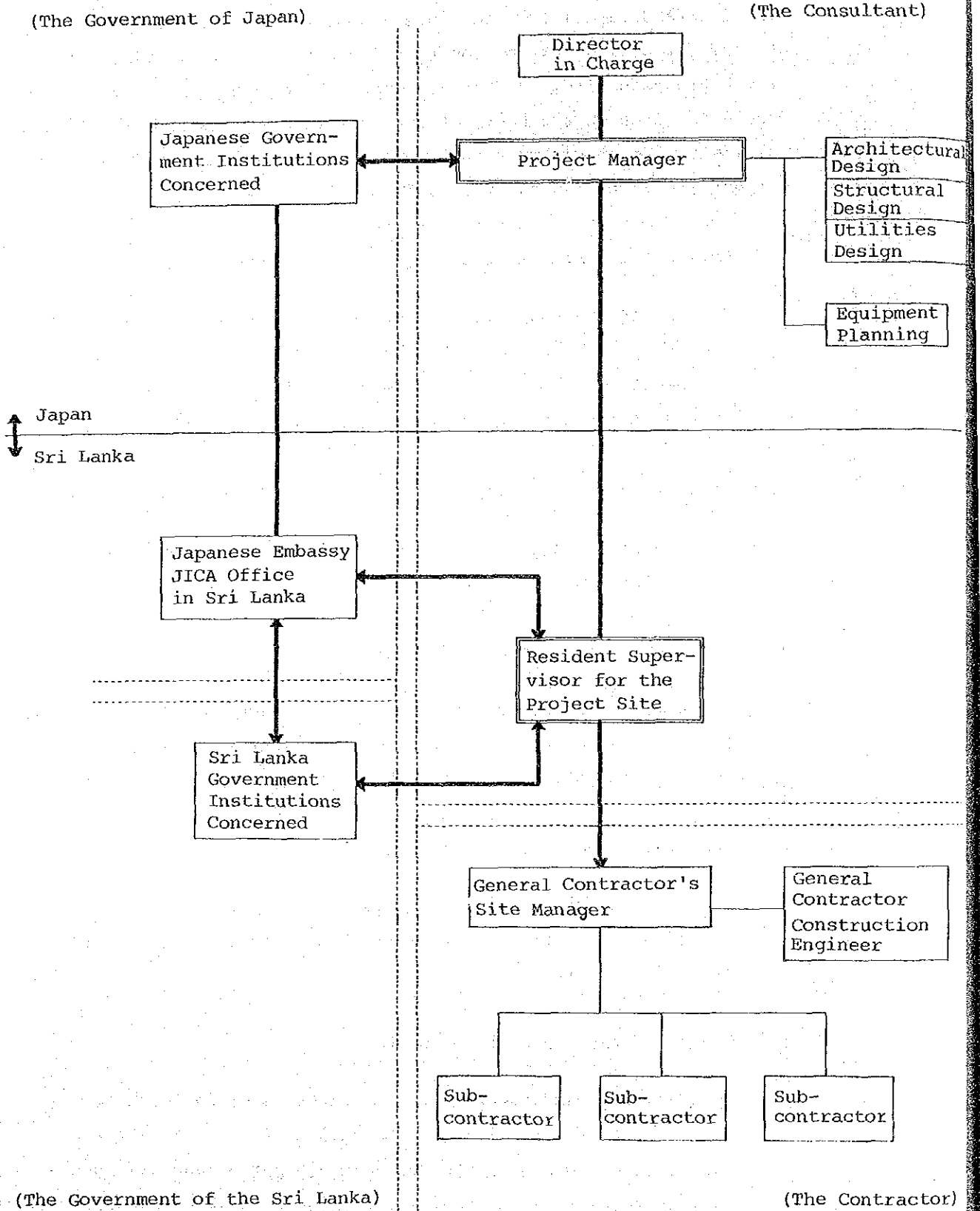
4. Approval of payments

To make inspection for verification of completed amount required for execution of payments during and after the completion of the work.

5. Report of the state of the work

To present periodic report on the progress of the work to the owner and to the institutions concerned of the Government of Japan, so as to contribute for a smooth performance of undertakings to be taken by the parties concerned of both Japan and Sri Lanka.

(2) Supervising Structure



6. Delivery of the facilities and equipment

Attendance at the formalities of delivery of the facilities in conformity with the contract, after verifying the satisfactory completion of the works according to the contracted conditions, and completion of the supervision work with the issuance of the certificate of acceptance of the owner.

4.3.4 Plan for procurement of equipment and materials

Of the available construction materials in Sri Lanka, those domestically manufactured are not so abundant, and are limited to such items as cement, sand, gravel, reinforcing bars, concrete blocks, bricks, roof tiles, slate, wood, plywood, tiles, etc. in the construction sector, and PVC pipes, hume pipes, wiring materials for low-tension systems, sanitary fixtures and the like in connection with utility installation, and all other items rely on imports. The main construction materials required in connection with this project will be procured in conformity with the plan shown in the followings, because there are problems of quality and supply in connection with some of the domestically manufactured products.

	Materials Procured in Sri Lanka	Materials Procured from Japan
Architectural	Gravel, Sand, Cement Concrete block Clay brick, Corrugated cement asbestos sheet, Ceramic Tile Glass, Paint	Reinforcing steel, Structural steel, Plywood for conc. form, Metal sash & door, Harware, Cement asbestos board, Gypsum board, Rockwool acoustic board, Plastic tile, Water proofing layer, etc.
Utility	Wire, PVC conduit Switch, Convenience Outlet	Wire, Lighting fixtures, Switch panel, Generator, PVC pipe, Valve, Faucet, Pump, FRP Reservoir tank and Elevated tank, Sanitary fixture, Refrigerating machine, Air-condition- ing units, Galvanized iron sheet, Insulation materials. Pre-fabricate type refrigerating and freezing room, etc.

Equipment for storing and distribution of medical supplies will be procured in Japan, because they are not manufactured in Sri Lanka in their totality. In connection with the selection of the materials and equipment, particular attention will be paid to the local maintenance system and to the ease of maintenance.

4.4 Project implementation schedule

The actual implementation of this project will occur after the Exchange of Notes between the governments of the two countries, referring to the grant aid of the Government of Japan for the implementation of the project. The project implementation schedule is described in the following, by dividing it into 3 main steps, detail design, bid and construction.

(1) Detail design

The agreement with the consultant will be signed immediately after the Exchange of Notes (E/N), in order to start the execution design. The bid documents will be drawn up by holding detailed deliberation on the detail design with the Sri Lankan authorities concerned, based on the Basic Design Study Report. Two months are expected to be required in this connection, and its completion is expected to be 3 months after the Exchange of Notes (E/N).

(2) Bid

Approximately 2 months are expected to be required for the sake of delivery of the bid documents and instructions, execution of the bid, evaluation of the offers, decision of the contractor, signature of the construction contract and commencement of the work, excluding such preliminary preparation steps as public announcement of the bid, pre-qualification of the bidders, etc.

(3) Construction

The construction will be started after the conclusion of the construction contract between the Government of Sri Lanka and the awarded bidder, with due approval of the Government of Japan. The construction work is expected to take approximately 14 months, and its completion is expected to be approximately 19 months after the Exchange of Notes.

4.5 Maintenance and Management Scheme

4.5.1 Administrative Structure

Medical supplies and equipment will be handled and stored more rationally and more efficiently concurrently with the improvement of the facilities and equipment, but the current systems for sorting and storing of the goods is assumed to remain untouched. Generally speaking, the existing personnel composition will be taken over as it is, and the new facilities will be operated with some minor personnel reshuffling, because the basic idea is to improve the work efficiency by making the most of the existing personnel instead of saving manpower by introducing mechanical equipment.

4.5.2 Operation and Maintenance Cost

The maintenance costs required during the first year (1988), calculated by making use of data obtained on the occasion of the field survey, mount to the following sums.

Approximate Estimate of Maintenance and Operation Expenses

1.	Personnel		Rs 6,054,900
2.	Travel and Transportation		237,300
3.	Stationery and Office consumables		93,000
4.	Communication		153,600
5.	Fuel, Light and Water		750,820
	1) City water	Rs 54,950	
	2) Electric power	656,470	
	3) Fuel	39,400	
6.	Vehicle maintenance		530,400
7.	Office equipment maintenance		31,000
8.	Consumables		39,500
9.	Others (Rental fee, Tax etc.)		129,100

T o t a l

Rs 8,019,620

The budget of the MSD for 1988 is expected to mount to Rs 7,972,000.

There is no conspicuous difference between the result of the trial calculation of the maintenance and control costs shown above and this expected budget, and therefore it is presumed that there is no obstacle to the operation of the project from this standpoint.

4.6 Approximate Estimate of Cost of Works to be undertaken by the Government of Sri Lanka		
1) Demolishing Work		
1.	Demolishing of existing stores and leveling the ground	Rs 679,000
2.	Demolishing of existing administration building and leveling the ground	Rs 824,000
	Sub-total	Rs 1,503,000
2) Construction of a guard's house		
		Rs 18,000
3) Outdoor work		
1.	Construction of gate and fence	Rs 120,000
2.	Gardening	Rs 150,000
	Sub-total	Rs 270,000
4) Infrastructure		
1.	Leading electric power into the site	Rs 457,000
2.	Leading telephone line into the site	Rs 300,000
	Sub-total.	Rs 757,000
5) Others		
1.	Charge for the building permission	Rs 15,000
2.	Customs clearance charge for construction materials	Rs 260,000
	Sub-total	Rs 275,000
	T O T A L	Rs 2,835,000 (₹18,625,000)

CHAPTER 5 PROJECT EVALUATION

5.1 Social Impact

The new facilities attach importance mainly to the storing of medical supplies, and have to function as a keystone for proper storage of medical supplies and equipment in Sri Lanka, through the incorporation of function required to fulfill the temperature conditions for proper storage of medical supplies of various kinds, and by improving the work efficiency through the introduction of rational storing systems.

- (1) The consolidation of a system able to realize stable distribution of medical supplies of good quality is particularly significant because it helps to solve a long overdue problem in the medical care field of Sri Lanka, and moreover it is expected to make substantial contribution in connection with the attainment of one of the goals of the medical care improvement program.
- (2) The Pharmaceutical Formulation Centre of Essential Drugs of the SPC for manufacture of essential drugs, which is being constructed at the present time, has the purpose of securing the stable supply of essential pharmaceutical drugs of good quality, through the domestic production of items that are currently relying on imports. Since the plan calls for delivery of 60% of its output to MSD, these facilities are indispensable for it to store and distribute these drugs without deteriorating their quality. Thus, the two cooperation projects to be implemented with the grant aid of the Government of Japan complement each other, and their synergistic effects are expected to achieve a satisfactory result.
- (3) The efficiency of both office work and distribution work will improve as a result of the centralization of the storage and distribution functions of medical supplies, and as a consequence it will be possible to promptly cope with requests of supply of pharmaceutical drugs.

As can be seen, it may safely be said that this project will make substantial contributions to the improvement of the health care of the people of Sri Lanka through the stable distribution of medical supplies of good quality to national and public medical institutions all over the country.

5.2 Economic and Financial Evaluation

The following effects of economic nature are expected to be brought about as a result of the realization of facilities provided with appropriate functions indispensable for storage of medical supplies and equipment, and the proper operation of these facilities.

- (1) It is presumed that most of the economic losses, consisting of quality deterioration and loss of effectiveness of medical supplies, unavailability for use and discarding due to expiration of period of validity and damage of containers, etc., caused by the inadequacy of the existing storing facilities, can be prevented through the construction of storing facilities equipped with appropriate functions for storing of medical supplies and equipment, and proper operation of these facilities.

As a matter of fact, a loss of Rs 19,958,360 against total expenditures for procurement of drugs amounting to Rs 1,201,973,253, which is equivalent to 1.66%, has been reported during the 1980-1984 period. The magnitude of this economic loss can be readily recognized when comparing it against MSD's operating expenditures of Rs 16,275,878 during the same period.

- (2) Conspicuous improvements in the transportation efficiency and saving of transportation costs, including fuel cost and maintenance expenditure, are expected as a consequence of the centralization of the facilities for storage and distribution of medical supplies and equipment, as well as strengthening of the transportation equipment.
- (3) As for the maintenance and operation cost of the project, the MSD budget for 1988, which is the year when the facilities of this project will start their operation, was estimated on the basis of the sum of the 1986 budget presented by the MSD to the survey team, and it was concluded that the obtained sum is sufficient to cope

with the expenditures calculated in section 4.6. Therefore, it is presumed that there is no problem in connection with the operation of the project.

(The calculated expenditures mount to Rs 8,019,620.--, and on the other hand the expected budget of the MSD mounts to Rs 7,972,000.--).

5.3 Executing and Operating Structure

Since the implementation of this project has long been a pending issue with the Government of Sri Lanka, the executing agencies including the Ministry of Health manifest extreme eagerness to realize it. Even though the existing organization and staff composition of MSD will be succeeded as the executing system, no problem is foreseen in operating the project since the facilities and equipment will be much more easier to operate than now as they will be renovated to more rational ones.

CHAPTER 6 CONCLUSION AND PROPOSITIONS

6.1 Conclusion

As can be seen, this project can be regarded as part of the efforts aimed at improving the health care level of the people that are being implemented in Sri Lanka. Public facilities for storing and distribution of medical supplies and equipment are playing a key role in the realization of the targets of the Government of Sri Lanka, and this project will be particularly significant in this connection. Moreover, it may safely be said that the contents of the project are appropriate from both economic and technical standpoints, because it is planned by taking into consideration the current technical level of Sri Lanka, so as to facilitate the future maintenance and administration. Such being the case, it is concluded that the implementation of this project is perfectly significant from the standpoints of its appropriateness and socio-economic impact.

It can be concluded that this project will make substantial contributions to the improvement of the medical care and health improvement of the people of Sri Lanka, through its contribution to the appropriate distribution of medical supplies and equipment in association with the medical care policy being implemented by the Government of Sri Lanka.

6.2 Propositions

(1) Measures should be taken to realize the correct use and to improve the administrative level of the facilities of the Central Store designed this time, through the perfect comprehension of the characteristics and functions of the storing systems, equipment and facilities, so as to make the most of the planned storage and distribution functions. In concrete terms, a perfect floor control should be carried out based on the basic concepts of order-discipline-cleanliness, and technical training should be implemented for correct operation of the facilities and equipment. The basic principles in connection with the goods stored in the Central Store should be careful and efficient handling to prevent losses and damages. Workers of the Central Store should be submitted to education programs referring to the following items, and supervision should be carried out to secure the implementation of the work methods taught therein.

- 1) Loading and unloading methods of the goods to and from the lorry on the occasion of the acceptance and issue.
- 2) Stacking method of the goods on pallets and lorries - efficient stacking, free of collapse and damage.
- 3) Orderly storing method with clear definition of the storing places, in order to facilitate the store and accurate pick-up of the goods.
- 4) Establishment of the basic policy for accurate acceptance inspection on the occasion of the arrival of the goods, orderly sorting and identification control of the goods, and accurate stocktaking method, for the sake of efficient and easy inventory control.
- 5) Preparation of the basic manual related to the distribution and control works of the warehouse, based on the aforestated considerations.

- (2) Proper transportation and storage are essential to secure the quality of the medical supplied during the distribution process, and in this connection it is desirable to fill up and improve the transportation equipment and the facilities for DDS.

- (3) Measures should be taken to make the most of the facilities of the Central Store at all times, and furthermore studies referring to the following aspects should be carried out in order to cope with the future increase in the volume of goods to be stored.
 - 1) Reduction of the lots carried into the Central Store at each time through the increase of the delivery frequency from supplies in order to shorten the period of stay of the goods in the storehouse, reduction of the quantities of goods stored at one time through the adjustment of the epochos of delivery of the goods from the suppliers, and measures to issue the goods from the Central Store shortly after their arrival.

 - 2) Revision of the storing and control system becomes particularly important when the inventory becomes large. In other words, shift to the storing and control system planned in conformity with a classification criteria based on the quantities of the various goods being stored will be required, by centralizing the arrangement of the storage equipment by function, so as to improve the storage efficiency based on the characteristics of each storage equipment.

APPENDIX

A P P E N D I X

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Appendix I Basic Design Survey

I-1 Members of the Survey Teams

(1) Basic Design Survey Team

Leader	Hironao SUZUKI	Head First Basic Design Study Division, Grant Aid Planning and Survey Department, Japan International Cooperation Agency
Administration planning for medical supply	Kenji YAMAKAWA	Assistant Director Pharmaceutical and Chemicals Safety Division, Pharmaceutical Affairs Bureau, Ministry of Health and Welfare
Architectural planning	Yasuchika NISHIJIMA	Chief Architect Architectural Department, Raymond Architectural Design Office, Inc.
Architectural designing	Akimoto TAKESHITA	Architect Architectural Department, Raymond Architectural Design Office, Inc.
Utilities planning	Hiroshi SUGIMOTO	Engineer Utilities Department, Raymond Architectural Design Office, Inc.
Distribution and Equipment planning	Yoshiaki MAKINO	Chief Consultant Distribution Department, JMC Consultants Inc.

(2) Draft Report Explanation Team

Leader	Mikio NAKAMURA	Deputy Head First Basic Design Study Division, Grant Aid Planning and Survey Department, Japan International Cooperation Agency
Architectural planning	Yasuchika NISHIJIMA	Chief Architect Architectural Department, Raymond Architectural Design Office, Inc.
Distribution and Equipment planning	Yoshiaki MAKINO	Chief Consultant Distribution Department, JMC Consultants Inc.

I-2 Survey Schedule

(1) Basic Design Survey Team

	Date		Place	Activity
1	Jan. 20 (Mon)			Tokyo -----(JL 719)---- Singapore
2	Jan. 21 (Tue)			Singapore --(SR 163)---- Colombo
3	Jan. 22 (Wed)	A.M. P.M.	JICA, Embassy of Japan EDR/MOF MOH UDA	Courtesy call and explanation of the survey schedule - Ditto - Courtesy call, discussion on the survey schedule Courtesy call
4	Jan. 23 (Thu)	A.M. P.M.	MOH MSD	Confirmation of the contents of request Confirmation of the function, organiza- tion & activities of MSD
5	Jan. 24 (Fri)	A.M. P.M.	MSD CDS	Field survey of the Project site & CDS at Deans Road Observation of other 3 CDS in Colombo
6	Jan. 25 (Sat)	A.M. P.M.		Observation of Madampe DDS & Hospital, and Sri Jayewardenepura General Hospital
7	Jan. 26 (Sun)			Observation of Peradenia Teaching Hos- pital & Kandy DDS
8	Jan. 27 (Mon)	A.M. P.M.		Observation of SPC Store Complex Observation of Colombo General Hospital and Bio Medical Engineering Unit
9	Jan. 28 (Tue)	A.M. P.M.	MSD MSD	Discussion on the Project, survey on procurement and distribution system of medical supplies & equipment Discussion of Draft Minutes
10	Jan. 29 (Wed)	A.M. P.M.	MSD ERD MSD	Confirmation of the matters discussed Discussed the Minutes Collection of data on distribution of medical supplies equipment
11	Jan. 30 (Thu)	A.M. P.M.	MSD Embassy of Japan MOH Embassy of Japan	Collection of data on distribution of medical supplies equipment Courtesy call to Ambassador and report- ing on progress of the field survey Discussion on the Minutes Meeting
12	Jan. 31 (Fri)	A.m. P.M.	MOH JICA MSD	Signing of the Minutes Reporting on progress of the survey Confirmation of the requirement for the facilities for the Project
13	Feb. 1 (Sat)	A.M. P.M.	MSD	Confirmation of the requirement for the utilities & equipment for the Project Collection of data & information related to construction

	Date		Place	Activity
14	Feb. 2 (Sun)			Compiling the matters discussed, data and information
15	Feb. 3 (Mon)	A.M.		Discussion on distribution of medical supplies and equipment, confirmation of the contents of discussion Collection of data & information related to construction
16	Feb. 4 (Tue)			Compiling contents of discussion and data
17	Feb. 5 (Wed)	A.M. P.M.	MSD	Confirmation contents of discussion Collection of data & information; visited Fire Dept., Survey Dept., etc
18	Feb. 6 (Thu)	A.M. P.M.	JICA Embassy of Japan	Reporting on the result of the survey - ditto -
19	Feb. 7 (Fri)	A.M. P.M.	MSD	Final meeting with MSD Colombo ----(TG 308)---- Bangkok
20	Feb. 8 (Sat)			Bangkok ----(JL 474)---- Tokyo

(2) Draft Report Explanation Team

	Date		Place	Activity
1	Apr. 21 (Mon)			Tokyo -----(UL 453)----- Colombo
2	Apr. 22 (Tue)	A.M.	JICA, Embassy of Japan	Courtesy call, explanation of the draft final report and deliberation on the schedule.
		P.M.	ERD	Courtesy call
			MOH	Courtesy call, presenting the draft final report and deliberation on the schedule.
			MSD	Curtesy call and explanation of the draft final report.
3	Apr. 23 (Wed)	A.M.	MOH	Explanation of the basic design, deliberation on the draft final report and Minutes.
		P.M.	MSD MOH	Preparation of Minutes Signing of Minutes
4	Apr. 24 (Thu)	A.M.	MSD	Supplemental explanation on the basic design and confirmation of the schedule for the preparatory work undertaken by Sri Lanka.
5	Apr. 25 (Fri)	A.M.	JICA, Embassy of Japan	Reporting on the result of the survey
		P.M.	MSD	Final meeting with MSD
6	Apr. 26 (Sat)			Collection of data and compiling contents of discussion
7	Apr. 27 (Sun)			Colombo -----(TG 308)----- Bangkok
8	Apr. 28 (Mon)			Bangkok -----(TG 640)----- Tokyo

I-3 Minutes of Discussions

(1) Basic Design Survey

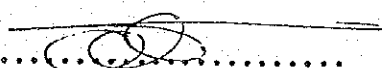
MINUTES OF DISCUSSIONS
ON
THE CONSTRUCTION PROJECT OF CENTRAL STORE FOR MEDICAL SUPPLIES
& EQUIPMENT IN THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

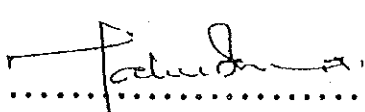
In response to the request of the Government of the Democratic Socialist Republic of Sri Lanka, the Government of Japan decided to conduct a basic design study on the construction project of the Central Store for Medical Supplies & Equipment (herein after referred to as "the Project"), and entrusted the study to the Japan International Co-operation Agency (JICA). JICA sent to Sri Lanka the Study Team headed by Mr. Hironao - Suzuki, Head of the First Basic Design Study Division, Grant Aid Planning & Survey Department, JICA from January, 20 to February 3, 1986.

The team had a series of discussions on the Project with the Officials concerned of the Government of the Democratic Socialist Republic of Sri Lanka headed by Dr. Malinga Fernando, Secretary, Ministry of Health and conducted a field survey in Colombo.

As a result of the study, both parties agreed to recommend to their respective Governments that the major points of understanding reached between them, attached herewith, should be examined towards the realization of the Project.

Jan 31
March, 30, 1986.


.....
Mr. Hironao Suzuki,
Leader,
The Basic Design Study Team,
J I C A.


.....
Dr. Malinga Fernando,
Secretary,
Ministry of Health.

1. The objective of the Project is to improve the present conditions of storing and distribution and to consequently ensure the proper and effective function in the supply of medical drugs and equipment to the users by accomodating modern and equipped facilities.

2. The site of the Project is located within the property of Ministry of Health at No. 355 Deans Road, Colombo 10, as shown in Annex I.

The site occupying approximately 2 Acres will exclusively be used for the Project.

3. Medical Supplies Division of Ministry of Health is responsible for the administration & execution of the Project.

4. The Japanese Study Team will convey to the Government of Japan the desire of Sri Lanka Government that the former takes necessary measures to cooperate by providing the building & other items listed in Annex II within the scope of Japanese economic co-operation programme in Grant form.

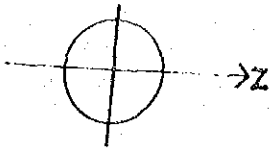
5. The Sri Lanka side has understood Japan's Grant Aid System explained by the Team which includes a principle of use of a Japanese Consultant Firm and Japanese General Contractor for the construction.

6. The Government of the Democratic Socialist Republic of Sri Lanka will take necessary measures listed in Annex III on condition that the Grant Aid would be extended to the Project.

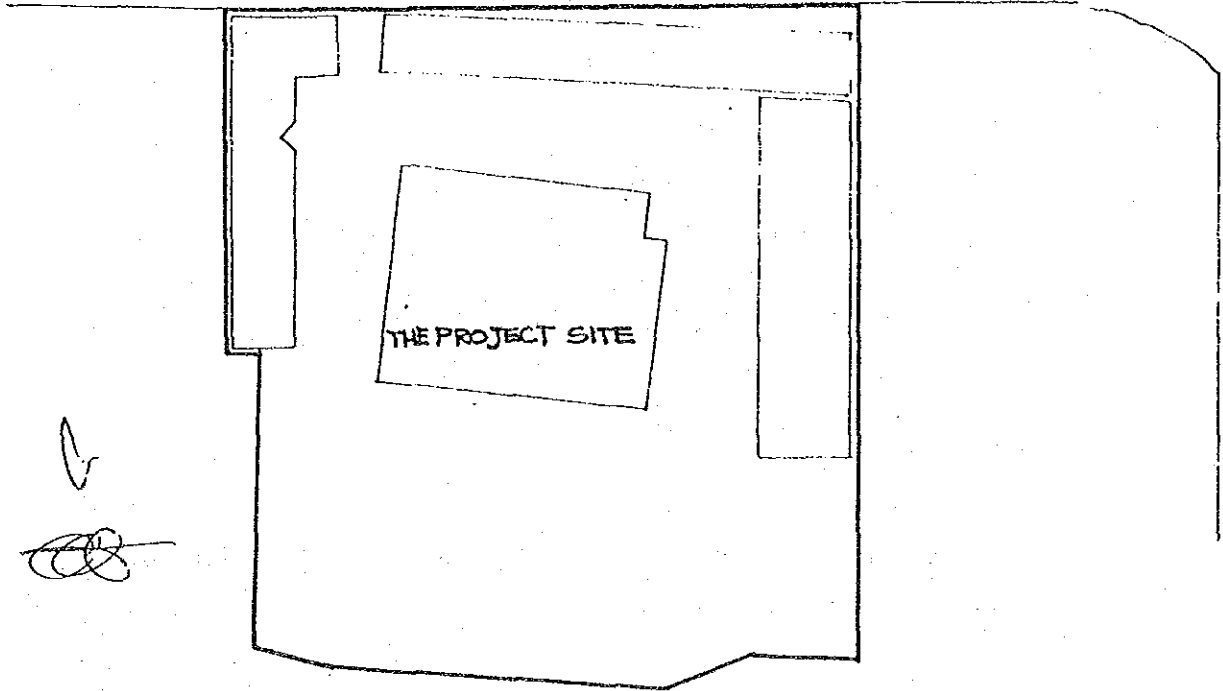
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ANNEX I

THE PROJECT SITE
NO. 355, DEANS ROAD, COLOMBO 10



DEANS ROAD



A N N E X II

Items requested by the Government of the Democratic Socialist Republic of Sri Lanka are as follows:-

1. Construction of Building for storing and distribution with:
 - 1) Cool room
 - 2) Freezer
 - 3) Special room for Narcotic & powerful drugs.
 - 4) Preparation room for mixture.
 - 5) Room for receiving, unpacking, packing and issuing.
 - 6) Truck berth.
 - 7) Administration office.
 - 8) Rest room.
 - 9) Meeting room.
 - 10) Workshop.
 - 11) Other necessary facilities.

2. Required ancillary facilities such as water supply, drainage electricity etc. including lift and inter communication system.

3. Equipment:
 - 1) Fork lift trucks.
 - 2) Racks and pallets.
 - 3) Other necessary equipment.
 - 4) Request was made by the Sri Lankan Authorities that 15 lorries 5 tons capacity be provided for transport to drugs from State Medical Stores to Divisional Drugs Stores. *at the moment*

A N N E X III:

The Government of the Democratic Socialist Republic of Sri Lanka will take necessary measures on the following matters:

- 1) To secure ^{approval of} building plan.
- 2) To secure a lot of land for the Project.
- 3) To clear, fill and level the site before commencement of the construction.
- 4) To remove the existing buildings.
- 5) To undertake incidental out-door works such as gardening, fencing, gates and exterior lighting in and around the site.
- 6) To provide facilities for distribution of electricity, water supply, telephone, drainage and other incidental facilities to the Project site.
 - 1) Electricity distributing line to the site.
 - 2) City water distribution main to the site.
 - 3) Drainage city main to the site.
 - 4) Telephone trunk line to the main distribution panel of building.
 - 5) General furniture such as carpets, curtains, tables, chairs and others.
- 7) To bear commissions to the Japanese foreign exchange bank for the banking services based upon the Banking Arrangement.
- 8) To ensure prompt unloading, tax exemption, custom clearance at Port of disembarkation in Sri Lanka.
- 9) To accord Japanese Nationals whose services may be required in connection with the supply of products and the services under the verified contract such facilities as may be necessary for their entry into Sri Lanka and stay therein for the performance of their work.
- 10) To maintain and use properly and effectively that the facilities constructed and equipment purchased under the Grant.
- 11) To bear all the expenses other than those to be borne by the Grant, necessary for construction of the facilities as well as for the transportation and the installation of the equipment.

(2) Draft Report Explanation

MINUTES OF DISCUSSIONS

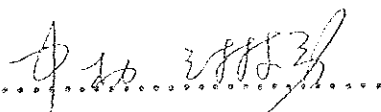
The Draft Final Report of the Basic Design Study
on
The Construction Project of the Central Store for
Medical Supplies and Equipment
in
The Democratic Socialist Republic of Sri Lanka

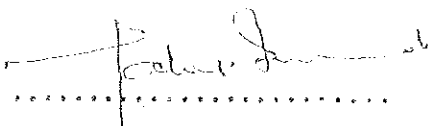
In response to the request made by the Government of the Democratic Socialist Republic of Sri Lanka for a grant aid for the Construction Project of the Central Store for Medical Supplies and Equipment in Sri Lanka (hereinafter referred to as "the Project"), the Government of Japan decided to conduct a basic design study on the Project and entrusted the study to the Japan International Cooperation Agency (JICA). JICA sent to Sri Lanka the team headed by Mr. Hironao SUZUKI, Head, First Basic Design Study Division, Grant Aid Planning and Study Department, JICA, from January 20th to February 5th, 1986.

As a result of the study, JICA prepared a Draft Report and despatched a team headed by Mr. Mikio NAKAMURA, Deputy Head, First Basic Design Study Division, JICA, to explain and discuss it with the relevant authorities of the Government of Sri Lanka from April 21st to 28th, 1986.

Both parties had a series of discussions on the Report and agreed to recommend to their respective Governments that the major points of understanding reached between them, attached herewith, should be examined towards the realization of the Project.

23th April, 1986


.....
Mr. Mikio NAKAMURA
Leader of
The Basic Design Study Team,
JICA;


.....
Dr. Malanga Fernando,
Secretary,
Ministry of Health,
SRI LANKA.

A T T A C H M E N T

1. Both parties agreed to reconfirm the Minutes of Discussion which was mutually signed on March 30, 1986.

2. The Sri Lanka side has agreed in principle to the basic design proposed in the Draft Final Report and appropriate alterations agreed upon during the discussions will be incorporated in the Final Report.

3. The Sri Lanka side understood Japan's grant aid system and the arrangement to be taken by the Sri Lanka side for realization of the Project.

4. The Final Report (10 copies in English) will be submitted to the Sri Lanka side by the end of May, 1986.



I-4 Names of Officials concerned in Sri Lanka

(1) Ministry of Health (MOH)

Dr. Malinga Fernando	Secretary Health
Dr. George Fernando	Deputy Director General, Dept. of Health Services
Dr. A.V.K.V. De Silva	Epidemiologist
Mr. F. Laffir	Manager, Computer Service Bureau

(2) Medical Supplies Division (MSD)

Mr. N.W.E. Wijewantha	Director
Mr. V. Velayuthampillai	Assistant Director
Mr. D.M.D.S. Chandrasiri	Assistant Director
Mr. R.D.S.C. Tillekerathne	Assistant Director
Mr. Rev. Gomez	

(3) Department of External Resources, Ministry of Finance and Planning

Mr. S. Keerapana	Assistant Director
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(4) Colombo General Hospital

Dr. Donald W. Abeysundera	Director
---------------------------	----------

(5) State Pharmaceutical Corporation (SPC)

Mr. Seneka Jayawickrama	General Manager
Mr. M.T. Fernando	Manager, Store Complex

(6) Urban Development Authority (UDA)

Mr. N.D. Dickson	Director, Planning
Mr. P. Gunawardena	Deputy Director, Planning

(7) National Building Research Organization

Mr. K.S. Senanayake	Senior Scientist, Social Division
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(8) Municipal Engineer's Department

Mr. K.T. Kanagasingham	Deputy Municipal Engineer, Water Supply and Drainage
Mr. S.G.V.D.H. Gunaserera	Superintending Engineer, Water Supply
Mr. Pallie	(Drawing office)

(9) Ceylon Electricity Board (CEB)

Mr. J. Perera	Planning Engineer
---------------	-------------------

- (10) Fire Service Department
Mr. K.D.B. Udugama Deputy Chief Officer
- (11) Embassy of Japan in Sri Lanka
Mr. Hiroshi Otaka Ambassador
Extraordinary and
Plenipotentiary
Councilor
Mr. Mitsuaki Kojima First Secretary
Mr. Yutaka Amino First Secretary
Mr. Mitsunori Itami Second Secretary
Mr. Yuichiro Hirano
- (12) Japan International Cooperation Agency, Colombo Office
Mr. Jiro Hashiguchi Director
Mr. Testuo Amagai Assistant Resident
Representative

Appendix II Collected Data

DAILY NEWS - November 6, 1985

Budget Estimates 1986

HEAD	MINISTRY	RECURRENT	CAPITAL	TOTAL
1-13	Department not grouped under Ministries	183,327	293,280	476,607
14-38	District Ministries	32,291	482,300	514,591
39-47	Defence	3,324,352	2,110,450	5,840,802
-48	Foreign Affairs	315,096	50,450	365,546
49-50	Plan Implementation	185,751	442,228	607,979
51-58	Lands & Land Development	358,662	1,375,933	1,734,595
61-69	Trade and Shipping	153,927	47,245	201,172
70-72	Education	3,596,691	521,064	4,117,755
74-75	Higher Education	401,693	618,800	1,020,493
77-78	Power and Energy	65,463	1,190,443	1,255,906
81-82	Labour	82,168	9,046	91,214
84-86	Public Administration	2,779,403	9,550	2,788,953
87-88	Rural Development	14,960	6,705	21,665
90-95	Local Govt., Housing & Construction	614,307	1,721,363	2,335,670
97-100	Industries & Scientific Affairs	106,550	33,888	140,438
102-110	Finance and Planning (See Below)	15,493,080	11,689,490	27,182,570
113-116	Transport	828,581	1,085,411	1,913,992
-117	Transport Boards	154,058	1,420	155,478
118-119	Private Omnibus Transports	3,243	1,800	5,043
-120	Plantation Industry	7,922	211,990	219,912
121-130	Justice	309,977	354,006	663,983
131-134	Agricultural Development & Research	434,371	554,303	988,674
136-137	Fisheries	52,118	234,000	286,118
-140	Mahaweli Development	255,764	3,450,130	3,705,894
-140	Youth Affairs & Employment	275,728	179,010	454,738
142-144	Rural Industrial Development	77,821	140,790	218,611
147-150	Posts & Telecommunications	807,586	731,185	1,538,771
-151	Health	1,762,660	400,389	2,163,049
-152	Women's Affairs & Teaching Hospitals	513,174	130,000	643,174
153-154	Indigenous Medicines	67,461	23,360	90,821
155-158	State	247,254	72,367	319,621
159-161	Social Services	2,165,892	7,334	2,173,226
162-166	Cultural Affairs	44,616	39,947	84,563
-168	Parliamentary Affairs & Sports	22,559	4,225	26,784
170-173	Food & Co-operatives	160,474	7,336	167,810
175-176	Textile Industries	41,776	54,171	95,947
-178	Coconut Industry	1,808	178,605	180,413
180-181	Regional Development	9,276	15,900	25,176
182-183	Highways	353,004	663,601	1,016,605
-185	Janatha Estates Development	1,096	269,975	271,071
-187	State Plantations	0,502	5,000	5,502
189-191	Home Affairs	303,600	14,600	318,200
-192	Rehabilitation	0,756	-	0,756
-193	Ministry without Portfolio	0,634	0,025	0,659
-194	National Security	2,712	559,905	562,617
-195	Security of Commercial Establishments	5,856	0,980	6,836
Total		37,000,000	30,000,000	67,000,000

Finance and Planning

Amounts include Public Debts and Miscellaneous Items.

	Recurrent	Capital	Total
Public Debts	9,227,629	7,134,933	16,362,562
Miscellaneous	5,841,660	4,443,875	10,285,535
Finance & Planning	423,791	110,882	534,673

II-2 Budget Estimates 1986 for Ministry of Health

MINISTRY OF HEALTH

	Estimate 1986
Programme I Recurrent Expenditure	166,964,000
Programme II - do -	986,629,000
Programme III - do -	<u>609,067,000</u>
	1,762,660,000
	20.36%
Programme I Capital Expenditure	66,422,000
Programme II - do -	164,082,000
Programme III - do -	<u>169,895,000</u>
	<u>400,389,000</u>
	16.59%
	<u><u>2,163,049,000</u></u>

- 1) The percentage from the total estimate for 1986, 16.59% have been allocated by the Government (including capital expenditure) for medical supplies.
- 2) 20.36% have been allocated by the Government from the total recurrent expenditure for 1986, in respect of medical supplies.

HEAD 151 - MINISTRY OF HEALTH (ESTIMATES 1986)

(1)

	DRUGS (a)	OTHERS (b)	C.T.D.&B.T.T. (c)	TOTAL
151-1-2-03-5 Regional Administration	30,000.00	10,000.00	4,000.00	44,000.00
151-1-3-03-5 Training & Scholarships	280,000.00	..	28,256.00	308,256.00
151-2-1-03-5 Provincial & Base Hosp.	117,000,000.00	20,000,000.00	10,900,000.00	147,900,000.00
151-2-2-03-5 District Hospitals including Cottage Hosp.	40,000,000.00	9,000,000.00	4,900,000.00	53,900,000.00
151-2-3-03-5 Peripheral Units & Rural Hospitals	24,000,000.00	4,000,000.00	2,812,000.00	30,812,000.00
151-2-4-03-5 Central Dispensaries & Maternity Homes	17,500,000.00	2,500,000.00	2,000,000.00	22,000,000.00
151-2-5-03-5 Specialized Hospitals	20,000,000.00	4,000,000.00	2,500,000.00	26,500,000.00
151-2-6-03-5 Laboratory & Other Diagnostic Services	5,000,000.00	5,000,000.00	1,000,000.00	11,000,000.00
151-2-7-03-5 National Blood Transfusion Services	6,100,000.00	450,000.00	671,000.00	7,221,000.00
151-2-8-03-5 Bio Medical Engineering Division	..	..	..	..
151-2-9-03-5 Quality Control Labl	..	200,000.00	20,000.00	220,000.00
151-2-10-03-5 Medical Research Institute	3,000,000.00	..	307,000.00	3,307,000.00
151-2-11-03-5 Assistance to Private Organisations & Local Authorities.	1,919,365.00	..	..	1,919,365.00
	234,829,365.00	45,160,000.00	25,142,256.00	305,131,621.00

	DRUGS (a)	OTHERS (b)	O.T.D.&B.T.T. (c)	TOTAL
151-3-1-03(5)	234,829,365.00	45,160,000.00	25,142,256.00	305,131,621.00
General Preventive Services & Environmental Sanitation	14,000,000.00	1,000,000.00	1,437,000.00	16,437,000.00
151-3-2-03	...	...	...	...
Health Education	...	...	...	...
151-3-3-03(5)	900,000.00	300,000.00	...	1,200,000.00
School Health including School Dental Health	250,000.00	...	...	250,000.00
151-3-4-03(5)	2,500,000.00	700,000.00	...	3,200,000.00
Malaria Control	180,000.00	180,000.00	37,000.00	397,000.00
151-3-5-03(5)	250,000.00	50,000.00	30,000.00	330,000.00
Venereal Diseases Control	2,985,000.00	15,000.00	300,000.00	3,330,000.00
151-3-6-03(5)	300,000.00	...	...	300,000.00
Rabies Control	300,000.00	...	...	300,000.00
151-3-7-03(5)	28,320,000.00	...	...	28,320,000.00
Venereal Diseases Control	28,320,000.00	...	...	28,320,000.00
151-3-8-03(5)	2,985,000.00	15,000.00	300,000.00	3,330,000.00
Rabies Control	300,000.00	...	...	300,000.00
151-3-9-03(5)	300,000.00	...	...	300,000.00
Food Quality Control	300,000.00	...	...	300,000.00
151-3-10-03(5)	28,320,000.00	...	...	28,320,000.00
Family Health	28,320,000.00	...	...	28,320,000.00
Total ...	<u>284,514,365.00</u>	<u>47,405,000.00</u>	<u>26,946,256.00</u>	<u>358,865,621.00</u>

Expenditure Incurred at the M.S.D for the Period 1/1/18 to 31/12/85

	1980	1981	1982	1984	1985	1986 Allocation
3/7 Uniform	3,145	4,151	7,657	-	-	32,000
04/1 Repairs and Maintenance of Office Equipment	7,785	13,151	8,930	31,751	7,540.40	24,153
04/2 Vehicles (Repairs and Maintenance)	82,380	55,191	66,631	106,763	94,206.74	300,000
5/1 Transportation	1,135,043	-	34,228	-	22,449.05	80,000
3/9(14) Sundries (Advertisements)	-	-	-	439	-	-
T o t a l	4,000,754	3,398,719	4,033,600	4,482,805	5,214,381	6,132,313

II-4 Quantity of Medical Supplies and Equipment to be Handled by Medical Supplies Division

Section A								
Serial Number	Name of Item	Unit	Balance 1/Jan./1986	1986 Estimate x 1/2	per Case	Number of Cases	Size of Case cm x cm x cm	Volume (m ³)
0028	Ammon Bicarbonate	kg	2,474.5	6,000	30	282	37.5 x 28.8 x 30.2	9.2
0007	Acid Citric	kg	3,891.5	3,500	40	185	37.5 x 28.8 x 30.2	6.0
0074*	Calx Chlorinata	kg	21,700	25,000	50	934	60 H x 20 radius (60 x 40 x 40)	89.7
0076	Calcium Lactate 300 mg	Tablet	55,385,000	40,000,000	50,000	1,908	52 x 30 x 53	157.8
0106	Creta Gallic	kg	1,000	7,000	25	320	60 x 37 x 15	10.7
0107	Creta Prepared	kg	3,550	3,000	25	262	60 x 37 x 15	8.7
0253	Magnesium Sulphate Crystals	kg	13,595	-	25	544	60 x 37 x 15	18.1
0376	Potassium Citrate	kg	3,585	5,000	40	215	57 x 35 x 23	9.9
0334	Yellow Soft Paraffin	kg	21,295	20,000	40	1,032	30 H x 20 radius (30 x 40 x 40)	49.5
0424	Sodium Bicarbonate	kg	9,900	10,000	50	398	76.2 x 40.6 x 15.2	18.7
0602	Dextrose	kg	4,101	3,500	20	380	57 x 35 x 23	17.4
1643	Ferrous Sulph. 200 mg	Tablet	2,850,000	25,000,000	60,000	464	52 x 30 x 53	38.4
1866	Aspirin 300 mg	Tablet	15,480,000	87,500,000	50,000	2,060	52 x 30 x 53	170.3
5517	Oral Rehydration Powder Pack	Packet	469,215	250,000	2,000	359	75 x 40 x 20	21.5
								625.9 m ³
								Except * 536.2 m ³

Section B

Serial Number	Name of Item	Unit	Balance 1/Jan./1986	1986 Estimate x 1/2	per Case	Number of Cases	Size of Case cm x cm x cm	Volume (m ³)
0021	Solvent Ether	Litre	26,381	12,500	20	1,944	37.5 x 28.8 x 30.2	63.4
0061	Benzyl Benzocate Application	Litre	63,206	-	20	3,160	57 x 35 x 23	145.0
0147	Extract of Liquorice BP	Litre	4,667.5	7,500	20	608	57 x 35 x 23	27.9
0230	Hydrogen Peroxide Solution (500 ml)	Litre	4,461.5	7,500	20	598	57 x 35 x 23	27.4
0250*	Cresol and Soap Solution	Litre	28,195	35,000	25	2,528	45 x 30 x 26	88.7
0332	Paraffin Liquid	Litre	6,635	8,500	20	757	37.5 x 28.8 x 30.2	24.7
1651	Piporazine Citrate Elixir	Litre	87,915	-	20	4,396	37.5 x 28.8 x 30.2	143.4
5040	Chlorhexidine with Cetrime Solution	Litre	79,400	12,500	20	4,595	37.5 x 28.8 x 30.2	149.9
								670.4 m ³ Except * 581.3 m ³

Section C-1 (Vitamins, Antibiotics)

Serial Number	Name of Item	Unit	Balance 1/Jan./1986	1986 Estimate x 1/2	per Case	Number of Cases	Size of Case cm x cm x cm	Volume (m ³)
0613	I.N.A.H. 100 mg.	Tablet	15,585,000	5,000,000	100,000	206	56.5 x 50.4 x 42.8	25.1
0634	Sodium Aminosalicilate 0.5 G	Tablet	2,200,000	-				
0639	Inj. Fortified Procaine Penicillin Vials	Vial	3,916,200	4,000,000	2,000	3,958	55 x 53 x 29	334.6
0640	Inj. Penicillin 1,000,000 unit Vials	Vial	5,980,025	3,500,000	2,000	4,740	55 x 53 x 29	400.7
0641	Inj. Penicillin 500,000 unit Vials	Vial	2,000,000	-	2,000	1,000	55 x 53 x 29	84.5
0726	Chloramphenicol 250 mg Cops	Capsule	3,120,000	3,000,000	50,000	122	56.5 x 50.4 x 42.8	14.9
1258	Inj. Streptomycin Sulphate 1 G. Vials	Vial	301,000	250,000	2,000	278	55 x 53 x 29	23.5
1259	Inj. Streptomycin Sulphate 5 G. Vials	Vial	295,900	300,000	1,000	596	55 x 53 x 29	50.4
1557	Phenoxymethyl Penicillin 125 mg	Tablet	2,664,000	26,500,000	60,000	486	56.5 x 50.4 x 42.8	59.2
1880	Tetracycline HCl 250 mg	Capsule	-	15,000,000	50,000	300	56.5 x 50.4 x 42.8	36.6
1896	Inj. Chloramphenicol Sodium Succinate 1G	Vial	16,200	100,000	1,000	116	30 x 26 x 26	2.4
1930	Erythromycin Stearate 250 kg	Tablet	107,000	2,250,000	50,000	47	56.5 x 50.4 x 42.8	5.7
1993	Syrop Penicillin Forte 125 ml	Bottle	3,484	2,500	12	499	35.5 x 33 x 27.9	16.3
5041	Benzathine Penicillin 1.2 mil.	Vial	400,400	200,000	2,000	300	55 x 53 x 29	25.4
5180	Grieseofulium 125 mg	Tablet	1,078,000	750,000	60,000	30.5	30 x 26 x 26	0.6
5209	Cloxacillin 250 mg	Capsule	1,086,000	3,500,000	50,000	92	56.5 x 50.4 x 42.8	11.2
5219	Ampicillin 250 mg	Capsule	7,400,000	10,000,000	50,000	348	56.5 x 50.4 x 42.8	42.4
5220	Inj. Ampicillin 250 mg	Ampule	220,600	1,250,000	2,000	735	55 x 53 x 29	62.1
								1,175.6 m ³

Section C-1

Serial Number	Name of Item	Unit	Balance 1/Jan./1986	1986 Estimate x 1/2	per Case	Number of Cases	Size of Case cm x cm x cm	Volume (m ³)
5221	Inj. Cloxacillin 250 mg	Ampule	90,000	500,000	2,000	295	55 x 53 x 29	24.9
5269	Inj. Ampicillin and Cloxacillin 2 ml	Vial	5,850	25,000	2,000	15	55 x 53 x 29	1.3
5271	Ampicillin Syrop 100 ml	Bottle	1,341.6	4,500	7.5	779	30.4 x 27.9 x 45.7	30.2
5272	Cloxacillin Syrop 60 ml	Bottle	314.4	400	7.5	95	30.4 x 27.9 x 45.7	3.7
5335	Rifampicin 300 mg	Capsule	900,000	350,000	25,000	50	35.5 x 20.3 x 60.9	2.2
5374	Inj. Gentamycin 40 mg	Ampule	76,393	75,000	2,000	76	55 x 53 x 29	6.4
5375	Rifampicin 150 mg	Capsule	1,082,000	1,000,000	25,000	83	35.5 x 20.3 x 60.9	3.6
0600	Folic Acid 5 mg	Tablet	15,391,000	12,500,000	100,000	279	30.4 x 50.8 x 30.4	13.1
0622	Multi Vitamin	Tablet	29,065,000	32,500,000	400,000	154	55 x 53 x 29	13.0
0675	Vitamin A & D	Capsule	9,408,000	10,000,000	100,000	194	35.5 x 20.3 x 60.9	8.5
0679	Inj. Vitamin B Complex	Vial	80,200	200,000	400	701	62.4 x 35.5 x 38	59.0
0680	Vitamin B Complex	Tablet	31,635,000	75,000,000	225,000	474	30.4 x 50.8 x 30.4	22.3
0751	Vitamin C 100 mg	Tablet	60,000	12,500,000	60,000	209	35.5 x 20.3 x 60.9	9.2
1889	Vitamin B Complex Strong	Tablet	1,515,000	1,500,000	300,000	10	30.4 x 50.8 x 30.4	0.5
1890	Vitamin C 500 mg	Tablet	1,357,000	1,000,000	50,000	47	55 x 53 x 29	4.0
0120		Ampule	344,000	2,000,000	2,000	1,172	30.4 x 35.5 x 60.8	76.9
								278.8 m ³

Section C-1 (X'ray Films and Chemicals)							Air-Condition Room	
Serial Number	Name of Item	Unit	Balance 1/Jan./1986	1986 Estimate x 1/2	per Case	Number of Cases	Size of Case cm x cm x cm	Volume (m ³)
5356	X'Ray Film 15 x 40 cm	Film	-	5,688	900	6	65 x 51 x 44	0.9
5357	X'Ray Films 35.6 x 35.6 cm	Film	34,650	56,250	900	101	67 x 44 x 45	13.4
5366	X'Ray Films 35.6 x 43.2 cm	Film	9,400	16,250	900	29	65 x 51 x 44	4.2
5475	X'Ray Films 30 x 24 cm	Film	124,800	157,500	1,500	188	93 x 38 x 35	23.3
5476	X'Ray Films 40 x 30 cm	Film	120,300	157,500	1,000	278	70 x 55 x 38	40.7
5423	X'Ray Films 18 x 24 cm	Film	26,475	56,250	2,000	41	63 x 33 x 50	4.3
5523	X'Ray Films 35.6 x 35.6 for Automatic Processing Packet	Film	250	4,825	900	6	67 x 44 x 45	0.8
5524	X'Ray Films 43 x 35 for Automatic Processing Packet	Film	-	3,900	900	4	65 x 51 x 44	0.6
5525	X'Ray Films 24 x 18 for Automatic Processing Packet	Film	19,700	15,650	2,000	18	63 x 33 x 50	1.9
5526	X'Ray Films 30 x 24 for Automatic Processing Packet	Film	103,000	87,500	1,500	127	93 x 38 x 35	15.7
5527	X'Ray Films 40 x 30 for Automatic Processing Packet	Film	89,950	62,500	1,000	152	70 x 55 x 38	22.2
								128 m ³

Section C-2 (Transfusion Fluids & External Preparations)

Serial Number	Name of Item	Unit	Balance 1/Jan./1986	1986 Estimate x 1/2	per Case	Number of Cases	Size of Case cm x cm x cm	Volume (m ³)
0293	Inj. Normal Saline 500 ml	Bottle	76,140	350,000	40	10,654	53 x 33 x 30	559.0
0582	Inj. Dextrose 50%	Ampule	61,600	200,000	340	769	53 x 38 x 30	46.5
0961	Inj. Protein Hydrolysate (Amigen) 500 ml	Bottle	1,710	5,000	12	559	34 x 25 x 30	14.3
1403	Inj. Hartman's Solution 500 ml	Bottle	31,340	25,000	40	1,409	53 x 33 x 30	73.9
1564	Inj. Dextrose 5% 500 ml	Bottle	114,240	400,000	40	12,856	53 x 33 x 30	674.6
1895	Inj. Darrows Solution 540 ml	Bottle	2,173	8,750	40	273	53 x 33 x 30	14.3
5044	Inj. Sodium Chloride 0.45% and Dextrose 5% BP in 500 ml	Bottle	25,008	-	12	2,084	34 x 25 x 20	35.4
5045	Inj. Sodium Chloride 0.18% and Dextrose 5%	Bottle	73,560	12,500	12	7,172	34 x 25 x 20	122.0
5248	Peritoneal Dialysis Solution	Bottle	70	13,500	30	452	53 x 33 x 30	23.7
5253	Inj. Mannitol 20% I.V. 250 ml	Bottle	-	15,000	12	1,250	34 x 25 x 20	21.3
								158.5 m ³

Section C-2 (Dressings)

Serial Number	Name of Item	Unit	Balance 1/Jan./1986	1986 Estimate 1/2	per Case	Number of Cases	Size of Case cm x cm x cm	Volume (m ³)
0051	Bandages Crepe 7.5 cms	Roll	58,176	39,000	144	675	48 x 30 x 20	19.4
0052	Bandages W.O.W 6.25 cms	Roll	618,672	1,440,000	3,600	572	72.5 x 60 x 66	164.2
0053	Bandages P.O.P 7.5 cms	Roll	53,040	30,000	120	692	48 x 30 x 38	37.9
0054	Bandages P.O.P 10.0 cms	Roll	65,040	18,000	120	692	48 x 30 x 48	47.8
0055	Bandages P.O.P 15.0 cms	Roll	48,000	27,000	60	1250	48 x 30 x 38	68.4
0105	Cotton Wool	kg	14,622	60,000	50	1492	71 x 53 x 68.5	384.6
0124	Bandages Elastic Adhesive 7.5 cms	Roll	53,928	30,000	144	583	53 x 40 x 27.9	34.5
0166	Cauze Absorbent BPC 90 cms	Meter	1,469,000	2,000,000	2,000	1735	76 x 45 x 45	267.0
0213	Lint Plain	Roll	28,650	-	100	286	84 x 51 x 38	46.6
0366	Plaster Adhesive 7.5 cms	Roll	48,010	25,000	120	608	70 x 30 x 40	51.1
0367	Plaster Adhesive 5.0 cms	Roll	48,240	25,000	180	407	61 x 25 x 30	18.6
0410	Sanitary Pads		696,960	1,000,000	2,880	589	107 x 53 x 84	280.6
0539	Wadding Cellulose	kg	4,661	-	15	310	71 x 40 x 43	37.9
5173	Disposable Giving Sets	Set	817,785	300,000	10,000	112	99 x 61 x 61	41.3
								1,499.0 m ³

Section C-3

Serial Number	Name of Item	Unit	Balance 1/Jan./1986	1986 Estimate x 1/2	per Case	Number of Cases	Size of Case cm x cm x cm	Volume (m ³)
0444	Sulphadiazine 0.5 G	Tablet	2,843,000	1,500,000	35,000	124	50 x 29 x 29	5.2
0448	Sulphamexathine 0.5 G	Tablet	58,135,000	20,000,000	35,000	2,232	50 x 29 x 29	93.9
0590	Ephedrine Hydrochlor 15 mg	Tablet	20,309,000	5,000,000	100,000	253	50 x 29 x 29	10.6
0612	Diethylcarbonazine 50 mg	Tablet	13,038,000	6,000,000	100,000	190	50 x 29 x 29	8.0
0699	Iodochloro-hydroxyquin 250 mg	Tablet	4,604,000	3,000,000	60,000	127	50 x 29 x 29	5.3
0713	Promethazine Hydrochloride	Tablet	1,926,500	7,000,000	500,000	18	50 x 29 x 29	0.8
0728	Phenytioin Sodium 100 mg	Capsule	4,325,000	7,500,000	50,000	237	50 x 29 x 29	10.0
0730	Theophylline & Ethylenediamine	Tablet	3,127,000	6,000,000	80,000	114	50 x 29 x 29	4.8
1297	Benzhexol 2 mg	Tablet	6,223,000	4,875,000	100,000	111	50 x 29 x 29	4.7
5177	Chlompromazine Hcl 50 mg	Tablet	3,285,000	10,000,000	100,000	133	52 x 29 x 29	5.8
1872	Tolbutamide 0.5 G	Tablet	4,601,000	6,000,000	50,000	212	52 x 30 x 53	17.5
1888	Phenibutazone 100 mg	Tablet	2,047,000	6,000,000	50,000	161	43 x 43 x 42	12.5
1921	Aluminium Hydroxide 500 mg	Tablet	9,146,000	8,500,000	50,000	353	52 x 30 x 53	29.2
1927	Hydro-Chlorothiazide 50 mg	Tablet	2,410,000	4,500,000	40,000	173	52 x 30 x 53	14.3
5051	Chloropropamide 100 mg	Tablet	1,804,000	5,000,000	100,000	68	50 x 29 x 29	2.9
5093	Metronidazole 200 mg	Tablet	469,000	4,000,000	40,000	112	52 x 30 x 53	9.3
5112	Trifluperacine 5 mg	Tablet	4,425,000	9,000,000	100,000	134	50 x 29 x 29	5.6
5143	Paractamol	Tablet	13,587,000	35,000,000	30,000	1,620	52 x 30 x 53	134.0
								374.4 m ³

Section C-3 (Tablets & Capusoles)

Serial Number	Name of Item	Unit	Balance 1/Jan./1986	1986 Estimate x 1/2	per Case	Number of Cases	Size of Case cm x cm x cm	Volume (m ³)
5185	Potassium Chloride Slow	Tablet	911,500	4,250,000	30,000	172	52 x 30 x 53	14.2
5194	Chlorphoniramine Maleate 4 mg	Tablet	14,858,000	25,000,000	100,000	399	50 x 29 x 29	16.8
5202	Methyl Dopa	Tablet	377,000	4,000,000	60,000	73	50 x 29 x 29	3.1
5046	Ephedrine Compound	Tablet	6,613,000	12,500,000	60,000	319	52 x 30 x 53	26.4
5210	Frusamide 40 mg	Tablet	361,000	4,000,000	100,000	44	52 x 30 x 53	3.6
5225	Propranolol 40 mg	Tablet	2,539,000	3,000,000	60,000	92	38 x 38 x 42	5.6
5259	Furazolidone 100 mg	Tablet	4,228,000	5,000,000	60,000	154	52 x 30 x 53	12.7
5260	Diazapan 5 mg	Tablet	749,000	7,000,000	100,000	77	38 x 38 x 42	4.7
5324	Indomethazine 25 mg	Capsule	46,000	4,020,000	50,000	81	38 x 38 x 42	4.9
5336	Ethambutal 400 mg	Tablet	4,224,000	4,250,000	20,000	424	38 x 38 x 42	25.7
695	Chloroquine 250 mg	Tablet	10,700,000	10,000,000	60,000	345	38 x 38 x 42	20.9
1711	Primaquine 7.5 mg	Tablet	5,190,000	5,000,000	100,000	102	38 x 38 x 42	6.2
								144.8 m ³

Section C-4 (Injections)

Serial Number	Name of Item	Unit	Balance 1/Jan./1986	1986 Estimate x 1/2	per Case	Number of Cases	Size of Case cm x cm x cm	Volume (m ³)
0046	Inj. Atropine Sulph 0.6 mg	Ampule	7,300	187,500	10,000	19	71.1 x 45.7 x 55.8	3.4
0137	Inj. Ergometrine Maleate 0.5 mg	Ampule	309,500	175,000	10,000	48	71.1 x 45.7 x 55.8	8.7
0193	Inj. Adrenaline (Multi Dose) 30 ml	Vial	3,425	10,000	300	45	66 x 35.5 x 38.1	4.0
0669	Inj. Thiopentone Sodium 1.0 G	Vial	7,650	55,000	500	125	66 x 35.5 x 38.1	11.2
0670	Inj. Thiopentone Sodium 0.5 G	Vial	5,950	37,500	500	87	66 x 35.5 x 38.1	7.8
0729	Inj. Theophy line & Ethylenediamine	Ampule	54,520	90,000	2,000	72	30.8 x 35.5 x 60.9	4.8
1639	Inj. Chlpropromazine 50 mg	Ampule	110,453	75,000	6,000	31	71.1 x 45.7 x 55.8	5.6
1745	Inj. Iron Dextran 2 ml	Ampule	375,912	150,000	4,000	98	60.9 x 45.7 x 38.4	10.5
1976	Inj. Neostigmine Methysulphate	Ampule	54,500	125,000	6,000	11	71.1 x 45.7 x 55.8	2.0
5065	Inj. Hydrocortisone Sodium	Vial	169,850	300,000	1,800	261	58.4 x 58.4 x 35.5	31.6
5074	Halothane 250 ml	Bottle	5,851	4,000	24	410	50.8 x 35.5 x 22.8	16.9
5114	Inj. Pralidoxime	Vial	36,827	10,000	400	117	66 x 35.5 x 38.1	10.4

Section C-4

Serial Number	Name of Item	Unit	Balance 1/Jan./1986	1986 Estimate x 1/2	per Case	Number of Cases	Size of Case cm x cm x cm	Volume (m ³)
5163	Inj. Promethazine Hyd	Ampule	217,650	10,000	2,500	91	99 x 55 x 32	15.9
5222	Frusimide	Ampule	342,081	350,000	4,000	173	50.8 x 35.5 x 28.8	9.0
5245	Sodium Bicarbonate 250 ml	Ampule	70,945	25,000	2,500	38	55.0 x 40.0 x 33.0	2.8
5263	Inj. Dexamethasone 1 mg	Ampule	292,238	250,000	2,000	271	99.0 x 55.0 x 32.0	47.2
5274	Inj. Diazepam 10 mg 2 ml	Ampule	106,300	300,000	8,000	51	71.1 x 45.7 x 55.8	9.2
5414	Inj. Lignocaine with Adrenalin 30 mg	Ampule	76,475	17,500	325	289	66.0 x 35.5 x 38.1	25.8
5496	Inj. Metronidazole 100 ml	Bottle	-	25,000	48	520	50.8 x 35.5 x 22.8	21.4
								231.3 m ³

Section C-4 (Vaccines and Sera)

2 - 4°C

Serial Number	Name of Item	Unit	Balance 1./Jan./1986	1986 Estimate x 1/2	per Case	Number of Cases	Size of Case cm x cm x cm	Volume (m ³)
0385	Inj. Oxytocin (Synthetic)	Ampule	26,200	200,000	3,000	75	47 x 36 x 38	4.8
0560	Inj. Anti Venom Serum 10 cc	Ampule	11,650	11,000	800	28	52 x 41 x 38	2.3
0720	Inj. Tubocurarine 1.5 ml	Ampule	38,137	27,500	3,400	19	47 x 36 x 38	1.2
1072	Inj. Soluble Insulin 40 unit	Vial	2,741	12,500	324	47	37 x 28 x 19	0.9
1503	Inj. Insulin 80 unit 10 ml	Vial	10,704	9,500	324	62	37 x 28 x 19	1.2
1598	Inj. Succinyl Choline 100 mg 2 ml	Ampule	88,260	67,500	1,500	104	47 x 36 x 38	6.7
1851	Inj. Insulin Zinc Suspension 40 unit	Vial	47,084	75,000	324	337	37 x 28 x 19	7.4
5020	Inj. Histamine Acid Phosphate	Ampule	1,229,570	-	3,000	410	84 x 53 x 32	58.4
5348	Inj. Insulin Lente 80 unit	Vial	43,863	62,500	324	328	37 x 28 x 19	6.5
								89.1 m ³

Section OP

Serial Number	Name of Item	Unit	Balance 1/Jan./1986	1986 Estimate x 1/2	per Case	Number of Cases	Size of Case cm x cm x cm	Volume (m ³)
0074	Calx Chlorinata	kg	21,700	25,000	50	934	60 H x 20 hadius (60 x 40 x 40)	89.7
0250	Cresol and Soap Solution	Letre	28,195	35,000	25	2,528	45 x 30 x 26	88.7
	Formalin							15.0
	Morphine							2.0
	Opium							1.0
	Pethedine							5.0

II-5 Quantity of Vaccines to be stored in the Central Store

My No: EPI/35/84
Epidemiological Unit,
385, Deans Road,
Colombo 10,
29.01.86

Mr. E. Wijewantha,
Director,
Medical Supplies Division,

COLD ROOM REQUIREMENTS FOR VACCINES AT
S.M. STORES EXPANDED PROGRAMME
ON IMMUNIZATION - EPI

Further to the discussion with you and the Japanese Team,
I am forwarding the Cold Room requirements.

In addition to the nett vaccine storage requirements,
space is needed for loose packing, air movement and walk around
space ie. Grossing factor.

The cold rooms should be of two types and the requirements
are as follows:

<u>Type of Cold Room</u>	<u>Vaccine Stored</u>	<u>Gross capacity</u>
+4° C to +8° C	B.C.G. DT, TT, DPT	60 m ³
-20° C	Measles , OPV	30 m ³

Sgd/- Dr. A.V.K. de Silva,
Epidemiologist.

Estimated Quantity of 6 month supply of Vaccines

<u>+4 °C +8 °C</u> Vaccine	<u>No of doses</u> <u>in each box</u>	<u>Size of box</u> <u>in cms</u>	<u>6 month</u> <u>supply of vaccine</u>	<u>No of</u> <u>Boxes</u>
1. B.C.G.	80,000	70x56x55	1 million doses	13
2. D.P.T.	19,000	63x40x56	1 million doses	53
3. D.T.	30,000	50x40x60	300,000 doses	10
4. T.T.	25,000	53x31x45	1 million doses	40
<u>-20 °C</u>				
5. Polio	16,000	35x40x50	1 million doses	63
6. Measles	14,000	70x61x48	250,000 doses	18

II-6 Particulars of Vehicles in MSD

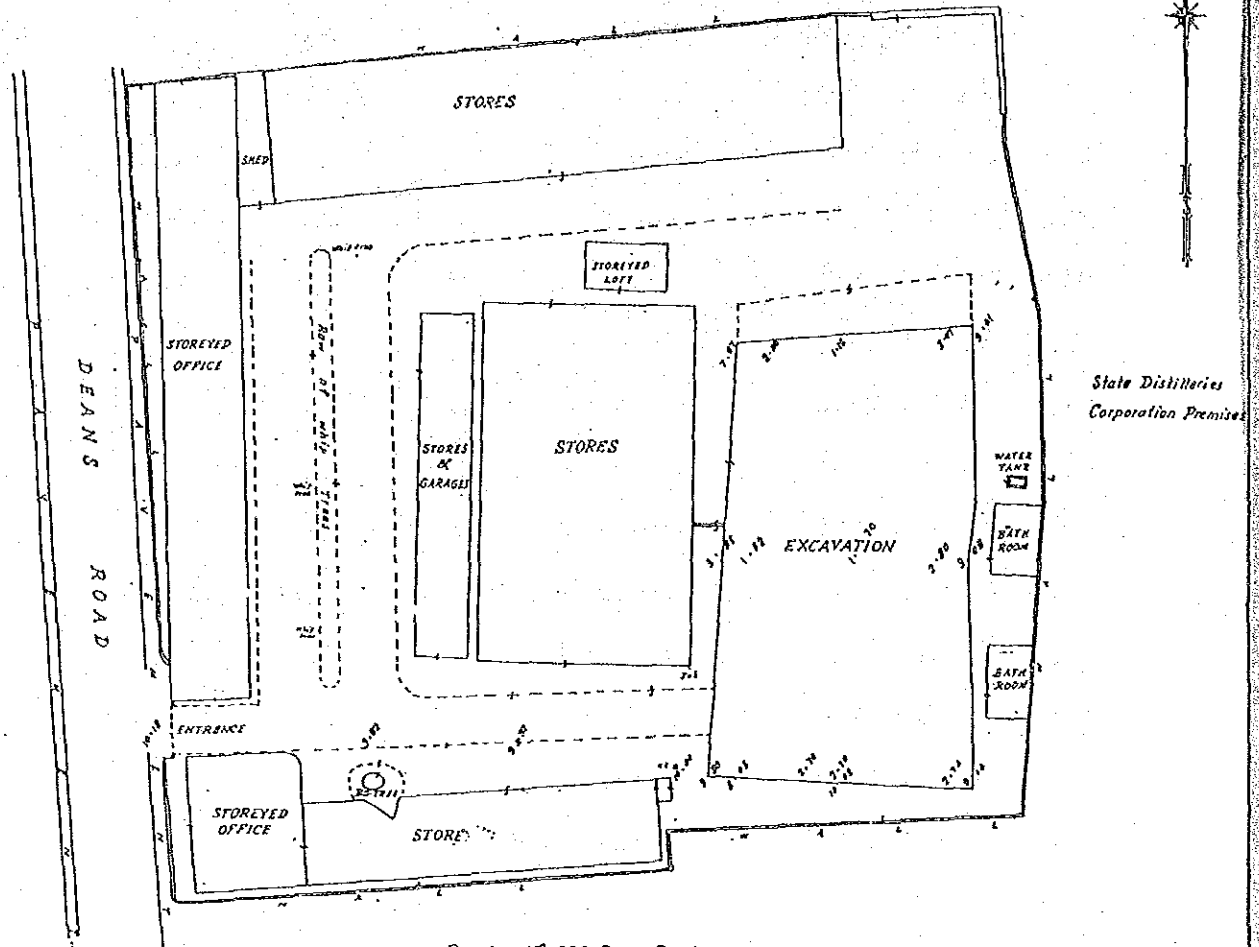
Particulars of Vehicles in M.S.D.

	<u>Registration No.</u>	<u>Make</u>	<u>Type</u>	<u>Age</u>	<u>Weight</u>
01.	26 Sri 1362	DAC	Lorry	9	5 tons
02.	26 Sri 3160	-do-	-do-	-do-	-do-
03.	26 Sri 3162	-do-	-do-	-do-	-do-
04.	26 Sri 3163	-do-	-do-	-do-	-do-
05.	28 Sri 2949	Isuzu Elf	-do-	7 Yrs.	3½ tons
06.	28 Sri 2720	-do-	-do-	-do-	-do-
07.	28 Sri 2951	-do-	-do-	-do-	-do-
08.	40 Sri 7501	Isuzu NHR	Pick Up Van	1 Yr.	below 20 c.wts.
09.	60 Sri 519	Nissan	-do-	6 Yrs.	-do-
10.	31 Sri 3783	Mitsubishi	Jeep	6 Yrs.	-do-
11.	31 Sri -3793	-do-	-do-	-do-	-do-
12.	8 Sri 1467	Peugeot 104	Car	9 Yrs.	-do-
13.	8 Sri 1228	Peugeot 405	-do-	-do-	-do-

M. T. Setunga, F.S.I.
 Licensed Surveyor & Leveller
 Court Commissioner & Valuer
 No. 5, Sri Dhammadara Mawatha
 Ralmalana.
 T. Phone 717287

PLAN No. 2477

Premises bearing Assmt. No. 315,
 Deans Road



State Distilleries
 Corporation Premises

Premises No. 385, Deans Road,
 Department of Health

Scale : 1 : 500

PLAN

of premises bearing Assmt. No. 355, Deans Road, Maradana Comprising of offices and stores of the Medical Supplies Division, Department of Health. Situated along Deans Road, within the Municipal Council Limits of Colombo.

COLOMBO DISTRICT

WESTERN PROVINCE

Bounded as follows.

North by Premises bearing Assmt. No. 315, Deans Road.

East by State Distilleries Corporation premises.

South by Premises bearing Assmt. No. 385, Deans Road of the Department of Health.

West by Deans Road.

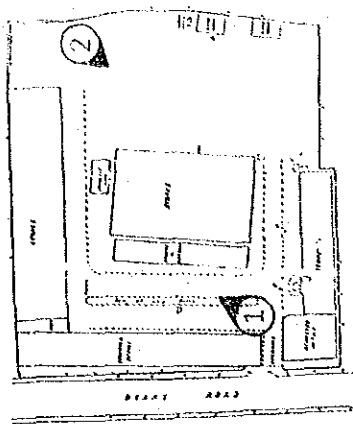
Containing in Extent 0.8600 Ha. (2 Acres, 0 Roods, 19.87 Perches)

Heights shown herein are on Assmed Datum of 10.00 feet.

Surveyed and Levelled on 5th Feb. 1986.

M. T. Setunga
 Licensed Surveyor & Leveller

PROJECT SITE



1-West Side



2-East Side

JICA