

7. Equipment List by Facility

Equipment list by facility

Project No.	Spec No	Description	Qty Planned
LETABA REGIONAL HOSPITAL			
CASUALTY			
H-L-A-01	38	Instrument set for treatment	4
SPECIALISED OPD			
H-L-B-01	43	Electrocardiograph, 6 channel	1
H-L-B-02	51	Ultrasonic nebulizer	1
H-L-B-03	38	Instrument set for treatment	2
H-L-B-04	19	Trial lens set	1
GENERAL OPD			
H-L-C-01	41	Diagnostic set	4
H-L-C-02	18	Blood pressure monitor	2
H-L-C-03	38	Instrument set for treatment	4
H-L-C-04	10	Instrument cabinet	4
H-L-C-05	9	Instrument cart	4
H-L-C-06	23	Dental unit	2
H-L-C-07	54	Instrument set for dental treatment	4
PAEDIATRIC			
H-L-D-01	4	Infant warmer	1
H-L-D-02	64	Infusion pump	2
H-L-D-03	2	Laryngoscope set for infant	1
H-L-D-04	3	Laryngoscope set for adult and paediatric	1
H-L-D-05	40	Neonatal monitor	1
H-L-D-06	21	Oxygen tent	1
H-L-D-07	7	Phototherapy unit	1
H-L-D-08	46	Resuscitation set for infant	1
H-L-D-09	45	Resuscitation set for adult and paediatric	1
H-L-D-10	13	Suction unit, portable	2
H-L-D-11	51	Ultrasonic nebulizer	2
H-L-D-12	10	Instrument cabinet	1
H-L-D-13	38	Instrument set for treatment	2
GYNAECOLOGY / OBSTETRICS			
H-L-E-01	53	Doppler fetus detector	2
H-L-E-02	59	Instrument set for delivery	4
H-L-E-03	14	Vacuum extractor	1
H-L-E-04	58	Cardiotocograph	1
H-L-E-05	22	Instrument set for Obstetric/Gynaecology examination	2
H-L-E-06	57	Bilirubinmeter	1
RADIOLOGY			
H-L-F-01	6	X-ray protection set	1
H-L-F-02	5	X-ray apparatus, basic screening unit	1
OPERATION THEATRE			
H-L-G-01	30	Operation instrument set for appendectomy	2
H-L-G-02	26	Operation instrument set for finger bone	1
H-L-G-03	24	Operation instrument set for gastrectomy	1
H-L-G-04	32	Operation instrument set for hand surgery	1
H-L-G-05	27	Operation instrument set for nephrectomy	1
H-L-G-06	28	Operation instrument set for prostetectomy	1
H-L-G-07	29	Operation instrument set for cholecystotomy	1
H-L-G-08	31	Operation instrument set for caesarean section	4
H-L-G-09	25	Operation instrument set for general surgery	4
H-L-G-10	44	Instrument set for biopsy	2
CSSD			
H-L-H-01	20	High pressure steam sterilizer	1
ICU / REANIMATION			
H-L-I-01	64	Infusion pump	4

Equipment list by facility

Project No.	Spec No	Description	Qty Planned
Dr. C.N. PHATUDI DISTRICT HOSPITAL			
CASUALTY			
H-P-A-01	15	Emergency cart	1
H-P-A-02	33	Defibrillator	1
H-P-A-03	38	Instrument set for treatment	2
H-P-A-04	1	Operation light, mobile with battery back up	1
H-P-A-05	55	Pulse oxymeter	1
H-P-A-06	12	Suction unit, 3L	1
H-P-A-07	3	Laryngoscope set for adult and paediatric	1
H-P-A-08	2	Laryngoscope set for infant	1
OPD (OUTPATIENT DEPARTMENT)			
H-P-C-01	43	Electrocardiograph, 6 channel	1
H-P-C-02	18	Blood pressure monitor	1
H-P-C-03	50	Ultrasound scanner	1
H-P-C-04	38	Instrument set for treatment	2
H-P-C-05	10	Instrument cabinet	2
PAEDIATRIC			
H-P-D-01	4	Infant warmer	1
H-P-D-02	64	Infusion pump	1
H-P-D-03	40	Neonatal monitor	1
H-P-D-04	7	Phototherapy unit	1
H-P-D-05	46	Resuscitation set for infant	1
H-P-D-06	45	Resuscitation set for adult and paediatric	1
H-P-D-07	13	Suction unit, portable	2
H-P-D-08	51	Ultrasonic nebulizer	1
H-P-D-09	10	Instrument cabinet	1
H-P-D-10	38	Instrument set for treatment	1
Gynaecology / OBSTETRICS			
H-P-E-01	53	Doppler fetus detector	2
H-P-E-02	59	Instrument set for delivery	4
H-P-E-03	47	Resuscitation set for adult	1
H-P-E-04	46	Resuscitation set for infant	1
H-P-E-05	12	Suction unit, 3L	2
H-P-E-06	58	Cardiotocograph	1
H-P-E-07	22	Instrument set for Obstetric/Gynaecology examination	2
H-P-E-08	57	Billirubinmeter	1
OPERATION THEATRE			
H-P-G-01	45	Resuscitation set for adult and paediatric	1
H-P-G-02	30	Operation instrument set for appendectomy	2
H-P-G-03	31	Operation instrument set for caesarean section	4
H-P-G-04	25	Operation instrument set for general surgery	4
H-P-G-05	44	Instrument set for biopsy	2
H-P-G-06	64	Infusion pump	1
DENTAL			
H-P-C-01	23	Dental unit	1
H-P-C-02	54	Instrument set for dental treatment	2

Equipment list (vehicle)

Project No.	Spec No	Local Aea	Mobile Clinic	Type of vehicle to be renewed (year)	Q'ty Planned
MCL-01A	37	Tzaneen Local Aea	Deerpark	Mazda 323(1989)	1
MCL-01B	37	Mgodeni Grace HC	Mugodeni	Toyota Venture (1996)	1
MCL-01C	37	Julesburg HC	Julesburg	Toyota Venture (1992)	1
MCL-01D	37	Shilvana HC	Shilvana	Toyota Venture (1992)	1
MCL-01E	37	Nkowankowa HC	Nkowankow	Toyota Venture (1993)	1

8. Equipment List by Equipment

List of Equipment

Spec No.	Description	Q'ty Planned						
		Grand Total	LTB	CNP	Sub Total	HC	CL	Sub Total
1	Operation light, mobile with battery back up	1		1	1			0
2	Laryngoscope set for infant	2	1	1	2			0
3	Laryngoscope set for adult and paediatric	2	1	1	2			0
4	Infant warmer	4	1	1	2	2		2
5	X-ray apparatus, basic screening unit	1	1		1			0
6	X-ray protection set	1	1		1			0
7	Phototherapy unit	2	1	1	2			0
8	Audiometer	5			0	5		5
9	Instrument cart	4	4		4			0
10	Instrument cabinet	8	5	3	8			0
11	Tuning fork	31			0	4	27	31
12	Suction unit, 3L	3		3	3			0
13	Suction unit, portable	9	2	2	4	2	3	5
14	Vacuum extractor	1	1		1			0
15	Emergency cart	1		1	1			0
16	Glucose meter	31			0	4	27	31
17	Sphygmomanometer	93			0	12	81	93
18	Blood pressure monitor	31	2	1	3	4	24	28
19	Trial lens set	1	1		1			0
20	High pressure steam sterilizer	1	1		1			0
21	Oxygen tent	1	1		1			0
22	Instrument set for Obstetric/Gynaecology examination	4	2	2	4			0
23	Dental unit	3	2	1	3			0
24	Operation instrument set for gastrectomy	1	1		1			0
25	Operation instrument set for general surgery	8	4	4	8			0
26	Operation instrument set for finger bone	1	1		1			0
27	Operation instrument set for nephrectomy	1	1		1			0
28	Operation instrument set for prostatectomy	1	1		1			0
29	Operation instrument set for cholecystotomy	1	1		1			0
30	Operation instrument set for appendectomy	4	2	2	4			0
31	Operation instrument set for caesarean section	8	4	4	8			0
32	Operation instrument set for hand surgery	1	1		1			0
33	Defibrillator	1		1	1			0
34	Dressing trolley	6			0		6	6
35	Snellen's chart, literate	31			0	4	27	31
36	Snellen's chart, illiterate	31			0	4	27	31
37	Vehicle for mobile clinic	5			0	5		5
38	Instrument set for treatment	48	12	5	17	4	27	31
39	Examination light	12			0		12	12
40	Neonatal monitor	2	1	1	2			0
41	Diagnostic set	66	4		4	8	54	62
42	Weighing and height scale	37			0	8	29	37
43	Electrocardiograph, 6 channel	2	1	1	2			0
44	Instrument set for biopsy	4	2	2	4			0
45	Resuscitation set for adult and paediatric	34	1	2	3	4	27	31
46	Resuscitation set for infant	34	1	2	3	4	27	31
47	Resuscitation set for adult	1		1	1			0
48	Digital thermometer	35			0	8	27	35
49	Weighing scale for infant	31			0	4	27	31
50	Ultrasound scanner	1		1	1			0
51	Ultrasound nebulizer	4	3	1	4			0
52	Stethoscope	141			0	50	91	141
53	Doppler fetus detector	4	2	2	4			0
54	Instrument set for dental treatment	6	4	2	6			0
55	Pulse oxymeter	1		1	1			0
56	Peak flow meter	66			0	12	54	66
57	Bilirubinmeter	2	1	1	2			0
58	Cardiotocograph	2	1	1	2			0
59	Instrument set for delivery	42	4	4	8	7	27	34
60	Delivery bed	3			0		3	3
61	Hemoglobinmeter	31			0	4	27	31
62	Autoclave	28			0	4	24	28
63	Medicine cabinet	9			0		9	9
64	Infusion pump	8	6	2	8			0
65	Reflex hammer	31			0	4	27	31

9. Cost Estimation Borne by the Recipient Country

10. Reference

Reference

No.	Title	Form	Original/Copy	Source	Year
1	Vote 7: Health, Strategic Plan 2003/04 and MTEF	Book	Original	Department of Health and Welfare, Limpopo Province	2003
2	Vote 7: Health, Annual Report 2002	Book	Original	Department of Health and Welfare, Limpopo Province	2002
3	Budget Statements 2003-2004	Book	Original	Limpopo Province Government	2003
4	Budget Statements 2002-2003	Book	Original	Northern Province Government	2002
5	National Planning Initiative: Strategic Position Statement of the Department of Health, Northern Province	Book	Copy	Department of Health and Welfare, Northern Province	2001
6	Tariff Fee Schedule 2002	Book	Copy	Department of Health and Welfare, Limpopo Province	2002
7	Greater Tzaneen Sub-district, Mopani District, Limpopo Province	Book	Copy	Greater Tzaneen Sub-district Health Office	2002
8	T. C. Masilela, et al. "Improved Service Delivery in the Absence of Fully-fledged District Management Structures: Experience of the Greater Tzaneen Sub-district"	Booklet	Original	Health Systems Trust	2002
9	News on Nutrition: Understanding Diabetes – What is it all about?	Booklet	Original	South African Sugar Association	n.a.
10	Update on Malaria in the Limpopo Province: Information Leaflet to Health Workers" 7 February 2003	Book	Copy	Department of Health and Welfare, Limpopo Province	2003
11	Stats in Brief 2002	Book	Original	Statistics South Africa	2002
12	The South African Labour Market	Book	Original	Statistics South Africa	2002
13	The People of South Africa, Population Census 1996: Summary Report	Book	Original	Statistics South Africa	2000
14	"The Contribution of Small and Micro Enterprises to the Economy of the Country: A Survey of non-VAT-registered Businesses in South Africa" Part 1- Summary and Tables	Book	Original	Statistics South Africa	2002
15	Causes of Death in South Africa 1997-2001	Book	Copy	Statistics South Africa	2002
16	Mid-year Estimates 2002	Book	Copy	Statistics South Africa	2002
17	Recorded Live Births 2001	Book	Copy	Statistics South Africa	2002
18	Advance Release of Recorded Deaths 1997-2000	Book	Copy	Statistics South Africa	2001
19	Marriage and Divorces 1999	Book	Copy	Statistics South Africa	2002

11. Plan for Technical Assistance by Consultant

The Project for Improvement of the Health Facilities in the Limpopo Province Technical Assistance by Consultant

1. Background

All the equipment in the health facilities under the Limpopo province are divided into 2 categories, the equipment that require installation work such as X-ray unit, Steam Steriliser, Operation light, etc. and the equipment other than that. The former is administered by Physical Resource Management Sub-directorate, Strategic Management and Planning Directorate, Strategic Management Services Branch of Limpopo DOHW. Each facility requests the Sub-directorate for repair or checkups and then the Sub-directorate requests the agents or distributor of the manufacturers to dispatch the engineer to each facility.

Other basic equipment are administered by each relevant section of Limpopo DOHW or district/sub-district health office. When requested by a facility, the section places an order for repair to agents.

Having no budget or staff for equipment maintenance of their own, the health facilities depend for equipment maintenance on the relevant section of Limpopo DOHW, which can respond only within the budget.

The largest problem that Limpopo DOHW has faced is the situation where no unified responsible agents for equipment maintenance exist in either Limpopo DOHW or health facilities.

To cope with the situation, Limpopo DOHW, as of 2003, decided to transfer all the responsibility for equipment maintenance to regional and district hospital and allocate the budget for equipment maintenance within the discretion of them.

Even Letaba Regional Hospital, the only hospital where specialized doctors are stationed, does not have a system of medical equipment maintenance. They only have a list of equipment in Finance, Procurement and IT Management Section.

So Letaba Hospital decided to establish a system of medical equipment in Finance, Procurement and IT Management Section to make the best use of the budget. They started with sending a manager of the above section to the counterpart training for medical equipment organized by JICA and wishes that the manager will play an important role in establishing a new Equipment Management Section. During the Explanation of Draft Report, the study team confirmed that a Medical Equipment Management section would be established under Subdirectorate: Technical Support Services (headed by Mr. Banda).

Under the circumstances in which need for establishing an Equipment Management Section and a system of management of their own, Letaba hospital requested the Basic Design study team for Technical Assistance by Consultant on instruction of computerized equipment management as a soft component of the Project.

2. Purpose

To establish a medical equipment management system designed for effective use of budget and for making the best use of equipment.

3. Outputs

- (1) To be able to grasp the situation of medical equipment based on the ledger for equipment management
- (2) To be able to grasp the annual cost for maintenance

4. Activities

First phase: Completion of equipment management ledger and centralised management of equipment

- (1) Assist the establishment of an Equipment Management Section in Letaba Hospital headed by Mr. Derrick Baloyi, who should have finished the counter part training for equipment management by JICA
- (2) Assist to extract the data of medical equipment from the list of equipment used by Mr. Baloyi and then define the name of equipment.
- (3) Discuss necessary item to be used in the computerised ledger and assist to make a formula for the ledger. Also assist data input.
- (4) Discuss the method of requesting quotation and assist to make slips for repair. Assist to establish a system for storing and supplying spare parts and consumables.
- (5) Assist to pick the equipment that need spare parts, consumables, periodical checkups and maintenance contract from the ledger.

After the First phase, the trainee should be able to complete the equipment management ledger. Then the trainee requests quotation for spare parts, consumables, periodical checkups and maintenance contract to manufacturers or agents.

Second phase: Making an annual maintenance budget

- (1) Assist to check the quotation from manufacturers or agents.
- (2) Assist to request additional quotation, if necessary.
- (3) Discuss the possibility of outsourcing of maintenance contract (what equipment and how)
- (4) Assist to classify the data of annual maintenance cost, spare parts, consumables and outsourced maintenance contract. Also assist to input the data of collected quotation.
- (5) Assist to establish an annual maintenance budget, calculate the cost of outsourced maintenance contract and draft a policy for allocation of maintenance budget.

5. Inputs

Management Method of Equipment

1 Japanese Consultant x 3.5 months (0.34M/M in Japan, 3.16M/M in South Africa)

- First phase, 1.5 months (0.17M/M in Japan, 1.33M/M in South Africa)
- Second phase, 2.0 months (0.17M/M in Japan, 1.83M/M in South Africa)

A Japanese consultant shall be dispatched twice for assistance of the above activities.

The first stage shall start immediately after installation of equipment under the project.

The second stage shall start after completion of construction work under the project.

The Japanese consultant shall have wide knowledge of medical equipment and be able to instruct on management of spare parts and consumables. He/she also shall have at least 12 years of experience including an experience of equivalent technical assistance.

	Activities	In Japan (Day, MM)	In South Africa (Day, MM)	Japan	South Africa					Maker / Agent
				Consultant	Letaba Hospital			Limpopo DOHW		
				Japanese Consultant	Medical Equipment Management	Material Management	CEO, Manager	Physical Resource Management		
First phase	Work in Japan (sort out equipment, etc)	3								
	1 Assistance in establishment of an Equipment Management Section		2							
	2 Assist to extract data and define the equipment title		9							
	3 Discuss the necessary item for ledger and make formula.		12							
	4 Assist for data input		5							
	5 Assist for method of requesting repair and for making slips		10							
	5 Assist to pick the equipment for requesting quotation		2							
	Work in Japan (organize data, etc)	2		○						
First phase Total		5 days 0.17MM	40 days 1.33MM							
	Collection of quotation and data input by trainee (for 3 months)									
Second phase	Work in Japan (sort out spare parts, consumables, etc)	3		○						
	1 Check the quotation		10							
	2 Assist for additional quotation, in necessary		3							
	3 Assist for outsourced maintenance contract.		7							
	4 Assist to classify the collected data		15							
	5 Assist for data input		5							
	5 Assist to establish an annual maintenance budget		15							
	Work in Japan (report to JICA, etc)	2								
Second phase Total		5 days 0.17MM	55 days 1.83MM							

6. Final Documents

- 1) Equipment Maintenance Ledger
- 2) Slips for equipment repair and spare parts/consumables
- 3) Annual Maintenance Plan (Draft)