PAGE ___ OF ___ PAGES

PROJECT APPRAISAL REPORT (PAR)

(2)

REPORT U-446

22p

1. PROJECT NO.	2. PAR FOR PERIOD:	3. COUNTRY	4. PAR SERIAL NO.
730-11-590-350	FY66 TO 2/28/73	Vietnam	730-73-033

5. PROJECT TITLE
Health Logistics Support

6. PROJECT DURATION: Began FY 66 Ends FY 76	7. DATE LATEST PROP	8. DATE LATEST PIP	9. DATE PRIOR PAR
	-	-	-

10. U.S. FUNDING	a. Cumulative Obligation Thru Prior FY: $61,004,000*	b. Current FY Estimated Budget: $ 5,195,000	c. Estimated Budget to completion After Current FY: $

11. KEY ACTION AGENTS (Contractor, Participating Agency or Voluntary Agency)

a. NAME	b. CONTRACT, PASA OR VOL. AG. NO.
Pope, Evans & Robbins International, Ltd.	AID/fe-309
URS Systems Corp	AID/vn-85
Republic of Korea	AID-430-2925
Reich (PSC)	AID/vn - 106
International Industrial Co., Ltd.	AID-430-2724

I. NEW ACTIONS PROPOSED AND REQUESTED AS A RESULT OF THIS EVALUATION

A. ACTION (X) U.S. A.I.D.	A.I.D./W	HOST	B. LIST OF ACTIONS	C. PROPOSED ACTION COMPLETION DATE
			Action: (See next page)	

Clearances:
A. E. Farwell, ADLD [signature] Date 4/3
W. D. Oldham, D/ADPH [signature] Date 4/
P. Askin, A/ADPROG [signature] Date 4/11/72
W. Lefes, PROG/EVAL [signature] Date 4/
J. Cotten, PROG/EVAL [signature] Date 4/

*Per U-203 Quarterly Project Report dated 12/31/72.

D. REPLANNING REQUIRES REVISED OR NEW: ☐ PROP ☐ PIP ☐ PROAG ☐ PIO/T ☐ PIO/C ☐ PIO/P

E. DATE REVIEW PANEL MET

PROJECT MANAGER: TYPED NAME, SIGNED INITIALS AND DATE
Thomas B. Stewart [signature]

MISSION DIRECTOR: TYPED NAME, SIGNED INITIALS AND DATE
Stanley J. Siegel, Acting Director

AID 1020-30 (10-72) PART I

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Although the Minister of Health is well aware of the scheduled drawdown of USG funding support and has proposed compensating GVN funding in his current four-year plan, it is felt that the matter should be officially brought to the attention of the Prime Minister. The plan will require considerable GVN funding in CYs 74, 75 and 76 as well as government assistance for local pharmaceutical production expansion. In addition, unless GVN procurement procedures are improved, the MOH Medical Logistics System cannot maintain the medical commodity level required to continue support of a free medical care program in MOH hospitals and dispensaries after FY 73.

Actions:

1. The Mission Director officially notify the Prime Minister and the DGBFA of the scheduled USG funding drawdown and the resulting deficit based on prior year procurement costs. With this notification, request the Prime Minister and the DGBFA to comment on the GVN capability to meet such funding deficit (including an estimated 4-5 million U.S. dollar or equivalent foreign exchange annual requirement for off-shore procurement of commodities that cannot be procured in-country).

2. The Mission Director request the Prime Minister in connection with the future operation of the MOH Medical Logistics System:

a) to review GVN policies, procedures and regulations concerned with in-country and off-shore procurement for the purpose of expediting Ministry of Health requirements;

b) to review the problems associated with efforts to expand the local pharmaceutical manufacturing industry for the purpose of identifying government regulations and procedures which may be revised or rescinded.

PAGE ___ OF ___ PAGES	PROJECT NO.	PAR FOR PERIOD ENDING	COUNTRY	PAR SERIAL NO.
	730-11-590-350	To: 2/28/73	Vietnam	730-73-032

II. PERFORMANCE OF KEY INPUTS AND ACTION AGENTS

A. INPUT OR ACTION AGENT — CONTRACTOR, PARTICIPATING AGENCY OR VOLUNTARY AGENCY	B. PERFORMANCE AGAINST PLAN: UNSATISFACTORY 1	2	SATISFACTORY 3	4	5	OUTSTANDING 6	7	C. IMPORTANCE FOR ACHIEVING PROJECT PURPOSE (X): LOW 1	MEDIUM 2	3	4	HIGH 5
1. PERIL AID/fe-309				x								x
2. USR AID/vn-85					x							x
3. ROK AID 430-2925					x						x	
4. IIC AID 430-2724						x						x
5. REICH AID/vn-106						x						x

Comment on key factors determining rating

See next page for comments on key factors determining rating.

4. PARTICIPANT TRAINING	1	2	3	4	5	6	7	1	2	3	4	5
				x							x	

Comment on key factors determining rating One (1) trainee, graduate of the Dept of Army Medical Equipment School, forms the nucleus of the MOH's medical equipment maintenance bureau. Other participant training consisted of short term (2 weeks) observation and on-the-job training at the USA MMAPAC, Okinawa. This type of training is important in that it gives trainees opportunity to witness a large scale medical depot in operation.

5. COMMODITIES	1	2	3	4	5	6	7	1	2	3	4	5
				x					x			

Comment on key factors determining rating $287,000 Office and printing equipment.

Office equipment, printing equipment, and manual type material handling equipment provided to propecly equip. USAID hired or contracted personnel and further to provide an independent printing facility to the MOH Directorate of Logistics.

6. COOPERATING COUNTRY		1	2	3	4	5	6	7	1	2	3	4	5
	a. PERSONNEL				x								x
	b. OTHER				x								x

Comment on key factors determining rating

Personnel assigned to MOH Directorate of Logistics are not highly motivated due to inadequate pay scales and Civil Service restrictions regarding promotions. Demonstrated talents of employees indicate they are capable of understanding and carrying through assigned tasks in reasonable time. To improve operations the Directorate of Logistics should try to fill vacancies in its staffing pattern particularly those positions in skill levels . B and C. (See Attachment #3).

7. OTHER DONORS NA	1	2	3	4	5	6	7	1	2	3	4	5

Comment on key factors determining rating of Other Donors

1. PERIL - The contractor's primary responsibilities of establishing stock accounting and warehousing systems at Hospital and Province Health Service level could not be effectively carried out due to war conditions which began in the spring of 1968. The contractor produced and implemented manual stock accounting system and trained supply personnel at the levels prescribed in the contract. Military conscription and other demands of the nation caused fast turn-over of this trained personnel.

2. URS - Establishing a fully automated data procedure within a major medical logistic system utilizing equipment common to all USAID/VN has caused delays in the ADP program. Projects with higher priorities have caused long machine "turn around time" on program testing and debuging of the medical logistic system. The contractor continues to perform his contracted responsibilities as rapidly and expertly as possible.

3. ROK - This contract for services of auto mechanics and medical equipment technicians terminated on Dec. 31, 1972. Personnel employed under this contract performed their technical functions with high degrees of proficiency. Because of lack of student input on part of the MOH the contractor was unable to participate in that part of the contract specifying the teaching of automative mechanics.

4. IIC - The contractor scope of work involved both operations within a medical logistic system and simultaneously training of MOH Directorate of Logistics personnel. Operational and training functions ranged from the Phu Tho Medical Logistics Center down to Province Health Service level. Contractor performed in all areas of responsibility in a highly satisfactory manner. War-time demands upon the MOH Directorate of Logistics caused a high rate of loss and/or turn-over of personnel trained by the Contractor.

5. REICH - Contractor's primary scope of work was to assist in the development of a methodology acceptable to GVN and USAID for the phased transfer of full funding and procurement responsibility for medical commodity support to MOH medical facilities. After extensive research involving MOH, commercial processors and USAID officials, it was decided the best approach was to work towards increasing VN commercial pharmaceutical processing capability.

PAGE ___ OF ___ PAGES	PROJECT NO. 730-11-590-350	PAR FOR PERIOD ENDING	COUNTRY Vietnam	PAR SERIAL NO. 730-73-

III.A. KEY OUTPUT INDICATORS AND TARGETS – QUANTITATIVE

1. QUANTITATIVE INDICATORS FOR MAJOR OUTPUTS	2. TARGETS (PERCENTAGE / RATE / AMOUNT)						
	CATEGORY	CUMULATIVE PRIOR FY	CURRENT FY TO DATE	CURRENT FY TO END	FY 74	FY 75	END OF PROJECT
1. Computer Prgrammers	PLANNED	-	3	3	-	-	3
	ACTUAL PERFORMANCE	-	3				
	REPLANNED			2*	1		3
2. Computer Systems Analysts.	PLANNED	-	-	2	-		2
	ACTUAL PERFORMANCE	-	-				
	REPLANNED						
3. Key Punch Operators	PLANNED	-	2	1	1		4
	ACTUAL PERFORMANCE	-	2				
	REPLANNED						
4. Participants returned and on-board (U.S. training)	PLANNED	9	1		2		12
	ACTUAL PERFORMANCE	9	1				
	REPLANNED						
5. Commodity Managers	PLANNED	-	3		2	0	5
	ACTUAL PERFORMANCE	-	3				
	REPLANNED						
6. Ass't Commodity Managers	PLANNED	-	12		8	-	20
	ACTUAL PERFORMANCE	-	12				
	REPLANNED						
7. Document Control Clerks	PLANNED		1	1	1	-	3
	ACTUAL PERFORMANCE		1				
	REPLANNED						
	PLANNED						
	ACTUAL PERFORMANCE						
	REPLANNED						

AID 1020-30 (10-72) PART III.A.

* One programmer is being trained as an analyst.

PAGE ___ OF ___ PAGES	PROJECT NO. 730-11-590-350	PAR FOR PERIOD ENDING To: 2/28/73	COUNTRY Vietnam	PAR SERIAL NO. 730-73-033

III.B. KEY OUTPUT INDICATORS AND TARGETS - QUALITATIVE

1. QUALITATIVE INDICATORS FOR MAJOR OUTPUTS	2. COMMENT
1. GVN decrees enacted.	1. Presidential Decree #45 YT enacted March 18, 1966 established MOH medical logistics system consolidating medical logistics support under Dir. of Logistics.
2. Stock accounting systems and storage techniques developed and implemented.	2. Contractor (PERIL) set up manual systems for requisition processing, stock control, storage techniques at 42 province health services and 63 hospitals.
2.1 Basic Indoctrination and Training Manual prepared.	2.1 Contractor (PERIL) prepared basic manual for training MOH personnel in hospital supply procedures. Published in March 1968 manual was used as a training aid for personnel in provincial health services. The manual was never officially adopted by the MOH but was used as one of the source documents for MOH management.
2.2 MOH Personnel trained in hospital medical material procedures.	2.2 Approximately 4 MOH supply personnel from each province health service and city hospital were trained from 1968-69. About 160 people were trained in all
3. Medical logistics catalog prepared, printed and distributed.	3. In 1967 a medical logistics catalog was prepared consisting of alphabetical listings, by stock class, of all stockage items within the Ministry of Health's logistics system. Catalog information includes pertinent management and consumer requisitioning data in Vietnamese and English. It includes 17 sections listing a total of 2,057 line items on 256 pages. Additions, deletions and changes to management data requires constant changes to the catalog. Catalog and periodic changes distributed to 175 MOH customers. PERIL developed and implemented ADP technique for storage and maintenance of catalog data in USAID computer.

PAGE ___ OF ___ PAGES	PROJECT NO. 730-11-590-350	PAR FOR PERIOD ENDING To: 2/28/73	COUNTRY Vietnam	PAR SERIAL NO. 730-73-033

III.B. KEY OUTPUT INDICATORS AND TARGETS – QUALITATIVE

1. QUALITATIVE INDICATORS FOR MAJOR OUTPUTS	2. COMMENT
4. Medical Logistics Information Letters (MLIL) produced and distributed.	4. In 1968 a medical bulletin was initiated to disseminate medical/technical information to consuming activities including medical catalog updates. Medical Logistics Information Letters in Vietnamese and English averaging 2 pages each, mimeographed and distributed to about 175 MOH customers.
	Number distributed: 1968: 36 1969: 58 1970: 238 1971: 75 1972: 10
5. Developed reference library.	5. In 1967 a reference library of commercial and federal commodity catalog was established. There are now approximately 4,200 volumes cross-referenced by manufacturer and item. It is utilized by MOH and USAID medical personnel. Updating is continuous.
6. ADP system for maintaining procurement management data developed.	6. Systems developed by contractor in 1967 and discontinued in 1972 as a fully automated medical logistics system currently being developed provides improved systems in these two functional areas.
7. Established a printshop to support MOH logistics publication requirements.	7. Multilith machines, Models#1200 and 1250, were installed. Used to produce MLILS (see output #4), catalogs, blank forms and other printing requirements of Medical Logistics Center and MOH.
8. Consumer credit system developed and implemented.	8. Implemented in 1970, the system provides annual allocations of credits to all health services and hospitals. Customer requisitioning is limited by the amount allocated. Monthly statements are provided each customer depicting credits used and balance available. Value of issues was reduced from a monthly average of US$1.6 million in 1970 to US$1.2 and 1.3 million in 1971 and 1972 respectively. This system will be automated in Phase III of current ADP systems development (see output #9).

PAGE ___ OF ___ PAGES	PROJECT NO. 730-11-590-350	PAR FOR PERIOD ENDING To: 2/28/73	COUNTRY Vietnam	PAR SERIAL NO. 730-73-033

III.B. KEY OUTPUT INDICATORS AND TARGETS - QUALITATIVE

1. QUALITATIVE INDICATORS FOR MAJOR OUTPUTS	2. COMMENT
9. Fully automated medical logistics system developed and implemented.	9. System is designed to be implemented in three phases. Phase I provides the basic data bank (master item file), catalog file and therapeutic index. Phase II provides procurement management reports that monitor both USAID and MOH procurement actions. Phase I and II are operational.
	Phase III will automate initiation of procurement actions, post stock accounting records, process customer requisitions, produce statistical and financial management reports, produce receipt and shipping documents, control physical inventories and stock location. Scheduled for implementation July 73.
	User procedures in Vietnamese and English have been completed (230 pages).
10. Storage procedures developed and implemented.	10. Designed and implemented procedures including receiving, warehousing, stock location, stock rotation and physical inventory at Medical Logistics Center, three branch depots, completed in 1972. Established nation-wide work order procedure and forms for reporting and turning in medical equipment for repair. Procedure installed in 1970.
11. Medical Equipment Maintenance (MEM) procedures developed and implemented.	11. Initiated tool controls for MEM shops in 1971. Built caged area for tools and designed and implemented a sign-out procedure.
11.1 Formal courses for medical equipment repairmen developed.	11.1 Syllabi for the following courses were prepared: a) Basic Medical Equipment Maintenance - BMEM. (3mo.). Included maintenance of medical equipment, lab equipment and low multi-amp X-ray. b) Advanced Medical Equipment Maintenance AMEM
	(6mo.). Included maintenance of electronic medical equipment and high multi-amp X-ray c) Regrigeration Equipment Maintenance - REM (3mo. and 4mo.) d) Generator Maintenance - GEM. (3wks., 3mo. and 5mo.).

PAGE ___ OF ___ PAGES	PROJECT NO. 730-11-590-350	PAR FOR PERIOD ENDING To: 2/28/73	COUNTRY Vietnam	PAR SERIAL NO. 730-73-033

III.B. KEY OUTPUT INDICATORS AND TARGETS – QUALITATIVE

1. QUALITATIVE INDICATORS FOR MAJOR OUTPUTS	2. COMMENT
11.1 Cont'd	Involved preparation of 849 lesson plans, 94 manuals in Vietnamese and 273 teaching aids during the period 1969-72. Formal instruction started June 1969.
11.2 Medical equipment maintenance personnel trained.	11.2
	*These numbers are non-add. Of those graduated approximately 70-75% are working as planned.
12. Redesigned and improved MOH Automotive Maintenance facility and procedures at Phu Tho.	12. Compartmented specific repair areas such as carburation and ignition, battery shop, machine shop, body repair shops, tire shop, emergency repairs and paint shop, and material handling equipment repair area. Initiated nation-wide work order system for MOH vehicles and established a vehicle inspection check list used throughout MOH facilities. Established stock control and storage facility for 12,000 line items of automotive repair parts.
13. Developed equipment requirements for Nguyen Van Hoc Hospital, an MOH teaching facility.	13. Conducted studies in 1968 to correlate plant design and equipment specifications. Involved coordination with U.S. and MOH doctors.
13.1 Installed medical and medical related equipment in Nguyen Van Hoc Hospital.	13.1 Approximately 110 major items of medical equipment installed in 1969.

Course	Duration	No. of Enrolled	Trainees Graduated*	Data as of:
BMEM	3 mo.	127	122	9/72
AMEM	6 mo.	64	53	8/72
REM	3 mo.	55	51	12/70
"	6 mo.	60	46	10/72
GEM	3 wk.	57	48	8/69
	3 mo.	54	48	12/70
	5 mo.	29	25	11/72

PAGE ___ OF ___ PAGES	PROJECT NO.	PAR FOR PERIOD ENDING	COUNTRY	PAR SERIAL NO.
	730-11-590-350	To: 2/28/73	Vietnam	730-73-033

III.B. KEY OUTPUT INDICATORS AND TARGETS - QUALITATIVE

1. QUALITATIVE INDICATORS FOR MAJOR OUTPUTS	2. COMMENT
14. Disassembled 4 Canadian donated emergency hospitals.	14. Disassembly program placed 2,684 line items valued at $252,000 into MOH stock.
15. Assembled and shipped to specified MOH provincial health services eight Impact Hospital Assemblies.	15. Average assembly contained approximately 800 line items including major items of medical equipment needed to establish a hospital. Completed 1970.
16. Developed list of non-expendable medical equipment (192 line items) to be placed in 250 bed hospital donated to GOV by ROK.	16. Completed 1972. To be issued on completion of hospital.
17. MOH Medical Logistics facilities constructed.	17. See Attachments #1 and 2 for recapitulation of construction from 1967 to 1972.

AID 1020-80 (10-72) PART III.B.

A.1. Statement of Purpose:

To establish a Ministry of Health (MOH) Medical Logistics System capable of supporting the supply and maintenance requirements of MOH, RVNAF, U.S. and Free World medical personnel assigned to MOH medical facilities.

B.1. Conditions which will exist when above purpose is achieved.

1. MOH funding all medical and medical-related supplies procured for use in the Medical Logistics System.

The transition from U.S. to GVN-funded procurement has been a gradual but systematic process. Since 1968 all vehicle repair parts (cars, trucks, fork lifts, etc.) have been procured with GVN resources. Since 1971 all refrigerators and air conditioners, including replacement parts and generator repair parts, were transferred to MOH procurement.

Comparative USAID/DOD - GVN/MOH Funding for Medical Commodity Procurement

	FY 71	FY 72	FY 73	FY 74	FY 75
a) USAID/DOD Medical Commodity Procurement (US$ millions)	16.0	12.7	(14.1)	(8.0)	(5.1)

	CY 70	CY 71	CY 72	CY 73
b) MOH/Dir of Logistics Budget (VN$ millions) 1/	221.1	291.1	1,176.3	2,461.3
c) MOH Dir of Logistics Budget (US$ millions) 2/	(0.81)	(1.06)	(2.73)	(5.18)
d) Total (a + c) (US$ millions)	(16.81)	(13.76)	(16.83)	(13.18)
e) Estimated Requirement (US$ millions) 3/			(15.0)	(15.0)
f) Estimated Balance (US$ millions)			(+1.83)	(-1.82)

(Figures in parentheses are estimates).

1/ Only those Articles of the MOH/DOD Budget which correspond with USAID/DOD Medical Commodity Budgets are included to facilitate comparison.

2/ The dollar equivalents of piaster amounts shown in line b is only gross estimate based on the following exchange rates: 1969/118; 1970-71/275; 1972/430 (Range: 405-465); 1973/475.

3/ Source: Memo from Mr. Stewart to Mr. Thanh (Dir of Logistics) dated 6/30/72 concerning planned reduction in USG funding.

2. MOH/Directorate of Logistics capable of assuming full administrative and management responsibilities for operation of Medical Logistics System.

2.1 An effective organization adequately started.

2.1 See Attachment #3 for Directorate of Logistics Organization Chart and Staffing Pattern.

2.2 ADP systems fully operational.

2.2 Recommended Transfer Schedule for ADP System

ADP systems cover several functional areas:

a) Financial Inventory Accounting and Reporting System.

b) Requisition and Stock Accounting Systems.

c) Consumer Budgetary and Financial Control Systems (Consumer Credit Systems)

d) Performance Reporting System, and

e) Procurement Actions.

Physical Transfer: August 15, 1973

An allowance of two months to develop a detailed transfer plan, 1½ months for preparation of physical transfer and 1½ months for parallel processing is recommended.

Technical Operations Transfer: September 30, 1973

User Operations Transfer: Sept 30, 1973

The recommended transfer date of August 15, 1973 will require an accelerated training program since MOH/LOG will be responsible at that time for all user function's and analyst/programmer support.

2.3 MOH/Dir of Logistics efficiently procuring, storing and distributing all medical and medical-related supplies and equipment.

a) Efficient procurement: Average time from requisition date to receipt of item

A sample of stock items were selected by stock class from stock card files. The average number of days elapsed from the date of requisition to receipt date for the sample of items within a given stock class was determined. The statistics thus collected show a significant improvement in the efficiency of procurement over the period studied, i.e., 1971 and 1972.

Results of Sample Survey		Average Number of Days	
Stock Class	Line items Sampled	1971	1972
6505 Drugs, biologicals, seagents	10	281	123
6510 Bandages and dressings	5	196	140
6515 Surgical Supplies and Instruments	10	116	84
6520 Dental Supplies	5	65	75
Total Sample for each year: 30			
Average Number of Days (All Classes)		165	106

b) Efficient Storage - Receiving/Shipping

- Receiving:

-Receiving: A continual high processing percentage rate assures the successful continuity within the Storage Receiving Section. Sealand trailer van type delivery of medical commodities from USAMMAPAC (Okinawa) facilities the check-in process and following average percentage rates reflecting efficiency have prevailed for the indicated years:

FY 69	FY 70	FY 71	FY 72	FY 73 (6 mos)
90%	99%	99%	95%	96%

- Shipping:

-Shipping: Factors governing efficiency of the Shipping Section cause low indicated efficiency rates. The Shipping Section is dependent upon: (1) customer pick-up of supplies; (2) Central Logistics Agency (CLA) provided transportation; and (3) the Stock Accounting Bureau's turn-over of Customer material requests (DD Forms 1348-1) to the Storage Bureau for further processing. After the

customer's requested supplies have been stock picked and assembled in appropriate areas, customers within driving distance are notified via VN Postal service to pick up the requested supplies. (The customer may respond promptly or may delay the pick-up for periods prevailing over several months. Long delays in customer pick-ups adversely affect the processing effectiveness.)

The MDH Directorate of Logistics is dependent upon the CLA furnishing transport of medical commodities to areas outside the local pick-up area. The CLA normally contracts this service and frequently has encountered problems in immediately finding a suitable trucking contractor who will reliably deliver the supplies to destination (Consignee). Delays in acquiring such contract services will always reflect in the Shipping Section's processing effectiveness.

Hopefully, future road-security conditions will permit faster and better contractor service in this problem area.

Administrative procedures in effect require the Stock Accounting Bureau to process customer requisitions through the point of typing the customer material release document (DD Form 1348-1) for each line item of supplies requested. After being typed these documents should be turned over to the Storage Bureau for appropriate actions on a daily basis. In actual practice these documents may accumulate for several days causing a large backlog of "items remaining to be shipped" in the Storage Bureau. Probably the ADP

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2.3 Shipping (cont'd)

-Shipping (cont'd)

System (Phase 3) will eliminate this particular problem when the system becomes operational.

Processing effectiveness for the Shipping Section is given in percentages for the indicated years.

FY 68	FY 69	FY 70	FY 71	FY 72	FY 73
80%	56%	44%	43%	59%	68%

2.4 MOH/Directorate of Logistics adequately maintaining all medical equipment and vehicles used in the MOH system.

a) Medical equipment maintenance: Repair processing efficiency.

- Volume of items repaired (all types)

Annual Totals	FY 69	FY 70	FY 71	FY 72	FY 73 1/
Total for Repair:	14,077	13,722	11,610	11,427	5,593
Repaired:	10,001	7,223	5,668	4,757	2,148
Monthly Average					
Total for Repair:	1,173	1,143	967	952	932
Repaired:	833	601	474	396	358

1/ First six months only.

- Percent efficiency: Items repaired over items received

FY 69	FY 70	FY 71	FY 72	FY 73
71%	52%	48%	41%	38%

b) Vehicle Maintenance: MOH fleet of 1500 vehicles, including cars, trucks, fork lifts, etc., maintained through 4th Echelon.

Transportation f medical supplies is vital to the success of this project. Vehicle maintenance is thus an important consideration. In order to augment the MOH's inadequate staff of auto mechanics, in July of 1966 the USAID

contracted with the Republic of Korea for the services of mechanics and related personnel. This contract expired December 1972 and as of date all Korean personnel have left. Statistics gathered from July 1968 through December 1972 reflect highly satisfactory maintenance support given while augmented by the ROK mechanics.

Several factors must be considered when attempting to rate the overall efficiency of the MOH's vehicle maintenance program: (1) wide dispersion of vehicles, (2) security of areas where vehicles are located, (3) availability of repair parts through CLA channels, (4) non-availability of personnel for hire as drivers and mechanics at all levels, and (5) inadequate facilities for housing vehicles.

The following statistics taken from Logistics Performance Reports show the volume of repairs and percent efficiency for the period FY 69 through the first six months of FY 73.

Vehicle Maintenance Performance

	FY 69	FY 70	FY 71	FY 72	FY 73
Second Echelon Repairs:					
Annual Totals					
Total for Repair:	3,786	2,652	2,283	1,643	1,035
Repaired:	2,561	2,121	2,065	1,587	999
Monthly Average					
Total for Repair:	315	221	190	137	148
Repaired:	213	177	172	132	143
Percent Efficiency:	66%	74%	80%	84%	84%
Third Echelon Repairs:					
Annual Totals					
Total for Repair:	1,528	1,724	1,705	1,538	690
Repaired:	910	1,143	1,253	1,165	487
Monthly Average					
Total for Repair:	127	144	142	128	99
Repaired:	76	95	124	97	78
Percent Efficiency:	59%	66%	87%	76%	79%

Fourth Echelon Repairs:	FY 69	FY 70	FY 71	FY 72	FY 73
Annual Totals					
Total for Repairs:	147	153	249	153	71
Repaired:	115	82	73	66	26
Monthly Average					
Total for Repairs:	12	13	21	13	10
Repaired:	10	7	6	6	4
Percent Efficiency	83%	54%	29%	46%	40%

An extract of performance statistics for the month of January 1973 provides an indication of the impact of the departure of the Korean Team on vehicle maintenance.

Data on Repair Volume and Performance for January 1973

Vehicles Received for Repair:	169
Vehicles Repaired:	125
Percent Efficiency:	74%

Summary Interpretation:

The average number of vehicles received for repair monthly for the first six months of FY 73 was 271 compared to the January figure of 169. This is a drop in vehicles received for repair of over 100 vehicles. It is assumed that either these vehicles did not receive needed repairs or they were repaired elsewhere.

The monthly average of vehicles repaired has been quite stable over the four-year period for which data is displayed. Numbers range from a low in the first six months of FY 73 of 216, to a high in FY 69 of 299. The number of vehicles repaired in January 1973 was 125, a monthly drop of 81 from the low monthly average.

MOH policy changing because of Prime Minister's decree and loss of TCN mechanics. Vehicle shops at Phu Tho and branch depots will maintain and repair only vehicles assigned to the four depots for logistical support operation. Other vehicles in provincial health services and hospitals must be repaired in provincial maintenance shops or the private sector.

3. GVN supporting an active program to reduce costs and to minimize foreign exchange expenditure for medical and related supplies to MOH facilities.

3.1 Elimination of non-essential items from MLS procurement list and substitution of medically acceptable but cheaper items.

Stockage items within the MOH's logistics system are regulated by an established Medical Material Technical Committee which determines the items to be added or deleted from the system. This committee is composed of doctors, pharmacists and logistics personnel from both the Ministry of Health and the USAID.

Some factors which are considered to determine the status of an item are: (1) therapeutic value of available medication, (2) patient tolerances, (3) usage limitations, (4) drug costs, and (5) availability in country.

The following statistics reflect a diminishing stockage list, which since the high in FY 69 has been reduced by 26%.

	FY 68	FY 69	FY 70	FY 71	FY 72	FY 73*
Monthly Average Number of Stockage Items	2,928	3,049	2,650	2,459	2,377	2,310
Monthly Average (Additions)	60	26	8	7	8	2
Monthly Average (Deletions)	36	49	20	28	9	23
Total Stockage Items Added	657	311	98	84	92	12
Total Stockage Items Deleted	400	586	239	329	102	88
Total Change in Stockage Items from FY 68 to mid-FY 73.	- 490					

* First six months only.

3.2 Program to expand domestic production of pharmaceuticals.

Progress to Date:

3.2 The MOH has a capability to manufacture some pharmaceuticals. According to the Reich/Paupe Report to ADLD March 30, 1971, the MOH facility was manufacturing only about 10 items. It was estimated by Pharmacists Nguyen Duc Trang and Vu Van Hien that, given the necessary resources, they could produce 10-20% of MOH requirements.

Too much emphasis on developing this facility, however, was considered to be detrimental to development of the commercial manufacturers on whom the MOH must rely in the future.

MOH still plans to produce 40-45 items - primarily tablets, ointments, and a few injectibles - target CY 74.

AID 1020-20 (1-72)

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project:
From FY 1966 to FY 1976
Total U. S. Funding $71,883,000*
Date Prepared: February 1973

Project Title & Number: Health Logistics Support - 730-11-590-350

*Total obligations through FY 75 only.

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Program or Sector Goal: The broader objective to which this project contributes: To improve the quality of life and well-being of the populace and help increase productivity.	**Measures of Goal Achievement:** 1. GVN National Budget for health increased to meet international standards for medical care in developing countries. 2. Four-Year Health Plan developed and implemented.	1. National Health Budget increased from current level of 2.1% to about 5% of the total National Budget.	**Assumptions for achieving goal targets:** 1. Health program will maintain its present priority in terms of GVN National Budget and staffing.
Project Purpose: To establish a Ministry of Health Medical Logistics System capable of supporting the supply and maintenance requirements of MOH, RVNAF, US and Free World medical personnel assigned to MOH medical facilities.	**Conditions that will indicate purpose has been achieved: End of project status.** 1. MOH funding all medical supplies procured for use in Med Log System. 2. MOH/Dir. of Logistics capable of assuming full administrative and management responsibilities for MLS.	1. MOH Budget for commodity procurement. 2. Staffing patterns and performance reports. 3. ADP systems operational.	**Assumptions for achieving purpose:** MOH providing appropriate resources for maintenance and supply activities.
Outputs: 1. Stock control and financial accounting systems developed and implemented. 2. MOH supply personnel trained. 3. Medical logistics catalog prepared. 4. Med Log Center, Branch Depots and provincial warehouses constructed and renovated as required. 5. Consumer Credit System implemented. 6. Vehicles maintained. 7. Medical equipment maintained 8. MEM courses developed. 9. MEM personnel trained.	**Magnitude of Outputs:** 1. Manual procedures installed in MOH medical facilities at national level. Now being automated. 2. 160 MOH personnel from city/prov. 3. Catalog updated continuously. 4. Main facility(Phu-Tho), 3 Branch Depots and 18 provincial warehouses. 5. Controls customer requisitioning. 6. About 250 monthly. II, III, & IV. 7. About 350 items monthly 8. 4 courses; 849 lesson plans 9. About 250.	Project reports, records and observation.	**Assumptions for achieving outputs:**

Inputs:

U.S.	Cum Thru 6/30/72	FY 73	FY 74	FY 75
A. Personnel (MM/$000)				
1. Direct Hire	2,568/4,315	168/315	60/232	60/158
2. Contract	3,876/3,576 726 1/	264/202	6/50	-
B. Participants	34/12	26/22	39/21	-
C. Commodities	52,375	4,656 2/	2,731	2,492

Implementation Target (Type and Quantity)

GVN	CY 72	CY 73	CY 74
A. GVN/MOH/DofL Budget (VN$ million)	1,323.4	2,558.0	-
B. Counterpart			
1. AAC Funds	17.0	44.0 3/	
2. Trust Funds			

Assumptions for providing inputs:

1/ Service Contract (FY67) to survey GVN Logistics requirements. Man Month data not available.
2/ Includes $600,000 for Korean Hospital equipment.
3/ This does not include special allocation of CY73 AAC funds.

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HEALTH LOGISTICS SUPPORT 730-11-590-350

Attachment #1

Recapitulation of Construction: 1967-1972

Phu Tho Facility:

Date Completed	Type of Construction	No. of Units	Area (Sq. Ft.)	Cost
1967	Warehouse (pre-fab)	5	62,000	
	Dormitory	3	9,900	
	Restaurant/Recreation Room	1	3,300	
1969	Warehouse	1	14,000	
	Warehouse (rebuilt after fire)	1	7,000 1/	
	Generator building	1	432	2/
	Maintenance shop	1	11,000 3/	
1970	Unloading Dock & Outside Storage Area	1	24,000	
	Outside Storage Area for Oxygen Cylinders	1	625	
	Utility Shop	1		2/
1971	Helipad	1	10,000	
	Resurfaced floor	-	7,000	
	Resurfaced road network	-	2 km	
	Security fence, lighting, guard towers	-	-	
	Improved Warehouse and Office lighting	-	-	
	Water System including 13,200 gal. tower	-	-	
	Drainage System	-	-	
	Resurfaced Outside Parking & Storage Area	-	25,000	
	Classrooms and Laboratories	-	5,220	
	Enlarged Auto Repair Shop	-	1,800	
1972	Generator Building	-	432	
			Total Cost:	US$ 531,243.00
				VN$ 79,646,481.00

1/ Includes 3,000 ft . of refrigerated space.
2/ Self-help project. No cost to USG for building materials.
3/ Includes "clean room" for repair of optical and electronic medical equipment.

HEALTH LOGISTICS SUPPORT 730-11-590-350

Attachment #2

Recapitulation of Construction: 1967 - 1972

Provincial Facilities:

Date Completed	Type of Construction	No. of Units	Area (Sq. Ft.)	Cost
1968	Branch Medical Depots:			
	Danang	1	14,000	$ 17,676 2/
	Nha Trang	1	14,000	$ 175,338
	Can Tho	1	14,000	$ 156,719
1972	Warehouses 1/	17	73,000	VN$44,751,964
			Total Cost:	$481,254
				VN$44,751,964

1/ Thua Thien, Phuoc Long, Gia Dinh, An Xuyen, Phu Yen, Khanh Hoa, Bien Hoa, Vung Tau, Quang Tri, Quang Nam, Ba Xuyen, Kien Hoa, Chau Doc, Qui Nhon, Vinh Long, Tay Ninh, Bac Lieu.

2/ Low cost due to construction by U.S. Navy (Seabees).

MDH/Directorate of Logistics
Organization/Staffing Pattern

Attachment #3

Office	Personnel Category A	B	C	D	Total On-Board	Total Authorized	Difference
Director/Asst. Director	2				2	2	0
Admin Bureau		22	12		34	34	0
Census Bureau		9	3		12	12	0
ADP Section	1	7			8	13	-5
Inspection Section	2				2	4	-2
Security Section		2	4		6	6	0
Supply Division:	1				1	4	-3
Storage Bureau	6	37	41	5	89	100	-11
Accntg Bureau	3	23	6	1	33	41	-8
Supply Bureau	1	1	2		4	16	-12
Pharm. Bureau	3	13	30	7	53	85	-32
Inventory Section	2	2	2		6	8	-2
Maintenance Division:	2	2			4	4	0
Utility Svc Bureau		2	19	3	24	23	+1
Med Equip Maint Bur	4	27	27	2	60	85	-25
Auto Maint Bureau	1	18	20		39	58	-19
Regional Depots:							
MR I	5	10	29	8	52	58	-6
MR II	5	17	27	13	62	65	-3
MR III	6	14	23	9	52	60	-8
TOTAL	44	206	245	48	543	678	(-135)

Key: A - Pharmacist
B - Technician
C - Asst Pharmacist
D - Laborer