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PHARMACEUTICAL PRICE ANALYSIS
AFGHAN HEALTH SECTOR SUPPORT
PROJECT

February 10, 1989

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PRICE ANALYSIS

AFGHAN HEALTH SECTOR SUPPORT PROJECT

SEPTEMBER-DECEMBER 1988

The Afghan Health Sector Support Project has supplied millions of dollars worth of drugs, and will continue to provide pharmaceuticals at an exponentially growing rate as the number of trained health workers increases, and basic health care service expands with the withdrawal of the Soviets. Throughout the existence of the Afghan Health Sector Support Project there has been a deep concern about obtaining fair prices for quality products.

By maintaining a reference list of current prices quoted from international, nonprofit suppliers MSH's Drug Management Program can take a "shopping cart" of drugs procured by the project and compare them with world market prices. This allows identification of prices that are either (1) extremely high, indicating that less expensive suppliers should be sought, or (2) extremely low, which might be a cause of concern for shoddy or substandard products.

The results of the price analysis indicate that the same shopping cart of drugs that AMEG procured for \$750,938 could be obtained on the international market for \$358,082; this amounts to a savings of over \$400,000. Even if an additional 25% for shipping and insurance charges is added, the cost would be only \$447,602, still a savings of \$300,000. This is shown graphically in Figure One.

$$\begin{array}{r}
 750,938 \\
 \times 1.27 \text{ Transp.} \\
 \hline
 447,602 \\
 \text{OR} \\
 358,082 \\
 \text{Pork } \dots
 \end{array}$$

almost (392,856)
pt. savings

From the Project Kit lists, forty two products, or 55% of all the drugs contained in the six kits, were matched and verified from original international supplier price lists, and AMEG invoices over a four month period from September to December 1988. By adding the dimension of time, a qualitative (by price comparison), as well as quantitative (by amounts purchased) analysis could be accurately done. This would allow relatively small differences in price to be translated into large-scale differences since the project purchases such large quantities of pharmaceuticals. Over the four month period, these 42 products represented over 33 million basic units, purchased at a price tag approaching one million dollars.

PRODUCT SELECTION

Products chosen had to meet two criteria. First, the international price could be verified back to the original supplier list. Second, project drugs had to have invoices so that both pack sizes and prices could be verified. Printout One shows the products listed in alphabetical order with the invoice dates and manufacturers.

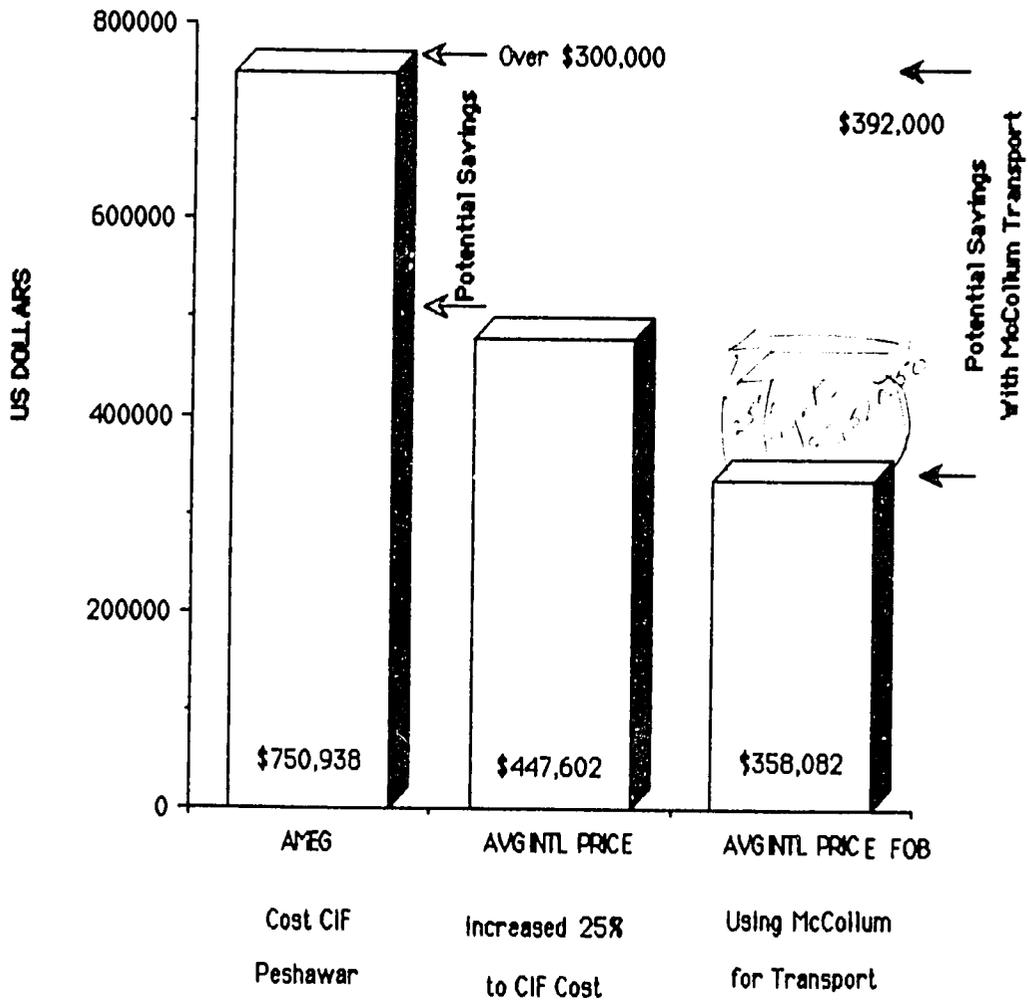
COST COMPARISON

Using the average internationally quoted price, a ratio of the AMEG price to the international price was calculated. That is, we divided the local price by the international price. Note that the international price was

AFGHAN HEALTH SECTOR SUPPORT PROJECT

COST ANALYSIS OF AMEØ VS INTERNATIONAL PRICE

FOR 42 PRODUCTS INVOICED SEPTEMBER - DECEMBER 1988



inflated by 25%, but that the Project could utilize the free transport via McCollum flights for products purchased in the USA or Europe. We added the 25% to be on the conservative side if the McCullum flights were not available.

The ratios can be interpreted as follows:

- 1= a ratio of 1 means the AMEG and estimated average international price are approximately equal.
- >1= a ratio of greater than one indicates that the AMEG price is more than the estimated illustrative international price.
- <1= a ratio of less than 1 indicates the AMEG price is less than the estimated international price.

In general, on individual items, AMEG was able to obtain prices similar to world market prices for about 55% of the products. The range being up to twice, or down to half the world market price. Print out two shows the sort by ratio.

AMEG prices greater than twice the world market price included seven products, including vitamin B complex, ferrous sulfate/folic acid, mebendazole (Vermox), and multiple vitamin tablets. These products had ratios of 14, 9, 9 and 4 respectively. This translates to prices that are 14 to 4 times higher than the average international market price.

Dr. Paul Ickx, of the MSH team in Peshawar, in his memo of 19 January 1989 (see attached memo), stated that the usual bazaar retail price of iron tablets with folate (Folvron) manufactured by Lederle is 82.50 rupees per box of 500. The exact same product, as purchased by AMEG, cost 175.00 rupees (as the lowest quotation). The most recent purchase orders from AMEG (dated 17 September 1988 and 18 December 1988) for 4,248,000 ferrous sulfate/folate tablets from Samco cost 165.00 rupees per 500. This one product alone cost nearly \$70,000 more than the world market price of ferrous sulfate/folate and nearly double the bazaar price in Pakistan!

Four products might not seem a lot compared to 42 products in our shopping cart, but in terms of purchasing they are significant. Purchases from September to December 1988 are summarized below:

PRODUCT	NUMBER OF TABLETS	AMEG PRICE	INT'L PRICE	POTENTIAL SAVINGS
MULTIVITAMIN	1,295,000	\$226,768	\$49,084	\$177,684
MEBENDAZOLE	1,295,000	\$140,000	\$12,342	\$127,658
FERROUS SO4	4,248,000	\$75,775	\$6,627	\$69,148
VITAMIN B	275,000	\$7,878	\$434	\$7,444
TOTALS		\$450,421	\$68,487	\$381,934

Part of the reason for these relatively large potential price savings is that multiple vitamins (Opulet-M) and the vitamin B complex (Suberx-T) were purchased in glass bottles of 30 and 20 tablets each respectively. Given that over a million of the multiple vitamin tablets and a quarter of a million B Complex tablets were purchased this amounts to a huge cost for what is usually an inexpensive product. The average international price for 1,000 multiple vitamin tablets is \$4.68 and \$1.58 for B-Complex.

From our Greenbook analysis approximately 6% of all patients were treated for worms which makes mebendazole one of the key primary health care products. Over a year ago, MSH informed AMEG of the high price the project was having to pay for mebendazole (Vermox). As of December 1988 a less expensive supplier has yet to be found.

On the other hand, AMEG procured 7 products that were less than half the world market price. These were:

Product	# Basic Units Ordered	AMEG Total Cost	Int'l Price	Difference
Water for inj.	1,402	\$ 38	\$ 88	\$ 50
Chlorpheniramine 4mg tablets	2,000	\$ 1	\$ 4	\$ 3
Isoniazide 300mg + Thiacetazone	108,000	\$ 350	\$ 1,590	\$ 1,240
Diazepam 5mg	177,000	\$ 191	\$ 965	\$ 774
Nitrofurazone 0.2%	50 tubes	\$ 15	\$ 76	\$ 61
Sulfamethoxazole + trimethoprim tabs	1,056,000	\$3,967	\$27,588	\$23,621
Xylenol w/v 100.ml	465	\$ 163	\$ 1,000	\$ 837
		\$4,725	\$31,311	\$26,586

So, even though prices on these seven products were less than half the world market price, the quantities involved make the differences relatively negligible in terms of the total procurement impact. Printout three lists the differences in costs for quantities procured for each drug line item.

SUMMARY

For our our total shopping cart, the same quantities of products tendered by AMEG cost \$750,938. We estimate the same amounts could have been purchased and delivered for \$358,082. Hence there might have been a savings of \$392,856 or more than 50% of the total AMEG drug cost. See Figure One.

TECHNICAL NOTES ABOUT THE PRICE COMPARISON AND ANALYSIS

NOMENCLATURE

The drugs are referred to by generic name. The supplying manufacturer used by AMEG is listed on printout one.

QUALITY

International suppliers were selected who offer products in compliance with international quality standards as specified by such international pharmacopoeia as the United States Pharmacopoeia (USP), and the British Pharmacopoeia (BP). The manufacturers follow Good Manufacturing Practices (GMP) in their production and facility operations. Quality certificates on all products could be provided by the supplier on special request.

PRICES AND TERMS OF DELIVERY

All prices have been converted to the US dollar. An exchange rate of 18.5 was used for the Rupee. International prices were adjusted according to the exchange rate prevalent at the time of the price quotation. 1988 prices were used for the analysis.

The international prices were quoted FOB price (free on board), which is the price of bringing the product to the point of shipment, but does not include the cost of insurance or freight (transport). The AMEG prices were invoiced as CIF which is the cost of delivery to the MSH warehouse in Peshawar. To account for this difference, the international prices were increased by 25% to align for the cost for freight and insurance to Peshawar, even though drugs purchased in the USA and Europe could be shipped free via McCollum flights to Islamabad.

PACKAGE SIZES

Almost all the prices have been adjusted to reflect standard package sizes, which are usually by bottles of 1,000 (tablets or capsules), single vials or in boxes of 100, and single tubes (creams and ointments) or bottles for liquids. An example of a package size adjustment follows: if a price were given for a bottle of 500 tablets (a package size not on the main price list), then, in order to compare prices equitably, the local price would be proportionally adjusted: either up to the cost of a bottle of 1000 tablets, or down to the cost of a bottle of 100 tablets as is on the international reference price list.

ATTACHMENT: MEMO

19 January 1989

MEMO

TO : William D. Oldham. M.D., Teamleader
FROM : Paul Ickx



SUBJECT : Difference between AMEG price and local market price.

Last month a shortage in supply of Iron tablets necessitated local purchase. When the quotation came in Mr. Ashraf was startled by the low price quoted by Lucky Enterprises. For the same product, Iron tablets with Folate (Folvron) of Lederle, this supplier quoted 79.9 Rs. per box of 500, while AMEG always had 175.00 Rs. as lowest quotation.

Mr. Ashraf then contacted a medical representative of Lederle in Lahore, who ensured him that the normal retail price of this item is 82.50 Rs. per box of 500 capsules.

As you will remember we lost all computer data entered by Henry to enhance the follow-up on individual products and Order Requests regarding deliver dates and prices. The retrieving of P.O.'s was done manually as soon as time was available (this morning) and is probably not 100% complete. A preliminary conclusion can be made from attached report.

(See report) The last column gives us what we have paid more per order for Iron Tablets going by AMEG's quotations compared to the price Mr. Ashraf got from the local supplier.

Next monday AMEG supply agents Hafeez and Safer will come to Peshawar for quotation analysis. Before discussing this matter with them or anyone else of AMEG I would appreciate your opinion on it.

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Price comparison between local purchases
and purchases through AMEG for
Ferrous Sulphate + Folic Acid.

Date of Purchase	Manufacturer.	Cost per tablet/ capsule.	Cost for ordered quantity.	Difference for ordered quantity.
12/05/88	LEDERLE/CYANAMID	0.1598	191760.00	0.00
*** Total ***			191760.00	0.00

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01/19/89

Price comparison between local purchases
and purchases through AMEG for
Ferrous Sulphate + Folic Acid.

Date of Purchase	Manufacturer.	Cost per tablet/ capsule.	Cost for ordered quantity.	Difference for ordered quantity.
04/03/88	LEDERLE/CYANAMID	0.3500	336000.00	182592.00
04/03/88	LEDERLE/CYANAMID	0.3500	128800.00	69993.60
06/01/88	LEDERLE/CYANAMID	0.3500	11200.00	6086.40
07/19/88	LEDERLE/CYANAMID	0.3500	127400.00	69232.80
07/27/88	LEDERLE/CYANAMID	0.3500	1233400.00	670264.80
08/15/88	SAMCO	0.3500	44800.00	24345.60
09/05/88	SAMCO	0.3300	960960.00	495622.40
12/18/88	ADAMJEE(SAMCO)	0.3000	400800.00	187307.20
*** Total ***			3243360.00	1705444.80

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ALPHABETICAL DRUG LIST WITH DATES AND MANUFACTURERS

18.5 Rupees/Dollar

FRAC. NUM.	GENERIC NAME	MANUFACTURER NAME	DATE OF INVOICE	ORDER AMOUNT	TOTAL BASIC UNITS ORDERED	1988 INTER. PRICE			AUG PRICE		AUG PURCHASE		DIFF	AUG	
						RU	LOW FOR	HIGH FOB	AVERAGE CIF	RUpees	Dollars	IN USA			RU PURCHASED
TOTAL COST (Rupees)		(INCLUSIVE FOR MULTIPLE INVOICES)		PACKAGE UNITS		AVERAGE INTL PRICE WAS INFLATED			SEPT-DEC 1988		SEPT-DEC 1988		ADJUSTED (INTL SAVINGS)		
TOTAL COST (US \$)						BY 25% TO OBTAIN AVG CIF PRICE					1988		25% TO CIF		
1	2.10 ACETYL SALICYLIC ACID 200MG	EFFROZE	9/5/88	770	770,000	1000	1.41	4.47	92.97	27.00	92.11	896	898	829	0.7
2	17.10 ALUMINIUM HYDROXIDE (COMPOUND)	BOOTS	9/5/88 - 12/18/88	5,106	5,106,000	1000	3.92	8.06	97.50	126.00	96.81	934,776	936,806	84,030	0.9
3	25.10 AMINOPHYLLINE 100MG	WELLCOME	9/5/88-9/18/88	110	110,000	1000	4.29	8.42	97.15	67.40	93.64	9401	9787	9386	0.5
4	6.31 AMPICILLIN 250MG CAPSULES	SANCO	9/5/88-12/18/88	1,811	1,811,000	1000	25.20	28.10	934.09	575.00	931.08	956,288	961,732	95,445	0.9
5	6.31 AMPICILLIN 500MG POW FOR INJ	KRKA-YUGO	9/5/88	330	330,000	100	16.62	27.28	930.18	650.00	935.14	911,595	99,958	91,637	1.2
6	4.20 ATROPINE SULFATE 1MG/ML	P.D.M.	19/1/88-19/12/88	198	198,000	100	4.76	11.50	919.16	90.00	94.86	9525	91,498	9572	0.5
7	6.31 BENZATHINE BENZYL PENICILLIN 1.2	MYETH	12/1/88	55	5,500	100	17.76	17.36	921.70	829.00	944.81	92,465	91,194	91,271	2.1
8	6.32 CHLORAMPHENICOL 250MG	YUGOSLAVIA	9/5/88	165	165,000	1000	11.76	18.90	917.88	204.50	911.05	91,824	92,949	91,125	0.6
9	15.00 CHLORHEX. 1.5% + CETRIMIDE 15%	I.C.I.	9/12/88-12/4/88	2,365	118,250	50	2.41	3.03	93.40	50.00	92.70	96,392	98,041	91,449	0.8
10	6.30 CHLORDQUINE 150MG BASE	EFROZE	9/5/88-12/18/88	3,306	3,306,000	1000	6.75	11.99	911.23	208.00	911.24	937,170	937,110	1860	1.0
11	3.00 CHLORPHENTRAMINE MALEATE 4MG	EFROZE	9/20/88	2	2,000	1000	1.59	1.78	92.11	13.00	90.70	91	94	93	0.3
12	18.10 DEXAMETHASONE 4MG/ML	YUGOSLAVIA	9/5/88	2,750	2,750	1	0.10	0.16	90.16	2.00	90.11	9297	9447	9159	0.7
13	26.20 DEXTAN 70, 6% W/V IN NS 500ML	ABBOTT	9/5/88	1,650	132,000	80	2.59	4.63	94.46	55.00	92.97	94,905	97,363	92,458	0.7
14	26.20 DEXTROSE 25%	DISULA-JAFAN	9/18/88-9/21/88	59	590	10	4.20	4.20	95.25	159.00	98.11	978	9310	9167	1.5
15	24.00 DIAZEPAM 5MG	EFROZE	9/5/88-9/18/88	177	177,000	1000	1.77	10.50	95.45	20.00	91.08	919	925	9773	0.2
16	24.00 DIAZEPAM 5MG/ML		9/18/88	4	400	100	5.06	14.00	911.06	120.00	96.49	926	944	918	0.6
17	22.00 ERGOMETRINE MALEATE 0.2MG/ML	SANCOZ	9/1/88	3,400	3,400	1	0.05	0.10	90.09	2.60	90.14	9478	9298	9180	1.6
18	6.72 ERYTHROMYCINE 250MG	ABBOTT	9/5/88	119	119,000	1000	35.10	50.74	951.46	145.00	978.38	98,622	95,661	92,961	1.5
19	6.34 ETHANBUTOL 400MG TABS (Not in any list)		9/5/88	11	11,000	1000	17.71	34.54	931.15	650	935.14	9386	9742	9644	1.1
20	10.10 FERRUS SULFATE + FOLIC ACID	SANCO	9/17/88-12/18/88	4,246	4,248,000	1000	1.41	1.71	91.95	330.00	917.84	975,775	98,284	987,492	7.1
21	15.00 GENIAM VIOLET POWDER	LAHORE PHARM	9/5/88-12/18/88	668	668	1	0.81	0.81	91.01	9.00	90.49	9325	9676	9351	0.5
22	2.10 IBUPROFEN 200MG	KRKA	9/5/88	165	165,000	1000	12.25	13.38	916.03	280.00	915.14	92,497	92,644	9147	0.9
23	6.34 ISONIAZID 100MG TAB (Not in any list)		9/5/88	108	108,000	1000	3.08	4.2	94.48	60	93.24	9350	9493	9133	0.7
24	6.74 ISONIAZIDE 200MG+THIACETAZONE 150MG	DUMEX	9/5/88	198	198,000	1000	9.87	13.43	914.73	60.00	93.24	9250	91,570	91,240	0.2
25	6.10 MERENDAZOLE 100MG TABLET	JASSEN	9/5/88-12/18/88	1,295	1,295,000	1000	8.06	10.68	911.91	2000.00	9108.11	9140,000	915,427	9124,570	9.1
26	27.00 MULTIVITAMINE COMPOUND	ABBOTT	9/5/88-12/18/88	10,488	10,488,000	1000	1.64	13.09	95.85	400.00	921.62	926,768	961,355	9165,413	2.7
27	13.20 NECTMYCINE 5MG/BACITRACIN 500IU 15GM	GLAXO	12/18/88	10,020	10,020	1	0.30	0.31	90.39	3.74	90.20	92,026	92,887	91,857	0.5
28	13.30 NITROFURAZONE 0.2% CREAM	S.K.F.	9/5/88	5	50	10	12.09	12.09	915.11	55.00	92.97	915	976	961	0.2
29	25.10 ORAL REHYDRATION SALTS 1000CC		9/5/88	339,895	339,895	1	0.07	0.12	90.11	2.00	90.11	936,745	938,238	91,493	1.0
30	21.1 OxyTETRACYCLINE 10% OPH DINT	ANTIBIOT	12/18/88	2,000	2,000,000	1000	1.00	1.1	91.5	1.1	90.11	922,965	950,100	927,135	0.5
31	6.31 PHENOMETHYL PENICILLIN 250MG	GLAXO	9/5/88	220	220,000	1000	12.71	49.75	921.64	400.00	921.62	94,757	95,080	91,727	0.8
32	17.20 PROMETHAZINE 25MG/ML	MAYABAKER	9/15/88	19	1,099	100	4.76	6.60	98.25	400.00	925.41	9254	984	9171	2.0
33	17.20 PROMETHAZINE HCL 25MG	MAYABAKER	9/15/88	16	16,000	1000	3.62	9.90	96.50	70.60	93.82	961	9104	943	0.6
34	6.34 PYRAZINAMIDE 500MG TAB (Not in any list)		9/5/88	27	27,000	1000	29.96	78.3	930.99	1000	954.05	91,459	91,917	9457	0.8
35	27.00 RETINOL 25,000-50,000 IU	WILSON	9/15/88	49	48,000	1000	6.28	8.75	94.29	207.00	918.24	9876	9451	94251	1.9
36	6.74 RIFAMPICIN 150MG TAB (Not in any list)	SANCO	9/5/88	100	100,000	1000	4.17	6.47	96.51	200	917.51	91,751	9651	97000	2.1
37	6.32 SULFAMETHOZAZOL 400+TRIMETHOPRIM 80	ADAMJEE	9/20/88-12/18/88	1,956	1,956,000	1000	17.96	75.70	925.17	69.50	93.76	97,967	927,588	923,621	0.1
38	21.1 TETRACYCLINE 12 OPH DINT 5GM		9/5/88-9/15/88	500	500	1	0.14	0.18	90.20	2.12	90.11	92,957	93,100	943	0.6
39	6.32 TETRACYCLINE HCL 250MG	KRKA-YUGO	9/5/88-12/18/88	3,433	3,433,000	1000	9.23	13.75	914.03	295.00	915.95	954,742	948,148	966,595	1.1
40	27.00 VITAMIN B COMPLEX	ABBOTT	9/5/88	275	275,000	1000	1.51	1.64	91.98	530.00	928.65	97,878	9543	97,335	14.5
41	26.20 WATER FOR INJECTION 2ML	FALCON LAHORE	9/15/88-12/15/88	1,402	1,402	1	0.04	0.05	90.06	0.50	90.03	938	988	950	0.4
42	1.20 XYLENOL W/V 100ML	I.C.I.	9/15/88-9/20/88	465	465	1	1.72	1.72	92.15	6.50	90.75	9167	91,000	9876	0.2

TOTALS 22,992,690 9750,928 9447,602 (9303,226) AVG RATIO = 1.7 HIGH RATIO = 14.5

FILE:PROCURE.WP1

19.5 Rupees/Dollar



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FORM NO.	GENERIC NAME	COMPANY NAME	ORDER AMOUNT	TOTAL BASIC UNITS ORDERED	1988 INTER L PRICE			AMEG PRICE	AMEG PRICE PURCHASE UNITS	AMEG PRICE PER TOTAL UNITS	AMEG PRICE PER PURCHASED UNITS	DIFF. INTL. PRICE	AVG. RATIO
					LOW	HIGH	AVERAGE						
TOTAL COST (Rupees)		PACKAGE UNITS	AVERAGE INTL PRICE WAS INFLATED BY 25% TO OBTAIN AVE CIF PRICE			SEPT-DEC 1988	SEPT-DEC 1989	ADJUSTED	INTL. SAVINGS	AVG	RATIO		
TOTAL COST (US \$)													
1	27.00 VITAMIN B COMPLEX	ABBOTT	275	275,000	1.51	1.64	\$1.98	570.00	\$2.45	\$7,878	\$547	(87,375)	14.5
2	100.00 FERROUS SULFATE + FOLIC ACID	SANCO	4,243	4,243,000	1.41	1.71	\$1.95	770.00	\$17.94	\$75,775	\$9,284	(67,491)	9.1
3	6.10 MEBENDAZOLE 100MG TABLET	JASSEN	1,295	1,295,000	8.06	10.69	\$11.91	2000.00	\$168.11	\$140,000	\$15,427	(124,573)	9.1
4	27.00 MULTIVITAMINE COMPOUND	ABBOTT	10,488	10,488,000	1.64	13.00	\$5.85	400.00	\$21.62	\$226,768	\$61,355	(165,413)	3.7
5	17.20 PROMETHAZINE 25MG/ML	MAYABAKER	10	1,000	4.76	9.60	\$8.35	470.00	\$25.41	\$254	\$84	(171)	3.0
6	6.34 RIFAMPICIN 150MG TAB (Not in any kit)	SANCO	100	10,000	4.13	6.43	\$6.51	250	\$12.51	\$1,351	\$651	(6700)	2.1
7	6.31 BENZATHINE BENZYL PENCILLINE 1.2	MYETH	55	5,500	17.36	17.36	\$21.70	829.00	\$44.81	\$2,465	\$1,194	(11,271)	2.1
8	20.00 PETHIDOL 20mg/50mg/100mg/150mg/200mg/300mg/400mg/500mg/600mg/800mg/1000mg/1200mg/1500mg/2000mg/3000mg/4000mg/5000mg/6000mg/8000mg/10000mg	MILSON	49	49,000	6.29	8.75	\$9.29	770.00	\$18.24	\$976	\$451	(425)	1.9
9	20.00 ERGOMETRINE MALEATE 0.2MG/ML	SANDUZ	3,400	3,400	9.05	9.10	\$0.09	2.60	\$0.14	\$478	\$299	(180)	1.6
10	26.20 DEXTROSE 25%	OTSUKA-JAPAN	59	590	4.20	4.20	\$5.25	150.00	\$8.11	\$478	\$210	(169)	1.5
11	6.32 ERYTHROMYCINE 250MS	ABBOTT	110	110,000	35.10	50.74	\$51.46	1450.00	\$78.38	\$8,622	\$5,661	(12,961)	1.5
12	6.31 AMPCILLINNE 500MG PGW FOR INJ	KRYA-YUGO	330	33,000	16.62	27.28	\$30.18	650.00	\$25.14	\$11,595	\$9,958	(11,637)	1.2
13	6.32 TETRACYCLINE HCL 250MG	KRYA-YUGO	3,433	3,433,000	9.27	13.75	\$14.07	295.00	\$15.95	\$54,742	\$48,148	(66,595)	1.1
14	6.34 ETHAMBUTOL 400MG TABS (Not in any kit)		11	11,000	17.71	34.54	\$11.17	650	\$75.14	\$786	\$742	(84)	1.1
15	6.34 CHLORQUINE 150MG PASE	EFROZE	2,706	2,706,000	6.75	11.29	\$11.27	200.00	\$11.24	\$77,170	\$77,110	(60)	1.0
16	26.10 ORAL HYDRATATION SALTS 100MGCC		339,895	339,895	9.07	9.10	\$0.11	2.00	\$0.11	\$36,175	\$29,238	(1,493)	1.0
17	2.10 IBUPROFEN 200MG	KRYA	165	165,000	12.25	13.38	\$16.03	280.00	\$15.14	\$2,497	\$2,644	(147)	0.9
18	6.31 AMPCILLINNE 250MG CAPSULES	SANCO	1,911	1,911,000	25.20	28.10	\$34.09	575.00	\$31.08	\$56,288	\$61,732	(5,445)	0.9
19	17.10 ALUMINIUM HYDROXIDE (COMPOUND)	ROOTS	5,106	5,106,000	3.92	9.06	\$7.60	126.00	\$6.81	\$74,376	\$78,866	(4,070)	0.9
20	15.00 CHLORPHEN. 150 + CETIRIZINE 150	I.C.I.	2,745	118,251	2.41	2.97	\$7.40	50.00	\$2.70	\$6,792	\$9,941	(1,149)	0.9
21	6.31 PHENOTHYRIMETHYL PENCILLINNE 250MS	GLANT	220	220,000	12.75	47.75	\$27.64	400.00	\$21.62	\$4,757	\$6,080	(1,323)	0.8
22	6.34 PYRAZINAMIDE 500MS TAB (Not in any kit)		27	27,000	29.26	28.3	\$29.99	1000	\$54.05	\$1,459	\$1,917	(457)	0.8
23	2.10 ACETYL SALICYLIC ACID 300MG	EFROZE	330	330,000	1.41	4.47	\$2.99	39.00	\$3.11	\$596	\$986	(299)	0.7
24	26.20 DEXTROSE 20, 40, 60, 80, 100, 150, 200, 300, 400, 500, 600, 800, 1000, 1500, 2000, 3000, 4000, 5000, 6000, 8000, 10000, 15000, 20000, 30000, 40000, 50000, 60000, 80000, 100000, 150000, 200000, 300000, 400000, 500000, 600000, 800000, 1000000, 1500000, 2000000, 3000000, 4000000, 5000000, 6000000, 8000000, 10000000, 15000000, 20000000, 30000000, 40000000, 50000000, 60000000, 80000000, 100000000, 150000000, 200000000, 300000000, 400000000, 500000000, 600000000, 800000000, 1000000000, 1500000000, 2000000000, 3000000000, 4000000000, 5000000000, 6000000000, 8000000000, 10000000000, 15000000000, 20000000000, 30000000000, 40000000000, 50000000000, 60000000000, 80000000000, 100000000000, 150000000000, 200000000000, 300000000000, 400000000000, 500000000000, 600000000000, 800000000000, 1000000000000, 1500000000000, 2000000000000, 3000000000000, 4000000000000, 5000000000000, 6000000000000, 8000000000000, 10000000000000, 15000000000000, 20000000000000, 30000000000000, 40000000000000, 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SORT BY COST DIFFERENCE

18.5 Rupees/Dollar

PROD. NUM.	GENERIC NAME	COMPANY NAME	ORDER AMOUNT	TOTAL BASIC UNITS ORDERED	1988 INTER L PRICE			AMEG PRICE		AMEG PURCHASE		INTL PRICE		DIFF		RATIO	
					LOW FOR	HIGH FOB	AVERAGE CIF	PURCHASE UNITS	OF TOTAL PUR	RUPEES	DOLLARS	IN USA	FOR ALL	INTL VS AMEG	AMEG VS INTL		
1	21.1 OXYTETRACYCLINE 1-32 OPTH OINT	ANTIRIOT.	200,400	200,400	1	0.2	0.21	99.25	2.12	90.11	122,965	850,100	927,125	0.5	1.0		
2	6.32 SULFAMETHOIAZOL 400+TRIMETHOPRIM 80	ADANJEE	1,056	1,056,000	1000	13.96	35.70	926.13	69.50	93.76	93,967	927,588	923,621	0.1	1.0		
3	6.31 AMFICILLINNE 250MG CAPSULES	SAMCO	1,811	1,811,000	1000	25.20	28.10	934.09	575.00	931.08	956,288	961,732	95,445	0.9	1.0		
4	17.10 ALUMINIUM HYDROXIDE (COMPOUND)	BOOTS	5,106	5,106,000	1000	3.92	8.06	97.60	126.00	96.81	934,776	938,806	94,030	0.9	1.0		
5	26.20 DEXTAN 7% 42 MW IN NS 500ML	ARBOIT	1,650	132,000	80	2.59	4.63	94.46	55.00	92.97	94,905	97,363	92,458	0.7	1.0		
6	17.20 NEOMYCINE 5MG+RACITRACIN 500IU 15GM	GLAYO	10,020	10,020	1	0.30	0.31	90.39	2.74	90.20	92,026	93,883	91,857	0.5	1.0		
7	15.00 CHLORHEX 1.5% + CETAMIDE 15Z	I.C.I.	2,365	118,250	50	2.41	2.03	93.40	50.00	92.70	96,392	98,041	91,649	0.8	1.0		
8	26.10 ORAL REHYDRATION SALTS 1000CC		339,895	339,895	1	0.07	0.13	90.11	2.00	90.11	936,745	938,238	91,493	1.0	1.0		
9	6.31 PHENOXIMETHYL PENICILLINE 250MG	GLAYO	220	220,000	1000	12.35	49.35	927.64	400.00	921.62	94,757	96,080	91,323	0.8	1.0		
10	6.34 ISONTIAZIDE 300MG+THIACETAZONE 150MG	DUMEX	108	108,000	1000	9.87	13.43	914.73	60.00	93.24	9350	91,590	91,240	0.2	1.0		
11	6.22 CHLORAMPHENICOL 250MG	YUGOSLAVIA	165	165,000	1000	11.76	18.90	917.80	204.50	911.05	91,824	92,949	91,125	0.8	1.0		
12	1.20 XYLENDL MW 100ML	I.C.I.	465	465	1	1.72	1.72	92.15	6.50	90.25	9165	91,000	9076	0.2	1.0		
13	24.00 DIAZEPAM 5MG	EFROZE	177	177,000	1000	1.77	10.59	95.45	20.00	91.08	9191	91,965	9773	0.2	1.0		
14	4.20 ATROPINE SULPHATE 1MG/ML	P.D.H.	108	10,800	100	4.76	11.50	910.16	90.00	94.86	9525	91,098	9572	0.5	1.0		
15	6.24 PYRAZINAMIDE 500MG TAB (Not in any kit)		27	27,000	1000	29.96	78.3	970.99	1000	954.05	91,459	91,917	9457	0.8	1.0		
16	25.10 AMINOPHYLLINE 100MG	WELLCOME	110	110,000	1000	4.29	8.42	97.15	67.40	93.64	9401	9787	9386	0.5	1.0		
17	15.00 GENTIAN VIOLET POWDER	LAHORE PHARMA	668	668	1	0.81	0.81	91.01	7.00	90.47	9725	9676	9251	0.5	1.0		
18	2.10 ACETYL SALICYLIC ACID 300MG	EFROZE	200	200,000	1000	1.41	4.43	92.99	39.00	92.11	9696	9786	9290	0.7	1.0		
19	18.10 DEXAMETHASONE 4MG/ML	YUGOSLAVIA	2,750	2,750	1	9.10	9.16	90.16	2.00	90.11	9297	9447	9150	0.7	1.0		
20	2.10 IUPROFEN 200MG	KRKA	165	165,000	1000	12.25	12.28	916.03	280.00	915.14	92,497	92,644	9147	0.9	1.0		
21	6.34 ISONTIAZID 100MG TAB (Not in any kit)		108	108,000	1000	3.08	4.2	94.48	60	93.24	9350	9483	9132	0.7	1.0		
22	13.30 NITROFURAZONE 0.2% CREAM	S.P. & F.	5	50	10	12.09	12.09	915.11	55.00	92.97	915	976	961	0.2	1.0		
23	26.20 WATER FOR INJECTION 2ML	FALCON LAHORE	1,402	1,402	1	0.64	0.65	90.06	6.50	90.02	978	968	950	0.4	1.0		
24	17.20 PROMETHAZINE HCL 25MG	MAYKRAIER	16	16,000	1000	2.62	9.00	96.50	70.60	95.82	961	9104	945	0.6	1.0		
25	21.1 TETRACYCLINE 1Z OPTH OINT 5GM		500	500	1	0.14	0.18	90.20	2.12	90.11	957	9190	943	0.6	1.0		
26	24.00 DIAZEPAM 5MG/ML		4	400	100	5.06	14.00	911.06	120.00	96.49	926	944	918	0.3	1.0		
27	3.00 CHLORPHENIRAMINE MALEATE 4MG	EFROZE	2	2,000	1000	1.59	1.78	92.11	13.00	90.70	91	94	93	0.3	1.0		
28	6.34 ETHAMBUTOL 400MG TABS (Not in any kit)		11	11,000	1000	17.71	34.54	931.13	650	935.14	9386	9342	(944)	1.1	1.0		
29	6.70 CHLOROFENIRAMINE 150MG BASE	EFROZE	7,706	7,706,000	1000	6.75	11.97	911.27	208.00	911.24	970,170	977,110	(960)	1.0	1.0		
30	26.20 DEXTROSE 25Z	DTSUNA-JAPAN	59	590	10	4.20	4.20	95.25	150.00	98.11	9478	9310	(9169)	1.5	1.0		
31	17.20 PROMETHAZINE 25MG/ML	MAYKRAIER	10	1,000	100	4.76	8.60	98.75	470.00	925.41	9254	984	(9171)	2.0	1.0		
32	22.00 ERGOMETRINE MALEATE 0.2MG/ML	SANDUZ	3,400	3,400	1	0.05	0.10	90.09	2.60	90.14	9478	9298	(9180)	1.6	1.0		
33	27.00 RETINOL 25,000-50,000 IU	WILSON	48	48,000	1000	6.28	8.75	99.39	307.50	918.24	9076	9451	(9425)	1.9	1.0		
34	6.34 RIFAMPICIN 150MG TAB (Not in any kit)	SAMCO	100	10,000	100	4.13	6.43	96.51	250	912.51	91,251	9651	(9700)	2.1	1.0		
35	6.71 PENZATHINE BENZYL PENICILLINE 1.2	MYETH	55	5,500	100	12.35	12.76	921.79	829.00	944.81	92,465	91,194	(91,271)	2.1	1.0		
36	6.31 AMFICILLINNE 500MG POW FOR INJ	KRKA-YUGO	70	70,000	100	16.62	20.28	970.18	650.00	935.14	91,595	99,958	(91,677)	1.2	1.0		
37	6.22 ERYTHROMYCINE 250MG	ARBOIT	110	110,000	1000	25.19	50.74	951.46	1450.00	976.28	98,622	95,661	(92,961)	1.5	1.0		
38	6.32 TETRACYCLINE HCL 250MG	KRKA-YUGO	3,433	3,433,000	1000	9.23	13.75	914.03	295.00	915.95	954,742	948,148	(96,595)	1.1	1.0		
39	27.00 VITAMIN B COMPLEX	ARBOIT	275	275,000	1000	1.51	1.64	91.98	530.00	928.65	943	97,878	9543	(97,335)	14.5	1.0	
40	10.10 FERROUS SULPHATE + FOLIC ACID	SAMCO	4,248	4,248,000	1000	1.41	1.71	91.95	330.00	917.84	975,775	98,284	(967,492)	9.1	1.0		
41	6.10 MPENDAZOLE 100MG TABLET	JASSEN	1,295	1,295,000	1000	8.76	10.60	911.91	2000.00	9180.11	9148,000	915,427	(9124,577)	9.1	1.0		
42	27.00 MULTIVITAMINE COMPOUND	ARBOIT	10,488	10,488,000	1000	1.64	13.00	95.85	400.00	921.62	9226,768	961,355	(9165,417)	2.7	1.0		

TOTALS 22,998,090

FILE:PROCURE.WK1

AVG RATIO = 1.7

HIGH RATIO = 14.5