

**FIVE (5) YEAR PROCUREMENT
PLAN FOR EXPANDED PROGRAMME OF
IMMUNISATION**

2006 - 2010

PAPUA NEW GUINEA

December 2005

Proposed JICA 5-year Procurement plan for PNG EPI

Background

In 1999, the Women's and Children's Health Project (WCHP), an initiative of the governments of PNG and Australia, focused on the strengthening and improvement of the national expanded program of immunisation (EPI) including rehabilitation of the Cold Chain System.

The rehabilitation of the cold chain system represents a major achievement of the Project. In 1999, a Project audit found less than 45% of health facilities had adequate cold-chain equipment. Of those facilities, which had equipment, many did not meet international standards. Procurement Targets were developed to address this, as well as for the establishment of provincial and district vaccine stores to serve the new vaccine distribution system that had been recommended for some time. Significant time and effort, during 1999/2000 was spent on the development with NDOH of equipment standards that determined the most appropriate type (of electric, gas/electric or solar power) for various settings, establishment of a central inventory, and procurement and distribution of equipment.

Initial procurement targets were met, and then targets revised in 2001, with inclusion of more church health services facilities, and other newly opened facilities. Equipment was procured to equip all required provincial and district vaccine stores. For procurement of equipment at health facilities, WCHP facilitated a complementary partnership with JICA and other donors to supplement equipment funded by AnsAID. This evolved into a most productive long term partnership (5 years) with JICA – it is unusual in the history of development assistance in PNG to find two donor agencies that collaboration so closely on a single goal.

Progress to date on support provided by JICA

During the past five years of this partnership, JICA procured 51% of the gas/electric refrigerators and freezers and solar vaccine units needed to rehabilitate health facilities in PNG. The result is that 95% of the health facilities have equipment that meets NDOH and international standards.

JICA also procured 3 walk-in Cool Rooms for the National Area Medical Store at Badili. This greatly increased vaccine storage capability at the National level where all vaccines are stored prior to being distributed to the Provincial/District vaccine stores for final distribution to the health facilities for administration.

One thousand vaccine carriers (procured by JICA) were distributed to support APWs qualified to administer vaccines. The distribution of these was explicitly linked to APW training. Monitoring of workshop outcomes suggests that this linkage of equipment with training is an important factor in supporting and validating the role of the APW in provision of immunisation services.

In addition to refrigerators and the 1,000 carriers for APW, JICA has procured other essential equipment of routine EPI activities in PNG (Annex 1). In preparation for the SIA in 2003-2005, JICA procured vaccines, vitamin A, and injecting equipment to support this important national activity. Again all donor agencies (including JICA) collaborated on a single goal, a successful SIA, and that goal was realised.

Our Plan for the next five (5) years for JICA's input into our EPI Program (Annex 2)

Rehabilitation of the CC equipment system was initiated in 1999 with an audit of existing system. Significant effort, during 1999-2000, was spent on the development of equipment standards to determine the most appropriate type of unit (gas, electric or solar) for various settings. In 2000, electric refrigerators/freezers were installed in 17 PVS (not Bougainville) and 6 DVS (Western Province, NCD). Twenty-one received 3 units and 2-4 units each. Health facilities in 19 provinces (not Bougainville) received 140 electric and 6 gas units (RCW42). This was the beginning of the CC equipment rehabilitation that rolled out to 2004-2005 when 95% rehabilitation was achieved.

Now we must think about replacement of equipment. The working lifespan of equipment is estimated to be:

- Electric, 5 to 10 years. Consider replacement after 5 years. All should be replaced by 10 years of age;
- Gas, as for electric but may be extended with replacement of some working parts (e.g. thermocouple, electric heater, flame failure device for RCW50);
- Solar, 20 years or more but may require new batteries, solar panels etc during that time.

Since the EPI Unit, NDOH have no experience in replacement planning we have used 10% of equipment supplied in a particular year to calculate replacement. This will need close monitoring and revision, if required, annually. Over time, with added experience of equipment life in PNG, projections will be more precise. It is envisioned that equipment lifespan will vary at different locations due to environmental factors (e.g. coastal – inland). Other planning considerations are:

- Adequate, secure storage space for new equipment until it is required and/or distributed; and
- System for the safe disposal of outdated equipment that does not endanger the environment.

We respectfully make the following 5 year procurement plan for consideration by JICA (Annex 2). The list is given with the understanding that some revision can be made each year if required.

JICA Contributions to PNG EPI 2000-2005

Routine EPI 2000-2004

Item	No.
Small gas refrigerators	148
Small gas freezers	60
LP gas cylinders	416
Solar refrigerators	94
Walk-in Cool Rooms at National Area Medical Store	3
Equipment boxes for immunization patrol	600
EPS boxes(vaccine transport boxes from Base Medical Store to Provinces	2,000
thermometers	750
Vaccine carriers	1,680
Vaccine cold boxes	350
Large vaccine carriers (1.7 L)	1,000

Routine EPI 2005

Item	No.
Gas refrigerators	30
Gas freezers	40
Solar refrigerators	50
Electric refrigerators	10
Cold boxes	200
Vaccine carriers	600
Icepacks	3,174
Thermometers	2,000

Supplementary Immunization Activity 2003-2004

Item	No.
Measles vaccine with diluent (10 doses/vial)	199,500 vials
Vitamin A (500 caps.bottle)	3,800 bottles
Oral Polio vaccine (10 doses/vial)	111,600 vials
Auto-disable syringes with needles(0.5ml) 100/box	16,700 boxes
Mixing syringes with needles for reconstitution (5ml), 100/box	1,670 boxes
Safety boxes for used syringes and needles	33,250 boxes

Supplementary Immunization Activity 2005

Item	No.
Safety boxes for used syringes and needles	1,000 boxes
Auto-disable syringes with needles(0.5ml) 100/box	8,000 boxes
Mixing syringes with needles for reconstitution (5ml), 100/box	1,000 boxes
Mixing syringes with needles for reconstitution (2ml), 100/box	10 boxes

Annex 2 Proposed JICA 5-year EPI procurement plan for PNG EPI

*Unit prices are approximate as based on 2004 prices therefore may be slightly higher than listed.

Year	Item	Specifications	Quantity	Unit price (US\$)	Total Price (US\$)
2006	Inclined electric refrigerator, compression type with standard spare parts per 10 units	Vaccine storage capacity: 20 litres, gross volume: 48 litres, energy source: 240VAC, reference model: MK074	12	800.00	9,600
	Refrigerator & icepack freezer, absorption type, electric and gas with standard spare parts per 10 units	Vaccine storage capacity: 24 litres, gross volume: 70 litres, energy source: 240VAC and/or LP gas, reference model: RCW50EGCF	34	1,209.00	40,800
	Icepack freezer, absorption type, electric and gas with standard spare parts per 10 units	Freezer/icepack storage: 14 litres, gross volume: 18 litres, energy sources: 240VAC and/or LP gas, Reference model: FCW 20	10	700.00	7,000
	Icepack freezer, compressor type with standard spare parts per 10 units	Vaccine storage capacity: 28 litres, gross volume: 32 litres, energy source: 240VAC, reference model: MF314	4	404.00	1,516
	Inclined electric refrigerator, compression type with standard spare parts per 10 units	Vaccine storage capacity: 106 litres, gross volume: 204 litres, energy source: 240VAC, reference model: MK304	3	700.00	2,100
	Inclined electric refrigerator, compression type with standard spare parts per 10 units	Vaccine storage capacity: 168 litres, gross volume: 250 litres, energy source: 240VAC, reference model: TCW1152	9	1,888.00	12,784
	Photovoltaic solar refrigerator and ice pack freezer with standard spare parts with 10 units	Vaccine storage capacity: 85 litres, gross volume: 127 litres, energy source: 12 DC volts, reference model: Dulas VC-150-F	40	4,764.38	47,844
	Small vaccine cold box with over shoulder sling, short range	Vaccine storage capacity: 5.3 litres, Number of icepacks required: 10, Reference model: RCW8/CF	100	170.00	17,000
	Vaccine carrier	Vaccine storage capacity: 1.7 litres, Number of icepacks required: 4, Reference model: 3504 UN/CF	200	19.70	3,946
	Icepack	Volume of icepack: 0 litres, Reference model: BK4	1200	0.50	600
	Icepack	Volume of icepack: 0.6 litres, Reference model: BK-5	750	0.58	435
	Bimetallic vaccine thermometer	Temperature range: -30C to +50C	500	2.80	1,400
	Vehicle for EPI Unit (NDOH)	Foyate Hilux, double cab with on-road costs (registration and inspection)	1	32,000.00	32,000
		SUB-TOTAL		42,350	177,325

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Year	Item	Specifications	quantity	*Unit price (US\$)	Total Price (US\$)
2007	Ice-lined electric refrigerator, compression type with standard spare parts per 10 units	Vaccine storage capacity: 20 litres, gross volume: 46 litres, energy source: 240VAC, reference model: MK074	12	800.00	9,600
	Refrigerator & icepack freezer, absorption type, electric and gas with standard spare parts per 10 units	Vaccine storage capacity: 24 litres, gross volume: 70 litres, energy source: 240VAC and/or LP gas, reference model: RCW50EG/CF	34	1,200.00	40,800
	Icepack freezer, absorption type, electric and gas with standard spare parts per 10 units	Frozen icepack storage: 14 litres, gross volume: 18 litres, energy sources: 240 VAC and/or LP gas, Reference model: FCW 20	10	700.00	7,000
	Icepack freezer, compression type, with standard spare parts per 10 units	Vaccine storage capacity: 264litres, gross volume:323litres, energy source: 240VAC, reference model: MF314	4	404.00	1,616
	Ice-lined electric refrigerator, compression type with standard spare parts per 10 units	Vaccine storage capacity: 108 litres, gross volume: 204 litres, energy source: 240VAC, reference model: MK304	3	700.00	2,100
	Ice-lined electric refrigerator, compression type with standard spare parts per 10 units	Vaccine storage capacity: 169 litres, gross volume: 250 litres, energy source: 240VAC, reference model: TCW1152	5	1,598.00	7,990
	Small vaccine cold box with over shoulder sling, short range	Vaccine storage capacity: 5.3 litres, Number of icepacks required: 10, Reference model: RCW8/CF	100	170.00	17,000
	Vaccine carrier	Vaccine storage capacity: 1.7litres, Number of icepacks required: 4, Reference model:3504 UN/CF	200	19.73	3,948
	Icepack	Volume of icepack: 0.4litres, Referential model BK-4	1200	0.50	600
	Icepack	Volume of icepack: 0.6 litres, Referential model BK-6	750	0.58	435
	Bimetallic vaccine thermometer	Temperature range: -30C to +50C	500	2.80	1,400
		SUB-TOTAL		5,596	92,487

Annex 2 Proposed JICA 5-year EPI procurement plan for PNG EPI

*Unit prices are approximate as based on 2004 prices therefore may be slightly higher than listed.

Year	Item	Specifications	quantity	*Unit price (US\$)	Total Price (US\$)
2008	1	Iceline electric refrigerator, compression type with standard spare parts per 10 units	12	800.00	9,600
	2	Refrigerator & icepack freezer, absorption type, electric and gas with standard spare parts per 10 units	34	1,200.00	40,800
	3	Icepack freezer, absorption type, electric and gas with standard spare parts per 10 units	10	700.00	7,000
	4	Icepack freezer, compression type with standard spare parts per 10 units	4	404.00	1,616
	5	Iceline electric refrigerator, compression type with standard spare parts per 10 units	3	700.00	2,100
	6	Iceline electric refrigerator, compression type with standard spare parts per 10 units	5	1,598.00	7,990
	7	Photovoltaic solar refrigerator and ice pack freezer with standard spare parts with 10 units	10	4,784.38	47,844
	8	Small vaccine cold box with over shoulder sling, short range	100	170.00	17,000
	9	Vaccine carrier	200	19.73	3,946
	10	Icepack	1200	0.50	600
	11	Icepack	750	0.58	435
	12	Bimetallic vaccine thermometer	500	2.80	1,400
		Sub-TOTAL		10,380	149,331

2008 Cont.	Item	Specifications	box/pack/vial/ al/bottle quantity	Box/pack/vial/ bottle *Unit price (US\$)	Total Price (US\$)
Supplementary Immunization Activity	1	Auto-disable syringes with attached needle, 200 syringes per box	7,524	16.00	120,384
	2	Disposable syringes with needle for reconstitution, 100 per box	15,049	2.80	42,137
	3	Safety boxes for used syringes and needles, 5L, 25/package	1,204	27.50	33,110
	4	Vaccine cold chain indicators on cards(250cards/package)	6	18.00	108
	5	Measles vaccine, 10 doses/Vial with diluents	150,487	2.00	300,974
	6	Vitamin A 100,000IU (500 capsules/bottle)	2,088	4.80	9,926
		SUB-TOTAL		71.10	506,640
		TOTAL		10,451	646,970

*Pricing is calculated for boxes/vial/bottle and not per piece.

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*Unit prices are approximate as based on 2004 prices therefore may be slightly higher than listed.

Year	Item	Specifications	quantity	Unit price (US\$)	Total Price (US\$)
2009	1 Inclined electric refrigerator, compression type with standard spare parts per 10 units	Vaccine storage capacity: 20 litres, gross volume: 46 litres, energy source: 240VAC, reference model: MK074	12	800.00	9,600
	2 Refrigerator & icepack freezer, absorption type, electric and gas with standard spare parts per 10 units	Vaccine storage capacity: 24 litres, gross volume: 70 litres, energy source: 240VAC and/or LP gas, reference model: RCW50EG/CF	24	1200.00	28,800
	3 Icepack freezer, absorption type, electric and gas with standard spare parts per 10 units	Frozen icepack storage: 14 litres, gross volume: 18 litres, energy sources: 240 VAC and/or LP gas, Reference model: FCW 20	10	700.00	7,000
	4 Icepack freezer, compression type, with standard spare parts per 10 units	Vaccine storage capacity: 264 litres, gross volume: 323 litres, energy source: 240VAC, reference model: MF314	4	404.00	1,616
	5 Inclined electric refrigerator, compression type with standard spare parts per 10 units	Vaccine storage capacity: 108 litres, gross volume: 204 litres, energy source: 240VAC, reference model: MK304	3	700.00	2,100
	6 Inclined electric refrigerator, compression type with standard spare parts per 10 units	Vaccine storage capacity: 169 litres, gross volume: 250 litres, energy source: 240VAC, reference model: TCW1152	5	1598.00	7,990
	7 Small vaccine cold box with over shoulder sling, short range	Vaccine storage capacity: 5.3 litres, Number of icepacks required: 10, Reference model: RCW8/CF	100	170.00	17,000
	8 Vaccine carrier	Vaccine storage capacity: 1.7 litres, Number of icepacks required: 4, Reference model: 3504 UN/CF	200	19.73	3,946
	9 Icepack	Volume of icepack: 0.4 litres, Referential model BK-4	1200	0.50	600
	10 Icepack	Volume of icepack: 0.6 litres, Referential model BK-6	750	0.58	435
	11 Bimetallic vaccine thermometer	Temperature range: -30C to +50C	500	2.80	1,400
		SUB-TOTAL		5,596	80,487

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*Unit prices are approximate as based on 2004 prices therefore may be slightly higher than listed.

Year	Item	Specifications	quantity	*Unit price (US\$)	Total Price (US\$)
2010	Ice-lined electric refrigerator, compression type with standard spare parts per 10 units	Vaccine storage capacity: 20 litres, gross volume: 46 litres, energy source: 240VAC, reference model: MK074	12	800.00	9,600
2	Refrigerator & icepack freezer, absorption type, electric and gas with standard spare parts per 10 units	Vaccine storage capacity: 24 litres, gross volume: 70 litres, energy source: 240VAC and/or LP gas, reference model: RCW50EG/CF	24	1200.00	28,800
3	Icepack freezer, absorption type, electric and gas with standard spare parts per 10 units	Frozen icepack storage: 14 litres, gross volume: 18 litres, energy sources: 240 VAC and/or LP gas, Reference model: FCW 20	10	700.00	7,000
4	Icepack freezer, compression type with standard spare parts per 10 units	Vaccine storage capacity: 264litres, gross volume: 323litres, energy source: 240VAC, reference model: MF314	4	404.00	1,616
5	Ice-lined electric refrigerator, compression type with standard spare parts per 10 units	Vaccine storage capacity: 108 litres, gross volume: 204 litres, energy source: 240VAC, reference model: MK304	3	700.00	2,100
6	Ice-lined electric refrigerator, compression type with standard spare parts per 10 units	Vaccine storage capacity: 169 litres, gross volume: 250 litres, energy source: 240VAC, reference model: TCW1152	5	1598.00	7,990
7	Photovoltaic solar refrigerator and ice pack freezer with standard spare parts with 10 units	Vaccine storage capacity: 85 litres, gross volume: 127 litres, energy source: 12 DC volts, reference model: Dulias VC-150 F	10	4784.38	47,844
8	Small vaccine cold box with over shoulder sling, short range	Vaccine storage capacity: 5.3 litres, Number of icepacks required: 10, Reference model: RCW8/CF	100	170.00	17,000
9	Vaccine carrier	Vaccine storage capacity: 1.7litres, Number of icepacks required: 4, Reference model: 3504 UN/CF	200	19.73	3,946
10	Icepack	Volume of icepack: 0.4litres, Referential model BK-4	1200	0.50	600
11	Icepack	Volume of icepack: 0.6 litres, Referential model BK-6	750	0.58	435
12	Bimetallic vaccine thermometer	Temperature range: -30C to +50C	500	2.80	1,400
		SUB-TOTAL		10,380	128,331
	Cost Summary 2006-2010	GRAND TOTAL		74,395	3,500,050

5. 要請機材リスト (EPI 英文)

要請機材リスト

No.	機材名(和)	数量	単位	仕様	価格	単位	調達方法
1	Ice-lined electric refrigerator, compression type with standard spare parts per 10 units (圧縮機式アイスライン冷凍冷蔵庫)	12	Units	Vaccine storage capacity: 20L, gross volume: 46L, energy source: 240VAC, reference model: MK074	800.00	US\$	UNICEF
2	Refrigerator & icepack freezer, absorption type, electric and gas with standard spare parts per 10 units (吸収式冷凍冷蔵庫)	34	Units	Vaccine storage capacity: 24L, gross volume: 70L, energy source: 240VAC and/or LP gas, reference model: RCW50EG/CF.	1,200.00	US\$	UNICEF
3	Icepack freezer, absorption type, electric and gas with standard spare parts per 10 units (吸収式冷凍庫)	10	Units	Frozen icepack storage: 14L, gross volume: 18L, energy source: 240VAC and/or LP gas, reference model: FCW20	700.00	US\$	UNICEF
4	Icepack freezer, compression type with standard spare parts per 10 units (圧縮機式冷凍庫)	4	Units	Vaccine storage capacity: 264L, gross volume: 323L, energy source: 240VAC and/or LP gas, reference model: MF314	404.00	US\$	UNICEF
5	Ice-lined electric refrigerator, compression type with standard spare parts per 10 units (圧縮機式アイスライン冷蔵庫)	3	Units	Vaccine storage capacity: 108L, gross volume: 204L, energy source: 240VAC and/or LP gas, reference model: MK304	700.00	US\$	UNICEF
6	Ice-lined electric refrigerator, compression type with standard spare parts per 10 units (圧縮機式アイスライン冷蔵庫)	8	Units	Vaccine storage capacity: 169L, gross volume: 250L, energy source: 240VAC and/or LP gas, reference model: TCW1152	1,598.00	US\$	UNICEF
7	Photovoltaic solar refrigerator and icepack freezer with standard spare parts per 10 unit (ソーラー式冷凍冷蔵庫)	10	Units	Vaccine storage capacity: 85L, gross volume: 127L, energy source: 12 DC volts, reference model: Dulas VC-150F	4,784.38	US\$	UNICEF
8	Small vaccine cold box with over shoulder sling, short range (小型ワクチンコールドボックス)	100	Units	Vaccine storage capacity: 5.3L, Number of icepacks required: 10, Reference model: RCW8/CF	170.00	US\$	UNICEF
9	Vaccine carrier (ワクチンキャリア)	200	Units	Vaccine storage capacity: 1.7L, Number of icepacks required: 4, Reference model: 3504UN/CF	19.73	US\$	UNICEF
10	Icepack (保冷材)	1200	Units	Volume of icepack: 0.4L, reference model BK-4	0.50	US\$	UNICEF
11	Icepack (保冷材)	750	Units	Volume of icepack: 0.6L, reference model BK-6	0.58	US\$	UNICEF
12	Bimetallic vaccine thermometer (バイメタル式温度計)	500	Units	Temperature range: -30 C to +50 C	2.80	US\$	UNICEF
13	Vehicle for EPI unit (NDOH) (車輛)	1	Units	Toyota Hilux, double cab with on road costs (registration and inspection)	32,000.00	US\$	現地調達

6. 要請機材リスト案（母と子 英文）

UNICEF から提案された要請機材リスト案

（妊娠の成果向上プログラム）

No.	機材名(和)	数量	単位	仕様	価格	単位	調達方法
1	Pre-packaged antimalarials (マラリア予防薬)	1,000	Pack	-	-	-	-
2	Malaria treatment (ITP) (マラリア治療薬)	4,000	Pack	-	-	-	-
3	Micronutrients (微量栄養素)	3,150,000	Tab	-	-	-	-
4	Albendazole (駆虫薬)	31,500	Tab	-	-	-	-
5	Rapid test kits (syphilis) (梅毒検査キット)	8,000	Set	-	-	-	-
6	Hanging scales (計量秤)	90	Unit	-	-	-	-
7	Heamoglobinometers (ヘモグロビン測定器)	35	Unit	-	-	-	-

保健省健康増進部リプロダクティブヘルスチームより提案された要請機材リスト案

（基本的産科ケアプログラム）

No.	機材名(和)	数量	単位	仕様	価格	単位	調達方法
1	Sphygmomanometer (anaroid) (アナロイド型血圧計)	1,030	Unit	Handheld adult pressure cuff.	20,600	kina	-
2	Arm band with cuff Adult (成人用アームバンド)	1,630	Unit	-	6,520	kina	-
3	Laryngoscope Adult, Child, Neonatal (喉頭鏡セット 成人・小児・新生児用)	70	Set	With set of blades, spare lamp, batteries.	23,100	kina	-
4	Stethoscope (聴診器)	3,120	Unit	With dual head chest place, diaphragm + bell.	53,290	kina	-
5	Fetoscope (胎児心音聴診器)	730	Unit	Aluminum Pinard 15cm.	1,460	kina	-
6	Suction Unit (Foot) (吸引装置)	440	Unit	Twin, max negative pressure 800mbra=500mmHg	132,000	kina	-
7	Vaccum extractor (Foot) (吸引分娩装置)	440	Unit	Bird, complete with suction cups diam 40, 50, 60mm suction jar with 500mls capacity.	1,078,000	kina	-

8	Heamoglobinmeter (ヘモグロビン測定器)	70	Unit	-	56,000	kina	-
9	Clinical Thermometer (医療用体温計)	1,600	Unit	Oral/Rectal, prism 36-42°C.	6,400	kina	-
10	Resustator with face mask, airway 3 set (蘇生セット 成人・小児・新生児用)	70	Set	-	59,150	kina	-
11	Measuring tape (巻尺)	660	Roll	150cm/60", vinyl coated.	1,320	kina	-
12	Pregnancy wheel (妊娠暦算出器)	590	Unit	Gestation calculator.	8,850	kina	-
13	Scale adult (成人用体重計)	590	Unit	-	22,420	kina	-
14	Scale infant (乳児用体重計)	590	Unit	Beam Type, handing scale.	71,980	kina	-
15	Jug measuring 1L (ピーカー)	590	Unit	Graduated in ml sterilisable.	1,770	kina	-
16	Delivery bed (マットレス付分娩台)	520	Unit	With mattress	390,000	kina	-
17	Post natal bed (マットレス付産褥ベッド)	870	Unit	With mattress	565,500	kina	-
18	Bucket soiled dressing (汚物用バケツ)	660	Unit	-	25,080	kina	-
19	Tray (蓋付トレイ)	590	Unit	53 x 41 x 5cm With lids.	24,190	kina	-
20	Coleman lamp (electric) (電気式ランプ)	140	Unit	-	8,960	kina	-
21	Hurricane Lamp (ハロゲンランプ)	590	Unit	Kerosene operated.	5,900	kina	-
22	Hot water bottle (温水ボトル)	6,660	Bottle	-	10,560	kina	-
23	Plastic bucket for carrying water (運搬用バケツ)	1,040	Unit	-	5,200	kina	-
24	Delivery pack (kit) (分娩キット)	800	Set	Artery forceps, Stitch scissors, Episiotomy scissors, Basin/Bowl.	66,752	kina	-
25	Perineal/Vaginal/Cervical repair pack (会陰切開・縫合キット)	800	Set	Needle holder, Vaginal speculums, Dissecting forceps, Stitch scissors.	44,984	kina	-
26	Nebulizer (ネブライザー)	210	Unit	Portable, 230VAC with adult and child mask, reusable drug chamber, mouthpiece and tube.	54,180	kina	-
27	Nabulizer foot operated (足踏み式レブライザー)	520	Unit	Foot operated with adult and child mask, reusable drug chamber mouthpiece and tube.	70,200	kina	-
28	Forceps set (挟子セット)	660	Set	3 types of forceps.	8,580	kina	-

29	Scissors set (剪刀セット)	660	Set	4 types of scissors.	11,550	kina	-
30	Scalpel handle set (外科用メスセット)	660	Set	2 types of scalpel.	924	kina	-
31	Digital timer (デジタルタイマー)	660	Unit	4 digits, 0-99min, Battery operated	13,200	kina	-
32	Auroscope (耳鏡)	70	Unit	Otoscope, Battery operated	21,000	kina	-
33	Glucometer (血糖測定器)	210	Unit	With spare batteries	105,000	kina	-
34	Hanging Scale (計量秤)	590	Unit	For infant and toddlers 25kg in 100g increment	34,220	kina	-
35	Cot (小児用簡易ベッド)	140	Unit	With mattress	46,830	kina	-
36	Vasectomy set (精管切除セット)	150	Set	Ringed clamp, dissecting forceps, Surgical scissors, Cutting edge.	27,300	kina	-
37	Small Bowl (小型ボウル)	1,110	Unit	Plastic.	3,219	kina	
38	Brush (hands and nail) (手・爪洗浄用ブラシ)	1,250	Unit	Hand brush.	750	kina	
39	Sterilizer pressure cooker (ポータブル滅菌機)	520	Unit	Portable dressing sterilizer 30 × 30cm, 24L, Fuel heated pressure type, Gasket.	95,160	kina	-
40	Sterilizing drum (滅菌用ドラム)	520	Unit	Diam 22.5cm high, 22.5cm cylindrical SS	26,000	kina	-
41	Stove electric (電気ストーブ)	70	Unit	-	3,150	kina	-
42	Stove primas multiple burner (混合バーナーストーブ)	52,070	Unit	Kerosene	23,400	kina	
43	Oxygen cylinder regulator (酸素ボンベ調整装置)	70	Unit	-	14,350	kina	-
44	Oxygen flowmeter (酸素流量計)	100	Unit	-	7,070	kina	-
45	Instrument lifting forceps (機材保持用摂子)	100	Unit	Chiepol forceps - supplier - meddent.	13,200	kina	-
46	Patient stretcher canvas (布製担架)	100	Unit	-	25,400	kina	-
47	I.V. stand (輸液用スタンド)	100	Unit	-	22,500	kina	
48	Clean water container (蓋付清浄水用容器)	100	Unit	80L container with lid - supplier kuntila	4,000	kina	-
合計					132,846,760 円	3,321,169 キナ	

通貨換算率：現地通貨 = KINA1.00 = ¥40 (2006年3月)

保健省疾病対策部マラリア・媒介昆虫疾病対策課から提案された要請機材リスト案

(マラリア診断体制整備プログラム)

No.	機材名(和)	数量	単位	仕様	価格	単位	調達方法
1	Microscopes (顕微鏡)	20	Unit	Model CX21 PST.	-	-	-
2	Training Microscope (研修用顕微鏡)	2	Unit	BHS. Photo micrographic Model PM-10AD with screen.	-	-	-
3	Blood Glucose Test Meter (血糖測定器)	3	Unit	Testing Blood sugar.	-	-	-
4	Ph. Meter (Ph 測定器)	3	Unit	Model MP 200 Basic ph. Quantitative electro-chemical measurement.	-	-	-
5	Weighing Balance (ラボ用天秤)	2	Unit	Model PG503-5 W/capacity 0.001-210gms.	-	-	-
6	Microscope Slides Frosted end. (顕微鏡用スライド)	5,000	Box	100 in per box	-	-	-
7	Bottle Reagent (試薬 1)	10	Bottle	Dark, 500mls for storing Giemsa stain and buffer water.	-	-	-
8	Bottle Reagent (試薬 2)	10	Bottle	Clear, with dropping needle stain and buffer water.	-	-	-
9	Centrifuge (遠心分離機)	1	Unit	Electric, CEN 040 DITTO. 24V Model.	-	-	-
10	Pipettes (ピペット 1)	100	Unit	Plastic bulb, polythene 1m graduated 0.5mls to 1.0ml.	-	-	-
11	Pipettes (ピペット 2)	100	Unit	Plastic bulb, polythene micro 50ml.	-	-	-
12	White Blood Cell Counter (白血球分析装置)	16	Unit	Mechanical 5 unit counter with locking key.	-	-	-
13	TV Screen (TV スクリーン)	1	Unit	-	-	-	-
14	TV Video Deck (TV ビデオデッキ)	1	Unit	-	-	-	-
15	Overhead Projector (拡大映像投射器具 1)	1	Unit	Transparencies.	-	-	-
16	Overhead Projector (拡大映像投射器具 2)	1	Unit	Power Point.	-	-	-
17	Computer (コンピューター)	1	Unit	Lab Top.	-	-	-
18	×100 Objective (対物レンズ)	100	Unit	Spare.	-	-	-
19	× 10 Occular lens eye pieces (接眼レンズ 1)	50	Unit	Spare.	-	-	-
20	× 7 Occular lens eye pieces (接眼レンズ 2)	50	Unit	Spare. with dropping needle stain and buffer water	-	-	-

7. 医療特別機材供与事業の概要

医療特別機材供与事業は国際協力機構人間開発部が所掌する保健医療分野における機材供与事業のひとつで、技術協力プロジェクトとは別に、国際機関とのマルチ・バイ協力により実施されている。感染症対策、家族計画・母子保健活動の推進、エイズ検査の拡充等を目的として、「感染症対策特別機材」、「母と子供のための健康対策特別機材」、「人口・家族計画特別機材」、「エイズ対策・血液検査特別機材」の供与事業を実施しており、「感染症」、「母と子」においてはUNICEFとの連携、「人口・家族計画」においてはUNFPAとの連携によるマルチ・バイ協力案件である。「エイズ対策」を除く上記事業は、単年度採択を必要とするが原則5年または4年間継続の予定で計画されている。供与対象国は毎年約45カ国、供与金額合計は平成15年には約12億円、平成16年度も最終的に約12億円となる見込みである。

主な供与機材としては、「感染症」では、ワクチン、コールドチェーン機材（ワクチン保管用冷蔵庫、ワクチン運搬用コールドボックス等）、注射器など。「人口・家族計画」では、避妊具、避妊薬、家族計画の教育用視聴覚・AV機器など。「母と子」では、助産婦用器具、各種抗生物質など。「エイズ対策」では、検査キット、エイズの教育用視聴覚・AV機器などがある。

調達方法として、①UNICEF調達、②現地調達（第三国調達を含む）、③本邦調達がある。

①UNICEF調達の手続きはJICA調達部が行っており、コペンハーゲンにあるUNICEFの Supply Divisionに発注している。機材は日本を経由することなく、直接供与先に送られる。

②現地調達はJICAの現地事務所などが調達手続きを行う。

③本邦調達はJICA調達部で手続きが行われる。

8. 主要保健指標

基本統計	数値
総人口 (1000 人)	5,772
乳児死亡率 (出生 1000 対)	68
5 歳未満児死亡率 (出生 1000 対)	93
妊産婦死亡率 (出生 10 万対) (調整値)	300
出生時平均余命 (年)	56
合計特殊出生率 (人)	3.9
1 人当たりの GNI (米ドル)	580
予防接種率	
1 歳児の完全に予防接種を受けた比率 (%)	
・ 結核	54
・ 三種混合	46
・ ポリオ	36
・ 麻疹	44
・ B 型肝炎	45
妊婦破傷風	10
HIV/AIDS 指標	
成人の HIV 感染率 (%) (推定値)	0.6
HIV/AIDS と共に生きる人 (人) (推定値)	
・ 成人と子ども (0~49 歳)	16,000
・ 子ども (0~14 歳)	16,000
・ 女性 (15~49 歳)	4,800
AIDS による死亡者数 (0~49 歳)	600
女性指標	
近代的避妊法の普及率 (%)	26
出産前ケアの実施率 (%)	78
専門技能者が付き添う出産比率 (%)	41
人口増加率 (%)	2.4

出典：Report on the global AIDS epidemic 2004, UNAIDS

The state of the world's children 2006, UNICEF