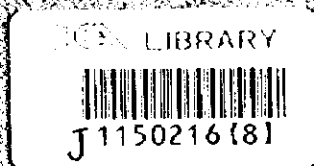


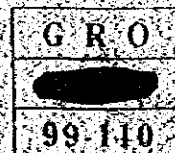
**STUDY REPORT
ON
THE GRANT AID FOR CHILD HEALTH,
THE PROJECT FOR ACCELERATION OF NEONATAL
TETANUS ELIMINATION AND MEASLES CONTROL
IN
THE REPUBLIC OF INDONESIA**

FEBRUARY 1999



JAPAN INTERNATIONAL COOPERATION AGENCY

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GRO





Ministry of Health
The Republic of Indonesia

STUDY REPORT
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PREFACE

In response to a request from the Government of the Republic of Indonesia, the Government of Japan decided to conduct a study on the Grant Aid for Child Health, the Project for Acceleration of Neonatal Tetanus Elimination and Measles Control and entrusted the Japan International Cooperation Agency (JICA) to conduct the study with the assistance of the Japan International Cooperation System (JICS).

JICA sent to Indonesia a study team from January 25 to January 30, 1999.

I hope that this report will contribute to the promotion of the project and to the enhancement of friendly relations between our two countries.

I wish to express my sincere appreciation to the officials concerned of the Government of the Republic of Indonesia for their close cooperation extended to the team.

February 1999



Kimio Fujita

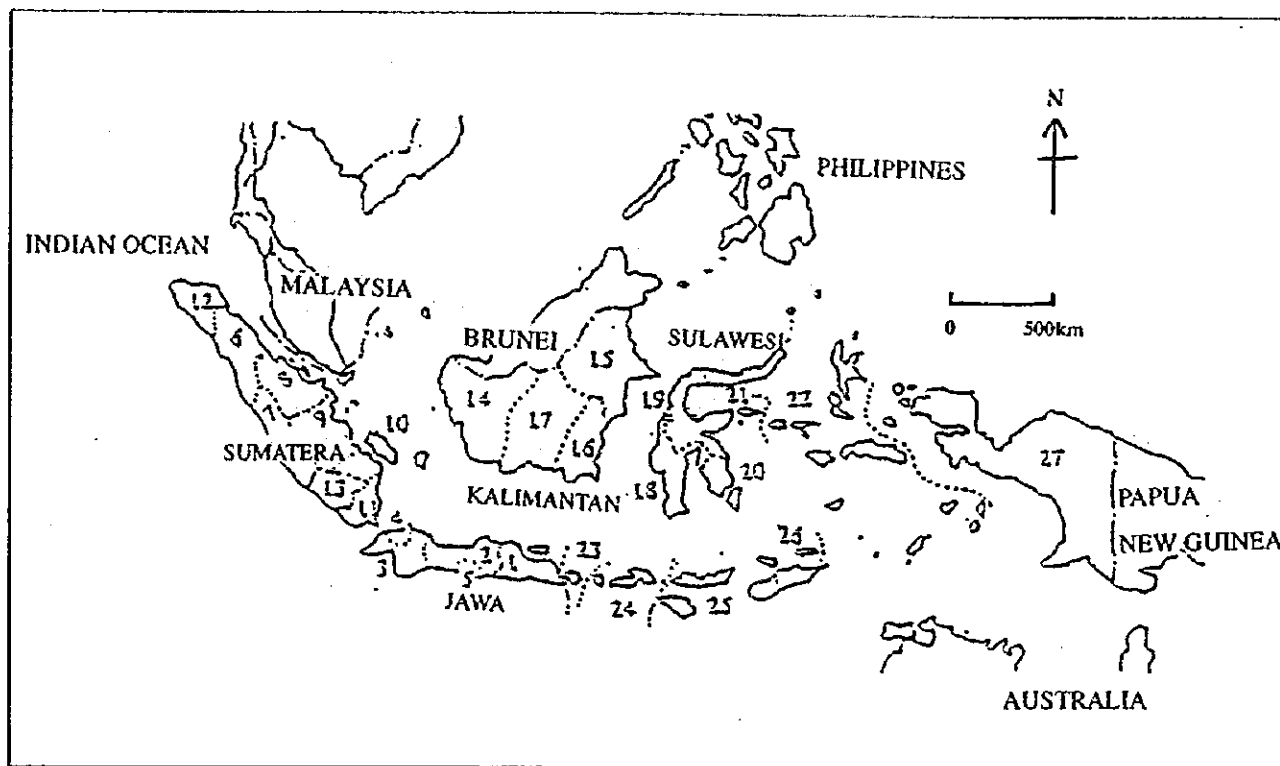
President

Japan International Cooperation Agency



Location Map

THE REPUBLIC OF INDONESIA



- | | | |
|------------------|------------------------|------------------------|
| 1. East Jawa | 10. South Sumatra | 19. Central Sulawesi |
| 2. Central Jawa | 11. Lampung | 20. Southeast Sulawesi |
| 3. West Jawa | 12. Aceh | 21. North Sulawesi |
| 4. Jakarta | 13. Bengkulu | 22. Maluku |
| 5. Jogjakarta | 14. West Kalimantan | 23. Bali |
| 6. North Sumatra | 15. East Kalimantan | 24. West Nusa Tenggara |
| 7. West Sumatra | 16. South Kalimantan | 25. East Nusa Tenggara |
| 8. Riau | 17. Central Kalimantan | 26. East Timor |
| 9. Jambi | 18. South Sulawesi | 27. Irian Jaya |

Abbreviations

ADB	Asia Development Bank
AIDB	Australian International Development Bureau (The present; AusAID : Australian Agency for International Development)
AIDS	Acquired Immuno--Deficiency Syndrome
CBAW	Child Bearing Age Women
CDC	Center for Disease Control
DT	Diphtheria and Tetanus Toxoid
EPI	Expanded Programme on Immunization
HB	Hepatitis B
KfW	Kreditanstalt fur Wiederaufbau
NIDs	National Immunization Days
OECF	Oversea Economic Cooperation Fund
OPV	Oral Polio Vaccine
SIP	School Immunization Programme
TT	Tetanus Toxoid
UNICEF	United Nation Children's Fund
USAID	United States Agency for International Development
WHO	World Health Organization

**Report of the Survey on Equipment Supply for Child Health Grant Aid
(the Project for Neonatal Tetanus and Measles Immunization)
in the Republic of Indonesia**

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Chapter 1 Background of the Project

1-1 Background and Contents of the Request

1-1-1 Background of the Request

(I) Present Situation of the Health Sector

According to population statistics for the Republic of Indonesia (hereinafter referred to as Indonesia), it is estimated that the overall population exceeded 200 million in 1997, however, there are signs that the child population is going down since the rough birth rate and number of children per family in 1997 were 2.27% and 2.6 respectively, compared with 3.55% and 4.7 respectively some 20 years ago. This change is thought to have been the result of the Family Planning Programme. It is expected that the child population will decline further in future and that the mortality rate among newborn infants will also fall. However, the said infant mortality rate in Indonesia is still high and many infants die every year. Although the mortality rate among infants of less than one year-old (per 1,000) has steadily fallen from 142 in 1971 to 112 in 1980, to 70 in 1990, to 50 in 1997 (figures are estimates), the infant mortality rate is still high when compared with the situation in neighboring countries. Infant fatalities accounted for approximately 27% of all fatalities in 1990, and this figure rose to approximately 43% when the mortality rate among children of less than four year-old was taken into account.

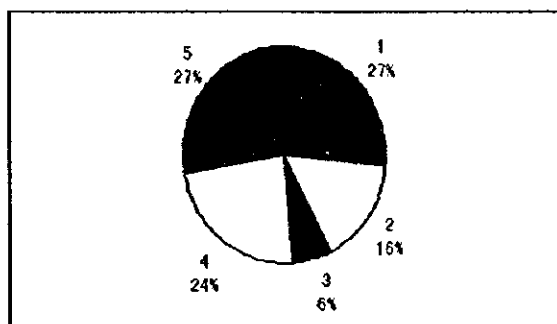


Figure 1 Mortality Rate According to Age Group (1990)

1: Less than 1 year-old 2: 1-4 year-old 3: 5-14 year-old 4: 15-54 year-old 5: 55 year-old and over

The greatest cause of fatalities among infants is death from infections that are preventable by immunization, accounting for approximately 30%, and this is followed by diarrhea (approximately 26%) and respiratory infections (approximately 8%). The greatest cause of fatalities among infants of less than one year-old is neonatal tetanus, accounting for approximately 20% of infant fatalities, and it is estimated that even now more than 15,000 newborn infants die from this every year.

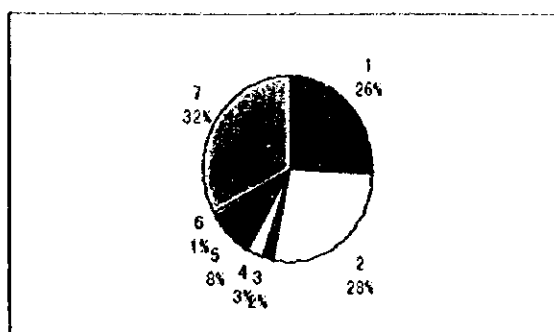


Figure 2 Causes of Infant Fatalities

1: Diarrhea 2: Diphtheria, whooping cough 3: Tetanus 4: Malnutrition 5: Respiratory diseases
6: Congenital diseases 7: Unknown causes, etc.

(2) Expanded Programme on Immunization (EPI)

The Expanded Programme on Immunization (EPI) was started in Indonesia in 1977, and by 1982 immunizations against tuberculosis, diphtheria, whooping cough, tetanus, polio and measles were being carried out on a national basis. In addition to the above six targeted diseases, immunization against viral hepatitis B was started in a few districts in 1991 and this was expanded to the whole country by 1997. Of the objectives for the year 2000 that were adopted at the Children's Summit held in 1990, the Government of Indonesia, giving consideration to conditions in the country, adopted the goals of administering immunizations against EPI-targeted diseases to all children by their first birthday (Table 1) and achieving an immunization rate of at least 80%.

Table 1 Immunization Schedule

Vaccine	Immunization Frequency	Immunization Interval	Subjects
BCG	1 x	—	0-11 month-old
DTP	3 x	4 weeks	2-11 month-old
Polio	4 x	4 weeks	0-11 month-old
Hepatitis B	3 x	4 weeks	0-11 month-old
Measles	1 x	—	9-11 month-old
DT	2 x	4 weeks	Time of entry to primary school
TT	2 x	4 weeks	Time of graduation from primary school
TT	2 x	4 weeks	Pregnant women Women planning to get married

DTP: Diphtheria, Tetanus, Whooping cough, DT: Diphtheria, Tetanus, TT: Tetanus

(3) Situation Regarding Implementation of Tetanus and Measles Immunizations

The results of EPI activities have been startling with high immunization rates being achieved with respect to all seven of the above-mentioned diseases. The immunization rates

concerning tetanus and measles had both exceeded 90% by 1997/1998 (see Table 2). As a result of the EPI activities, the infant mortality rate arising from tetanus has fallen and there was only one reported case of an infant dying from measles in 1997. Also, with respect to polio, no wild strains have been discovered in the past few years.

Table 2 Immunization Rates (%) in 1997/1998

Subject	BCG	DTP 1	DTP 2	DTP 3	OPV 1	OPV 2	OPV 3	OPV 4	Measles	HB 1	HB 2	HB 3
4,734,444	98.4	99.1	93.2	90.1	93.4	88.0	86.2	85.5	92.3	84.9	73.3	65.3

DTP: Diphtheria, tetanus, whooping cough, OPV: Polio, HB: Hepatitis B
The figures underneath DTP, OPV and HB refer to the number of immunizations.

In spite of the above efforts, it is estimated that neonatal tetanus still claims more than 15,000 lives per year, and this is a major issue for future concern. To improve this situation, the Republic of Indonesia makes efforts to reduce the mortality rate from neonatal tetanus thorough the tetanus toxoid immunization to Child Bearing Age Women (CBAW, 15-39 year-old, approx. 45,000,000 women) and pregnant women and sanitary accouchement. As a result, the rate of double immunization against tetanus toxoid (TT2) to pregnant women increased from 43% in 1989 to 70% in 1996, and newly graduated midwives now conduct sanitary deliveries in approximately 80% of the country's 65,000 villages. Moreover, the Ministry of Health, Ministry of Education, Ministry of Home Affairs and Ministry of Religious Affairs compiled the School Immunization Programme (SIP) in 1997 and aim to eradicate neonatal tetanus by designating November as an annual immunization month and giving children the five immunizations needed to counter tetanus toxoids (TT5), before the graduation of school. In addition, TT5 immunizations for child bearing age women (CBAW, 15-39 years old, approximately 45 million women) have been promoted since 1996. However, steps still need to be taken in order to deal with large disparities in immunization rates among districts.

Next, moving onto measles, single vaccinations have been given to infants aged 9-11 months based on the EPI in Indonesia, and these activities have produced dramatic results. The vaccination rate has exceeded 80% in more than 90% of districts and the number of measles patients fell dramatically from 44.36/100,000 in 1992 to 7.33/100,000 in 1996. However, outbreaks of measles have been confirmed every year in districts and primary schools all over the country, and there has been a confirmed increase in the contraction rate among children of five years and over. In response to this situation, the Government of Indonesia in 1998 decided to provide all primary school children with two measles vaccinations, as is commonly the case in advanced nations.

Syringes that can be reused upon carrying out sterilization have so far been used in EPI activities in Indonesia. However, from surveys of general medical care and immunization stations, it has become clear that safe injection practice for preventing infections is not carried

out in a lot of cases. Grave concern is being expressed over the spread via immunizations of blood-carried infections such as AIDS, viral hepatitis B and C, the administration of contaminated substances, and the risk of inflammations and external wounds caused by pathogenic bacteria, etc. Reasons given for this situation are a lack of safe injection education, negligent sterilization practices and a shortage of equipment and materials, etc. The spread of AIDS, etc. has raised awareness among people receiving immunizations and there is growing concern over the use of reusable syringes.

1-1-2 Contents of the Request

As the above-mentioned, Indonesia has promoted the School Immunization Programme (SIP), and moreover given tetanus immunizations for child bearing age women (CBAW) since 1996. However, steps still need to be taken in order to deal with large disparities in immunization rates among districts. For example 105 out of 413 districts are still classified as high risk with TT3 being provided to only 12% of CBAW due to budget constraints, and it will be necessary to target a further 9.7 million people in high risk areas in order to give everyone immunization by 2000. In order to deal with this situation, Acceleration of Neonatal Tetanus Elimination in Indonesia, Plan of Action (1998-2000), targeting areas with a low immunization rate (high risk areas), has been compiled and it is intended to prevent at least 90,000 neonatal tetanus fatalities every year.

Concerning measles, there was only one who died of measles in Indonesia in 1997. So it seems that the aim of measles control by Indonesia was achieved. But on the other hand, outbreak of measles has been confirmed every year in primary schools of all over the country, and it has become apparent that measles epidemic rates have tended to increase among children over five year-old. Therefore the Government of Indonesia in 1998 decided to provide all primary school children with twice measles vaccination which is common among the developed countries on the recommendation of the WHO. To examine the efficacy of two measles vaccinations, primary school children only in capital Jakarta and Jawa Barat province will be vaccinated during SIP in November 1999, but next year the target province will be extended to the whole country.

Furthermore, in view of the fact that safe injection practice has been slow to spread and there is great difficulty in overcoming actual problems in a short period, WHO/UNICEF recommend the use of autodestruct syringes which can permit only one use and encourage safe injection practice through EPI activities. In this background, the Government of Indonesia, adopting the slogan of "One needle, one syringe for one injection", has decided to use autodestruct syringes as model case, in the programme on tetanus elimination and measles control.

However, as a result of the economic crisis, depreciation of the rupiah and high inflation

that started in 1997, it has not been possible to secure and execute a sufficient budget for medical care administration. Then these two plans; Acceleration of Neonatal Tetanus Elimination in Indonesia, Plan of Action for CBAW in high risk areas throughout the country and Measles Control Programme for all Primary school children in two Province, that were going to be carried out in 1998 were postponed to 1999 for insufficient of needed syringes. It was against this background that the Government of Indonesia requested the Government of Japan to supply autodestruct syringes (approximately 15 million syringes in total at a cost of approximately 250 million yen) required for the Acceleration of Neonatal Tetanus Elimination in Indonesia, Plan of Action for CBAW and Measles Control Programme in 1999, as well as safety boxes needed for the safe disposal of used syringes.

Chapter 2 Contents of the Project

2-1 Objectives of the Project

The following three items are given as the ultimate objectives of the Project:

- 1) To reduce the incidence of neonatal tetanus by the year 2000 (incidence rate of less than 1 case per 1,000 newborn infants);
- 2) To reduce the measles mortality rate by 5% and measles outbreaks by 10% (compared with the previous year); and
- 3) To secure safe injection practice in the implementation of immunization campaigns.

Moreover, the following six items can be raised as direct objectives of the Project:

- 1) To raise the TT3 immunization rate for CBAW in high risk areas to 90% or more by 1999;
- 2) To finish TT5 immunizations for women before they reach child bearing age;
- 3) To raise the measles immunization rate to 99% or more by providing vaccinations in rural villages where the measles immunization rate is low and conducting catch-up campaigns for primary school children;
- 4) To bolster monitoring through conducting measles epidemic surveys and establishing an agency for implementing surveys;
- 5) To secure safe immunization through the use of autodestruct syringes; and
- 6) To achieve conversion into a CFC-free refrigerator by gradually reestablishing the cold chain and reeducating technical staff.

The direct objectives targeted by the aid from Japan are 1) and 3) above. Item 3) is contained in the SIP targeting primary school children. Moreover, in order to achieve these objectives, the Project is regarded as 5) in the said programme, meaning that it is intended to secure safe immunizations through procuring the necessary autodestruct syringes.

2-2 Basic Concept of the Project

The Acceleration of Neonatal Tetanus Elimination in Indonesia, Plan of Action targets women aged between 15 and 39 in all the country's 27 provinces, and the number of women targeted by this has been grasped in detail as a result of cleaning-up campaigns. Women who have not received any tetanus toxoid immunizations will require two immunizations in 1999, while other women will receive one immunization per year until they have received all five. Table 3 shows the number of women who have so far not received any tetanus toxoid immunizations, the number of syringes (excluding those provided by other donors) and the number of safety boxes contained in the request to Japan.

Table 3 Targeted Number of People and Quantities of Equipment Contained in the Acceleration of Neonatal Tetanus Elimination in Indonesia, Plan of Action

No.	Province	Targeted People (TT1-2)	Autodestruct Syringes	Safety Boxes
1	D.I.Aceh	378,647	381,000	3,810
2	Sumatera Utara	1,146,827	1,153,800	11,538
3	Sumatera Barat	324,796	326,800	3,268
4	Riau	133,216	134,100	1,341
5	Jambi	125,022	125,800	1,258
6	Sumatera Selatan	598,523	602,200	6,022
7	Bengkulu	63,637	64,100	641
8	Lampung	249,869	251,400	2,514
9	DKI Jakarta	0	0	0
10	Jawa Barat	796,267	801,100	8,011
11	Jawa Tengah	1,740,565	751,100	7,511
12	D.I.Yogyakarta	216,723	218,100	2,181
13	Jawa Timur	1,216,108	1,223,500	12,235
14	Kalimantan Barat	164,824	165,900	1,659
15	Kalimantan Tengah	7,786	7,900	79
16	Kalimantan Selatan	17,627	17,800	178
17	Kalimantan Timur	110,000	110,700	1,107
18	Sulawesi Utara	184,504	185,700	1,857
19	Sulawesi Tengah	96,076	96,700	967
20	Sulawesi Selatan	303,267	305,100	3,051
21	Sulawesi Tenggara	99,825	100,500	1,005
22	Bali	181,853	183,000	1,830
23	Nusa Tenggara Barat	42,682	43,000	430
24	Nusa Tenggara Timur	0	0	0
25	Maluku	120,800	0	0
26	Irian Jaya	221,596	223,000	2,230
27	Timor Timur	-	-	-
Total		8,541,040	7,472,300	74,723

Note) TT1 and TT2 are the targets. The requested number of syringes, given in units of 100, has been obtained by taking a loss rate of 0.6% into account and multiplying by 1.006. (In No. 11 Jawa Tengah, 751,000 syringes shall be provided under the Project since a further 1,000,000 are scheduled to be supplied by other donors. In No. 25 Maluku, since all necessary syringes are to be provided from other donor agencies, the number requested to Japan is zero).

The Measles Control Programme in 1999 targets first grade to sixth grade children in all primary schools located in the 32 prefectures in the two provinces of Jakarta and Jawa Barat (West Java). A request for equipment supply for this programme has only been presented to Japan. Table 4 shows the required numbers of syringes and safety boxes that have been calculated based on the targeted number of people in the same way as indicated in Table 4 below.

Table 4 Targeted Number of People and Quantities of Equipment Contained in the Measles Control Programme

Province	Primary School Children (1st-6th grades)			Syringes	Safety Boxes
	Public	Private	Total		
DKI Jakarta	659,881	342,476	1,002,357	1,008,400	10,084
Jawa Barat	4,955,057	961,363	5,916,420	5,952,000	59,520
Total	5,614,938	1,303,839	6,918,777	6,960,400	69,604

Since the capacity of safety boxes ranges from 110 to 140 syringes depending on the maker and the figures given here assume that syringes are packed correctly in boxes, the number of safety boxes has been given in units of 100 to be on the safe side (i.e. if syringes are not packed correctly, a box intended for 100 syringes will not be able to hold this number).

2-3 Basic Design

The basic design of the Project has been planned as follows with consideration given to the current state of the EPI in Indonesia, the contents of the request, the aid activities of other donors and campaigns for safe injection practice, etc.

2-3-1 Design Concept

The Project is being advanced as part of the Expanded Programme on Immunization (EPI) that has been in progress in Indonesia since 1977. The Project intends to supply syringes that are required for giving tetanus toxoid immunizations to CBAW (women aged between 15-39) in high risk areas and carrying out the trial implementation of secondary measles vaccinations for primary school children (first grade through sixth grade) centering in the metropolitan area where population concentration is high and there is much poverty.

Since the Project incorporates a campaign for the promotion of safe injection practice, it entails the procurement of autodestruct syringes, which can only be used once, and safety boxes for the safe storage and disposal of used syringes.

(1) Concept Regarding Method of Transportation

The autodestruct syringes and safety boxes shall be shipped to Jakarta by sea. However,

since the Acceleration of Neonatal Tetanus Elimination in Indonesia, Plan of Action targets the whole country, the costs incurred in the inland transportation of syringes and safety boxes for this will be massive. In view of the fact that the necessary budget for this cannot be secured on the Indonesian side due to the economic crisis, Japan shall bear the cost of transporting the syringes and boxes from Jakarta to each provincial capital.

Concerning autodestruct syringes and safety boxes for the Measles Control Programme, since this only targets the metropolitan area and Jawa Barat (West Java adjoining the metropolitan area), inland transportation costs shall be borne by the Government of Indonesia.

(2) Concept Regarding Division of Programmes

The Project is divided into equipment supply for the Acceleration of Neonatal Tetanus Elimination in Indonesia, Plan of Action and the Measles Control Programme. Since equipment for the Measles Control Programme is planned for use during the school immunization month in November, it is desirable that the necessary equipment arrive in Jakarta by the first week in October at the latest.

However, the planned autodestruct syringes are not manufactured in Japan and are only made and supplied by three companies throughout the world. Since the manufacturing and supply capacity of these three companies differs and there is a possibility that none of the companies will be able to supply the 15 million autodestruct syringes required for the Project on time, screening of the three companies according to their ability to meet the strict delivery deadline should be avoided in order to ensure that the equipment can be procured through a process of fair competition at fair prices.

Accordingly, autodestruct syringes for both components of the Project shall be procured and supplied en-masse with ample time (approximately four months) set aside as the manufacturing period.

(3) Concept Regarding the Items of Procurement

The items requested by the Government of Indonesia for implementation of the Project are autodestruct syringes and safety boxes. The specifications of these items, as indicated in Table 5, are common to both programmes. The autodestruct syringes are intended for experimental use based on the safe injection practice campaign, and syringes shall be supplied according to the requested specifications.

Table 5 Requested Equipment and Specifications

Equipment	Specifications
Autodestruct syringe	Capacity 0.5 ml, made from polypropylene. The piston locks and cannot return after being used once. Compliant with WHO/UNICEF standards
Safety box	Capacity 5 l, made from cardboard or plastic Holding capacity is 110 or 140 syringes. Compliant with WHO/UNICEF standards

(4) Concept regarding Supply Source

The items to be supplied under the Project are autodestruct syringes and safety boxes. One of the Project objectives is to promote EPI activities through using autodestruct syringes for the sake of safe injection practice as recommended by WHO/UNICEF. Therefore, a manufacturer or retailing agent that deals in equipment which complies with WHO/UNICEF standards shall be selected as the supply source. Since there are no companies in Japan that supply this equipment, the supply source shall be selected from a third country.

(5) Concept Regarding Operation and Maintenance Capacity

EPI activities started in Indonesia in 1977 and, as a result of the long experience and extensive measures that have accumulated since then, since the immunization management setup ranging from the Directorate General of Infections to grass-root immunization posts (Posyandu) and vice-versa is firmly in place and guidance is provided by UNICEF, there is considered to be no problem regarding operation and maintenance capacity. Neonatal tetanus toxoid immunizations are performed at health centers or at Posyandu (service posts) by dispatched health center staff, and records of immunizations are written on individual TT cards. Measles vaccinations, on the other hand, are conducted with the help of primary schools based on the SIP, but in this case, too, there is thought to be no problem in terms of management.

(6) Concept Regarding Equipment Specifications

The following products based on the specifications given in Table 5 can be obtained.

1) Autodestruct Syringes

The requested autodestruct syringes are manufactured by three companies. Each company's products comply with the WHO/UNICEF standard E8/DS.1, are similar in terms of materials, specifications and method of use, and satisfy the request (see Table 6).

In calculating the required number of syringes, a loss rate of 0.6% was taken into account. Moreover, in order to avoid confusion arising from small lot use, the syringes shall be procured in units of boxes (100 syringes).

Table 6 Autodestruct Syringe Specifications

Becton and Dickinson Company United States	E8/09	0.5 ml Polypropylene 23Gx 25 mm	locked/trapped piston	100/box	5 boxes/carton
Destroject GmbH Medical Devices Germany	E8/10	0.5 ml Polypropylene 23G x 25 mm	locked/trapped piston	100/box	E10/08 Safety box packed
UNIVAC United States	E8/12	0.5 ml Polypropylene 23Gx 25 mm	locked/trapped piston	100/box	Individual or overall packing of syringes

2) Safety Boxes

Safety boxes for exclusive use with syringes are manufactured by four companies, each of which satisfy the WHO/UNICEF standards E10/IC.1 or E10/IC.2 (see Table 7). Enough safety boxes to deal with the amount of used syringes shall be procured.

Table 7 Safety Box Specifications

Company Name and Nationality	PIS Code	Capacity (syringes) and Material	Packing Unit	Remarks
Pa-Hu OY Finland	E10/13	51 (140) Cardboard	25	Method of use given on box
POLYNOR Norway	E10/14	51 (122) Recycled cardboard	25	Method of use given on box Printing in Indonesian possible Logo printing free of charge
CPI Industries South Africa	E10/15	51 (117) Cardboard, plastic	300	With handle
Danapak Cartons Ltd. United Kingdom	E10/16	51 (110) Cardboard	25	With handle

2-3-2 Basic Design

(1) Overall Plan

1) Acceleration of Neonatal Tetanus Elimination in Indonesia, Plan of Action

This programme intends to give TT5 immunizations to CBAW (women aged 15-39) in 27 provinces throughout the country. The equipment to be supplied by Japan is intended for use on 8,445,235 CBAW who live in high risk areas and have yet to receive tetanus immunization. (There are no new women targeted in the Jakarta Special District and Nusa Tenggara Timur Province. Equipment provided by other donors will be used for all subjects in Maluku. Timor Timur Province has not been included on the list of equipment distribution destinations due to lack of data in the province, but supply will be conducted at the responsibility of the Government of Indonesia). The targeted CBAW will receive TT2 immunizations at four week intervals in 1999. Syringes provided by other donor organizations will also be used in this programme.

Incidentally, this programme was originally planned for implementation in 1998, however, due to delay in the procurement of syringes for the safe injection practice campaign, it was postponed until 1999.

2) Measles Control Programme

This programme targets 6,918,777 public and private primary school students (first grade through sixth grade) located in 32 prefectures in Jakarta Special District and Jawa Barat Province. However, this figure has been taken from 1996 statistics, so it is estimated that the actual number will be slightly more. Since population concentration is the highest in these two provinces, it is thought that the impact of implementing second measles vaccinations mainly at primary schools will be the greatest in terms of limiting group infection outbreaks. Depending on the achieved effect, it is planned to expand the programme to primary schools throughout the whole country in the following year. The programme will be implemented in November to coincide with the primary school immunization schedule, however, in the case where arrival of the necessary equipment is delayed, it is hoped that the Indonesian side can manage by utilizing equipment previously provided by other donors, and so on.

(2) Equipment Plan

Table 8 summarizes the specifications, purposes of use and quantities of the equipment to be supplied under the Project.

Table 8 Contents and Scale of the Cooperation

Equipment	Specifications	Target and Quantity	
		Tetanus	Measles
Autodestruct syringe	0.5 ml Compliant with WHO/UNICEF standards 100 syringes/box	To be used in TT2 immunization of CBAW (aged 15-39) 7,472,300 syringes to be procured	To be used in giving all primary school children (first grade through sixth grade) in two provinces second measles vaccinations. 6,960,900 syringes to be procured.
Safety box	5l Compliant with WHO/UNICEF standards	To be used for the safe disposal of used syringes. 74,723 boxes to be procured.	Same as on the left. 69,609 boxes to be procured.

Incidentally, the required numbers of autodestruct syringes and safety boxes for used syringe to be used in both the tetanus and measles control programmes shall be transported to the capital of each target province at Japan's expense.

Chapter 3 Implementation Plan

3-1 Implementation Plan

3-1-1 Implementation Schedule

(1) Budget year: Single year (fiscal 1998)

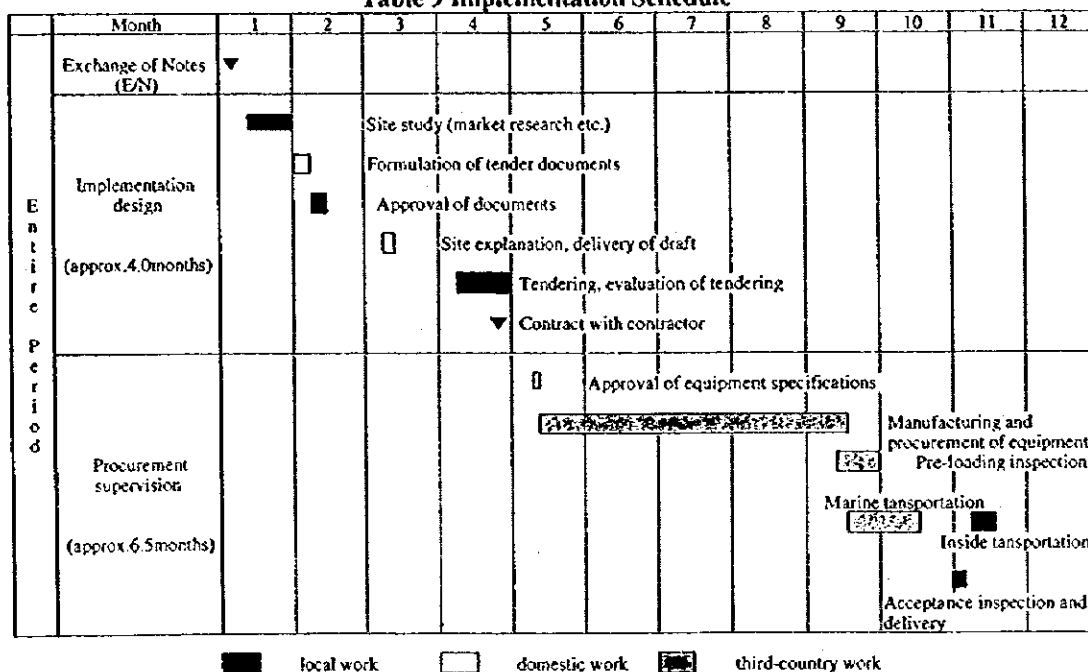
(2) Implementation Schedule

Overall implementation period (from E/N to handing over) : 11 months

From E/N to contractor contract : 4 months

Delivery period (from contractor contract to handing over) : 7 months

Table 9 Implementation Schedule



The important point of the Project under the grant aid scheme is the period required for the supply of autodestruct syringes. This is because there are only three manufacturers of the autodestruct syringes in the world and the supplier shall be determined upon considering impartiality with respect to the period required from order to manufacture and transportation. No specific delivery deadline has been set for the Acceleration of Neonatal Tetanus Elimination in Indonesia, Plan of Action. In the Measles Control Programme, however, since this is timed to be implemented in accordance with the schedule of the School Immunization Programme (SIP) in November, it would be ideal to complete the handing over of equipment by the beginning of October. If, however, arrival of the necessary equipment is delayed, it is hoped that the

Indonesian side can manage by temporarily utilizing autodestruct syringes previously provided by other donors for the Acceleration of Neonatal Tetanus Elimination in Indonesia, Plan of Action, or by revising the SIP schedule, and so forth.

3-1-2 Obligations of Recipient Country

The following items are to be undertaken by the Government of Indonesia in the course of Project implementation:

- (1) To provide data and reference materials necessary for Project implementation;**
- (2) To pay banking arrangement commissions;**
- (3) To ensure the prompt unloading, customs clearance and tax exemption of the supplied equipment;**
- (4) To bear the costs of unloading and inland transportation in Indonesia of equipment intended for the Measles Control Programme;**
- (5) To smoothly carry out and bear the costs of transportation from each provincial capital of equipment intended for the Acceleration of Neonatal Tetanus Elimination in Indonesia, Plan of Action;**
- (6) To ensure the storage and distribution of the supplied equipment in appropriate condition;**
- (7) To secure sufficient personnel necessary for Project implementation Project;**
- (8) To strive to secure the lacking funds that are necessary for Project implementation; and**
- (9) To provide data and reference materials obtained as a result of Project implementation.**

3-1-3 Special Items of Note

(1) Inland Transportation of the Supplied Equipment

Following its arrival in Jakarta, equipment for the Acceleration of Neonatal Tetanus Elimination in Indonesia, Plan of Action will be transported to the capital of each target province at Japan's expense, however, it may be necessary to examine the method and timing of transportation depending on the state of civil peace in the country.

3-2 Operation and Maintenance Plan

The Project involves the supply of autodestruct syringes, etc. that are intended for use in the Acceleration of Neonatal Tetanus Elimination in Indonesia, Plan of Action, which aims to provide TT5 immunizations to CBAW in high risk areas throughout the country, and the Measles Control Programme, which aims to provide second measles vaccinations to all primary school students in the first to sixth grades in the metropolitan area and one more neighboring province, where population concentration is high and the immunization effect will be great.

Since the Project incorporates a campaign for safe injection practice, it is planned to use autodestruct syringes which can only be used once. The Project differs from routine EPI activities and NIDs, however, in view of experience accrued over the years in Indonesia, it is thought that no problems will arise concerning operation and implementation. Only a few personnel in the medical care sector have experience of dealing with autodestruct syringes, however, technical problems in use can be overcome by giving preliminary explanations and, concerning the disposal of used syringes, too, there should be no problem regarding the use of safety boxes also to be procured under the Project.

Concerning operation and maintenance costs, no such expenses will arise with respect to the autodestruct syringes and safety boxes (as would otherwise be the case with respect to mechanical equipment). Storage and distribution costs and personnel expenses, etc. will be covered by the operation budget. The Indonesian side has secured a budget of 21,700,000 yen and can use a further 2,000,000 yen provided by UNICEF for the syringes and safety boxes intended for neonatal tetanus immunizations. As for the syringes and safety boxes intended for measles control, the Indonesian side has secured an operation budget of 400,000 yen and has requested a further 400,000 yen in assistance from UNICEF.

Chapter 4 Project Evaluation and Recommendation

4.1 Project Effect

In confirming the appropriateness of the Project, the following examination was carried out.

Item	Results of Examination
(1) Compatibility with superior plans	<p>Comprehensive plans for the public health and medical care sector in Indonesia are based on the Second 25 Year Development Plan (1994-2018) and the Sixth Five Year Development Plan (REPELITA VI, 1994-1998). The Public Health and Medical Care Programme has been compiled against the background of the National Policy Guidelines (1993) and the Public Health Act (1992). REPELITA VI contains nine major objectives, the first two of which are as follows:</p> <p>1) Strengthening of prevention and promotion activities for the reduction of mother and infant mortality and contraction rates, restriction of the birthrate, and improvement of nutrition;</p> <p>2) Qualitative improvement of medical care services and systems.</p> <p>The strengthening of prevention and promotion activities for the reduction of infant mortality and contraction rates incorporates EPI activities, and the qualitative improvement of medical care services is also a priority item. Since the Project entails the supply of immunization equipment that is indispensable to child health management, it is compatible with superior plans.</p>
(2) Situation regarding EPI implementation	<p>EPI activities targeting tuberculosis, diphtheria, whooping cough, tetanus, polio and measles were started in 1977, and immunizations against viral hepatitis B were added in 1991. Nationwide polio vaccinations have been implemented three times since 1996 and great results have been achieved as a result of these EPI activities and the firm establishment of the immunization setup. As part of the drive to eliminate neonatal tetanus, the School Immunization Programme (SIP), which aims to give children five immunizations by the time they graduate from primary school, was started in 1998. Moreover, a cleaning-up operation was commenced from 1996 in districts where many women have not yet received immunization, and the immunization setup from the central government down to the village levels has been established.</p> <p>Accordingly, the Project will be implemented through making use of the overall EPI (including SIP) and cleaning-up operation setups and is thus feasible in terms of organization and staff.</p>
(3) Examination with respect to social needs	<p>The infant mortality rate in Indonesia remains high at 58 per 1,000 infants, and tetanus accounts for 9.8% of all neonatal fatalities. Although the infant mortality rate arising from measles has dropped dramatically, this has shifted to children aged five years and over and outbreaks of epidemics at primary schools have become a problem.</p> <p>It is judged that the Acceleration of Neonatal Tetanus Elimination in Indonesia, Plan of Action, which aims to provide TT5 immunizations to CBAW, and the Measles Control Programme, which aims to experimentally provide second measles vaccinations to primary school children, are necessary for protecting children from preventable diseases.</p>
(4) Appropriateness of the requested equipment	<p>The syringes requested for use in both programmes are the autodestruct type which can only be used once, and the use of these will also promote a safe injection practice campaign. The use of this type of syringe is recommended by WHO/UNICEF as a means of preventing infections. Autodestruct syringes are judged to be necessary in order to secure safe injection practice and enable trial implementation. Since safe injection practice also entails the disposal of used syringes, it is deemed necessary to also procure syringe safety boxes.</p>
(5) Examination with respect to beneficiaries	<p>The Acceleration of Neonatal Tetanus Elimination in Indonesia, Plan of Action targets CBAW who have so far not received any immunizations or have received up to four immunizations. Approximately 8,500,000 women have not yet received any immunizations. Since support is being provided by other donors, the syringes supplied under the Project will be used for approximately 7,500,000 of these women. It is estimated that the administration of TT5 immunizations will lead to the reduction of 15,000 neonatal tuberculosis fatalities every year.</p> <p>The Measles Control Programme aims to give secondary measles vaccinations to all primary school children (approximately 7,000,000 children in total) in the metropolitan area and one neighboring province, where population concentration is high, there is much poverty and it is thought that a great impact can be achieved. It is only possible to estimate the effect of experimentally administering secondary vaccinations, however, it is hoped that the exercise will reduce the incidence of group outbreaks and lower the risk of infections. If good results are obtained in the said two provinces, the programme will be expanded to cover all primary school children in the country the following year, leading to the eradication of measles and consequently having an immense impact.</p>

4-2 Recommendation

The objectives of Project implementation are firstly to eliminate neonatal tetanus through giving tetanus toxoid immunizations to CBAW, and secondly to eradicate mass outbreaks of measles and prevent infections among infants through administering secondary measles vaccinations (a practice widely adopted in advanced nations), and since the Project will help promote EPI activities, it has a high social significance. In addition to these objectives, the Project also incorporates a campaign for safe injection practice in immunization activities and shall therefore involve the use of autodestruct syringes which can only be used once. Also, with a view to preventing piercing accidents among medical staff and other accidents involving used syringes, safety boxes shall be procured. Since the success of this campaign will have an effect on future EPI activities, it is necessary to give consideration to the following points.

(1) Project Continuation

The Project was compiled and instigated in 1996 or 1997 at a time when nobody was able to foresee the economic and financial crisis that befell Indonesia from the end of 1997. It is difficult to envisage an immediate recovery in the current situation where per capita GNP has fallen to \$ 500, or half its previous value. Consequently, the EPI needs to be continued under extremely difficult economic conditions and, from the long-term viewpoint, it is necessary to quickly examine the nature of future cooperation regarding EPI in Indonesia in the future.

(2) Safe Injection Practice

Not all medical personnel have a thorough knowledge of autodestruct syringes and safety boxes. Prior to implementation of the Project, it is necessary to standardize the methods of syringe handling, injection, and handling and disposal of used syringes, etc., and compile and distribute a manual containing this information. It is thought that this will aid the improvement of safe injection practice. Moreover, continuing education of medical staff and control and supervision of work places are necessary, and this matter will also need to be mentioned to the Indonesia side.

Furthermore, since the requested autodestruct syringes or similar items are not currently produced in Japan (i.e. Japanese products are excluded from the outset), further examination will need to be conducted regarding the appropriateness of making such items the subject of Japanese grant aid.

(3) Equipment Procurement Schedule

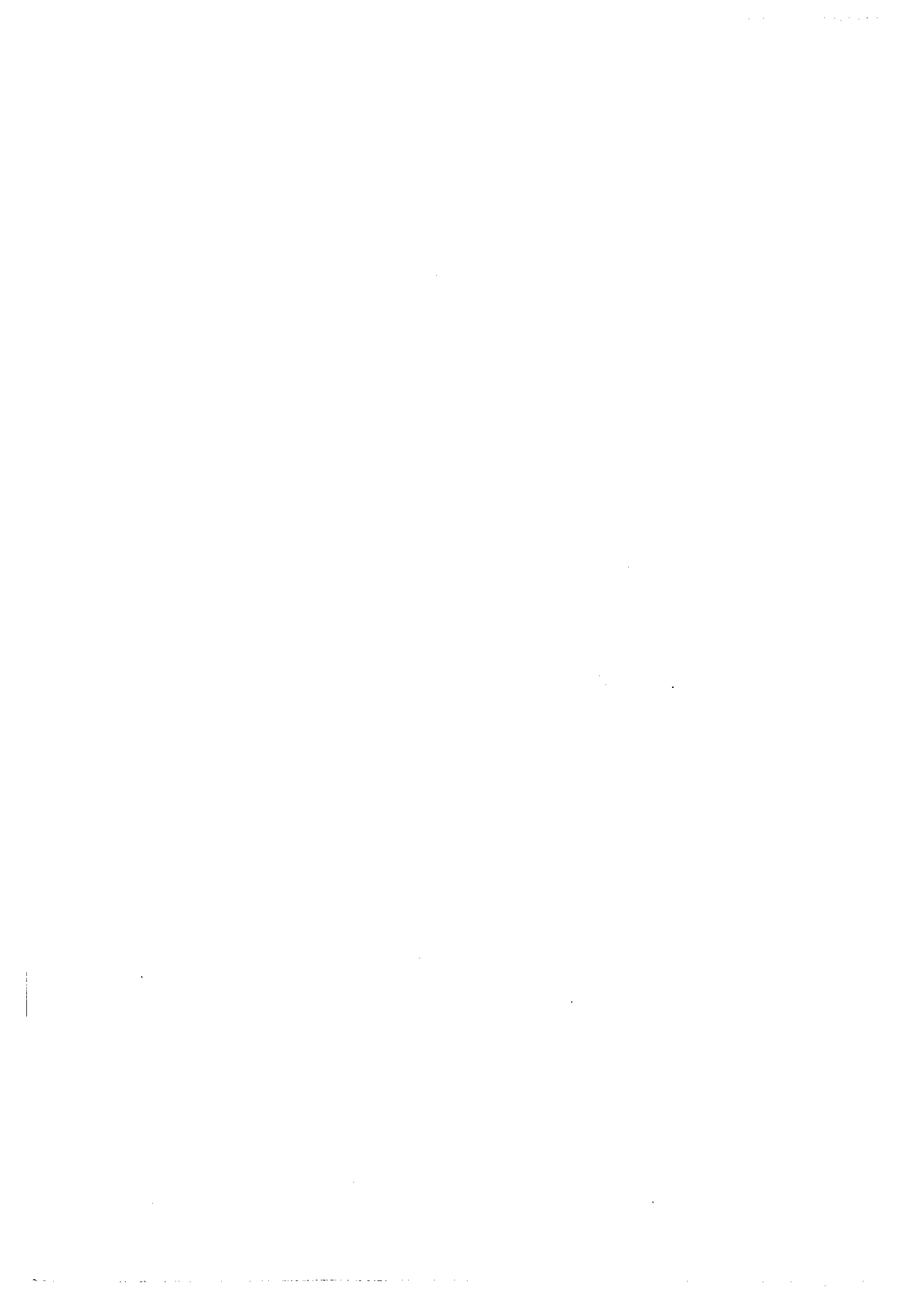
Concerning the Acceleration of Neonatal Tetanus Elimination in Indonesia, Plan of Action, since the 1999 portion of the plan is to be implemented as quickly as possible upon arrival of the Project equipment following the supply of autodestruct syringes by USAID and

KfW, there is no restriction concerning the timing of equipment arrival. The Measles Control Programme, on the other hand, is planned for implementation in November based on the SIP and preparations in each area are advancing. Therefore, it is requested that the equipment for the measles programme be delivered to Jakarta by the first week in October at latest. However, if equipment for the measles programme is made conditional on satisfying this deadline, as was mentioned earlier, only two American companies will be able to supply the equipment and this will obstruct fair competition. If the deadline is not restricted, it will be possible for one more German company to be considered as a supply source in addition to the said American companies.

Therefore, as the Project concept regarding equipment procurement, it has been decided to adopt the bulk supply of equipment for both programmes without setting strict deadline conditions. In this case, it is considered that the Indonesia side should manage the situation by, for example, putting USAID and KfW autodestruct syringes, which arrive earlier and are intended for use in tetanus elimination, to temporary use in the measles programme.

(4) Post-Implementation Study and Analysis

As is indicated above, it will be necessary to conduct post-implementation study and analysis of the study findings in order to assess the effect of the grant aid. Japan does not provide any support in this area, however, it is necessary to appropriately report on the study and analysis findings. From this it is thought that areas of future possible cooperation regarding EPI activities in Indonesia can be extracted.



Appendix 1 Member list of the survey team

<u>Name</u>	<u>Charge</u>	<u>Position</u>
(1) Mr. Takeshi Imazu	Leader	Managing Director, Grant Aid Project Study Department, Japan International Cooperation Agency (JICA)
(2) Dr. Toshiaki Nishigaki	Equipment & Procurement Planning 1	Grant Aid Management Department, Japan International Cooperation System (JICS)
(3) Mr. Noriaki Nishimiya	Equipment & Procurement Planning 2	Director, Administration Division General Affairs Department, Japan International Cooperation System (JICS)

Appendix 2. Survey Schedule

No	Date		Schedule		Accommodation
			Imazu (Leader)	Nishimiya, Nishigaki (Member)	
1	25. 01.99	Mon.	10:50 Departure Narita(JL725) → 16:05 Arrival Jakarta		Jakarta
2	26. 01.99	Thu.	09:00 JICA office (Courtesy Call · Arrangement) 10:30 Embassy of Japan (Courtesy Call · Arrangement) 13:00 Ministry of Health, CDC Directorate General (Courtesy Call · Conference)		Jakarta
3	27. 01.99	Wed.	09:00 USAID (Courtesy Call) (Person in Charge was out) 10:00 National Family Plan committee (Courtesy Call · Conference) 14:00 Ministry of Health, CDC Directorate General (Conference) UNICEF (Courtesy Call · Conference) (Leader only)		Jakarta
4	28. 01.99	Th.	10:00 Ministry of Health, CDC Directorate General (Conference) 14:00 Becton Dickinson Company (Investigation) 16:00 P.T. WARNA JAYA RAYA Company (Investigation) With Gresik Thermal Power Generation D · B/D Investigation Group (Leader only)		Jakarta
5	29. 01.99	Fri.	09:00 Ministry of Health, CDC Directorate General Minute (Conference · Signature) 14:00 Gresik Thermal Power Generation Minute (Conference · Signature) (Leader) 15:00 JICA Office (Report) 16:00 Embassy of Japan (Report) 23:45 Departure Jakarta (JL726)		Jakarta/ In-flight
6	30. 01.99	Sta.	(Gresik Thermal Power Generation) D · B/D Investigation Group	08:35 → Arrival Narita	Jakarta
7	31. 01.99	Sun.	Arrangement of materials		Jakarta
8	1. 01.99	Mon.	The same as the above		Jakarta
9	2. 01.99	Thu.	The same as the above 23:45 Departure Jakarta (JL726)		In-flight
10	3. 01.99	Wed.	→ 08:35 Arrival Narita		

Appendix 3. List of Party Concerned in the Recipient Country

<Japan>

Japanese Embassy in Indonesia

- Mr. Norio Hattori Ambassador Extra Ordinary
And Plenipotentiary
- Mr. Uzu Shinobu Second Secretary

JICA Indonesia Office

- Mr. Kazuhiro Yoneda Deputy Resident Representative
- Mr. Kazuto Kitano Staff

<Indonesia>

Ministry of Health, Directorate General (Communicable Disease Control and Environmental Health)

- Dr. Achmad Sujudi General Director
- Dr. I. Nyoman Kandun Director,
Epidemiology and Immunization
- Dr. Jane Seopardi Medical Epidemiologist
- Mr. H. Sayuti Administration staff

National Family Plane committee

- Dr. Yurni Satria Head, Planning Bureau
- Dr. Mazwar Noerdin Deputy Head,
Program Planning and Analysis
- Dr. Heru P. Kasidi Chief, International Section

<Helping Association>

WHO

- Dr. Steven R. Rosenthal Medical Officer EPI/Surveillance

<Private Enterprise>

Becton Dickinson Asia Limited

- Mr. Arief Wibowo Representative for Asia Pacific

P.T. DWI WARNA JAYA RAYA

- Mr. Hardi Solaiman President

Appendix 4. Minutes of Discussion

MINUTES OF DISCUSSION
THE STUDY ON THE CHILD HEALTH GRANT AID PROJECT FOR
ACCELERATION OF NEONATAL TETANUS ELIMINATION AND
MEASLES CONTROL
IN
THE REPUBLIC OF INDONESIA

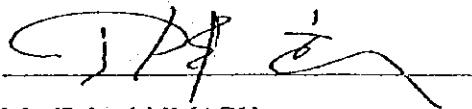
In response to the request from the Government of the Republic of Indonesia (hereinafter referred to as the "GOI"), the Government of Japan (hereinafter referred to as the "GOJ") decided to conduct a study on the Child Health Grant Aid Project for Acceleration of Neonatal Tetanus Elimination and Measles Control in Indonesia (hereinafter referred to as the "Project") and entrusted the study to Japan International Cooperation Agency (JICA).

JICA sent the Study Team (hereinafter referred to as the "Team") headed by Mr. Takeshi IMAZU, Managing Director, Grant Aid Project Study Department, to Indonesia from January 25 to January 29, 1999.

The Team had a series of discussions with the officials concerned of the GOI and conducted a field survey.

As a result of discussions between both sides and the field survey, the both sides confirmed the Project substance and related matters as attached and confirmed that they will be reported to each government.

Jakarta, January 29, 1999



Mr. Takeshi IMAZU
Leader of the Study Team
JICA



Dr. Achmad Sujudi
Director General
Communicable Disease Control and
Environmental Health
Ministry of Health,
The Republic of Indonesia

ATTACHMENT

1. Objective

The objective of the Project is to accelerate elimination of neonatal tetanus and to control measles through the provision of necessary equipment.

2. Project Sites

The Project covers 27 provinces for acceleration of neonatal tetanus elimination and Jakarta and West Java province for measles control.

3. Responsible and Executing Agency

Directorate General of Communicable Disease Control and Environmental Health,
Ministry of Health

4. Request by the Government of Indonesia

(1) The GOI has been struggling to reduce morbidity and mortality of infant diseases based on EPI and achieved remarkable progress in its reduction for the past decades. To accelerate neonatal tetanus elimination and measles control, the GOI implemented the immunization with tetanus toxoid for child bearing age women in high-risk villages in 1996, School Immunization Program in 1997 and 2-dose measles vaccination in 1998 together with a policy of improvement of safe injection practice.

To continue the plans with the policy in 1999, the GOI will need the items shown in Annex 1 as the logistics of the Project.

(2) For the above-mentioned plans in 1999, the GOI requested the GOJ to provide necessary support to procure approximately 7.6 million autodestruct syringes for tetanus elimination in child bearing age women and 6.9 million autodestruct syringes for measles control and the comparable number of safety boxes for used syringes.

(3) The team understood the background and contents of the Project. However, the team mentioned that further internal discussions and examination will be necessary to consider the possibility and scope of Japan's cooperation. The team will inform its final result to GOI through JICA Indonesia office later for more consultation.

5. Japan's Grant Aid System

(1) The GOI has understood the system of Japan's Grant Aid shown in Annex 2 as explained by the Team.

(2) The GOI will take necessary measures, as described in Annex 3 for the smooth implementation of the Project on the condition that the Grant Aid is extended to the Project by the GOJ.

6. Schedule of the Study

JICA will prepare a study report on the Project and send it to the GOI around March, 1999.

7. Other relevant issues

The GOI will allocate the necessary budget and personnel for execution of the Project.

List of Logistics

1. Neonatal Tetanus Elimination

	Items	Subject immunized	Quantity
1	Vaccines (10 dose vial)	12.8 million	25 million
2	Autodestruct syringe	12.8 million	21 million
3	TT card	8.2 million	8.2 million
4	Safety Box		Comparative with the above syringe number
5	Operation Cost		

2. Measles Control

	Items	Subject immunized	Quantity
1	Vaccines (10 dose vial)	6.9 million	8.3 million
2	Autodestruct syringe	6.9 million	6.9 million
3	Safety Box		Comparative with the above syringe number

Japan's Grant Aid Scheme

1. Grant Aid Procedures

1) Japan's Grant Aid Program is executed through the following procedures.

Application Study	(Request made by a recipient country) (Basic Design Study conducted by JICA)
Appraisal & Approval	(Appraisal by the Government of Japan and Approval by Cabinet)
Determination of Implementation	(The Notes exchanged between the Governments of Japan and the recipient country)

2) Firstly, the application or request for a Grant Aid project submitted by a recipient country is examined by the Government of Japan (the Ministry of Foreign Affairs) to determine whether or not it is eligible for Grant Aid. If the request is deemed appropriate, the Government of Japan assigns JICA (Japan International Cooperation Agency) to conduct a study on the request.

Secondly, JICA conducts the study (Basic Design Study), using (a) Japanese consulting firm(s).

Thirdly, the Government of Japan appraises the project to see whether or not it is suitable for Japan's Grant Aid Program, based on the Basic Design Study report prepared by JICA, and the results are then submitted to the Cabinet for approval.

Fourthly, the project, once approved by the Cabinet, becomes official with the Exchange of Notes signed by the Governments of Japan and the recipient country.

Finally, for the implementation of the project, JICA assists the recipient country in such matters as preparing tenders, contracts and so on.

2. Basic Design Study

1) Contents of the Study

The aim of the Basic Design Study (hereafter referred to as "the Study"), conducted by JICA on a requested project (hereafter referred to as "the Project") is to provide a basic document necessary for the appraisal of the Project by the Japanese Government. The contents of the Study are as follows:

- a) Confirmation of the background, objectives, and benefits of the requested Project and also institutional capacity of agencies concerned of the recipient country necessary for the Project's implementation.
- b) Evaluation of the appropriateness of the Project to be implemented under the Grant Aid Scheme from a technical, social and economic point of view.
- c) Confirmation of items agreed on by both parties concerning the basic concept of the Project.
- d) Preparation of a basic design of the Project

e) Estimation of the costs of the Project

The contents of the original request are not necessarily approved in their initial form as the contents of the Grant Aid Project. The Basic Design of the Project is confirmed considering the guidelines of Japan's Grant Aid Scheme.

The Government of Japan requests the Government of the recipient country to take whatever measures are necessary to ensure its self-reliance in the implementation of the Project. Such measures must be guaranteed even though they may fall outside of jurisdiction of the organization in the recipient country actually implementing the Project. Therefore, the implementation of the Project is confirmed by all relevant organizations in the recipient country through the Minutes of Discussions.

2) Selection of Consultants

For the smooth implementation of the Study, JICA uses (a) registered consultant firm(s). JICA selects (a) firms(s) based on proposals submitted by interested firms. The firm(s) selected carry (ies) out the Basic Design Study and write(s) a report, based upon terms of reference set by JICA. The consulting firm(s) used for the Study which is (are) recommended by JICA to the recipient country to also work on the Project's implementation after the Exchange of Notes, in order to maintain technical consistency.

3. Japan's Grant Aid Scheme

1) What is Grant Aid ?

The Grant Aid Program provides a recipient country with non-reimbursable funds needed to procure the facilities, equipment and services (engineering services and transportation of the products, etc.) for economic and social development of the country under the principals in accordance with the relevant laws and regulations of Japan. Grant Aid is not supplied through the donation of materials as such.


2) Exchange of Notes (E/N)

Japan's Grant Aid is extended in accordance with the Notes exchanged by the two Governments concerned, in which the objectives of the Project, period of execution, conditions and amount of the Grant Aid, etc., are confirmed.

3) "The period of the Grant Aid" means the one fiscal year in which the Cabinet approves the Project for. Within the fiscal year, all procedure such as exchanging of the Notes, concluding contracts with (a) consultant firm(s) and (a) contractor(s) and final payment to them must be completed. However in case of delays in delivery, installation or construction due to unforeseen factors such as weather, the period of the Grant Aid can be further extended for a maximum of one fiscal year at most by mutual agreement between the two Governments.

4) Under the Grant Aid, in principle, Japanese products and services including transport or those of the recipient country are to be purchased.

When both Governments deem it necessary, the Grant Aid may be used for the purchase of the products or services of the third country.



However the prime contractors, namely, consulting contracting and procurement firms, are limited to "Japanese nationals". (The term "Japanese nationals" means persons of Japanese nationality or Japanese corporations controlled by persons of Japanese nationality.)

5) Necessity of "Verification"

The Government of recipient country or its designated authority will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be verified by the Government of Japan. This "Verification" is deemed necessary to secure accountability to Japanese taxpayers.

6) Undertakings required of the Government of recipient country

In the implementation of the Grant Aid Project, the recipient country is required to undertake such necessary measures as the following:

- a) To secure land necessary for the sites of the Project and to clear, level and reclaim the land prior to commencement of the construction.
- b) To provide facilities of the distribution of electricity, water supply and drainage and other incidental facilities in and around the sites.
- c) To secure buildings prior to the procurement in case the installation of the equipment.
- d) To ensure all the expenses and prompt execution for unloading, customs clearance at the port of disembarkation and internal transportation of the products purchased under the Grant Aid.
- e) To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which will be imposed in the recipient country with respect to the supply of the products and services under the Verified Contracts.
- f) To accord Japanese nationals whose services may be required in connection with the supply of the products and services under the Verified contracts, such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work.

7) "Proper Use"

The recipient country is required to maintain and use the facilities constructed and the equipment purchased under the Grant Aid properly and effectively and to assign the necessary staff for operation and maintenance of them as well as to bear all the expenses other than those covered by the Grant Aid.

8) "Re-export"

The products purchased under the Grant Aid shall not be re-exported from the recipient country.

9) Banking Arrangements (B/A)

- a) The Government of the recipient country or its designated authority should open an account in the name of the Government of the recipient country in a bank in Japan (hereinafter referred to as "the Bank"). The Government of Japan will execute the Grant Aid by making payments in Japanese yen to cover the obligations incurred by the Government of the recipient country or its designated authority under the Verified Contracts.
- b) The payments will be made when payment requests are presented by the Bank to the Government of Japan under an authorization to pay issued by the Government of the recipient

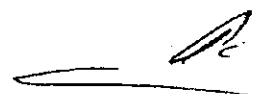
country or its designated authority.

Ac

Necessary Measures to be taken by the Government of Indonesia

Following necessary measures should be taken by the Government of Indonesia on condition that the Grant Aid by the Government of Japan is extended to the Project:

1. To provide data and information necessary for the Project;
2. To bear commissions to a bank of Japan for its banking services based upon the Banking Arrangement, namely the advising commission of the "Authorization to Pay" and payment commission;
3. To ensure prompt unloading, tax exemption, customs clearance before entering in Indonesia and prompt internal transportation therein of the materials and equipment for the Project purchased under the Grant Aid;
4. To exempt Japanese juridical and physical nationals engaged in the Project from customs duties, internal taxes and other fiscal levies which may be imposed in Indonesia with respect to the supply of the products and services under the verified contracts;
5. To accord Japanese nationals whose services may be required in connection with the supply of the products and the services under the verified contract such facilities as may be necessary for their entry into Indonesia and stay therein for the performance of their work;
6. To provide necessary permissions, licenses and other authorizations for implementing the Project, if necessary;
7. To assign appropriate budget and staff for proper and effective use of equipment and instruments provided under the Grant Aid;
8. To maintain and use properly and effectively the equipment and instruments provided under the Project;and
9. To bear all the expenses, other than those to be borne by the Japan's Grant Aid within the scope of the Project.



Appendix 5. References

The following reference material was used in preparing this report.

1. Demographic References

- 1) Demographic and Health Survey 1997. edited by Central Bureau of Statistic, State Ministry of Population, and Ministry of Health. Demographic and Health Surveys, and Macro International Inc., 1998**

2. EPI References

- 1) Road to Child Survival: Expanded Programme on Immunization, Republic of Indonesia. Directorate General Communicable Disease Control and Environmental Health, Ministry of Health, 1992**
- 2) Indonesia in Brief. Directorate General of CDC & EH, Ministry of Health, 1993**
- 3) S.R. Rosenthal and C.J. Clements; Two-dose measles vaccination schedules. Bulletin of the World Healthy Organization, 71(3/4):421-428, 1993**

3. Safe Injection Practice References

- 1) R. Salan and J. Murad; Injection practice research in Indonesia. Report from World Health Organization, 1994**
- 2) Reducing the risk of unsafe injection in immunization programmes;The role of injection equipment. WHO/EPI/LHIS/94.2, 1994**
- 3) A Drive to Safer Injection. By Scientific Advisory Group of Experts (SAGE). GPV/SAGE.97/WP.05, 1997**

4. General

- 1) Questionnaire responses**



JICA