Part Six

Financial Plan

6.1 Financial requirements and investment plan
6.2 External resource committments

Part Seven

Monitoring and Evaluation

HEALTH WORKER EQUIVALENCIES

CATEGORY	QUALIFICATION
DOCTOR	Medical Doctor Equivalent Physician
DENTAL SURGEON	Dental Surgeon
DENTAL ASSISTANT	Dental Assistant Equivalent Dentist Equivalent Dental Assistant
DENTAL HYGIENE	Dental Hygiene Nurse Basic Dental Assistant(UNBRO)
PHARMACIST	Pharmacist
ASSISTANT PHARMACIST	Equivalent Pharmacist Assistant Pharmacist Auxiliary Pharmacist
DISPENSER	Dispenser Pharmacy Dispenser (UNBRO)
SECONDARY NURSE	Secondary Nurse UNBRO Nurse Secondary State Nurse Equivalent Nurse
PRIMARY NURSE	Primary Nurse Equivalent Medic. Paramedic Para Nurse Military Nurse Equivalent Health Worker
GRADUATE NURSE	Graduated Nurse (UNBRO)
ANAESTHETIC NURSE	Specialist Anaesthetic Nurse Anaesthetic Nurse Anaesthetic Nurse Assistant

The Process of Policy Development
for the 1994-96 Health Policy and Strategy Guidelines Paper

1. The process commenced in July 1993 at the request of the Minister of Health of the newly elected Interim Government of Cambodia. Two previous documents were used for reference:

State of Cambodia 1992 Health Policy and Strategy Guidelines
FUNCINPEC's Health Policy Paper 1992

2. A series of meetings were held involving very senior policy makers of Ministry of Health. These included :

The Minister
The Vice-Minister
The Director of Cabinet
The Director of Health Care
The Director of Policy Development and Planning
The Director of Finance and Administration

Some meetings were held just with the Minister; some with Minister and Vice-Minister; some with the larger group.

Group discussions were mostly in Khmer, with individual simultaneous translation for expatriate team members. Small meetings at Ministerial level were in either English or French. At these meetings, SHS project team members and national counterparts facilitated and focused discussions and wrote down policy statements as they were discussed.

3. A first draft Health Policy document, written in English, was printed in September 1993. Translation into Khmer followed at once and a first Khmer draft was ready at end-October 1993. A Ministerial change took place at that time, when the Minister of Health of the new Royal Government took office.

4. During November 1993, the Khmer language draft of the Policy Document was in put on computer (takes time) and the translation was revised and cross-checked twice by Policy Development and Planning Unit staff and the Director of Cabinet. It was submitted to the Director of Health, now newly appointed as one of three Under-Secretaries of Health.

5. A series of internal meetings were then held at top management level to update, revise and check the Khmer version of the Policy Document. The English version was not used during these discussions. Staff involved were :

The Minister
The 3 Under-Secretaries of Health
The Director General of Drugs and Supplies
The Director General of Health Care (national counterpart)
The Director General of Human Resources
The Director of Cabinet
The Vice Director of Policy Development and Planning (national counterpart)

No expatriate team members took part in this stage of the process.

6. Next, the Khmer draft was updated and revised on computer.

7. The Under-Secretary Health and the Director of Cabinet met with the SHS Team Leader and national counterpart in several meetings to review in detail both the Khmer and English versions of the document. The English document was revised to match exactly the Khmer meaning - on a sentence by sentence and paragraph by paragraph basis.

8. The two documents were merged, printed in final draft and submitted to the Minister for finalisation and writing of a Forward, which was completed on 24 January 1994. The combined Khmer/English document was sent for printing on 25 January 1994.

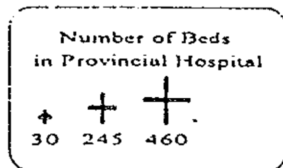
9. The 1994 Health Policy and Strategy Guidelines will be launched officially by the Minister of Health at the 1994 National Health Congress, 9-11 February.

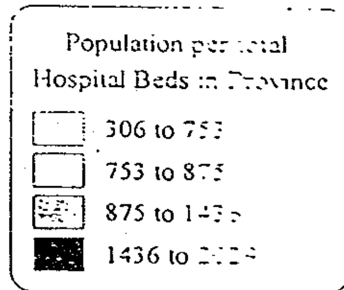
SHS Project
January 1994

Kingom of Cambodia
Provinces and Districts

Banteay Meanchey
Siem Riep
Preah Vihear
Stung Treng
Rattanak Kiri
Battambang
Kg. Thom
Mondol Kiri
Kratie
Pursat
Kg. Chhnang
Kg. Cham
Koh Kong
Phnom Penh
Kg. Speu
Prey Veng
Kandal
Svay Reing
Takeo
Sihanoukville
Kampot

Location and Size of Provincial Hospital





④ Maternal and Child Health National Health Plan 1994-1996

Maternal and Child Health

National Health Plan

1994-1996

MCH center
Ministry of Health

Kingdom of Cambodia

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Maternal and Child Health, National Health Plan

Situation Analysis

1. Summary

The health status of women and children in Cambodia is gradually improving, despite the many difficulties faced by the health services. Assistance from UNICEF, other international organisations, and NGOs has been significant and essential in achieving this increase. Unfortunately, recent political and economic instability has slowed further improvement.

Of particular concern are the multiple impacts of poverty on health, e.g.: malnutrition, difficulty obtaining safe water, leading to diseases of poor sanitation; lack of equipment and supplies at health facilities, causing the public to have little faith in the services, and resulting in late referrals for illness, such as ARI, with consequent serious complications being difficult to treat.

Refresher training of TBAs, midwives and obstetricians has been occurring since 1989 and is anticipated to start showing an impact on maternal and child health status indicators. Emphasis has been on health promotion at commune level.

2. Health Indicators

2.1 Work has begun on improving information collection for health indicators. Accurate and complete nation-wide statistics are not yet readily available. Standard information is not ***regularly*** collected and collated at central level. (see table 9.)

2.2 Infant mortality rates are not accurately known for the whole country. Information that is available is not consistent between reports (see table 11.).

2.3 Maternal mortality rates for home births are not accurately known. Reported hospital mortality figures are approximately 430 per 100,000 births.

2.4 Growth monitoring charts have been translated into Khmer and are being used in some areas. Consistent and regular use has not yet been achieved (see table 15.).

3. Maternal Health

3.1 Maternal health does not have a high profile.

3.2 Small surveys indicate that many women die from complications of pregnancies without having access to any medical services.

3.3 The scale and effects of non-medical/illegal abortions are unknown.

3.4 The attendance of women at antenatal clinics is increasing in urban areas, and in some but not all rural areas.(see table 1.)

3.5 The number of times each woman attends for prenatal and postnatal visits is still low. Less than 50% of all pregnant women attend for any antenatal consultation. Of those who do attend, only 22 % attend 3 or more times (see tables 1, 2, 3.).

3.7 82% of all births occur at home, 11% occur in hospital, and 7% at private clinics. (see table 5).

3.6 The number of "at risk" pregnancies being detected and appropriately referred is still low. Only 1.2 % of prenatal consultations are referred for being "at risk" (see table 4.).The number of complicated deliveries treated at hospital is correspondingly lower than expected. (see tables10, 20.).

3.8 The number of pregnant women presenting for prenatal care receiving 2 doses of tetanus toxoid is 54% (see table 7.).

4. Child Health

4.1 Child health has been improving since 1980. However, it is not yet satisfactory. Estimates of the infant mortality rate are still higher than desirable. (see table 9.)

4.2 Immunisation coverage is increasing to about 64% (see table 14.). Correct registration of all children, and maintenance of the cold chain need to be ensured for this to be an effective rate of immunisation coverage.

4.3 Many children are still dying from preventable diseases. (see tables 8, 11, 12, 20.)

4.4 Acute respiratory diseases and diarrhoea remain significant causes of illness in children of all ages up to 15 years. Late referral of complications is a problem. (see table 8, 20.)

4.5 Levels, types and basic causes of malnutrition requires research and monitoring. It is estimated that 40% of all children admitted to Phnom Penh hospitals show signs of malnutrition.

4.6 Fever of unknown origin, and eye diseases are also significant causes of illness in children. (see table 8.)

5. Health Services Infrastructure and Resources

5.1 Much external aid has, and continues to be, directed at training health staff and improving buildings, equipment and supplies at health facilities. This work is extremely beneficial and impacts positively on the immediate population of the area. There is still a lot of work needing to be done. Some provinces, such as Mondul Kiri, Kratie and Ratana Kiri have received virtually no assistance.

5.2 There is inconsistency in the number and accessibility of staff at all levels of MCH services throughout the country.

5.3 There is inconsistency in the training and skills of staff.

5.4 Most staff do not have written job descriptions or a good understanding of all aspects of their role.

5.5 Most staff are not adequately supervised in their work.

5.6 Government pays staff salaries (which have dropped significantly in purchasing power) but there is very little if any money for programme activities from government.

5.7 There is inconsistency in the quality and accessibility of commune clinics and hospital services throughout the country.

5.8 Most district services have inadequate water and electricity supplies, and inadequate toilets and sewage systems.
5.9 There is inconsistency in the level of equipment available at district services.
5.10 The January 7th Hospital is in a bad state of disrepair, and has been recommended that services be relocated to better premises (note the Ross Joseph report, 1992).
5.11 Hospital facilities for children in Phnom Penh have improved.

6. Health Promotion Activities

6.1 Health promotion activities have focused on training staff in public education skills. In 1992, 60 courses were held, training 1,220 staff, mostly at province level (see table 21.).
6.2 The number of staff in Maternal and Child disease prevention in Phnom Penh includes 8 at the PMI center and 32 doctors and medical assistants who work part-time from January 7th Hospital. (this is about 10% of the 345 staff working at January 7th hospital; see table 16.).
6.3 Government funding is not sufficient for extensive public health education activities.
6.4 There have not yet been any formal evaluation studies of the public education that is being done with the assistance of NGOs and IOs.

Maternal and Child Health, National Health Plan

Assumptions behind the Objectives and Action Plan

1. Primary Health Care and District Health Focus

This plan is written as a component of the National Health Plan. Stated Ministry of Health stategies include Primary Health Care and the District as the focus of management and organisation of health care services. This plan has been written assuming the continued acceptance and implementation of these approaches throughout the health services.

2. Integration of Health Services Planning and Management

This plan has been written assuming the gradual integration of vertical programmes with the overall health services structure and management.

3. Government Funding

Throughout the Cambodian Health Services at present, the low level of staff salaries is causing several problems including, lack of motivation for staff working in the public sector, general lack of discipline and control over the activities of staff and the need for staff to work in private practice. Funding for revitalisation and development of health services is almost entirely from external aid rather than government.

This MCH plan has been written with the assumption that government funding for health services staff and activities will gradually increase.

4. External Aid

Acknowledging that full government funding will take some time to establish, external aid is essential for continuing to provide maternal and child health services. It is assumed that the government will continue to seek and receive financial assistance for health services from Non Governmental and International Organisations and Biltaeral Donors. It is also assumed that close collaborative relationships between the Ministry of Health and these organisations will ensure that allocation and management of all financial and technical assistance will be directed to maximise effectiveness in order to meet the objectives of the National Health Plan.

5. Policy Options.

Some of the objectives involve MCH managers in working groups to develop policy options. The purpose of this work is intended to assist the government by providing some initial documents from which make decisions, or to further develop concepts. These objectives have been written on the assumption that the government will appreciate this assistance and will make the final decisions on policies.

6. Cooperation with other Government services.

Several of the objectives in this plan involve MCH managers and staff working with other sections of government services and health services. Cooperative working relationships are necessary to achieve these objectives. In some cases the objectives are mainly the responsibility of another section, but the significant impact on maternal and child health services warrants direct input from the Maternal and Child Health services managers. This plan has been written on the assumption that cooperative working relationships and clarification/acceptance of responsibility in appropriate sections will occur.

7. Technical Advisors

This plan was written by a group of people comprising the Director and several doctors from the PMI Center, and representatives from UNICEF, Japanese Government, SCF (UK) and WHO. Managers and staff from the health services are pleased to work with technical assistance from International and Non Governmental Organisations and Bilateral Dornors.

This plan has been written assuming the continued availability of technical advisors to provide assistance. It is anticipated that two expatriate experts in Maternal and Child Health (one from UNICEF and one from SCF Australia) will be arriving to work full time with national MCH managers to assist with further development and implementation of this Maternal and Child Health Plan.

8. Skilled Managers

The complexity of the work required to achieve the objectives of this plan will require many skilled managers at Central, Provincial and District levels. This plan has been written assuming that additional skilled managers will be available through training present MCH staff who have the capacity to be effective managers and through expatriate assistance from Non Governmental and International Organisations.

9. Modifying the Plan

It is acknowledged that in the present environment of rapid change of conditions and circumstances, that with the passage of time, any plan is likely to need modifying to keep pace with such changes. This plan has been written assuming that modifications will be made when necessary.

Abbreviations used in the Maternal and Child Health, National Health Plan

ARI	Acute Respiratory Infections
CDD	Control of Diarrhoeal Diseases
CNHE	Center for National Hygiene and Epidemiology
Cocom	Coordinating Committee for Health Services
EPI	Expanded Programme of Immunisation
FTEs	Full Time Equivalents
HR	Human Resources
IMR	Infant Mortality Rate
IOs	International Organisations
MCH	Maternal and Child Health
MMR	Maternal Mortality Rate
MoF	Ministry of Finance
MoH	Ministry of Health
NGOs	Non-Governmental Organisations
obj	objective
ORS	Oral Rehydration Solution
ORT	Oral Rehydration Therapy
PHC	Primary Health Care
Procowcom	Provincial Coordinating Committee for Health Services
TBA	Traditional Birth Attendant

MATERNAL and CHILD HEALTH
NATIONAL HEALTH PLAN

Vision: **To improve the health of all mothers, children (to 15 years) and future mothers, by enhancing health promotion; by prevention and treatment of maternal, reproductive and childhood diseases in coordination with other sectors of the government and health services; and especially by educating the people in healthy lifestyles.**

Primary Objectives:

1. **To reduce the mortality rates for children under 5 years in all provinces by 20% by the end of 1996.**

1.1 To determine by November 1994, an **estimate of the current mortality rates** for neonates, children: under 1 year and 1 to 5 years.

1.2 To **reduce the hospital perinatal mortality rate** by 30% by the end of 1996, through initiatives in hospitals and the community, including public and private sectors.

1.3 To ensure that all women attending for antenatal care, or who have other contact with the health services, have received at least **2 doses of tetanus toxoid**.

1.4 To work closely with CNHE and assist with the programme to improve **immunisation coverage rates** for children under 5 years in all districts.

1.5 By the end of 1996 to have reduced child mortality from **acute malnutrition** by 15%, and to reduce the incidence of acute malnutrition by 40%, focusing on specific **micronutrient deficiencies**, such as vitamin A and iron, according to identified needs of the district.

1.6 To reduce the **mortality due to diarrhoea** in children under five years by 30% by the end of 1996.

1.7 To reduce the **hospital mortality rate of Acute Respiratory Infections** in children under 5 years by 30% by the end of 1996.

1.8 To ensure that by the end of 1994, children in all districts have access to the health care services provided for the control of **Malaria and Dengue Haemorrhagic Fever**.

1.9 To work towards regulation and monitoring the **private health services** to improve the quality of private paediatric services, including appropriateness of "prescribed" medication (by doctors or pharmacies), and speed of necessary referral to hospital.

2. To reduce the maternal mortality rate by 20% across the country during the 18 months to the end of 1996.

2.1 To increase the average length of **time between birth and conception** to at least 2 years for 30% of childbearing women by the end of 1996.

2.2 For the number of women attending **routine antenatal care** at least twice during pregnancy to be increased to 50% of all pregnant women in urban areas and rural areas by the end of 1996.

2.3 To ensure that, by the end of 1996, all women giving birth at hospital, and 50 % of women giving bbirth at home, are attended by a TBA or midwife who has received recent approved training in **safe delivery techniques**.

2.4 By November 1994, to estimate the current **maternal mortality rate** throughout Cambodia, and to reduce the rate in hospital facilities by 20% by the end of 1996.

2.5 To improve analysis of maternal mortality by extending the **confidential survey** on maternal mortality to one additional provincial hospital each year.

2.6 To formulate and implement by July 1994 a policy and **system for referring** at risk women and children between different levels of MCH services, ensuring adequate communication and feedback between referring parties.

2.7 To ensure that by the end of 1996, district, provincial and national MCH **referral centers are appropriately equipped and staffed** to recognise, accept and treat referred cases.

2.8 To improve the **case management** of women at risk of complications of pregnancy and birth.

2.9 To work with the Ministry of Health Technical section to improve the extent and speed of **supply of blood** to hospitals, especially in emergency situations.

2.10 To work towards regulation and monitoring the **private health services** to improve the quality of private maternity services.

2.11 To work with the Ministry of Health to develop policies and regulations concerning reduction in the number of **unwanted pregnancies**.

3. To promote mothers' awareness of healthy lifestyle and the importance of disease prevention; and to develop their capacity to recognise and act on the signs of dangerous and priority diseases.

3.1 By November 1994, to increase the range and production of tested **public health education material** so that all districts have supplies of posters and pamphlets on healthy lifestyles, birth spacing and prevention of priority and dangerous diseases.

3.2 To ensure that, by the end of 1994, all MCH staff at commune, district and province levels understand their role in maximising **all opportunities to educate** mothers and children in health promotion, healthy lifestyles, birth spacing, disease prevention and how to recognise and act on the signs of dangerous diseases.

3.3 By February 1995, to increase the use of **broadcasting media** as a mechanism for educating families on healthy lifestyles, birth spacing and prevention of dangerous and priority diseases, complementary to individual and small group education.

Secondary Objectives: essential for meeting the primary objectives:

4. To ensure clear organisation and management at all levels in order to effectively implement the national integrated Maternal and Child Health plan.

4.1 To define the **role and function of District, Provincial and Central Maternal and Child Health services** by January 1994, noting especially the integrated relationship with the other parts of the health services at all levels and the importance of disease prevention and health promotion.

4.2 To work with other sections of the Ministry of Health to develop a model, by June 1994, for **integrated organisation and management of all health services at provincial and district levels**, in line with national policies on organisation of health services **based on the district as the focus** of organisation and management.

- To establish systems to ensure effective communication and coordinated management between the central MCH services and all activities in maternal and child health at province and district level.
- To establish simple systems to ensure effective communication between provincial and district sectors with village/commune levels of health service.
- To organise better integration of the curative and preventative activities in Maternal and Child Health care at central, provincial and district levels.

4.3 To **train district and province administrative and technical managers** to implement the above plans by holding workshops during August to November 1994, and providing ongoing support to managers.

4.4 To prepare **annual financial budgets** by March each year based on the National Health Plan, detailing planned expenditure, both operational costs and capital development, at district, province and central levels, for expected government funding and external aid donations for Maternal and Child Health.

4.5 To maximise the use of all available funds by implementing established **accountability systems** at all levels within the MCH services by July 1994, in line with national policies, to ensure:

- No over or inappropriate purchasing
- That items are bought at competitive prices
- That items bought reach the service location intended and are correctly used.
- That detailed and accurate records are kept of finances expended.

4.6 By March 1995, to have implemented the national policies on the number, type and placement of staff working at each level in the maternal and child health services, especially for remote health centers.

5. To improve the knowledge, practical skills and management capabilities of health staff through regular education based on the identified needs and demands of staff at different levels, and with courses focused to meet the health needs of mothers and children.

5.1 To develop for all MCH services by October 1994, **job descriptions, standards of care and norms of practice** for all categories of staff, in line with this MCH plan and the National Health plan, and acknowledging the multipurpose role of many staff (note: objective 4.2).

5.2 In association with the Ministry of Health Human Resources section, by December 1994, to develop and distribute a range of comprehensive **national protocols of care** based on appropriate scientific information and accepted international standards, for all major Maternal and Child Health problems, to guide staff actions at all levels of care, including primary health care.

5.3 In coordination with the Ministry of Health Human Resources section, by February 1995, to **re-evaluate all present post-basic training courses** in Maternal and Child Health to determine their coverage, quality and consistency with national protocols and national health plans.

5.4 For provincial health staff to **attend the monthly Provincial Coordinating Committee meetings** to discuss the implementation of MCH training courses that are offered/provided by NGOs, to monitor quality of the training and to ensure content remains consistent with national protocols and policies.

5.5 In coordination with the Ministry of Health Human Resources section, by May 1995, to hold **training for trainers courses** in 6 provinces, and to check on staff already trained as trainers in the other 15 provinces, to ensure that all provinces have a core of qualified staff able and enthusiastic to teach Maternal and Child health care to other staff especially at district level.

5.6 By August 1995, ensure all provincial Maternal and Child Health sectors have and are implementing schedules for **approved training courses at district level** to ensure that staff are sufficiently trained to meet the requirements of objectives 1, 2 and 3.

5.7 To ensure that, by October 1995, most commune and district staff are able to **correctly identify and appropriately refer** women and children whose severity of illness requires them to be transferred for further treatment.

5.8 To continue the **supervision training course** to ensure that, by June 1995, all provinces have at least three staff trained to provide **integrated supervision**, and to ensure that all supervisors have planned schedules of integrated supervision of health staff in all districts and communes, including:

- To encourage and assist district staff to supervise commune staff activities
- To ensure practice is in accordance with national protocols, and to provide on-the-job-training
- To monitor the activities and attendance at antenatal clinics
- To ensure at risk patients are being identified and appropriately referred
- To monitor the EPI programme and effectiveness of the cold chain
- To ensure staff are using every opportunity to teach mothers and children, both individually and in groups.
- To ensure that accurate information is being collected regularly

5.9 To extend the **supervision training course** to ensure that, by the end of 1996, 30% of districts have at least two staff trained to provide **integrated supervision**, and to ensure that all supervisors have planned schedules of integrated supervision of health staff in all communes, including:

- To ensure practice is in accordance with national protocols, and to provide on-the-job-training
- To monitor the activities and attendance at antenatal clinics
- To ensure at risk patients are being identified and appropriately referred
- To monitor the EPI programme and effectiveness of the cold chain
- To ensure staff are using every opportunity to teach mothers and children, both individually and in groups.
- To ensure that accurate information is being collected regularly

5.10 By May 1996, to train and establish the effective functioning of **five provincial MCH evaluation teams** (3 people, multidisciplinary: 1 from central MCH and 2 from province), each of which surveys 5 districts in each of 2 provinces every year to evaluate quality and effectiveness of services including:
- The activities and performance of provincial and district MCH trained personnel in health promotion, illness prevention and treatment services for mothers and children.
- The activities and performance of the provinces' trained supervisors.
- The effectiveness of provincial MCH training courses, and feedback results to the trainers, Prococom and curriculum development teams.

5.11 By September 1996, to train and establish the effective functioning of **ten district MCH evaluation teams** (3 people, multidisciplinary: 1 from province and 2 from district), each of which surveys 8 communes in each of 5 districts every year to evaluate quality and effectiveness of services including:
- The activities and performance of commune MCH trained personnel in health promotion, illness prevention and treatment services for mothers and children.
- The effectiveness of commune MCH training courses, and feedback results to the trainers, Prococom and curriculum development teams.

5.12 To work with the Faculty of Medicine and Nursing Schools to ensure that medical, pharmacy, midwifery, nursing and dentist education have adequate coverage of community (village) health, MCH health promotion, safe home delivery and MCH disease prevention.

5.13 In association with the Ministry of Health Human Resources section, to screen all offers for **overseas fellowships in MCH** to ensure suitability, and if relevant, to work with province administrators to choose participants who will return the maximum benefit to the Cambodian MCH services on their return.

5.14 Promote relevant and planned **study tours to nearby countries** for province and district MCH staff to broaden and deepen their experience in the management and delivery of MCH services, and to provide examples of role models.

6. To implement the national information system by accurately collecting required data, to ensure that the priority needs of maternal and child health are correctly and promptly identified and acted on.

7. To work with the National Essential Research section to undertake research on priority topics for Maternal and Child Health.

8. To review and evaluate progress on this plan every six months, during June and December each year, to identify areas and reasons for lack of progress, to decide on action to take, and to adjust this plan as necessary.

Appendices

Tables for Situation Analysis

Table 1. Maternal Consultation
Table 2. Prenatal Consultation
Table 3. Reasons of Prenatal Consultation
Table 4. Pregnant Women Identified as "at Risk"
Table 5. Place of Delivery
Table 6. Rate of Still Birth
Table 7. TT Vaccination
Table 8. Consultations in Pediatrics, and Cause of Death
Table 9. Health Indicators; PMR, NMR. IMR, U5MR, MMR
Table 10. Causes of Maternal Mortality
Table 11. Causes of Child Mortality
Table 12. Causes of Infant Mortality
Table 13. Index for EPI Targeted Diseases
Table 14. Coverage of EPI
Table 15. Index for Nutrition, Vitamin A deficiency, Iodine Deficiency
Table 16. Training Activities in MCH

Table 1. Maternal Consultation by Provinces

		Number of Pre-natal Consultation							Post-Natal Consult.					BS consultation				
province	Est. P	1	2	3	>4	total	*	**	1st.	total	m.v.	*	**	1st.	total	m.v.	*	**
Banteay M	15594	6061	2386	1803	1605	11855	152%	(6)	1064	2124	2.0	9%	(9)	153	231	1.5	1%	(9)
Battamban	21343	8798	2742	1536	1775	14851	70%		770	1283	1.7	4%		48	51	1.1	0%	(3)
Kampot	18171	9382	2544	998	401	13325	73%		1594	2242	1.4	9%		274	371	1.4	2%	
Kandal	33665	17943	4734	2109	1396	26182	78%		3775	6542	1.7	11%		26	44	1.7	0%	
Kg Cham	53823	22386	9727	5960	9023	47096	88%		11946	22521	1.9	22%		7187	10968	1.5	13%	
Kg Chhn	12160	4750	2162	1431	1240	9583	79%		1971	3885	2.0	16%		1423	1904	1.3	12%	
Kg Som	4280	1655	543	222	37	2457	57%		38	94	2.5	1%		39	151	3.9	1%	
Kg Speu	18618	15006	4251	3479	2009	24745	133%		2683	3837	1.4	14%		5132	7369	1.4	28%	
Kg Thom	18788	258	98	59	36	451	10%	(3)	426	489	1.1	9%	(3)	5	7	1.4	0%	(3)
Phnom P	26713	9418	3365	2293	2169	17245	86%	(9)										
Prey Veng	35259	16014	5029	2624	2417	26084	74%		4261	5872	1.4	12%		3008	4063	1.4	9%	
Pursat	10183	4389	1704	869	960	7922	78%		884	1081	1.2	9%		624	767	1.2	6%	
Siem Reap	22215	1032	466	324	256	2078	12%	(9)	100	106	1.1	2%	(3)					
Svay Rien	16642	8860	1731	776	466	11833	71%		1249	1519	1.2			2481	5304	2.1	20%	(9)
Takeo	25456	12073	2870	1220	978	17141	67%		3888	5784	1.5			2911	3914	1.3	11%	
total		138025	44352	25703	24768	232848	75%		34649	57379	1.7	10%		23311	35144	1.5	8%	
		59%	19%	11%	11%	100%												

est. p.: estimated number of pregnancy (4% of total population)

* : coverage of the pregnant women estimated   1st.:number of new registration

** : number of months for data collection, blank=12 months   m.v.: average number of visit per person

Table 2. Number of Times of the Prenatal Consultation

times of consultation	numbers of patients (%)
1	138025 (59)
2	44352 (19)
3	25703 (11)
4 or more	24768 (11)
total	232848 (100)

from 1992 statistics of PMI (1993)

Table 3. Reasons of Consultation

	number of patients (%)
prenatal	231302 (55)
postnatal	56979 (13)
birth spacing	35144 (8)
others	91928 (22)
unknown	7622 (2)
total	422975 (100)

from 1992 statistics of PMI (1993)

Table 4. Pregnant Women Identified as "at risk"

number of pregnant women identified as "at risk"		2764
number of prenatal consultation		231302
% of at risk pregnancy detected		1.2%
number of referral		2320
reasons of referral (multiple answer)		
hypertension	350	(15%)
anemia	511	(22%)
hemorrhage	481	(20%)
abnormal labour	495	(21%)
others	520	(22%)

from 1992 statistics of PMI (1993)

Table 5. Place of Delivery

hospital	8976	(11%)
clinic	5607	(7%)
home	66743	(82%)
by TBA	39736	(49%)
by other HW	27007	(33%)
total	81326	(100%)

HW: health worker

from 1992 statistics of PMI (1993)

Table 6. Rate of Still Birth

live birth	77928
still birth	1342 (1.69%)
total	79270

from 1992 statistics of PMI (1993)

Table 7. TT Vaccination

number of pregnant women given TT twice	141791 (54%)
registered pregnancies	262153 (100%)

from 1992 statistics of PMI (1993)

Table 8. Consultations in Pediatrics

Number of Pediatric Outpatients of the 11 Provinces 1992

	<1y	1-5y	5-15y	total
1 ARI	**29631**	**31702**	**32304**	**93637**
common cold	14335	15172	18474	47981
pneumonia	4768	6034	4059	14861
severe p	1317	1498	971	3786
severe ARI	986	1084	967	3037
tonsillitis	2839	2811	3586	9236
ear inf	1623	1826	1483	4932
others	3763	3277	2764	9804
2 Diarrhea	**13413**	**12388**	**11475**	**37276**
new patient	10764	9691	9380	29835
revisit	2649	2697	2095	7441
3 Fever of unknown	5835	7870	7360	21065
4 Eye disease	5493	7175	7189	19857
5 Anemia	1587	2912	3501	8000
6 Skin disease	1838	3093	2902	7833
7 Malnutrition	**2450**	**2253**	**1350**	**6053**
kwashiorkof-N	346	514	340	1200
-R	86	70	49	205
Marasmus-N	300	358	161	819
-R	80	95	45	220
W/H<80%-N	1403	933	454	2790
-R	235	283	301	819
8 Malaria	380	854	1911	3145
9 DHF	638	930	1332	2900
10 Accident	241	794	1233	2268
11 Measles	355	741	532	1628
12 Pertussis	362	503	322	1187
13 Polio	14	63	612	689
14 Tetanus	36	14	14	64
others	4948	6384	6863	18195
total	**63836**	**72059**	**72890**	**208785**
	31%	35%	35%	100%

average months for data collection: 4.7 months

name of provinces Banteay M, Battamban., Kg Chhang, Kg.Cham, Takeo, Kampot, Kandal, Pursat, Kg Speu, Prey Veng, Siem Reap

Cause of Death in the Provincial Hospitals 1992

	<1y	1-5y	5-15y	total
1 Premature	112			112
2 Perinatal	108			108
3 Diarrhea	35	26	11	72
4 ARI	36	16	10	62
5 Accident	26	12	23	61
6 Malaria	5	17	37	59
7 Neonate Tetanus	39			39
others	33	45	44	122
unknown	48	19	16	83
total	**442**	**135**	**141**	**718**

average months for data collection: 3.9 months
name of provinces Banteay M, Battamban, Kg Chhang, Kg Cham, Kg.Speu, Kampot, Prey Veng, Siem Reap, Takeo

Table 9. Health Indicators

	Cambodia				Oudong [7]		
	1980	1990	1991	1992	1988	1989	1990
PMR			25[4]				
NMR					188	63	66
IMR	212[1]	125[3]	127[5]	125[6]	365	143	139
U5MR	313[1]	200[3]	199[5]	199[6]			
MMR	200-10000[2]		200-3000[2]		10590	11110	4370

1) CNHE,
2) 3) world bank report (92),
4) PMI (1-6,91),
5) WHO AIDS RPT (91),
6) MOH,
7)PMI-WVI MVH survey (91)

Table 10. Maternal Mortality - Score (percent)

	1991[1]	1991[2]	1992[3]
Hemorrhage-post	1(23%)	1(27%)	1(21%)
Hemorrhage-pre		4(8%)	2(18%)
Eclampsia	2(15%)	2(19%)	2(18%)
Anemia	3(13%)	5(8%)	7(3%)
Infection	4(10%)	7(3%)	5(5%)
Abortion	5(4%)	7(3%)	8(1%)
Obstruction	5(4%)	3(17%)	
Renal failure	5(4%)		
Tetanus	8(1%)	7(3%)	
Malaria		4(8%)	4(15%)
Rapture U			6(4%)
total number of cases		67	105

1) PMI-SCF A (91), 2) PMI rpt. (92), 3) PMI rpt.(93)
from annual health statistics (1993) and 1992 statistics of PMI (1993)

Table 11. Child Mortality (score)

	1991 Cambodia[1]	1991 Bat.H[2]	1991 Pur.H[3]	1990 MOH[4]	1990 MOH[5]
Fever	1			4	2
Diarrhea	2		3	1	3
DHF	3	2	4	4	1
Malaria	4	1	1		
Meningitis	5				7
encephalitis					4
ARI	5	3	2		
Measles	6			3	
Tetanus	7			1	5

1) PMI rpt (92), 2) Battamban Hospital, MSF-F rpt (91)
3) Pursat Hospital, MSF-HB rpt (91), 4) MOH Seminar for PHC in 90, from 7 provinces, 5) MOH (90) national pediatrics hospital

from annual health statistics (1993)

Table 12. Infant Mortality (score)

	1991[1]	1992[2]
neonatal tetanus	1	3
diarrhea	2	5
measles	3	
ARI	4	4
premature		1
perinatal		2

1) MOH Seminar for PHC in 90, from 7 provinces
2) PMI rpt (93)
from annual health statistics (1993) and 1992 statistics of PMI (1993)

Table 13. Index for the EPI target diseases
Number of cases (Number of death)

	1980	1985	1989	1990	1991
Measles	32240 (213)	44557 (268)	9236 (20)	1266 (7)	2186 (7)
Tetanus	2089 (97)	1169 (72)	264 (8)	183 (22)	46 (10)
Polio	591 (12)	931 (7)	179 (3)	63 (2)	84 (2)
Diphtheria	1559 (19)	367 (35)	69 (1)	168 (11)	44 (4)
Pertussis	86334 (25)	25023 (58)	4222 (2)	1504 (10)	821 (14)
TB	29446 (110)	13712 (102)	5755 (38)	4907 (72)	4197 (66)

from MOH, 1992 transitional health plan for Cambodia (1992)

Table 14. Coverage of EPI

	Cambodia		BAT	PNH	PNH
	90	91	91	91	92
Measles	37%		49%	51%	56%
Polio3	37%	38%	54%	53%	64%
DTP (3)	37%	39%	54%	53%	64%
BCG	53%	55%	69%	55%	70%

from annual health statistics (1993) and 1992
transitional health plan for Cambodia (1992)

Table 15. Index for Nutrition

		<3ys	<5ys
	PNH	PNH	PNH
	86	88	91
H/Age<90%	22	17	42
W/Age<70%			83
W/Age<80%			
W/H<80%	5	6	7
No of cases		1359	203

Vitamin A Deficiency

night blindness	14%	(n=761)	in Pursat, 1992
Keratomalacia stage3	0.5%	(n=1446)	in PNH, 1990

Iodine Deficiency

	all	female
n=	10238	5287
goitor visible	7%	12%
goitor palpable	4%	8%

in Rattanakiri, 1989
from annual health statistics (1993)

Table 16. Training for MCH

	1980-88			1989			1990			1991			1992			1980-1992	
	P.	N.C.	N.T.	P.	N.C.	N.T.	P.	N.C.	N.T.	P.	N.C.	N.T.	P.	N.C.	N.T.	N.C.	N.T.
Central level																	
Maternal H.	14	13	202	5	?	19	10	3	75							16+a	296
CDD										4	3	26					
ARI										3	1	14	8	1	20	5	60
MCH										6	2	59	4	1	24	3	83
Re-train													4	1	8	1	8
Child H													6	1	30	1	30
Supervision													8	1	19	1	19
Provincial level																	
Maternal	6	16	49	3	?	27	7	16	268	7	24	367				56+a	711
Supervision													1	2	57	2	57
MCH													11	24	402	24	402
Child H													6	18	443	18	443
District level																	
TBA	5	11	544	1	?	124	5	7	165	7	21	518	5	11	217	50+a	1568
Total		**40**	**795**		**?**	**170**		**26**	**508**		**51**	**984**		**60**	**1220**	**177+a**	**3677**

N.P.: Number of Provinces involved, N.C.: Number of courses, N.T.: Number of Trainee

⑤ National MCH Center: Management Structure 1994

Nation Religion King

NATIONAL MCH CENTRE

Kingdom of Cambodia
Ministry of Health

SUMMARY OF MATERNAL AND CHILD HEALTH STATISTICS 1993

NATIONAL MCH CENTRE

SUMMARY OF MATERNAL AND CHILD HEALTH STATISTICS 1993

The information in this document comes from the statistics sent to the National MCH Centre from 16 Provinces.

Some of the information is inaccurate or incomplete. In particular, information regarding mortality is underreported. For example, if a maternal mortality rate of 800 per 100,000 is accepted, only 1 in 15 Maternal deaths have been reported. If an infant mortality rate of 120 in 1000 is accepted, only 1 in 30 infant deaths have been reported.

However, morbidity statistics are more clear. They illustrate the main health problems that Cambodian women and children experience.

We would like the personnel working in maternal and child health to examine this information in relation to their own province and district.

Here is a summary of the kind of information available.

FIGURES ON -

CHILD CONSULTATIONS
CHILD MORBIDITY AND MORTALITY
MATERNAL CONSULTATIONS
MATERNAL MORTALITY
HEALTH SERVICE INDICATORS
HEALTH STATUS INDICATORS

GRAPHS OF -

PLACE OF BIRTH
CAUSE OF MATERNAL DEATHS
REASONS FOR MATERNAL REFERRAL
MATERNAL HEALTH ATTENDANCES 1991 - 1993
AT RISK DETECTION 1992 - 1993
ANTE NATAL CARE COVERAGE BY PROVINCE
DISEASES OF CHILDREN 1993
CHILD MORTALITY
DELIVERIES BY PROVINCE
REPORTED PROVINCE IMMUNISATION COVERAGE
PREVENTABLE DISEASE

OVERVIEW OF MATERNAL HEALTH

The major findings of this statistical report are as follows :

Over half of the pregnant women have access to ante natal care, but only 29% have deliveries attended by trained personnel.

The statistics on ante natal and immunisation coverage are not consistant.

Service utilization in maternal health has increased since 1991 (although more provinces are reporting). There have been proportional increases in birth spacing and post natal services during this period.

The reasons for maternal referrals are evenly distributed (delivery problems, anaemia, hypertension and infection).

Health staff have substantially increased risk detection in pregnancy (from 1 % in 1992 to 5 % in 1993).

In absolute terms, there were twice as many consultations for birth spacing in 1993. In relative terms, the percent increase in birth spacing services was 4%.(12.2% of all maternal consultations).

Hypertension, infection and malaria are the main causes of reported maternal deaths. Malaria was not identified as a cause of maternal referral.

OVERVIEW OF CHILD HEALTH

Consultations for children outnumber consultations for women by 2 to 1. The main morbidity problems are ARI (45 % of consultations) and DIAR (17 % of consultations). 24% all ARI cases were classified as pneummonia (5% very severe).

Mortality in infants is primarily attributable to prematurity (31%) and delivery complications (29%).

In the one to four year old age group, Pneummonia (20%), Malaria (13%) and diarrhoea (7%) are the main causes of death. Malaria is reported as the major cause of death for children between the age of 5 and 15.

Preventable diseases such as tetanus, measles, polio and pertussis have been reported. In this group, measles is the most prevalent (7021 cases).

Vector born disease is also recorded. Malaria cases outnumber dengue cases by 3 to 1. There are no statistics on TB or STD\HIV prevalence.

OVERVIEW OF SERVICE UTILISATION

There has been an increase in utilization of maternal health services. There were 120,000 more consultations in 1993 as compared to 1992 (1 extra province received statistics in 1993). However, utilization varies significantly from province to province (see graphs of ante natal coverage, deliveries by province, immunisation coverage by province).

There is strong evidence of bypass of District Hospitals for obstetric care (see graph "Place of Birth").

OVERVIEW OF HEALTH INFORMATION SYSTEM

Information was collected from 16 provinces with a total population of 7,916,786 (UNTAC 1993). From these provinces, 949 monthly reports from districts were received (divide by 12 = 79 Districts). The districts received 6608 monthly reports from communes (divide by 12 = 551 communes).

There are separate maternal and child health report forms. The maternal report system has 46 variables. 33 were used in this analysis. The child report form has 113 variables. 26 were used in the analysis. There are separate child and maternal mortality report forms.

There is a lot of information on child morbidity and obstetric care (health status and utilisation of services). Mortality is underreported. There is no information on human or capital resources (i.e. who is providing the service and if there is sufficient medicine or equipment to provide the service).

All the following information will be translated into Khmer and distributed to the provinces and districts.

We would ask you to use this information for teaching purposes.

Thanks are expressed for the input of Aedes and UNICEF in making corrections to this report.

If you require further information, please contact the Director of MCH Dr Eng Huot,

MCH CENTRE APRIL, 1993.

CHILD HEALTH 1993

CHILD MORBIDITY AND CONSULTATIONS

Consultations are listed in the order of frequency of all presentations.

CONSULTATIONS	NUMBERS	%
1 ACUTE RESPIRATORY CONDITIONS	491710	45
2 DIARRHOEA	184807	17
3 FEVER	107378	10
4 EYE PROBLEMS	79883	7
5 SKIN PROBLEMS	35822	3
6 ANAEMIA	31533	3
7 MALARIA	20078	2
8 ACCIDENTS	13658	1
9 MALNUTRITION	12800	1
10 MEASLES	7021	1
11 DENGUE	6177	1
12 PERTUSSIS	3192	.3
13 TETANUS	453	.04
14 POLIO	158	.01
15 OTHERS	101025	9.2
TOTAL	1095695	100

CHILD MORTALITY

There were 2139 infant deaths reported. The cause of death of a percentage of these was reported as follows :

CAUSE	< 1	1 - 4	5 - 15
1 PREMATURITY	295	-	0
2 DELIVERY COMPLICATIONS	262	-	0
3 ARI	73	46	29
4 NEONATAL TETANUS	46	-	0
5 DIARRHOEA	23	16	6
6 ACCIDENTS	20	17	14
7 MALARIA	18	30	51
8 UNKNOWN CAUSES	116	33	92
9 OTHER CAUSES	87	92	21

MATERNAL HEALTH 1993

MATERNAL CONSULTATIONS

CONSULTATIONS	NUMBERS
1 ANTE NATAL CARE	270,677
2 REPORTED ASSISTED BIRTHS	89,915
3 BIRTH SPACING	70,494
3 POST NATAL VISITS	68,944
4 OTHER	164,503

MATERNAL MORTALITY

Total maternal deaths reported for the year was 192. The cause of death of some of these is recorded below.

(Jan - Sep 1993)

1 HYPERTENSION	25
2 INFECTION	23
3 MALARIA	19
4 POST PARTUM HAEMMORHAGE	16
5 HAEMMORHAGE > 20 WEEKS	7
6 RUPTURED UTERUS	4
7 OTHER KNOWN CAUSE	14
8 UNKNOWN CAUSE	10
TOTAL	118

HEALTH INDICATORS

The following indicators have been calculated using the guidelines developed in the document "MCH INDICATORS" (PMI Draft working document Nov 1992).

Indicators have also been calculated with the following baseline information :

POPULATION OF PROVINCES ANALYSED 7,916,876 (UNTAC)

CRUDE BIRTH RATE 40 BIRTHS PER 1000 (UNICEF)

EXPECTED BIRTHS 1993 316,675

HEALTH SERVICE INDICATORS

1	% PREGNANT WOMEN RECEIVING ANTE NATAL CARE (1 VISIT)	53%
2	% PREGNANT WOMEN RECEIVING A MINIMUM OF 3 CONTACTS BY TRAINED PERSONNEL	9.6%
3	% WOMEN RECEIVING DELIVERY BY TRAINED PERSONNEL	29.4%
4	% PREGNANT WOMEN RECEIVING TT2 OR MORE	37%
5	% AT RISK PREGNANT WOMEN DETECTED	5%
6	% CHILDREN FULLY IMMUNISED UNDER AGE OF 1	44%
7	ARI CASE FATALITY RATE	?
8	DIARRHOEAL DISEASE CASE FATALITY RATE	?

COMMENT ON INDICATORS

1 (% Ante natal care)

Numerator	=	Total Ante natal attendance (1 visit)	=	165,051
Denominator	=	Total expected births	=	316,675

2 (% 3 Contacts) Same as above

3 (% Delivered by trained personnel)

Numerator = Number of deliveries reported = 89,915

This number equals the number of deliveries at hospital or home by medical staff or trained TBA. For the purposes of this calculation, a TBA is assumed to have been trained or supervised if the birth has been registered).

Denominator = Total expected births = 316,675

4 (% TT2.)

Numerator = Number of women with 2 TT or more = 113,360
Denominator = Total expected births = 316,675

5 Numerator = Total ante natal women seen = 275,906
Denominator = Total at risk women detected = 15,675

6 Numerator = Total expected births = 316,675
Denominator = Total No. of infants < 1 with complete vaccination = 140832

7 Unable to calculate with any accurracy because of underreporting of child mortality.

8 Same as above.

HEALTH STATUS INDICATORS

1 INFANT MORTALITY RATE	?
2 MATERNAL MORTALITY RATE	?
3 % LOW BIRTHWEIGHT	18.42%
4 STILL BIRTH RATE	1.7%

COMMENT ON INDICATORS:

1 Unable to calculate. Deaths underreported.

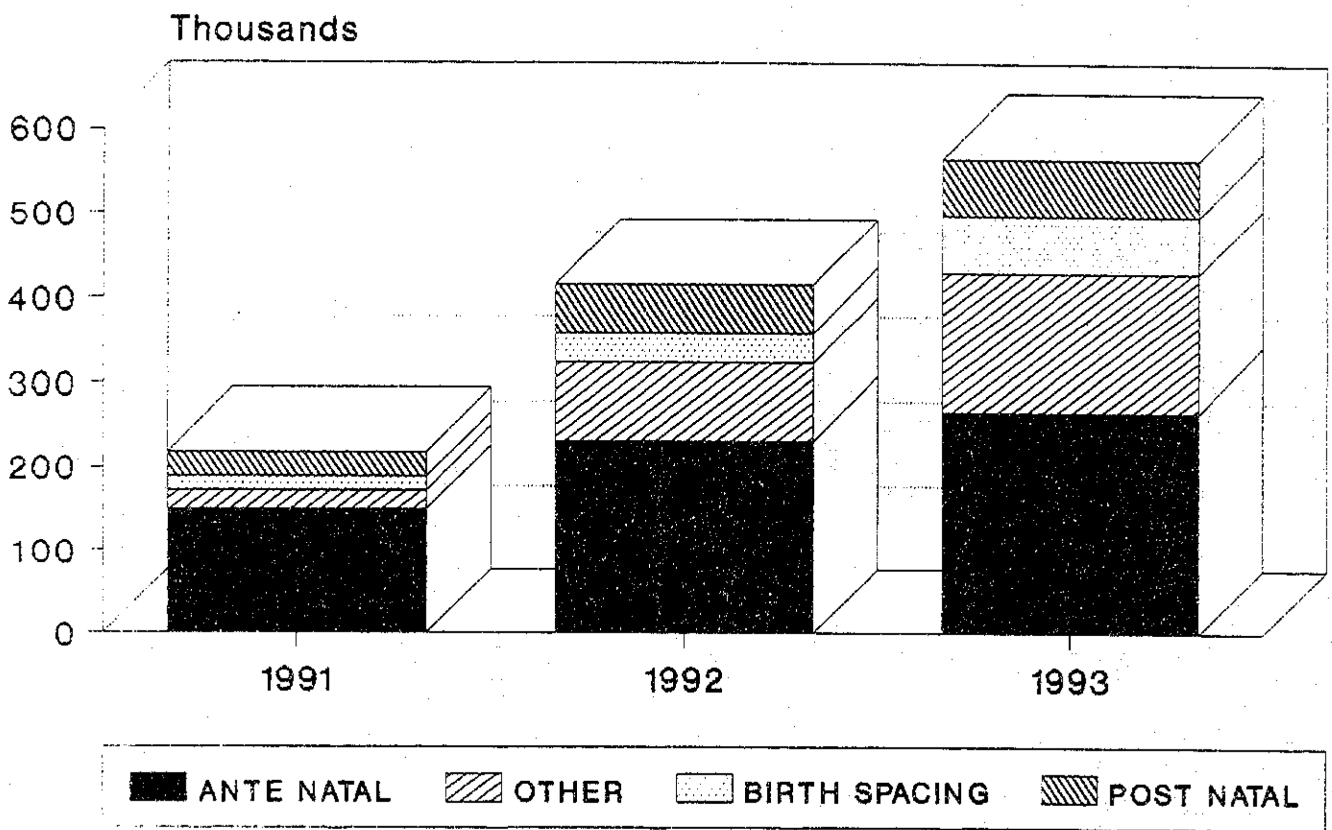
2 As above

3 Numerator = Weights below 2.500g.
Denominator = Total reported births.

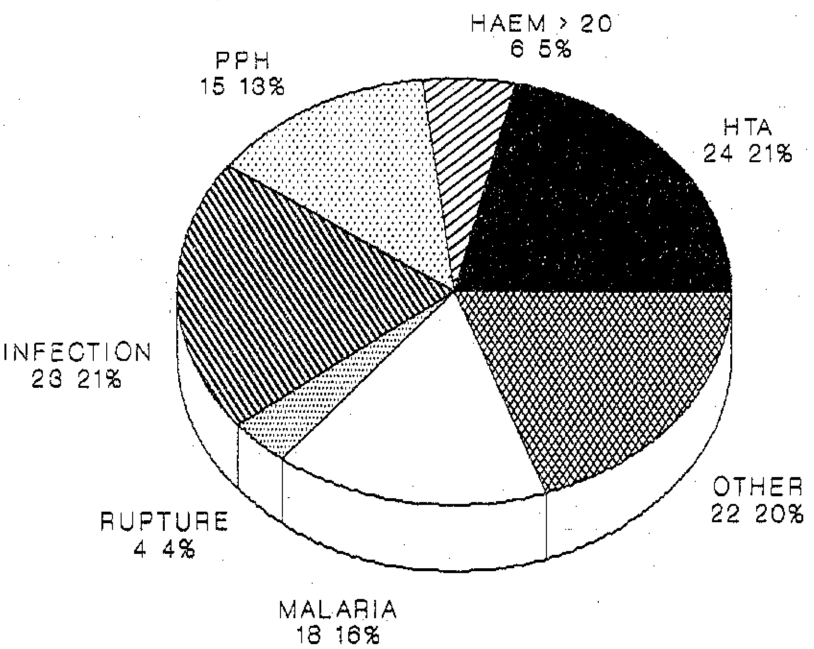
4 Numerator = Stillborn = 1524
Denominator = Live reported births + stillborn = 89,657

MATERNAL HEALTH 1991 - 93

TOTAL ATTENDANCES

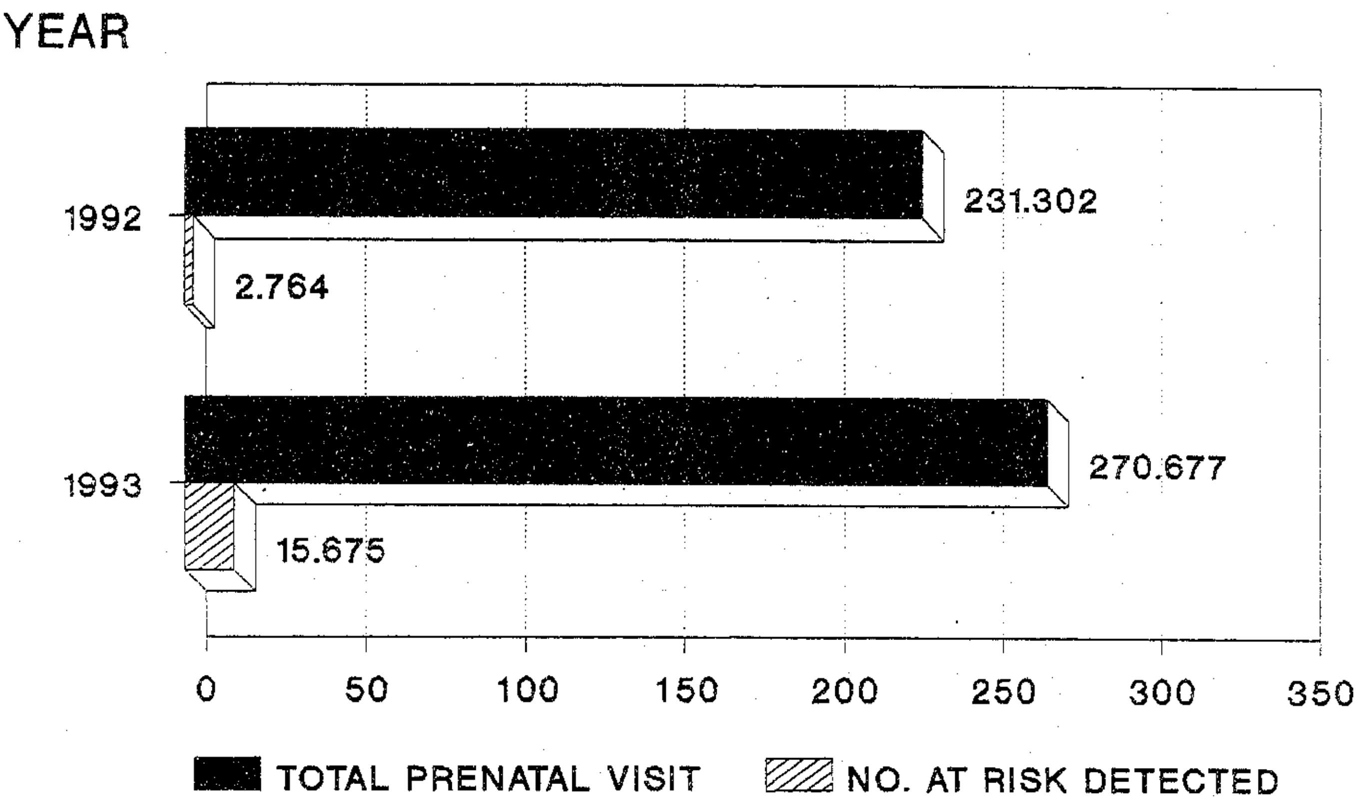


CAUSE OF MATERNAL DEATH 1993

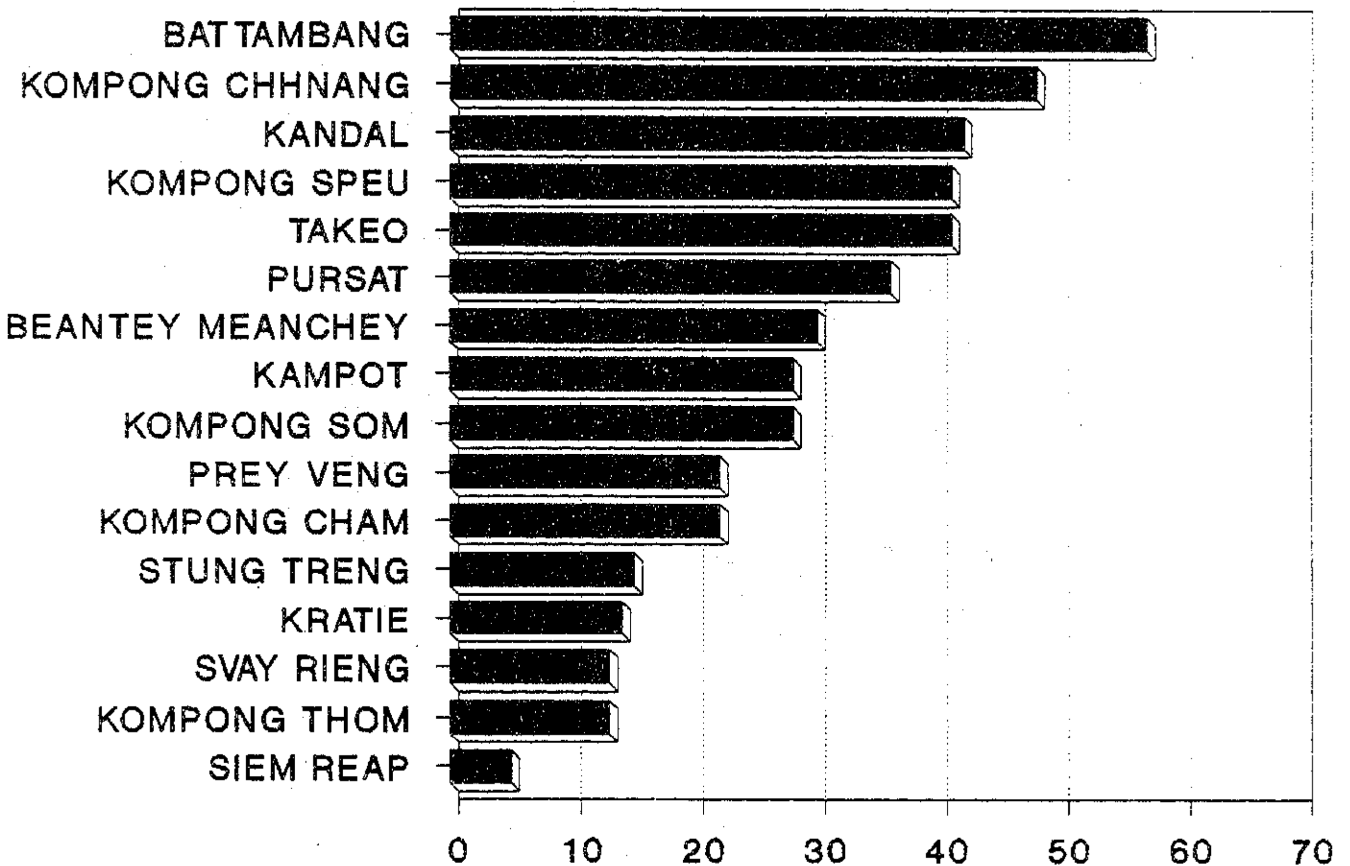


AT RISK DETECTION

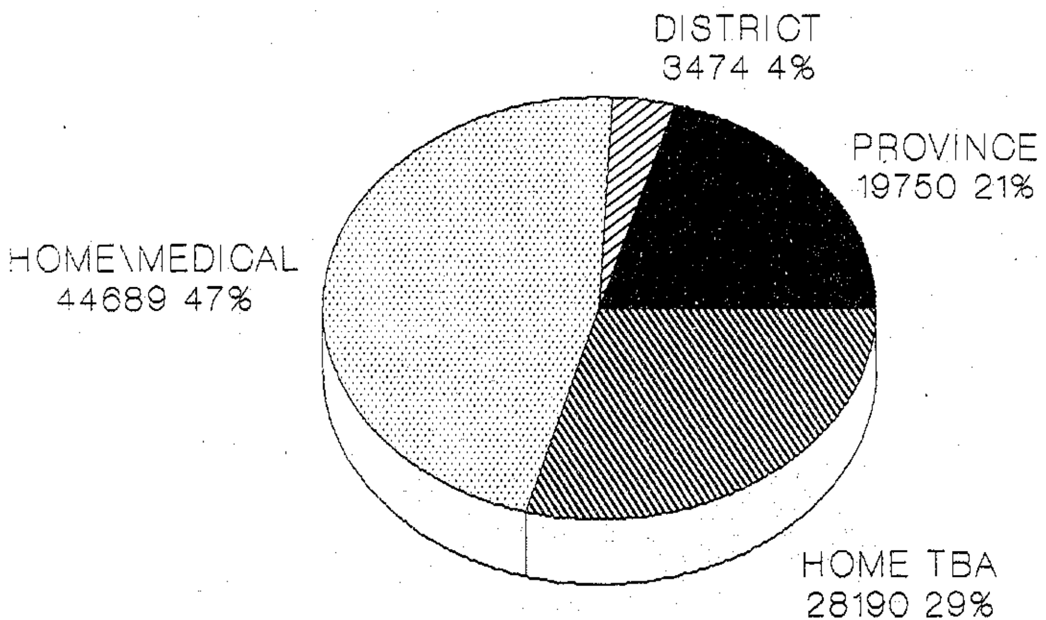
1992 - 1993



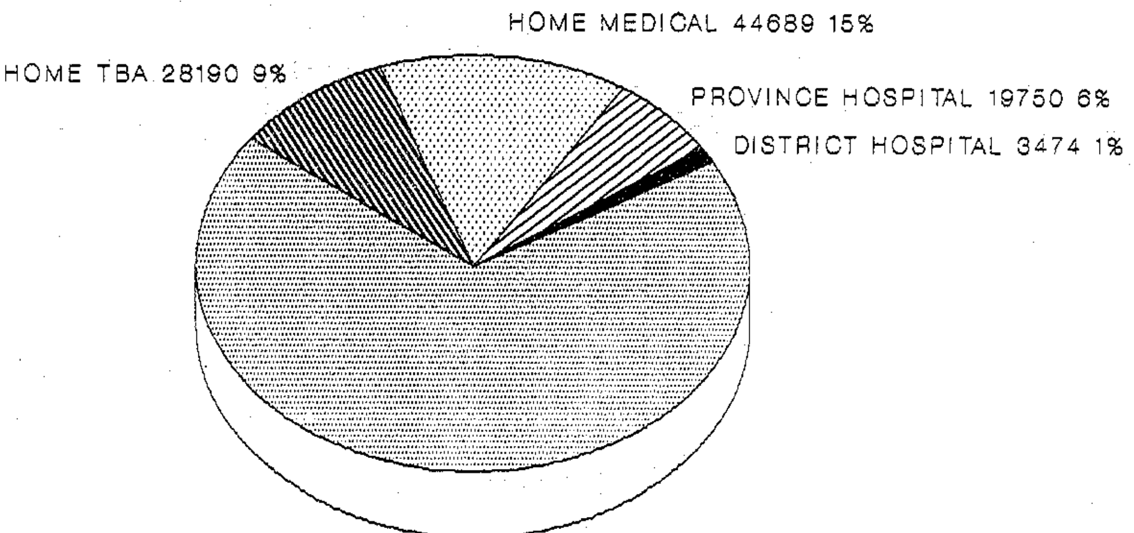
DELIVERIES BY PROVINCE



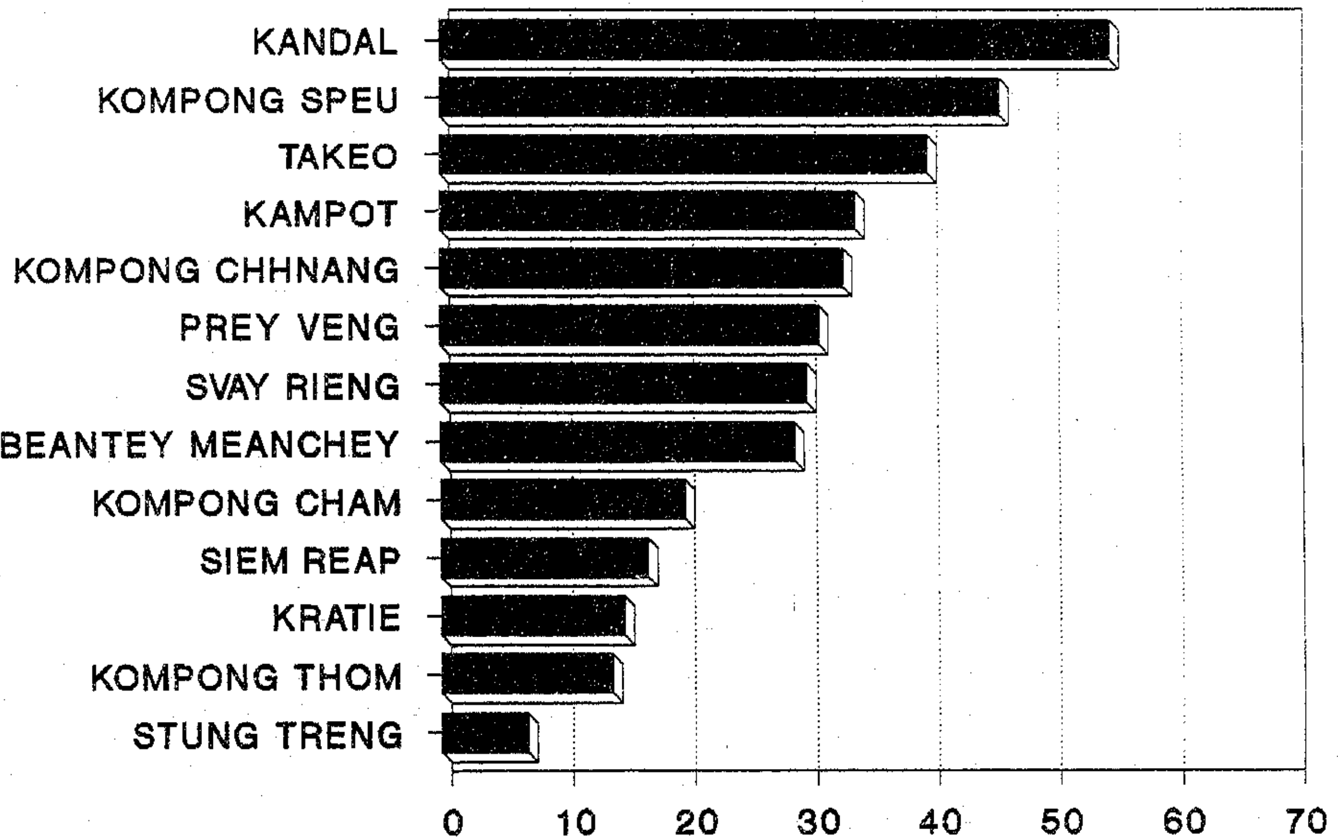
PLACE OF BIRTH 1993
(REPORTED BIRTHS)



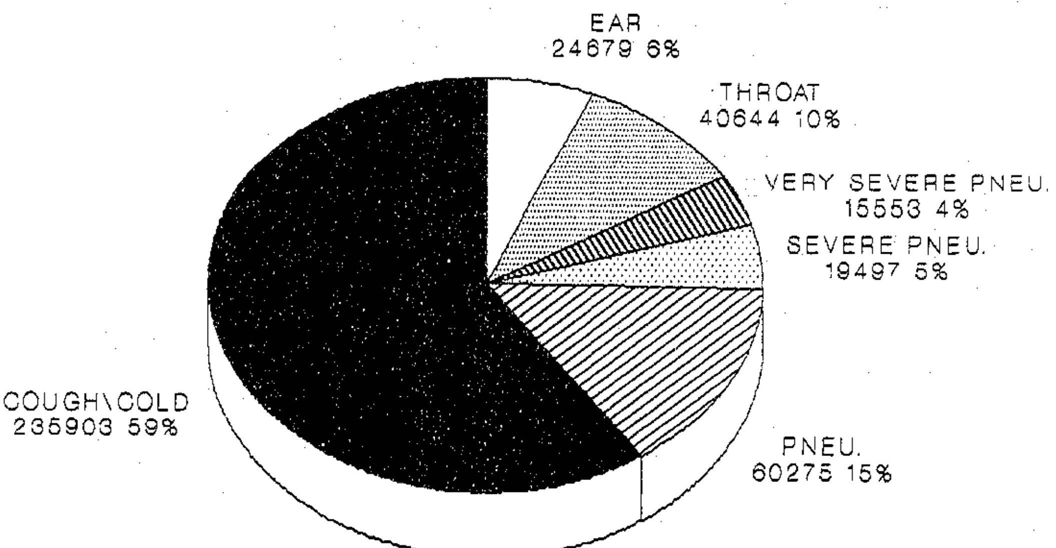
BIRTHS CAMBODIA 1993



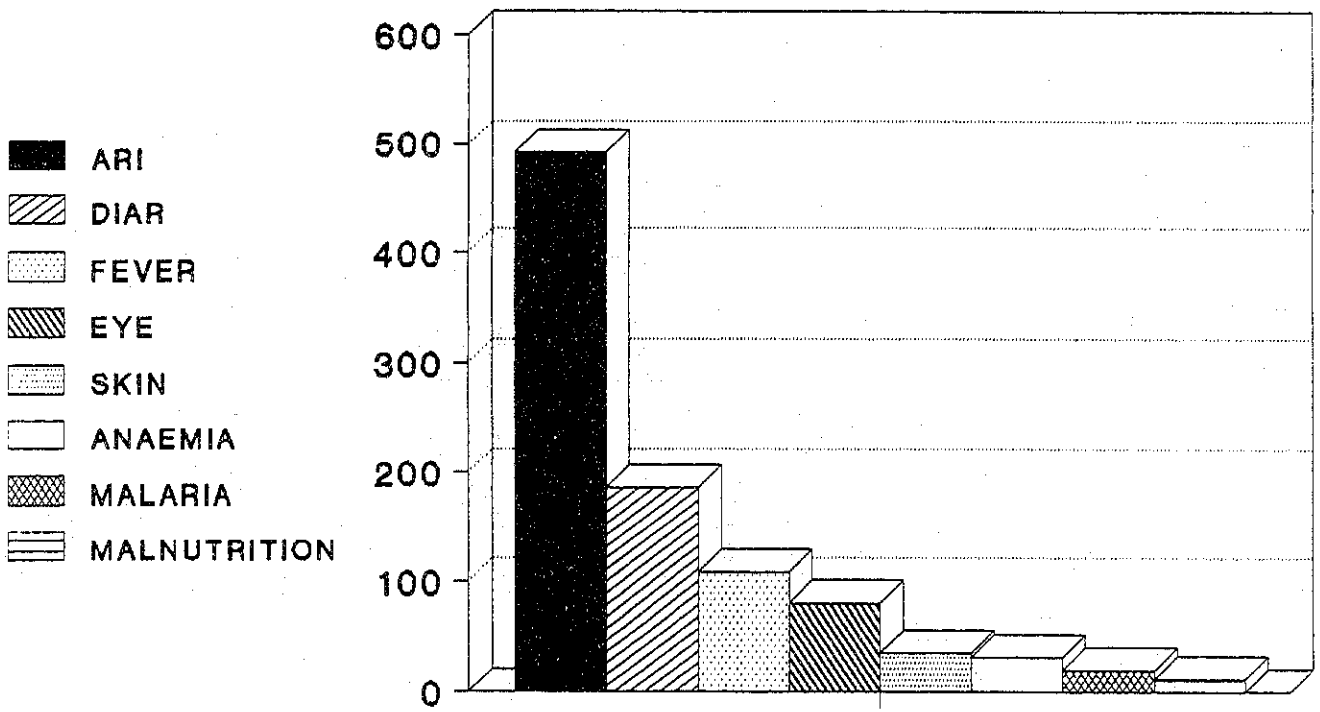
UNREPORTED BIRTHS CALCULATED FROM CRUDE BIRTH RATE 40\1000


PROVINCE IMMUNISATION COVERAGE
IMMUNISED UNDER AGE OF 1
KANDAL
KOMPONG SPEU
TAKEO
KAMPOT
KOMPONG CHHNANG
PREY VENG
SVAY RIENG
BEANTEY MEANCHEY
KOMPONG CHAM
SIEM REAP
KRATIE
KOMPONG THOM
STUNG TRENG
0
10
20
30
40
50
60
70
EXPRESSED AS % OF EXPECTED BIRTHS
FIGURES UNCLEAR FOR BATTAMBANG AND K.SOM

ARI INCIDENCE
1993

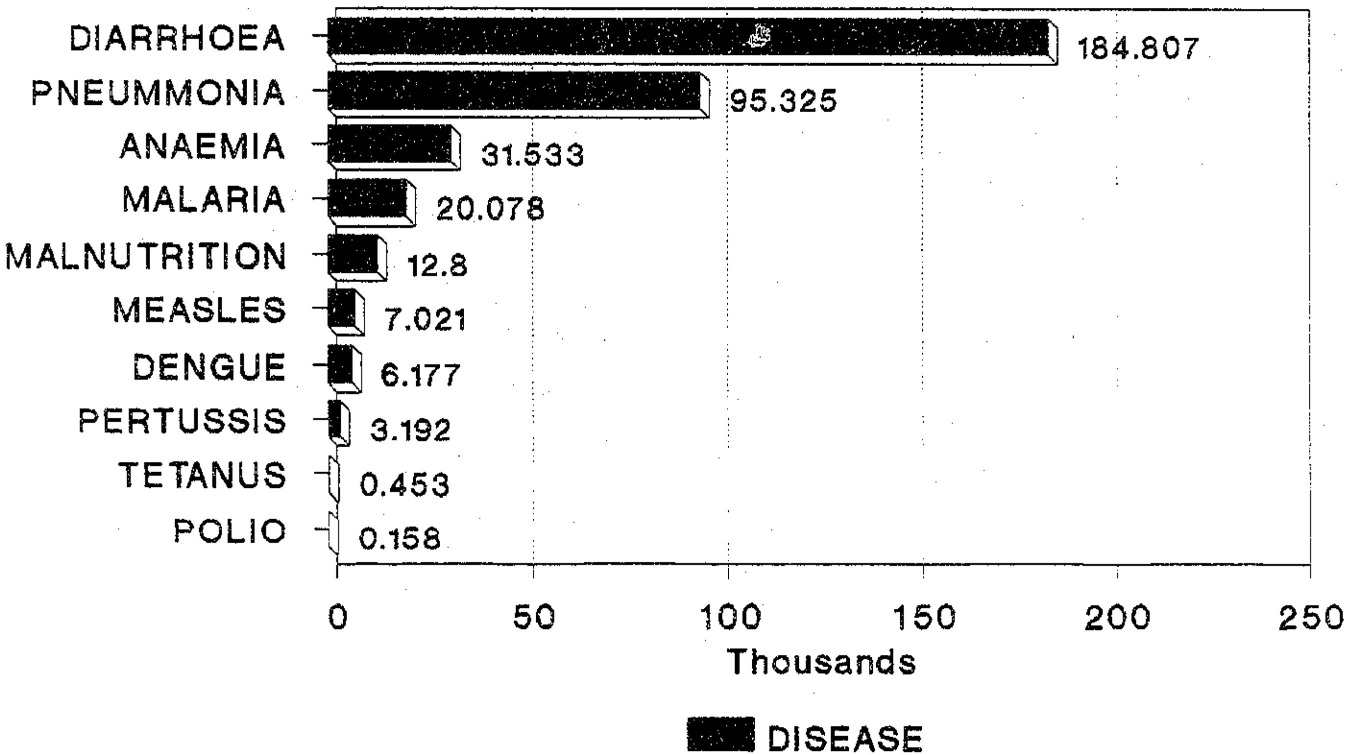


CHILD CONSULTATIONS
CAMBODIA 1993

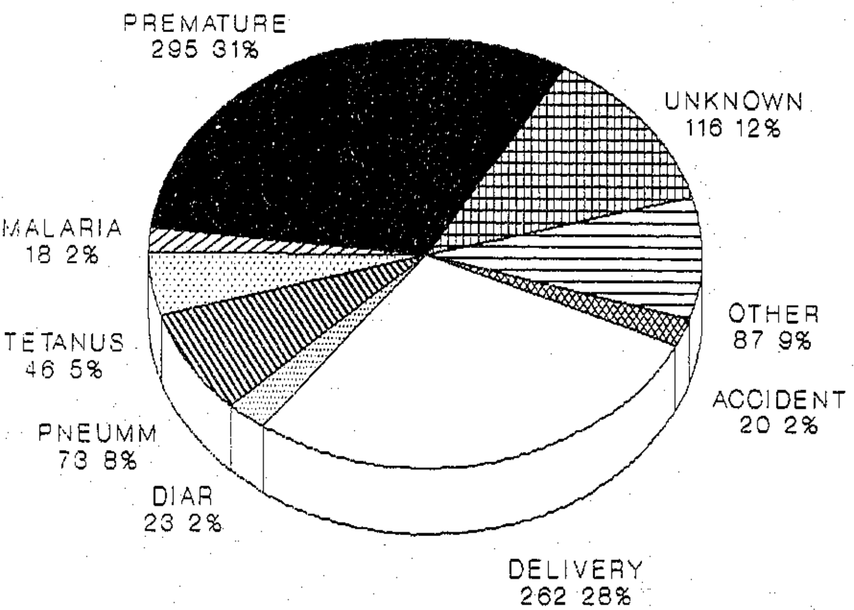


DISEASE FREQUENCY 1993

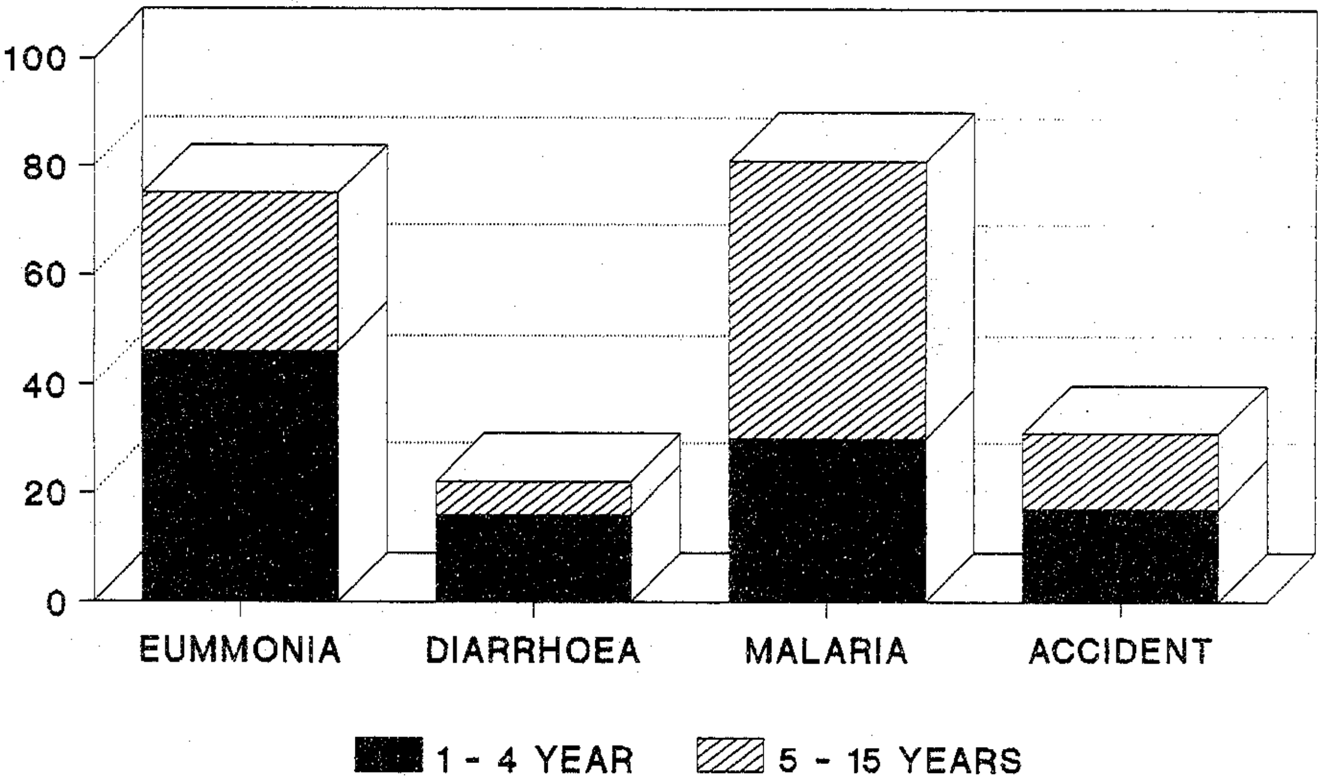
CHILDREN O - 15



INFANT MORTALITY
0 - 1 YEAR



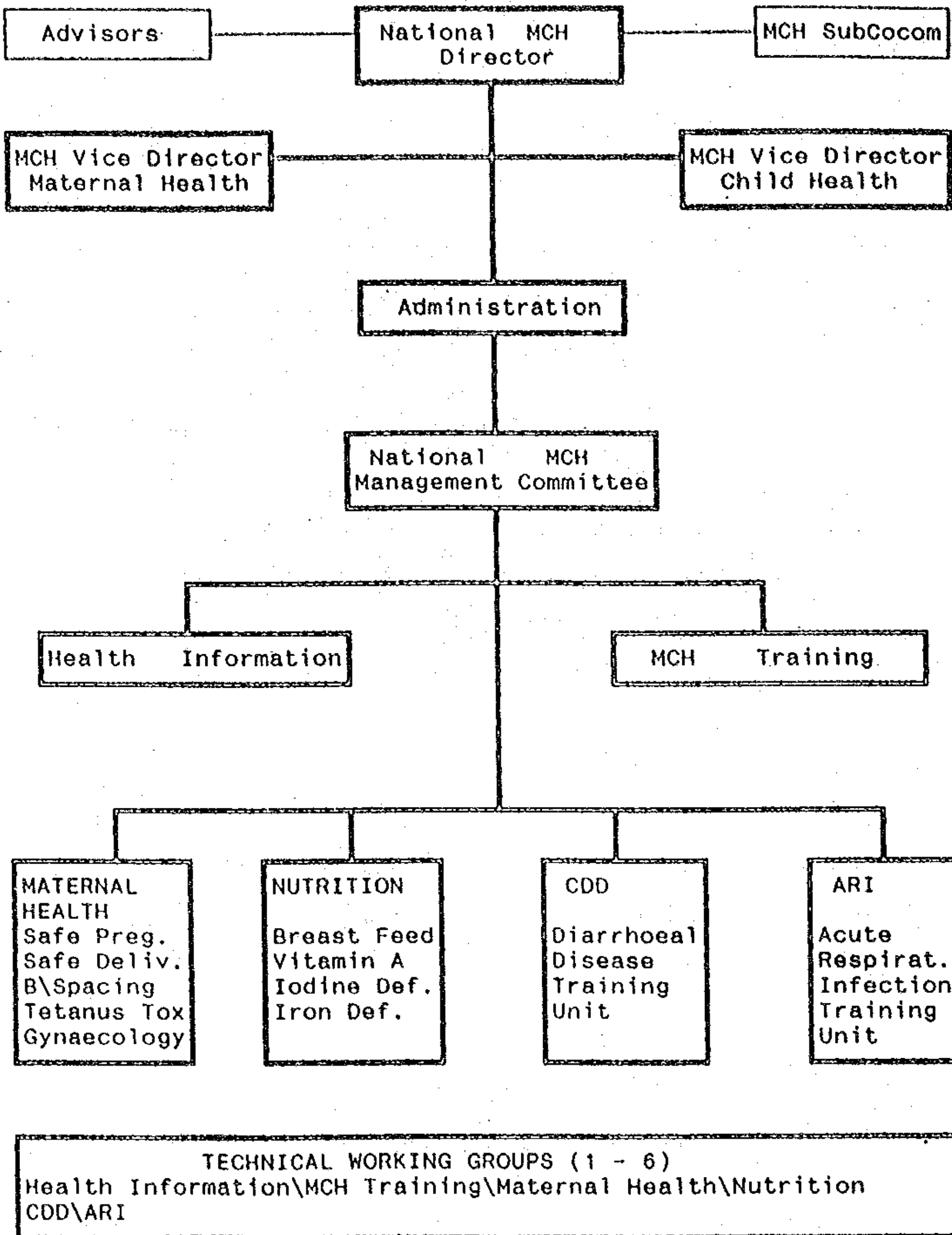
CHILD MORTALITY
1993



OTHER CAUSES (KNOWN + UNKNOWN) = 441

NATIONAL MCH CENTRE

ORGANISATIONAL CHART



TECHNICAL WORKING GROUPS (1 - 6)
Health Information\MCH Training\Maternal Health\Nutrition
CDD\ARI

⑥ 技術協力要請内容

Proposal for the Project Type Technical Cooperation

Project Title: Maternal and Child Health (MCH) Project
Implementing Agency: MCH center (ex-PMI center)
Responsible Ministry: Ministry of Health
Total project cost: not yet estimated

1. Background of the Project

The New Constitution of the Kingdom of Cambodia, adopted September 21 1993, declared that " The State shall give full consideration to children and mothers." in Chapter 6, Article 73. Special emphasis, even before the declaration of this constitution, has been placed on providing maximum support to the health of mothers and children including birth spacing, to "improve the health of all the people in their communities, by enhancing health promotion, prevention and treatment of disease, using traditional and modern methods, and by educating the people in healthy lifestyle and prevention of illness" as written in National Health Plan.

The health status of women and children in Cambodia is, despite the considerable improvement since 1980 with the assistance from UNICEF, other international organizations and NGO's, still in a poor condition, due to multiple factors, such as malnutrition, poor sanitation, lack of equipment and supplies, lack of human resources and so on. Cambodia's rate of natural increase of population is 2.5 % per annum and the crude birth rate is 41.1 per 1000 of population. This high birth rate is accompanied by very high mortality rates (maternal;200-3000 per 100,000 live births, infant; 125 per 1000 live birth). The lack of the accurate statistics of maternal mortality rate itself disclosed the poor status of women in Cambodia. Small surveys indicate that many women die from complications of pregnancies without having access to any medical services, and effects of non-medical/illegal abortions are assumed very serious.

To resolve these difficulties, MOH had founded PMI (Protection de Maternite et Infantier) center adjacent to the 7 January hospital, to serve wide range of preventive and curative activities in the field of MCH. After the election in May 1993, PMI center was renamed MCH center and terms of reference was reconfirmed as follows;

1) to make Policy/Plan in the field of MCH including Birth Spacing
2) to support and monitor implementation of the MCH plan (for both preventive and curative activities) by Provincial Health Sectors
3) to train health workers in the field of MCH
4) to facilitate Public Education for MCH
5) to be responsible for Information Network in MCH
6) to serve as a top referral hospital for children's and women's health

To accomplish these tasks, MOH and MCH center requested technical assistance from the Japanese Government in the above mentioned activities, specially in the training activity (3), and upgrading of a hospital activity as a top referral (6).

2. Current status of Implementing Agency

Please see appendix A. (MCH National Plan)

3. Objectives and Outline of the project

1) Goal (long-term objectives) of the project
Reduction of the maternal and child mortality rates

2) Purpose (short-term objectives) of the project

a) to train health workers in the field of MCH, through strengthening training activities of the MCH center, in alignment with National Health Plan

b) to upgrade curative activities for children and women's health, through re-training of medical doctors and nurses/midwives

3) Outline of the project

i) Training activity

<u>first phase</u>

-to establish training curricula, prepare training materials, and set up training schedules for health workers at all levels in the field of the MCH, through re-evaluating existing training courses/materials and clarify the real needs and demands for training
-to confirm the national policy for Birth Spacing
-to train trainers in the central level
-to hold seminars for health administrators of provinces

<u>second phase</u>
with completion of the construction of a new MCH center and new training courses established in phase 1,

-to train trainers of all provinces at central level
No. of the trainers; depend on a population size at least one doctor/midwife/nurse as a core person and three MWs/Nrs as trainers and supervisors
-to train supervisors in all provinces
-to train trainees from provinces
on Child care (ARI, CDD, Nutrition)
on Maternal care (including BS)
and so on.
-to retrain medical skills of medical doctors/medical assistants and nurses/midwives in all provincial hospitals and major district hospitals

- experts for education
- medical doctors
  - Ob/Gy
  - Pediatrist
  - Anesthesiologist
  - Surgeon (Pediatrics)
  - Internal Medicine (for Women's general health)
- nurses
- midwives
- nutritionists
- pharmaceutist
- expert for hospital management
- expert for maintenance of medical equipment

5) Request for training
- training for trainers/educator
  in Japan, in Mahidol University in Thailand
- training for medical doctors
- training for nursing in pediatrics, gynecology, surgery
- training for midwives
- training for maintenance of medical equipment
- training for project management

6) Request for equipment
- midwife/commune-nurse set
  including stethoscope, sphygonomanometer, stopwatch, scale and etc.
- equipment for training center and women's hospital
  in co-ordination with grant aid

4. Related projects

- Swiss Khmer Foundation; Support Kunta-Bohha Hospital (children's hospital), by technical cooperation, rehabilitation of the building and provision of equipment
- UNICEF; EPI activity, MCH activity
- Save the Children Fund (SCF)Australia; despatch of an adviser to MCH center
- Redd Barna and SCF-UK; training of nurses/midwives at Nursing School, not directly involved in this project but should be related in terms of training of nurses/midwives
- Several NGOs are involved in the MCH activities including training health workers in province and district levels

MOH and MCH center are responsible for the coordination with those organization.

-to establish an evaluation system

<u>third phase</u>

- -to continue training activities
- -to support provincial trainers to hold training courses in provinces and districts
- -to evaluate training activities at provincial and district level
- -to evaluate skills of the trainers at all levels
- -to evaluate supervising activities

Tentatively planned training courses, as an example

Number of participants

months	1	2	3	4	5	6	7	8	9	10	11	12	T
1-A	10 →	→	→	→	→	→							10
1-B	10 →		10 →		10 →		10 →		10 →		10 →		60
Sur	10		10		10		10		10		10		60
T-ped		20		20		20		20		20		20	120
T-mat	20		20		20		20		20		20		120
Ret-A	8 →			8 →			8 →			8 →			32
Ret-B	10	10	10	10	10	10	10	10	10	10	10	10	120
total	58	38	50	38	58	30	48	28	40	28	48	20	522
No/C	6	5	6	5	6	4	5	4	4	5	5	3	

1-A: training for trainer of central level, 6 months
1-B: training for trainer of province level, 6 weeks
Sur: training for supervision, 4 weeks
T-ped: training for nurses in pediatrics, ARI, CDD and nutrition, 4 weeks
T-mat: training for midwives, antenatal care, safe delivery, at risk pregnancy, and BS, 4 weeks
Ret-A: in-service training of medical doctor, 2 months
Reh-B: in-service training of nurses/midwives, 4 weeks
total: numbers of trainees in a month
No/C: numbers of courses in a month
T: total numbers of trainees in a year

ii) Curative activity

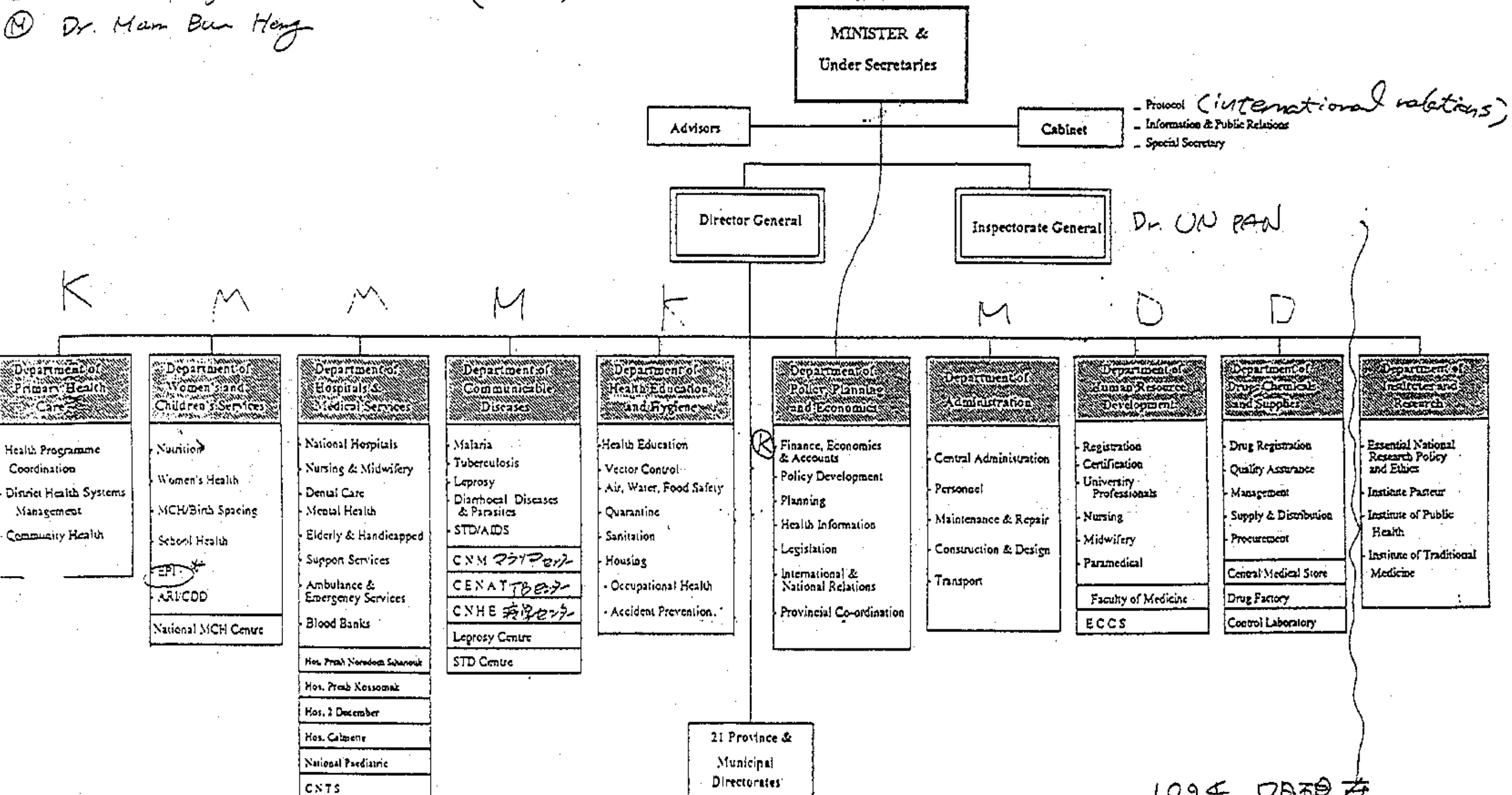
- -to upgrade medical skills of all medical doctors, and medical assistants in the field of pediatrics, Ob/Gy and general medicine in MCH center, and train them as trainers for in-service training courses for medical doctors

- -to upgrade medical skills of nurses and midwives in MCH center and train them as trainers for in-service training courses for nurses and midwives

4) Request for experts
- -consultant for planning of training courses
- -experts for IEC

⑦ 保健省機構図

Ⓓ Dr. Dy Narong Rith
Ⓔ Dr. Ok Aing Kim
Ⓜ Dr. Mam Bun Heng



⑧ 国立母子保健センター活動実績

ROYAUME DU CAMBODGE

MINISTERE DE LA SANTE
CENTRE DE PMI

ACTIVITES DE L'HOPITAL L'ANNEE 1993

HOPITAL SPECIALISE EN GYNECO-OBSTETRIQUE :

I - SANTE MATERNELLE :

A - CONSULTATION EXTERNE :

- Consultation pré et postnatale : 3.078 consultants
  産前産後 患者
- Consultation Gynécologie : 952 -
  婦人科 患者
- Nombre de consultations : 8.105 consultations
  診療数
- Vaccination tétanol pour les mères : 6.345.
  妊婦に対する破傷風予防注射

B - HOSPITALISATION :

- Malades hospitalisés	:	5.660	入院
- Accouchement normal	:	3.463	正常分娩
- Accouchement prématuré	:	106	未熟児
- Accouc.par ventouse/forceps	:	265	かん子分娩
- Accouchement gémellaire	:	70	
- Césarienne	:	363	帝王切開
- Embryotomie	:	4	
- Mort in utéro	:	57	
- Hémorragie de la délivrance	:	20	出血
- Mort maternelle	:	34	妊産婦死亡
- Menace d'avortement	:	44	
- Tatal d'avortements	:	89	

C - CHIRURGIE :

- Petits chirurgies : 2.025 (obstétricales) 小手術
- Grands chirurgies : 581 dont : 大手術
  . 308 obstétricales et 産科
  ; 273 gynécologiques 婦人科

II - SANTE INFANTILE :

A - CONSULTATION EXTERNE :

	Service Pédiatrie(7/1)	KANTHABOPHA	TOTAL
- Nombre des consultants 外来患者	10.160	52.983	63.143
- Nombre de consultations 外来	19.027	129.174	148.201
- Vaccination des 6 maladies EPI 接種			26.968

B - HOSPITALISATIONs :

- Malades hospitalisés 入院	1.973	7.492	9.465

ROYAUME DU CAMBODGE

MINISTERE DE LA SANTE
CENTRE DE PMI

ACTIVITES DE L'HOPITAL DE L'ANNEE 1994*
(1er semestre 1994)

HOPITAL SPECIALISE EN GINECO-OBSTETRIQUE :

I - SANTE MATERNELL :

A - CONSULTATION EXTERNE :

- Consultation pré et postnatale : 1.834 consultants
- Consultation Gynécologie : 464 -
- Nombre de consultation total : 5.064 consultations
- Vaccination tétanol : 3.486

B - HOSPITALISATION :

- Malades hospitalisés : 2.939
- Accouchement normal : 1.218
- Accouchement prématuré : 46
- Accouch.par ventouse et forceps : 124
- Accouchement gemellaire : 39
- Césarienne : 217
- Embryotomie : 4
- Mort in utéro : 38
- Hémorragie de la délivrance : 3
- Mort maternelle : 28 (1,26%)
- Menace d'avortement : 14
- Total avortements : 59

C - CHIRURGIE :

- Petits chirurgies : 1.364 (obstétrique)
- Grand chirurgie : 334 dont
  - 180 obstétriques
  - 154 gynécologie

II - SANTE INFANTILE :

A- CONSULTATION :	Service pédiatrie(7/1)	KANTHABOPHA	TOTAL
- Nombre de consultants	3.124	53.402	56.526
- Nombre de consultations	4.916	88.251	93.167
- Vaccination des 6 maladies			25.626
B- HOSPITALISATION :			
- Malade hospitalisés	407	4.245	4.452

ROYAUME DU CAMBODGE

MINISTERE DE LA SANTE
CENTRE DE PMI

STATISTIQUE DES ETUDIANTS ET DES ELEVES
MISES EN STAGE PRATIQUE DANS LE CENTRE PMI

学生 実習受入

ETUDIANTS ET ELEVES	1993	1994*	OBSERVATIONS
I - FACULTE DE MEDECINE ET DE PHARMACIE :			
- Docteur en médecine (医師)	198	159	
- Médecin Asistant (医療助手)	485	418	
- Pharmacien (薬剤師)	17	31	
- Pharmacien auxiliaire (薬剤師助手)	12	29	
II - ECOLE DES CARDRES SANITAIRES :			
- Sage femme (助産婦)	90	25	
- Infirmier (看護婦)	223	107	
TOTAL	1.025	769	

* 1994 : 1er Janvier au 15 Juillet .

ROYAUME DU CAMBODGE

MINISTERE DE LA SANTE
CENTRE DE PMI

研修実績 1994年1月1日〜7月15日

STATISTIQUE DES PARTICIPANTS DES FORMATIONS DANS LE DOMAINE DE LA SANTE MATERNELLE ET INFANTILE DU 1er JANVIER AU 15 JUILLET 1994.

N°	PROVINCES ET ETABLISSEMENTS	NIVEAU NATIONAL (National Level)			NIV. PROVINCIA		NIV. DISTRIC	TOTAL
		SMI MCH	IRA/LMD ARI/CDD	ESP. Birth Spacing	SMI MCH	SI CH	MATRONES TBA	
1	- KANDAL	-	2	-	-	-	-	2
2	- BATTAMBANG	-	2	19	-	-	-	21
3	- SIEM REAP	-	2	-	-	-	-	2
4	- KAMPONG CHAM	-	2	-	20	40	20	82
5	- SVAY RIENG	-	2	-	40	20	-	62
6	- TAKEO	-	2	-	-	-	120	122
7	- KAMPONG SPEU	-	2	-	-	-	58	60
8	- KAMPONG CHHNANG	-	-	-	20	-	70	90
9	- KAMPONG THOM	-	-	-	20	27	100	147
10	- STUNG TRENG	4	-	-	10	-	-	14
11	- PREY VENG	-	-	-	-	82	10	92
12	- MONDULKIRI	4	-	-	-	-	12	16
13	- RATTANAKIRI	4	-	-	-	-	-	4
14	- PREAH VIHEAR	4	-	-	-	-	-	4
15	- KOH KONG	4	-	-	-	-	-	4
16	- CENTRE DE PMI	-	6	-	-	-	-	6
17	- HOPIT. NAT. PEDIC. CENT	-	5	-	-	-	-	5
	TOTAL	20	25	19	110	169	390	733
		64			279		390	

SMI = MCH 母子保健
IRA/LMD = ARI/CDD 急性呼吸器感染症/下痢症
ESP = Birth Spacing 家族計画
SI = CH 小児保健
MATRONS = TBA 伝統的助産婦

⑨ 1994年国家予算

National Budget in 1994 million R

	total		*capital*		*recurrent*	1000 US$	(%)
Total	**889,600**		**312,000**		**577,600**	**$222,154**	
王宮費	18,070	(2%)	1,000	(0%)	17,070	$6,565	(3%)
議会費	5,488	(1%)	0	(0%)	5,488	$2,111	(1%)
閣議費	54,085	(6%)	31,540	(10%)	22,545	$8,671	(4%)
外務省	23,324	(3%)	800	(0%)	22,524	$8,663	(4%)
防衛省	164,000	(18%)	0	(0%)	164,000	$63,077	(28%)
内務省	86,722	(10%)	0	(0%)	86,722	$33,355	(15%)
大蔵省	32,365	(4%)	21,600	(7%)	10,765	$4,140	(2%)
情報省	6,503	(1%)	1,000	(0%)	5,503	$2,117	(1%)
交通省	170,574	(19%)	159,120	(51%)	11,454	$4,405	(2%)
農業省	69,747	(8%)	56,400	(18%)	13,347	$5,133	(2%)
法務省	1,142	(0%)	100	(0%)	1,042	$401	(0%)
教育省	76,304	(9%)	25,248	(8%)	51,056	$19,637	(9%)
商務省	19,437	(2%)	112	(0%)	19,325	$7,433	(3%)
産業省	8,643	(1%)	5,300	(2%)	3,343	$1,286	(1%)
計画省	2,534	(0%)	150	(0%)	2,384	$917	(0%)
保健省	49,898	(6%)	4,000	(1%)	45,898	$17,653	(8%)
観光省	1,659	(0%)	500	(0%)	1,159	$446	(0%)
宗教省	1,114	(0%)	180	(0%)	934	$359	(0%)
通信省	33,436	(4%)	3,500	(1%)	29,936	$11,514	(5%)
文化省	4,867	(1%)	900	(0%)	3,967	$1,526	(1%)
社会厚生省	29,690	(3%)	550	(0%)	29,140	$11,208	(5%)
予備費	29,998	(3%)	0	(0%)	29,998	$11,538	(5%)

⑩ 1994年保健省予算

Health Budget in 1994 recurrent cost

	milion reil	1000US$	
Total	**45,898,000,369**	**17,653**	
Central	***22,915,890,744***	**8,814**	**50%**
MOH	3,418,891,330	1,315	7%
National program	9,890,573,600	3,804	22%
Malaria	1,633,512,796	628	
TB	1,631,036,964	627	
AIDS	902,310,219	347	
MCH	1,575,354,562	606	
GNHE	2,274,000,032	875	
Blood Bank	741,474,697	285	
Training Institute	1,368,679,220	526	3%
Pharmaceutical Labo	217,965,236	84	0%
Phnom Penh Hospital	8,019,781,358	3,085	17%
Provinces	***22,982,109,625***	**8,839**	**50%**
Pursat	468,673,200	180	
B-Meanchey	762,772,862	293	
Mattanban	856,717,371	330	
Siem Riep	1,355,073,667	521	
Kg. Cham	3,760,773,757	1,446	
Kg. Chhnang	561,289,799	216	
Kg. Speu	1,025,890,503	395	
Kg. Thom	1,388,277,519	534	
Kampot	909,856,212	350	
Kep	22,687,651	9	
Kandal	2,257,318,878	868	
Phnom Penh	1,892,500,766	728	
Mondulkiri	130,364,057	50	
Stung Treng	164,397,161	63	
Koh Kong	174,486,690	67	
Prey Veng	2,848,173,195	1,095	
Takeo	1,864,393,017	717	
Sihanoukville	296,782,877	114	
Svay Rieng	1,289,926,259	496	
Preah Vihea	236,956,229	91	
Kratie	494,730,072	190	
Ratanakiri	220,067,883	85	

⑪ 1994年保健省支出

Budget 1994			
TOTAL	CENTRAL	PROVINCES	TOTAL
Description of Category,	Request from	ADJUSTED	COUNTRY
Sub-Total: Operational Expenses	22,915,890,739	22,982,109,625	45,898,000,364
	0		0
First Category of Expenses:			
Human Resources & general supplies	22,608,149,454	22,944,112,103	45,552,261,556
Chapter 10: Salaries and Allowances	3,143,335,678	7,005,359,550	10,148,695,227
Remuneration for Senior Public Servants	3,883,104		3,883,104
Basic Annual Salaries	2,359,113,497	4,921,613,814	7,280,727,311
Approximate Number of Staff	*6,113*	*14,302*	*20,415*
Cabinet	7,206,940		7,206,940
Ministry of Health	592,688,880		592,688,880
National Programmes	243,149,813		243,149,813
Phnom penh Hospitals	991,934,332		991,934,332
Training Institutes	93,077,899		93,077,899
Pharmaceutical Laboratory	132,284,434		132,284,434
New Health Graduates (1,000)	298,771,200		298,771,200
Allowances for Dependants	527,166,796	1,959,928,336	2,487,095,132
Additional Allowances	253,172,280	123,817,400	376,989,680
Wages and Allowances for Casual Staff		279,000,000	279,000,000
Chapter 11: General Supplies,	19,408,013,896	15,659,752,553	35,067,766,448
Equipment and Repairs			
Buildings			
Rent			
Repairs and Maintenance	692,171,505	418,861,277	1,111,032,782
Water	108,460,888	146,708,215	255,169,103
Electricity	529,806,070	360,967,718	890,773,788
Generator running and maintenance	259,351,339	112,831,797	372,183,135
Furniture and small equipment	771,744,795	252,852,750	1,024,597,545
Communication Costs: telephone, telex, pos	147,193,741	31,623,693	178,817,434
Printing, office supplies & equipment	235,544,199	253,448,003	488,992,202
Books and documents	139,875,784	139,756,859	279,632,643
Meetings and conferences	153,147,770	161,733,277	314,881,047
Transport Costs			
repairs and maintenance	1,055,325,591	626,595,438	1,681,921,029
fuel and oil	576,071,979	336,480,507	912,552,486
Reception Costs	131,846,331	100,547,035	232,393,366
Costs for Celebrations	54,547,500	22,110,641	76,658,141
Clothing and Uniforms	142,515,655	442,197,244	584,712,899
Safety equipment and special costs for haza	73,502,966	138,505,695	212,008,661
Training for improving skills			
Research	98,271,046		98,271,046
Laboratory equipment for training	415,515,072	68,602,481	484,117,553
Seminars and conferences	1,662,060,290	274,409,923	1,936,470,213
Publication of Information for the Public	1,524,859,011	190,832,409	1,715,691,420

TOTAL Description of Category, Article, Paragraph and Sub-Paragraph	CENTRAL Request from Government for 1994	PROVINCES ADJUSTED Request from Government	TOTAL COUNTRY Request from Government
Expenses specific to the Sector			
Drug Supplies	4,794,664,120	6,482,597,459	11,277,261,580
Medical Material	1,564,871,862	719,245,557	2,284,117,419
Medical Equipment supplies & maintenance	1,179,115,003	153,384,982	1,332,499,985
Patient food	855,152,216	3,351,939,196	4,207,091,412
Contribution: Regional Training School	24,021,400	7,123,479	31,144,879
Oxygen	57,421,389	149,726,966	207,148,354
Cleaning	88,839,348		88,839,348
Crematorium Fees, Freight etc		76,818,740	76,818,740
Training Equipment & Student Food etc.		275,542,754	275,542,754
Staff Food			
Patient Bedding & clothing	38,832,892	167,792,520	206,625,412
Blood Donor Costs	56,868,000		56,868,000
Phnom Penh Ambulance Service	76,680,359		76,680,359
Cold Chain	404,510,486		404,510,486
Support Costs/Monitoring & Evaluation	132,829,415		132,829,415
Reimbursement of Costs			
In-country Travel			
Transport costs		111,291,819	111,291,819
Accommodation	546,720,283	85,224,117	631,944,399
Cost of Mission	581,597,948		581,597,948
Out-of-country Travel			
Transport costs	117,038,823		117,038,823
Accommodation	58,519,411		58,519,411
Cost of Mission	23,407,765		23,407,765
Other expenses, eg: conference fees	35,111,647		35,111,647
Chapter 12: Operating Subsidies to Public			
Administrative Institutes	56,799,880		56,799,880
Third Category of Expenses:			
Chapter 31: Social and Cultural Expenses	307,741,285	37,997,522	345,738,807
Direct Social and Cultural Expenses	107,741,285.21	267,258,714.79	375,000,000
Direct Social Expenses			
Birth	6,604,541	16,382,959	22,987,500
Illness	3,307,657	8,204,843	11,512,500
Work accidents	1,583,797	3,928,703	5,512,500
Deaths	2,014,762	4,997,738	7,012,500
Invalids & Handicapped	1,152,832	2,859,668	4,012,500
Aid for retirement	18,671,565	46,315,935	64,987,500
Aid for redundancy	16,947,704	42,039,796	58,987,500
Purchase of medicines for social assistanc			
Other social expenses	57,458,427	142,529,073	199,987,500
Scholarships			
for research	20,000,000		20,000,000
for university study	160,000,000		160,000,000
to complete higher degrees			
for overseas study	20,000,000		20,000,000

⑫ 1994年母子保健センター予算

Grand total 1,672,000,000 1,348,340,641

RUNNING COST (1994)	PMI CENTER	JAN. 7 HOSPITAL
CATEGORY-1: human resources & general supp		
chapter-10: salaries & allowances		
article-2 : permanent civil servants		
paragragh-1: basic annual salaries		197,930,400
2: allowances for dependants		44,554,469
additional allowances		10,557,000
sub-total		253,041,869 (19%)
chapter-11:general supplies, equip. & repair		
article-1 :supplies & equipments		
paragraph-1: buildings		
subparagraph-1: rent		
2: repairs & maintenance	10,000,000	2,383,054
3: water	3,000,000	12,000,000
4: electricity	3,000,000	40,000,000
5: generator running & mainte		65,000,000.
paragraph-2: furniture & small equipments	8,000,000	6,366,473
3: communication(tel, postage)	5,000,000	4,000,000
4: printing, office suppl. & equip	4,000,000	5,000,000
5: books & documents	3,000,000	1,500,000
6: meetings & conferences	2,000,000	1,500,000
7: transport costs		
subparagragh-1: repairs & maintenance	22,500,000	20,000,000
2: fuel and oil	14,000,000	
3: vehicle rental & public tr		
8: reception costs	4,000,000	
9: costs for celebrations	500,000	
10: clothing & uniforms		15,000,000
11: safety equipment & special cost for hazards		3,000,000
sub-total	79,000,000	175,749,527 (13%)
12: training for improving skills		
subparagraph-1: research		
laboratory equip. for train	10,000,000	5,000,000
seminars & conferences	175,000,000	70,000,000
sub-total	185,000,000	75,000,000 (5.6%)
13: publication of inf. for public	200,000,000	20,000,000

14: expenses specific to the sec		
subparagraph-1: drug supplies		500.000.000
2: medical materials	550.000.000	100.000.000
3: medical equipment supplies & maintenance	650.000.000	20.000.000
4: patient food		160.000.000
6: oxygen		5.000.000
7: claening		18.000.000
8: crematorium fees, fleight		
9: training equip.& stud.food		
10: staff food		
11: patients clothing & beddi.		14.000.000
12: blood donor costs		
13: PP ambulance service		
14: health information system		
15: PVC pipe, cables, pumps, ceme		
16: cold chain		
17: support costs/monitoring		
sub-total	1.200.000.000	817.000.000 (60%)
article-2: reimbursement of costs paragraph-1: in-country travel subparagraph-1: transport costs		
2: accomodation	4.000.000	
3: cost of mission	4.000.000	
	8.000.000	
CATEGORY-3: CONTRIBUTIONS to OTHER PUBLIC INSTITUTIONS chapter-31: social & cultural expenses article-1 : direct social expenses paragraph-1: direct social expenses		
subparagraph-1: birth		462.732
2: illness		231.743
3: work accidens		110.965
4: deaths		141.160
5: invalids & handicapped		80.771
6: aid for retirement		1.308.180
7: aid for redundancy		1.187.402
8: purchase of medicines for social assistance		
9: other social expences		4.025.692
sub-total		7.548.645

⑬ 母子保健センターカウンターパートリスト

NATIONAL PROGRAM MANAGERS

PROGRAM	MANAGER
DIRECTOR NATIONAL MCH CENTRE	Dr Eng Huot
VICE DIRECTOR (MATERNAL HEALTH)	Dr Koum Kanal
VICE DIRECTOR (CHILD HEALTH)	Dr Yit Sunnara
NATIONAL PROGRAM MANAGER HEALTH INFORMATION	Dr San Chan Soeun
NATIONAL PROGRAM MANAGER MCH TRAINING	Dr Or Sivarrin
NATIONAL PROGRAM MANAGER MATERNAL HEALTH	Dr Koum Kanal
NATIONAL PROGRAM MANAGER NUTRITION	Dr Sour Kim Ann
NATIONAL PROGRAM MANAGER ARI	Dr Chan Sary
NATIONAL PROGRAM MANAGER CDD	Dr Bun Chan Than

⑭ ＰＣＭ方式による分析

<table>
<tr><td>Overall Goal</td><td colspan="2">To improve the maternal & child health status in Cambodia through promotion of the National MCH program activities.</td></tr>
<tr><td>Purpose</td><td colspan="2">1)To strengthen the management capability of the NMCHC.
2)To strengthen training activities of the NMCHC, in alignment with National Health Plan.
3)To improve clinical care activities for children & women at the NMCHC.</td></tr>
<tr><td>Outputs</td><td>Improvement of management capability of the NMCHC</td><td>Strengthening of training activities of the NMCHC</td></tr>
<tr><td>Activities</td><td>1)human resources(HR)
● establish the organaization of NMCHC
● clarify the job description (responsibility)
● proper promotion
● proper allocation of HR
● establish the discipline
2)equipment/materials/drugs
● proper training for usage of equipment
● cleaning
● record keeping
3)finance
4)information
5)training
● cooperation with technical advisor
● study tour to abroad
● follow to the National Plan</td><td>1)management/planning
● re-evaluation of on-going training courses(curricula, materials)
● establish training courses (continuous, refleshment, preventive care, clinical) for students, staff of NMCHC, TOT of provinces, district HW
2)implementation
● cooperation with local staff /health department
● keep place for training
● communication
3)supervision
● NMCHC sataff supervise to provincial staff
● training of provincial staff to supervise district staff
● check list/survey
4)evaluation
● basic situation survey
● establish the evaluation method(indicator)</td></tr>
</table>

⑮ ミニッツ

MINUTES OF DISCUSSIONS
BETWEEN THE JAPANESE PRELIMINARY SURVEY TEAM
AND
THE AUTHORITIES OF THE ROYAL GOVERNMENT OF THE KINGDOM OF CAMBODIA
ON THE JAPANESE TECHNICAL COOPERATION
FOR
THE MATERNAL AND CHILD HEALTH PROJECT

The Japanese Preliminary Survey Team (hereinafter referred to as "the Team") organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA")and headed by Dr. Seiki Tateno visited the Kingdom of Cambodia for the purpose of making a study on the request by the Royal Government of Cambodia for Japanese technical cooperation concerning the Maternal and Child Health Project (hereinafter referred to as "the Project).

During its stay in Phnom Penh, the Team had a series of discussions with the Cambodian authorities concerned on the matters related to the Project and conducted site visits.

As the result of the discussions, both sides agreed to record the matters in the document attached hereto.

Phnom Penh, July 25th, 1994

Dr. Seiki Tateno
Leader
Japanese Preliminary Survey Team
Japan International Cooperation Agency

Dr. Mam Bunheng
Under Secretary of State for Health

ATTACHED DOCUMENT

1.TITLE OF THE PROJECT

Maternal and Child Health (MCH) Project

2.OVERALL GOAL

To improve the maternal and child health status in the Kingdom of Cambodia through promotion of the National Maternal and Child Health program activities.

3.SPECIFIC OBJECTIVES

(1)To strengthen the management capability of the National Maternal and Child Health Center (NMCHC).

(2)To strengthen training activities of the NMCHC, in alignment with National Health Plan.

(3)To improve clinical care activities for children and women at the NMCHC.

4.ACTIVITIES OF THE PROJECT

The project activities for achieving the specific objectives were discussed between the Team and the Ministry of Health.
Further discussion will be continued between the Japanese expert(s) and the Cambodian side and the Project activities will be finalized in the Record of Discussions.

5.SITE OF THE PROJECT

The project will be carried out at the NMCHC, which at present is located in the January the 7th Hospital.
Cambodian side pointed out that Royal Government of Cambodia has already requested the execution of Grant Aid Assistance for construction of a new NMCHC officially to the Government of Japan, and also insisted on its prompt execution.

6.DURATION OF THE PROJECT

The duration of the technical cooperation under the Project is expected to be 5 years from the date given in the Record of Discussions(R/D).

7.IMPLEMENTATION OF THE PROJECT

The Team explained to the Cambodian side that Japanese Technical Cooperation under the Project will be implemented through the following three basic components.
(1) Dispatch of Japanese experts,
(2) Training of Cambodian personnel in Japan, and
(3) Provision of equipment necessary for the Project.

8.MEASURES TO BE TAKEN BY THE CAMBODIAN SIDE

The Cambodian side should take the following measures for the successful implementation of the Project.

(1)To provide an adequate number of personnel necessary for implementing the Project including administrative staff and secretaries.

(2)To provide working facilities necessary for implementing the Project and assistance in accommodating Japanese experts.

(3)To make necessary arrangements to secure an adequate budget for implementing the Project.
- Expenses necessary for transportation of the equipment within Cambodia as well as installation, operation and maintenance thereof
- Running expenses necessary for the implementation of the Project

(4)To make necessary arrangement to exempt customs duties, internal taxes, and any other duties imposed in Cambodia on the equipment provided by JICA.

(5)To coordinate all external donors, including IOs, GOs and NGOs, in the field of the MCH(including the birth spacing activities)

(6)To assure the new organogram of MOH to become effective as soon as possible.

9.THE CAMBODIAN ORGANIZATION RESPONSIBLE FOR THE IMPLEMENTATION OF THE PROJECT

(1)Minister of Health will take overall responsibility.

(2)Director General of Health in charge will be responsible for the implementation of the Project.

(3)Director of the NMCHC will be responsible for the administration and management of the Project.

10.JOINT COORDINATING COMMITTEE

A joint coordinating committee is expected to be established at the start of the Project .

(1)Terms of Reference of the Committee
- To formulate the annual plan of the Project within the framework of the Record of Discussions.
- To monitor the progress of the Project
- To evaluate the activities of the Project
- To discuss other matters relevant to the Project

(2)Composition of the Committee
- Chairperson : Minister of Health

- Members:
Cambodian side:
Under Secretary delegated by the Minister
Director General of Health
Official Representative of the Cabinet
Director of Department of Finance
Official Representative of Human Resources Department
Official Representative of Planning Unit
Director of NMCHC
Vice-directors of NMCHC

Japanese side
Chief Advisor
Coordinator
Japanese experts
Other personnel to be dispatched by JICA
Resident representative of JICA in the Kingdom of Cambodia

Note : Official(s) of the Embassy of Japan may attend the joint coordinating committee as observer(s)

11.DISPATCH OF THE IMPLEMENTATION SURVEY TEAM:

(1)The Japanese side will send an implementation survey team to finalize the Record of Discussions of the Project so that technical cooperation can be initiated.

(2)The details of the Project and the nomination of the staff members are to be identified through further discussion.

12.JAPANESE GRANT AID SYSTEM

Cambodian side has understood Japanese Grant Aid system explained by the Team.

Cambodian side will take necessary measures described in Annex I for the smooth implementation of the Grant Aid Project(GAP) on condition that Japanese Grant Aid is extended.

S.T. U

ANNEX I

NECESSARY MEASURES TO BE TAKEN BY THE ROYAL GOVERNMENT OF CAMBODIA ON CONDITION THAT JAPAN'S GRANT AID ASSISTANCE IS EXTENDED

1. To provide data and information necessary for the GAP.
2. To secure land for the sites of the GAP.
3. To clear, level and reclaim the sites prior to commencement of the construction.
4. To construct access roads to the sites prior to commencement of the construction.
5. To provide facilities for distribution of electricity and other incidental facilities such as gate, fence, and exterior lighting in and around the sites.
6. To ensure prompt unloading, custom clearance, at the port of disembarkation in Cambodia and internal transportation therein of the products under the grant.
7. To exempt Japanese nationals involved in the GAP from customs duties, internal taxes and other fiscal levies which may be imposed in Cambodia with respect to the supply of products and services under the Verified Contracts.
8. 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 Cambodia and stay therein for the performance of their work.
9. To maintain and use properly and effectively the facilities constructed and equipment purchased under the Grant Aid.
10. To bear all the expenses other than those to be borne by the Grant Aid necessary for the GAP.
11. To bear the commissions to the Japanese foreign exchange bank for the banking services based upon the Banking Arrangement.
12. To assign the necessary staff for operation and maintenance of the facilities constructed and equipment purchased under the Grant Aid.
13. To coordinate and solve any issues related to the GAP which may arise with third parties and inhabitants living around the GAP area during implementation of the GAP.

⑯ 保健省アドバイザー木下専門家報告書抜粋

4．母子保健プロジェクトに関するメモ

4．1　背景

1992年３月、1960年代以来初めての我が国医療調査団がパリ和平協定締結後、平和に向けて模索中の「カ」国を訪問した。同調査団の報告を受け同９月には保健省へのアドバイザーが派遣され、「カ」国の保健医療情勢の調査分析を行うと共に、我が国の協力の可能性が検討され、母子保健プロジェクト、医学教育プロジェクト、州病院を拠点としたＰＨＣプロジェクト、プノンペン市病院プロジェクトが検討された。これに続く1993年２月より５月までの第２期保健省アドバイザー派遣において、フランスが医学教育への支援を決定したこと、地方病院を拠点とすることには、治安上、あるいは交通通信上の問題があること、プノンペン市内の病院には援助が集中していること等が指摘され、他方、母子保健に関しては保健行政上の優先課題とされているにもかかわらず、本格的な援助がなされていないこと、インフラの整備がされていないこと、「カ」国側の母子保健行政組織が弱体で技術援助が必要なこと、人材の育成が緊急に必要とされていること等の点から我が国の母子保健への積極的援助の意義が確認された。また同時に「カ」国側及び他の援助機関との意見交換において我が国の母子保健への関心が表明された。このような議論をもとに、同アドバイザーは母子保健マスタープランの策定に参画し、その骨子を作り上げ帰国した。1993年の５月の総選挙、これに基づく新政権の発足を受けて同９月に派遣された第３期保健省アドバイザーは、我が国政府への母子保健センターに対するプロジェクト方式技術協力と産婦人科病院と訓練センターを既存の小児病院に隣接して移転・新設する無償資金協力の要請を助言、12月には同国政府から両案件が正式に我が国政府に要請された。

4．2　現状

4．2．1　一般情勢

母子保健の現状については、添付の母子保健ナショナルプランの統計表及び1993年統計（表２）を参照頂きたい。小児についてはユニセフが1979年以来当地で活動しており、またプノンペンの２つの小児病院にもＮＧＯが積極的に援助しており、保健指数は依然として貧困な保健状態を示しているが、改善傾向を示している（５歳未満児死亡率、1980年313、1990年200、1993年184／1,000）。他方、母性に関してはいまだ妊産婦死亡率も明らかではなく、プノンペン市の産婦人科病院ですら満足な医療を行える環境にない。地方では、帝王切開のできる施設、人材に事欠くことも希ではない。少なからぬ数の妊産婦がまともな医療を受けることなく（分

娩の報告は全分娩の30%と推定）、自宅で死亡していると言われ、また不法で危険な人工中絶が女性の健康を大きく害している可能性も指摘されているが、これらの事実を証明する大規模な調査すら行なわれていないのが現状である。このような背景から、1993年９月に発布された憲法でも、また保健医療政策大綱においても母子保健は優先課題とされており、これを受け、1993年11月には母子保健ナショナルプランが策定された。

４．２．２　母子保健活動機構

母子保健活動は従来母子保健センター（ＰＭＩセンター）が中心となって行なってきたが、現在進行中の保健省機構改革案では保健局(General Direction of Health)の中に母子保健部が設立され、ＰＭＩセンターは実施機関として同部に属する予定である。部長は現母子保健センター所長が兼任すると予想されている。

母子保健センターには、産婦人科病院と小児病院を統括する治療部と、予防部とがあるが、実際にはほとんどのスタッフは病院業務についており、いわゆる母子保健活動を行なう予防部の活動は極めて低調であると言わざるを得ない。従来は専任の予防部のスタッフはおらず（収入の面で格差が大きいため）診療活動の片手間に予防部の活動を行っていたが、現在は８名の専任スタッフ（医師２名、補助医師３名、正看護婦２名）が配属されており、今後増員が予定されている。母子保健センターの機構図は図３に示したが、現在機構改革の必要性が指摘されている。

地方には州（province）の保健局にＭＣＨセンターがあり、主に正助産婦（Secondary Midwife)が責任者に任命され、数名のスタッフ（州の規模により３～10人）と共に統計、訓練、産前検診、ＥＰＩ活動等を行っており、中央の母子保健センターから技術的指導を受けている。治療活動は第２次レファレル病院である州立病院で行なわれている。県（District）レベルでは、県立病院のスタッフの一人がＭＣＨ活動の責任者となり、活動等を行うと共に、KhumでのＭＣＨ活動を統括している。また県立病院は第一次レファレル病院としての機能を期待されている。Khumの診療所では、助産婦が産科の、看護婦が小児科のＭＣＨ活動を実践することになっている。村落（Village）には、伝統的産婆（ＴＢＡ）や保健員(Health Worker)が保健医療活動を行っているが政府の組織には組み込まれていない。実際の活動状況については後述。

４．２．３　母子保健従事者

４．２．３．１　資格及び教育内容

医　　師：７年間の医学部教育が必要であるが、教育カリキュラムもフランス植民地時代、シアヌーク時代（ほぼフランス植民地制度を踏襲）、ベトナム寄りロンノル政権時代、ポルポト後の旧ソ連支援人民党時代と政治状況に応じてめまぐるしく改変されており、充分な教育が実施されたとは言い難い状況である。約１割の医師（43名）しかポルポト時代を生き残れず、またこの間医学教育を含め一切の近代医学が否定されたという歴史的悲劇も同国の医療の質に大きく影響している。ま

た汚職体質は教育界にも及んでいたとされ、入学試験、進級試験も公正さを欠いていた時期がある。いわゆる専門医のための教育研修制度はなく、海外での研修を経たものが専門医とみなされており、専門医制度は確立されていない。現在麻酔科専門医のコース（医学部卒業後２年間）が医学部に創設されたところである。産婦人科、小児科専門医はプノンペンの国立病院にのみ配属されており、地方病院では州立病院ですら専門医はいない。多くの県立病院（規模の大きい州を除く）には医師は配属されていない。女医の場合は１割程度であるが、分娩、産前検診は際だった異常がない限り、ほとんど助産婦、ＴＢＡ（全員女性）が行なっている。

補助医師：５年間の教育が必要であるが、現在医学部では募集を中止しており、今後は卒後教育により、医師にランクアップしていく予定。現在多くの県立病院では、補助医師が中心になって医療を行っている。専門性はもちろんない。

正助産婦：３年間の教育が必要である。中央のＥＣＣＳでのコースと共に、４つの地域学校で教育がなされているが、中央レベルでもいまだカリキュラムが充分検討されておらず、地方では教育者の訓練も充分ではなく、また教材も施設も不足している。100人を超す学生に対し血圧計が１台しかなく、血圧が測定できないまま卒業しているのが実態である。また地方では病院分娩数が著しく少なく、分娩の実習も充分とはいえない。施設、人材、カリキュラム共大きな援助を必要とされているにもかかわらず、現在援助は行われていない。

準助産婦：１年間の教育。多くは地方の州病院の教育訓練施設で養成されており、主に県立病院とKhumの診療所に配属されている。Khumレベルでの実際の母子保健担当者である。教育カリキュラムも統一されておらず、将来的には廃止の方向ではあるが、地方ではまだニーズがあり、特に北東部では養成は続行する予定である。

正看護婦：正助産婦同様の教育制度であり、教育施設も共有している。教育実態も同様である。中央のＥＣＣＳでは、ＮＧＯ(REDD BARNER）の援助で、新カリキュラム造りが進められている。男性が約２／３を占め、県病院レベルでは中心的役割を果たしている。州レベルでも主なナショナルプログラムの責任者である事が多い。

準看護婦：準助産婦同様の教育。男性が正看護婦同様多く、Khumレベルでの実際の保健医療の担当者である。

ＴＢＡ：公的の保健医療従事者ではないが、実際にはKhum、Villageレベルでのほとんどの分娩を手掛けている。ＭＣＨセンターではこれらのＴＢＡの研修コースも準備しており、ＮＧＯにより教育／研修を受けているＴＢＡも多い。母子保健にとっては非常に有用な人材源であり、適切な再教育が必要である。

保健員：１週間から１カ月の研修を受けているが、正式の保健医療従事者ではなく給料も

支払われていない。地域によっては活性化されており、Khum診療所のスタッフと協力してＥＰＩ活動を支援しているが、多くの村落では全く活用されておらず、むしろ質の低い私的医療サービスを提供している事が多い。村落レベルのＰＨＣ活動には彼らの再教育／再活性化が必要と考えられているが、予算の問題等今後解決すべき問題は多い。

４．２．３．２　人数及び配属

保健省管轄の医師の総数は842名、このうち48％が地方(プノンペン市51名６％を含む）に配属されており、そのほとんどが州立病院に勤務している。保健省の計画では将来的には各県病院に医師一人を配属する予定である。補助医師は 1,083名で68％が地方（プノンペン市85名、８％）、多くは州立及び県立病院勤務。薬剤師は 257名中44％（プノンペン市85名、６％）、準薬剤師78名中72％が地方勤務でその多くは州立病院に配属されている。正看護婦総数 2,379名中69％、準看護婦総数5,510名中94％、正助産婦、1,076名中79％、準助産婦 1,593名中98％が地方勤務となっている（表３参照）。

中央の母子保健センターには、小児病院、産婦人科病院勤務者も含め、医師71名、補助医師60名、正看護婦91名、準看護婦33名、正助産婦127名、準助産婦10名が配属されている。

４．２．４　母子保健活動とナショナルプラン

４．２．４．１　中央レベル

母子保健センターの業務内容は

1)　母子保健（家族計画を含む）に関する政策／計画の策定
2)　地方母子保健活動の監督
3)　母子保健領域の保健医療従事者の研修
4)　母子保健に関する教育広報活動
5)　母子保健情報システムの管理運営
6)　母子保健に関する最高位リフェラル病院の運営を通じての医療レベル向上

とされている。センターの活動は診療部と予防部に分けられているが、実際にはほとんどのスタッフは診療部で働いており、予防部の活動は低調と言わざるを得ない。

母子保健（家族計画を含む）に関する政策／計画の策定に関しては、ＵＮＩＣＥＦ、ＷＨＯ、ＮＧＯ及び日本のアドバイザーの技術的助言を得て、1993年末に母子保健ナショナルプランを策定、また年次計画の立案作業も行なっているが、その計画立案、実施能力は充分とはいえない。母子保健ナショナルプランは巻末に添付した。ナショナルプランの主な活動分野は1)小児死亡率の低下（ＥＰＩ、ＣＤＤ、ＡＲＩ）2)妊産婦死亡率の低下（家族計画を含む）3)母親教育、住民教育（衛生、栄養教育）4)管理運営能力の強化、5)母子保健従事者の研修、6)情報システムの強化である。

地方母子保健活動の監督業務に関しては、母子保健活動報告は1992年は15州から、また

1993年は16州から報告されている。その内容は、産前検診数、産後検診数、家族計画相談数、高リスク妊娠の発見率、出産場所、死産率、妊産婦死亡率、破傷風予防注射接種率、小児外来受診者数、疾病構造、病院死亡率、ＥＰＩ対象疾患罹病率、ＥＰＩ接種率である。これらの地方からの報告に対し、中央からの支援体制は予算の欠如もあっていくつかの研修コース以外には全く確立されていない。現在アドバイザーからの助言と財政的支援を得て、順次地方への視察を計画している段階である。

研修業務に関しては、母子保健ナショナルプランの表16を参照。現在、中央レベルでは、母子保健研修指導者研修（３週間）、ＣＤＤ（２週間）／ＡＲＩ（２週間）研修、再教育研修（４週間）、監督業務研修（２週間）の４コースが行われている。いずれも州スタッフを対象にした研修指導者養成コースである。1993年にはこれに加え、家族計画の研修がプノンペンとカンダール州を対象に行われた。母子保健研修指導者研修は1994年３月の北東４州に対する研修をもって、全ての州に対し研修が終了した。州レベルではこれらの研修指導者が母子保健コース、小児保健コースを開催することになっており、現在までに13の州で研修が行われているが、全てＮＧＯの協力によるものである。また県レベルでの研修（ＴＢＡ研修）も全てＮＧＯの協力／指導によるものである。1993年までに、中央で計670名、州で計2,415名、県で計2,671名（総計5,756名）が研修を受けているが、その後のフォローアップや評価は全く行われていない。

教育広報に関しては、計画はあるがほとんど実行には移されていない。ＣＤＤのポスターの作成がなされたのが第１歩と言える。

母子保健情報システムの管理運営に関しては1994年より情報の集中化が図られる計画であり、センターでは情報の解析が主な仕事となる予定である。情報の質の管理も今後の重要な課題である。

母子保健に関する医療レベル向上は、小児病院ではスイスのＮＧＯの援助を受け、技術指導も行われているが、産婦人科病院には技術援助は入っておらず（1993年６月まではイギリス人産婦人科医が技術指導を行っていた）また施設も老朽化しており、最高位リフェラル病院としての機能も、研修機能も満足できる域にはほど遠い。活動実績は表４に示した。

４．２．４．２　州レベル

母性分野では、産前検診の徹底、産後検診の普及、高リスク妊娠の発見と経過観察及びリフェラル制度の確立、破傷風予防注射の普及、母親の指導（栄養指導、母乳栄養、衛生教育）、清潔な分娩の普及、異常分娩の管理、スタッフ（州、県、クム）の教育研修、県レベルの管理、疫学調査、統計等が業務とされているが、実際には多くの州では、産前検診、破傷風予防注射の普及、異常分娩の管理（一部）、県レベルの管理（不十分）、統計作業（部分的）だけが行われており、母親の指導（栄養指導、母乳栄養、衛生教育）、スタッフの教育研修、清潔な分娩の普及等はほとんど行なわれていない。

子供分野：ＥＰＩ、発育モニター、ＣＤＤ、ＡＲＩ、スタッフ（州、県、クム）の教育研修、県レベルの管理、疫学調査、統計が業務内容であるが、現在最も活発なのはＥＰＩ活動のみといってよい。発育モニター活動はほとんど行われていない（カードはある）。ＣＤＤ、ＡＲＩについては、ようやく中央での普及活動が始まったばかりであり、地方での普及はまだ浸透していない。一部ＮＧＯの協力のある州では、ＣＤＤのプロジェクトは施行されている。教育研修以下の業務に関しては、母性分野同様である。

実際には、業務はこのようには分かれておらず、ＭＣＨの一人の長と２～10人（州の規模による）のスタッフが全ての業務を受け持っており、業務区分も明らかではない。また、ＮＧＯが援助しているところは院外活動も行っているが、指導のないところでは、病院での活動が主であり、また病院での治療部門と予防部門の提携がうまくいっていないところが多い。県レベルの活動を全く把握していない州もある。研修活動もＮＧＯの援助の有無に大きく寄っている。病院分娩の数は少なく（報告数の21％、推定分娩数の６％）、また帝王切開の報告件数も非常に少なく、異常分娩の管理も充分とは言い難い状態である。実際には州レベルでも帝王切開のできない場合もある。

４．２．４．３　県レベル

県レベルの業務内容は、カバー面積は違うものの基本的には州レベルと同様である。しかし、実際の活動内容は県のサイズ（人口１千人～13万人）、またＮＧＯの援助の有無により大きく異なる。保健省では、人口と地理的または社会的事情により県病院規模を３段階に分類しており、これに応じて病院規模、施設、スタッフ数の基準を示しているが、現在でも小さな県では15人、大きな県では30人以上おり、東北部の州で助産婦が絶対的に不足している以外は人数的には問題ない。問題は質と分布である。不便な遠隔地への人員配置が大きな問題となっており、また治安上、地理的に到達困難な地域もある。この県レベルの業務の活性度次第で、実際のクム及び村落レベルの医療サービスの質、量が決定されると言っても過言ではない。多くの県病院では、分娩のための施設は整備されておらず、まだ病院分娩もほとんど行われていない（報告数の４％、推定分娩の１％）。小児活動もＥＰＩのための冷蔵庫の多くが維持されておらず、多くの地域では州病院から毎回ワクチンを搬送して行っているのが実情である。全く活動していない県病院も希ではない。

４．２．４．４　Khumレベル

実際に、住民に接するのはこのレベルであるが、活動レベルは非常に低い。充分給料が支払われていないこともひとつの理由であり、また建物がない場合もある（少なくともココン、スタントレイン、モンゴルキリ、ラタナキリの４州には全くない）。保健省では最低3人（看護婦、助産婦）のスタッフをKhumの診療所に配属、治療（ＣＤＤ、ＡＲＩ）、予防（産前検診、正常分娩、ＥＰＩ、成長モニター、衛生教育）、管理（統計、薬剤／ワクチン管理）という業務内容を徹底させる計画を立てているが、活動の統計もほとんどなく、実態は不明である。

一般的な大きな問題は、患者の行動形態であろう。患者はまず薬局で薬を買い、治らなければ有料の開業医（看護婦／助産婦）を訪れ、それでもだめな場合、病院を訪れる。この時には、患者は重症化し、お金も無くしてしまっている。住民教育の必要性が指摘されているが、そのための体制はほとんど確立されていない。

４．２．５　病院施設／医療施設

産婦人科病院は中央ですら悲惨な状況にある。日本の無償資金協力で最低限の機材は供与されたが、立地場所が道路より低いため雨期には下水が逆流し、一階は使用不能となるばかりではなく、衛生上も問題が大きい。建物も1900年代前半に建てられたもので、改築も困難と言われている。二つの小児病院は共にＮＧＯの援助が入っており、設備が整っている。

州病院では、ＮＧＯの援助の入っている病院は一応手術可能であるが、援助のないところでは帝王切開ができれば良い方といえる。分娩も吸引分娩はほぼ全ての州病院で可能であるが、子宮摘出術ができる病院は少ない。水、電気の供給も充分とはいえない。血液銀行は現在６州の州都に開設されているが、州都での供給が精一杯である。県病院は規模と援助の有無で全く違うが、援助がない限り医療設備は皆無と言っても良い。血圧計すらない病院もある一方、小手術が可能な病院もある。ＵＮＩＣＥＦの助産婦セットが全病院に配布されていることになっているが、倉庫に保管してある例、全く見かけない例もある。Khumレベルの診療所には基本的には、血圧計、体重計程度の設備しかない。

私設クリニック（産科が多い）は多くの地方で存在しており、その設備の程度は様々である。

４．２．６　予算

中央レベルのＭＣＨナショナルプランの予算は、64万ドルであり、保健省の全予算の 2.6%、全ナショナルプランの17%を占める。人件費は含まれておらず（病院予算に含まれる）、医療機材／消耗品の予算が71%、研修費11%、広報費12%という内訳である。センターの病院予算は１月７日病院が、45万ドル（人件費16%、薬剤医療品47%、維持費10%）、Kunta Bopha病院が25万ドルであるが、後者はスイスのＮＧＯより、人件費、消耗品費、維持費を含め病院予算に匹敵する額の援助を受けている。地方予算はそれぞれの州で要請しているが、母子保健独自の予算は計上されていない。

４．２．７　家族計画 (Birth Spacing)

現在公式に行われているのは、母子保健センターで1992年５月より行われている家族計画クリニック（ＦＰＩＡの援助）であるが、地方レベルではＮＧＯの援助でいくつかの家族計画クリニックが開かれている。家族計画の方法としては、コンドーム、ピル、ホルモン注射、ＩＵＤが認められている。不妊手術、インプラント等はまだ正式には認められていないが、清潔の概念が全く普及していない現状からすると妥当な判断と言える。センターのクリニック及びＭＳＦのSVAY RIENGのクリニックの受診者数及び受胎調整の方法は次の通りである。

	PHNOM PENH	SVAY RIENG
ＩＵＤ	412 (32%)	39 (２%)
PILLS	111 (９%)	121 (５%)
INJECT (Depo-provera)	N. D.	2,299 (93%)
CONDOMS	757 (59%)	2 (０%)
TOTAL	1,280 (100%)	2,461 (100%)

実際には市中の薬局でピル、注射用ホルモン剤、ＩＵＤとも簡単に入手可能。ピルは有名製薬会社製で100円程度、ヴィエトナム、中国製だと４～50円、注射用ホルモン剤で200円弱、ＩＵＤも 500円程度であり、医師や助産婦等が自宅で挿入しているケースが多い。避妊手術も都市部では実際に行われている。女性へのインタビューによる小規模調査によると、希望子供数は３～５人、子供が多いと貧乏になるとの回答が多い等、家族計画への潜在的需要は非常に高いが、情報は充分行き渡っておらず、安全な避妊法は未だ普及していない。

国レベルでは、人口増加政策が考えられている節もあり、本計画は政治的には微妙な側面を持つため、保健省では母親の健康／子供の健康のために、適切な間隔での計画的分娩（初産年齢も含め）の必要性を強調している。

４．３　母子保健分野における援助の動向

現在、中央レベルでは、ＵＮＩＣＥＦ、ＳＣＦ－ＡがＰＭＩセンターにアドバイザーを派遣している。ＵＮＩＣＥＦは、ＥＰＩ（実施機関は現在のところＣＮＨＥ；衛生疫学センター、将来的にはＰＭＩセンターに移転される予定）、ＡＲＩ、ＣＤＤ、Baby Friendly Hospital、微量栄養（ビタミンＡ、鉄、ヨード）、家族計画プロジェクトを予定しており、それぞれのＵＮＩＣＥＦのプロジェクトに対し、プロジェクトマネジャーを任命するようにＰＭＩセンターに要請中。実際の活動は1993年８月にアドバイザーが交替してから漸く本格化したばかりであり、まだ軌道には乗っていない。ＳＣＦ－Ａは、研修活動へ協力しているが、1994年３月に突然主資金源であるＡＩＤＡＢが資金援助を中止、６月から活動の中止あるいは縮小を余儀なくされている。両組織の活動計画とナショナルプランの関係については表５を参照。

州レベルでは、多くのＮＧＯが何らかの形でＭＣＨ活動に関与している。これらのＮＧＯは月１回母子保健センターに集まり、情報の交換を行なっている。主な活動は、ＥＰＩ、小児診療、研修活動であり、ＰＭＩセンターの研修活動はこれらＮＧＯの援助（資金援助、地方での研修実施のための技術援助）なしには成り立たない。一部のＮＧＯは家族計画も実施している。県レベルも同様であり、特にＩＦＲＣの地方におけるＴＢＡ教育に関する貢献度は高い。また、

統計、実態調査等へのＮＧＯの貢献も大である。主なＮＧＯは、ＭＳＦ、ＳＣＦ、ＩＦＲＣ等。

４．４　問題点

４．４．１　保健省の問題

保健省ではＭＣＨを最重要案件としているが、保健省内にはいまだＭＣＨ担当局が確立されておらず、母子保健センターの位置付けがはっきりしていない。これは保健省新機構図が承認されれば解決に向かうと考えられ、むしろ活動が先行することが問題の解決を促進すると考えられる。また他のＰＨＣ活動との関係、特に卒後教育プロジェクトとの関係が明確でない。これは主にこれらのプロジェクトの全容がまだ明らかにされていないためであり、ＭＣＨが先行している形である。最近、ＰＨＣ活動に対し、地方開発庁及び他の関係省庁との行政区分を明らかにするため、保健省内にＰＨＣ委員会が設立され、母子保健センターも代表を送っている。

４．４．２　母子保健センターの機構図の問題

治療部、予防部の分け方が長い間定着しており、一般的に予防活動が軽視される傾向が強い。特に医師の治療医療重視傾向は全世界的傾向と考えられるが、ここでも意識改革が必要であろう。またこれらの予防医学従事者に対する経済的な配慮も必要と思われる。機構図も古く、活動目的に応じた機構改革の必要性が指摘されている。

小児病院は２つあり、ひとつは母子保健センターの小児部門であるが、スイスのＮＧＯの援助で移転改築され、Khunta Boppa病院として多くの患者の診療に当たっている。この病院ではスイスの医療がそのまま持ち込まれており、抗生剤の投与もＡＲＩプロジェクトのマニュアルでは筋注することになっているが、ここでは静注されており、研修病院としての機能には問題がある。もう一つは国立小児病院であり、1970年代よりＷＶの援助を受けている。ここではカンボディアに即した医療がきちんと施行されているが、ＵＳＡＩＤの資金供与を受けたＷＶが研修施設を建築、小児診療の国立研修センターを設立しようという動き（保健省との協議なし）があり、国家政策との整合性が問題となっている。これらの小児病院の位置付け、協力体制を明確にする必要がある。

４．４．３　人材の問題

ポルポト時代に医師、看護婦等の知識階級が大量虐殺されたこと、20年以上にわたる内戦のため基礎教育、専門教育とも満足に行い得なかったという当国特有の歴史があり、量的、質的な人材不足は深刻な問題である。

母子保健に関わる医療従事者の再教育は最優先課題であろう。しかし基礎教育レベルの低さもあり、対策は容易ではない。各種の研修も行われているが、研修参加の目的が多くの場合ＮＧＯ等から支給される日当（地方で１日 7.5ドル、プノンペン10ドル）であることも多い。給料の低さももう一つの問題である。現在医師で20ドル／月、看護婦で10ドル程度である。日

常生活にはプノンペンで最低200ドル、地方でも100ドルは必要と言われており、ほとんどの医療従事者はプライベートな診療活動を行なっている。ＮＧＯ、ＩＯのほとんど全てはそのカウンターパートに給与（50～100ドル程度）を支給している。母子保健センターでも最近ユニセフがプロジェクトマネジャーのカウンターパートに80ドルの活動報酬を支払うことに正式決定した。ＭＣＨ分野での人材不足解消のためには、何らかの経済的支援が必要であるが、母子保健／ＰＨＣに関する理解の不足、その重要性の認識不足も人材不足の一因と思われる。

人材養成は、臨床／ＭＣＨ部門ばかりではなく、管理部門にも強く求められている。母子保健センターのスタッフの管理運営能力や計画能力は母子保健プロジェクト成功のための重要な要素であり、一層の強化が必要であろう。

４．４．４　ユニセフや他の援助団体との関係

前述のようにすでに母子保健には多くのＩＯ、ＮＧＯｓが活躍している。日本が協力を予定している中央の母子保健センターにもユニセフ、ＳＣＦ－Ａがアドバイザーを派遣しており、これらの援助団体間の調節が重要である。1993年12月日本国政府への無償資金協力・プロジェクト方式技術協力の正式要請提出を受け、1994年１月から母子保健センターにアドバイザー会議の設立を提案。離任までの間、月２回、ユニセフ、ＳＣＦ－Ａ、日本の３人のアドバイザーと母子保健センター長が意見交換のため集まった。この場では、日本の援助計画の概要説明、各団体の援助計画の検討、役割分担のおおまかな確認等が行なわれ、現在のところ援助の調整はうまく行っている（表５参照）。今後、ＵＳＡＩＤが家族計画に参入することが予想されており、母子保健の一本化を図るためにも、このような会議の重要性は増すものと思われる。このほか、保健省全体で、援助の調整と保健医療行政に対するアドバイスを目的にしたＣＯＣＯＭ（詳細は建野専門家の報告書参照）の下部組織である母子保健委員会があり、月１回会合を開いている。

母子保健分野で活躍する多くのＮＧＯｓは月一回、保健省及びＮＧＯ間の情報交換を目的に会合を開いており、非常に良好な関係を保っている。

４．４．５　予算の問題

今年度予算では従来とは大きく異なり、人件費以外の予算が十数年ぶりに計上された。しかし、その計画能力、管理能力は充分とは言えず、今後これらの予算が適切に支出されるか、また来年度に向け妥当な予算請求ができるか等についてのモニターが必要であり、このための技術指導も必要であろう。特に、母子保健センターでは、他のナショナルプランと異なり、病院部（国立病院予算）と予防部（ナショナルプラン予算）の予算が分かれて計上されており、今後、両者の統合あるいは明確な分離に向けての議論が必要と考えられる。

４－５　提言；日本の援助のターゲット

これまで述べてきたように、当国では、ヒト、モノ、カネの全てが不足している。このよう

な状況の中で、母子保健プロジェクトが成功するためには、1)人造り（管理運営を含む）を中心にした、2)無償資金協力とプロジェクト方式技術協力が有機的に統合された、3)大規模な援助より状況に応じたきめ細かい、4)他の援助機関との連携を考慮に入れた援助を可及的速やかに開始しなければならない。

無償資金協力については、現存の産婦人科病院は改築不能のため、現在の人員で運営可能な150～200床程度の産婦人科病院を、ＮＧＯが支援している小児病院に隣接して建築、また研修のための施設を新／改築し、既存の小児病院と合わせ母子保健センターとする要請が出されている。この病院規模はプノンペン病院計画マスタープランに基づいたものである。研修施設は、あらゆるレベルの母子保健医療従事者の研修のためのものであり、研修費用の節約のため、つまりプロジェクトの継続性のため研修生のための宿泊施設が是非必要である。また、大学を含めた他の教育／研修機関が充分整備されていないことから、講堂、図書館等の施設が名実共に国立母子保健センターとなるためには必要である。またこの研修施設には、母子保健センターの管理運営部門のスペースも確保する必要がある。病院施設には、２つの機能が求められ、第一にはあらゆるレベルの母子保健従事者への研修病院としての機能である。このため正常分娩から複雑な異常分娩、婦人科疾患、性病等を幅広く扱い得る病院である事が期待される。婦人科疾患の診療は、女性を単に“生む性”として扱うべきではないというＷＩＤ的視点からも充実させたい領域である。もう一つの機能は、「カ」国のトップ・リフェラル病院としての機能であり、他の州病院への規範となるような病院である必要がある。先進国レベルの３次病院を意味するものでないことは言うまでもない。ランニングコストに関しては現在収入増加政策が図られているが、前述（３．２．３）のように様々な問題が存在しており、即座に全面的な「カ」国側負担を期待することは困難である。ランニングコストの軽減化を考慮にいれた計画でなければならないことは言うまでもないが、消耗品の供与等にも考慮する必要があろう。病院と研修機関のコスト／収入の分離についての検討も必要である。なお敷地の問題（以前は防衛省に属していた）も防衛省との間で文書が交わされ、保健省の所有地となった。

技術協力については、次の３点に焦点を絞った協力が勧められる。この３点はナショナルプランの６つの目的1)小児死亡率の低下、2)妊産婦死亡率の低下、3)母親教育（衛生、栄養教育)、4)管理運営能力の強化、5)母子保健従事者の研修、6)情報システムの強化の中で、4) 5)を柱にして、1) 2)の実現を目指すものである。

第１の領域は母子保健センターの管理運営能力の強化である。このためには、まず、より目的指向的な機構改革を行ない、適切なカウンターパートを選択、あるいは育成する必要がある。カウンターパート及び核となる指導者の人選は大きなポイントになるであろう。多くの優秀な人材は、特に英語の堪能な人材はすでに国際機関やＮＧＯで働いており、選択の対象をプノンペンに限らず広く地方にも拡げ、また職種や年齢にとらわれないことも重要である。このような新機構のもとで、各スタッフの Job Discriptionを作成した後、領域に応じて、計画能力、

管理運営能力、調整能力、モニター能力、評価能力の強化を図る必要がある。これらの能力は机上のみで達成されるものではなく、実際のフィールドでの母子保健に直接関わりながら修得することの重要性が認識されなければならない。

当国の特徴のひとつは、国の再建に先立ち、国際機関、ＮＧＯを通じ多くの援助が寄せられたことである。その貢献度は高く評価しなければならないが、しかしまた、援助機関間の調整という問題も引き起こしている。ＭＣＨ分野においても多くのプロジェクトが「カ」国政府の活動に先行している。我が国の全面的な母子保健プロジェクト援助において、ひとつの重要な仕事はこれらの活動の統合であろう。例えば、研修プログラムにおいても、ＣＤＤ、ＡＲＩ、避妊法等の研修が別々の援助団体により別々に行われる可能性がある。しかし末端で実際にこれらの医療サービスを住民に提供するのは、一人の助産婦、または看護婦であり、研修の効率的実施のためには、母子保健センターの調整能力を高めこれらの研修を支援団体のいかんにかかわらず、母子保健センターのリーダーシップのもとに統括することが不可欠である。これは、管理運営の全ての分野、監督業務、情報システム等にも言及できることである。

第２の領域は研修活動への協力である。現在すでに母子保健センターでは、州の母子保健担当者に対しての研修指導者研修を行っているが、その後の評価は全く行っていない。この研修コースは５年前に成立したものであり、現在再評価の時期にある。また研修指導者を教育する中央の研修指導者に対する、グレードアップのための研修も継続的に行われるべきであろう。これらの中央の研修指導者は、中央で研修を行うだけではなく、実際に地方に出かけ、州の研修指導者が実際に研修を開催する指導も行う義務があることが正しく認識されなければならない。研修の最終目的は、研修を受けた者がその研修内容を実践することにある。すなわち、州レベルの指導者養成コースの目的は、その指導者が実際に州あるいは県レベルで研修会を開催、効果的な研修を行うことであり、母子保健従事者への研修の効果は、研修受講者がその知識を実際に日常活動に活用しているかで判断されなければならない。このために必要なのは、研修後の監督業務である。監督業務とは、単なる監視ではなく、現場に赴き、現場の抱える問題を現地スタッフと協議し、その解決を図る、または、現場の業績を評価し勇気付けるといったきめ細かな作業である。特に、地方医療行政が荒廃し、人々が行政への信頼を失っている現況では、このような努力が地方医療行政の活性化には不可欠である。しかるに中央政府もまた、長い間の予算不足、あるいは国内交通問題等からこうした行政指導・監督には経験がなく、一方通行の行政のみを行ってきている。日本の技術移転においては、実際の母子保健従事者の技術の修得と共に、母子保健センター及び地方行政責任者への、こうした行政者としての行動規範を示すこともまた重要と思われる。

同様の理由で、現在行なわれていないが新設すべきコースとして、州の保健医療行政官に対する管理運営の能力の研修が挙げられる。これは、共通の問題を抱える州行政官の間の情報交換にも役立ち、彼らの議論は母子保健プランへの貴重なフィードバックとなるものと期待され

る。

これらの研修が一通りの成果を挙げ、地方での研修活動が充実するまでの期間は、コストはかかるが地方の母子保健従事者を中央で直接教育する必要もある。また、医師に関しては、州病院レベルの医師に対し、専門性獲得のための卒後研修が現在施行されているが、その内容強化が必要とされている。実際の協力分野としては、小児科領域では、ＥＰＩ、ＡＲＩ、ＣＤＤの分野についてはＵＮＩＣＥＦ、ＷＶ、国立小児病院等が中心になってすでにプロジェクトを展開している事から、主眼は母性分野におくと共に、両者の統合にも力を注ぐというアプローチが有効と考える。

また地方活動に当たってはＮＧＯとの協力が不可欠であり、日本のＮＧＯ以外にも広くネットワークを張り巡らす必要がある。現在、保健省／母子保健センター、あるいは中央レベルでアドバイザー業務を行っている組織とＮＧＯｓの関係は良好であり、今後も緊密なコミュニケーションを保つことが重要である。外務省の小規模無償等の利用も効果的であろう。

最後の領域は母子保健における診断、治療レベルの向上である。予防医学中心のＰＨＣ的アプローチはＭＣＨプロジェクトの根幹であるが、同時に治療医学の向上なしには母子保健レベルの向上は望めない。このため、中央レベルの病院治療活動に技術援助を行い、研修の場を用意することもまた重要である。本プロジェクトの主目的である研修の効果は即時的ではないため、目に見えるインパクトとして、カンボディアへの印象が弱いという問題がある。このためには、無償資金協力の持つ大きな影響力を利用し、臨床技術指導を行い、日本の協力に対する信頼感を高めるという作業も、比較的地味な研修プロジェクトの成功のためには重要であろう。また、本病院は唯一の医科大学の実習病院となっており、学生に対しＭＣＨの基本的考え方、診断治療技術を総括的に教育する役割も期待されており、病院活動における技術協力のインパクトも小さくはないものと考えられる。

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