No.

インドネシア共和国
北スマトラ地域保健対策プロジェクト
第8回ステアリングコミティー報告書/
その他関係資料・報告書

1984年12月

国際協力事業団
医療協力部

インドネシア共和国
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はしがき

昭和59年8月8・9両日，インドネシア国ジャカルタで開催された北スマトラ地域保健対策プロジェクト第8回ステアリングコミティーへ橋本道夫プロジェクト国内委員長を団長とする専門家チームを派遣した。

本年は，昭和59年4月より始まる新たな5年の協力期間の初年度という節目に当たり，今回のステアリングコミティーでは，今後のプロジェクトの進め方等重要事項が検討された。

また，専門家チームはステアリングコミティーに先立ち新プロジェクト地域の視察を行ない，3保健所にて聞取り調査を行なった。

本報告書は，同ステアリングコミティー報告書及び同専門家チームの収集諸資料，さらに昭和58年度末～昭和59年度初めに帰国した専門家，調査団の報告も適宜合わせて収録した。今後関係各位のお役に立てば幸甚である。

ステアリングコミティー出席専門家チーム団員各位，その他調査団員，専門家各位のお骨折り，ご協力に対し深甚なる謝意を表したい。

昭和59年12月

国際協力事業団
医療協力部長　　中平　立

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1. 第８回ステアリングコミティー報告書

（昭和59年８月８・９日実施）

REPORT OF THE
EIGHTH STEERING COMMITTEE MEETING
NORTH SUMATRA HEALTH PROMOTION PROJECT
(ASAHAN HEALTH IMPROVEMENT PROJECT)
JAKARTA, AUGUST 8--9, 1984.

I. INTRODUCTION :

The eight steering committee of the Asahan Health Improvement Project was held in Jakarta on August 8-9, 1984 under the chairmanship of Director General of Community Health and Director General of Communicable Desease and Environmental Health, Ministry of Health, Republic of Indonesia.

The meeting was attended by representatives from Indonesian side and JICA.

II. SUMMARY OF THE MEETING :

In the meeting basic policies and strategy in the field of health of Fourth Five Year of Health Development Plan in Indonesia were presented by Indonesian authorities.

Participants of the meeting agreed that a legal document as umbrella for cooperation of both sides in the second period of five years needs to be developed and signed by representatives of both sides (see ANNEX : 1).

Policy framework for the second five year plan (OTA 43) by JICA was presented by JICA delegates (see ANNEX : 2).

Progress report of the project was presented by the project manager, where achievement and constraints in the implementation of the project were discussed in the meeting (see ANNEX : 3).

III. RESULTS OF THE DICUSSION :

Due to the change of the basic policies of the Government of Indonesia in the Fourth Five Year Development Plan, both sides agreed that in the second period of cooperation maximum efforts should be focused on reduction of infant mortality which is in line with the national health development plan.

IV. PLAN OF ACTION :

Master Plan for the second period of cooperation was discussed (see ANNEX : 4).

Plan of action for the remaining months for FY 1984/1985 for malaria and environmental health programmes were presented and discussed (the original of plan of action, see ANNEX : 5).

Plan of action (proposals) for FY 1985/1986 for health promotion, C.D.C., environmental health, health education and family health programs were presented and discussed in details (see ANNEX : 6)

V. SUPPORTING SERVICES

1. List of experts to be dispatched by JICA in FY 1985/1986 (see ANNEX : 7)
2. List of fellowships to be requested to JICA in FY 1985/1986 (see ANNEX : 8)
3. List of equipment and materials to be requested to JICA in FY 1985/1986 should be submitted early in 1985.

VI. MISCELLANEOUS

Specific issues related to problems and constraints in the past implementation of the project, were discussed by both sides. (see ANNex : 2,9).

Within the spirit of cooperation, both sides agreed that maximum efforts will be taken to overcome problems which may arise in

the course of the project (see ANNEX : 2,9).

List of participants of the meeting is shown in ANNEX : 10.

Signed in Jakarta, on August 13, 1984

HIROSHI YAMAMURA
Resident Representative
Japan International Cooperation
Agency
Jakarta, - Indonesia

dr. SUYONO YAHYA, MPH.
Director General of
Community Health, Ministry of Health of
The Republic of Indonesia

LIST OF ANNEXES

1. Guidelines for the second five year technical Cooperation Project between the Government of Indonesia and the Government of Japan (JICA) for the promotion of Health in Asahan Regency, North Sumatra (OTA - 43 Fy 1984/1985 - 1988/1989). (1 - 5)
2. The Policy Framework for the second 5 year Plan OTA - 43 by JICA. 1984 - 1989 (2 - 16)
3. Progress Report 1983/1984 - 1984/1985 by Project Manager (3 - 19)
   a. Table :
      - Summary of Health Conditions
      - Budget Allocation
      - List of Japanese experts
      - List of Fellowship awarded
      - Equipment and Materials donated by JICA.

   b. Progress Report 1983/1984
      - Malaria
      - Tuberculosis
      - Water Supply Activity.
4. Plan of Activities for Five Years, 1984/1985 - 1988/1989, cooperation with JICA (Master Plan, page 1 - 34 with table 1 - 9) (4 - 59)
   Additional paper :
      - Malaria Control Programme for five years
      - Medan Regional Health Laboratory.
      - Plan of Action 1984/1985 - 1988/1989.
5. Plan of Action 1984/1985 (5 - 2)
      - Malaria (adjusted).
      - Environmental Health (adjusted).
6. Plan of Action 1985/1986 (Proposal) (6 - 16)
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7. Experts Requested for 1985/1986 (7-1)
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GUIDELINES FOR THE SECOND FIVE YEAR TECHNICAL COOPERATION PROJECT BETWEEN THE GOVERNMENT OF INDONESIA AND THE GOVERNMENT OF JAPAN (JICA) FOR THE PROMOTION OF HEALTH IN ASAHAN REGENCY, NORTH SUMATRA, (OTA-43, FY 1984/1985-1988/1989)

I. INTRODUCTION

In Asahan Regency was built Hydroelectric Power and Allumium Smelter Side as the result of the cooperation between GOI and Government of Japan. For increasing the status of health of the community surrounding project area, technical cooperation between GOI and JICA in the field of health (OTA - 43) had been implemented, based on the Record of Discussion signed both sides on the 10th of October, 1977. The implementation of this first cooperation ended on the 31st of March, 1983. The result of assesment found out that through the technical cooperation, many things had been improved. Facilities for delivery of health services had been improved. Furthermore ., some new methods and techniques in various kinds of health services had been introduced. By improvement of those factors, health condition of the community in the designated project area had been improved to some extent.

Based on the assesment mentioned above, the local government of North Sumatra recommended that the cooperation project should be extended and expanded for another period of five years. Based on the Record of Discussion signed on the 12th of March, 1984, GOI and JICA agreed to extent and to expand the cooperation as the second five year plan, which is in line with the time frame of the Fourth Five Year Development Plan of Indonesia. The implementation of the second five year cooperation between GOI and JICA (OTA-43), must then be based on the Fourth Five Year Health Developmet Plan.

As mentioned in the Guidelines of State Policy (GBHN) adopted by the People's Consultative Assembly adopted for previous Five Year Development Palns, namely, that "national development is aimed at establishing a justice and prosperous society with both material and spiritual equity based on the principles of Pancasila", and that "the primary objective of long term development is the establishment of a strong foundation for the Indonesian nation to grow and and develop by its own strength towards a justice and prosperous based on Pancasila".

Similar to previous Five Year Development Plans, the goals of the Fourth Five Year Development Plan, are :

Firstly : To improve more equitable and justly the standard, intelegence and the welfare of the whole people.

Secondly : To lay a strong foundation for the next stage of development.

The development of health services in Asahan Regency through the second five year cooperation between GOI and JICA (OTA-43), is a part of the health national development, and must be in line with the policy and strategy of the Fourth Five Year of Health Development Plan.

II. OBJECTIVES OF THE COOPERATION

1. General objective of the technical cooperation project is to further strengthen the technical cooperation between the Government of Indonesia (GOI) and JICA (OTA-43) in the development and implementation of health services, especially in Asahan Regency of North Sumatra.

2. Specific objectives of the project, are :

   a. To strengthen the health care delivery system in seven Kecamatans of Asahan Regency with special attention to reduction of infant mortality, through technical cooperation and donation by JICA.

   b. To develop appropriate methodologies in health care delivery system.

III. MAIN POLICIES OF COOPERATION

1. Cooperation between GOI and JICA is based on the process of total integrated national health development plan.
2. Emphasis will be given in priority of national health programmes, in conjunction with implementation efforts in selected geographical areas in Asahan Regency of North Sumatra.
3. JICA should facilitate in the field of dispatch of experts, provision of fellowship/training, and supply of equipments and materials.
4. GOI should facilitate in the field of provision of counter budget for operational costs, recruitment of counterparts.
5. In conducting the cooperation, community participation and inter-programme and inter-sectoral coordination should be encouraged.

IV. PROGRAMMES AND AREAS CONCERNED

1. The cooperation programmes between GOI and JICA are focused on the following implementation :
   a. Strengthening of health efforts through health centres and sub-centres.
   b. Increasing the target groups, especially mothers, infants, and children.
   c. Manpower development through training and fellowship, and transfer of technology through dispatching Japanese expertees.
2. Geographical areas

   The technical cooperation activities are located in seven Kecamatans in Asahan Regency of North Sumatra, namely Kecamatans Medang Deras, Air Putih, Limapuluh, Tanjung Tiram, Buntu Pane, Pulau Rakyat, and Bandar Pulau.

   The three Kecamatan mentioned earlier are the Kecamatans in the first five year plan of cooperation.

3. Activitie areas

a. Communicable disease control :

- Malaria
- Tuberculosis
- Worm diseases
- Diarrhoeas
- Immunization

b. Community health promotion :

- Nutrition
- MCH and Family Planning

c. Environmental health :

- Hygiene and sanitation
- Rural water supply

d. Laboratory services.

V. PHASING OF ACTIVITIES

The technical cooperation programmes will be implemented in accordance with the Fourth Five Year of Health Development Plan.

Accordingly, the JICA resources will be provided for the following items :

1. Strengthening of health efforts through health centres and sub-centres.
2. Strengthening of manpower development.
3. Strengthening of health promotion technology.
4. Strengthening of annual programming.
5. Baseline date survey (with special attention to infant mortality).
6. Evaluation survey at the end of the cooperation.

VI. ORGANIZATIONAL STRUCTURE AND MECHANISM OF COPPERATION

1. The joint Steering Committee meeting consist of representative from GOI and JICA is the highest body to coordinate and give guidance for implemenntation of the project. The committee is chaired by Director General of Community Health and/or Director General of Communicable Disease and Environmental Health, Ministry of Health of the Republic of Indonesia. The Committee should meet at least once a year, Preferably in July, where evaluation of the ongoing activities and plan of operation for the following fiscal year should be discussed. Laison Officer between GOI and JICA is the secretary of the Directorate General of Community Health.
2. In the Provincial level, an executing board consisting of members from health Department Regional Office (KANWIL), Provincial Health Service (DINAS), and project directors of related programmes is responsible for implementation of the project.
3. The JICA experts team consist of Japanese expertees disptched in this project is responsible for transferring technology and evaluation of the efforts.
4. Joint meeting of JICA experts team and executing board in the provincial level should be held regularly.
5. Supervision for monitoring of the project activities should be conducted in an integrated way.

VII. BUDGEITING

1. Counter budget needed for the operational activities of the project should be provided by national government and local government of North Sumatra.
2. Budget needed for provision of fellowships, training, experts, equipments, and material should be provided by JICA, as a grant.

VIII. MONITORING AND EVALUATION

Monitoring and evaluation are integral parts of the cooperation programmes to ensure the programme components are implemented in an integrated way and relevant to the objectives of the Fourth Five Year of Health Development Plan.

Scope of monitoring and evaluation will cover programme contents, machanism and prosedures of the cooperation.

The following principles to be used as guidance, are :

1. Success of this cooperation efforts will be assesed against achievements of objectives and targets of cooperation within the framework of the Fourth Five Year of Health Development Plan. Output indicators will be developed for this purpose.
2. Monitoring and evaluation will be conducted based on a special terms of reference prepared by a certain committee consist of GOI and JICA expertees.

A final evaluation of the cooperation between GOI and JICA will be conducted in FY 1988/1989.

IX. SPECIFIC ISSUES

In case of specific issues arise, both sides will jointly take necessary steps either in provincial or national level to overcome the issues.

Signed in Jakarta, on August 13, 1984

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THE POLICY FRAMEWORK

FOR THE SECOND 5 YEAR PLAN OF OTA-43 BY JICA

1984 - 1989

1. INTRODUCTION

Based on the Record of Discussion concerning extension and expansion of OTA-43, signed on 12th March 1984 at Jakarta, the second 5 Year Plan was decided to be implemented from 1st April 1984 to 31st March 1989.

In advance to the 8th Steering Committee on 9th August 1984, JICA team, headed by Prof. Michio Hashimoto has examined the draft policy framework for the second 5 Year Plan, worked out in Tokyo JICA Headquarters by Domestic Committee for OTA-43, through the review of the prepared draft proposal of action plan for 1984/1985 and for 1984/1989 by Indonesian side.

Two days of interview studies with those responsible officials of the North Sumatera Provincial Health Authority and the Regional Office of Ministry of Health, and two days of field visit to newly expanded 3 Kecamatan (another one was already visited in 1983) at health centre, BPU and BKIA were conducted.

Special considerations were paid for clear understanding of new policy direction, given by Dr. Suyono Yahya, Director General of Community Health, Ministry of Health, in October 1983; that is the top national health priority for maternal and child health to improve the present infant mortality rate during the term of the 4th National Economic and Social Development Plan.

As the results of those examinations, we have reached following conclusions.

2. POLICY FRAMEWORK FOR TECHNICAL CO-OPERATION OF JICA IN THE SECOND 5 YEAR PLAN OF OTA-43

Technical co-operation programme of JICA can be devided into two categories : the first one is facilities/equipments/materials supply as donation and the second one is the technology transfer through expert, fellowship and training programmes.
The first category is directed for the basic infrastructure development for health care delivery system and sectoral and support programmes development.
Those programmes of the first 5 year plan are to be continued adjusting to the changing programme needs. However, those two programmes of "pilot rural deep well construction" and "field laboratory complex construction" can not be expected in the newly expanded area in principle.
Meanwhile, some new programmes are expected to be added, such as maternal and child health, toxicology and environmental chemistry and public cleansing (excreta, refuse and wastes disposal). Those programmes of T.B., Cholera and worm control will be trimmed and malaria control study will include some new approaches.

The scale of budget for facilities/equipments/materials supply can be expected 35 million Yen per fiscal year as on-going through the first 5 year plan.
At present, the number of fellowship per fiscal year is limited 3 persons. Maximum effort will be done to expand the number of fellowship through all available measures.
As for expert programme, there are substantial constraints in both sides. In JICA side, it is not the matter of budget availability, but the problem of feasibility to recruit appropriate expert to meet the request of Indonesian side at given time.
However, it is worldwide problem of government finance. We are not in position of criticism or claim at all.
The training programme is the most importance for technology transfer.

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2.1. Basic Infrastructure Development Programme

Health Centre

In the newly expanded 4 Kecamatan, there are 4 health centres at present. In the 3 Kecamatan of the first 5 year plan, one health centre has been newly organised. Therefore, at present 6 health centres are to be target of facilities, equipments and materials supply as the result of expansion and extension. In case of increase of new health centre within the second 5 year plan, it is to be included in target also.

In the first 5 year plan, BPU and BKIA were not included as the target of the programme of facilities/equipments/materials supply. However, in view of tha national priority for maternal and child health programme to improve infant mortality rate, BPU and BKIA are the most important field organs with close daily contact with villagers, namely mothers and children. In JICA Programme of cooperation for infrastructure development, BPU and BKIA should be taken as the important target in the Second 5 Year Plan. At the same time, enlightment and training of Dukums, traditional local midwives are the important approach by health centre, BPU and BKIA. The placement and distribution of necessary kits are to be actively supported by JICA programme.

So far as concern 12 basic activities of health centre, they were well taken into account in the First 5 Year Plan. We have learned the important strategy of the 5 integrated programmes; namely nutrition, immunisation, diarrhea, maternal and child health and family planning. In addition to the each sectoral and technical approaches, integrated and educational approach by field staffs in healh centre, BPU and BKIA are the key issues of practice.

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The supply and distribution and training for field organs are the important items for JICA cooperation programmes. In the First 5 Year Plan, audiovisual aids supplied by JICA had been remained in provincial level mostly.
The educational materials should be Indonesian made and locally fitted for villagers understanding. We learned that there are already good pamphlets, pictures, booklet for nutritions and maternal and child health.

In addition to those kits, namely first aid, midwife, dental, ENT, ophthalmic and minor sugurt, those materials and equipments should be assisted by JICA programme.

As for the medical / function of health centre, Pulau Rakyat has been designated by World Bank project. Building facility for 10 beds has been already completed. But those necessary medical facilities equipments and materials are not yet clear so far as we are informed. It was also informed that Bandan Pulau health centre had been agreed to have ten beds. Last year, we saw already housing facilities and several beds there. JICA should taken into consideration how to support those hospital functions in the two health centres. In Tinggi Raja (Bunte Pane), it was informed that health centre had difficulty to access villagers because of widely scattered in distant remoted communities. It was deemed that strengthen the mobile capacity in Tinggi Raja is indispensable.
JICA should take into account of the issue. In Tanjung Tiram, the nature of district is very different from other three Kecamatan.
The main health problems are cholera and malaria etc.
Health centre facility is very poor at present.

However, the problem of health centre facility itself is rather out of OTA-43 at present. But, so far as water supply, public water pump provide good water for helath centre. The referal system with Kisaran hospital seems to be more favourable then other 3 health centres. As for the bacteriological examination, Indrapura laboratory can provide good support for this health centre.

Health centre as a whole, laboratory equipments such as microscopy etc., refrigerators with good flame material supply and mobil equipments etc. are common issue for facilities/equipments/materials supply programme of JICA.
So far as telecommunications and ambulance, the needs should be examined at first by Indonesian side.

Regional Medan Health Laboratory has directions for malaria immunology development, and strengthening toxicological function. In view of the administrative needs for polution control in relation to water, pesticides, soil and air, we recommended to add new capabilities for environmental chemistry in the Regional Medan Laboratory. Within the terms of the Second 5 Year Plan, the Regional Medan Laboratory is to be expected to have equal level of capacities of Surabaya in relation to communicable disease. This was the proposed view of JICA team since the First 5 Year Programme. It is also important to have capability of environmental chemical analysis with certain automatic instruments, such as Atomic Ray Absorption, Infrared analyser, gaschromatography. The minimum level to handle those automatic analystical instrument is to be expected to be achieved.

2.2. Sectoral Programmes Development

Maternal and Child Health :

As it is already stated how to enlighten village dukun and train them to use dukun kit with understanding of basic maternal child care is the most basic issue.

JICA can support through facilities/equipments/materials supply programme, and also through fellowship in relation to maternal and child health and nutrition. As the expert programme, it must be rather difficult to recruite appropriate expert in the field of nutrition anthropology, but in case of maternal and child health experts with emphasis on nutrition, diarrhea etc. can be expected, if it is necessary.

We are requested to support those routine programmes of maternal and child health through growth chart, periodic scaling (weight measurement, growth and development observation), provision of booklet, teaching materials and five leaflet sets.

High dosage of vitamine A administration programme is also proposed. However, those two studies of Netherland (1974) and USA (1980?) showed contradictory different finding.

We also informed that nutritional status is evaluated only by comparing standard growth chart at present. In response to our questions to health centre doctor, the vitamine A defficiency does not seem to be regarded as problem at present.

We feel the need of further examination by expert. Nevertheless, we will respond to certain extent to the request of Vitamine A tabulet as possible.

It was informed that in health centre, they are much concern protein defficiency. It was told that in the case of protein defficiency , soy bean is given to mother, and mother is used to pay Rp. 50,-.

Malaria Control :

Five year schedule for malaria control development plan to meet the different ecology of prevailing vector has been already worked out through careful cooperative discussion from both sides since 1983. We would like to recommend to accompany some profitable measures other than malaria in those project site. JICA would like to cooperate as possible. The function of the Regional Medan Health Laboratory should be strengthened and expanded to meet the malaria immunology.

TB Control :

TB control plan towards 21 century had been already worked out in the North Sumatra Province with cooperation of JICA expert in the First 5 Year Plan (by Dr. Takai). Some short term expert for technology transfer in case of laboratory training is necessary within the term. The fellowship programme is also expected to support Indonesian side as possible.

Cholera, Worm Control :

In case of big epidemic, JICA would like to respond to Indonesian request, if necessary. Maximum use of the Regional Laboratory in Medan and the Indrapura field laboratory in project area is the practical and fundamental. The laboratory function and technique have already been trasferred in the First 5 Year Plan.

Based on the past experience of cooperation in field epidemiological control and parasite survey, we decide to trim the expert programme. The problem of counter budget to be real difficult issue for smooth cooperation in the past.

Diarrhea :

This is the common, joint problem between communicable disease control and maternal and child health. It is also one of the five integrated programme. JICA can support in term of materials supply, such as oralit, educational materials etc.
Special effort is necessary to produce educational materials for the guide of preparation for administration of oralit for mother of sick child.
Hygienic handling practice for preparation and administration is essential.

Environmental Health :

The expansion of water workshop at Indrapura Health Laboratory building is the most important programme of JICA.
It was studied number of rural wells were left unrepaired if disordered. JICA expert study reviewed the importance of training sanitarian and villagers for maintainance and repair practice of existing disordered wells. Among the five pilot wells, two of them were very successful, two of them needs some repair and reinforcement for better use. One is a failure in a sense. JICA will try further to improve those poor condition wells as possible.
So far as concern electro conductivity study for underground water layer detection, sanitary engineer can help considerable extent.
The problem of excreta, refuses and wastes disposal have been growing issues recently. Another sanitary engineer may be necessary in next step.
The problems of environmental pollution such as air, water, foods etc. have become also growing concern, Since the National Environment Conservation Law was enacted in 1981, it now come to the stage to begin the development of control approach step by step.

By the end of of the Second 5 Year Plan, minimum capacity for environmental chemistry should be established in the Regional Medan Health Laboratory. So far as concern Several requested field kits for measurement of water and air, JICA can supply through facilities/equipments/materials programme. KANWIL and the North Sumatra Health Authority is advised to consult the another JICA project of the Academy of Chemical Engineer and Analysis at Medan under Indsutrial Directorate.
The Director, Dr. Uematsu is the one of the top class and well experienced scholar of the Institute of Technology, Ministry of International Trade and Industry of Japanese Government in the field of chemical analysis and measurement of environmental pollution.

2.3. Support Programme

Instead of sectoral approaches, support programmes play the role of horizontal approaches. Health education and laboratory service are the two main support programmes in community health promotion programme.

Health Education :

Routine health education practice in the levels of health centre, BPU and BKIA is the most important and essential activity. How to make the 5 integrated programmes approach is the most relevant issue for maternal and child health programme, which is stressed as the top priority policy in the 4th National Economic and Social Development Plan.
As it is stated already, provision of educational materials in BPU, BKIA are the important programme of OTA-43. Those materials isexpected to be simple, easy to understand through visual expression and also to be Indonesian made materials as possible.

It is also our concern that each health centre is requested to run 2 villages for intensive community health promotion. Some concentrated efforts for those intensive community health approach is to be device.
As the target of health education, dukun and women group, school and village council are already focused.
JICA can provide facilities, equipments and materials supply and also provide expert advice, if requested.
We are informed that health education media production center if the on-going national programme by Ministry of Health. Not only the highly sophisticated audiovisual aids, but also common practical media production is to be included.
OTA-43 can provide those facilities, equipments and materials relevant to the Asahan Project. But so far as concern centre buildings and so forth, they are not covered by OTA-43, but expected to request through other ODA of Japanese Government.
Expert and fellowship programmes in relation to health education is expected to be considered if requested during the term of the Second 5 Year Plan.
Through our past experience, good relations among sectoral programme offices, health education division and OTA-43 project office are the most important issues for well co-ordinated and integrated educational approach.

Laboratory Service :

There are three levels of laboratory service, those are Regional, Indrapura Laboratory complex and each health centre. The Regional Health Laboratory in Medan is expected to strengthen and expand its laboratory capacity to meet the needs of malaria immunology, toxicology and environmental chemistry.

JICA would like to support those programmes in the Second Five Year Plan. No particular expansion of Indrapura laboratory complex is expected.
However, we would like to expect the laboratory capacity of Indrapura health centre should be widely used for the needs of those newly expanded 4 Kecamatan in the Second Five Year Plan.
The routine laboratory facilities, equipments and materials for 6 health centers in the project area are also covered by OTA-43, as it was done 3 health centers in the First Five Year Plan. The items of supply for two health centres with 10 beds (pulau Rayakat, pulau Bandar) is to be carefully examined if any other requirements for hospital care service is expected.

2.4. Technology Transfer :

Expert, fellowship and training programmes are the essential and basic programmes in JICA technical cooperation programme.
Based on the experience in the First Five Year Plan, we would like to add "Scientific Meeting" as the joint scientific discussion meeting among JICA experts and Indonesian counter parts.
OTA-43 has created the unique experiences international and interdisciplinary approach through joint efforts among Japanese scientific and academic experts and Indonesian administrative and technical counter-arts.
In reality, it is not easy task. Mutual understanding has been gradually brought up and grown for past 6 years. Scientific meeting is the outcome of the efforts of mutual understanding and cooperation for promotion of community health.

Expert programme is not restricted by financial reason, but the difficulty to recruit appropriate expert to meet the request of Indonesian side at

Meanwhile, the problem of available counter-part budget posed constraint to the activities of experts in the project.
Taking into account of inflation and also confronting budget saving policy in Indonesia, the real value and amount of counter budget has been decreasing, in spite of written budget figure in table seems to be slightly increased.
We understand the difficulty of government finance. This is not only the matter of Indonesia, but also severae in Japan, even all government finance in the world at present.
Therefore, the request of expert is to be co-ordinated to the availability of counter budget.
From JICA side, it will be mentioned the extent of feasibility of recruitment of proposed expected expert for next fiscal year.

Fellowship programme :

The number of fellowship allocated to OTA-43 is three at present. Some fluctuation had been observed in the past. As the Domestic Committee for OTA-43 in JICA Tokyo would like continue demand to increase the number through all available measures. Not only administrative level, but also key persons of laboratory and health centre are expected to be included in the list of fellowship candidate.

Training :

JICA would like strengthen the support for various training courses.
The training course for microscopist of malaria control is already scheduled. The Water Workshop in Indrapura is requested to expand. It is highly desirable to work out training schedule for the Second Five Year Plan.

It was also strongly requested to support domestic training of key staff in the field level at somewhere in Indonesia, where excellent programme is going on or training institute is in operation.

Scientific Meeting :

As it is already stated, this is the outcome of growth of mutual understanding and cooperation among experts of JICA and counter parts of Indonesian side.
We hope this meeting will be periodically held.
By the end of the Second Five Year Plan, we hope this meeting grows to contribute to the better positive relation among scientific programmes and finding and administrative management and practice in those related matters.

3 MISCELLANEOUS

Through the past six years experiences, mutual understanding and cooperative efforts have been grwon up.
We are very much appreciated to those administrative efforts done by Indonesian side for improvement of administration of programme implementation.
There are still some unsolved problem.
At present, Japanese side would like to request Indonesian side as follows :

Counter budget :

We would like to request to make further efforts to obtain appropriate and sufficient budget as possible.
The allocation and implementation should be done as early as possible.

Handling procedure for :

Those equipments and material of 1982/1983 FY had not yet cleared.

Those for 1983/1984 were also already arrived in Indonesia. We would like strongly request to be cleared and delivered as early as possible. Further speed up and delivery is requested.

Drivers recruitment :

We would like request to recruit sufficient number of drivers for the Japanese experts vehicles and also provide garages for them.

Appropriate transaction procedure :

In relation to the transaction of used vehicle donated by JICA to private person, legitimate and appropriate criteria for transaction should be agreed by Indonesian Government and Japanese Government. The copy of the letter No:352/JICA/7/84 is attached herewith.

4. CONCLUSIVE AND DOCUMENTED REMARK

The Second Five Year Plan is the end of OTA-43.
No extension can not be expected. Community health promotion project covers wide divercified sectoral programmes areas.
This project is an international, interdisciplinary and also "inter administration & science" project.
This is unique experience for both countries. There are many difficulties at first. But we have gradually overcome those difficulties, but still remain. At the end of OTA-43, we would like to expect to produce project report and evaluation with clear presentation of interface of administrative practice and scientific studies.
We hope JICA can make profitable contribution for Indonesian government and also to community people in the project area.

Jakarta, August 7, 1984

Michio HASHIMOTO
Chairman, Domestic Committee
for OTA-43, JICA, Tokyo

JAPAN INTERNATIONAL COOPERATION AGENCY

Japanese Embassy Compound
24, Jalan Thamrin, Jakarta, Indonesia

Tel. 322387, 324247, 326818, 326946
Telex, 44198 JICA IA

No. 352/JICA/7/84

Jakarta, July 7, 1984

Dr. Suyono Yahya
Director General of Community Health
Department of Health
JAKARTA

Dear Sir,

Vehicles donated by JICA to the OTA-43 project

First of all, I would like to express my sincere acknowledgement to the invaluable support extended by the Department of Health of the Republic of Indonesia as well as efforts of the Indonesian counterparts devoted to the Promotion of Health in North Sumatera project (OTA-43).

Our project brought us many fruitful achievements as you would know in the past six years, and I am pleased that we are entering a new stage of another five years to cooperate further for more successes. Although there have always been mutual confidence and understanding between Japanese and Indonesian sides, I sincerely wish that they be more deepened and strengthened than ever for the ultimate goals of the project.

Meantime, I would like to have your kind attention to the following:

The project received seventeen (17) vehicles with other equipment since 1978, which must exclusively be utilized as long as possible for the project in close consultation with our experts, even-though such equipment already became the project's property as stated in the Record of Discussions signed on October 10, 1977.

However, according to the information by Dr. T. Ikemoto, our expert in Medan, four officials related to the project submitted applications to you for purchasing four of the above-mentioned vehicles for themselves based on the Presidential Order of 1983, ratifying that in order for the

Government .../-2

JICA

JAPAN INTERNATIONAL COOPERATION AGENCY

Japanese Embassy Compound
24, Jalan Thamrin, Jakarta, Indonesia

Tel. 322387, 324247, 326818, 326946
Telex, 44198 JICA IA

No.

Jakarta, ...

Government to pare down maintenance costs, less economical official vehicles can be purchased, if requested by Government officials.

In this case, I would like to suggest that the Steering Committee could review such cases and recommend how many vehicles be still necessary to support the project activities and how many vehicles should be abandoned according to their conditions. If project officers would like to purchase project vehicles, logically it should be the abandoned vehicles.

Therefore, my understanding goes to the effect that ones might be abandoned only after consultation with SETKAB and the donor agency.

Under the circumstances, I would like to have your comment on this matter at the earliest convenience.

Thank you very much for your continuous cooperation for the project with us.

Sincerely yours,

Japan International Cooperation Agency Colombo Plan UNDER JAPANESE GOVERNMENT JAKARTA

Hiroshi Yamamura
*Resident Representative
Japan International Cooperation Agency

cc.: Ir. Kumhal Djamil
Head Bureau of Technical Cooperation
Secretariat Cabinet

Mr. M. Fujii
First Secretary
Embassy of Japan

ASAHAN HEALTH IMPROVEMENT PROJECT
PROGRESS REPORT
F.Y. 1983/1984 and 1984/1985

INTRODUCTION.

Fiscal year 1984/1985 is the first year of the second period of the technical cooperation project between the government of Indonesia and the government of Japan in the field of promotion of health in North Sumatra.

Before the Record of Discussion concerning extension and expansion of the cooperation project was eventually signed on the - 12th of March 1984, many people were in doubt whether the cooperation would be extended or terminated in FY.1983/1984.

Based on that reason, many units did not enthusiastically propose programs and budget for FY.1984/1985.

In relation to that, budget allocation for the cooperation in this fiscal year couldn't yet be cleared up to this moment.

Since the seventh steering committee meeting which was held in Jakarta on the 12th of October 1983, many JICA experts finished their assignment and returned to their homeland.
Therefore, the remaining cooperation activities which were conducted between October 1983 and July 1984 are activities in malaria, tuberculosis and environmental health programs.

ACTIVITIES :

- Malaria Program.

Malariometric surveys were conducted in several villages at different time.

The number of blood examination samples which were taken varied from 43 to 292 samples and the parasite rate varied 0 to 41,99 % (see table I).

Active case Detection were also conducted in varions places at different time. The number of blood examination taken varied from 17 to 57 samples and the slide parasite rate varied from 33,33 to 73,68 % (see table II).

- Tuberculosis Control.

In fiscal year 1983/1984, the target for sputum examination in the project area was 1.869 samples and realization was 1.512 (80,9 %). The target for treatment cases was 205 and realization was 193 cases (94 %).

- Environmental .....

- Environmental Health program.

Activities for water supplies improvement in the project area were conducted under cooperation with JICA experts such as : establishment of workshop in Indrapura for hand pump reparation, training for staff members from health centers and community - people, organization of community people to take care of the water facilities and improvement of the artesian wells which were donated by JICA in the past.

In FY. 1984/1985 some cooperation activities especially in CDC programs couldn't yet be started because the budget allocation was not yet cleared and some experts didn't yet arrive.

CONSTRAINTS :

In this fiscal year, clearance of equipment which was donated by JICA from custom offices got some difficulties due to lack of budget for handling cost.

Efforts have been made to request financial support from - governor to solve the problem.

CONCLUSION :

The activities which are conducted in FY.1984/1985 until now, is the continuation the activities in FY. 1983/1984.

Problems which are faced up to this moment are related to operational guidelines, lack of budget and administrative procedure for clearance of budget allocation.

SUGGESTION :

- Budget allocation for CDC programs should be cleared soon.
- Operational guidelines for feasibility study in water - supply project should be endeavoured immediately.
- By the expansion of the project area in the second period of cooperation, budget for operation of the project should be increased.

Medan, August 1984.

1. ASAHAN HEALTH IMPROVEMENT PROJECT

SUMMARY OF HEALTH CONDITIONS

SECTION	1979/1980	1980/1981	1981/1982	1982/1983	1983/1984
MALARIA					
Parasite rate	1,52 %	1,81 %	1,85 %	< 2 %	-
House spraying	9.576	2.564	13.183	10.306	4.723
TUBERCULOSIS					
Target realization					
Bacteriologycal Examination	88 %	124 %	168 %	100 %	16.758 (55,56 %)
Patient treatment	99,36 %	95 %	98,52 %	100 %	2.065 (59 %)
Prevalence rate	0,60 %	0,49 %	-	0,30 %	-
IMMUNIZATION					
Target realization					
B C G	39,2 %	96,7 %	69,8 %	90 %	88 %
DPT Complete	35,6 %	84,6 %	48 %	90 %	88 %
TT Complete	17,6 %	32,7 %	20 %	70 %	54 %
W O R M					
Prevalence Ascaris	90,35 %	69,83 %	-	< 10 %	-
Trichuris Trichuma	77,84 %	64,37 %	-	< 10 %	-
Ankylostoma duodenale	23,55 %	13,17 %	-	< 10 %	-
HYGIENE & SANITATION					
Number of population with safe water supply.	24,1 %	27,8 %	-	33,9%	34,52 %
Number of population with family latrines	40,2 %	44,2 %	-	52,1%	77,55 % (pit privies & latrines).
Number of population with garbage disposal	60,15 %	64,45 %	-	69,60 %	-
HEALTH EDUCATION					
Intensive work areas	2 villages	3 villages	4 villages	9 villages	9 villages
LABORATORY					
Examination of specimen					
Bacteriology	1796 samples	3800 samples	2500 samples	4000 samples	-
Parasitology	1047 samples	1891 samples	1000 samples	3000 samples	546 samples
Water from wells	-	20 samples	40 samples	400 samples	600 samples

2. BUDGET ALLOCATION FOR ASAHAN HEALTH IMPROVEMENT PROJECT .-

I N D O N E S I A				J A P A N
FISCAL YEAR	NATIONAL BUDGET	PROVINCIAL BUDGET NORTH SUMATRA	T O T A L	
1978 / 1979	Rp. 12.570.000.-	Rp. 20.000.000.-	Rp. 32.570.000.-	¥. 50.000.000.-
1979 / 1980	Rp. 44.172.000.-	Rp. 18.600.000.-	Rp. 62.772.000.-	¥. 100.000.000.-
1980 / 1981	Rp. 49.970.000.-	Rp. 36.110.000.-	Rp. 86.080.000.-	¥. 150.000.000.-
1981 / 1982	Rp. 66.473.000.-	Rp. 600.000.-	Rp. 67.073.000.-	¥. 30.000.000.-
1982 / 1983	Rp. 74.436.500.-	Rp. 23.193.000.-	Rp. 97.629.500.-	¥. 50.000.000.-
1983 / 1984	Rp. 29.415.000.-	Rp. 6.100.000.-	Rp. 35.515.000.-	¥. 30.000.000.-
1984 / 1985	Rp. 20.702.000.-	Rp. 23.500.000.-	Rp. 44.202.000.-	¥. 35.000.000.-
T O T A L	Rp.297.738.500.-	Rp.128.103.000.-	Rp.425.841.500.-	¥ 445.000.000.-

Notes :
The amount mentioned above does not include budget allocated for experts and fellowship.

3. LIST OF JAPANESE EXPERTS AND SURVEY TEAM MEMBERS DISPATCHED FOR THE PROJECT.

No.	N a m e	Field of Assigment	Duration	Position	R e m a r k s
1.	Toshio OHISO	Leader of the Team	Dec. 6-1976 - Dec.15-1976	Executive Director, Japan International Medical Association	Preliminary - Survey Team.
2.	Haruyo SANO	Public Health	"	Professor, Kyoto Univ.	"
3.	Akio UCHIDA	Medicine for Agri. Village.	"	Professor, Chiba Univ.	"
4.	Akira Matsuda	Environmental Health	"	Ministry of Health & Welfare.	"
5.	Nabuo ONODERA	Coordination	"	J I C A	"
6.	Tadashi TAKEUCHI	Leader of the Mission	Sep.29-1977 - Oct.11-1977	Professor, Nihon Univ.	R/D Mission
7.	Shuhiro SAKAMOTO	Public Health	"	Professor, Hyogo Univ.	"
8.	Akira ISHII	Parasitology	"	Associate Professor Tokyo Univ.	"
9.	Masaaki NAITO	Sanitary Engineering	"	National Institute for Environmental Studies.	"
10.	Matsuyo KAMIJO	Coordination	"	J I C A	"
11.	Akira ISHII	Parasitology	Feb.25-1978 - Mar.18-1978	Associate Professor, Tokyo Univ.	Expert
12.	Masayuki YASUNO	Ecology	"	National Institute for Environmental Studies.	"
13.	Mitsumi KANEKO	Sanitary Enginnering	"	Institute of Public Health	"
14.	Hitoshi TANAKA	Health Statistics	Aug. 3-1978 - Feb.28-1979	Ministry of Health and Welfare.	"
15.	Norichika KEMAZAWA	Bacteriological Epidemiology.	Nov.17-1978 - Nov.16-1980	Tokyo Univ.	"
16.	.....				

No.	Name	Field of Assigment	Duration	Position	Remarks
16.	Kasuo TANAKA	Entomology	Jan.18-1979 - Jan.17-1981	Tokyo Univ.	Expert
17.	Akira ISHII	Parasitology	Feb. 5-1979 - Mar.15-1979	Professor, Miyazaki Medical College.	"
18.	Kiroku MATSUNO	Public Health	"	Associate Professor, Kyoto Prof. Medical College.	"
19.	Masayuki YASUNO	Ecology	"	National Institute for Environmental Studies.	"
20.	Hiroshi HASHIURA	Coordinator	May.23-1979 - Mar.31-1983	JICA	"
21.	Tsuguo YANAGIHASHI	Team Leader & Public Health.	Jul.11-1979 - Jul.10-1980	Associate Professor, Kagoshima Univ.	"
22.	Michio HASHIMOTO	Leader of the Mission	Aug. 1-1979 - Aug.21-1979	Professor, Tsukuba Univ.	Contact Mission for Rural Water Supply Facilities.
23.	Kazunobo ONOGAWA	Water Supply Engineering	"	Ministry of Health and Welfare.	"
24.	Koichi MIYOSHI	Koordination	"	JICA	"
25.	Jiro YAMAMOTO	Leader of the Team	Sep.13-1979 - Sep.20-1979	Director, Medical Cooperation Dept., JICA	Advisory Team
26.	Minoru UEMATSU	Health Statistic & Community Health	Sep.13-1979 - Sep.20-1979	Professor, Kitasato Univ.	"
27.	Koichi MICHISHITA	Coordination	"	JICA	"
28.	Akio SAKASHITA	Indrapura Laboratory Construction	Nov.19-1979 - Dec.18-1979	Ministry of Construction	Expert
29.	Hiroyuki USHIJIMA	"	"	"	"
30.	Choichi KOBAYASHI	"	"	"	"
31.	Michio HASHIMOTO	Leader of the Team	Nov.21-1979 - Dec.20-1979	Professor, Tsukuba Univ.	Survey Team for Rural Water Supply.
32.	Kazunobu ONOGAWA	Environmental Health	"	Ministry of Health & Welfare.	"

No.	N a m e	Field of Assignment	D u r a t i o n	P o s i t i o n	R e m a r k s
33.	Koichi MIYOSHI	Coordination	Nov.21-1979 - Dec.20-1979	J I C A	Survey Team for Rural Water Supply.
34.	Hideki YAMAZAKI	Water Supply Planning	"	Japan Water Supply Consultant Co. Ltd.	
35.	Teruji SASAKI	Facility Design	"	"	"
36.	Isao SEKINE	Water Resources Planning.	"	"	"
37.	Takaya IKEMOTO	Ecology	Jan. 1-1980 - Jan.31-1981	Teikyo Univ.	Expert
38.	Hiroji KANBARA	Malaria Parasitology	Jan.31-1980 - Mar.25-1981	Osaka Univ.	"
39.	Ryoji TAKAI	Team Leader and TB Control.	Jun. 1-1980 - Mar. 3-1983	The Research Institute of TB Japan Anti TB Association (Former Position)	"
40.	Akio SAKASHITA	Indrapura Lab.Construction	Sep.17-1980 - Sep.27-1980	Ministry of Construction	"
41.	Hiroyuki USHIJIMA	"	"	"	"
42.	Syuji MUKUNOKI	"	"	"	"
43.	Hideki YAMAZAKI	Water Supply Facilities.	Sep. 1-1980 - Nov.30-1980	Japan Water Supply Consultants Co. Ltd.	"
44.	Tetsubumi TSUJIMOTO	Supervisor, Water Supply Facilities Consrtuction.	Sep. 1-1980 - May.15-1981	"	"
45.	Ichiro WAKISAKA	Leader of the Team	Nov. 5-1980 - Nov.21-1980	Professor, Kagoshima Univ.	Advisory Team
46.	Masayuki YASUNO	Malaria Control	"	National Institute for Environmental Studies.	"
47.	Chiaki FUJIOKA	Health Education	"	Associate Professor, Osaka Educational Univ.	"
48.	Koji TANABE	Coordination	"	J I C A	"
49.	Yoshiaki KAROJI	Ecology	Jan. 1-1981 - Jan.14-1982	Kyoto City Institute of Public Health.	Expert

No.	Name	Field of Assigment	Duration	Position	Remarks
50.	Hideki YAMAZAKI	Water Supply Facilities	Mar. 1-1981 - Mar.31-1981	Japan Water Supply Consultants Co. Ltd.	Expert
51.	Junichi IMAI	Parasitology	Mar.15-1981 - Mar.14-1982	Associate Professor, Miyasaki Medical College.	"
52.	Hiroyuki AMANO	Malariology	Mar.15-1981 - Sep.14-1981	Physician, Dept. of Overseas Medical Service, Tenri Hospital	"
53.	Keichiro JYO	Bacteriology	"	Ministry of Health and Welfare	"
54.	Michio HASHIMOTO	Leader of the Team	Dec.19-1981 - Dec.28-1981	Professor, Tsukuba Univ.	Advisory Team
55.	Akira ISHII	Parasitology	Dec.14-1981 - Dec.28-1981	Professor, Miyazaki Medical College	"
56.	Ryutaro YATSU	Water Supply Engineering	"	Ministry of Health & Welfare	"
57.	Koji TANABE	Coordination	"	J I C A	"
58.	Chobei IMAI	Ecology	Dec.19-1981 - Dec.18-1982	Osaka City Institute of Public Health and Environmental Sciences.	Expert
59.	Michio HASHIMOTO	(For 5 th Steering Committee Meeting)	Jan. 8-1982 - Jan.15-1982	Professor, Tsukuba Univ.	
60.	Koji TANABE	(")	Jan. 8-1982 - Jan.10-1982	J I C A	
61.	Hideki ITOKAWA	Malariology	Jan.27-1982 - Sep.26-1982	Tokyo Medical & Dental Univ	Expert
62.	Kazuhiro BABA	Bacteriology	Mar. 6-1982 - Sep. 5-1982	Ministry of Health & Welfare.	"
63.	Osamu SAKAMOTO	Parasitology	Apr.10-1982 - Apr. 9-1983	Kanagawa Pref. Health Service Association.	"
64.	Akiko SHIZUKUISHI	TB. Lab. Work	Jun.13-1982 - Sep.12-1982	The Research Institute of TB., Japan Anti TB.Association.	"
65.	Michio HASHIMOTO	Evaluation Team	Aug.21-1982 - Sep. 8-1982	Professor, Tsukuba Univ., Chairman, Internal Committee on Project OTA-43	

No.	Name	Field of Assignment	Duration	Position	Remarks
66.	Masayuki YASUNO	Evaluation Team	Aug.21-1982 - Sep. 5-1982	National Institute of Environmental Member, Internal Committee on Project OTA-43	
67.	Taiji NAKAGAWA	"	Aug.21-1982 - Aug.29-1982	J I C A	
68.	Katsuyuki MAKINO	Water Supply	Sep.10-1982 - Mar.31-1983	Water Supply Department, Manicipal Government of Sapporo.	Expert
69.	Masahiro TAKAGI	Malaria Ecology	Oct.15-1982 - Mar.31-1983	Department of Medical Zoology, School of Medicine Univ.	"
70.	Takaakira INOMOTO	Malaria Parasitology	Oct.22-1982 - Mar.31-1983	Institute of Tropical Medicine, Nagasaki Univ.	"
71.	Michio HASHIMOTO	Contact Mission on the new Project.	Mar. 8-1983 - Mar.16-1983	Mentioned above.	
72.	Osamu SAKAMOTO	Gastroenteritis Epidemiology.	Apr. 9-1983 - Oct. 8-1983	Kanagawa Prefecture Health Service Association.	Extension of the term of duty.
73.	Takaya IKEMOTO	Malaria Ecology	Apr.16-1983 - Apr.15-1984 Aug.10-1984.	Department of Parasitology School of Medicine, Tokyo University.	Expert
74.	Akiko SHIZUKUISHI	TB. Lab. Works	May. 9-1983 - Jul.16-1983	The Research Institute of Tuberculosis, Japan Anti-TB.Association.	Leave from duty before the end of the Term duty because of illness.
75.	Hiroyuki MATSUOKA	Malaria Parasitology	Aug. 1-1983 - Jul.31-1984	Institute of Medical Science Tkyo University.	Expert
76.	Sadao AIHARA	Water Supply	Aug. 3-1983 - Mar.31-1984	Water Supply Department, Municipal Government of Sapporo.	"
77.	Katsutaka SHIMOMURA	Coordination	May.26-1984 - Apr.26-1984		
78.	Hideki ITOKAWA	Malariology	Yul.15-1984 - Yul.15-1985		
79.	Chobei IMAI	Malaria Ecology	Yul.25-1984 - Yul.24-1985		

4. FELLOWSHIP TRAINING

No.	N a m e	Training Subject	Duration	Position	Remarks
1.	Dr. R.Tampubolon	Health Management	Jan. 11-1979 - Mar. 2-1979	Deputy Manager, Asahan Health Improvement Project.	
2.	Dr. R.Sudiranto	Laboratory Service	Jan. 11-1979 - Feb. 15-1979	Director, Health Laboratory in Medan.	
3.	Dr. Mangasa Siregar	Primary Health Care	Mar. 25-1979 - Apr. 12-1979	Chief of Provincial Health Service of North Sumatra, Manager of the Project.	
4.	Dr. L.A. Lolong	Health Management	Mar. 25-1979 - Apr. 12-1979	Chief, Planning and Programing Division Directorate General of Community Health.	
5.	Mr. Wesly Pohan	Health Entomology	Mar. 31-1979 - Aug. 8-1979	Staff of Communicable Diseases Control Directorate, Provincial Health Service in North Sumatra.	
6.	Dr. Ramafiata P.Purba	Parasitology	Jul. 7-1979 - Oct. 31-1979	Chief of Sub.Section of Parasitology, Regional Health Laboratory in Medan.	
7.	Mr. Hari Sutikno	Sanitary Engineering	Jan. 8-1980 - May 12-1980	Staff of Regional Health Service in Asahan North Sumatra.	
8.	Mr. Mangasa Soaduon Lubis	Clinical Chemistry	Jan. 10-1980 - May 24-1980	Chief of Clinical Chemistry Sub.Section Regional Health Laboratory in Medan.	
9.	Mr. Marono Cinting	Food and Drinks Examination	Nov. 28-1979 - Apr. 3-1980	Chief, Subsection of Food and Drinks Microbiology, Regional Health Laboratory in Medan.	

No.	N a m e	Training Subject	Duration	Position	Remarks
10.	Dr. Sulaiman Lubis	T.B. Control	Jun. 12-1980 - Oct. 20-1980	Chief of Communicable Diseases Control, Asahan Regency Health Service in Kisaran.	
11.	Dr. Santoso Karo-Karo	Management of Health Care Delivery Service	Mar. 21-1981 - Apr. 8-1981	Chief, Program Preparation and Reporting Div. Directorate General of Community Health Jakarta.	
12.	Dr. Darmansyah Harahap	Hospital Administration	Jul. 12-1981 - Aug. 11-1981	Chief, Kisaran Hospital.	
13.	Dr. Halomoan Nainggolan	Malaria Epidemiology	Oct. 17-1981 - Dec. 25-1981	Staff Member, CDC.,Provincial Health Service of North Sumatra.	
14.	Dr. Helmi Djafar	Public Health Management	Oct. 17-1981 - Nov. 3-1981	Chief of Provincial Health Service of North Sumatra, Manager of the Project.	
15.	Dr. T.B.H.Lumbanraja	Environmental Health	Aug. 19-1982 - Sep. 22-1982	Chief of Division of Environmental Health Protection, Provincial Health Service of - North Sumatra.	

No.	N a m e	Training Subject	Duration	Position	Remarks
16.	Drs.Dabal Purba	Statistics	Jan.20-'83 - May.3-1983	Chief of Section of Environmental Sanitation.	
17.	Dr.Mara Laut Siregar, SKM.	Health Education	Jan.20-'83 - May.3-1983	Chief of Division of Health Education Provincial Health Service of North Sumatra	
18.	Dr.W.Panjaitan DTM&H.	Communicable Disease Control.	Feb.23-'84 - Mar.26-1984	Chief of Division of Communicable Disease Control. Provincial Health Service of North Sumatra.	

5. EQUIPMENT AND MATERIALS DONATED BY JICA TO THE PROJECT

FISCAL YEAR	P R I C E
1978 / 1979	Y. 50.000.000
1979 /1980	Y. 100.000.000
1980 / 1981	Y. 150.000.000
1981 / 1982	Y. 30.000.000
1982 / 1983	Y. 50.000.000
1983 / 1984	Y. 30.000.000
1984 / 1985	Y. 35.000.000
T O T A L	Y. 445.000.000

Notes :

The amount mentioned above does not include budget allocated for experts and fellowship.

PROGRESS REPORT 1983 / 1984.

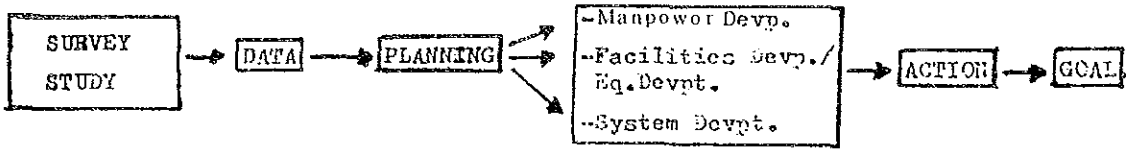
* HEADING : ASIAN HEALTH IMPROVEMENT PROJECT
UNIT/SECTION MALARIA.

* INTRODUCTION : Based on Record of Discussion 10 Oct. 1977.
Between Government of Indonesia and Government of Japan.

* G O A L : Improvement of Health Condition in 3 Kecamatan in Asahan Area with objective : a. ACD Whole Malaria Cases.
b. MS examine Whole 0 - 9 years old.

* STRATEGY : Improvement through : - Manpower Development.
- Facilities Development.
- System Development.

* CONCEPTUAL FRAMEWORK :



* ACTIVITIES :
- Surveys / Studies : Surveys every month.
- Data Collections : See enclosure.
- Manpower Development :
- Quantitative : Number of Employees Increased.
- Qualitative : - Training : - Formal.
- Informal.
- Experts enforced.
- Followships Awarded.
- Facilities / Equipment Development : - Specification.
- System Development : - Methodologies Improvement
- Intensity in Implementation.

* ACHIEVEMENTS : SEE ENCLOSURE.

* CONSTRAINTS : -

* ANALYSIS : -

*CONCLUSION : -

* SUGGESTION : -

Table I.

Malario Metric Survey
Cooperation With JICA Expert
October 1983 to July 1984.

Place	Date	Blood Examination	Positive Total	F	V	M	Mix	P.R. %
SD Lorong II	Oct.'83	292	41	33	7	-	1	14,04
Kwala Tanjung	Nov.'83	62	0	-	-	-	-	0
Medang (Kw.Sipare)	Dec.'83	53	1	1	-	-	-	1,88
SD Lorong II	Jan.'84	280	35	16	18	-	1	12,5
SD Lorong V	Jan.'84	75	14	6	7	-	1	18,66
Desa Durian	Feb.'84	73	0	-	-	-	-	0
G u n t u n g	Mar '84	60	9	2	7	-	-	15
SD Lorong II	Apr.'84	266	48	19	26	-	4	18,04
SD Lorong V	May.'84	46	20	1	19	-	-	41,66
SD Lorong XI	May.'84	51	0	-	-	-	-	0
SD Lorong III	May.'84	79	2	1	1	-	-	2,29
Medang (Kw.Sipare)	Juli'84	46	0	-	-	-	-	0

Table II.

Active Case Detection
Cooperation With JICA Expert.
October 1983 to May 1984.

Place	Date	Blood Examination	Positive Total	F	V	M	Mix	S.P.R. %
Lorong I	Oct.'83	17	10	6	4	-	-	58,82
Lorong I + II	Nov.'83	57	25	10	14	-	1	43,85
Lorong I + II	Dec.'83	34	18	9	6	-	3	52,94
Lorong I + II	Jan.'84	24	14	1	13	-	-	58,33
Lorong I + II	Feb.'84	34	25	20	3	-	2	73,52
Lorong I + II	Mar.'84	19	14	7	7	-	-	73,68
Lorong I + II	Apr.'84	31	13	3	10	-	-	41,93
Lorong I + II	May '84	18	6	1	5	-	-	33,33

PROGRES REPORT 1983/1984.-

1. H E A D I N G : ASAHAN HEALTH IMPROVEMENT PROJECT.
SECTION : TB.CONTROL SEKTION.

2. FISCAL YEAR : 1983/1984.

3. TRIMESTER : I, II, III, IV.

4. INTRODUCTION :

a. Based on Record of discusion, Oct,10,1977
b. Strategy of Regional Development in North Sumatera
c. Strategy of Rural Dovelopment in Asahan Area.

5. G o a l : Improvement of health conditions in 3 Kecamatan in Asahan-Area,with objective to reduce A.F. Prevalence and incidens.

6. STRATEGY : 1.Case finding passive in Health centre and Active in the-Field by home visitor.
2.TB.Control integrated to the health centre.
3.Passive Case Finding and Fixation in all sub Health centre.
4.All of Sputum Examination in health centre laboratory.
5.Treatment Case in H.C and sub HC

7. CONCEPTUAL FRAME WORK:

SURVEY → Data → Planning → Man power dev) → Action → Goal
Facilities dev)
System dev

8 . ACTIVITIES :

1. Data Collection
2. Man Power development, all BPU worker trained for Sputum collection and fixation
3. Case Finding passive and active in Health centre
4. Case Holding in Health Centre,
5. Passive Case finding in all sub Health centre

.9. ACHIEVEMENT : The Result of Sputum examination and treatment cases 1983/84 as follows:

No	Health centre	Target/Year		Realization / Year	
		Sputum Exam	Treatment Cases	Sputum Exam	Treatment Cases
1	Indrapura	690	80	874 (122 %)	161 (201 %)
2	Medang Deras	430	46	592 (141 %)	25 (52 %)
3	Limapuluh	753	77	73 (9,7%)	7 (9%)
	T O T A L	1.869	203	1.512 (80,9%)	193 (94 %)

10. CONSTRAINTS :

1. Deficiency of Home Visitor
2. The location of health centre is usually far from the village
3. The lack of villagers knowledge about Tb.Control
4. The traditional ceremony could make contact infection
5. The lack or skill the microscopist
6. Tbc.workers have no incentive .

Medan, 25 Juli 1984.-

Head of Tb.Control Section
Provincial Health Services

= dr.Josua Simanjuntak =
NIP : 140050278.-

REPORT OF WATER SUPPLY ACTIVITY IN ASAHAN PROYECT FOR F.Y. 1983/ 1984.

INTRODUCTION:

In connection with the tecnical cooperation between the government of Indonesia and government of Japan in Asahan health Improvement Project ,Water Supply activities is one of the activities which was conducted from 1979 until 1983/1984.

The activities in 1983 /1984 are the continuation and development of the last year and will be Expected to develop in the future – year.

By the year of 1983/1984 we got one Sanitarian Engeonering (JICA'S – EXPERT) named: Mr .Sadao Aihara,who: Substituted and continued the – MR.MAKINO'S task on 1982/1983.

Activities :

The activities have already done on August 1983 to March 1984 such as :

(1). Establishment of the Workshop in Indrapura Laboratory and repaired hand pump.(The workshop is the office and stockroom to keep tool set,spare parts etc).
The list of the tool set and spare parts see on Enclosure. Number of hand pump have already repaired 26 Units in 8 Villages in 3 districts.

(2). Training :

2.1. Training of the Staffs from 3 Districts on Study of the mec – hanism of the hand pump and how to repair the hand pump.

2.2. Training of the 8 members LKMD (Community personel) from – 3 districts.Each member of LKMD represent from one villlage.

(3). Establishment of the organisation/ Committee in 8 villages whose – Responsible for water facilities in each villlage after community personal training (2.2)/

(4). IMPROVEMENT of 3 Artesian wells which donated by JICA in the last year,they are :

4.1. Survey of the actual condition of the three artesian wells (Sei Buah Keras,Limau Sundai and Tanjung Duda) and Exami – nation water quality (See on enclosure).

4.2. Washing of the two artesian wells (Sei Buah Keras and Limau Sundai) up to the bottom with water pressuring .

4.3. Installation of Equipment for two artesian wells which have washed already in 4.2.

* Sei Buah Keras .....

* Sei Buoh Keras Artesian well :

Submersible motor pump plus one generator,
The generator located in one small concrete house near the well.
By using generator and submersible motor pump, this facility can produce water 60 L/menit.
This quantity is more enough for the inhabitant of Sei Buoh Keras.
The generator enough operated 3 times/day i.e :

1 our in the morning.
1 our in the afternoon.
1 our in the evening.

* Tanjung Mudo Artesian well.

Deep well hand pump changed in to new type (Bellows type).
By using this new type pump, produce water increase from 0,238 l/stroke become 0,435 l/stroke.

STAFF :

1. Environmental Health Dept of Provincial Health Services of North Sumatra.
   TBH. Lumbanradja, MD, DTM-H, M.Comm.H.
   H.S. Siregit , SKM.
   N.B. Manik.
   T. Debataraja.
2. JICA Expert : Sadao Aihara.

Medan, July 1984.-

(TBH.Lumbanradja,MD,DTM-H,M.Comm.H.)

Chief of Environmental Health Dept
Provencial Health Services of North Sumatra.

PLAN OF ACTIVITIES FOR FIVE YEARS , 1984/1985 - 1988/1989 .

COOPERATION WITH JICA .

NO.	DIVISION	SECTION / UNIT.	TARGET	ACTIVITIES	UNIT OF ACTIVITY	TOTAL 5 YEARS	FISCAL YEAR				
							84/85	85/86	86/87	87/88	88/89
1	2	3	4	5	6	7	8	9	10	11	12
1.	Communicable Disease Control.	A.Disease Transmitting Insect (Vector).	A.To find out effective and efficient method in malaria Vector Control.	A.Investigation of malaria Vector Ecology.	Weekly survey & 3 mandays/week	260 Weeks 780	52 Weeks 156	52 Weeks 156	52 Weeks 156	52 Weeks 156	52 Weeks 156
		B.Vector/Larva Control.	B.Larva Control Operation.	B.Larva Control Operation (Fish Insecticide).	Village/ breeding placees.	5	1	1	1	1	1
				a.Preparatory-phase.	- Weeks - Mandays	130 25	26 25	26 -	26 -	26 -	26 -
				b.Attack phase.	- 8 mandays /2 weeks.	1040	1208	208	208	208	208
		C.Malaria Parasitology.	C.To suppress malaria prevalence and to determine malaria season.	C.Malaria parasite survey.	Weekly survey (Weeks).	260	52	52	52	52	52
					3 mandays /week.	780	156	156	156	156	156

PLAN OF ACTIVITIES FOR FIVE YEARS , 1984/1985 - 1988/1989

EXPERT REQUEST TO JICA .

No.	DIVISION	SECTION	KINDS OF EXPERTS REQUESTED	NUMBER OF EXPERT					TOTAL 5 YRS.	ASSIGMENT	
				84/85	85/86	86/87	87/88	88/89		SHORT TERM	LONG TERM
1.	Communicable Disease Control.	A. Disease Transmitting Insect (Vector)	Vector Ecologist	1	1	1	1	1	5	-	x
		B. Vector/Larva Control.	Specialist on Larva Control Operation.	1	1	1	1	1	5	x	-
		C. Malaria Parasitology.	Specialist on Malaria Parasite (Parasitologist).	1	1	1	1	1	5	-	x

PLAN OF ACTIVITIES FOR FIVE YEARS , 1984/1985 - 1988/1989 .

FELLOWSHIP REQUEST TO JICA .

3.

NO.	DIVISION	SECTION / UNIT	KINDS OF FELLOWSHIP REQUESTED	NUMBER OF FELLOWSHIP					TOTAL 5 YEARS	REMARKS
				84/85	85/86	86/87	87/88	88/89		
1.	Communicable Disease Control.	A.Disease Transmitting Insect (Vector).	- Basic Entomology	1	-	-	-	-	1	
			- Intermediate Entomology	-	1	-	-	-	1	
			- Advance Entomology	-	-	1	-	-	1	
		B.Vector/Larva Control.	- Larva Control-Operation.	1	1	1	-	-	3	
		C.Malaria Parasitology.	- Malaria Parasitology.	-	1	-	-	-	1	

Asahan Health Improvement Project
Equipment/Material Request Form.

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U n i t : DIVISION OF COMMUNICABLE DISEASES CONTROL
Sub Unit : SECTION OF MALARIA CONTROL.

No.	I t e m	Specification	Unit	Quantity	Remarks
	I. TRANSPORTATION.				
1.	Toyota Jeep with a two wheels cart for carrying power sprayer.	Toyota	unit	1	
	II. DISEASE TRANSMITTING INSECTS.				
2.	Chloroform		liter	40	
	Methanol		"	20	
3.	Xylene		"	20	
4.	Ethanol		"	20	
5.	Giemsa Solution		"	12	
6.	Napthalene (Pellet)	500 g/pack	pack	80	
7.	Para- di- chlorbenzine (Pellet)	500 g/pack	"	80	
8.	Paper cup	200 ml	pcs	2000	
9.	Rubber tube Amber-colored , outside.	diameter 15mm	meter	1000	
10.	Slide glass for Microscope, polished edged, clear.		pcs	5000	
11.	Cover glass for microscope	15 x 15mm 100 pcs/box	box	100	
12.	Glass tube, polished edged,	15 mm outside, 13 mm inside diameter		-	
		25 cm length, 20 cm length	pcs	200	
13.	Plastic pipette with bellows SAM HELLOPETTE	2 ml	pcs	100	
		5 ml		-	
		10 ml	pcs	100	
14.	Plastic Dipper	1000 ml	"	20	
15.	Plastic bottle, large mouth	type 100 ml	"	500	
16.	Packing tape (Gum tape)	Cloth type	rolls	40	
		Paper type	"	40	
17.	Nylon cloth quality is the game to insect collection nets		"	4	
18.	Plastic Net, White, Mesh finer than Mosquito Net	1 m x 50 m	rolls	4	

Date : .....

Signed : .....

Aceh Health Improvement Project
Equipment/Material Request Form.

U n i t : DIVISION OF COMMUNICABLE DISEASES CONTROL
Sub Unit : SECTION OF MALARIA CONTROL

No.	I t e m	Specification	Unit	Quantity	Remark
19.	Forceps, Sharp points and Stainless	1 m x 50 m	pcs	40	
20.	Rubber Boots, short (35cm hight)	Size 25 cm 26 cm	" "	25 20	
21.	Self - adhesive label	10 x 32 cm	"	5000	
22.	Lens paper		pack	400	
23.	Hand Flash Light	2 battery	pcs	20	
	Flash light	Head Lamp type	"	20	
25.	Screw Vial Bottle	NEGS-1 100pcs/box	box	20	
26.	Insect Pin	No 4 100 pcs/pack	pack	20	
27.	Photomicrographic Equipment for Microscope and Stereo Microscope	Olympus PM 10		-	
28.	Pluviometer, self registering ISUZU.	IZ ISUZU	set	1	
29.	Salinity Meter Yokogawa	SC - 52	set	2	
30.	Water Master Horiba U-7 with the spare expendable supplies		unit	1	
31.	Typewriter Hand operated	type 10 inch ea-carriage 20 inch	sets set	1 1	
33.	Steel Desk Single sleeve type		unit	2	
	Chair With casters		unit	2	
34.	White Board	90 x 120 cm	"	1	
35.	Incubator		"	2	
36.	Cooling Box	(Holiday Box) 25 liter	pcs	2	
37.	Electric Shallow Well Pump	150 W	unit	2	
38.	Filing Cabinet	LION B_4 - 4	"	2	
39.	Pure Water Supplies with the expendable supplies.			-	
	III. VECTOR/LARVA CONTROL.				
1.	Temephos powder (Abate insecticide).		pack of 3 kg	400	
2.	White Board, 100 x 100 cm	LION	Pcs	1	
3.	Mouse Foods Pellet type (for Rearing mosquito larva and fishes)	10 kg/pack	pack of 10kg	100	

Date : .....

Signed : .....

Asahan Health Improvement Project
Equipment/Material Request Form.

Page : 6

Unit : DIVISION OF COMMUNICABLE DISEASES CONTROL
Sub Unit : SECTION OF MALARIA CONTROL.

o.	I t e m	Specification	Unit	Quanti-ty	Remarks
4.	Power Sprayer with Engine - driven pumps for use Liquid type of Ince Insecticide.		set	2	
	IV. MALARIA PARASITOLOGY.				
1.	Kamagawa Pippette	1 ml	pcs	10	
2.	Beaker glass, 2	2 ml	"	10	
3	Beaker glass	50 ml 100 ml 250 ml	" " "	100 100 100	
4.	Erlinmeyer flask	100 ml 300 ml	" "	100 100	
5.	Measuring cylinder	50 ml 100 ml	" "	10 10	
6.	Poliyethylene washing bottle	250 ml	"	20	
7.	Glass bottle, small mouth with colour.	250 ml 500 ml 1000 ml	" " "	50 50 50	
8.	Slide glass for microscope (frost)		box of 50 pcs	1000	
9.	Batt 36 x 26 x 7 cm (horo) 32 x 44 x 7 cm (plastic)		pcs "	10 10	
10.	Erva bar for staining	40 cm	"	20	
11	Blood lancet, stainless steel		box of 50 pcs	200	
12.	Giemsa stain	100 ml/bottle	bottle	100	
13.	Powder for phosphate buffer M, PH. 7,2.	for one liter	liter	200	
14.	Filter Paper No. 2, ø 12,5 cm Toyo.	100 circular/box	box	10	
15.	PH Test Paper BTB PH 6,2 - 7,8	200 pcs/box	box	10	
16.	Writing Desk (Metal)	70 x 120 x 70 cm	set	20	
17.	Desk chair (Circular seat)	circulair seat	pcs	4	
18.	Neon lamp for desk	(220 V 15 W)	pcs	4	
19.	Book shelf (metal + glass)	90 x 40 x 180 cm	set	2	
20.	Book shelf for Microscope (metal).	92 x 46 x 180 cm	set	2	

Date : .....

Signed : .....

Asahan Health Improvement Project
Equipment/Material Request Form.

U n i t : DIVISION OF COMMUNICABLE DISEASES CONTROL
Sub Unit : SECTION OF MALARIA.

No.	I t e m	Specification	Unit	Quantity	Remarks
21.	Filing Cabinet Box (Metal, 4 drawers).	45 x 64 x 130 cm		2	
22.	Air Conditioner for laboratory	220 V		1	
23.	Plastic file	22 x 35 cm		200	
24.	Type Writer	40 inch		2	
25.	Atash Case	44 x 33 x 12 cm		10	
26.	Drying shelf	180 x 50 x 90 cm		1	
27.	Hand Tally Counter	Type H.102 - 4		5	
29.	Slide Projektor	220 V		1	
30	White Board	180 x 100 cm		2	
31.	Marker for white board	Red Blue Black Jellow		12 12 12 12	
32.	Reversal Film for Slide	ASA 400 RH 135 - 36		50	
33.	Pure water supplier with the spare exp supp.	Unit		2	
34.	Electric Shallow well pump.	150 W / Unit		2	

Date : .....

Signed : .....

PLAN OF ACTIVITIES FOR FIVE YEARS, 1984/1985 - 1988/1989

COOPERATION WITH JICA

NO.	DIVISION	SECTION/UNIT	TARGET	ACTIVITIES	UNIT OF ACTIVITY	TOTAL 5 YRS.	FISCAL YEAR					REMARKS
							1984/1985	1985/1986	1986/1987	1987/1988	1988/1989	
1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Communicable Disease Control.	Tuberculosis Control	To reduce prevalence of BTA (+) 30% in 5year from the prevalence of 1984/'85 : 0.44 %	a.Basic survey in 1984/1985 and Evaluation in 1988/1989	People	10.000	5.000	-	-	-	5.000	
				b. Case Finding and Case Holding	People	2.500	500	500	500	500	500	
				c.Training Staff of 4 Health Center.	Staff	40	40	-	-	-	-	

PLAN OF ACTIVITIES FOR FIVE YEARS, 1984/1985 - 1988/1989
EXPERT REQUEST TO JICA.

NO.	DIVISION	SECTION	KIND OF EXPERTS REQUESTED	NUMBER OF EXPERTS					TOTAL 5 YRS.	ASSIGNMENT	
				1984/1985	1985/1986	1986/1987	1987/1988	1988/1989		SHORT TERM	LONG TERM
1.	COMMUNICABLE DISEASE CONTROL.	TUBERCULOSIS CONTROL	- Tb.Laboratory Technician	1	-	1	-	1	3	x	
			- Expert on Tb. Control Program.	1	-	1	-	1	3	x	

PLAN OF ACTIVITIES FOR FIVE YEARS 1984/1985 - 1988/1989. 10.

FELLOWSHIP REQUEST TO JICA.

NO.	DIVISION	SECTION / UNIT	KINDS OF FELLOWSHIP REQUESTED	NUMBER OF FELLOWSHIP					TOTAL 5 YEARS	REMARKS
				1984/ 1985	1985/ 1986	1986/ 1987	1987/ 1988	1988/ 1989		
1.	COMMUNICABLE DISEASE CONTROL	TUBERCULOSIS CONTROL	- Statistical Method of Tb. Control	1	-	-	-	-	1	
			- Management of Tb. Control	-	1	-	-	-	1	

11.

PLAN OF ACTIVITIES FOR FIVE YEARS 1984/1985 - 1988/1989
MATERIAL/EQUIPMENT REQUEST TO JICA

DIVISION OF COMMUNICABLE DISEASE CONTROL
SECTION OF TUBERCULOSIS CONTROL

No.	I t e m s	Specification	Unit	Quantity	Remark
1.	Sterilizer	-	unit	5	-
2.	Microscope	-	unit	5	Binoculair
3.	Sputum container	-	pcs.	40.000	-
4.	Micro Slide glass	-	pcs.	40.000	-
5.	Motorcycle	Suzuki,100 cc	unit	5	-
6.	Filing Cabinet	-	unit	1	-
7.	Drugs ect.	Short terapy	packet	2.500	Rifamficine

PLAN OF ACTIVITIES FOR FIVE YEARS , 1984/1985 - 1988/1989
COOPERATION WITH JICA

NO.	DIVISION	SECTION/UNIT	TARGET	ACTIVITIES	UNIT OF ACTIVITY	TOTAL 5 YEARS	84/85	85/86	86/87	87/88	88/89	REMARKS
1	2	3	4	5	6	7	8	9	10	11	12	13
1	CDC	Worm Control	To reduce prefalence from over 30% to under 10 %	- Basic Data Survey	People	2500	500	500	500	500	500	-
				- Treatment	People	25000	5000	5000	5000	5000	5000	-
				- Evaluation Survey	People	2500	500	500	500	500	500	-
2.	CDC	Cholera	To Supres death rate down to 3 %	- Case finding and case holding of cholera/diarrhea	People	21500	4000	4000	5000	4000	4000	Adjusted with the P4D program according to instructions from central level.
				- Rectal Swab	People	2100	400	400	500	400	400	

PLAN OF ACTIVITIES FOR FIVE YEARS
1984/1985 - 1988/1989
EXPERT REQUEST TO JICA

NO.	DIVISION	SECTION/UNIT	KINDS OF EXPERT REQUESTED	NUMBER OF EXPERTS					TOTAL 5 YEARS	ASSIGNMENT	
				84/85	85/86	86/87	87/88	88/89		SHORT TERM	LONG TERM
1.	CDC	Worm Control	Parasitologist	1	1	1	1	1	5	-	x
2.	CDC	Cholera	Cholera Control	1	1	1	1	1	5	x	-

PLAN OF ACTIVITIES FOR FIVE YEARS
1984/1985 - 1988/1989
FELLOWSHIP REQUEST TO JICA

NO.	DIVISION	SECTION/UNIT	FELLOWSHIP REQUESTED	NUMBER OF FELLOWSHIP					TOTAL 5 YEARS	REMARKS
				84/85	85/86	86/87	87/88	88/89		
1.	CDC	Worm Control	Laboratory Study	1	1	1	1	1	5	-
2.	CDC	Cholera	Research Analitycal Epidemiology.	1	1	1	1	1	5	-

PLAN OF ACTIVITIES FOR FIVE YEARS 15.
1984/1985 - 1988/1989
MATERIAL & EQUIPMENT REQUEST TO JICA

DIVISION OF CDC
SCTION OF WORM CONTROL

No.	Items	Specification	Unit	Quantity	Remarks
1.	Microscope Binoculair	OLYMPUS	pcs	3	-
2.	Streomicroscope	OLYMPUS	pcs	1	-
3.	Centrifuge tube 5000 rpm		tube	1	-
4.	Centrifuge tube		pcs	200	-
5.	Health meter		pcs	2	-
6.	Test Tube (16 x 165 mm)		pcs	2000	-
7.	Tube vack 50 tube (17 x 17mm)		pcs	10	-
8.	Stool Container		pcs	13500	-
9.	Hemometocyan reagent Kit		kit	40	-
10.	Whatmans filter paper no.2 (40 x 40)		lbr	100	-
11.	Para Film M		roll	20	-
12.	Adhesive label		pcs	15000	-
13.	Cellophane paper (Kato Method)		pcs	15000	-
14.	Centrifuge for Hemotocrit (11.000 rpm)		pcs	2	-
15.	Capillery tubes for hematocrit 75 mm.		pcs	3000	-
16.	Tube sealer and holder		pcs	200	-
17.	Polytyline paper (culture)		roll	50	-
18.	Cover glass 18 x 24 mm		pcs	2000	-
19.	Ice box		pcs	10	-
20.	Ancyloscope		pcs	2	-
21.	Refrigerator		pcs	2	-
22.	Kamagome pipette rubber cap (1 ml)		pcs	10	-
23.	Mescylinder (1000 ml)		pcs	2	-
24.	Enameled tray (35 x 45 x 9cm)		pcs	2	-
25.	Capillery tubes heparinized (100)		box	10	-

PLAN OF ACTIVITIES FOR FIVE YEARS
1984/1985 - 1988/1989

MATERIAL & EQUIPMENT REQUEST TO JICA

DIVISION OF CDC
SECTION OF CHOLERA

No.	Items	Specification	Unit	Quantity	Remarks
1.	Carry and Blair		bottle	2100	-
2.	Alkali pepton		"	600	-
3.	Cotton Tip Applicator		pcs	3000	-
4.	TCBS Agar		bottle	600	-
5.	Thermos flask.		pcs	30	-
6.	Rubber hand Gloves		pcs	600	-

PLAN OF ACTIVITIES FOR FIVE YEARS , 1984/1985 - 1988/1989
COOPERATION WITH JICA

NO.	DIVISION	SECTION/ UNIT	TARGET	ACTIVITIES	UNIT OF ACTIVITY	TOTAL 5 YEARS	84/85	85/86	86/87	87/88	88/89	REMARKS
1	2	3	4	5	6	7	8	9	10	11	12	13
1	HEALTH - EDUCATION	Direct Education	- 35 x	Film Show	1 x / H.C	35 x	7	7	7	7	7	
			- 35 x	Education through traditional media.	1 x / H.C	35 x	7	7	7	7	7	Through : - Ludruk - Nasyid - Opera
				Production of posters	pcs	7500 pcs	1500	1500	1500	1500	1500	Topics : - Nutrition - F.Planning - Diarrhea - Immunization
			- 12 x	Education through Radio Broadcast.	1 x / month	60 x	12	12	12	12	12	Arranged by Asahan Regency Health Service.
		Community Participation	70 volunteers receive training	Follow up of community participation	Village	7	2	2	1	1	1	
			Recruitment of 50 volunteers	Establisment of community participation in village	Village	5	1	1	1	1	1	
			5 x		Meeting with other programs & other sector in provincial level.	5	1	1	1	1	1	

1	2	3	4	5	6	7	8	9	10	11	12	13
		School Health Service	100 Primary School and Junior High School receive S.H. kit.	Provision of School Health Kit	1 Kit/ School	100	20	20	20	20	20	
			20% of the Primary Scholl have "little doctor"	Development of "little doctor"	1 group of little doctors/Primary School	60 groups	12	12	12	12	12	

PLAN OF ACTIVITIES FOR FIVE YEARS , 1984/1985 - 1988/1989
EXPERT REQUEST TO JICA

NO.	DIVISION	SECTION/UNIT	KINDS OF EXPERT REQUESTED	NUMBER OF EXPERTS					TOTAL 5 YEARS	ASSIGNMENT	
				84/85	85/86	86/87	87/88	88/89		SHORT TERM	LONG TERM
1.	HEALTH EDUCATION	- Community Participation	Community Organization	1	-	1	-	1	3	X	-
		- Direct Education	Media	1	-	1	-	-	2	X	-

PLAN OF ACTIVITIES FOR FIVE YEARS , 1984/1985 - 1988/1989

FELLOWSHIP REQUEST TO JICA

No.	DIVISION	SECTION/UNIT	FELLOWSHIP REQUESTED	NUMBER OF FELLOWSHIP					TOTAL 5 YEARS	REMARKS
				84/85	85/86	86/87	87/88	88/89		
1.	HEALTH EDUCATION	-Direct Education	- Media Production	1	-	-	-	-	1	
			- AVA	-	1	-	-	-	1	
		-Community Participation	- Primary Health Care	1	-	-	-	-	1	
			- Community Organization	-	-	-	1	-	1	
		-School Health Service	Media in School	-	-	1	-	-	1	

PLAN OF ACTIVITIES FOR FIVE YEARS
1984/1985 - 1988/1989
MATERIAL & EQUIPMENT REQUEST TO JICA

DIVISION OF HEALTH EDUCATION
SECTION OF DIRECT EDUCATION AND COMMUNITY PARTICIPATION

No.	Items	Specification	Unit	Quantity	Remarks
1.	Mobile Unit	Jeep	Unit	1	For Mass Communication
2.	Video Unit	24 inch	Unit	1	For group education
3.	Movie Camera	16 mm	Unit	1	-
4.	Video Camera	16 mm	Unit	1	-
5.	Video Cassette	16 mm	Roll	8	-
6.	Film for Education	16 mm	Roll	5	Topics : - Nutrition - F.P - Immunization - Diarrhea - Comm Organization
7.	Wireless amplifier	National, 220 Volt	Unit	2	
8.	Slide Projector	National, 220 Volt	Unit	1	
9.	Stencil Machine		Unit	1	

PLAN OF ACTIVITIES FOR FIVE YEARS , 1984/1985 - 1988/1989 . 22.

COOPERATION WITH JICA .

NO.	DIVISION	SECTION/ UNIT	TARGET	ACTIVITIES	UNIT	TOTAL 5 YRS.	FISCAL YEAR					REMARKS
							84/85	85/86	86/87	87/88	88/89	
1.	Family Health Care.	Nutrition	- To reduce cases of Prote in Calories Malnutrition in children under five years.	Family Nutrition Program. - Weighing - Education - Yards plants - Reporting Recording - Suplementary activities.	Village.	124	24	48	72	96	124	Cumulative
2.	idem	idem	- To elminate Xerophthalmia in children under five years.	Distribution of high dosage Vitamin A.	Children under five years	186.000	3.600	72.000	108.000	144.000	186.000	

PLAN OF ACTIVITIES FOR FIVE YEARS , 1984/1985 - 1988/1989

EXPERT REQUEST TO JICA

No.	DIVISION	SECTION / UNIT	KINDS OF EXPERT REQUESTED	NUMBER OF EXPERT					TOTAL 5 YRS.	ASSIGNMENT		REMARKS
				84/85	85/86	86/87	87/88	88/89		SHORT TERM	LONG TERM	
1.	Family - Health Care	Nutrition	Antrophologyst food habit.	1	1	1	1	1	5	-	x	
2.	idem	idem	Nutritionist.	1	1	1	1	1	5	-	x	

PLAN OF ACTIVITIES FOR FIVE YEARS , 1984/1985 - 1988/1989 .

FELLOWSHIP REQUEST TO JICA .

No.	DIVISION	SECTION/UNIT	KIND OF FELLOW-SHIP REQUESTED	NUMBER OF FELLOWSHIP					TOTAL 5 YEARS	REMARKS
				84/85	85/86	86/87	87/88	88/89		
1.	Family Health Care	Nutrition	- AVA Production	2	-	-	-	-	2	
			- Fellowship for Nutrition.	-	2	2	-	-	4	

PLAN OF ACTIVITIES FOR FIVE YEARS , 1984/1985 - 1988/1989 .
MATERIAL / EQUIPMENT REQUEST TO JICA .

- DIVISION OF FAMILY HEALTH CARE
- SECTION OF NUTRITION
- MATERIAL / EQUIPMENT REQUEST , 1984/1985 .

NO.	ITEMS	SPECIFICATION	UNIT	QUANTITY	REMARKS	FISCAL YEAR				
						84/85	85/86	86/87	87/88	88/89
1.	Weighing Scale.	Capacity 25 kg	unit	248		48	48	48	48	56
2.	Infant Growth Chart	Coloor Print	pcs	186.000		36.000	72.000	108.000	144.000	186.000
3.	Guide book for Nutrition volunteers	Colored picture - strories.	pcs	2.600		480	480	480	480	560
4.	Poster	Poster concerning - nutrition 60 x 80 cm	pcs	5.000		1.000	1.000	1.000	1.000	1.000
5.	Capsule Vit. A.	200.000 I.U.	caps	372.000		72.000	144.000	216.000	288.000	372.000

PLAN OF ACTIVITIES FOR 5 YEARS, 1984/1985 - 1988/1989

COOPERATION WITH JICA.

DIVISION OF ENVIRONMENTAL HEALTH DEVELOPMENT.

No.	DIVISION	SECTION/UNIT	TARGET	ACTIVITIES	UNIT OF ACTIVITY	TOTAL 5 YEARS	FISCAL YEAR				
							1984/85	1985/86	1986/87	1987/88	1988/89
1	2	3	4	5	6	7	8	9	10	11	12
1.	Environmental-Health.	A.Hydrogeology	51 Villages	- Survey	mds	1275 mds	-	650 mds.	625 mds.	-	-
		B.Sanitary Enginering	246 Trainees	- Training	mds	1230 mds.	230 mds.	250 mds.	250 mds.	250 mds.	250 mds.
				- Workshop	mds	*	*	*	*	*	*
		C.Water Quality Control.	106 Villages	- Survey	mds	1282 mds	-	324 mds.	312 mds.	324 mds.	312 mds.
			14 Trainees	- Training	mds	112 mds.	-	56 mds.	-	56 mds.	-
			106 Villages	- Health Education.	mds	-	-	*	*	*	*

Remarks : Depend upon the need / expert.

PLAN OF ACTIVITIES FOR FIVE YEARS
1984/1985 - 1988/1989
EXPERT REQUEST TO JICA

NO.	DIVISION	SECTION	KIND OF EXPERT REQUEST	NUMBER OF EXPERT					TOTAL 5 YEARS	ASSIGMENT	
				1984/1985	1985/1986	1986/1987	1987/1988	1988/1989		SHORT TERM	LONG TERM
1	2	3	4	5	6	7	8	9	10	11	12
1.	ENVIRONMENTAL HEALTH	A.WATER SUPPLY	(1) Hydrogeologist	-	+	x	-	-	2	1	1
			(2) Water Supply Engineering.	+	x	+	+	+	5	1	4
			(3) Specialist on Water Quality.	-	+	+	+	+	4	-	4
		B.PUBLIC CLEANING	(4) Specialist on Rural Sewerage.	-	x	x	x	x	4	4	-
			(5) Specialist on Air Pollution.	-	-	+	+	+	3	-	3
			(6) Specialist on Pesticide and Soil Pollution.	-	+	+	+	-	3	-	3
			TOTAL	1	5	6	5	4	21	6	15

Remarks : (x) : Short Term
(+) : Long Term

PLAN OF ACTIVITIES FOR FIVE YEARS
1984/1985 - 1988/1989

FELLOWSHIP REQUEST TO JICA

NO.	DIVISION	SECTION	KINDS OF FELLOWSHIP REQUESTED	NUMBER OF FELLOWSHIP					TOTAL	REMARKS
				1984/1985	1985/1986	1986/1987	1987/1988	1988/1989	5 YEARS	
1	2	3	4	5	6	7	8	9	10	11
1.	ENVIRONMENTAL HEALTH	A. WATER SUPPLY	1.Assistant on Hydrogeology	1	-	1	-	1	3	
			2.Water Facilities Design and Construction.	-	1	-	1	1	3	
			3.Laboratory Assistant on Water Quality Control.	-	-	1	-	1	2	
			4.Waterworks Technical Management.	-	-	1	-	-	1	
		A. PUBLIC CLEANING	1.Technical Assistance for Water Pollution/Sewerage Treatment and Construction	-	1	-	1	-	2	
			2.Technical Assistance for Soil Pollution and Pesticide Control.	-	-	1	1	-	2	
			3. Air Pollution & Vibration Control.	-	1	-	-	-	1	
			TOTAL	1	3	4	3	3	14	

PLAN OF ACTIVITIES FOR FIVE YEARS 1984/1985 - 1988/1989
EQUIPMENT/MATERIAL REQUEST FROM JICA

DIVISION : ENVIRONMENTAL HEALTH DEVELOPMENT
SECTION : WATER SUPPLY.

No.	I t e m	Specification	Unit	Total	Remark
	1985/1986.				
1.	Geoelectric Resistivity	Geological Survey	Unit	2	
2.	Theodolit	Top.Con 70	"	2	
3.	Fotograph Camera	Standard/Tele Lens (M)	"	2	
4.	4 Wheel Vehicle	Hard Top Diesel	"	1	
5.	Drilling Rig	DR - 1.000.	"	1	
6.	Compressor		"	1	
7.	Helm, Boot, Dress, Gloves		Set	36	
	1986/1987.				
1.	Oce Light Druk	Type Oce - 20 P	Unit	1	
2.	Foto Copy Machine	Xerox	"	1	
3.	4 Wheel Vehicle Jeep	Hard Top Diesel	"	1	
4.	Sound Projector 16 mm	ELMO YP - 350	"	1	
5.	Over Head Projector	ELMO MF - 3300	"	1	
6.	Sound Camera 16 mm	ELMO	"	1	
7.	Fotograph Camera + Tele Lens (M)	Canon	"	1	
	1987/1988.				
1.	Multistage Pump	Bight Presure 200 M	Unit	1	
2.	Meeting Amplifier	WA / 24	"	2	
.	Wireless Microphone	WA WMA	"	2	
4.	Wireless Microphone	MA - 220 W	"	2	
5.	Filter Set Polypropylene and Filter Set Carbon Active.		Set	106	
6.	Spectrofotometer Specialy for Examination of Water Quality		"	2	
7.	Reagent for Water Analysis.		"	2	
8.	Binocular Microscope		"	2	
	1988/1989.				
1.	Centrifugal Water Pump	Diesel Engine, 15 HP, Suction Hose 2	Unit	2	
2.	Drafting Machine	L I O N	"	2	
3.	Slide Projector	E L M O	"	1	
4.	Welding Electric With Generator	LION BRAND, Type225/3AS Yanmar Engine, 15 HP, Dynamo 225 AC/DC.	"	1	

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PLAN OF ACTIVITIES FOR FIVE YEARS 1984/1985 - 1988/1989
EQUIPMENT/MATERIAL REQUEST FROM JICA

DIVISION : ENVIRONMENTAL HEALTH
SECTION : PUBLIC CLEANING.

No.	I t e m	Specification	Unit	Total	Remark
1.	TRANSPORTATION.				
	- Diesel Jeep	Toyota/Dhaihatsu	Unit	1	
2.	RURAL SEWERAGE.				
	- Compass		Pieces	2	
	- Drawing Paper		Roll	2	
	- Lineair 1 m.		Dozen	5	
	- Pencil		"	10	
	- Colour Pencil		"	10	
	- Erases Pencil		Pieces	10	
	- Stationery Case (Map)		"	250	
	- Ink		Bottle	12	
	- Ballpoint		Dozen	12	
	- Poster for Health Education.		Sheet	500	
	- Graph Paper		Roll	5	
	- Camera Standard Lens		Pieces	1	
	- Wide Angle Lens		Pieces	1	
	- Calculator		Pieces	1	
	- Percolation Test Kit		Set	2	
	- Fiber Glass Tape 100 m.		Pieces	2	
	- Field Dresses		Set	12	
3.	PESTICIDE SOIL CHEMICAL.				
	- Chromatography Portable		Set	1	
	- Spectro Fotometer		"	1	
	- Pesticide Protector Dresses.		"	24	
4.	AIR POLLUTION.				
	- CO/CO2 Kit		Set	2	
	- SO Kit		"	2	
	- NO Kit		"	2	
	- Vibration Detector		"	1	
	- Air Humidity Test Kit		"	2	
	- Air Thermometer		Dozen	5	
	- Wind Rose Kit		Set	2	
	- Sound Level Meter		"	2	

PLAN OF ACTIVITIES FOR FIVE YEARS, 1984/85 - 1988/89

COOPERATION WITH JICA.

DIVISION OF ENVIRONMENTAL HEALTH DEVELOPMENT.

I. WATER SUPPLY.

1. Hydrogeology.

Objective : a. to find out water table at 6 District in Asahan regency

b. to decide which water facilities could be constructed at particular place in the project.

Activities : Survey 5 days/village.

Target : 51 villages.

Duration : 2 years (1985/86 and 1986/87).

Equipment : - Geoelectric Resistivity.

- Teodolit.

- Field dress (Helm/hat, boot, gloves, dresses, etc.).

Implementation for 2 year.

1985/86 : 5 staffs x 5 days x 26 villages

= 650 man days (= 650 mds.).

1986/87 : 5 staffs x 5 days x 25 villages

= 625 man days (= 625 mds.).

Total : 1275 mds.

Manpower :

- 1 person (Expert from JICA).

- 3 person/staffs from Province (2 Staff as Class II, and 1 Staff as Class III).

2. Sanitary Survey .

Objective : a. Establishment of workshop at Indrapura which was-built in 1984.

b. Rehabilitation of disfunctioning water facilities in the Asahan project.

c. Training of Health Center staffs and LKMD employee Community volunteers on water facility repair/construction.

Training :

Duration of training : 5 days per group in one year for 4 years (1984/85 - 1988/89).

Number of trainees : Health Center Staff : 14 persons.

- LKMD Employee : 116 persons.

- Villages person : 116 persons.

= 246 persons.

Plan of .....

Plan of training : 1984/85 : 50 person x 5 days.
1985/86 : 50 person x 5 days.
1986/87 : 50 person x 5 days.
1987/88 : 50 person x 5 days.
1988/89 : 46 person x 5 days.

Budget : - Transport : Rp.4000/trainee (246 x Rp.4000,-).
- Implementation Rp.6000/days/trainee (246 x 5 x Rp.6000,-).

Workshop & Rehabilitation Equipment :

- 1 For workshop 1984/85 : see enclosed list of Equipment Request in 1984/85.
- And afterwards : according to the development of workshop.

Staff / manpower :

- 1 person specialized in Water Supply Engineering (JICA EXPERT).
- 3 person from Province.
- 1 person from Asahan Regency.
- 1 person from Health Center.

3. Water Quality and Hydrogeology.

Objective : 1. Survey
2. Health education.
3. Appropriate technology on water quality facilities.
4. Training for Health Center staff (7 Health Centers, 4 days).

Target : a. Survey and HE : 106 villages (4 years).
b. Training : all Sanitary staff of Health Center in 2 years (1985/86, 1986/87).

Survey Staff : 1 person from JICA EXPERT.
3 person from Province.
1 person from Asahan Residence.
1 person from Health Center.

Implementation of Survey.

- 1985/86 = 27 villages x 3 days x 4 prs = 324 mds.
- 1986/87 = 26 villages x 3 days x 4 prs = 312 mds.
- 1987/88 = 27 villages x 3 days x 4 prs = 324 mds.
- 1988/89 = 26 villages x 3 days x 4 prs = 312 mds.

Equipment :

- Polypropylene filter set.
- Carbon active filter set.
- Spectro photo meter specially for water quality examination.
- Reagent for water analysis kit.
- Binocular Microscope.

II. PUBLIC .....

II. PUBLIC CLEANING :

4. Rural Sewerage Activities.

a. Survey - Household survey on sewerage in the Rural Community.
- Health education and training on water pollution sewerage and garbage.

Duration of Survey : 4 years (1985/86 - 1988/89).

Staff : 1 person from JICA EXPERT on Rural Sewerage.
2 person from Province.
1 person from Regency
1 person from Health Center } 4 person.

Unit of Activity :
- 5 days/week for 6 months (24 weeks).
- 1 year = 24 x 5 days x 4 person = 480 mds.
- 4 year = 4 x 480 days = 1920 mds.

Equipment :
- Field dress.
- Percolation test.
- Camera (standard + wide angle lens).
- Poster.
- Administrative/Office equipment.
- Calculator.

b. Training and Health education.

- Trainee : 124 person from LKMD.
12 person from Health Center (2 person/ Health Center).
- Duration : 4 year (1985/86 - 1988/89).
: 1 year = $\frac{124 \times 12}{4}$ = 34 Trainees.
- Budget : Transport : 34 x Rp.4.000,- = Rp. 136.000,-
One year implementation : 34 x Rp.6.000 x 5 = 1.020.000,-

Rp. 1.156.000,-

5. Chemical Analysis of the Air. (Air Pollution control).

Objective : To find out the level of air analysis around Smelter-site.

Activities : - Survey.

Staf : 1 person Expert from JICA on Air Pollution.
2 person from Province.
1 person from Regency.
1 person from Health Center.

Duration : 4 years (1985/86 - 1988/89).

Unit of Activities : 5 days/week, for 20 weeks/year.
4 x 5 days x 20 weeks = 400 mds/years =
1.600 mds for 4 years.

Equipment .....,

Equipment :

- CO/CO2 analysis Kit.
- SO Analysis Kit.
- NO Analysis Kit
- Vibration detector Kit
- Field dress.
- Wind direction meter Kit.
- Air Humidity test.

6. Soil Pollution and Pesticide Control.

Objective : to find out the standard of Pesticide and heavy metal to- the community, soil and vegetation around the project area.

Activities : Survey on:

1. Chemical analysis of the soil.
2. Human blood which was exposed to Pesticide.
3. Residual Pesticide on Vegetation which use Pesticide.

Staff : 1 person JICA Expert, Spesialist on Soil and Pesticide.
2 person from Province.
1 person from Asahan Regency.
1 person from Health Center.

Duration : 4 year (1985/86 - 1988/89).

Unit of activities : 5 days/week for 45 weeks (3 x 15 week/kind of survey).
4 person x 5 days x 45 weeks = 900 mds/year.

Equipment :

- Vibration detector
- Air Humidity test kit
- Air thermometer
- Wind rose kit
- Sound level meter.
- Chromatography (portable).
- Spectro photometer for Pesticide and heavy metod.
- Pesticide Protector dress (Helm, Glasses Masker, Boot, Dress, Gloves).

TABLE 1 POPULATION OF NORTH SUMATRA 1971 - 1982.

No.	Municipality/ Regency	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
1.	Medan	635562	668673	676876	995480	1041137	1089213	1129686	1205802	1278529	1373747	1409481	146021
2.	Binjei	59868	61548	63267	65026	66824	68661	70538	72454	74410	76444	78432	77561
3.	Pematang Siantar	129098	131120	133251	135490	137839	140297	142863	145539	148323	150296	154204	149143
4.	Tebing Tinggi	30299	30922	31583	32284	33024	33804	34622	35480	89665	92068	94462	94056
5.	Tanjung Balai	33535	34245	35005	35825	36674	37528	38540	39547	40603	41776	42862	42679
6.	Sibolga	42182	43377	44724	46225	47879	49686	52646	53760	56026	59466	61012	61527
7.	Deli Serdang	1430237	1466409	1526879	1277592	1300638	1321030	1345864	1339206	1285021	1241057	1273324	1287396
8.	Langkat	519447	538462	557702	577116	596854	616766	636902	657262	677846	701380	719616	716356
9.	Tanah Karo	182156	186060	190046	194116	198268	202504	206822	211222	215706	219202	224900	228488
10.	Simalungun	662257	672390	682678	693123	703728	714495	725427	736526	747526	759024	778759	784055
11.	Asahan	593584	612979	632545	652281	672188	692265	712512	732930	753519	774980	795129	794404
12.	Lbuhan Batu	360153	375911	392641	410343	429015	443660	469275	490862	513421	547171	561397	574798
13.	North Tapanuli	622535	628791	635745	642138	649235	656645	667300	673881	678161	682412	700155	704219
14.	Central Tapanuli	135857	139396	142942	146494	150051	153615	157285	160760	164342	167161	171507	176227
15.	Shouth Tapanuli	628394	642439	656613	670917	685350	699912	714604	729452	744376	754961	774590	795442
16.	Dairi	184822	190396	196138	202048	208124	214368	220779	227357	234103	241785	248071	254988
17.	Nias	370825	379362	388434	398040	408180	418854	430062	441804	454081	468021	480190	486681
	Total	6620811	6802480	6987069	7174578	7365008	7538357	7754627	7953817	8155928	8350950	8568074	8688236

Source :

Bureau of Statistics
Province of North Sumatra, 1984.

TABLE : 2. POPULATION OF PROJECT AREA AND OF ASAHAN REGENCY ACCORDING TO CENSUS.

PROJECT AREA	1970	1975	1980
1. Kecamatan Medang Deras	23.137	24.756	27.169
2. " Air Putih	47.124	49.695	62.315
3. " Lima Puluh	59.950	60.080	64.425
4. " Tanjung Tiram	55.128	61.391	68.741
5. " Buntu Pane	37.737	39.961	49.097
6. " Pulau Rakyat	42.337	49.392	63.699
7. " Bandar Pulau	23.196	29.675	35.177
Total 7 Kecamatan	285.609	314.950	370.629

ASAHAN REGENCY	1970	1975	1980
Total 17 Kecamatan	575.745	672.188	774.980

TABLE 3 NUMBER OF VILLAGE POPULATION ACCORDING TO CENSUS IN - KECAMATAN : MEDANG DERAS.

No.	Name of the Village	1970	1975	1980
1.	Pangkalan Dodek	4.419	5.092	4.920
2.	Sidomulyo	1.603	1.694	1.718
3.	Sei Buah Keras	2.188	2.117	2.120
4.	Aek Nauli	978	967	1.097
5.	Nanas Siam	1.326	1.193	1.311
6.	Durian	1.743	1.864	1.910
7.	Medang	2.767	2.821	2.998
8.	Pakam	2.091	2.520	3.329
9.	Lalang	1.552	1.737	2.674
10.	Pematang Cengkering	2.008	2.188	2.416
11.	Sei Rakyat	1.656	1.620	1.750
12.	Tanjung Sigoni	811	956	926
	Total	23.137	24,756	27.169

Source :

Regency Health Service of Asahan, 1984.

TABLE 4 NUMBER OF VILLAGE POPULATION ACCORDING TO CENSUS IN KECAMATAN : AIR PUTIH.

No.	Name of the Village	1970	1975	1980
1.	Indrapura	3.422	4.029	4.656
2.	Limau Sundai	2.515	2.642	3.322
3.	Pematang Panjang	3.699	3.922	3.640
4.	Suka Raja	1.417	1.609	1.602
5.	Tanah Tinggi	2.455	2.558	2.975
6.	Tanjung Muda	1.206	1.287	1.185
7.	Tanah Merah	904	1.008	1.328
8.	Aras	2.176	2.353	2.670
9.	Tanjung Kubah	2.645	2.237	2.658
10.	Pasar Lepan	1.700	1.756	2.295
11.	Sipare-pare	2.217	2.442	3.132
12.	Pematang Jering	2.098	2.107	3.125
13.	Simodong	2.179	2.407	3.460
14.	Sipare-pare Plantation	1.838	1.437	3.295
15.	Sei Suka Deras	1.869	2.415	3.487
16.	Tanjung Sari	2.839	2.812	3.412
17.	Sei Simujur	1.995	2.249	2.994
18.	Tanjung Kasau Plantation	2.973	2.685	2.826
19.	Tanjung Kassu	1.216	1.489	1.308
20.	Laut Tador	3.163	3.320	3.902
21.	Tanjung Parapat	1.463	1.492	1.756
22.	Kwala Tanjung	1.145	1.339	3.280
Total		47.124	49.695	62.315

Source : Regency Health Service of Asahan, 1984.

TABLT 5 NUMBER OF VILLAGE POPULATION
ACCORDING TO CENSUS IN
KECAMATAN : LIMA PULUH.

No.	Name of the Village	1970	1975	1980
1.	Tanah Gambus Plantation	5.562	4.474	4.648
2.	Lima Puluh Plantation	2.899	2.702	2.527
3.	Tanah Hitam Ulu Plantation	3.271	2.603	2.659
4.	Tanah Hitam Hilir Plantation	1.571	1.408	1.551
5.	Dolok Plantation	1.340	1.757	1.799
6.	Limau Manis Plantation	1.255	781	629
7.	Kwala Gunung Plantation	1.290	719	355
8.	Lima Puluh	2.590	2.698	3.154
9.	Antara	1.047	1.789	1.947
10.	Cahaya Pardomuan	1.260	1.320	1.509
11.	Kwala Gunung	761	912	937
12.	Air Hitam	2.644	2.968	3.785
13.	Simpang Dolok	1.271	1.451	1.456
14.	Empal Negeri	2.471	2.630	3.239
15.	Lubuk Besar	2.577	3.437	4.190
16.	Sumber Makmur	1.114	1.296	1.245
17.	Sumber Padi	1.430	1.883	2.166
18.	Mangkai Baru	3.224	3.575	4.424
19.	Simpang Gambus	5.555	6.759	7.748
20.	Pematang Panjang	5.486	6.222	6.404
21.	Guntung	2.144	2.544	2.350
22.	Perupuk	5.188	5.604	6.406
Total		55.950	60.080	64.425

Source : Regency Health Service of Asahan, 1984.

TABLE 6 NUMBER OF VILLAGE POPULATION ACCORDING TO CENSUS IN KECAMATAN : TANJUNG TIRAM.

No.	Name of the Village	1970	1975	1980
1.	Durian	1.376	1.513	1.620
2.	Desa Gajah	3.418	4.689	4.903
3.	Air Putih	1.142	1.312	1.299
4.	Suka Makmur	897	1.902	1.194
5.	Tanjung Tiram	3.274	2.953	3.628
6.	Kwala Sikasim	1.803	2.122	2.328
7.	Sei Balai	4.536	5.349	6.113
8.	Bogak	4.391	5.102	6.290
9.	Bagan Dalam	2.729	3.042	3.715
10.	Lima Laras	2.867	3.375	3.968
11.	Guntung	767	836	975
12.	Sukamaju	3.289	4.330	5.323
13.	Sei Mantaram	1.153	1.355	1.340
14.	Ujung Kubu	8.877	9.749	12.000
15.	Sei Balai Plantation	5.516	5.315	4.231
16.	Si Ajam	2.671	2.302	2.365
17.	Sukaramai	2.254	2.465	2.846
18.	Sei Bejangkar Plantation	2.266	1.964	2.253
19.	Tanjung Mulia	1.902	2.124	2.363
Total		55.128	61.391	68.741

Source:

Regency Health Service of Asahan, 1984.

TABLE 7 NUMBER OF VILLAGE POPULATION ACCORDING TO CENSUS IN KECAMATAN : BUNTU PANE.

No.	Name of the Village	1970	1975	1980
1.	Buntu Pane	4.820	4.523	6.259
2.	Tinggi Raja	4.236	5.328	6.133
3.	Perapat Janji	2.393	3.030	3.116
4.	Ambalutu	3.819	3.915	4.508
5.	Sei Silau Tua	2.422	3.041	3.302
6.	Silo Meraja	1.145	1.580	1.712
7.	Urung Pane	2.204	2.504	2.929
8.	Sei Silau Timur	4.658	3.601	4.831
9.	Terusan Tengah	2.538	2.947	3.771
10.	Piasa Ulu	5.096	5.564	8.682
11.	Sei Silau Barat	4.406	3.928	3.854
12.				
Total		37.737	39.961	49.097

Source :
Regency Health Service of Asahan, 1984.

TABLE 8 NUMBER OF VILLAGE POPULATION ACCORDING TO CENSUS IN KECAMATAN : PULAU RAKYAT.

No.	Name of the Village	1970	1975	1980
1.	P. Rakyat Pekan	1.750	1.181	1.975
2.	Orika	2.008	1.843	1.960
3.	P. Rakyat Tua	3.092	4.126	5.962
4.	Kp. Beru	780	1.095	1.532
5.	Sei Piring	434	1.025	1.036
6.	Mania	3.083	2.767	3.496
7.	Singo Sari	2.411	2.597	3.080
8.	Aek Loba	3.185	3.736	5.124
9.	Padang Nahndang	4.268	5.858	6.974
10.	Loba Jiur	834		1.135
11.	Aek Nabuntu	1.319	1.006	1.175
12.	Aek Bango	1.665	1.217	2.312
13.	Keb Aek Loba	2.459	2.488	3.294
14.	Aek Lodong/ Af.Ii	1.726	1.191	999
15.	Aek Korsik	2.297	3.828	7.042
16.	Tunggul 45	2.041	1.534	1.514
17.	Ledong Barat	3.816	4.530	6.140
18.	Persatuan	2.189	2.531	2.666
19.	Bangun	1.042	1.317	1.350
20.	Ofa Padang Mahondang	821	468	260
21.	Alang Banban	1.116	2.688	4.967
Total		12.337	49.392	63.699

Source :

Regency Health Service of Asahan, 1984.

TABLE 9 NUMBER OF VILLAGE POPULATION
ACCORDING TO CENSUS IN –
KECAMATAN : BANDAR PULAU.

No.	Name of the Village	1970	1975	1980
1.	Padang Pulau Plantation	1.193	758	799
2.	Aek Tarum "	2.012	2.256	3.314
3.	Tangga "	159	220	368
4.	Marjanji Aceh "	484	884	1.692
5.	G. Malaka "	638	903	1.211
6.	Loba Roppan "	312	487	862
7.	Rahuning "	2.047	3.198	4.691
8.	Aek Songsongan "	1.920	2.205	2.540
9.	Buntu Meraja "	1.087	1.260	1.768
10.	Bandar Pulau "	3.273	3.019	2.325
11.	Gunung Melayu "	675	3.525	3.719
12.	Bandar Pulau Pekan "	783	988	1.111
13.	Bandar Selamat "	3.083	3.121	2.998
14.	Padang Pulau "	826	1.120	1.511
15.	Aek Banban "	1.625	2.200	2.532
16.	Aek Nagaga "	2.028	1.420	2.268
17.	Gunung Melayu "	1.051	1.420	1.467
Total		23.196	29.675	35.177

Source :
Regency Health Service of Asahan, 1984.

NORTH SUMATRA HEALTH PROMOTION PROJECT

(Asahan Health Improvement Project)

Plan of Action 1984 - 1989 (OTA-43)

Unit : Malaria

MALARIA CONTROL PROGRAMME FOR FIVE YEARS (FY 1984 - FY 1988)

C o n t e n t s

I. Introduction

According to the Record of Discussion, malaria control in the Asahan district is selected as one of the important programme for the next five years. The situation of the coastal malaria in this area has been studied for the past six years. Anopheles sundaicus is thought to be the vector, although sporozoites have not been detected from mosquitoes yet. It is difficult to control malaria with residual indoor DDT-spray in this area, since the vector is exophilic. No suitable method has been established against such vectors even in other countries. WHO has recommended "space spray" in this case but it is costly and WHO further recommended "larval control" only in the case that the larval habitat is restricted. The distribution of breeding places of Anopheles sundaicus in the Asahan district is restricted to the coast and therefore "larval control" may be effective to control malaria. However, it will be impossible to attain a perfect control by larviciding, because no one is sure whether all the breeding places are treated. Assuming the low vectorial capacity of this mosquito based on the low survival rate, we expect to reduce the transmission of malaria by reducing the adult emergence, even if the larval control is not perfect.

A tentative protocol for this programme was writen in 1983 and preliminary studies to select larvicides have been performed in ponds of Perupuk village in 1983/1984. The present protocol was revised based on the progress in 1983/1984.

II. Objectives

To develop an appropriate control method to meet the environment and the state of malaria in the Asahan district of North Sumatra, especially coastal malaria transmitted by Anopheles sundaicus.

It should be proved that the method developed can control malaria below an unnoticeable level in village scale trials. In other word, reduce malaria prevalence (incidence) rate to a controlled state.

III. Target

The target should be confined to the coastal malaria transmitted by Anopheles sundaicus. The present trial should be concentrated at Perupuk village and its surrounding. Additional study sites could be selected at different places within Asahan regency or another regency for comparison of basic study on control methods.

IV. General activity for malaria control

It is desirable to strengthen the malaria control activity in general in whole North Sumatra, while a new method is being developed in the Asahan district. It can be expected for the personel engaging malaria control as well as village people to accept the new method if they have some knowledge on malaria control. Due to the lack of the trained personel, the diagnosis in villages has been uncertain. Even DDT-spray could be made completely if the purpose of the spray is well understood. The same can be said for medication. Both people working in Health Center and village should know the correct dose and regime of the medicine. Conceivable actions at present are

(1) to open training courses for Health Centre personel and
(2) to conduct Health Education to village people.

As for training course, a detailed plan will be prepared seperately.

V. Parasitological activity

(1) Development of passive case detection

Passive case detection system should be developed in the target area and a control (comparison) village. Suspected malaria patients may receive the drug with a minimum charge (free charge) at Health Center after blood examination.

(2) Malariometric survey, chloroquine resistance test and screening of G6PD deficiency are necessary to be continued in the target and other area.

(3) Seroepidemiology by the use of ELISA (Enzyme linked immunosorbent assay) will be performed.

VI. Surveys

(1) A control (comparison) village.

Perupuk village is exceptionally high in the prevalence of malaria and therefore the achievement of control could be clearly recognized. Nevertheless, a control village is desirable. The village could be selected within Asahan regency or its surroundings. Both parasitological and entomological survey should be carried out to find an appropriate control village.

(2) Target area

All the breeding places of Anopheles sundaicus in Perupuk should be recorded on a map before the control operation is commenced. The breeding places which have been routinely examined so far are within a limited area.

Therefore, i) systematic surveys should be made in the surrounding area (Lorong 3,4,5 and 6 and Guntung) and

ii) The same should be made again in the study area (Lorong 1 and 2 of Perupuk) to reduce unnoticed breeding places as far as possible.

Although the focus of malaria prevalence is Lorongs 1 and 2 of Perupuk, surrounding area can not be ignored. These surveys should be initiated in the first year, if manpower is available.

Surveys on another endemic area of malaria in North Sumatra, which may provide useful information, are recommended only when the spare manpowers and time are available.

VII. Control methods

(I) Vector Control

Control operation against Malaria in this area will be performed destroying the breeding places of Anopheles sundaicus. The methods to be considered are

1) larvicides including growth inhibitors,
2) biological methods such as fish or B.t.i. and
3) environment management (= ecological or engineering),
4) peridomicile spray can be considered although the priority is low.

(1) Larvicides

Larvicides which are considered to be suitable are listed in Table 1. Field tests are indispensable to determine the effectiveness. The field tests may indicate also the duration of the effectiveness in the local environment. Formulation or application methods also should be studied. Preliminary experiments which have been conducted in 1983/1984 might provide some useful data (see seperate report).

(2) Biological agents

B.t.i. seems to be not so effective against Anopheles sundaicus though extensive experiments have not been made.

Fish inhabiting in the ponds in the Perupuk village are listed in Table 2. At present, indigenous species are considered as a control agent, although Gambusia affinis is used widely. Studies are necessary whether any of these native fish may use for the control. Further surveys on fish fauna should be conducted. Larval control with fish depends on the density of fish and the predation efficiency of individual fish. Laboratory and field tests on these properties should be conducted. Particularly, it is important to clarify whether a high density of fish can be maintained in ponds. Not only the species but also the size or age of fish to be released and the number per unit area for the initial stock should be determined before operation. Another important problem to be

solved is the mass rearing of fish, which is essential for the operation.

Facilities for the mass rearing should be provided in a village itself to avoid the transportation problem.

(3) Environment management

The most habitats of Anopheles sundaicus in Perupuk are man-made. This fact indicates that these may be destroyed if not in use. However, health education to villager is esential to convince the necessity of habitat destruction and also the participation of villagers is desired.

Another management methods, e.g. shading will be investigated also.

(4) Peridomicile spraying

This method may be useful when the mosquito density is high. It is worthwhile to estimate the cost and effect if the epidemic season is short. ULV equipments and insecticides for this spraying should be listed if this method is considered.

(II) Disease Control

Another control operation against malaria in this area will be performed by medico-parasitological approaches. The methods to be considered are

(1) Selective age group treatment (in a selected village)

Disease carriers under 20 years old are selectively treated because gametocite have been rarely found above the age. Blood examination will be carried out and medical treatment with both schiezonticidal and gametocidal drugs will follow.

Secondly, selective treatment of pre-school children and infants will be carried out hopefully combined with MCH activities.

(2) ACD or house to house visits (in a selected village)

Active case detection will be carried out if the situations permits. By house to house visits, it would be possible to detect malaria cases among pre-school children, infant and also adults.

These activities may be combined with other health promotion activities such as nutrition, anemia detection and MCH including weighing and immunization.

VIII. Control operation

(I) Vector Control

Main operation is as follows:

i) Reduce number of ponds potential for breeding by draining or filling up.

ii) Stock fish in remaining ponds.

iii) Apply a larvicide in a ponds which had been positive for Anopheles sundaicus.

Reduction of potential habitat should be made prior to the application of another methods. The third method is repeated periodically. If necessary, fish will be also stocked repeatedly. In case a number of large fish which may predate introduced fish are present, they should be removed before fish-stocking. It is hoped that the second method reduced the use of larvicide.

This operation will be made first in a limited area, probably Lorongs 1 and 2 of Perupuk village in the 3rd year to investigate the feasibility and will be extended to the total village in the 4th year. The 5th year is for the maintenance and evaluation.

Operation with following method will be tried only when the suitable study sites are availabe. Therefore, it depends on the results of the surveys.

iv) Peridomicile spray

(II) Disease Control

Main operation is as follows;

i) Malariometric survey including blood examination and spleen rate determination first for pre-school children.

ii) Treatment of parasite carriers in primary school with chloroquine and/or primaquine.

iii) House to house visits to detection of parasite carriers especially among pre-school children and the same treatment same as the above.

iv) Expand these activities to middle and high school students.

IX. Assessment

Assessment of the control operation includes;

(1) Larval density
(2) Adult mosquito density
(3) Malaria parasite rate
(4) Seroepidemiology

To assess the mosquito density, the human-bait collection which has been used will be continued since no alternate method is known. Periodical collections at several places will be needed throughout the experiment because of the seasonal fluctuation. As for parasite rate, we know also its seasonal change but it is impossible to conduct the monthly blood examination. Therefore, the rate will be determind at the peak time of malaria, August or September.

The immunological method to assess the prevalence of malaria may be considered, if the method is established sufficiently in due course and at the time of the final assessment.

X. Basic study

(1) Entomology

Many aspects on the biology of Anopheles sundaicus remain unknown. If the spare manpowers are available, following questions should be solved.

i) Resting place
ii) Survival rate (more accurate estimates)
iii) Dispersal
iv) Susceptibility to the parasites
v) Strain variation of the exophilic behaviour
vi) Sporozoite detection using monoclonal antibodies.

(2) Parasitology

i) Plasmodium culture and isolation of antibodies
ii) ELISA application for seroepidemiology
iii) Chloroquine, mefroquine resistance
iv) G6PD deficiency
v) Immunological evaluation.

Table 1

Candidates of chemical as larviciding against
Anopheles sundaicus

Name	Characteristics and use	Toxicity
Temephos (abate)	Used for Aedes and simulium	Low to mammal and fish
Fenthion (Baytex)	For Culex fatigans (WHO)	High to mammal
	For Anopheles (Indonesia)	Extremely high to birds
Chloropyriphos (Dursban)	Long residual effect in pits	High to mammal
Chloropyriphos (methyl)		Low to mammal
Altosid 10F (methoprene)	Used to An. albimanus Long Effect in ditches	Low to mammal and fish
Diflubenzuron		Low toxicity

Table 2

FISHES FOUND IN THE BREEDING PLACES OF ANOPHELES SUNDAICUS

Ophiocepalidae	genus sp.
	Ophiocephalus sp.
Clariidae	Clarias sp.
Gobiidae	Periophthalmus sp.
Cyprinodontidae	Haplochlus panchax
	Oryzias javanicus
Toxotidae	Trichogaster trichopterus sumatranus
Eleotridae	genus sp.

NORTH SUMATRA HEALTH PROMOTION PROJECT

(Asahan Health Improvement Project)

Plan of Action 1984 - 1989 (OTA-43)

Unit : Malaria

MALARIA CONTROL PROGRAMME FOR FIVE YEARS (FY 1984 - FY 1988)

C o n t e n t s

Programme of Master Plan

Activity	Year 1st	2nd	3rd	4th	5th	Expert Long term	Short term
General							
Training						101,102,103,104,105	
Health Education						401,402,403,404,405	
Parasitological							
PCD,Slective treat						401,402,403,404,405	411,412,413,414,415
Seroepidemiology						401,402,403,404,405 502,503,504,505	512,513,514,515
Survey							
Target area						101	
						201,202	222
Comparison						201,201,	
Others						101,102, ...	112,113,114,115
Fish fauna							301
Method selection							
Fish						201,202	301
Fish rearing						201,202,203,	301,302,303,.....
Larvicide						101,102,103	
Ecological						102,103	
Operation							
(Vector) I						103,203	223
II						104,204	224
III						105,105	225
IV						214,215	
(Disease) I						401,402,403,404,405	
II						401,402,403,404,405	
Assessment							
Entomological						101,102,103,104,105	
Parasitological						401,402,403,404,405	411,412,413,414,415
Serological						502,503,504,505	512,513,514,515
Basic Study							
Entomology						101,102,103, ...	
Parasitology						401,402,403,.....	
Immunology						502,503,504,505	512,513,514,515

Expert Code :
- 100 Entomologist/Ecologist
- 200 Entomologist/Control
- 300 Fish/Control
- 400 Parasitologist/Malaria
- 500 Immunologist

Operation (Vector) :
- I Integrated (ecological, fish and larvicide), in Lorongs scale
- II Integrated in village scale
- III Integrated in village scale, maintenance
- IV Peridomicile spray in Lorong, if possible

(Disease)
- I House to house visit with treatment
- II Selective drug treatment

Activity in the Target Area nad Comparison Villages designate

Activity	Target Area Perupuk		Target Area (Guntung or -)		Comparison Village P. Cermin		Comparison Village P. Dodek	
	FY 84-86	FY 86-88	FY 84-86	FY 86-88	FY 84-86	FY 86-88	FY 84-86	FY 86-88
General								
Training	+	+	+	+	+	-	+	-
Health Education	+	+	+	+	+	+	+	+
Parasitological								
PCD	+	+	+	+	+	+	+	+
Others	+	-	+	-	+	-	+	-
Survey	+	+	+	+	+	+	+	+
Method Selection	+	-	-	-	-	-	-	-
Operation								
Larval Control	-	+	-	-	-	-	-	-
Selective drug treatment	-	-	+	+	-	-	-	-
Peridomicile spray	-	(+)	-	-	-	(+)	-	-
DDT residual spray	-	-	-	-	+	+	(±)	(±)

(+) : Activity depends on the result of larval control

BALAI LABORATORIUM KESEHATAN MEDAN

MEDAN REGIONAL HEALTH LABORATORY.

Plan of Action 1984/1985 - 1988/1989.

I. HEADING : ASAHAN HEALTH IMPROVEMENT PROJECT.

II. INTRODUCTION :

Based on the 4 th National Health Development Program (1984/1985 - 1988/1989) the laboratory activities as supporting services to other health services had been emphasized especially on development of Referal System - from Health Centres, District Hospitals to Medan Regional Health Laboratory. By referal system it will be expected that the supporting laboratory services could fulfill the demands of other subsystem of health services to the - people of North Sumatera and other Provinces on the whole and especially - in ASAHAN PROJECT area.

III. OBJECTIVES :

To increase and strengthening services to the people of Asahan Project area through one of the supporting health services, it is the Health Laboratory services at all layers (Health Centres, District Hospital to Medan Regional Health Laboratory).

IV. TARGET :

1. To support the malaria, tuberculosis, gastroenteritis and Hygiene Sanitation Programs.
2. To train the laboratory personnel of Health Centres.
3. To increase the facilities especially equipment and chemicals needed.
4. Malaria Serologist from Japanese expert to train our personnel

V. GENERAL ACTIVITIES:

To achieve the above mentioned target:

1. Last June we recieved MICRO ELYSA AUTOMATIC READER (DYNATECH) through the Development Budget of 1984/1985.
   We hope that it could be applied for Seroepidemiology of malaria, tuberculosis and other kind of infections.
2. For malaria program :
   a. G-6-PD defficiency detection.
   b. Plasmodium culture and isolation of antibodies.
3. See the table of activities.

Medan, July 25, 1984.

Director of Medan Regional Health Laboratory

(dr. R. Sudirento)

NIP. 140017237.

ASAHAN HEALTH IMPROVEMENT PROJECT

Medan Regional Health Laboratory (1984/1985 - 1988/1989)

No.	Target	Activity	Unit	Total 5 years	1984/85	1985/86	1986/87	1987/88	1988/89	Source	Explanation
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1.	To increase laboratory facilities (Equipment + Chemicals)	1. Limapuluh	set	1	1	-	-	-	-	JICA	Part of chemicals in Puskesmas by APBD/APBN.
		2. Medang Deras	"	1	1	-	-	-	-	"	
		3. Medan Health Laboratory.	"	5	1	1	1	1	1	"	
2.	Total number of laboratory technicians	1. Limapuluh	person	2	2	-	-	-	-	-	
		2. Medang Deras	"	2	2	-	-	-	-	-	
		3. Indrapura	"	2	2	-	-	-	-	-	
3.	Laboratory training	1. To increase the skill of laboratory technicians from 3 Health Centers (6 persons)	man - days (Rp. 15.000,-/day)	210	42	42	42	42	42	-	
				3.150.000	630.000	630.000	630.000	630.000	630.000	APBD	
		2. Fellw ships for Medan Regional Health Laboratory									
		a- Bacteriology									
		b- Parasitology									
		c- Serology	person	5	1	1	1	1	1	JICA	
		d- Virology									
		e- Environment Sanitation									

Japanese experts needed :

1. Parasitologist.
2. Bacteriologist.
3. Immunologist.

-- Medan, Juli 25, 1984 --

Director of Regional Health Laboratory

Ir. R. Sutiyono

NIP. : 140017237

P.O.A. 1984/1985

Heading : Asahan Health Improvement Proyect.
Unit/Section : Malaria.

Introduction ect : See protocol.

Plan of activities :

1. Parasitology.

a. M.S. : Perupuk (Lima Puluh) : 1 x/year 4 staffs each 6 days.
: Guntung (Lima Puluh) : 1 x/year 4 staffs each 6 days.
: Bagan (Pantai Cermin): 1 x/year 4 staffs each 6 days.
: P.Dodek (M.Deras) : 1 x/year 4 staffs each 6 days.
: Others 4 distries :
: Tanjung Tiram : 1 x/year 4 staffs each 6 days.
: Buntu Pane : 1 x/year 4 staffs each 6 days.
: Bandar Pulau : 1 x/year 4 staffs each 6 days.
: Pulau Rakyat : 1 x/year 4 staffs each 6 days.

b. A.C.D. Perupuk monthly 8 days/month.
: 12 x 8 = 96 days/year.

2. Larva Control :

- Investigation of Malaria vector ecology :
monthly : 8 days/month = 12 x 8 = 96 days/year.
8 Specialist on control operation of malaria mosquito :
monthly : 8 days/month = 12 x 8 = 96 days/year.
- Fish biologist : monthly : 8 days/month = 6 x 8 = 48 days/six months

BUDGET 1984/1985

1. Malariometric Survey : 4 staffs x 6 days x 8 location x Rp 17,000.-	Rp	3,264,000.-
2. Parasitology : 12 months x 8 days x Rp 17,000.-	= Rp	1,632,000.-
3. Vector ecology : 12 months x 8 days x Rp 17,000.-	= Rp	1,632,000.-
4. Specialist on control operation of malaria mosquito : 12 months x 8 days x Rp 17,000.-	= Rp	1,632,000.-
5. Fish biologist : 6 months x 8 days x Rp 17,000.-	= Rp	816,000.-
T o t a l	= Rp	8,976,000.-

Medan, 20 Juli 1984.-

a.n. Kepala Dinas Kesehatan Dati I Prop.
Sumatera Utara.
Ka.Sub Dinas P2M,

(dr.W.Panjaitan DTM&H)
NIP. 140049195.-

PLAN OF ACTION 1984/1985 AND 1985/1986
ASAHAN HEALTH IMPROVEMENT PROJECT.
DIVISION OF : ENVIRONMENTAL HEALTH DEVELOPMENT.

I. INTRODUCTION :

Cooperation with JICA is based on Record of Discussion on Oct. 10th, 1977 and on extension of the cooperation in FY 1984/1985 to 1988/1989.

The Division of Environmental Health Development in the Province of North Sumatra, plans several activities which can be classified as follows :

a). Water supply activities
b). Environmental Sanitation.

II. G O A L :

To improve health condition of community people in 7 kecamatans in Asahan regency, in relation to water supply and environmental sanitation in the rural areas.

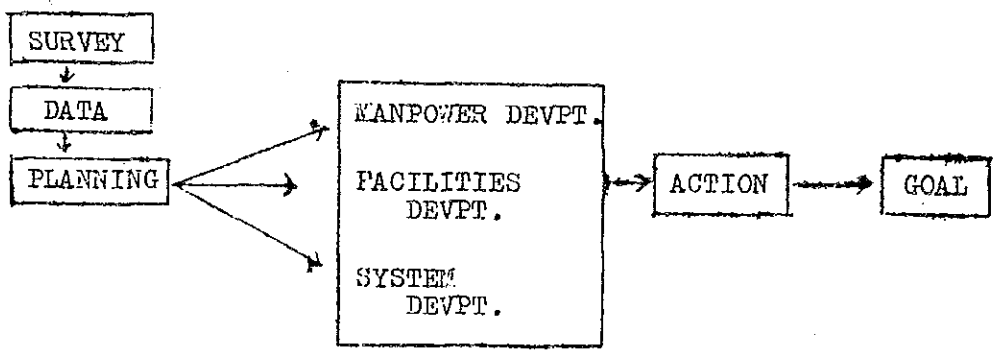
III. STRATEGY :

a). Survey :
1. Hydrogeology
2. Evaluation of the existing water supply facilities.
3. Preparation/Design for construction of water supply facilities in the coming years.
4. Wastes from households
5. Pesticide pollution.

b). Rehabilitation of water supply facilities in the project area.

c). Training for Health staff members and volunteers from community people for health education.

IV. CONCEPTIONAL FRAMEWORK :



V. ACTIVITIES :

FY.1984/1985

Water Supply Activities :

1. Training for 50 Health Center staff members and volunteers from community people for 5 days.
   The objective of the training is to improve the knowledge and skill of the trainees to maintain the water supply facilities in their village.

2. Survey :
   a). Evaluation survey of water supply projects in the project area.
   b). Preparation and design of water distribution from the artesian well in Tanjung Muda.
   c). Data collection about utilization and development of water supply facilities in the project area and the influencing factors, especially in the village of the new town in Kuala Tanjung.

3. Rehabilitation of 1 artesian well which was construted by JICA in the village of Tanjung Muda and development of reservoir, generator, and pumping machine.

MANPOWER :

- 1 expert in Sanitary Engineering from JICA.
- Staff member from Provincial Health Service.
- Staff member from Regional Health Department office.

BUDGET :

1. Provincial Budget will cover :
   - Point (1) : Training for 8 participants
   - Point (2) : Survey : a, b and c.
   - Point (3) : Rehabilitation and transport cost, power house for artesian well in Tanjung Muda, and maintenance of artesian well.

2. National Budget will cover :
   - Point (2) : survey ; a, b and c.
   - Point (3) : Rehabilitation ; Construction of reservoir, procurement of generator engine, sucking pipe, conductor and fitting and wages for installation of the engine.

FY.1985/1986.....

3.

F.Y. 1985/1986.

A. WATER SUPPLY ACTIVITIES :

1. Hydrology :

The activities : to find out water layers and to determine suitable type of water facilities to be constructed for the rural community.

Target : 7 kecamatans
Duration : 2 years (1985/1986 and 1986/1987)
Manpower : - 1 expert (Hydrogeologist) from JICA
- 1 staff member from Provincial Health Service
- 1 staff member from Regional Health Department office.
Equipment : To be supplied by JICA
Budget : - JICA
- Counter budget from Indonesia (National Water Supply Project).

2. Sanitary Survey & Training :

Activities :

- Development of workshop in Indrapura which was established in 1984.
- Rehabilitation of water supply facilities.
- Training (continuation of FY.1984/1985).

Target : 246 people from 7 kecamatans.

Duration : 5 years.

Manpower :

- 1 Expert(Sanitary Engineering) from JICA
- 1 Staff member from Provincial Health Service
- 1 Staff member from Regional Health Department office.

Budget : JICA and Counter budget from Provincial Government.

Equipment : to be supplied by JICA.

3. Water .....

3. Water Quality Control :

Activities : 1. Survey
2. Health Education

Target : - Survey and Health Education in 106 villages in 4 years.
- Training : All of the Health Center staff members in 2 years (1985/1986 and 1986/1987).

Duration of training : 3 days and 4 people from each village.

Manpower : - 1 expert in water quality control
- 1 staff member from Provincial Health Service.
- 1 staff member from Regional Health Department office.

Budget : Counter budget from :
1. Provincial Government for 2 years (1985/1986 - 1986/1987).
2. National Government for 2 years (1987/1988 - 1988/1989).

B. ENVIRONMENTAL SANITATION ACTIVITIES :

1. Rural Sewerage :

Activities :

1. Survey, to find data about household wastes in the rural areas in an effort to increase awareness of people so that they are willing to improve their environmental health.
2. Training of Health Education for community volunteers and health center staff members.

Target : 14 health center staff members and 140 community volunteers.

Duration : 4 years (1985/1986 to 1988/1989).

Manpower : - 1 expert in Rural Sewerage
- 1 staff member from Provincial Health Service/ Regency Health Service.
- 1 staff member from Regional Health Department office.

Budget : Counter budget from Provincial Government.

Equipment .....

5.

Equipment : to be supplied by JICA, such as : portable chromatograph spectrophotometer for pesticide, pesticide protect c dress, etc.

We really hope that this simple plan of action can be implemented. Counter budget for FY.1984/1985 has been provided by the Government of North Sumatra, and we also hope that the counter budget is still provided in the coming fiscal years.

P.O.A. 1985/1986

Heading : Asahan Health Improvement Proyect.
Unit/Section : Malaria.

Introduction ect : See protocol.
Plan of activities : Same with 1984/1985

1. Parasitology .
   a. M.S. : Perupuk (Lima Puluh) : 1 x/year 4 staffs each 6 days.
   : Guntung (Lima Puluh) : 1 x/year 4 staffs each 6 days.
   : Bagan (Pantai Cermin): 1 x/year 4 staffs each 6 days.
   : P.Dodek (M.Deras) : 1 x/year 4 staffs each 6 days.
   : Others 4 districs :
   : Tanjung Tiram : 1 x/year 4 staffs each 6 days.
   : Buntu Pane : 1 x/year 4 staffs each 6 days.
   : Bandar Pulau : 1 x/year 4 staffs each 6 days.
   : Pulau Rakyat : 1 x/year 4 staffs each 6 days.

   b. A.C.D. Perupuk monthly 8 day/month.
   : 12 x 8 = 96 days/year.

2. Larva Control :
   - Investigation of malaria vector ecology :
   monthly : 8 days/month = 12 x 8 = 96 days/year.
   - Specialist on control operation of malaria mosquito :
   monthly : 8 days/month = 12 x 8 = 96 days/year.
   - Fish biologist : monthly : 8 days/month =
   6 x 8 = 48 days/sixmonths.

BUDGET 1985/1986

1. Malariometric Survey : 4 staffs x 6 days x 8 location x Rp 17,000.-	Rp	3,264,000.-
2. Parasitology : 12 months x 8 days x Rp 17,000.-	= Rp	1,632,000.-
3. Vector ecology : 12 months x 8 days x Rp 17,000.-	= Rp	1,632,000.-
4. Specialist on control operation of malaria mosquito : 12 months x 8 days x Rp 17,000.-	= Rp	1,632,000.-
5. Fish biologist : 6 months x 8 days x Rp 17,000.-	= Rp	816,000.-
T o t a l	= Rp	8,976,000.-

Medan, 20 Juli 1984.-

a.n. Kepala Dinas Kesehatan Dati I Prop.
Sumatera Utara.
Ka.Sub Dinas P2M,

(dr.W.Panjaitan DTM&H)
NIP. 14004919[illegible].-

F. O. A. 1985/1986.

Asahan Improvement Project,
Unit Section : TB Control,

1. Introduction oct: See Plan for 1984 - 1989.
2. Target : Sputum examination = 5000
   Treatment Cases = 500
3. Plan of Activities:
   a. Sputum collection will be carried out by two method :
      - Passive in Health Centre and all sub.H.C-
        In sub H.C sputum collection and fixation, examination in H.C laboratory.
      - Active by one home visitor in H.C.
   b. Treatment Cases in H.C. and sub H.C. according to distance of cases.
   c. Supervises every 3 month to each H.C 3 days by 3 staff.
   4. Budget :
      a. Salary : Nurse + Microscopist at 7 HC : 14 x 12 bln x Rp 6000= 1,008,(
         Home Visitor at 7 H.C : 7 x 100 days x Rp 2250 = 1,575,(
      b. Supervise / evaluation of treatment:
         3 staff x 2 days x 7 H.C x 4/year x Rp 23,000.-=Rp 3,864.
      c. Eqipment :

No	Materials	Amount/ Unit	Unit Cost	Total Price
1	Sputum pot	6,000	Rp. 100,-	Rp. 60,000,-
2	Micro Slide	6,000	Rp. 40,-	Rp. 240,000,-
3	Anisol 100 cc/btl	21 btl	Rp.7,000.	Rp 147,000,-
4	TB 5 (Rif 450 mg) 24 Caps	500 pkg	Rp.9.960.	Rp.4,980,000,-
5	TB 6 (Rf 600 mg)/44 Caps	500 pkg	Rp23,628.	Rp.11,814,000-
6	TB 4, 68 Tab/Pkt	500 pkg	Rp. 800.	Rp. 400,000.
7	TB 3, 44 Tab / Pkt	500 pkg	Rp. 375.	Rp. 187,500.
8	TB 2 ,48 Tabl/Pkt	500 pkg	Rp.4.750.	Rp. 2.375,000.
Sub.	T o t a l			Rp.20,203,500.

Total Budget : Rp.26,650,500,-

Medan, tgl 31 Juli 1984.-
Head of TB.Control Section
Provincial Health Services

-Josua Simanjuntak,MD-

NIP : 140050278.-

FISCAL YEAR 1985 / 1986.

No.	Health Center	Total *) Population	Annual target Sputum Exam	Annual target Cases Treatment	Remarks
1.	Medang Deras	29.741	400	40	
2.	Air Putih	74.202	1000	100	
3.	Lima Puluh	71.446	900	90	
4.	Tanjung Tiram	75.828	900	90	
5.	Buntu Pane	54.008	650	65	
6.	Pulau Rakyat	69.290	650	65	
7.	Bandar Pulau	38.297	500	50	
	T O T A L	412.812	5000	500	

*). Total population : is projection of census in 1980 with 2.66% annual population increase.

PLAN OF ACTION 1985/1986.

ASAHAN HEALTH IMPROVEMENT PROJECT

DIVISION: Health Promotion / Health centre Section.

I. INTRODUCTION.

According to GBHN, extending of health service was carried out by health centre and hospital and some other activities for promoting the health state of the village population. For this purpose, these health service units would be supported by sufficient personnel , equipment, technology, budget and physical facilities.

II. G O A L.

To promote health condition in the Asahan area especially at 7 districts surrounding the smelter site (Idma puluh, pulau Rakyat,Tinggi Raja,Aek Songsongan, Indrapura, Pagurawan, Tanjung Tiram), by promoting function and coverage of the health centre and sub centre.

III. STRATEGY.

1. Promoting the skill of health centre personnel.
2. Tosupply/adding the needs of medicine and equipment.
3. Strengthening the referral system.
4. To promote health management at health centre.
5. To promote the participation of community by forming Primary health care (PKMD).

IV. CONCEPTIONAL FRAMEWORK.

Survey/Study ——————> Collecting of Data ——————> Planning ——

——> Manpower development
——> Facilities development ——————> Action ——————> Goal.
——> System development

V. ACTIVITIES.

A. To carry out the basic 12 activities:

1. Treatment
2. Mother and child health/Family Planning
3. Communicable Disease control
4. Health education
5. Public health nursing
6. Hygiene and Sanitation
7. Nutrition

8. Dental Health
9. School Health
10. Mental Health
11. Laboratory
12. Recording/Reporting

B. Development and Building (Pengembangan dan Pembinaan)

1. Manpower Development:

a. Personnel training of health centre/sub centre 40 persons

b. Fellowship of health centre dokter to Japan 3 persons.

2. Kind of expert requested:

3. Recruitment of personnel:

4. Developing of comunity Participation.

IV. FACILITIES/EQUIPMENT DEVELOPMENT:

Facilities/Equipment expected from JICA in 1985/1986:

1. Minor Surgery set	4 set
2. First aid kit set	4 set
3. Midwife kit set	4 set
4. Dental set	4 set
5. Diagnostic set	4 set
6. Trial lens set	4 set
7. Hartman Nasal Speculum	4 set
8. Fil-ing Cabinet	8 set
9. Motor Cycle	4 units

V. Target of Activities:

1. The attendance of H.C./sub centre expected 100 person/day.
2. Mother and child care:
   - Delivery aid by H.C./trained dukun expected 40 % pregnant women.
   - Examining of pregnant women expected 60% pregnant women.
   - Examining of babies and children expected 60% of all babies and children.

3. School health: all the existing primary school would carry out school health care (100%).
4. Dental health (UKGL= Usaha Kesehatan Gigi Lapangan) would be done by the 7 Health Centre.
5. Family Planning 50% from ELCO.
6. Nutrition: weighing operation (OT)/giving extra nutrition (PMT)/ Nutrition padkage (paket gizi) for 3 village in each district. (21 villages in 7 districts).
7. To perform Primary Health Care (PKMD) in 2 villages at each district. (6 villages in 3 districts).

Medan, 24 July 1984.

Chief, Section of Health Centre.

(dr. Fauzi, SKM)

" PLAN OF ACTION 1985/1986 "

ASAHAN HEALTH INPROVEMENT PROYECT

UNIT/SECTION : HEALTH EDUCATION

I. INTRODUCTION :

a. Based on record of discussions 10 October 1977 between the Government of Indonesia and the Government of Japan.

b. Based on experiences of Health Education activities in the past years.

II. GOAL :

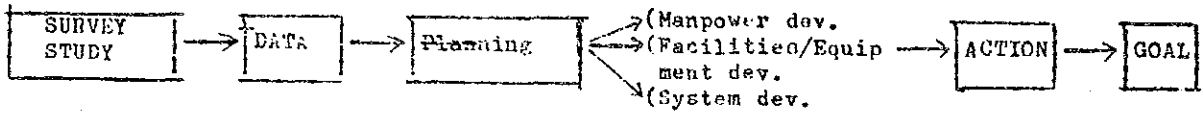
- To ensure the people that health is valuable.
- To give the people skill to solve their own health problems.
- So that the people will utilize health facilities and develop them.

III. STRATEGY :

Improvement will be reached by :

- Manpower development.
- Facilities/equipment development.
- System development.

IV. CONCEPTIONAL FRAMEWORK :



V. ACTIVITIES :

1. Manpower development :

   a. Training of staff members.

   b. Technical guidance for staff members.

   c. To provide Fellowship from JICA for training in Japan.

2. Facilities/equipment development :

   a. To provide 1 Mobile Unit equiped with :

      - 1 film projector.
      - 1 wide screen.
      - 1 set generator.
      - 1 set slide projector with slide films.
      - 2 loudspeakers
      - 1 unit Video Cassette.

b. To develop health education media.

c. To develop guide books.

3. System development :

Coordination, integration and synchronization of health edducation activities with the activities of other governmental agencies for for the implementation of comprehensive development programs in the local area .

VI. TARGET OF ACTIVITIES.

1. The public.
2. Teachers and pupils.
3. Kepala Desa/Lurah, Pamong Desa, L.K.M.D., Woman organisation/PKK, key persons, voluntary health workers
4. Ibu hamil, melahirkan dan menyusui (Pregnant women, delivering and lactating mothers)
5. P.U.S. (Eligible couple)

M e d a n 22 July 1984.

PLAN OF ACTION OF NUTRITION PROGRAM OF ASAHAN HEALTH IMPROVEMENT IN 1984/1985 (1st year of 5 years plan)

By : Nutrition Section of Family Health Division
Of Provincial HEALTH SERVICES of North SMTR.

I. OBJECTIVES :

To improve health status of underfives children and their mothers by improving nutritional status in specific area of Kabupaten Asahan.

II. STRATEGY :

To continue the former nutrition activities that have been left by the nutrition project 1 to 2 years ago due to the duration of the project.

III. ACTIVITIES IN 1984/1985 :

III.1. To continue the Family Nutrition Improvement (UPGM) through :

a. Retraining of Caders in the villages
b. Encouraging of the monthly weighing program for underfives
c. Improving of the nutrition education after knowing the result of weighing
d. Recording and reporting in the Weighing Place
e. Improving of the coordination with other services in Kecamatan
f. Distribution of First Nutrition Aids

2. Distribution of Vitamin A high dosage capsule for the children 1 to 4 years old in the project area

IV. IMPLEMENTATIONS

IV.1. Retraining of the Village Caders :

Patiopants will be at least 10 of the former Caders or selecting the new one if some of them are dropped out. Duration is 3 days in each village. Curiculum has been prepared by province. Trainer should be Nutrition Implementor of Health Centre (TPG). Budget for retraining is from Central Budget for 19 villages and from Provincial Budget for 5 villages. Totally, 24 villages, in 6 Kecamatans.

IV.2. Monthly Weighing :

Will be carried out by the Village Cader guided by TPG. According to the former data the average of the prevalence of PEM in some Kecamatan of Kabupaten Asahan is 42.4 % (mild + moderate) and 2.1 % (Severe).

IV.3. Nutrition Education :

Mainly, for the mothers who are coming to the Weighing Place based on the result of the weighing. Information or suggestion will be given by Village Cader guided by TPG. Budget from Central.

IV.4. Coordination in Kecamatan :

IV.4. Coordination in Kecamatan :

Regular meeting among services is very important. They are Cam Doctor of Health Centre, Agriculturer, Fishery, Animal Husbandry, F Planning, Mass Education, Religion and Village Development. Through meeting the nutrition improvement in the village could be monitored

IV.5. Vitamin A Capsule distribution :

In 1984/1985 the distribution of Vitamin A Capsule should be tw times (once per six months). Target is 36.000 children 1 - 4 years distributed by Village Cadere guided by TPG.

V. Request of Equipments :

V.1. Growth Chart, 24 villages x 100 pcs	2.400	pcs
V.2. Scales capacity 25 kgw, 2 scales/village	48	pieces
V.3. Booklet (Guidance) for Village Cadere, 20 pcs./Village	480	"
V.4. Teaching Material, 10 pcs./Village	240	"
V.5. Five leaflet sets :		
a. Healthy Menu 100/Village	2.400	pcs
b. Food substitution List..... - idem -	2.400	"
c. Healthy Eyes..... - idem -	2.400	"
d. Guidance for Diarhea ..... - idem -	2.400	"
e. Motivation of Weighing..... - idem -	2.400	"
V.6. High dosage Vitamin A Capsule.....	72.000	caps

—— Nutritin Section ——

LOCATION of Nutrition Projects in Asahan Health Improvement Project, FY.1984/1985.-

No.	Kecamatan	Village	The Year of Nutrition Project	Remarks
1.	Medang Deras	1. Sidomulio	1981/1982	Provincial Project.
		2. Sei Rakyat	1981/1982	
		3. Daham	1981/1982	
		4. Medang	1982/1983	
		5. Pematan Cengkring	1982/1983	
2.	Air Putih	6. Tanjung Muda	1981/1982	National Project. (Health + Agriculture).
		7. Tanjung Seri	1981/1982	
		8. Tanjung Kasau	1981/1982	
3.	Pulau Rakyat	9. Padang Mahondang	1981/1982	National Project.
		10. Aek Bange	1981/1982	
		11. Ledong Barat	1981/1982	
		12. Sengon Sari	1982/1983	
		13. Alang Bonbon	1982/1983	
		14. Labur Jiur	1982/1983	
4.	Tanjung Tiram	15. Bagan Dalam	1982/1983	National Project.
		16. Ujung Kubu	1982/1983	
		17. Kwala Sikarim	1982/1983	
5.	Lima Puluh	18. Mangkei Baru	1979/1980	National Project.
		19. Lubuk Besar	1979/1980	
		20. Sumber Padi	1979/1980	
		21 Empat Negeri	1979/1979	
6.	Buntu Pane	22.	1984/1985	National Project.
		23.	1984/1985	
		24.	1984/1985	
			1985/1986	

List of Experts Requested for F.Y. 1985/1986

No.	Division	Section	Kinds of Experts Requested	Total Number	Remarks
1.	Communicable Disease Control	a. Disease Transmitting Insect (Vector)	Vector Ecologist	1	Long Term
		b. Vector/Larva Control	- Specialist on Larva Control Operation	1	Long Term
			- Fish Biologist	1	Long Term
		c. Malaria Parasitology.	Specialist on Malaria Parasite (Parasitologist).	1	Long Term
2.	Communicable Disease Control	Tuberculosis Control	Tb. Laboratory Technician	1	Short Term
3.	Environmental Health.	Water Supply	Water Supply Engineering	1	Long Term
4.	Laboratory Services.	Immunology	Malaria Immunologist.	1	Long Term

LIST OF FELLOWSHIP REQUEST
F.Y. 1985 / 1986

No.	DIVISION	SECTION/UNIT	KINDS OF FELLOW-SHIP REQUESTED	NUMBER	REMARKS
1.	C.D.C.	a.Disease Transmitting insect (Vector).	-Intermediate Entomologi.	1	
		b.Vector/Larva Control.	-Larva Control Operation.	1	
		c.Malaria Parasitology.	-Malaria Parasitology.	1	
		d.Tuberculosis Control.	-Management of TB. Control.	1	
2.	Health Education.	Direct Education	- AVA	1	
3.	Family Health Care.	Nutrition.	-Fellowship of Nutrition.	1	
4.	Environmental Health.	Water Supply	-Water Facilities Design and Construction.	1	
5.	Health - Promotion.	Health Center Services.	Management of Health Care Delivery System.	1	
6.	Secretariat	-	Health Administration.	1	

Miscellaneous

Agrement to experts :

We would like to request to take a prompt action for giving "agrement" to the following experts :

1) Malaria Parasitologist (Mr. Itokawa)

2) Malaria Vector Ecologist (Mr. Imai)

They have got only oral agrement

3) Fish biologist

4) Specialist of Control Operation of Malaria Mosquito

They are going to leave for Indonesia on August 29, 1984.

Submitting A1 & A4 form :

We would like to request to submit A1 form for Water Supply Engineer as early as possible so that the form could reach JICA, Tokyo in August. The expert is ready to leave for Indonesia in the beginning of October.

We would like to request to submit the 2nd A4 form for FY 84/85 for supplying equipment to Japanese Embassy as early as in August. If not, we are not sure to be able to accept your application.

ASAHAN HEALTH IMPROVEMENT PROJECT
EIGHTH STEERING COMMITTEE MEETING.
JAKARTA, 8 - 9 AUGUST, 1984.
ATTENDANCE LIST.

No.	N A M E	P O S I T I O N
A.	JAPANESE SIDE	
1..	MICHIO HASHIMOTO	Professor, Tsukuba University,Chairman,Domestic Committee for OTA-43,JICA, TOKYO.
2.	AKIRA ISHII	Professor, Okayama University,member,Domestic - Committee for OTA-43 JICA,TOKYO.
3.	TAKASHI YAMANAKA	Staff, JICA, TOKYO.
4.	MOTOYUKI FUJII	First Secretary Embassy of Japan
5.	HISAMITSU NISHIO	Staff, JICA OFFICE Jakarta.
6.	TAKAYA IKEMOTO	Acting Team Leader of Japanese Experts.
7.	CHOBEI IMAI	JICA Expert on Malaria Tector Ecdogist/Entomologist.
8.	KATSUTAKA SHIMOMURA	Coordinator of Japanese Experts Team.
B.	INDONESIAN SIDE	
1.	SOEYONO YAHYA	Director General of Community Health.
2.	ADHYATMA	Director General of C.D.C.
3.	KUMARA RAI	Chief, Sub Directorate of Malaria.
4.	Mrs. ACE J.HAYATI	Staff, Directorate of Water Sanitation.
5.	SUKAMTO	Chief, Direectorate of Water Sanitation.
6.	R. SETYONO	Chief, Sub Directorate of Water Sanitation.
7.	B. WINARDI	Chief, Sub Directorate of Diarrhocal Diseases.
8.	ABDUL MANAF	Chief, Sub Directorate of Tuberculosis
9.	Mrs. ARWATI SUPANTO	Chief, Directorate of Vector Borne Diseases - Control.
10.	DJUMHANA.S.	Chief, Division of Program Formulation and - Report, CDC.
11.	NAHROWI OESMAN	Expanded Program of Immunization,CDC.
12.	BROTO WASISTO	Chief, Planning Bureau, M.O.H.
13.	RUSJDI DJUNAID	Staff, Planning Bureau, M.O.H.
14.	SUWARNA	Chief, Directorate of Health Center Development.
15.	RASYID ODANG	Chief, Sub Directorate of MCH.
16.	PRIYONO ASHARI	Chief, Division of Program Formulation and - Report, Comunity Health.

No.	N A M E	P O S I T I O N
17.	AUNG MYNT	WHO Consultant for Health Center Development.
18.	BAGUS MULYADI	Staff, Health Laboratory Center.
19.	SOEDIONO	Staff, Bureau of General Affairs, M.O.H.
20.	J.H. TAMBUNAN	Chief, Bureau of Logistics, M.O.H.
21.	R.TAMPUBOLON	Deputy Manager, Asahan Health Improvement-Project, North Sumatra.
22.	W. PANJAITAN	Chief, Division of CDC Provincial Health - Service, North Sumatra.