Maternal and Child Health (MCH) Project

Ministry of Health (MOH) Tanzania and

Japan International Cooperation Agency (JICA)

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Annual Report

April 2000 – March 2001

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Preface

Maternal and Child Health (MCH) Project launched in December 1994 based on the agreement between Governments of Tanzania and Japan for five years. Two-year follow-up was agreed in November 1999. Eight months remain therefore in the project follow-up period, which means the project now is in the final phase. The output and activities have been defined in the renewed Record of Discussion (Appendix 1: R/D).

There remain a number of constraints, which are to be solved although most of the initial objectives have been achieved. This annual report describes the activities from April 2000 to March 2001 (Appendix 2: Summary of the MCH Activities). This is not the final report but has a feature of the one. One of the remarkable in this report is SUSTAINABILITY of the project activities. The clinical laboratory (SPL) in Paediatrics Department MMC especially, has been establishing the cost sharing by completing revolving finance system, in which income from the fee-paying patients cover the running cost for the exempted patients. In Southern and Eastern Africa, there have been few project activities in which the running cost is covered by income generated within the project. It is meaningful to share the experience from this project with those who are interested in self-sustainability in this sense. The purpose of this report will be fulfilled if readers of this report understand a number of trials toward the sustainability and apply some of them to their own activities.

As known well, Tanzania is one of the countries in which ODA (official development of assistant) activities have been reviewed introducing new scheme such as basket-common-fund. In this context, the project type activities are one of them that have been also questioned. However, we could show that the project type scheme can be an established method that assures achievement in spite of trial and error.

This report mentioned quite detailed contents in some chapters, but we hope the reader could understand the reality for the sustainability through those details. We therefore are proud that we could refer to the detailed achievement. We believe that the general remark will make sense only when mentioned with particular details.

We have number of materials that we have developed for the sustainability apart from the appendix attached to this report. Those are available if requested to us. Most trials for the sustainability mentioned here are the ones that survived while the rest have modified or disappeared on the way. We have learnt that measure and method for sustainability should be developed by ourselves to meet individual country and culture. For example, we have developed own incentive system by introducing Time Recorder and Recording Attendant Hours. We thought people could accept the principle that diligence and quality of work should be reflected to the incentives. Consequently it was accepted through several revisions that have been invented to meet Tanzanian reality. We witnessed small incidence in which plural cultures meet and create the third culture in this way.

Any feed back to this report would welcome, which will be helpful for us to better the project activities in the remaining period. We appreciate those who have supported us and contributed to the project activities.

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Contents

A. Tanga Region

I. Activities and Achievement in Tanga Region

1. Activity of Traditional Birth Attendants (TBA)

1-1) Refresher Courses

Refresher courses for TBAs were provided for the following purposes from October to December 2000 in Pongwe and Magoma Division (Appendix 3&4):

- Emphasize the role of TBA in the community
- Ensure TBA knowledge of risk factors and referral cases
- Ensure good working relationship among health staff, community leaders and TBA
- Ensure correct use of TBA kit consumables
- Ensure correct reporting system within the Health facility and community leadership

1-2) TBA Meetings

The quarterly TBA meetings were started in 1998 in each ward of the pilot area. The meetings were conducted by MCH Coordinator and supported by the MCH Project at that time. Since 1999 the meetings have been organized and conducted by Maternal and Child Health Aid (MCHA) / Primary Health Nurse (PHN). The agenda in the meetings are on delivery and referral cases, checking TBA-kit consumption, reporting systems and so forth.

1-3) The TBA kit Revolving System

The TBA-kit revolving system was started as a trial in March 1999 at Kirare dispensary in Pongwe division Tanga Municipality. The kit includes the following:

1) Mackintosh 2) Apron 3) Stainless bowl 4) Scrubbing brush
5) Small container 6) Weighing scale 7) Hurricane lamp with extra glass 8) Pint measure 9) Jerry can 10) Hand towel 11) Aluminum box and padlock
12) Consumables: include surgical gloves, bandage, soap, razor blade and baby powder

In order to sustain the consumable kit, TBAs charge Shs.500- for each delivery case. The money is used to buy new consumables from the nearest Health facility. It makes 5 sets of consumables to make one kit and one set costs 2500/=

After six months from March 1999, the kit revolving system has been expanded to the whole project area.

1-4) TBA Achievements in 2000 (Appendix 3 & 4)

Appendix 3 & 4 show statistics from TBA activities such as number of trained TBAs and deliveries attended by the trained TBAs. The deliveries increased from 1996 to 1999 in number. However the deliveries in 2000 decreased compared with 1999. The clear cause cannot be identified because we do not have statistics on the total deliveries, which includes the delivery

attended by non-trained TBA or in the other health facility. The following might be the reasons:

a) Total deliveries might decrease due to the success of family planning campaign
b) The transferred cases to the referral facilities have increased because the knowledge on the indication to refer cases has spread through TBA training. In Magoma division in Korogwe district, the proportion of referred case has been increasing, probably because the communities have understood that the referral system contributes to the decrease of maternal and child death Rate. Availability of health facility facilitated them to use more.
c) Unknown reasons.

Allowance and motivation: The community traditional notion that paid-employment is the only respected activity has gradually changed by accepting the TBAs and other non-salaried activists.

2. Strengthening the Function of the Health Facilities and Medical Equipment

The basic equipment and instrument which the Ministry of Health standardized for the health facility was almost provided in pilot area and in particular equipment and instrument for OBGY and pediatric section for Bombo Regional Hospital and Korogwe District Hospital.

II. Constraints and Solution in Tanga Region

1. TBA (Traditional Birth Attendant) activity

1-1) Low understanding of TBA

Whereas there has been noticeable improvement on TBA, problems still exist on reporting of their activities and correct usage of consumables. A number of TBAs are illiterate and have passed the age for learning new subjects.

1-2) To Ensure Continuous TBA Activities

It is expected the MCH Coordinator will take over supervision role for TBA activity after the project come to the end. In the meantime the Coordinator is facilitating to prepare herself for the role. The following activities are planned:

a) Training of Trainer (TOT) of Maternal and Child Health Aide (MCHA).

MCHA and PHN (Public Health Nurse) are key-person of TBA activity. Improvement of TBA capability will depend on supervision by MCHA/PHN in each Health facility.

b) TBA Training by MCHA / PHN

Organizing small TBA group trainings in their respective areas will be more cost -efficient than getting together the whole group.

c) Establish Reporting System on Referral Cases

Trained TBAs are to report for Health facility and village leaders.

d) Sustainability of TBA Kit Consumables

The Community and local government are to be capable to ensure the system sustains the TBA Kit consumables.

2. Strengthening the Function of the Health Facilities

Low participation from the community to the Government activity has been found in

the rehabilitation / building works on the existing facilities. They have not been received full support from community. It is necessary to analyze it and to remove factors that obstruct the participation.

B. Microbiology Department in MMC

I. Activities and Achievement in Microbiology Department in MMC

1. Poliovirus Isolation / Identification

1-1) Refresh Training of Lab-Technicians

A short-term expert, Dr. T. Yoshij reviewed the poliovirus isolation technique and established it in June and July 2000. The virology laboratory started issuing Monthly Report (Appendix 5: Summary of Monthly Report Virology Lab) since July 2000. Poliovirus isolated cases, AFP cases, serological positive cases of measles have been reported in the Monthly Report. Stool samples of AFP cases started reaching the virology laboratory. EPI center has been collaborating by sharing the AFP samples with the virology laboratory in Zambia that is currently the official laboratory for polio-suspecting cases in Tanzania.

2. Equipment / Facility to be maintained

2-1) Establish Maintenance System

Inventory of equipment and consumables has got ready by the end of the year 2000. Major equipment and facilities have been in good condition in the virology laboratory.

3. Others

3-1) Polio Network in WHO

The virology laboratory has not been included in Polio-Network in WHO by now, although Ministry of Health and WHO country office have been making efforts to be accredited.

II. Constraints and Solution in Microbiology Department in MMC

1. Poliovirus Isolation / Identification

The technique and skill of poliovirus isolation have been established. No more refresh training will be needed as long as the laboratory technicians keep their standard.

2. Equipment / Facility to be maintained

Regular checking up the inventory of equipment and consumables is to be followed. Capability to sort out and to solve the problems with equipment and facilities is also to be strengthened.

3. Others

3-1) Polio Network in WHO

The virology laboratory is to be included in Polio-Network of WHO, otherwise the initial

objective of the project in this field is not fulfilled. The accreditation by WHO is needed as well. The MCH project will support that Ministry of Health and WHO country office Tanzania pursue the promotion.

C. Paediatric Department in MMC

I. Activities and Achievement in Paediatrics in MMC

1. Progress in Laboratory Based Medicine

1-1) To promote Better Result Interpretation:

Through Grand Round weekly held in SPL Data Room, the better interpretation of the lab-data has been spreading among almost all pediatricians. It has become very common for most pediatricians to diagnose patients using lab data that has been available anytime in SPL. That is so effective not only clinically but also educationally, that young doctors who have been exposed in these opportunities will be fostered to "lab-data oriented doctors"

Urgent delivery system of Panic-data has been established. In this system, the abnormal lab data was defined, should reach to the wards earlier than the ordinary data.

1-2) Better Utilization of SPL (Appendix 6: Summary of Monthly Report SPL)

Appendix 6 shows statistics of patient, samples and financial status. The statistics indicates that utilization of the clinical laboratory is stable or improving.

Sample Collection and Result Return Flow system have been improved drastically especially in paediatric wards. Most of results now go back to the wards within the day ordered. This might be the first experience in the public hospital in Tanzania. This was realized through the following implementation (Appendix 7: Collaboration with Wards SPL):

a) Recording system of daily samples from the wards was improved by introducing a new record form. Duplication of recording both in the wards and the laboratory has been unified in this system, resulted in fewer mistakes in the records.

b) Samples from the wards reach to the laboratory earlier than before by mutual agreement between SPL and the wards on the sample collection hour.

c) Necessary sample containers are assured in the sample-keeping box introduced in the wards. A certain number of containers will be kept in the wards all the time by replacing exact number of containers consumed.

d) The results should be sorted out regularly and registered when returned. This prevents missing results and facilitates to confirm results return.

Japanese Experts, Ms. Kazuko Ohnishi (Nursing Management, MIE Univ.), Sachiko Endo (Nursing Management, Pinel Hosp.), Eriko Nishijima (Administrative Management) Motoi ADACHI M.D. (Paediatrician, MIE Univ.) have contributed to the implementation of the system.

2. Collaboration of Medical Personnel

2-1) To improve Medical Staff's Communication (Appendix 7)

A number of "Joint Meetings" have taken place. Problems, which lie between the lab and wards,

were discussed. The better result-return above mentioned is one of the achievements from the meetings.

Inter-com telephone was introduced. All the paediatric wards and each SPL section were connected by the system, which enables communication easier.

3. Improvement of SPL Finance

3-1) Marketing of Laboratory Service

SPL has been offering the sample collection service to Muhimbili Orthopedics Institute (MOI) since last year. We have been convinced there is potent demand in the hospitals in DSM town. That is why we try to expand the sample collection service to the other hospitals.

SPL has also expanded lab-test service at night, Saturday, Sunday and Holiday for fee-paying patients. The income from nights and Holidays is about 200,000/= per month which is around 10 % of all income.

3-2) Revolving Finance (Appendix 8: Budget Plan SPL)

Revolving Finance started from October 2000. Fifty three percent (53 %) of total income is approved to revolve in the Steering Committee, while the project has been suggesting higher percentage of revolving (75% - 100%). The worry (the risk in saving too much Tanzanian Shilling in the account) the project suggested has become reality (mentioned in the following chapter)

3-3) The Balance in MMC Account (Appendix 9: Balance in MMC A/C)

The balance in MMC Account in which the income from the cost sharing has been saved was reconfirmed and fixed. The amount saved is about 54 million Tanzanian Shilling (US$ 60,000) by the day of 28th February 2001.

4. Improvement of Management in SPL

4-1) To Assign and Train Administrative Staff in SPL

A pediatrician was nominated as SPL Administrator after long time vacancy. SPL has failed to assign the one, although MMC and MOH have been making effort to nominate the eligible personnel in last two years. He will be assigned as an administrator of SPL after two-month training in Japan in May 2001.

4-2) Establish Equipment / Facility Maintenance System

Weekly meeting with an equipment-supplying agency has been held to establish equipment maintenance system. Although SPL has managed to keep good condition of the major analyzers, there have been so many troubles with the agency who supplied them to SPL. The system has been formally completed but it has not eventually been functioning fully because of violation by the agency.

4-3) To Ensure Reagent Supply

Business Meeting with the main supplying agency (the same agency mentioned above) have been held in weekly basis. The meetings have been cancelled so often by the agency. SPL has been surviving through tough negotiation with them in the meeting in spite of unstable reagent

supply. The order-delivery-system that has been improved with well-drafted form has not functioned because the other party (reagent agency) has not been following the mutual agreement. Regret to say, the performance by the agency has not been very satisfactory nor improved. SPL In-Charge, on the other hand, has been enough motivated and capable to conduct the meetings with initiative.

5. Others

5-1) Renovation Work

Renovation of Ward 17 and Makuti (Outpatient Clinic, Paediatrics) was completed in this fiscal year. The waiting room of SPL was renovated the end of the fiscal year as well. Thanks to this renovation, the patients at night and holiday have been increasing in number. Furthermore, mosquito will no longer annoy the patients waiting for lab- tests and results in the room.

5-2) Personnel Management (Appendix 10: Organization Chart SPL)

SPL has improved its organization structure by reinforcing management capability such as service section, cashing section and general affair section. In order to self-sustain SPL, it has been found that well-organized administration is definitely necessary.

Time-Recorder introduced in SPL is the one of measures, which reinforces personnel management. We have found it works effectively to promote staff motivation because the attendance / absent record by the recorder reflects to the honoraria amount to the staff. Someone worried the introduction of the time recorder, but it was introduced smoothly because manual recording had been established before the time recorder.

Four personnel have shifted from MCH employment to SPL employment in March 2001. The rest of five MCH employees shall be shifted, which is essential for full running of the SPL by the end of the project period.

II. Constraints and Solution in Pediatrics Department in MMC

Overview

1. Ownership of the project

There has been misunderstanding about the ownership of the project in the Department of Pediatrics. The misunderstanding is that the ownership of the project will be handed over to the Pediatric Department at the end of the project. However the ownership of the project was supposed to belong to the Pediatric Department from the beginning of the project, which is clearly mentioned in the Record of Discussion (R/D) in 1994. As a result, the misunderstanding has made the handing-over delay. Probably reasons are that the department has not been involved enough especially in two aspects: i) coordinating activities and ii) financial controlling from the initial stage.

2. Fundamental Constraints

A number of measures have been successfully achieved toward the sustainability of the

Specialized Pediatric Laboratory (SPL). However, several fundamental constraints lie against the sustainability as follows:

i) **The first,** capability of the paediatric department is limited under current situation in terms of administrative manpower. Basically, the capacity of SPL is beyond one Clinical Department. SPL therefore needs supports from MMC (MNH) or MOH for its sustainability.

ii) **Secondly,** surrounding environments such as **bureaucracy** in MMC are coming one of obstacles for the sustainability. For instance, it has taken lots of time and efforts for SPL to control SPL-code-account in MMC Account. SPL definitely needs own control system (internal counter checking). SPL cannot survive without accurate accounting and quick withdrawing from the Imprest

iii) **Thirdly,** insufficient capability of **the supplier** (reagent / equipment agency) in Tanzania will become highest barrier for the sustainability. A certain supplier from which MCH project has been purchasing equipment, reagent and service contract has not been improving so much in the past six years; delay of reagent supply, often violation against the Service Maintenance Contract for the major analyzers. The support from the authority might be expected on this issue.

iv) **Fourthly, moral hazard** of the people is also beyond of control by the project. The Project has been invented several system to encourage diligence of the staff and to prevent the moral hazard. Although a number of measures are successful at least within SPL, the system does not reach out of SPL (such as Paediatric Wards).

v) **Fifthly,** The activities in pediatrics have not faced serious **security problems** fortunately. However, we have to realize that there are risks losing money, equipment, facility, and consumables anytime. The cost for security and low productivity due to the security protection is to be minimized by well-organized activities.

Particular Aspect

1. Progress in Laboratory Based Medicine

1-1) To promote Better Result Interpretation:

The capability of doctors especially pediatricians to interpret the lab-data has been improved. However, the capability still differs from doctors to doctors. We may point out that medical personnel cannot be serious to interpret the lab-data as far as most of lab-tests are exempted for under-five-year patients. That will be suggested from the fact that some results are not collected in time until SPL reminds or deliver them to the wards.

1-2) Better Utilization of SPL

As mentioned above, we have achieved the improvement of Sample-Collection / Result-Return-Flow system. That has been effective and epoch making. However it will not before the current exemption system is reviewed that the system functions hundred percent. Because it is difficult for us to expect that all the medical staff promote the quick sample-collection and quick result-return only with voluntary basis. While fee-paying patients could easily request the medical staff to return the results quickly, the exempted patients cannot be

aggressive to the medical staff to do so. We cannot deny that some of medical staff is apt to be arrogant, which makes the exempted samples to be examined slowly. As a result, the exemption to the major part of the patients seems to affect quality of the result because of less responsibility, The money paid by the patients is more likely to bring responsibility in nature, although this is not the case in SPL now, I believe.

However there have been a number of cases, in which medical staff might deceive SPL reception by filling wrong information in the lab-order-forms such as age or file-number of patients. Some patients might ask medical staff (or medical staff might offer?) to do a favor to test samples with cheaper price than the ordinary channel. We have not found how to prevent it, but such moral hazard could be rectified with good relationship between SPL and the wards to some extent.

2. Collaboration of Medical Personnel

2-1) **To improve Communication among Medical Staff** (Appendix 7: Collaboration with Wards)

The communication among medical staff has been improved remarkably. Especially physical devices for better communication such as inter-com and notice boards have contributed to the improvement. However, the improvement has been between SPL and nursing section in the wards; more improvement between SPL and doctor's section is necessary. Insufficient communication with doctors has caused several problems. For instance, doctor's name in block letter and their signatures have not been filled in properly, although the filling has been requested and essential criteria for the exemption. The department has not submitted the doctor's names list for the identification yet. Symptoms and findings of patients are not filled in the lab-order form satisfactorily, which are also helpful for the SPL lab-technicians to counter check the lab results. There are several doctors who have not recognized the laboratory for fostering but simply for utilizing.

3. Improvement of SPL Finance

3-1) **Marketing of Laboratory Service (Appendix11: Income-Expense SPL)**

About seventy (70) percent of total expense is recovered with the income from the cost sharing at this moment. The income has come from fee-paying patients who are only 20 % out of all patients; the rest of patients (about 80 %) are free of charge because of under-five-year old. It is possible therefore to recover 100 % of running cost (excluding initial investment), if SPL increases fee-paying patients from 20 % to 30 %. The most probable way to survive SPL is to increase fee-paying patients by providing good service to the patients.

What is necessary to increase fee-paying patients is to meet their demands. The demands are a) accuracy of the results, b) quick and stable results return, c) hospitality and polite attitude. Those are of course also demands even for exempted patients. Fee-paying patients will not repeat to visit SPL without being fulfilled the above demands. Once SPL fulfills their demand, SPL could find more potential market in Dar es Salaam, such as private company, international organization and embassy staff. This system has a function of re-distribution of the wealth from fee-paying strata to the exempt strata.

3-2) Revolving Finance

When the revolving system was discussed in the meeting with Director General, MMC and in the steering committee SPL, the chief advisor of the project has been suggesting 100% revolving because there is a risk of losing value due to dropping of exchanging rate if SPL save a big amount in the account. It has come reality in March and April 2001. SPL has lost more than US$ 7000 by dropping the Tanzanian Shilling value from Tsh 800 to Tsh 900. It is necessary to save money in foreign currency, which is essential for importing reagent and equipment, to avoid the risk of foreign exchange loss.

The other problem for the revolving system is so much time-consuming for drawing Imprest. It took three months occasionally, which is barrier to the smooth running of the laboratory. This delayed response cannot meet the fee paying-demand, resulting in loosing reputation, reducing income and deteriorating financial management consequently. Appropriate measure by MMC and Paediatric authority and is expected.

3-3) The Balance in MMC Account (Appendix 9: MMC Account Balance)

Fairly big discrepancy has been rectified through counter-checking. In order to improve current situation, the following two measures could be suggested: a) having internal counter checking system within SPL to avoid unnecessary trouble. b) SPL should have own account for smoothening running in near future. Internal-counter-checking has been establishing in SPL while SPL has not received positive response on Own Account from MMC although under inquiry.

4. Improvement of Management in SPL

4-1) To Assign and Train Administrative Staff in SPL (Appendix 10: SPL Organization)

It has taken two years more to nominate a candidate for SPL administrator in spite of the efforts by MMC and MOH. Finally, paediatric department had to manage to allocate a paediatrician for the position because no eligible personnel have been nominated from MOH and MMC. The support, in this way, from the upper organization has not been fulfilled, which has been obstacles to the sustainability of the project. Under the health reform in MOH, it seems difficult to allocate personnel. The lower organization like paediatric department has had much more difficulty to modify the structure because it needs approval every time from the upper organization. However, The understanding by the Head of Paediatrics has enabled the allocation, being supported by DG MMC, which could be highly appreciated.

4-2) Establish Equipment / Facility Maintenance System

Poor maintenance service of the analyzer is the biggest problem with the Service Contract Agency who has violated the contract in terms of lack, or delay of the full service of the analyzers, which is clearly mentioned in the contract. This poor response by the supplying agency has come the biggest barrier for the sustainability of the SPL at this moment when SPL has been solving most of the problems. Legal reaction might be necessary by the authority in case the situation continues.

4-3) To Ensure Reagent Supply

Regret to say, the reagents would not have been supplied unless we could have managed to have weekly business meeting with the supplier. SPL and the supplier have agreed order-delivery system with well-drafted form. In the mutual agreement, the reagents are supposed to be delivered in one-month time after order confirmation. However, mainly because of the supplier's excuse, it has so often taken two-six months after order confirmation. Every time when the delivery was delayed, SPL has lost fee-paying patients. Even though the order-delivery system could be perfect it would not make sense if the other party would not follow the agreement. The establishment of stable reagent supply is still pending issue for the SPL sustainability. Alternative supplying channel is one of the solutions, but SPL has had few channels by now.

5. Others

5-1) Renovation Work

a) Ownership in Renovation Work

The department of paediatrics as a user should be empowered by the sponsor (MCH project) in the negotiation with the contractors, because the department is the long-term user of the building. When the project has the initiative in the negotiation, all outstanding issues will come not to the department but to the project, which might be disadvantage from the point of ownership in future. The department (recipient) can represent the project (donor) by adding clauses in the contract in which all rights for negotiating outstanding issues shall belong to the department (recipient). This can be applied not only to renovation work but also to purchasing equipment, which makes that the ownership belongs to the counter-part (department).

5-2) **Personnel Management** (Appendix 7: Organization Chart)

a) Organization Structure

SPL has improved its organization structure by reinforcing management sections such as service section, cashing section and general affair section. Self-sustaining clinical laboratories have seldom been tried in Southern and Eastern Africa before. We therefore have been creating a suitable organization structure by ourselves by revising several times. Few clinical laboratories in Tanzania have allocated service staff for answering patient's question, to record staff attendance / absence before. We hope that the authority would assess and evaluate the new organization from not bureaucratic but sustainable point of view.

b) Service Staff

Four (two: lab technicians, two: service staff) out of nine (9) personnel have shifted from MCH project to SPL employment March this year. The rest of five (all: serviced staff) are also necessary staff for sustaining SPL. Therefore they are to be shifted as well before the project ends. All **project employees** have been working hard with diligence, which is shown in the attendant record with less absence and more punctuality compare to the MMC employee. That is statistically significant. It is evident that they have been contributing to the betterment of SPL administration: better service to patients with quick sample collection and result return and increasing income. If the authority cannot continue their employment, SPL will fall into a vicious circle; resulting poor service both to the fee-paying and the exempted patients, delayed

sample-collection / result-return and decreasing income.

Technology section in SPL has capacity to tests samples five times as many as the current number of samples. If the service section works fully, the technology section can also function fully. If the serviced section shrinks, the capability in technology section also shrinks. In that case, SPL will go back to the old paediatric side-laboratory in which only paediatric samples are tested and results will be returned 2-3 days later

c) Collaboration with Paediatric Wards

Although the service section has been strengthened since1999, it is still occupied with crowded patients and samples. That is partially because the service staff has to spare most of time and efforts to the samples (about 150 samples per day) from the pediatric wards. A number of troubles remain such as delay of sample collection, missing / lacking sample containers, improper filling the lab-order-form. If those problems are solved with better collaboration between SPL and the paediatric wards, the service staff may be able to concentrate on providing better service and increasing income.

We have been taking the strategy for the sustainability of the project activities in which the incomes from fee-paying patients will subsidy the expense for exempted strata. This is not familiar to the existing state institutes at this moment. However, we believe that this might be only way to self-sustain a clinical laboratory under the financial difficulty. We sincerely hope that authority in Ministry of Health, Muhimbili National Hospital and Paediatric Department could understand the situation and be cooperative with the project activities.

Appendix 1: Master Plan, Record of Discussion(R/D), Follow-up Period MCH Project

1. Overall Goal

To reduce maternal and child morbidity and mortality in the United Republic of Tanzania.

2. Project Purpose

(1) Maternal and chilled health services through TBA activities in Pongwe Division of Tanga Municipality and Magoma Division of Korogwe District are improved.

(2) Virological diagnosis of Polio at MMC is strengthened.

(3) Pediatric services at MMC are improved.

3. The Output of the Follow-up Programme of the Project

(1)-1 Capability of TBAs in the pilot areas is improved.

(1)-2 Referral system of high-risk pregnancy is established in the pilot area.

(1)-3 Revolving system of TBA's service is applied throughout the pilot area.

(2)-1 Poliovirus isolation and identification are improved.

(2)-2 Equipment installed in virological laboratory is well maintained.

(3)-1 Concept of Laboratory Based Medicine" is further understood by doctors, nurses and laboratory technicians.

(3)-2 Collaboration of medical personnel is improved.

(3)-3 Revenue from cost sharing scheme at Pediatric Laboratory is increased.

(3)-4 Pediatric Laboratory is efficiently managed by the Tanzanian personnel.

4. Activities of the Follow-up Programme

(1)-1-1 To train District MCH Aid to undertake refresh training of TBAs

(1)-1-2 To conduct refresh training of TBAs, organized by District MCH Coordinator and District MCH Aid.

(1)-1-3 To supervise TBA's activities through regular meeting

(1)-2-1 To train District MCH Coordinator and District MCH Aids to monitor referred cases

(1)-3-1 To support and monitor revolving system of TBA's kit

(2)-1-1 To conduct refresh training of laboratory technicians

(2)-2-1 To establish maintenance system for facilities and equipment installed in the virological laboratory.

(3)-1-1 To conduct seminar on nursing management

(3)-2-1 To conduct seminar on communication among doctors, nurses and laboratory technicians

(3)-3-1 To conduct the marketing of laboratory service

(3)-4-1 To assign and train administrative staff to manage the laboratory

(4)-4-2 To establish maintenance system for facilities and equipment installed

(4)-4-3 To ensure the supply of the reagents

Appendix 2: Summary of MCH Activities

MCH Project Activities Apr 2000 - Mar 2001

Out-put		Activities	Apr-00	May-00	Jun-00	Jul-00	Aug-00	Sep-00	Oct-00	Nov-00	Dec-00	Jan-01	Feb-01	Mar-01
Tanga Area														
1	TBA Capability	1) MCH Aid Training	MCHA Training											
		2) TBA 's Refresh Training	TBA 's Refresh Training											
		3) TBA 's Regular Meeting												
2	Referral System for High Risk Pregnancy	1) Train District MCH Coordinator	Cancelled					Instead Revise Report Form and in Use						
3	Revolving System for TBA Kits	1) Support / Monitor Revolving System of TBA-kits												
4	Others				Renovation Tongoni Disp							Renovation 3 Disp in Magoma		
Microbiology MMC														
1	Poliovirus Isolation/ Identification	1) Refresh Training of Lab-Technicians		Refresh Training										
								Polio Isolation from AFP Cases / Monthly Report						
2	Equipment / Facility to be maintained	1) Establish Maintenance System									Equipment / Consumables			
3	Others				MOH Meeting									
Paediatrics MMC														
1	Progress in Laboratory-Based-Medicine	1) To promote better Result Interpret												
			Grand Round 1/wk					Panic Data Semina						
		2) Better Utilization of		Sample Flow/ Result Return Work Shop					Sample Container Revolving Service					
2	Collaboration of Medical Personnel	1) To improve Medical Staff Communication					Joint Meeting (Wards a Lab)					Intercom Installation		
3	Improvement of SPL Finance	1) Marketing of Laboratory Service			Questionnaire (SPL)				District Hosp			Sample Collection Service		
							Service Staff Increased							
		2) Revolving Finance												
			Planned		Propose Implementation			Implemented (53%)						
4	Improvement of Management in SPL	1) Assign and to be trained Administrative Staff in						Administrator Assign			C/P training in Japan			
		2) Establish Equipment / Facilities Maintenance System in Lab and wards	Business Meeting Weekly with Supplier											
											Water Plant / Generator Maintenance Establishing			
		3) Ensure Reagent Supply	Business Meeting Weekly with Supplier					Developing Alternative Supplier						
											Order Alternatively			
5	Others	1) Renovation Work			Renovation Wd 16 and Makuti (Outpatient)							Renovation Waiting Room SPL		
		2) Personnel Management	Time Recorder Introduced			Organization Revised			Honoraria Revised			4 Personnel Shifted fro MCH to SPL		

Appendix 3: TBA Statistics in Pongwe Division

Pongwe Division

TBA in PONGWE Division

TRAINED TBA / WARD	PONGWE		MAWENI		DUGA		TANGASISI		TONGONI	MARUNG	KIRARE		TOTAL	
TBA in 1996	11		6		3		5		0	4	10		**39**	
TBA in 1997	9		5		2		6		5	7	5		**39**	
TBA in 1998	3		6		4		9		3	4	5		**34**	
TOTAL Nos. TBA Trained	**23**		**17**		**9**		**20**		**8**	**15**	**20**		**112**	
TBA Refresher Course 1999	15		14		8		13		5	11	16		**82**	
TBA Refresher Course 2000	13		12		6		11		6	10	15		**73**	
TBA Dropped Out	10		3		3		5		1	1	3		**26**	
TBA Active (2001)	13		14		8		16		7	14	17		**89**	

Delivery by Trained TBA in Pongwe Division

	PONGWE		MAWENI		DUGA		TANGASISI		TONGONI		MARUNG		KIRARE		Total	
	DEL	REF	DEL	REF	DEL	REF	DEL	REF	DEL	REF	DEL	REF	DEL	REF	DEL	REF
Nos. Delivery (Referred) 1996	8	0	6	0	4	0	5	2	0	0	5	0	11	0	152	2
Nos. Delivery (Referred) 1997	195	3	11	0	20	0	3	2	2	0	13	0	12	0	413	5
Nos. Delivery (Referred) 1998	53	11	39	6	40	2	41	0	25	5	42	6	32	3	386	41
Nos. Delivery (Referred) 1999	188	7	38	13	77	7	71	3	44	2	38	8	35	9	525	38
Nos. Delivery (Referred) 2000			50	16	64	5	49	10	16	3	34	5	14	7		
TOTAL Number of Delivery	**444**	**21**	**144**	**35**	**205**	**14**	**169**	**17**	**87**	**10**	**132**	**19**	**162**	**19**	**1476**	**86**
Nos. Delivery Average per Year	111		29		41		34		18		27		52			
Nos. Delivery per TBA	34		10		25		10		12		9		15			

Reproductive Population in Pongwe Division

TOTAL POPULATION	9795	6797	8353	11158	4489	3000	5088		
Population Reproductive Age	2586	1852	2370	2788	1290	721	1214		
Percentage (%) Reproductive	26	27	28	25	29	24	24		

(population data from JICA Project Base Line Survey 1998)

Appendix 4: TBA Statistics in Magoma Division

Magoma Division

TBA in MAGOMA DIVISION														
TRAINED TBA / WARD	**MASHEWA**		**KIZARA**		**KERENGE**		**MAGOMA**						**TOTAL**	
TBA in 1996	8		11		13		11						43	
TBA in 1997	7		7		9		8						31	
TBA in 1998	5		16		14		5						40	
TOTAL NUMBER	**20**		**34**		**36**		**24**						**114**	
TBA Refresher .Course 1999	17		26		35		23						101	
TBA Refresher Course 2000	28		34		34		25						121	
TBA Dropped out	1		1		1		0						3	
TBA Active (2001)	20		34		29		30						113	

Delivery by Trained TBA in Magoma Division													Total	
	DEL	**REF**	**DEL**	**REF**	**DEL**	**REF**	**DEL**	**REF**	**DEL**	**REF**	**DEL**	**REF**	**DEL**	**REF**
Nos. Delivery (Referred) 1996	2	2	15	0	28	0	17	2					**62**	4
Nos. Delivery (Referred) 1997	19	4	32	0	73	3	45	7					**169**	14
Nos. Delivery (Referred) 1998	91	9	182	5	202	13	167	30					**642**	57
Nos. Delivery (Referred) 1999	127	23	251	13	250	9	211	34					**839**	79
Nos. Delivery (Referred) 2000	91	26	105	16	170	17	167	30					**533**	89
TOTAL NUMBER	**330**	**64**	**585**	**34**	**723**	**42**	**607**	**103**					**2245**	243
Nos Delivery. Average per Year	66		117		145		121							
Nos Delivery. Average per TBA	28		29		25		20							
TOTAL POPULATION													**39892**	
(population data from Annual Primary Health Report 1999 in Korogwe District)														

Appendix 5: Summary of Monthly Report Virus Lab

Summary of Monthly Report in Virology Laboratory

Jul 2000 – Jun 2001

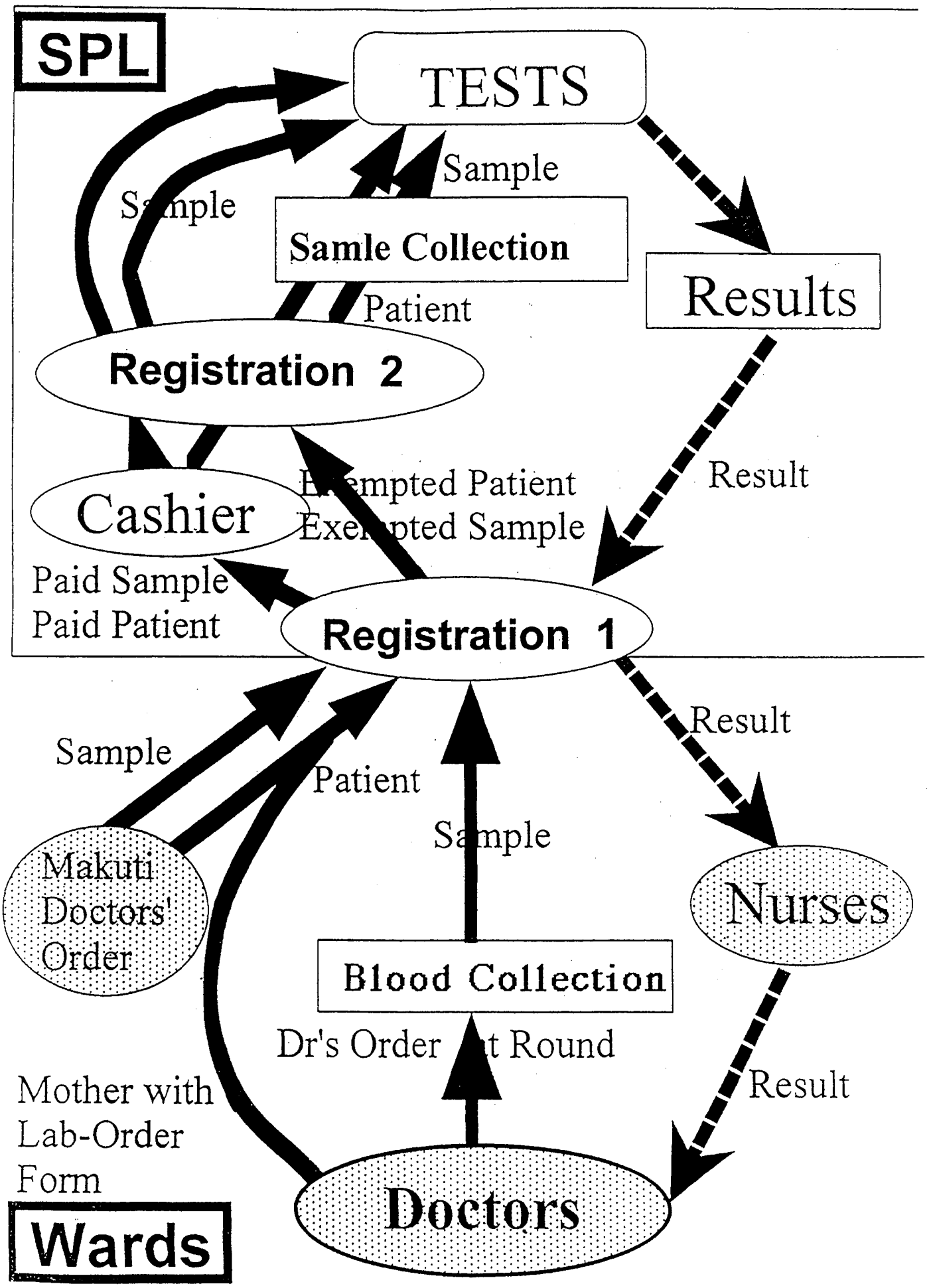
			Jul-00	Aug-00	Sep-00	Oct-00	Nov-00	Dec-00	Jan-01	Feb-01	Mar-01	Apr-01	May-01	Jun-01	Total
Viral Serology	Measles / Rubella	Measles/ Rubella IgM	84	0	122	66	33	72	5	20	15	55			472
		Positive Anti-Measles IgM	56	0	67	33	24	25	4	17	8	41			275
		Positive Anti-Rubella IgM	5	0	27	12	1	11	0	0	0	1			57
Virus Isolation	AFP	AFP Samples tested	33	13	14	5	13	13	4	3	5	0			103
		Positive for Poliovirus	0	0	1	0	0	0	0	0	0				1
		Positive for non-Polio	6	3	1	1	1	2	1	0	1				16
	General	Genaral Virology Sample	0	0	0	0	0	0	0	0	0	0			0
		Positive Virus 1													0
		Positive Virus 2													0
	Measles	Measles Samples	0	0	0	2	0	0	0	0	0	0			2
		Positive for Measles vurus				0									0
Vaccine Potency Test	OPV	OPV Lots tested	2	0	0	0	0	0	0	0	0	0			2
		OPV Lots potent	2												2
	Measles	Measles Lots tested	4	0	0	0	0	0	0	0	0	0			4
		Measles Lots potent	4												4

Appendix 6: Summary of Monthly Report SPL

Statistic Summary in SPL, May 2000 - Mar 2001

	May-00	Jun-00	Jul-00	Aug-00	Sep-00	Oct-00	Nov-00	Dec-00	Jan-01	Feb-01	Mar-01	Total
Exempted Pts	1970	2204	2002	2019	1773	1733	1651	2263	2079	2441	2053	22188
Cash	482	522	445	460	490	501	421	461	486	450	603	5434
Bill										82	31	
Total	2452	2726	2447	2479	2263	2234	2072	2724	2565	2973	2687	27622
Malaria BS	3894	2121	2008	2025	1952	1849	2497	3191	4394	1757	1535	31366
Hb										1630	1394	
Others Side Lab										152	138	
ESR										433	396	
FBP	468	491	389	412	397	413	336	293	509	451	410	4569
Biochemistry	706	671	523	391	353	437	440	457	775	292	413	5458
Immunology	245	206	111	139	92	65	110	54	110	115	141	1388
Bacteriology	416	351	295	282	321	340	426	383	574	434	413	4235
Others	20	18	14	24	30	25	12	17	16	14	17	207
Total	5749	3858	3340	3273	3145	3129	3821	4395	6378	5278	4857	47223
Paediatrics MMC	2016	2208	1822	2049	1841	1878	1335	2388	2157	2573	2567	22834
Other MMC (Include MOI)	394	415	605	431	489	414	699	419	365	297	403	4931
Out of MMC+Unknown	144	103	20	25	28	40	37	17	42	103	79	638
Income (Tsh)	2,540,000	2,404,000	3,035,000	2,384,000	2,047,000	2,015,000	1,970,000	2,148,000	2,091,000	1,620,000	2,865,000	25,119,000

Appendix 7: Collaboration with Wards SPL



Appendix 8: Budget Plan SPL　　Proposal of Revolving Finance in SPL, 2000-2001

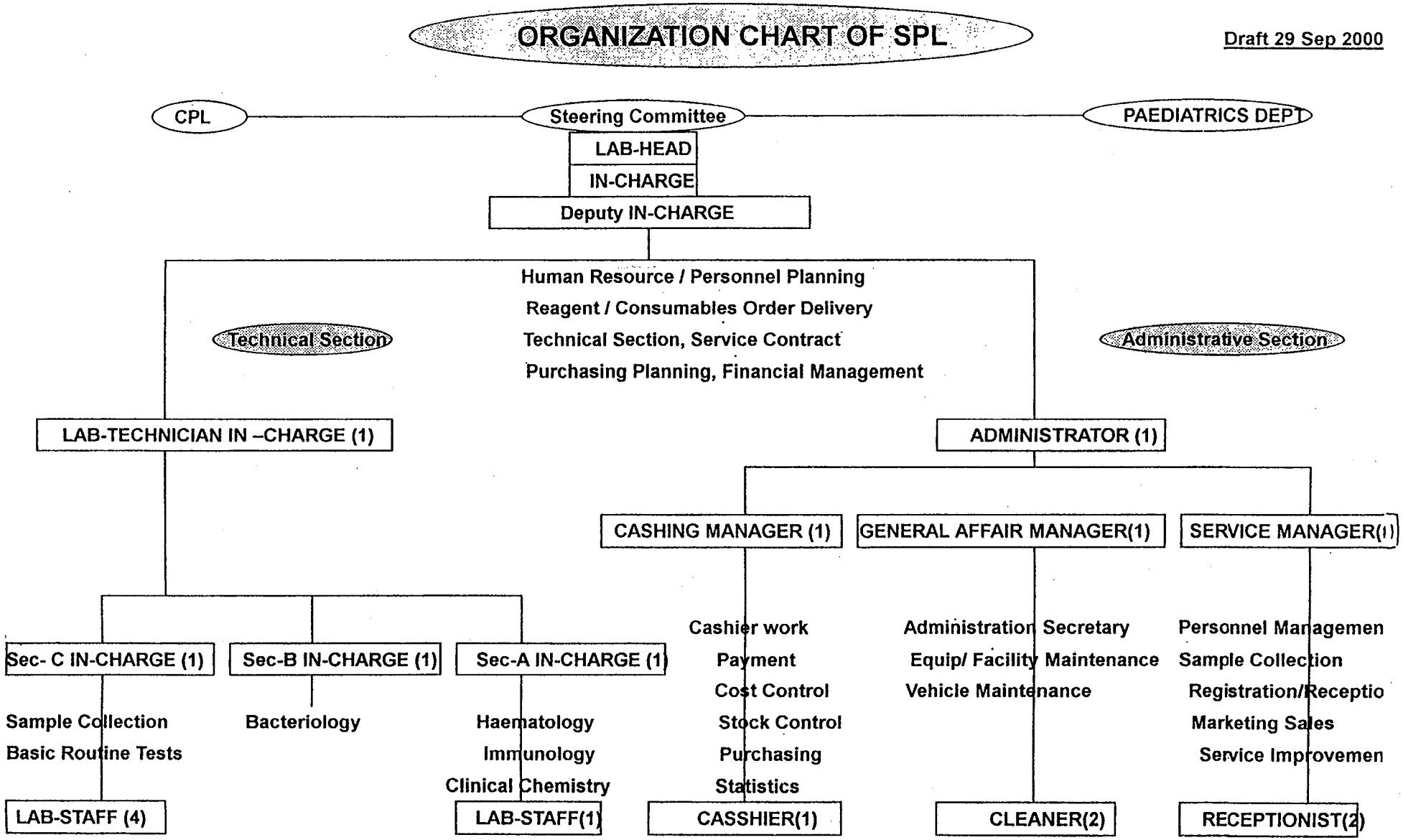
	Monthly Regular	MOI	Research/ Health Check	Income Subtotal	Reagent(US$)	Reagent(Tsh)	Honoraria x 1	Consumables x 1	Local Staff x 1/2	Vehicle(Vitarha, M.Bike) x1	Telephone 153322 x1	Stationary x1	Service Mainte x 1	Others, Generator Fuel	From imprest	Reagent x 1	Security x1	Local Staff x 1/2	From MGH Project / Depositor	Expense Subtotal
Jul,00	2,000,000	70,000	0	2,070,000	6,000	4,800,000	144,900	50,000	240,000	40,000	30,000	50,000	733,333	40,000	1,328,233	4,800,000	270,000	240,000	510,000	8,638,233
Aug	2,050,000	70,000	0	2,120,000	0	0	148,400	50,000	240,000	40,000	30,000	50,000	733,333	0	1,291,733	0	270,000	240,000	510,000	4,801,733
Sep	2,100,000	70,000	0	2,170,000	0	0	151,900	50,000	240,000	40,000	30,000	50,000	733,333	0	1,295,233	0	270,000	240,000	510,000	4,805,233
Oct	2,150,000	70,000	0	2,220,000	6,000	4,800,000	155,400	50,000	240,000	40,000	30,000	50,000	733,333	40,000	1,338,733	4,800,000	270,000	240,000	510,000	8,648,733
Nov	2,200,000	70,000	0	2,270,000	0	0	158,900	50,000	240,000	40,000	30,000	50,000	733,333	0	1,302,233	0	270,000	240,000	510,000	4,812,233
Dec	2,250,000	70,000	1,000,000	3,320,000	0	0	232,400	50,000	240,000	40,000	30,000	50,000	733,333	0	1,375,733	0	270,000	240,000	510,000	4,885,733
Jan,01	2,300,000	70,000	0	2,370,000	6,000	4,800,000	165,900	50,000	240,000	40,000	30,000	50,000	733,333	40,000	1,349,233	4,800,000	270,000	240,000	510,000	8,659,233
Feb	2,350,000	70,000	0	2,420,000	0	0	169,400	50,000	240,000	40,000	30,000	50,000	733,333	0	1,312,733	0	270,000	240,000	510,000	4,822,733
Mar	2,400,000	70,000	0	2,470,000	0	0	172,900	50,000	240,000	40,000	30,000	50,000	733,333	0	1,316,233	0	270,000	240,000	510,000	4,826,233
Apr	2,450,000	70,000	0	2,520,000	6,000	4,800,000	176,400	50,000	240,000	40,000	30,000	50,000	733,333	40,000	1,359,733	4,800,000	270,000	240,000	510,000	8,669,733
May	2,500,000	70,000	0	2,570,000	0	0	179,900	50,000	240,000	40,000	30,000	50,000	733,333	0	1,323,233	0	270,000	240,000	510,000	4,833,233
Jun	2,550,000	70,000	1,000,000	3,620,000	0	0	253,400	50,000	240,000	40,000	30,000	50,000	733,333	0	1,396,733	0	270,000	240,000	510,000	4,906,733
Total	27,300,000	840,000	2,000,000	30,140,000	24,000	19,200,000	2,109,800	600,000	2,880,000	480,000	360,000	600,000	8,799,996	160,000	15,989,796	19,200,000	3,240,000	2,880,000	6,120,000	41,309,796
															53.1%					

Appendix 9: Balance in MMC Account

From SPL Record

	DepositedMMC	HonorariaDrawn	Other Expense	Remark
07-Apr-98	610,000			Petra Study
04-Aug-98	820,000			
01-Dec-98	2,476,000			
01-Apr-99	8,613,600			From Naomi
Jan-99	900,000	119,700		
Feb-99	1,305,000	140,300		
Mar-99	1,678,000	143,400		
Apr-99	890,000	112,700		
May-99	962,000	177,800		
Jun-99	1,078,000	155,200		
Jul-99	1,708,000	159,100		
Aug-99	1,469,000	113,600		
Sep-99	1,323,000	133,400		
Oct-99	2,076,000	130,200		
Nov-99	1,699,000	147,300		
Dec-99	1,435,000	100,450		
Jan-00	1,107,000	77,491		
Feb-00	1,832,000	128,240		
Mar-00	2,661,000	186,270		
Apr-00	2,074,000	136,010		
May-00	2,540,000	181,370		
Jun-00	2,404,000	240,660		
Jul-00	3,035,000	148,050		
Aug-00	2,384,000	155,890		
Sep-00	2,047,000	150,080		
Oct-00	2,015,000	147,700	168,003	
Nov-00	1,970,000	149,538	339,960	
Dec-00	2,148,000		0	
Jan-01	2,091,000		250,000	
Feb-01	1,620,000			
Mar-01				
	58,970,600	3,334,449	757,963	54,878,188

Appendix10:Organization Chart SPL



Appendix11: Income-Expense SPL

Income-Expense Balance, July 00 - Jun 01			
Item	Income	Expense	Balance
Jul00-Jan01	14,693,500		
Reagent		13,227,400	
Personnel		4,159,390	
Honoraria		884,543	
Consumables		1,392,300	
Security		810,000	
	14,693,500	20,473,633	-5,780,133

Maternal and Child Health (MCH) Project
MOH Tanzania and JICA

1 / April / 2000

ACTION PLAN

Apr. 2000 / Mar. 2001

Dr. Nobuyuki Matsubayashi
Chief Advisor MCH Project
Japan InternationalCooperation Agency (JICA)

for Project Manager of Maternaland Child Health Service Project ,Head of Reproductive and ChildHealth Unit, Ministry of Health, Tanzania

A. Summary

As mentioned in the revised Record of Discussion (R/D) for the following-up period, the activities of MCH project this fiscal year will mainly focus on sustain the project. The following output therefore will be targeted in the activities:

1. In pediatric MMC, 1) to make progress in laboratory based medicine 2) to promote collaboration of medical personnel, 3) to improve SPL finance, 4) to improve SPL management
2. In Tanga, 1) to improve TBA capability, 2) to establish referral system for high risk pregnancy, 3) to establish TBA Kit revolving system.
3. In microbiology MMC, 1) to reinforce polio virus isolation, 2) Equipment / Facility to be maintained.

B. Activities in Each Site (see the Annex-1)

I. Activities in Paediatrics in MMC

1. To Progress in Laboratory Based Medicine

1) To Ensure Stable Running of SPL:, Availability of accurate lab-results is the basis for the Lab-Based Medicine. For that purpose, stable running of the laboratory is requested which includes, quality control of lab-result, reagent stock control and keeping / upgrading standard of lab-technician. These will be transferred through daily activity (chief advisor) and instruction by the short term-experts (lab-technologist, lab-administration)

2) Better Utilizing of the Lab-Results: Smooth sample collection, quick result returning, smooth communication between lab and wards are the another factor for lab-based medicine. Nursing Management Seminar which is supposed to take place by the short-term experts (nursing management) will contribute to the better lab- utilization.

2. To Collaborate among Medical Personnel

1) To Improve Medical Staff Communication: This is also one of the conclusions which we shall focus in the following phase. Among three parties, Doctors, Nursing staff and laboratory staff should be closely communicated. Communication Seminar (by lab / hosp. administration) and Nursing Management Seminar will help the purpose.

3. To improve in SPL Finance

1) Marketing of Lab-Service: In order to self-sustain the laboratory, especially in terms of finance, improvement of marketing is definitely required. Developing fee-paying samples is one of the essential focus. However, we have found that it will not be realized without the satisfactory service with accurate results, quick results return, courtesy and polite patients services. Some of the short-term experts for hosp./ lab administration is sure to contribute in this field

2) Finance Revolving System (see Annex 3: SPL Budget plan for 2000 / 2001) : This also is essential for self-sustaining in near future. As mentioned in the Record of Discussion for the MCH project, local cost is supposed to be afforded by Tanzania side. The establishment of the revolving system therefore meets the policy of Tanzanian and Japanese Governments.

Seven percent (approximately 140000/ Tsh/ month) out of monthly income (approximately 2 mil per month) has been paid for the motivation of the laboratory staff. The rest of the income has been accumulated in the MMC account. The balance of the account from the last two year's cost-sharing is therefore saved more than 34 mil Tsh (4 mil for FY 1997 / 1998, 13 mil Tsh for FY 1998 / 1999, 17 mil for FY 1999 / 2000) which is almost equivalent the reagent cost for two years. The income has increased by 40 percent per year. So that, it seems reasonable for SPL to introduce a revolving system at this moment.

Every aspect such as result quality control, marketing, patients service, account system in the laboratory must be related to the revolving system. The competent capability is therefore required to be obtained in the administration in order to establish and maintain the system. This is one of the most essential conditionings to be assured before handing over the management to the Tanzanian side. The chief advisor of the project and short-term expert (Japanese) for hospital administration will take roles for establishing the system and transferring the administrative management skills to the Tanzanian side. Tanzanian administrator is to be appointed hopefully as soon as possible, so is the re-organization of the SPL if possible.

4. To Improve Management in SPL

1) To Foster Administrative Staff: As for the administrative staff in SPL, there are three personnel, 1) administrator (Tanzanian: vacant), 2) accountant (Tanzanian: vacant) and 3) assistant administrator (MCH National Staff Employee). The most crucial is the administrator who has not been appointed in the last two years. Without fulfilling this post with competence, it is impossible to establish the SPL management and self sustain. It will take at least one year (hopefully one year and half) to hand over what is required to learn as an administrator, so that the appointment is expected in the early half of 2000. The authority such as MOH and MMC are expected to be cooperative to recruit and appoint the personnel.

2) To Establish Maintenance System: The infrastructure (electricity and water), the facility (building, furniture, etc.) the equipment (main analyzers and others) shall be maintained in good condition all the time. The following the service contract with the supplier is one of the way of the maintenance. Keeping daily log book record, check list, reporting line is the others. Quick allocation for necessary repair is also needed, so is flexible finance. The delay of resume of the laboratory functioning shall result in failure of the financial revolving by loosing reputation and patients / customers.

3) To Ensure Stable Reagent Supply: The smooth flow of the inquiry, order, delivery, tax invoice, payment, and revolving system are necessary for the stable reagent supply. The system has had a number of obstacles up to now mainly because

immaturity of the suppliers and partially because immaturity SPL administration ourselves. But recently, we are proud that it is establishing, however strong administration is needed to maintain the system. The system may require somehow independent account for well organized reagents supply. Otherwise the system does not seem to work smoothly.

5. To Improve Facilities in Pediatrics

The following renovations are planned in this fiscal year by the budget. The cost for the renovation are estimated 10.8 mil 17.2 mil Tsh for 1) and 2) respectively.

1) Ward 17 Renovation
2) Makuti Renovation

II. Activities in Tanga

1. Improve TBA's Capability

1) Training of MCHA for TOT: MCH / PHN are key persons in maintaining the TBA activities because they are working in the health facilities located in the areas, they have all the information on the health situation in the communities. Therefore MCHA / PHN should have the skills and knowledge to supervise and train the TBAs and also conduct the refresher training courses when necessary.
The Ministry of Health will conduct a seminar of TBA activities for the Regional MCH Coordinators and the Zonal MCH Coordinators. A National Guideline will be published after the seminar.
Following the above activities by MOH, the MCH Project has a plan to have a workshop for DMCH Coordinator for TOT by the Regional and Zonal MCH Coordinators in June or July. The training of MCHA / PHN for TOT in Magoma Division in Korogwe District will take place in August for two weeks, and the venue will be the Magoma Health Centre in Magoma Division. The training of MCHA / PHN for TOT in Pongwe Division in Tanga Municipality will take place in September for two weeks, and the venue will be the Pongwe Health Centre.
2) TBA Refresh Training: After the MCHA / PHN training for TOT, a TBA refresher training course is planned to take place by MCHA / PHN. TBAs will attend the nearest Health Facility to participate the refresher training course. The course will take thirty days in total, however, the course will not be held continuously but scheduled to meet TBA's convenience by MCHA / PHN. The cost for the training is to be not high for the local government to follow it in future.
3) TBA Regular Meeting: TBA Meetings are conducted by DMCH Coordinator approximately quarterly because of seasonal and road conditions. The time schedule of the meetings are shown in the annex 2. The purpose of the meetings are as follows:

- To get the delivery information
- To know the situation of the referral cases
- To check the report system

- To check the consumption of TBA Kit consumables and correct the usage
- To solve any other matter that arises

The meeting will be conducted by MCHA / PHN under the supervision by MCH Coordinator. This is a challenge which has not been experienced. The project expect the challenge shall empower MCHA / PHN.

2. Establish Referral System of High Risk Pregnancy

1) Training of District MCH Coordinator: The lack of following up of referred cases has been found in TBA activities in the past. That is why the referral system would be focused on in the following-up period. The following are activities for this year:

a) Analyze the referral cases: to start with analyzing the referral cases

b) Workshop: to have a workshop involving the personnel concerned such as District MCH Coordinator, In-charge of Health Facilities, Private Hospitals, RHMT, DHMT. The format for the referral cases will be discussed in the workshop which shall be simple and effective for the TBAs to answer.

3. To Establish Revolving System for TBA- kit

1) Support / Monitor Revolving System of TBA-kit: In order to sustain the TBA Kits (permanent equipment and consumables) which were provides in 1998, revolving system for consumables started as a trial in Kirare dispensary in Pongwe in Tanga Municipality in March, 1999. The system shall be maintained by the supervision of the Project and DHMT. The following are the purpose of the supervision:

- How to keep the records of consumables
- How to manage to buy consumables
- How to avoid misuse of the money form the consumables

The system is expected to extend to the other wards through appropriate review and revision. One short-term expert (Japanese) in this field is anticipated to contribute to improve the system.

III. Activities in Microbiology Department

1. Polio Virus Isolation / Identification

1) Refresh Training for Lab-Technicians: A Japanese short-term expert will conduct refreshing training for the virology lab-technicians. Through the training, Polio isolation skills are to be so stable that the WHO accreditation criteria could be cleared by comparing the results to the one from Zambian Laboratory.

2. Maintain Facility / Equipment

1) To establish Maintenance System: Through regular meeting, the maintenance system will be gradually established.

C. Training of Tanzanian Counter Parts in Japan

Two counter-part training, one for hospital / lab administrator the other for nursing management are planned this year. (see the Annex-2)

E. Dispatch of Japanese Experts

Three titles for four long term experts, six titles for seven experts are planned to be dispatched this year. (see the Annex-2)

Annual Report 1999/2000, Activities Chart

Annex-1

Annual Report 1999/2000

No	Output	Activities	Apr	May	Jun	Jul	Aug	Spt	Oct	Nov	Dec	Jan	Feb	Mar
I	Paediatrics in MMC													
1	Improvement of Diagnostic Capability	1) Lab-data Interpretation	Through Daily Lab-Service and Grand Round											
		2) Lab-Techncian Upgrading Seminar					Individual Training, Biochemistry, Immunology, Bacteriology						Malaria Workshop	
2	Sustain the SPL	1) Facilities / Equipment Maintenance	Through Daily Maintenance								Renew Service Contract			
		2) Administration/ Management Skill	Training in Japan for Assistant Administrator				On Job Training by Expert			On Job Training				
		3) Financial Improvement			Re-Organization of Financial System									
		4) Patient / Customer Service					Introduction of New Flow					Satrt Revized System		
3	Improvement of Facilities	1) Renovation of A3, B3												
II	Tanga Area													
1	Reinforce Health Activities in Community	1) Village Monthly Meeting	TBA Regular / Village Monthly Meeting in Pongwe											
2	TBA's Skill / Knowledge Improved	1) TBA Seminar				Refresher Courses								
		2) TBA Regular Meeting, Kit Revolving	kit revolving											
3	VHW's Skill/ Knowledge Improved	1) VHW Seminar				Refresher Courses								
4	Improvement of Health Facilities	1) Mareng Dispensary											Officially Opened	
5	Health Statistics	1) Health Survey in the Pilot Area	Statistics							Report Issued				
III	Microbiology													
1	Upgrade / Maintain Virology Skill / Knowledge	1) Transfer Virus Isolation Skills			Short Term Experts									
		2) Maintein Cell Culture Skill												

Anual Rteport 1999 / 2000, Experts and Trainees

Annex-2

Experts / Trainees 1999/2000

No	Activity	Title	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
	Experts													
1	Dr. N.Matsubayashi	Chief Advisor												
2	Ms. T.Yamamoto	Midwife												
3	Mr. M. Hayakawa	Coordinator												
4	Mr. Noda	Public Health												
5	Mr. O. Sakamoto	Lab- Technician												
6	Dr. Sakurai	Virologist												
7	Dr. Yoshii	Virologist												
8	Dr. M. Adachi	Paediatrician												
9	Ms. E.Nishijima	Hosp Administration												
10	Vacant	Health Education												
11	Prof. T. Yamauchi	Health Policy												
	Final Assess Team													
	Trainees													
1	Mr. Mbena	Virology Technician												
2	Mr. Pambamaji	Hospital Administration												
3	Dr. Kimey	Community Health												

ANNEN-3-1

Budget2000-2001

	Monthly Regular	MOI	Research/Health Check	Income Subtotal	Reagent(US$)	Reagent(Tsh)	Honoraria	Local Staff	Security	Consumables	Service Mainte	Vehicle(9939,Vitarha, M.Bike	Telephone 153322 / Communication	Stationary	Others,Geneartor Fuel	Expense Subtotal
Jul, 2000	2,000,000	70,000	0	2,070,000	6,000	4,800,000	144,900	350,000	270,000	50,000	733,333	50,000	30,000	50,000	40,000	6,518,233
Aug	2,050,000	70,000	0	2,120,000	0	0	148,400	350,000	270,000	50,000	733,333	50,000	30,000	50,000	0	1,681,733
Sep	2,100,000	70,000	0	2,170,000	0	0	151,900	350,000	270,000	50,000	733,333	50,000	30,000	50,000	0	1,685,233
Oct	2,150,000	70,000	0	2,220,000	6,000	4,800,000	155,400	350,000	270,000	50,000	733,333	50,000	30,000	50,000	40,000	6,528,733
Nov	2,200,000	70,000	0	2,270,000	0	0	158,900	350,000	270,000	50,000	733,333	50,000	30,000	50,000	0	1,692,233
Dec	2,250,000	70,000	1,000,000	3,320,000	0	0	232,400	350,000	270,000	50,000	733,333	50,000	30,000	50,000	0	1,765,733
Jan,2,001	2,300,000	70,000	0	2,370,000	6,000	4,800,000	165,900	350,000	270,000	50,000	733,333	50,000	30,000	50,000	40,000	6,539,233
Feb	2,350,000	70,000	0	2,420,000	0	0	169,400	350,000	270,000	50,000	733,333	50,000	30,000	50,000	0	1,702,733
Mar	2,400,000	70,000	0	2,470,000	0	0	172,900	350,000	270,000	50,000	733,333	50,000	30,000	50,000	0	1,706,233
Apr	2,450,000	70,000	0	2,520,000	6,000	4,800,000	176,400	350,000	270,000	50,000	733,333	50,000	30,000	50,000	40,000	6,549,733
May	2,500,000	70,000	0	2,570,000	0	0	179,900	350,000	270,000	50,000	733,333	50,000	30,000	50,000	0	1,713,233
Jun	2,550,000	70,000	1,000,000	3,620,000	0	0	253,400	350,000	270,000	50,000	733,333	50,000	30,000	50,000	0	1,786,733
Total	27,300,000	840,000	2,000,000	30,140,000	24,000	19,200,000	2,109,800	4,200,000	3,240,000	600,000	8,799,996	600,000	360,000	600,000	160,000	39,869,796

Cost Share 00-01

	Monthly Regular	MOI	Research/Health Check	Income Subtotal	Reagent(US$)	Reagent(Tsh)	Reagent x 1/3	Honoraria x 1	Consumables x 1	Local Staff x 1/2	Vehicle(9939,Vitarha, M.Bike) x1	Telephone 153322 x1	Stationary x1	Service Mainte x 1	Others,Generator Fuel	From Imprest	Reagent x 2/3	Security x1	Local Staff x 1/2	From MOH Project /c Deposit	Expense Subtotal
Jul,00	2,000,000	70,000	0	2,070,000	6,000	4,800,000	1,600,000	144,900	50,000	175,000	50,000	30,000	50,000	733,333	40,000	2,873,233	3,200,000	270,000	175,000	3,645,000	6,518,233
Aug	2,050,000	70,000	0	2,120,000	0	0	0	148,400	50,000	175,000	50,000	30,000	50,000	733,333	0	1,236,733	0	270,000	175,000	445,000	1,681,733
Sep	2,100,000	70,000	0	2,170,000	0	0	0	151,900	50,000	175,000	50,000	30,000	50,000	733,333	0	1,240,233	0	270,000	175,000	445,000	1,685,233
Oct	2,150,000	70,000	0	2,220,000	6,000	4,800,000	1,600,000	155,400	50,000	175,000	50,000	30,000	50,000	733,333	40,000	2,883,733	3,200,000	270,000	175,000	3,645,000	6,528,733
Nov	2,200,000	70,000	0	2,270,000	0	0	0	158,900	50,000	175,000	50,000	30,000	50,000	733,333	0	1,247,233	0	270,000	175,000	445,000	1,692,233
Dec	2,250,000	70,000	1,000,000	3,320,000	0	0	0	232,400	50,000	175,000	50,000	30,000	50,000	733,333	0	1,320,733	0	270,000	175,000	445,000	1,765,733
Jan,01	2,300,000	70,000	0	2,370,000	6,000	4,800,000	1,600,000	165,900	50,000	175,000	50,000	30,000	50,000	733,333	40,000	2,894,233	3,200,000	270,000	175,000	3,645,000	6,539,233
Feb	2,350,000	70,000	0	2,420,000	0	0	0	169,400	50,000	175,000	50,000	30,000	50,000	733,333	0	1,257,733	0	270,000	175,000	445,000	1,702,733
Mar	2,400,000	70,000	0	2,470,000	0	0	0	172,900	50,000	175,000	50,000	30,000	50,000	733,333	0	1,261,233	0	270,000	175,000	445,000	1,706,233
Apr	2,450,000	70,000	0	2,520,000	6,000	4,800,000	1,600,000	176,400	50,000	175,000	50,000	30,000	50,000	733,333	40,000	2,904,733	3,200,000	270,000	175,000	3,645,000	6,549,733
May	2,500,000	70,000	0	2,570,000	0	0	0	179,900	50,000	175,000	50,000	30,000	50,000	733,333	0	1,268,233	0	270,000	175,000	445,000	1,713,233
Jun	2,550,000	70,000	1,000,000	3,620,000	0	0	0	253,400	50,000	175,000	50,000	30,000	50,000	733,333	0	1,341,733	0	270,000	175,000	445,000	1,786,733
Total	27,300,000	840,000	2,000,000	30,140,000	24,000	19,200,000	6,400,000	2,109,800	600,000	2,100,000	600,000	360,000	600,000	8,799,996	160,000	21,729,796	12,800,000	3,240,000	2,100,000	18,140,000	39,869,796

ANNEX-3-2

Cost Share01-02

	Monthly Regular	MOI	Research/Health Check	Income Subtotal	Reagent (US$)	Reagent(Tsh)	Reagent x 2/3	Honoraira x 1	Consumables x 1	Local Staff x 1	Vehicle(9939,Vitarha. M.Bike) x1	Telephone 153322 x1	Stationary x1	Service Mainte x 1	Others,Generator Fuel	From Imprest	Reagent x 1/3	Security x1	From MCH Project / Deposit	Expense Subtotal
Jul,01	2,600,000	70,000	0	2,670,000	6,000	4,800,000	3,200,000	186,900	50,000	350,000	50,000	30,000	50,000	733,333	40,000	4,690,233	1,600,000	270,000	1,870,000	6,560,233
Aug	2,650,000	70,000	0	2,720,000	0	0	0	190,400	50,000	350,000	50,000	30,000	50,000	733,333	0	1,453,733	0	270,000	270,000	1,723,733
Sep	2,700,000	70,000	0	2,770,000	0	0	0	193,900	50,000	350,000	50,000	30,000	50,000	733,333	0	1,457,233	0	270,000	270,000	1,727,233
Oct	2,750,000	70,000	0	2,820,000	6,000	4,800,000	3,200,000	197,400	50,000	350,000	50,000	30,000	50,000	733,333	40,000	4,700,733	1,600,000	270,000	1,870,000	6,570,733
Nov	2,800,000	70,000	0	2,870,000	0	0	0	200,900	50,000	350,000	50,000	30,000	50,000	733,333	0	1,464,233	0	270,000	270,000	1,734,233
Dec	2,850,000	70,000	1,000,000	3,920,000	0	0	0	274,400	50,000	350,000	50,000	30,000	50,000	733,333	0	1,537,733	0	270,000	270,000	1,807,733
Jan,02	2,900,000	70,000	0	2,970,000	6,000	4,800,000	3,200,000	207,900	50,000	350,000	50,000	30,000	50,000	733,333	40,000	4,711,233	1,600,000	270,000	1,870,000	6,581,233
Feb	2,950,000	70,000	0	3,020,000	0	0	0	211,400	50,000	350,000	50,000	30,000	50,000	733,333	0	1,474,733	0	270,000	270,000	1,744,733
Mar	3,000,000	70,000	0	3,070,000	0	0	0	214,900	50,000	350,000	50,000	30,000	50,000	733,333	0	1,478,233	0	270,000	270,000	1,748,233
Apr	3,050,000	70,000	0	3,120,000	6,000	4,800,000	3,200,000	218,400	50,000	350,000	50,000	30,000	50,000	733,333	40,000	4,721,733	1,600,000	270,000	1,870,000	6,591,733
May	3,100,000	70,000	0	3,170,000	0	0	0	221,900	50,000	350,000	50,000	30,000	50,000	733,333	0	1,485,233	0	270,000	270,000	1,755,233
Jun	3,150,000	70,000	1,000,000	4,220,000	0	0	0	295,400	50,000	350,000	50,000	30,000	50,000	733,333	0	1,558,733	0	270,000	270,000	1,828,733
Total	34,500,000	840,000	2,000,000	37,340,000	24,000	19,200,000	12,800,000	2,613,800	600,000	4,200,000	600,000	360,000	600,000	8,799,996	160,000	30,733,796	6,400,000	3,240,000	9,640,000	40,373,796

CostShare01-02Alt

	Monthly Regular	MOI	Research/Health Check	Income Subtotal	Reagent (US$)	Reagent(Tsh)	Reagent x 1	Honoraria x 1	Consumables x 1	Local Staff x 1	Vehicle(9939,Vitarha. M.Bike) x1	Telephone 153322 x1	Stationary x1	Service Mainte x 1	Others,Generator Fuel	From Imprest	Reagent x 0	Security x1	From MCH Project / Deposit	Expense Subtotal
Jul,01	2,600,000	70,000	0	2,670,000	6,000	4,800,000	4,800,000	186,900	50,000	350,000	50,000	30,000	50,000	733,333	40,000	6,290,233	0	270,000	270,000	6,560,233
Aug	2,650,000	70,000	0	2,720,000	0	0	0	190,400	50,000	350,000	50,000	30,000	50,000	733,333	0	1,453,733	0	270,000	270,000	1,723,733
Sep	2,700,000	70,000	0	2,770,000	0	0	0	193,900	50,000	350,000	50,000	30,000	50,000	733,333	0	1,457,233	0	270,000	270,000	1,727,233
Oct	2,750,000	70,000	0	2,820,000	6,000	4,800,000	4,800,000	197,400	50,000	350,000	50,000	30,000	50,000	733,333	40,000	6,300,733	0	270,000	270,000	6,570,733
Nov	2,800,000	70,000	0	2,870,000	0	0	0	200,900	50,000	350,000	50,000	30,000	50,000	733,333	0	1,464,233	0	270,000	270,000	1,734,233
Dec	2,850,000	70,000	1,000,000	3,920,000	0	0	0	274,400	50,000	350,000	50,000	30,000	50,000	733,333	0	1,537,733	0	270,000	270,000	1,807,733
Jan,02	2,900,000	70,000	0	2,970,000	6,000	4,800,000	4,800,000	207,900	50,000	350,000	50,000	30,000	50,000	733,333	40,000	6,311,233	0	270,000	270,000	6,581,233
Feb	2,950,000	70,000	0	3,020,000	0	0	0	211,400	50,000	350,000	50,000	30,000	50,000	733,333	0	1,474,733	0	270,000	270,000	1,744,733
Mar	3,000,000	70,000	0	3,070,000	0	0	0	214,900	50,000	350,000	50,000	30,000	50,000	733,333	0	1,478,233	0	270,000	270,000	1,748,233
Apr	3,050,000	70,000	0	3,120,000	6,000	4,800,000	4,800,000	218,400	50,000	350,000	50,000	30,000	50,000	733,333	40,000	6,321,733	0	270,000	270,000	6,591,733
May	3,100,000	70,000	0	3,170,000	0	0	0	221,900	50,000	350,000	50,000	30,000	50,000	733,333	0	1,485,233	0	270,000	270,000	1,755,233
Jun	3,150,000	70,000	1,000,000	4,220,000	0	0	0	295,400	50,000	350,000	50,000	30,000	50,000	733,333	0	1,558,733	0	270,000	270,000	1,828,733
Total	34,500,000	840,000	2,000,000	37,340,000	24,000	19,200,000	19,200,000	2,613,800	600,000	4,200,000	600,000	360,000	600,000	8,799,996	160,000	37,133,796	0	3,240,000	3,240,000	40,373,796

Maternal and Child Health (MCH) Project

Ministry of Health (MOH) Tanzania and

Japan International Cooperation Agency (JICA)

1 / April / 2001

Action Plan

April 2001 – November 2001

N. Matsubayashi M. D.

Chief Advisor, MCH Project JICA

For Project Manager, Head of Reproductive and Child Health Unit, Ministry of Health, Tanzania

Preface

The project is coming to the final year of its seven-years activities. We have been challenging to the sustainability of the activities. Now we may say the sustainability is coming reality in some activities of the project.

People often complain that they cannot sustain activities because of lack of fund. I agree partially their opinions. However, I do not agree it hundred percent because I believe human capability can cover the lack of fund. Furthermore, the capability for technique and management skills can generate money. We have been showing the fact through the past project activities. It would be traced through the annual report 2000-2001.

But, it is also true that the activities have not been matured yet. Seven years are not enough long to be matured. For example, SPL looks like a boy who has stood up and started walking independently. He cannot run fully yet by himself. He may fall down when he stumbles over a stone. He needs support until he gets more skill and power.

In this action plan (see appendix: Action Plan MCH Project), I have added few plan to the previous year's activities. Most of plans are following the last year. In the final year of the project, what we shall concentrate is to keep on aiming at the objectives, following the strategies and handing over them to the Tanzanian colleagues.

I am proud of our colleagues in the project who have been making incredible efforts and achieving most productive structure. If they believe that the money comes after the capability, the boy will grow and run without support.

Nobuyuki MATSUBAYASHI M.D. chief Advisor, MCH Project MOH-JICA
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Overall

I. Final Evaluation

Final evaluation will be performed by a joint team consisted of Tanzania and Japan authority in mid or end of June 2001. The evaluation will follow the evaluation last time June 1999 and Record of Discussion agreed at that time.

II. Final Report

The final report will be compiled and submitted to Ministry of Health. The report will be presented in a meeting, which will take place in October 2001.

A. Tanga Region

1. Improve TBA's Capability

1-1) **TBA Training by MCHA:** The initiative for TBA training has been shifting from MCH project to Maternal Child Health Aid (MCHA) or Primary Health Nurses (PHN) through TOT. This is to be completed by the end of the Project.

1-2) **TBA Regular Meetings:** TBA regular meeting is also important factor for maintaining TBA activities. The meeting will be succeeded continuously under supervision by MCH coordinators.

2. Referral System for High Risk Pregnancy

The referral system for high-risk pregnancy will be established in the pilot areas and will be monitored by the means of revised form.

3. The TBA kit Revolving System

The TBA kit revolving system spread in the all the wards will be followed. The items consumed will be replaced and the system is expected to continue revolving.

B. Microbiology Department in MMC

1. Poliovirus Isolation / Identification

1-1) **Refresh Training of Lab-Technicians:** A short-term expert, virologist, is standing by to be dispatched for a short refresh training to the lab-technicians if WHO performs an inspection to assess capability for a polio laboratory. Monthly report filled with results of virology tests will be issued and delivered to those concerns.

2. Equipment / Facility to be maintained

2-1) **Establish Maintenance System:** The inventory of the facility and equipment will be regularly checked up. Logbook of the equipment is to be prepared and regularly recorded.

3. Others

3-1) **Polio Network in WHO:** The project will support MOH to promote the virology laboratory to be included in the Polio Network in WHO.

C. Paediatric Department in MMC

1. Progress in Laboratory Based Medicine

1-1) **To promote Better Result Interpretation:** The project support "the grand round" which would promote doctors to have better skills of "Laboratory Based Medicine". A survey will take place investigating statistics of current situation in the paediatrics. The survey will cover number of admitted / discharged patients, lab-tests examined, case fatality rate and so forth.

1-2) **Better Utilization of SPL:** Sample-collection and result-returning system, which were established last year will be followed. Sample container stock system is necessary to be reviewed because the system has not been working. The reasons are 1) not enough preparation in SPL and 2) not well controlled stock in each ward.

2. Collaboration of Medical Personnel

2-1) **To improve Medical Staff's Communication:** Although communication between SPL and nursing section has improved, the one between SPL / Nursing and doctors are not certain. For instance, filling 1) doctors name, 2) signature and 3) patients information in the lab-order form are sometimes not fulfilled satisfactorily. Through joint meeting among three sections, such communication is to be improved.

3. Improvement of SPL Finance

3-1) **Marketing of Laboratory Service:** SPL will develop out-reach the services to more patients and customers. This activity is beneficial to the patients out of MMC because the patients in DSM can have the lab-service with high quality, with reasonable price. That also contributes to the exempted patient under five by sharing cost.

3-2) **Revolving Finance:** SPL is to develop revolving financed system; 1) revolving proportion will increase 53% to 90%, 2) Coverage of income against expense shall increase from 70 % to 90% from the view of the simple revolving aspect which means SPL will self-sustain without financial support for five years at least until the analyzers reach to their life span.

4. Improvement of Management in SPL

4-1) **Train Administrative Staff in SPL:** Administrative management skills will be brushed up for the personnel such as: 1) Administrator, 2) Lab-technician in-charge, 3) Service section in-charge, 4) General-affair in-charge. Internal relationship between them is also strengthened.

4-2) **Establish Equipment / Facility Maintenance System:** SPL will try to ensure the maintenance system by having weekly business meeting with the current contractor. However, the contractor shall be carefully chosen to avoid violation when the contract will be renewed.

4-3) **To Ensure Reagent Supply:** Same as the maintenance contract, stable channel for stable reagent supply is crucial for surviving SPL. So that SPL will establish the reagent-supplying channel by taking into account any alternative supplying route.

5. Others

5-1) **Personnel Management**: Organization structure in SPL has been improved to meet patient demand, however it still needed to be revised. The service section has been found essential for sustaining SPL by contributing to 1) keeping quality of service, 2) income as a result. So that employment shall shift from MCH project to SPL to fix the organization.

Action Plan, MCH Project Apr 2001- Nov 2001

	Out-put	Activities	Apr-01	May-01	Jun-01	Jul-01	Aug-01	Sep-01	Oct-01	Nov-01
	Overall		Fimnal Eva Team						Final Report	
	Tanga Area									
1	ImproveTBA Capability	1) TBA Training by MCHA		Preparation			Magoma	Pongwe		
		2) TBA 's Regular Meeting								
2	Referral System for High Risk Pregnancy	1) Monitoring by MCHA								
3	Revolving System for TBA Kits	1) Support / Monitor Revolving System of TBA-kits								
	Microbiology MMC									
1	Poliovirus Isolation/ Identification	1) Refresh Training of Lab-Technicians			Refresh Training					
2	Equipment / Facility to be maintained	1) Establish Maintenance System	Inventry, Stock Checking				Polio Isolation from AFP Cases / Monthly Report			
	Paediatrics MMC									
1	Progress in Laboratory-Based-Medicine	1) To promote better Result Interpret	Grand Round 1/wk				Panic Data Delivery Service			
		2) Better Utilization of SPL	Maintein Sample Container Revolving Service				SampleCollection/Result Return Service			
2	Collaboration of Medical Personnel	1) To improve Medical Staff Communication		Joint Meeting						
3	Improvement of SPL Finance	1) Marketing of Laboratory Service	Expanding Service out of MMC			Night,Sat Sun, Holiday Service				
		2) Revolving Finance	Implemented (53%)			Implemented (80-90%)				
4	Improvement of Management in SPL	1) Assign and to be trained Administrative Staff in SPL	Administrator Assign		Keep Administrative Staff and Train them					
		2) Establish Equipment / Facilities Maintenance System in Lab and wards	Business Meeting Weekly with Supplier							
		3) Ensure Reagent Supply	Business Meeting Weekly with Supplier			Developing Alternative Supplier				
5	Other	1) Personnel Management		Organization Revised		All Service Staff Emploied by SPL				