

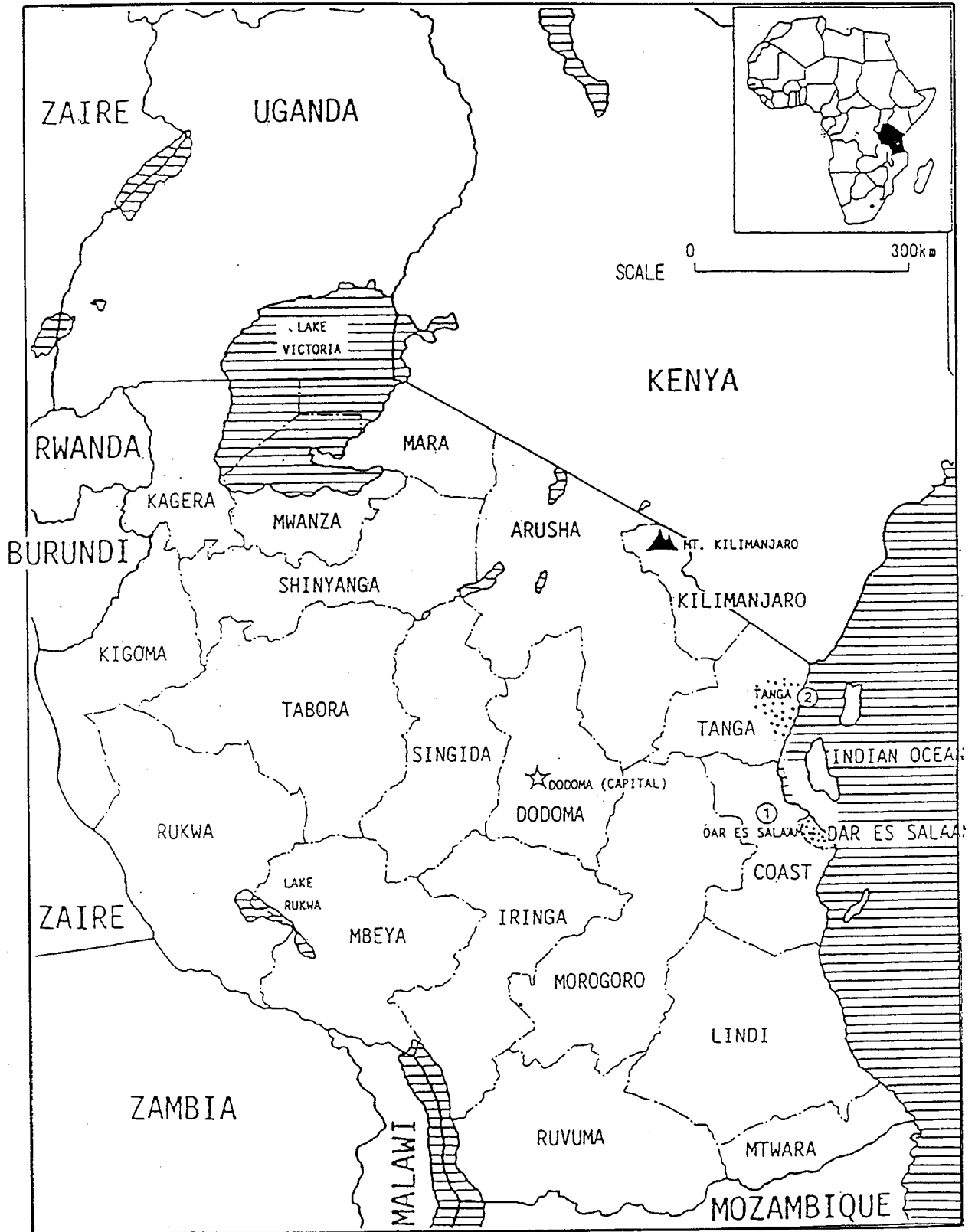
タンザニア共和国

JICA 母子保健(MCH)プロジェクト概要

2001年(平成13年)7月現在

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I タンザニア連合共和国地図

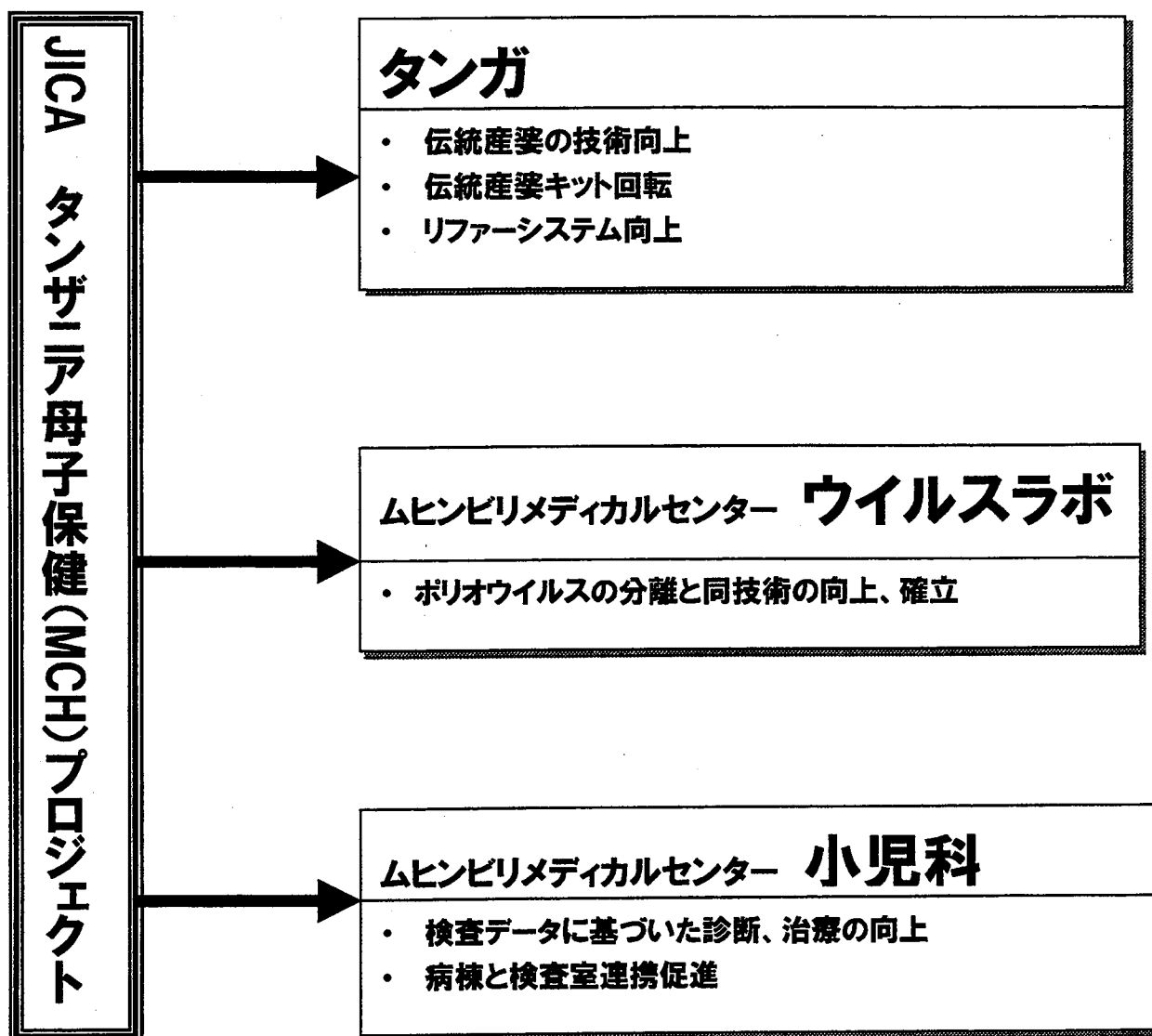


III ムヒンビリメディカルセンター(MMC)図



IX 母子保健(MCH)プロジェクト全体像

タンザニアの乳児・5歳未満児死亡率の高さ等で示される厳しい母子保健の水準向上を目的として1994年12月から開始された当プロジェクトには、次の3つのサイトがある。各サイトの活動目標は図のようである。



① タンガ

タンガ市とコログエ郡の2つのパイロット地区(ボングエ地区、マゴマ地区)の母子保健活動の強化を目標として、次の活動を実施している。

○活動

- ・ **伝統産婆の技術向上**⇒各地域に存在する助産婦たちに対し、科学的な知識に裏づけされた助産婦の技術を研修することで、助産婦の全体的な技術向上を図り、周産期母子保健を改善する
- ・ **伝統産婆キット回転**⇒上記の研修を実施するときに、安全な出産に必要な最低限の器具や消耗品類のはいったキットを渡し、それらを自主的に維持する体制作り
- ・ **リファーステム向上**⇒出産時にリスクがある妊産婦(高血圧、尿糖、むくみ)をモニターする体制を作る

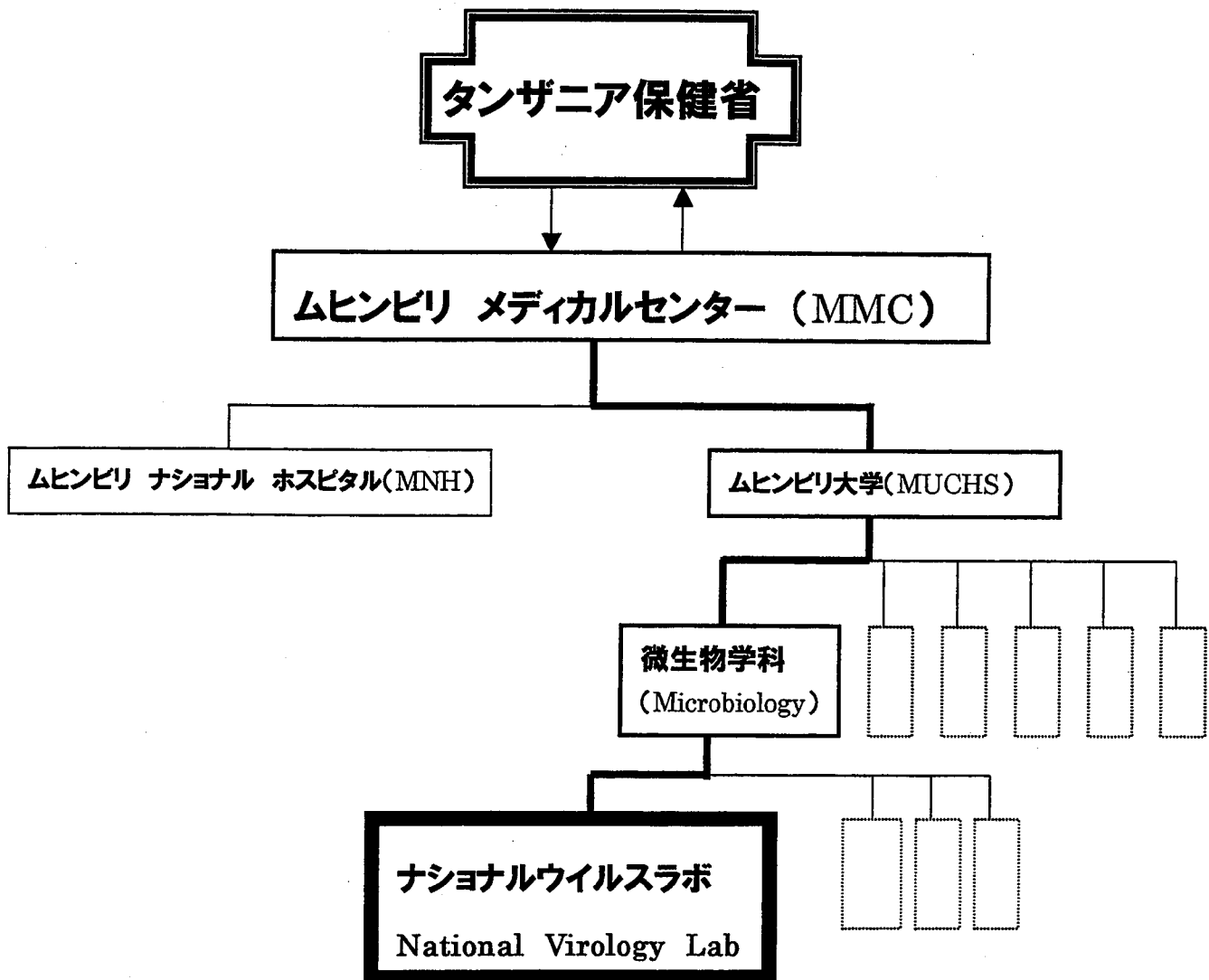
○プロジェクトが主に係わっているタンザニア側担当者(7名)

- ・**タンガ州** Regional Medical Officer (州の保健政策担当責任者) 1名
MCH Coordinator (MCH プロジェクトの活動実施担当者) 2名
- ・**タンガ市** District Medical Officer (郡の保健政策担当責任者) 1名
MCH Coordinator (MCH プロジェクトの活動実施担当者) 1名
- ・**コログエ郡** District Medical Officer (郡の保健政策担当責任者) 1名
MCH Coordinator (MCH プロジェクトの活動実施担当者) 1名

* タンガ在住専門家(山本)が、各 Medical Officer とプロジェクトの全体構想や計画について話し合い、合意を得て、各 MCH Coordinator に具体的な指導をすることで、活動を推進していく。

② ムヒンビリメディカルセンター ウィルスラボ

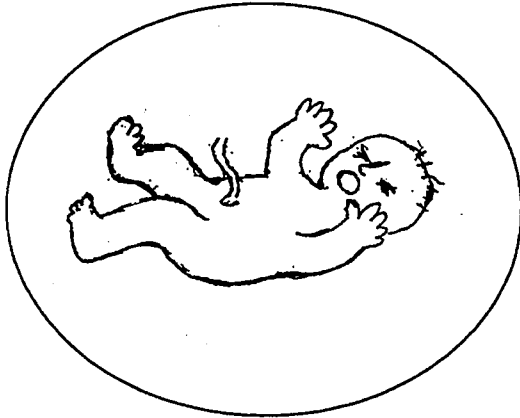
タンザニアでのウイルス検査技術を向上させ、WHO ポリオ撲滅計画への協調、また、高度な技術を有するナショナルウィルスラボとして、今後のタンザニアの保健行政に寄与することが期待されている。



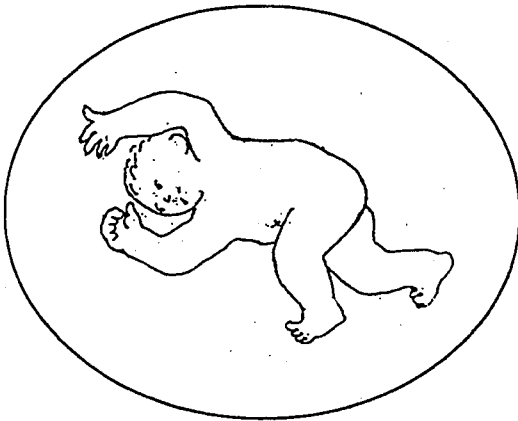
* 2000年にタンザニア政府により実施された組織改変で、ムヒンビリメディカルセンター(MMC)は2つに分割された。2001年7月現在、ムヒンビリナショナルホスピタル(MNH)は保健省直轄、ムヒンビリ大学(MUCHS)は高等技術教育省直轄となっている。

③ ムヒンビリメディカルセンター 小児科

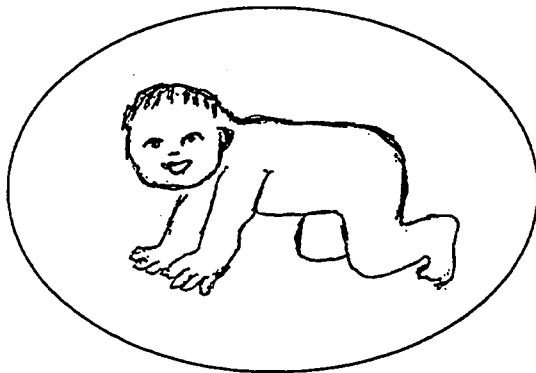
当活動の目標の一つ「検査データに基づいた診断、治療の向上」の基礎となる“検査室運営”について、これまでの経緯は次のようである。



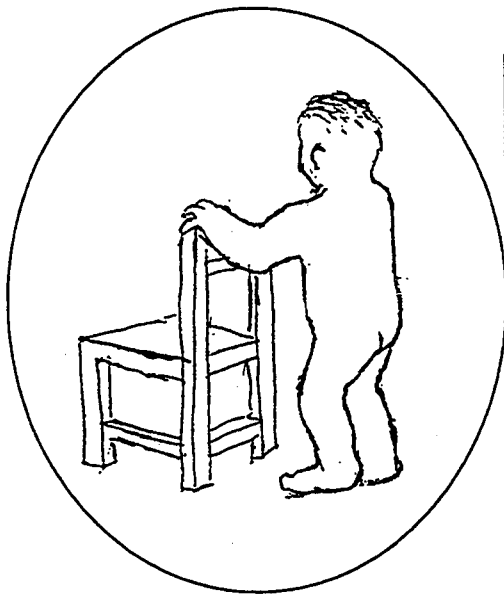
1994年・プロジェクト開始
検査室建築開始
1996年・検査室完成
・検査機器購入



1996年・検査機器据付
・検査室立ち上げ
1996年～(現在も進行中)
・試薬ルートと機材メンテナンス確保



1997年～・検査技師の技術向上を図る
1998年・検査室運営ファンドを確保するために料金徴収(コストシェアリング)開始
→ 改善

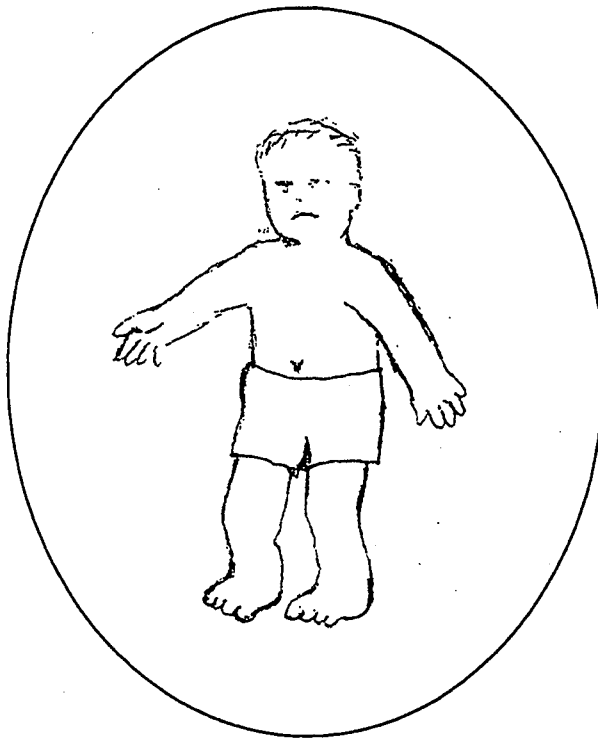
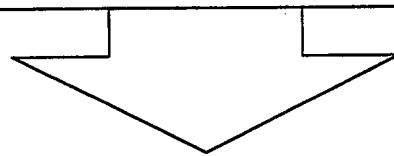


1999年・試薬の発注納品新システム導入

- ・在庫管理新システム導入
- ・検査結果精度管理(Internal/External)

2000年・検査室/病棟の検体の流れ整備

- ・組織機能(情報管理・労務管理)強化
- ・患者サービスの強化(サービススタッフ配置)
- ・アドミニストレーター任命
- ・夜間、土日有料検体受付開始



2001年

3月～4月・アドミニストレーター日本研修

4月～6月・アドミニストレーターへの引継ぎ

(収支記録管理、労務管理、物品管理)

6月 ・オフィス管理(セキュリティ、カギ、ファイル)委譲

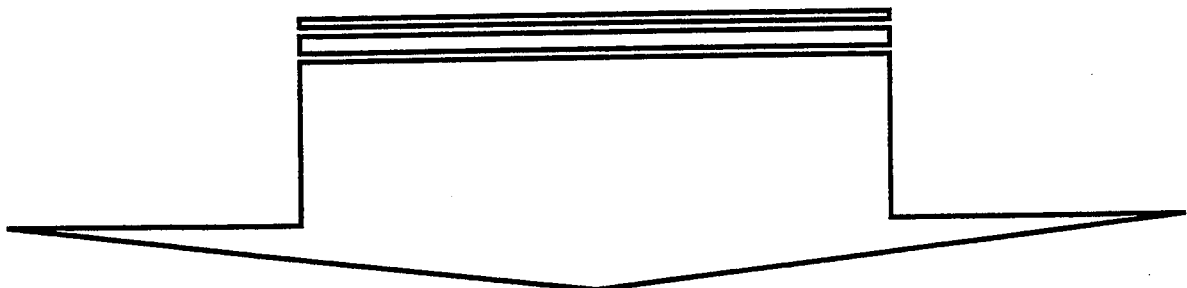
6月～11月・アドミニストレーターの業務管理観察と支援

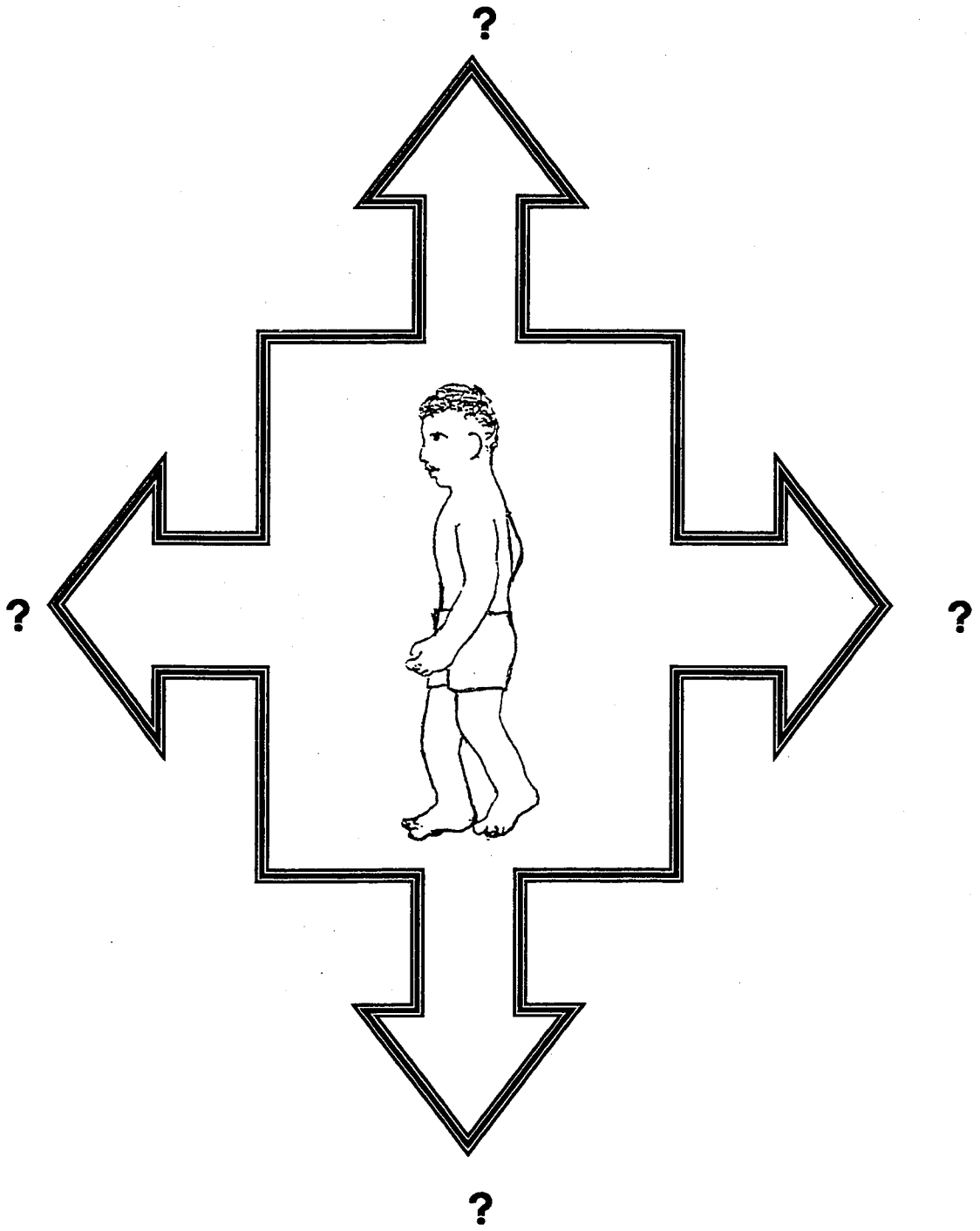
7月 ・タンザニアチームの財政運営の自立開始
(プロジェクトからの財政支援ストップ)

7月～11月・プロジェクト終了後のモニタリング用の資料作成指導

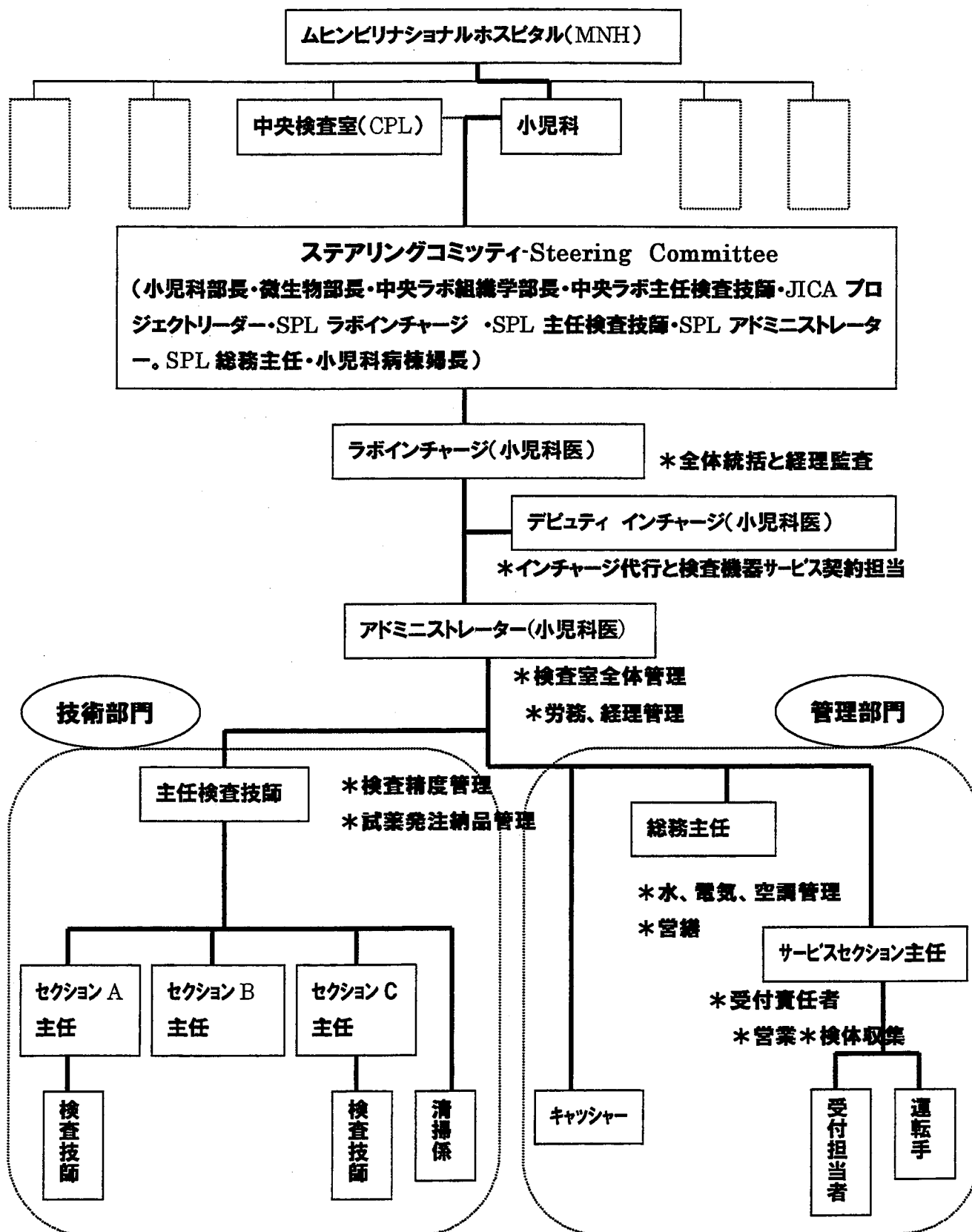
10月 ・プロジェクト終了時報告会(保健省)

11月 ・MCH プロジェクト終了





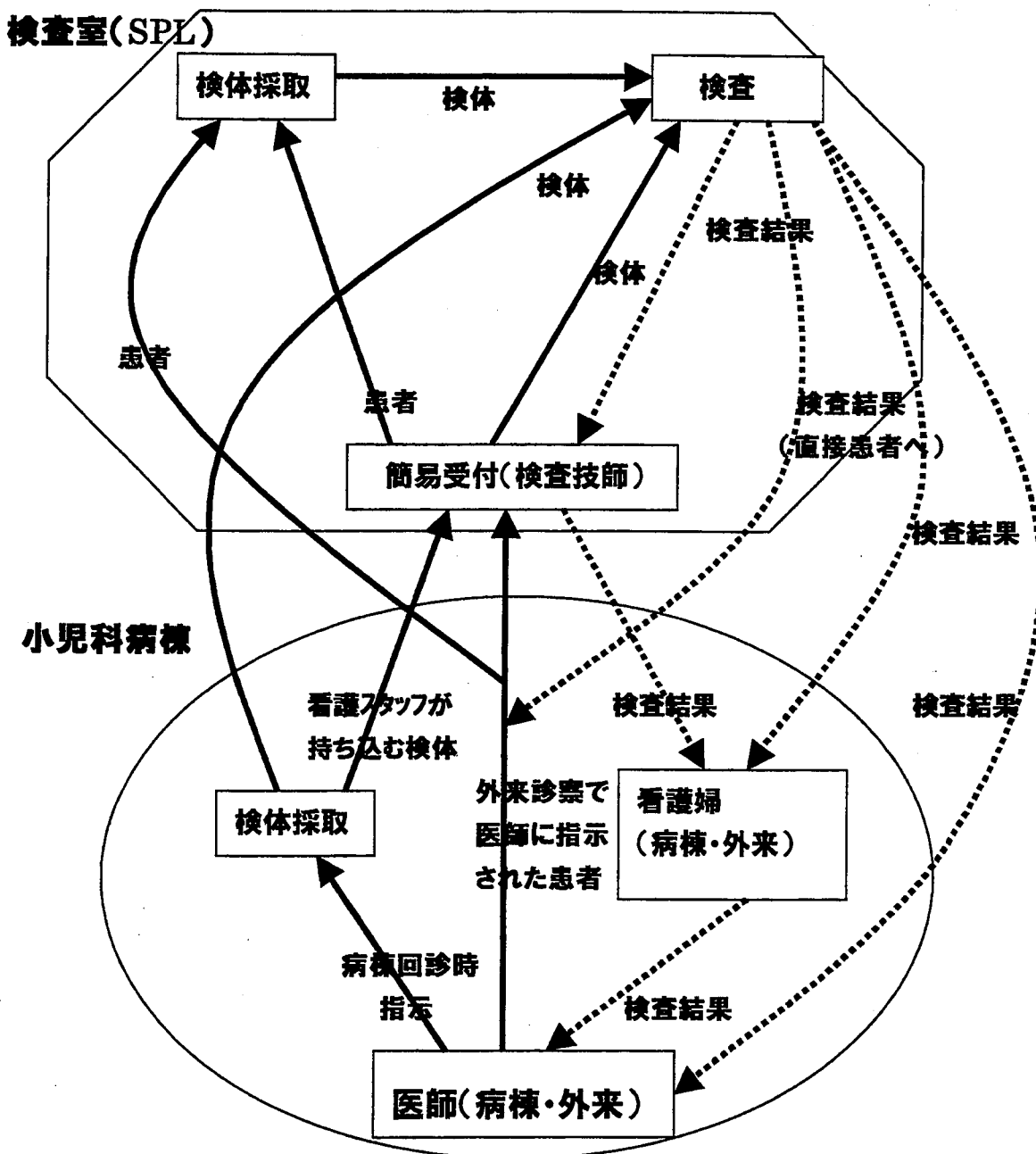
SPL 組織図とその役割



-小児科病棟と検査室(SPL)における検体の流れ

2000年に短期専門家を集中的に投入し実施した、小児科病棟と検査室における検体の流れの整備は、病棟と検査室の連携の基盤として定着しつつある。この基盤を固めた上で医師の意識「検査データに基づく診断技術向上」をバックアップすることで、プロジェクト本来の目的が確実に達成される。97年当初と現在の検体の流れを比較してみた。

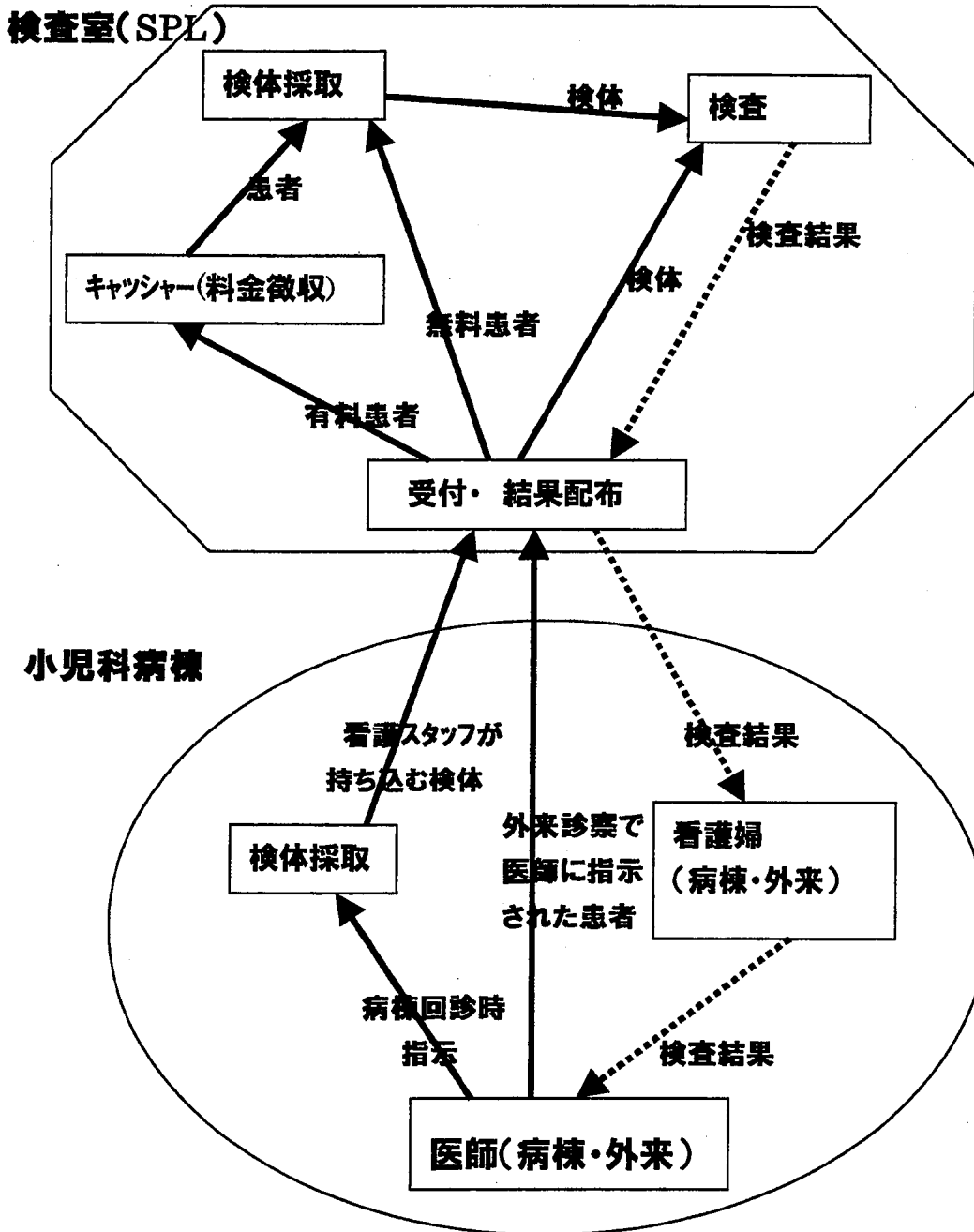
1997年当初



2001年7月現在

変化の特徴: 全ての検体と検査結果が検査室(SPL)受付で一括された

: キャッシャー(料金徴収)が配置された



X タンザニアにおける保健医療分野の

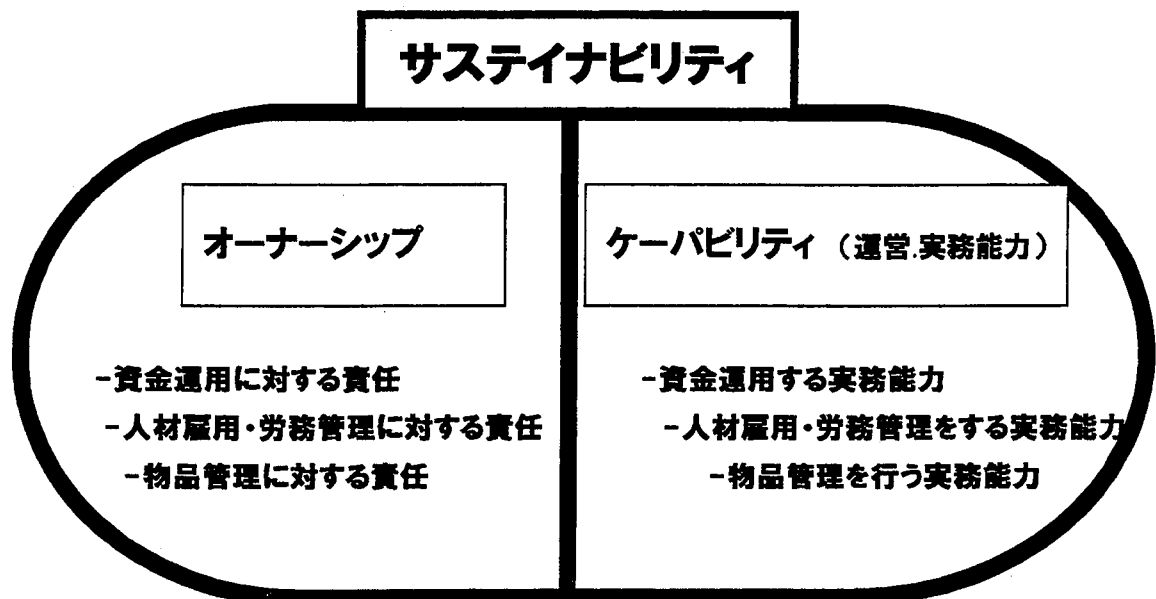
サステナビリティについて

MCH プロジェクト・チーフアドバイザー，松林信幸

最終的に自立支援を目指す国際協力にとって「サステナビリティ」とは、具体的に何をさすのか？ 1997年より当プロジェクトをサステインに導くため試みてきた経験より、以下の結論を得た。

プロジェクトのサステナビリティに必要な絶対条件として、プロジェクト終了時に、次の2点が育っている必要がある。したがって、立案時にこれら2つをプロジェクト目標に組み込むべきである。

1. オーナーシップ
2. ケーパビリティ（運営・実務能力）



オーナーシップとケーバビリティの保証

1. オーナーシップとケーバビリティの結果として、運営資金を一部でも自力で継続的に調達することは必須条件である。
2. オーナーシップとケーバビリティを評価するために具体的・実質的な基準設定が必要である。
3. この評価基準に基づいたモニターが必要である。

モニター後の支援

一定期間のモニター後、オーナーシップとケーバビリティが確認されたなら、次の支援を考慮することができる。

- LLDC の国では保健・教育など福祉分野では原価償却を含めたサステインではなく、オーナーシップとケーバビリティに応じた分だけの投入を行う。(オーナーシップとケーバビリティが不十分と認められれば投入を中止する、または相当の額まで減額する。オーナーシップとケーバビリティを越えた投入はしてはならない)

**Maternaland Child Health (MCH) Project
MOHTanzania and JICA**

1 / May / 2000

**ANNUALREPORT
forActivities Apr. 1999 - Mar.2000**

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A .Summary

The activities of Maternal and Child Health (MCH) Service Project in 1999 / 2000 fiscal year are described in this report. The project was in the fifth year since the beginning December 1994, which means coming to harvesting stage of the project.

The biggest topic in the period is that the “following-up” (F/P) for two years upto November 2001 was decided. The major reason for the decision seems the following-up activities would bring more fruitful harvest than stopping the project at this moment. That was based on the recommendation by a Joint Evaluation Team in June 1999. The Record of Discussion (R / D) was revised accordingly. The activity is therefore gradually shifting to the revised R/D since December 1999 that focuses on maintaining and sustaining the project. The fields which seems more effective, sustainable and feasible such as Paediatric Laboratory, collaboration among staff in Paediatric MMC, TBA activities in Tanga have been reinforced. Through such activities, the sustainability has come realistic in some fields.

B . Activities in the Respective Sites (Seethe ANNEX-1)

I. Activities in Paediatrics in MMC

1 Improvement of Diagnostic Capability

The combination of the cost-sharing system and the exempted cases (free of charge for under five children) is functioning, although recovering rate (income / expense) has not reach 100 % yet that seems to improve.

1) Lab-data Utilisation / Interpretation (see attached User’s Guide)

a) Availability of the Lab-data: As the running of Specialised Paediatric Laboratory (SPL) has come stable in terms of facility / equipment / reagent / technical maintenance, “the Science Based Medicine” has been much ensured. It is certain that the doctors especially paediatricians in MMC have been benefited by easier utilisation of essential laboratory tests. Total number of patients tested in past one year in SPL are , that consists of exempted patients and fee paying patients. Total number tested in the last one year are , exempted , fee paying .

b) Grand Round: Utilisation of lab-data for the diagnosis and the treatment has come more common in the paediatrics MMC which is easily observed in the weekly grand round. The participants have exchanged much profound interpretation based on the lab-data which is now available.

2) Lab- Technician Upgrading Activities

a) Individual Teaching of Major Analyser Operation: Five sessions of individual teaching were performed which covered immunology assay analyser (for two lab-technicians), biochemistry analyser (for two lab-technicians) and bacteriology (one technician). The sessions took almost one month to complete and were all very

practical. Making use of free time in a day, one to two hours were spent for the teaching that never disturb daily routine work. We found that such individual teaching is very effective and practical rather than formal group seminar which cost more. Thanks to these sessions, SPL may able to manage running the laboratory within limited personnel because one lab-technician can operate two or three types of machine / tests. That means the productivity in the laboratory has been much improved.

- b) Malaria Diagnostic Workshop: Diagnostic skill for malaria Giemsa staining has been improved by this workshop. The interpreting skill was focused on by means of comparison with other lab-technicians skills, other diagnostic methods (PCR method).

The methodology for this workshop must be new type and unique. Three types of Giemsa samples (definitely positive 15 cases, probable positive 15 cases, negative 15 cases) have been prepared in advance. All samples have been tested by PCR method before the workshop. The results were blind to the participants which resulted in fruitful discussion when result was opened.

Six (6) SPL laboratory technicians, three (3) CPL lab-technicians and one facilitator from CPL were involved in the workshop.

2 . Sustain SPL

One of the focus for the “following-up period” is how to sustain SPL. Quite a big efforts have been therefore made to sustain the SPL as follows:

1) Facility / Equipment Maintenance:

a) Weekly business meeting with supplier:

SPL has been following all pending issues by having weekly business meeting with the supplier. Although the response from the supplier have not always been satisfactory, negotiation with them has been making progress to solve the suspending problems. The major analysers (Haematology, Biochemistry, and Immunology) therefore have been maintained in good condition. That is why SPL is now able to slightly shift its power to the result quality control and patient’s service, etc.

- b) Service Contract with Supplier: The service contract with the supplier for the major analysers have not been fulfilled although we paid for it. This situation has been also improved slowly but gradually through continuous negotiation.

- c) Log Book: The record system of the analysers’ condition in the log book has been established.

- d) Morning Briefing: Every constraints / problems should be reported in the morning briefing every morning. The progress for solution as well.

2) Administration / Management Skill

- a) Re-Organisation in SPL: In order to meet the reality, the organogram was revised. Administration section was reinforced in the new organogram, by separating the organ into two sections, technicians section and administration section.
- b) Internal Communication System: Announce / Report lines from top to down and bottom to top have been rectified, relating to the revised organisation chart. It is functioning now.
- c) Reagent Supply System: Inquiry / Order / Balance Check System for reagents were introduced. The system have not been functioned 100 % mainly due to the supplier's problems. However, it is improving slowly.
- d) Training for the Assistant Administrator: The assistant administrator had training in Japan, and has had on-the job training.

3) Financial Improvement:

- a) Income from the cost-sharing system is increasing (see balance chart for 1999 / 2000). That is covering about half of total expense, although SPL is serving to the patients under five-year in free of charge.

4) Patient Customer Service:

- a) Patient / Sample Flow: It was improved to minimise the complication by simplifying and designating to the public.
- b) Order Forms: Six types order forms are been prepared and supplied continuously to the Paediatric wards and some major wards in MMC.
- c) Result Return System: The result return system is being improved by 1) recording , 2) delivering to the wards in case not collected , 3) telephone / fax service in particular cases.

3. Improvement of Facilities

- 1) Renovation of A3, B3: Renovation of A3, B3 wards has completed by the LLDC budget in January 2000. The wards will be expected to contribute to better treatment in the Paediatric General wards and financial condition because they will be used as Fast-Track-Wards (fee paying) in near future.

II. Activities in Tanga

1. TBA (Traditional Birth Attendant) activity

1) TBA Refresher Course

The Purpose of TBA Refresher Course is as follows:

- Emphasize the roles of TBA in the community
- Ensure risk factors and referral cases
- Secure good relationships among health facility staff, community leaders and TBA

- Assure report system by TBA to health facilities and community leaders
- Ensure proper usage of TBA Kit consumables

The Refresher Course conducted between 26th July and 28th August '99 had 105 TBA participants from Korogwe District in Magoma Division.

The Refresher Course conducted between 26th July and 11th Sep. '99 had 83 TBA participants from Tanga Municipality in Pongwe Division.

2) Quarterly TBA Meeting

Since 1998 A TBA Meeting has been conducted almost quarterly every year in each area by MCH Coordinator being supported by JICA MCH Project.

In the meetings, various topics are discussed such as delivery cases, referral cases, report system, confirmation of proper usage of TBA Kit consumables and others (refer to Annex).

3) TBA Kit Revolving System

The purpose of TBA Kit is to keep safe and clean the material used during delivery time. The Project has supplied the Kit to TBAs who had finished training.,

The contents of the Kit are as follows:

- Permanent items; a mackintosh, an apron, a stainless steel bowl, a small steel container, a scrubbing brush, a weighing scale, a kerosene lamp with extra gas, a jerry can, a pint measure and a hand towel. The above items are all kept in an aluminum box locked with a padlock.
- Consumables; five pairs of surgical gloves, a roll of bandage, a soap, five razor blades (in one packet) and baby powder

The TBA Kit Revolving System started as a trail in March 1999 at the Kirare Dispensary in Pongwe Division, Tanga Municipality.

To sustain the consumables in the Kit, a TBA goes to the nearest health facility to buy the consumables. The facility sells necessary consumables in sets. One set of the consumables is enough for five deliveries. That costs about 2,500/Tsh for one set.

In Tanzania, some gifts or cash have been given to a TBA as payment for attending a delivery. However, since 1998 the Project has introduced the system of cash payment only for each delivery. At first, the system didn't work well but soon people came to accept the system because they find the system good and fair. Now more than 95% of the delivery cases are being paid for. The system cash payment has the following advantages;

- The fare itself is cheap and affordable for all families concerned.
- A TBA can earn some amount of cash for her efforts.
- A TBA gets an incentive to do her work and also she can make efforts to buy the consumables from the payment she receives for deliveries.

The Kit Revolving System has been gradually expanding to the other areas since February 2000.

2. VHW (Village \ Health Worker) activity

1) VHW training

Fifty two (52) VHWs completed training in Magoma Division in cooperation with UNICEF.

VHWs in the both divisions of Pongwe and Magoma were awarded with certificates and supplied with VHW First Aid Kit and a bicycle by the Project and UNICEF respectively.

In 1999 one day refresher course was conducted for TBAs and VHWs jointly. The course focused on the roles of TBA and VHW in the community, report system, home visiting, nutrition, newborn baby care, and pregnant mothers on risk factors.

2) VHW Meeting

Regular meetings are organized in each health facility in Pongwe Division. However, meetings are not organized in Magoma Division. At the meetings VHW activities such as home visiting, environmental sanitation, water and latrine problems, reporting were discussed.

It is sometimes found difficult to maintain the motivation of VHW maybe because it is a voluntary work.

3. Base Line Survey

The Project has conducted Base Line Survey in Pongwe and Magoma Divisions to identify the present health situation of the rural population.

Furthermore, In Jan. and Feb. 1998, the Project conducted Vital Statistics Survey in Pongwe Division as the basic health data which contributes to health planning at a district level. The survey was conducted by VHWs visiting door to door with a register book compiled by UNICEF. The Vital Statistics Survey Report was published in English.

4. Strengthening The Functions of Health Facilities

1) Health Facility

Parastatal Marungu Dispensary in Pongwe Division, Tanga Municipality, which was closed down in 1997. was built newly in the collaboration with the residents of Marungu, Tanga Municipality and the Project. It was officially opened by the First Lady, Anna Mkapa, in March 2000. Population of Marungu Ward that is about 3,000 will be benefited by this new dispensary.

2) Medical Equipment

The basic equipment and instruments which the Ministry of Health has standardized for the health facilities in the country have been almost provided to the facilities in the pilot areas by the MCH Project. Particularly, equipment and instruments have been provided for OBGY and paediatric sections at the Bombo Hospital and Korogwe District Hospital.

III. Activities in Microbiology Department in MMC

1. Upgrade / Maintain Virology Skills / Knowledge

- 1) Transfer Virus Isolation Skills: By dispatching two short-term experts Dr. Yoshii and Dr. N. Sakurai, virus isolation skill especially for polio virus has been established.
- 2) Maintain Cell Culture Skills: After the dispatching of the experts, cell lines have been well maintained. So that the virology laboratory is ready to accept AFP stool samples anytime for polio isolation.

2. **Maintain Virology Laboratory Equipment: Most of lab-equipment installed in the laboratory have been well maintained although there have been minor troubles with some equipment.**

C. Constraints from the Activities

1. From the Activities in Paediatrics

1. Organisation in SPL(Specialised Paediatric Laboratory):

As the SPL has grown its capability and function, more administration capability and more lab- technicians have been demanded. SPL is now receiving more than 800 patients in a week which includes patients from the other wards in MMC, Fast Track and Private Clinic. The administration capability in the Paediatric Department is now not enough for the increase of the patients / samples.

2. Vacancy of Lab-administrator:

The stake-holder for running the SPL, the administrator has been taken by Japanese Expert by now. It seems a real serious constraint for handing over SPL to the Tanzanian side at the end of the Project following -up period. As it will take at least one year for transfer the know-how of the administrative management, the appointment of the personnel is requested as soon as possible.

3. Financial Self Sustainability (Cost-sharing):

The income from the cost sharing has been increasing. So that nearly 50 % of total running expense will be covered from the income at this moment (see Annex 3). However, much effort to increase fee-paying patients will be required in order to cover 100% of the expense, because fee paying patients occupy only 20 % of total patients.

4. Immaturity of the Local Suppliers and Reagent Agent:

This problem has been affecting the incomplete maintenance service for the major analysers, the delay of reagent delivery and so much trouble in the account balance.

2. From the Activities in Tanga

1. TBA Activities

- 1) Lack of understanding of TBA Activities by TBA themselves: Lack of understanding of TBA activities such as reporting system and proper usage of TBA Kit by TBA is still a problem. The main reason for this is that many of TBA are illiterate. Reporting system is a new experience for them and they do not fully recognize its importance.
- 2) Initiative Action by MCH Coordinator: MCH Coordinator must understand fully the situation of TBA activities. However, there is no set-up plan or analyzed action plan on MCH Coordinator side for TBA activities.
- 3) Allowances and Motivation: Being a civil servant makes is sensitive to ask for allowances and motivation, It causes problems for TBA activities and other activities as well.

2. VHW Activities

- 1) Difficulty to focus on activities: The National Guideline concerning VHW activities covers wide range and is not clear enough. There are particular problems in each area which must focus on VHW activities. However, here again, spontaneous motivation will be sustainable.
- 2) Acceptance by the community: VHW is comparatively a new idea introduced by the government a few years ago, and it is still a new concept for each community because VHW activity is not very evident anywhere in its midst.

3. Strengthening the functions of health facilities

Community's participation is very low in government activities such as case of rehabilitation or building health facilities. This is perhaps due to their own personal commitments which do not give them time for other voluntary work.

3. From the Activities in Microbiology

1. Delay of Official Opening: Although the virology laboratory is now eventually capable to isolate polio virus, it is not officially opened yet.
2. Delay of AFP (Acute Flaccid Paralysis) Sample Collection in the EPI Network: AFP samples have not been sent to the virology laboratory yet although the laboratory is expected to isolate polio virus.

3. Accreditation by WHO: The virology laboratory was not accredited yet by WHO as Polio-Laboratory although it might clear the criteria for the accreditation. That will be constraint for the future activities of the laboratory, including financial sustainability.

D. Recommendation for the Coming Activities

1. From the Activities in Paediatrics

1. Re-Organisation : The increase of patients / Samples is now beyond of one clinical department in both aspects, the administration and the technician's manpower. The tight relation with CPL therefore shall be recommended to solve the constraint. A senior lab-technician in-charge, more lab-attendants in section C (SPL side lab) shall be supported.
2. Assignment of Lab-Administrator: This is for two-year pending issue. A Tanzanian, eligible and authorised personnel is definitely required to take over the role of administration which has been taken by a Japanese Expertise. It is very clear that SPL will not continue the stable activities because one of most difficult and necessary skills is the administrative management.
3. Review of Exempted Criteria: At this moment, income from 20% of patients have been covering 50% of expense. This means that the self sustaining is very difficult under the current policy that under 5 children are exempted. Charging even 5 or 10 % of full price will improve the situation.
4. Guide / Orientation to the Suppliers from the Authority: The behaviours by the supplier / agent are sometimes nearly against the law. For instance, they have not performed the maintenance service mentioned clearly in the service contract. However, it is not advantage to take the problems to the court if we consider totally. So that it will help SPL administration / Tanzanian child health if the authority guide / orientates the suppliers by adequate instruction.

2. From the Activities in Tanga

1. TBA Activities

- 1) Trainers of Trainees (TOT) of Maternal and Child Health Aid: MCHA and PHN (Public Health Nurse) are key persons of TBA activities. To improve TBA's capability, TBA must be supervised by MCHA/PHN in each health facility. MCHA/PHN can only supervise TBA if they have technical knowledge of supervision and training of trainees. After acquiring these skills, MCHA/PHN can then give training to TBAs in each area.
- 2) MCHA/PHN give training to TBA: The effectiveness of the training is as follows;
 - To make small groups of training TBAs in the area will be more cost efficient than a whole big area
 - To get MCH data which is more accurate.

- 3) Establish a report system on referral cases in TBA activities: A trained TBA is taught the obligation of report for the health facility and village leaders. In case of a referral of examined pregnant woman, she should have a follow-up by TBA. Further investigation will be given by a person who is dealing with the referral case to TBA.
- 4) Sustainability of TBA Kit Consumables: After getting TBA Kit, each community and local government should establish some sort of a system by which TBA Kit is sustainable. Ensure payment of delivery to TBA and keep consumables for TBA Kit at the health facility.

3. From the Activities in Microbiology

1. Official Opening: The Official Opening should be organised as soon as possible. Then Activities will be promoted by doing so.
2. AFP Sample Collection in the EPI Network: Without collecting AFP Samples, It might difficult to keep the standard of the polio isolation skills and knowledge, which means the virology laboratory does not function as a referral virology laboratory in the nation. So that AFP sample collection system should promoted by EPI authority through sharing AFP stool samples with Zambia Virology Lab where so far all AFP samples have been directed.
3. Accreditation by WHO: Eventually the laboratory is clearing the criteria for WHO accretion. However, without the accreditation, the nation has to continue the situation in which polio diagnosis is to be dependent on the other laboratory in the other country. It is therefore expected that the authority is to promote to obtain the accreditation from WHO by showing the criteria to be fulfilled.

Action Plan 2000 / 2001, MCH Project

Annex-1

Action Plan 2000/2001

No	Output	Activities	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
I Paediatrics in MMC														
1	Progress in Laboratory Based Medicine	1) To Promote Better Result Interpret 2) Better Utilization of SPL						by Short-term Experts	by Short-term Experts					
2	Collaboration of Medical Personnel	1) To Improve Medical Staff Communication		Preparation			Seminar							
3	Improvement in SPL Finance	1) Marketing of Lab- Service 2) Revolving Finance	Through daily activities											
4	Improvement of Management in SPL	1) Assign and to be trained Administrative Staff in SPL 2) Establish Equipment / Facilities Maintenance System, in Lab and Wards 3) Ensure Reagent Supply			assignment		Training in Japan							On Job Training through daily activities
II Tanga Area														
1	Improve TBA's Capability	1) Training of MCH Aid for TOT 2) TBA's Refresh Training by MCHA 3) TBA's Regular meeting		Preparation in Pongwe		Training in Magoma		in Pongwe						
2	Establish Referral System of High Risk Pregnancy	1) Training of District MCH Coordinator					Preparation							
3	Revolving System for TBA-Kit	1) Support / Monitor Revolving System of TBA-Kit												Workshop for MCH Coordinator / Health Staff
III Microbiology														
1	Polio Virus Isolation / Identification	1) Refresh Training of Lab-Technicians												Short-term Expert
2	Equipment / Facility to be Maintained	1) Establish Maintenance System	Through regular meeting and daily activities											

Action Plan for Experts and Trainee in 2000 - 2001

Annex-2

Experts / Trainees 2000/2001

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. K. Suzuki	Coordinator												
5	Ms. E. Nishijima	Lab/Hosp Admi												
6	Ms. N. Yamaguchi	Lab- Technician												
7	Ms. K. Ohnishi	Nursing Manage												
8	Ms. S. Endo	Nursing Manage												
9	Dr. M. Adachi	Paediatrician												
10	Dr. Yoshii	Virologist												
11	Ms. S. Ogawa	Public Health												
Trainees														
1	Vacant	Hospital Administration												
2	Sr. Ngalambe	Nursing Manage												

ANNEN-3

Balance98-99

Month	Monthly Regular	Research/Health Check	Income Subtotal	Reagent(US \$)	Reagent(Tsh)	Honoraria	Local Staff	Security	Consumables	Service Maintenance	Vehicle(993 9, Vitarha, M.Bike	Telephone/Communication	Stationary Others	Expense Subtotal	% Honoraria / Income * 100
Jul, 1998			802,000	2,277.80	1,776,684	137,000	205,000	270,000	50,000	814,545	29,400	34,135	3,500	3,327,464	
Aug			1,208,000	0.00	0	171,600	242,250	270,000	95,000	814,545	25,000	48,275	122,200	1,806,870	
Sep			1,056,000	516.30	402,714	132,100	237,120	270,000	0	814,545	10,000	30,612	70,000	1,970,991	
Oct			1,051,000	0.00	0	137,700	235,500	270,000	0	814,545	34,100	43,476	0	1,541,921	13.10
Nov			1,111,000	5,469.90	4,266,522	146,400	241,860	270,000	69,930	814,545	166,000	26,471	24,300	6,033,228	13.18
Dec	1,073,000	1,292,000	2,365,000	0.00	0	134,300	238,700	270,000	66,350	814,545	180,600	62,074	29,500	1,803,269	5.68
Jan, 1999	974,000	122,000	1,096,000	12,842.50	10,017,150	131,700	253,150	270,000	98,350	814,545	20,000	194,705	114,720	11,921,520	12.02
Feb	1,172,000	71,000	1,243,000	0.00	0	119,700	233,640	270,000	13,150	814,545	25,000	153,130	24,000	1,661,765	9.63
Mar		568,000	1,753,000	0.00	0	143,400	239,540	270,000	32,200	814,545	72,100	265,651	78,000	1,922,936	8.18
Apr	890,000	50,000	940,000	0.00	0	112,700	246,600	270,000	69,000	814,545	29,500	242,907	157,440	1,965,732	11.99
May	1,065,000	106,000	1,171,000	0.00	0	177,800	200,500	270,000	1,000	814,545	51,200	147,629	0	1,670,174	15.18
Jun	970,000	61,000	1,031,000	1,515.35	1,181,973	155,200	334,500	270,000	219,750	814,545	29,722	108,345	64,740	3,185,975	15.05
Total	486,000	1,860,000	14,827,000	22,821.85	17,645,043	1,699,600	2,908,360	3,240,000	714,730	9,774,540	672,622	1,357,410	688,400	36,811,845	11.56
Balance															
Deposit															
Reagent 1															
Reagent 2															
Budget 99-00															

Balance99-00

Month	Monthly Regular	Research/Health Check	Income Subtotal	Reagent(US \$)	Reagent(Tsh)	Honoraria	Local Staff	Security	Consumables	Service Maintenance	Vehicle(993 9, Vitarha, M.Bike	Telephone/Communication	Stationary Others	Expense Subtotal	
Jul, 1999	869,000	81,000	1,809,000	0.00	0	159,100	334,500	270,000	79,800	733,333	34,290	108,345	104,340	1,823,708	
Aug	1,450,000	73,000	1,523,000	0.00	0	113,600	439,700	270,000	44,000	733,333	45,000	164,989	33,000	1,883,622	
Sep	1,285,000	36,000	1,301,000	5,284.00	4,227,200	133,400	443,400	270,000	58,000	733,333	45,000	77,676	117,500	6,110,793	
Oct	1,862,000	88,000	1,950,000	0.00	0	130,200	438,900	270,000	23,000	733,333	55,000	82,163	95,900	1,868,496	
Nov	1,631,000	61,000	1,692,000	5,169.58	4,135,664	147,300	450,100	270,000	28,500	733,333	50,000	68,000	8,900	5,896,967	
Dec	1,361,000	74,000	1,435,000	1,286.42	1,029,136	100,450	369,100	270,000	70,500	733,333	60,000	180,000	50,000	2,903,805	
Jan, 2,000	1,041,000	66,000	1,107,000	0.00	0	77,790	338,800	270,000	80,400	733,333	50,000	100,000	17,500	1,667,823	
Feb	1,743,000	89,000	1,832,000	4,418.95	3,535,160	128,240	338,600	270,000	34,500	733,333	70,000	180,000	13,800	1,798,473	
Mar	1,938,000	80,000	2,018,000	306.80	245,440	186,270	335,000	270,000	58,600	733,333	55,000	230,000	1,500	5,409,282	
Apr	1,904,000	39,000	1,943,000	4,276.66	3,421,328	136,010	305,000	270,000	61,300	733,333	72,000	71,000	7,400	1,931,790	
May					0									3,425,605	
Jun														0	
Total	15,064,000	687,000	17,253,000	20,742.41	16,593,928	1,312,360	3,793,100	2,700,000	538,600	7,333,330	536,290	1,262,173	449,840	180,000	34,720,363

添付 1 : フォローアップ R/D

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 child 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

添付 2 : 年間活動サマリー

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 2) TBA 's Refresh Training 3) TBA 's Regular Meeting											
		1) Train District MCH Coordinator 1) Support / Monitor Revolving System of TBA-kits											
2	Referral System for High Risk Pregnancy												
3	Revolving System for TBA Kits												
4	Others												
Microbiology MMC													
1	Poliovirus Isolation/ Identification	1) Refresh Training of Lab-Technicians											
2	Equipment / Facility to be maintained	1) Establish Maintenance System											
3	Others												
Paediatrics MMC													
1	Progress in Laboratory-Based-Medicine	1) To promote better Result Interpret 2) Better Utilization of Lab											
2	Collaboration of Medical Personnel	1) To improve Medical Staff Communication											
3	Improvement of SPL Finance	1) Marketing of Laboratory Service											
4	Improvement of Management in SPL	2) Revolving Finance 1) Assign and to be trained Administrative Staff in 2) Establish Equipment / Facilities Maintenance System in Lab and wards 3) Ensure Reagent Supply											
5	Others	1) Renovation Work 2) Personnel Management											

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

	DEL		REF		DEL		REF		DEL		REF		DEL		REF		DEL		REF		Total		
	DEL	REF	DEL	REF	DEL	REF	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	2	0	0	5	0	5	0	11	0	152	2				
Nos. Delivery (Referred) 1997	195	3	11	0	20	0	3	2	2	0	0	13	0	13	0	12	0	413	5				
Nos. Delivery (Referred) 1998	53	11	39	6	40	2	41	0	25	5	5	42	6	42	6	32	3	386	41				
Nos. Delivery (Referred) 1999	188	7	38	13	77	7	71	3	44	2	2	38	8	38	8	35	9	525	38			(72%)	
Nos. Delivery (Referred) 2000			50	16	64	5	49	10	16	3	3	34	5	34	5	14	7						
TOTAL Number of Delivery	444	21	144	35	205	14	169	17	87	10	10	132	19	132	19	162	19	1476	86				
Nos. Delivery Average per Year	111		29		41		34		18			27		27		52							
Nos. Delivery per TBA	34		10		25		10		12			9		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)

添付 4 : マゴマ TBA 統計

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

Summary of Monthly Report in Virology Laboratory

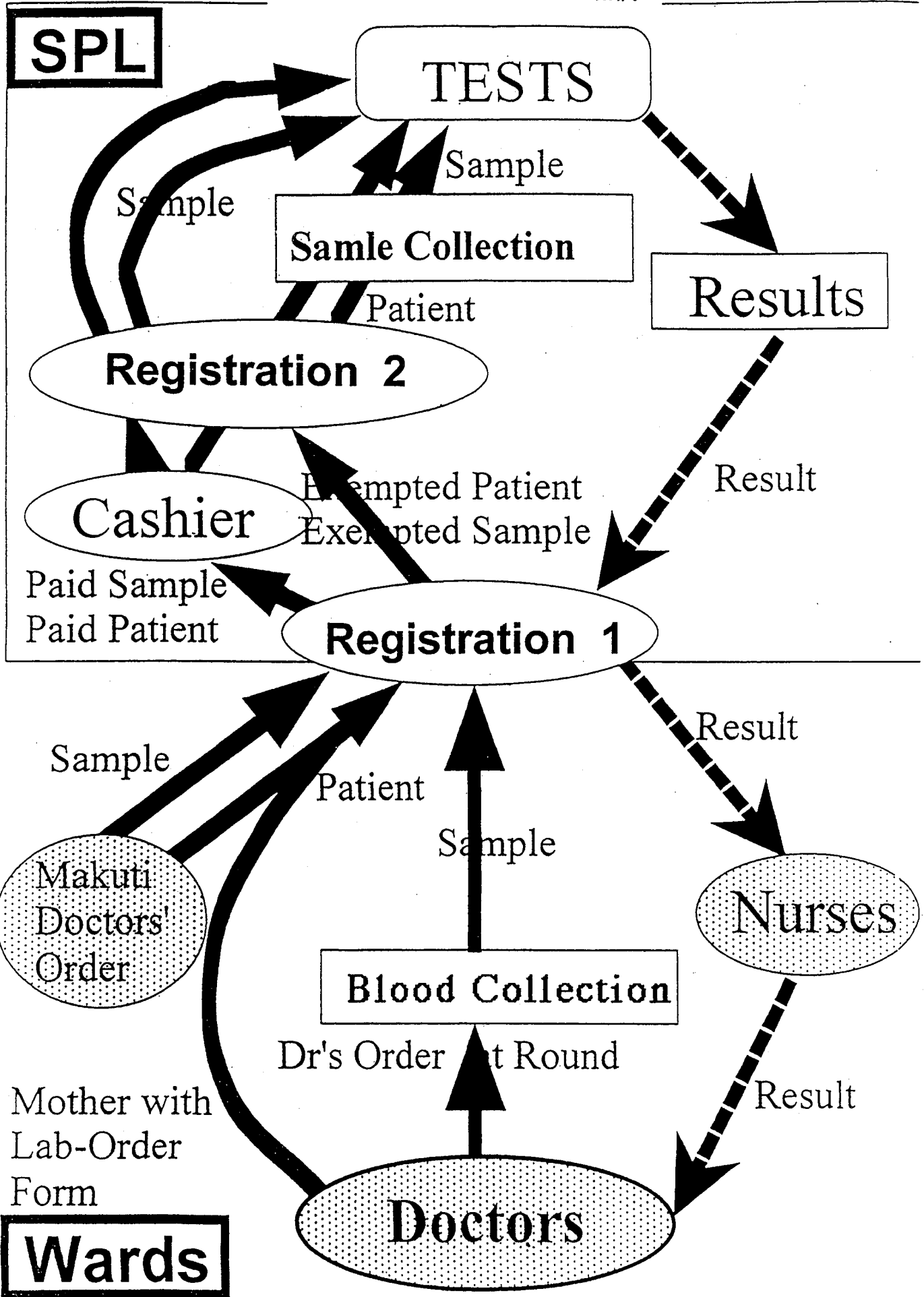
Jul 2000 - Jun 2001

		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 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
	AFP Samples tested	33	13	14	5	13	13	4	3	5	0			103
AFP	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 Virology Sample	0	0	0	0	0	0	0	0	0	0			0
Virus Isolation	Positive Virus 1													0
	Positive Virus 2													0
Measles	Measles Samples	0	0	0	2	0	0	0	0	0	0			2
	Measles vurus Positive for OPV Lots tested				0									0
Vaccine Potency Test	OPV OPV Lots potent	2	0	0	0	0	0	0	0	0	0			2
	Measles Lots tested	4	0	0	0	0	0	0	0	0	0			4
	Measles Lots potent	4												4

添付 6 : 小兒科臨床検査室統計

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										1757	1535	
Hb										1630	1394	
Others Side Lab	3894	2121	2008	2025	1952	1849	2497	3191	4394	152	138	31366
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



添付 8 : 2000 年度予算案

Proposal of Revolving Finance in SPL, 2000 2001

	Monthly Regular	MOI	Research/Health Check	Reagent(US\$)	Reagent(Tst)	Honoraria x1	Consumables x1	Local Staff x 1/2	Vehicle(Vehicle, M.Bike)	Telephone 153322 x1	Stationary y x1	Service Mainte x 1	Others, Generator or Fuel	Reagent x 1	Security x1	Local Staff x 1/2	MOI	Subtotal
Jul,00	2,000,000	70,000	0	6,000	4,800,000	144,900	50,000	240,000	40,000	30,000	50,000	733,333	40,000	4,800,000	270,000	240,000	510,000	5,636,733
Aug	2,050,000	70,000	0	0	0	148,400	50,000	240,000	40,000	30,000	50,000	733,333	0	0	270,000	240,000	510,000	5,807,733
Sep	2,100,000	70,000	0	0	0	151,900	50,000	240,000	40,000	30,000	50,000	733,333	0	0	270,000	240,000	510,000	6,005,733
Oct	2,150,000	70,000	0	6,000	4,800,000	155,400	50,000	240,000	40,000	30,000	50,000	733,333	40,000	4,800,000	270,000	240,000	510,000	6,335,733
Nov	2,200,000	70,000	0	0	0	158,900	50,000	240,000	40,000	30,000	50,000	733,333	0	0	270,000	240,000	510,000	6,535,733
Dec	2,250,000	70,000	1,000,000	0	0	232,400	50,000	240,000	40,000	30,000	50,000	733,333	0	0	270,000	240,000	510,000	7,335,733
Jan,01	2,300,000	70,000	0	6,000	4,800,000	165,900	50,000	240,000	40,000	30,000	50,000	733,333	40,000	4,800,000	270,000	240,000	510,000	7,535,733
Feb	2,350,000	70,000	0	0	0	169,400	50,000	240,000	40,000	30,000	50,000	733,333	0	0	270,000	240,000	510,000	7,735,733
Mar	2,400,000	70,000	0	0	0	172,900	50,000	240,000	40,000	30,000	50,000	733,333	0	0	270,000	240,000	510,000	7,935,733
Apr	2,450,000	70,000	0	6,000	4,800,000	176,400	50,000	240,000	40,000	30,000	50,000	733,333	40,000	4,800,000	270,000	240,000	510,000	8,135,733
May	2,500,000	70,000	0	0	0	179,900	50,000	240,000	40,000	30,000	50,000	733,333	0	0	270,000	240,000	510,000	8,335,733
Jun	2,550,000	70,000	1,000,000	0	0	253,400	50,000	240,000	40,000	30,000	50,000	733,333	0	0	270,000	240,000	510,000	9,135,733
Total	27,300,000	840,000	2,000,000	24,000	19,200,000	2,109,800	600,000	2,880,000	480,000	360,000	600,000	8,799,996	160,000	19,200,000	3,240,000	2,880,000	6,120,000	27,809,796
																		53.1%

添付 9 : MMC の SPL 口座収支

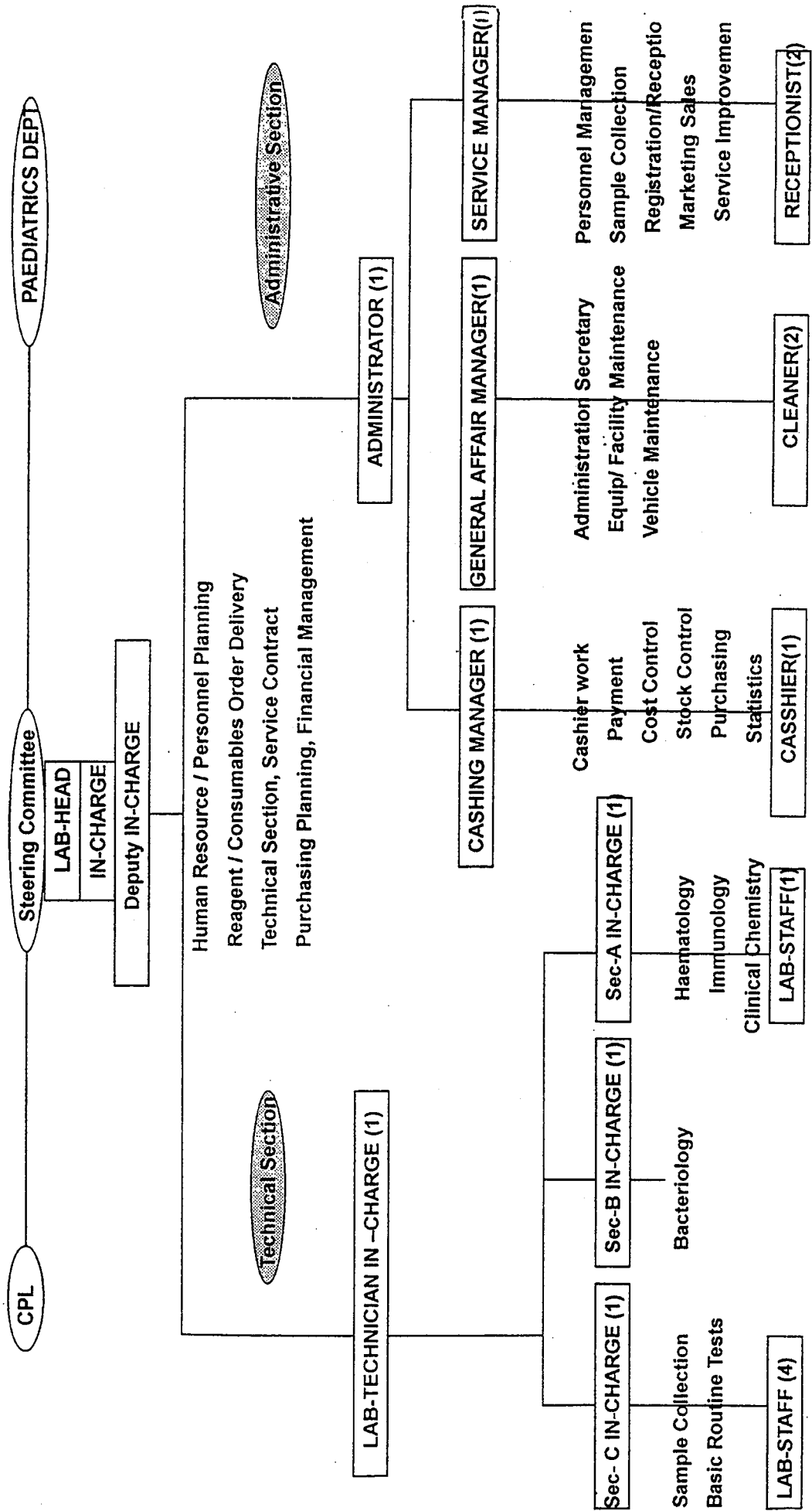
From SPL Record

	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

添付 10：検査室組織図

ORGANIZATION CHART OF SPL

Draft 25 Sep 2000



添付 11： 収入—支出 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