

2. PDM(改訂版)

**Project Design Matrix (PDM) of the Project on Animal Disease Control in Thailand and Neighboring Countries**

Project Site: Main Site: Disease Control Division(DCD), DLD, MOAC  
 Sub-Sites: a) Div. of Veterinary Epidemiology (DVE), b) National Institute of Animal Health (NIAH), c) Div. of Veterinary Biologics (DVB)  
 Participating Countries: Thailand(Core Country), Malaysia(Collaborating Country), Cambodia, Lao P.D.R., Myanmar and Vietnam  
 Target Group: Staff of the Project Sites, Staff of the Animal Health Departments of Neighboring Countries

Project Period 25<sup>th</sup> December 2001- 24<sup>th</sup> December 2006

Revised on December, 2004

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
<p><b>Overall Goal:</b> The improvement of animal health is promoted in Thailand and neighboring countries.</p>	<p>Establishment of sustainable structure in the field of animal disease control in the CLM/MVT Countries <del>Outbreak and occurrence of animal diseases</del></p>	<p>1. Contents of minutes or agreement of Regional and bi-lateral meeting between the CLM/MVT countries 2. Interview to the relevant authority and responsible persons of each country 1-GIE Report 2-FAO Report 3-Statistics from the Governments</p>	<p>1. No catastrophic disease outbreak in the region. 2. Suitable policy is applied in animal health development.</p>
<p><b>Project Purpose:</b> The technology of animal disease control is improved in Thailand and neighboring countries.</p>	<p>1. A common system on Animal Health Information shared among the member countries of the Project 2. Numbers of internationally recognized methods on - diagnosis, - vaccine production and quality control that are commonly introduced among the member countries of the Project</p>	<p>1. Animal Health and Production Information System for ASEAN (AHPISA) 2. Annual Reports from the Animal Health Departments (relevant information in English) 3. Questionnaire on Animal Health Basic Information (Monitoring and Evaluation of Project Activities) <del>Monitoring-Reports-of-the-Project</del></p>	<p>1. Support by other donors is maintained. 2. Suitable veterinary service system is established. 3. Veterinary legislation is established.</p>
<p><b>Output:</b> 1. Strengthening of regional cooperation system and resources for effective animal disease control including FMD. 2. Disease surveillance techniques are improved. 3. Vaccine production and quality control techniques are improved. 4. Animal quarantine techniques are improved.</p>	<p>1-1 Significant interchange of human resources and information on animal health among the member countries of the Project 2-1 Numbers of internationally recognized diagnostic methods used in each country 2-2 Contents and number of shared and distributed technical information produced. 3-1 Kinds and quantities of qualified vaccine produced. 4-1 Harmonization of animal quarantine procedures among the member countries 4-2 Number of animals checked during pass through the border and domestic quarantine facilities at selected important border points by the harmonized procedures</p>	<p>1. Questionnaire on Animal Health Basic Information (Monitoring and Evaluation of Project Activities) <del>Monitoring-Reports-of-the-Project</del> 2. Monitoring Sheets on Member Countries 3. Annual Report from the Animal Health Departments (relevant information in English) 4. National Coordinator Meeting Reports <del>Reports-of-the-Meetings</del> 5. Reports from Training Participants 6. Reports from Regional Experts 7. Proceedings of the Seminar and Workshop 8. Progress Report on Pilot Activities in Member Countries 9. Questionnaire Results</p>	<p>National coordinator of member countries is dispatched and they do their role of coordinating in their country and monitor the Project.</p>
<p><b>Activities:</b> 1. Strengthening of the capacity of the regional cooperation system and resources for effective animal disease control 1-1. Develop human and institutional resources for regional cooperation</p>	<p><b>Input</b> Japan 1. Dispatch of Japanese experts 1) Long term experts Chief Advisor Project Coordinator</p>	<p>Thailand 1. Provision of land and facilities 2. Arrangement of C/P Project Director Project Manager</p>	

<p>1-2. Plan and implement country plans under the Project including staff training and equipment supply</p> <p>2. Improvement of disease surveillance</p> <p>2-1. Reinforce/strengthen diagnostic techniques</p> <p>2-2. Distribution and sharing of the information on disease and techniques</p> <p><del>2-2. Collect, analyze and distribute epidemiological information</del></p> <p><del>2-2. Develop a basic disease information system</del></p> <p>3. Improvement of vaccine production and quality control techniques</p> <p>3-1. Reinforce/strengthen vaccine production techniques</p> <p>3-2. Reinforce/strengthen vaccine quality control techniques</p> <p>4. Improvement of animal quarantine techniques</p> <p>4-1. Promote technical concepts and practical procedures of quarantine</p> <p>4-2. Strengthen disease detection techniques at selected important border points</p>	<p>Expert in the technical field of</p> <p>Animal Disease Control</p> <p>2) Short term experts</p> <p>2. Provision of equipment</p> <p>3. Acceptance of trainees</p> <p>1) Training in Japan</p> <p>2) Training in core and collaborating countries</p> <p>4. Dispatch of the Missions, when necessity arises</p>	<p>Staff specialist of necessary field</p> <p>Other necessary supporting staff</p> <p>3. Dispatch of Thai experts</p> <p>4. Acceptance of trainees</p> <p>5. Cost for administration of project coordination</p> <p>Malaysia</p> <p>1. Dispatch of Malaysian experts</p> <p>2. Acceptance of trainees</p> <p>Each neighboring country (including Malaysia)</p> <p>1. Provision of land and facilities</p> <p>2. Arrangement of C/P</p> <p>National Coordinator</p> <p>Staff specialist of necessary field</p> <p>Other necessary supporting staff</p>	<p>Prerequisites:</p> <p>1. Thailand and Neighboring Countries maintain good international relations.</p> <p>2. There is no force majeure in the region.</p> <p>3. The Governments and Animal Health Departments of each country accept the Project and maintain to allocate budget for consumables, manpower and other national costs appropriately.</p>
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「タイ及び周辺国における家畜疾病防除計画」 PDM(中間評価調査での改訂版)

プロジェクトサイト： メインサイト 家畜疾病防除課 (DCP)、DLB、MOAC； サブサイト a) 獣医学部 (DVE)、b) 国立家畜衛生研究所 (NIAR)、c) 動物用生物学的裁判課 (DVB)  
相手国実施機関： 農業協同組合省 (MOAC) 畜産振興局 (DLB)

参加国： タイ (拠点国)、マレーシア (協力国)、カンボジア、ラオス、ミャンマー、ベトナム

協力期間： 5年 (2001年12月25日～2006年12月24日)

ターゲット・グループ： プロジェクトサイトの職員、周辺国の職員、周辺国の畜産・衛生当局の職員

2004年12月

上位目標	プロジェクトの要約	指標	入手手段	外部条件
タイ及び周辺国において家畜衛生の改善が促進される	GLMWT各国での家畜疾病防除の分野における持続可能な体制整備	1. プロジェクトの各周辺国の間で家畜疾病情報を共有するため の共通システム 2. プロジェクト関係国間で導入された国際的に承認された以下 の手法の件数 -診断 -ワクチン製造 -家畜検査	1. OILMWT国間の地域あるいは二国間会議のモニタリングや 台湾文書の内容 2. 各国の関係機関や責任者へのインタビュー	
プロジェクト目標	タイ及び周辺国において家畜疾病防除技術が改善される	1. プロジェクトの各周辺国の間で家畜疾病情報を共有するため の共通システム 2. プロジェクト関係国間で導入された国際的に承認された以下 の手法の件数 -診断 -ワクチン製造 -家畜検査	1. アジア家畜衛生・生産情報システム (APRISA) 2. 各国畜産衛生局の年次報告書 (英語での関連情報) 3. 家畜衛生基本情報に係る質問票 (プロジェクト活動に 係るモニタリング評価)	1. 当該地域における家畜疾病の大発生が ないこと 2. 適切な畜産開発政策の施行
成果 1	口蹄疫を含む家畜疾病を効率的にコントロールすべく、地域協力体 制及び入荷等が強化される	1-1 プロジェクトの周辺国間の家畜衛生に係る人的・情報の 蓄積共有	1. 家畜衛生基本情報に係る質問票 (プロジェクト活動に 係るモニタリング評価) 2. 周辺各国のモニタリングシステム 3. 各国畜産・衛生当局の年次報告書 (英語での 関連情報) 4. ナショナル・コーディネーター会議報告書 5. 研修参加者の報告書 6. 専門家報告書 7. セミナーやワークショップ報告 8. 専門家報告書周辺国での活動巡視報告書 9. 質問票回収結果	1. 他ドナーによる支援の継続 2. 適切な獣医サービスクラウドの整備 3. (周辺国の) 畜産に係る法律の制定
成果 2	家畜疾病診断技術が向上する	2-1 各国で利用された国際的に承認された診断方法の件数 2-2 共有され、発信された技術情報の内容とその数		
成果 3	ワクチン製造及び品質管理技術が向上する	3-1 製造されたワクチンの種類と検査数		
成果 4	家畜検査技術が向上する	4-1 各周辺国間の家畜検査手続きの調和 4-2 国境や選定された重要国境地点での各型衛生施設で、 手続きの調和により検査をパスした家畜の数		
活動 1	1 効果的な家畜疾病防除のための地域間協力体制及び人材等の強化 1.1 地域間協力を進めるための人的・経済的リソースの開発 1.2 職員のリソースを共有するプロジェクトを通じた各国計画 の企画及びその実施	投入	投入	投入
活動 2	2 疾病診断方法の改善 2.1 診断技術の強化 2.2 条約や技術に関する情報の発信と共有	投入	投入	投入
活動 3	3 ワクチン製造及び品質管理技術の改善 3.1 ワクチン製造技術の強化 3.2 ワクチン品質管理技術の強化	投入	投入	投入
活動 4	4 家畜検査技術の改善 4.1 検査に係る技術概念と実際の検査手法適用の促進 4.2 選定された重要国境地点での家畜検査技術の強化	投入	投入	投入





#### 4. 主要面談者

##### <大使館・JICA 関係者>

荻原 英樹 在タイ日本国大使館 一等書記官  
高久 竜太郎 在カンボジア日本大使館 二等書記官  
佐藤 幹治 JICA タイ事務所 所長  
奥邨 彰一 JICA タイ事務所 次長  
高間 英俊 JICA タイ事務所 次長  
鈴木 和哉 JICA タイ事務所 所員  
武市 二郎 JICA カンボジア事務所 所員  
西脇 英隆 JICA ラオス事務所 所長  
作道 俊介 JICA ラオス事務所 所員  
山下 誠 JICA ミャンマー事務所 次長  
正永 能久 JICA ミャンマー事務所 所員  
仲宗根 邦宏 JICA ベトナム事務所 所員

##### <プロジェクト専門家>

佐々木 正雄 家畜疾病防除計画 チーフアドバイザー  
遠藤 清美 家畜疾病防除計画 調整員  
柏崎 佳人 家畜疾病防除計画 短期専門家 (家畜疾病防除)

##### <タイ側関係者>

Sahat Ninlaphan Deputy Director General, DLD, MOAC  
Nirundorn Aungtragoolsuk Director, Bureau of Disease Control and Veterinary  
Service, DLD, MOAC

##### <カンボジア側関係者>

Mr. Kao Phal Director General, Department of Animal Health and Production, MAFF  
Mr. Holl Davun Deputy Chief of National Animal Health and Production Investigation  
Center (NAHPIC)

##### <ラオス側関係者>

Sithong Phiphakhavong Director, Animal Vaccine Production Center  
Bounlom Douanggeun Director National Animal Health Center



5. 分析結果報告書



Japan-Thailand Technical Cooperation Project  
On  
“Animal Disease Control in Thailand and Neighboring Countries”

**Report  
of  
Analysis on Questionnaire & Interviews  
for the Project Mid-term Evaluation**

**December 2004**

By

Akira Matsumoto

JICA Consultant

**Compliment for Mid-term Evaluation of Project**



## Analysis on Questionnaire & Interviews for the Mid-term Evaluation



Evaluation Member Meeting on 11/11/04



Thai Evaluation Team Leader and Sub-leader



Trainees from Myanmar & Vietnam at NIAH



Trainees from Malaysia at NIAH

### In Myanmar



Vaccine Production at LBVD



Interview with the Section Chief



Small reagents supported by JICA



Interview with Trainees

**In Laos**



Small reagents supported by JICA



Avian Influenza equipment supported by JICA&FAO



Interview with the Laboratory Director (left: Animal Health Center, right: Vaccine Laboratory)





## **Analysis on Questionnaire & Interviews for the Mid-term Evaluation (2)**



Evaluation Member Meeting on 25/11/04



Visit NIAH and interview with training participants



Interview with section chief in NIAH



### **In Cambodia**



Team A in NAHPIC



In NAHPIC (right to left: National Coordinator, Director General and 2 ex-participants)



Presentation by NAHPIC



Observation in NAHPIC laboratory



Observation of equipment supplied in laboratory



Interview with National Coordinator

**In Vietnam**



Visit Ministry of Agriculture and Rural Development (MARD)



Visit and interview at Dept of Animal Health (DAH)





Interview with the ex-participants



NIVR ex-participants with brought reagents

Project e equipment supplied in NIVR laboratory

\*NIVR=National Institute of Veterinary Research, Vietnam



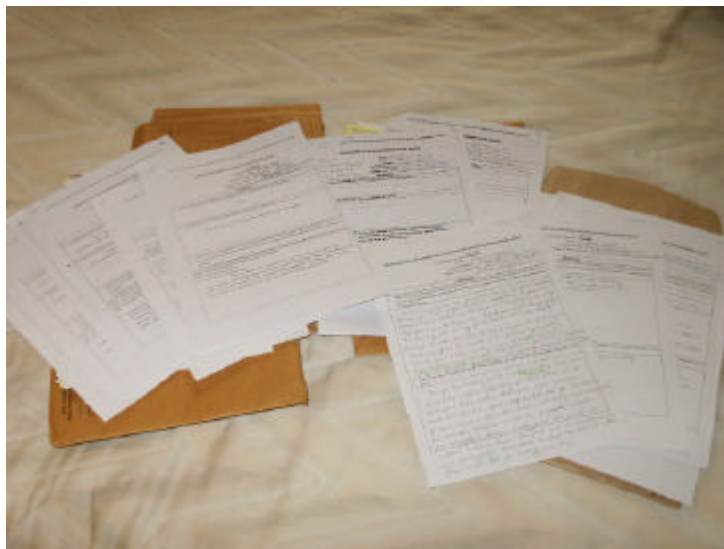
Interview with staff at DAH



Reception of diagnosis sample from regional laboratory



The field training to animal health workers and students conducted by ex-participant



Replied questionnaires from ex-participants in member countries

## Analysis on Questionnaire & Interviews for the Mid-term Evaluation

### TARGETED GROUP OF QUESTIONNAIRE & INTERVIEWS

Training Place	Number of Participants	Distribution of Questionnaire	Responded/Returned Numbers	Interviews	Respondent rate (%)*2
<b>Ex-participants of training</b>					
Cambodia	11	11	10	6	10(91%)
Laos PDR	13	13	7	5	7(54%)
Malaysia	11	11	9	2	11(100%)
Myanmar	15	14	14	14	14(93%)
Thailand	9	8	4	4	4(50%)
Vietnam	11	9	8	5	9(82%)
Sub- Total	70*1	66	52	36	55(79%)
<b>Training implementation agency</b>					
NIAH, Thailand		5	5	14	14 (100%)
DVB, Thailand		1	1	1	1(100%)
DVS, Malaysia		?	?	?	?
Sub-total		6	6	15	15
Grand total		72	58	51	

\*1 **Trainees in total** In Japan 13(19M/M in total) In Malaysia 3(3M/M) In Thailand 54(74.65M/M)  
(In Thailand: 10 Cambodia 11.8M/M, 11 Laos PDR 13M/M, 10 Malaysia 13.3M/M, 13 Myanmar 22.55M/M, 10 Vietnam 14M/M)

The questionnaire was distributed through the national coordinators in participating countries as it many as possible. The deadline of returning of response was 3rd December 2004.

\*2 These are the ratio of respondents who returned their answers of questionnaire and/or took interviews.

### Questionnaire Process

Two (2) type of questionnaire was distributed to the related persons and the target group of the Project. One questionnaire was distributed to the training participants, and another to the training implementation agencies. The questionnaire was fulfilled by the respondents, and been returned and collected during the evaluation survey. The replied questionnaire was confident and was analyzed according to the evaluation criteria. It is very difficult to reach the questionnaire to all ex-participants in their hands due to their working place where they work in remote areas from the capital city or limited response time. For the sake of national coordinators and support from each government, the respondents' ratio is very high in spite of limited time available.

### **Methodology and Objectives of Questionnaire**

The questionnaire aims to grasp the opinion and ideas through the self-evaluation of the Project stakeholders, and specify the Project performance with deep concerns, especially on the achievement and impact of the training conducted. To fulfill the above objectives, the evaluation team members constructed the questionnaire. The questionnaire is made “free answer” and open style in which consist of Q&A blank sheet. It aims to catch the “qualitative” way of evaluation, not “quantitative” way with numerous data accumulations.

### **Interview Process**

Before the interviewing, the questionnaire was analyzed as much as possible, even though most of questionnaire was not collected before the interviewing day.

The interview date was set and adjusted by the national coordinators in advance. The interviews were conducted in each participating country. The interviews were conducted as individual or group style depended on the situation and efficient way.

The main focus of the interview is to collect the additional individual information, and to grasp their frank opinion regarding to the training performance, achievements and the lessons learnt.

(Abbreviation)

NIAH= National Institute of Animal Health, DVB= Veterinary Biologics Division

C/P=Counterpart Staff, J/E=Japanese Experts, NC=National Coordinators in each country

Based on the questionnaire and interviewing results, it is summarized as bellows.



**Analysis on Questionnaire & Interviews**  
**for the Mid-term Evaluation**  
**(Cambodia)**

**TARGETED GROUP OF QUESTIONNAIRE & INTERVIEWS**

Training Place	Number of Participants	Distribution of Questionnaire	Responded/Returned Numbers	Interviews	Respondent rate (%)
<b>Ex-participants</b>					
Thailand	10* <sup>1</sup>	10	9	5	9(90%)
Japan	1	1	1	1	1(100%)
<b>Total</b>	<b>11</b>	<b>11</b>	<b>10</b>	<b>6</b>	<b>10(91%)</b>

\*<sup>1</sup> In total training was ten (10) numbers from Laos PDR with 11.8M/M. However, some participants were trained several time of training. Actually, a trainee was given training twice in Thailand, and another trainee was a chance of training three times through the Project (two time in Thailand, and one time in Japan)

**RESULTS ON THE ANALYSIS OF EX-PARTICIPANTS**

Interviewed Numbers: 6

Additional Information

- One trainees were attended a training courses instead of another candidate who were absent of sickness.
- In Cambodia, no existing as a checkpoint.
- The animal movement regulation has been under amendment, but not yet approved.
- Training in Japan is very useful to learn new techniques of cell culture and start the technology. And she went Thailand the following year as the same subject. Further, some equipment was received through the Project support.
- One trainee was only undertook her training 6 days in Thailand due to her sickness.
- The epidemiology workshop that conducted jointly by the Project and FAO is very interesting of the subject matter as well as survey with practice.
- Training is very useful to learn the new techniques and method. But no utilize due to the lack of equipment, facility, chemical, reagents, transportation and supplement (allowance) as well as requirement of the hierarchy and approval.
- Almost of the trainees who interviewed had experiences of training in Malaysia as MCTP program.
- Visiting by Thai expert was useful but too short period.
- Some of trainees who returned back to lab, they explained the theory and learned techniques to

other staff, but in fact few apply or utilization.

- Each section was attached a few staff who has a degree of university level, but not veterinarian.
- Comments; the trainees' techniques were improved gained through the training, but not utilized yet with implementation difficulty including no power of trainees.

Responded Questionnaire: 10

- 3 Men & 7 Women (Actually, the same person participated to different training courses, such as one lady attended three (3) type of training, and another one lady attended two (2) type of training. Therefore, actual number of the trainees from Cambodia was just only five persons.)

**Q1: Are there the same working place and/or position before and after the training?**

Answer: Same 10 (100%)

One person is doing the same job as an inspector of animal quarantine, but also he is working at animal quarantine private company as well.

**Q2: What is the most useful subject which you attained the training?**

- Cell culture on chick kidney & virus isolation
- HA and HI test
- Biochemical test
- Practice in tuberculin test (SID)
- Rose Bengal Plate test
- ELISA of detection antibodies, typing antigen
- Immunoperoxidase test for detection antigen of CSFV disease
- Epidemiology
- Management of animal movement and stock
- Helminth diagnosis

**Q3: Do you have an opportunity to utilize the technology and knowledge gained through the training?**

Answer: Yes 3 (30%) No 6 (60%) ? 1(10%)

**Q3(1): If you have an opportunity, how do you utilize the results of the training? Please describe the example in detail.**

- Utilized some materials, reagents and chemical which JICA provided after the training course
- I know how to do the survey and how to make the questionnaire in Epidemiology subject

**Q3(2): The reason of no opportunity is below;**

- Lack/Shortage of some necessary material and equipment for run the test 3
- Shortage of the place of processing, budget

- No chance to try
- Short period for individual practice
- Problem with reader plate program, conjugate and some chemicals
- Need more time to try to practice the techniques to become a good experience in Hog Cholera diagnosis

**Q4: After the training, do you share the knowledge and technology with your colleagues and other staff within the same organization?**

Answer: Yes 10 (100%)

- Provided the handout and experience
- Explained and transferred to all staff in the Section and gave lecture to staff in the Lab.

**Q5: How about the extension and share the knowledge and technology gained through the training into the regional and/or provincial laboratory?**

Answer: Yes 4(40%) No 6 (60%)

- Explained to provincial Lab. staff, how to run the test and how to collect the samples for find the brucellosis
- Explained to provincial Lab. staff, how to collect the samples, presented and sending the samples
- I share the knowledge through training with the staff of practice, and NAHPIC
- Train the provincial veterinarian and laboratory staff and also conduct the student come from college or university
- No extension into the regional or provincial Lab, because of there has not been a programme prepared as yet
- No, because short period for the training and individual practice
- In provincial Lab, there have not have activity in serology.

**Q6: Please feel to give comments, desires and/or necessary changes related to the training.**

- Update the knowledge with the latest skills and information more efficiently and to share new skills in my department with others 2
- Wish to be provide some materials, reagents and chemicals to improve and practice to compare the result between during training an after come back

**Analysis on Questionnaire & Interviews**  
**for the Mid-term Evaluation**  
**(Laos)**

**TARGETED GROUP OF QUESTIONNAIRE & INTERVIEWS ON 15/11/04**

Training Place	Number of Participants	Distribution of Questionnaire	Responded/Returned Numbers	Interviews	Respondent rate (%)
<b>Ex-participants</b>					
Thailand	11* <sup>1</sup>	11	6* <sup>2</sup>	4	6(55%)
Malaysia	1	1	0	0	0(0%)
Japan	1	1	1	1	1(100%)
<b>Total</b>	<b>13</b>	<b>13</b>	<b>7</b>	<b>5</b>	<b>7(54%)</b>

\*<sup>1</sup> In total training was eleven (11) numbers from Laos PDR with 13M/M.

\*<sup>2</sup> One trainee who are currently undertaken her training at NIAH, Thailand, could response the questionnaire.

**Results on the questionnaire & interviews**

*Writer's Comments and Impressions*

- Based on the questionnaire and interview, the training was useful as individual benefits, however it is not visible the benefit to other staff and organization. It means the impact is very limited. Furthermore, most of trainees mentioned the difficulty of utilizing knowledge gained through the training due to the constraints of budget, but in fact, many donors such as EU and Australia has been supported various amounts of equipment. Therefore, as my observation, I can say frankly that it is less motivated and has a given-attitude, which they are accustomed to be donated outside as a present and reluctant to consider the self-reliance efforts.

## RESULTS ON THE ANALYSIS OF EX-PARTICIPANTS

Interviewed Numbers: 5

Additional Information

- Training is very useful to learn the new techniques and method. But no utilize due to the facility & reagents.
- Thailand and Japan are highly equipped, but in Laos, less developed the laboratory.
- All of the trainees who interviewed had experiences of training abroad before.
- Support of other donors is quite abundant, such as EU (the project was just completed at 2004, but maybe the next phase will be available) and Australia, OIE, IAEA and FAO.
- The number of laboratory staff is very small.
- Comments: shortage budget for do diagnosis and vaccine production in their laboratory

Responded Questionnaire: 7

- 5 Men & 2 Women

**Q1: Are there the same working place and/or position before and after the training?**

Answer: Same 7 (100%)

- All of them are same working place, but one of the trainees is not belonging to the section in charge of the training subject, which she attended.

**Q2: What is the most useful subject which you attained the training?**

- ELISA test 3 answer
- Cell culture 3
- FA test to detect the CSFV disease
- Plaque forming method, etc
- Review HS
- Active mouse protection test, etc

**Q3: Do you have an opportunity to utilize the technology and knowledge gained through the training?**

Answer: Yes 5 (71%) No 2(29 %)

**Q3(1): If you have an opportunity, how do you utilize the results of the training? Please describe the example in detail.**

- Get conjugate for ADV and CSFV disease from NIAH, so I will make more diagnosis with FA test.
- Use the method and technology to modify her work, but ELISA method have just conducted only once time.
- Animal registration

**Q3(2): The reason of no opportunity is below;**

- Too short training period
- Lack of equipment, some chemical and cell line
- No reagents and facility to do the cell culture & PCR

**Q4: After the training, do you share the knowledge and technology with your colleagues and other staff within the same organization?**

Answer: Yes 5 (71%) No 2 (29%)

- Visited the checkpoint along the border many times and discuss some techniques of Animal movement
- Share the knowledge with his technician in vaccine production center
- Organized seminar in the center
- Presented for all of my colleagues

**Q5: How about the extension and share the knowledge and technology gained through the training into the regional and/or provincial laboratory?**

Answer: Yes 1 (14%) No 6 (86%)

- No opportunity because the no equipment and chemical
- No veterinarian
- No possible due to the human resource and facility to do
- Difficult to do, because the provincial laboratories they can do only the basic diagnostic techniques, for example, parasitological examination, not to do bacteria & virology.

**Q6: Please feel to give comments, desires and/or necessary changes related to the training.**

- More practical needed 2
- The training is very useful because such specific course were very rare. 2
- I will another training like this especially in disease investigation.
- More longer the training period
- I need to set up and more equipped laboratory.
- Poor pipethets & reagents, which DVB provided, and the result sometimes do not trust.
- The instructors do not speak English well.

**Analysis on Questionnaire & Interviews  
for the Mid-term Evaluation  
(Malaysia)**

**TARGETED GROUP OF QUESTIONNAIRE & BREIF INTERVIEWS**

Training Place	Number of Participants	Distribution of Questionnaire	Responded/Returned Numbers	Interviews	Respondent rate (%)
<b>Ex-participants</b>					
Thailand	10* <sup>1</sup>	10	8* <sup>2</sup>	2* <sup>3</sup>	10(100%)
Japan	1	1	1	0	1(100%)
<b>Total</b>	<b>11</b>	<b>11</b>	<b>9</b>	<b>2</b>	<b>11(100%)</b>

\*<sup>1</sup> In total training was ten (10) numbers from Malaysia with 13.3M/M.

\*<sup>2</sup> One trainee who are currently undertaken her training at NIAH, Thailand, could response the questionnaire.

\*<sup>3</sup> Two trainee are currently undertaken her training at NIAH, Thailand, and they could response brief interview.

**RESULTS ON THE ANALYSIS OF EX-PARTICIPANTS**

Responded Questionnaire: 9: 7 Doctor (3 female, but other 4 no define), 2 Male

**Q1: Are there the same working place and/or position before and after the training?**

Answer: Same 9 (100%)

**Q2: What is the most useful subject which you attained the training?**

- FMD ELISA & tissue culture techniques 2
- Serological test (MAT) and culture the sample received
- Antigen preparation
- Lab diagnosis (cell cultures, PCR, etc)
- Diagnosis of Anthrax, methods for its confirmation and procedures in its handling
- Animal Quarantine and Animal Movement Management in Indo-China Peninsular
- Field Visits
- Discussion & Conclusion Veterinary epidemiology investigating disease outbreak
- Anthrax isolation and identification Brucella isolation & Serology

**Q3: Do you have an opportunity to utilize the technology and knowledge gained through the training?**

Answer: Yes but constraint 9 (100%)

- Yes, opportunity with some limitation
- Used a techniques in experiment survey in rat and other species to isolate the bacteria from the kidney, but main constraints in utilize the technique as: 1)sample received only a few case and mostly negative, 2) difficulty in maintaining the live antigen (bacteria) easily contaminated and

zoonotic, 3) need special staff to run the test and keep the antigen and prepare the media for the stock culture and 4) need different temperature for isolation work and  $-180\text{ }^{\circ}\text{C}$  for maintaining main stock culture

- Mostly used the techniques for experimental purposes
- Carried out a survey to determine the presence of *Bacillus anthracis* in the soil samples in government farms. At present the results are negative.
- Improve and upgrade the current practice of quarantine management system in Malaysia.
- The interaction between the participants from different countries helped me to revise the existing import regulations of animals and animal products to Malaysia.
- Diagnosis of FMD is not conducted.
- Not fully utilized because not enough manpower

**Q4: After the training, do you share the knowledge and technology with your colleagues and other staff within the same organization?**

Answer: Yes 9 (100%)

One example; I have given a lecture and practical training for veterinary officers and lab.

**Q5: How about the extension and share the knowledge and technology gained through the training into the regional and/or provincial laboratory?**

Answer: Yes 8 (89%) No 1 (11%)

- Malaysia is not big country and FMD disease is placed at the Regional Veterinary Laboratory Kota Baru. We able to better able to control the test quality assurances and accuracy of results. But the knowledge is always with other Lab for the awareness.
- Discussed the techniques and prepare for experimental study in our bacteriology group.
- Improve the lab, techniques by regular discussion with other regional labs

**Q6: Please feel to give comments, desires and/or necessary changes related to the training.**

- The training is very beneficial and useful 4(to improve the knowledge in FMD diagnosis, to suspected animals and the patent of the disease, to animal quarantine services)
- The NSF 3ABC ELIA techniques should be taught in detail and allowed to practice.
- Need more exposure in Immuno-fluorescent techniques and preparation of the antigen, which we can develop here.
- The course was very tight that made difficult to fully understand and gain the skill. It had better to more specific depend on requirement.
- The duration of training should be shorten depend on the subject/content of training courses.
- Training methodology is excellent but it would be better if the following could be included; visit to the positive Anthrax location, demonstrate the procedures for the collection of suspected specimens in the field, and show the procedure on how to transport the specimens to the lab.
- Participants should not be left alone without continuing training or consultation for progress assessment and effectiveness of the training used follow-up consultation.



**Analysis on Questionnaire & Interviews**  
**for the Mid-term Evaluation**  
**(Myanmar)**

**TARGETED GROUP OF QUESTIONNAIRE & INTERVIEWS ON 15/11/04**

Training Place	Number of Participants	Distribution of Questionnaire	Responded/Returned Numbers	Interviews	Respondent rate (%)
<b>Ex-participants</b>					
Thailand	13* <sup>1</sup>	12	12* <sup>2</sup>	12* <sup>3</sup>	12(92%)
Malaysia	1	1	1	1	1(100%)
Japan	1	1	1	1	1(100%)
<b>Total</b>	<b>15</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14(93%)</b>

\*<sup>1</sup> In total training was thirteen (13) numbers from Myanmar with 22.55M/M.

\*<sup>2</sup> Two trainee who are currently undertaken her training at NIAH and DVB, Thailand, could response the questionnaire as well as interview.

\*<sup>3</sup> One trainees were not attained the interview due to their inconvenience stay in remote area.

**Results on the questionnaire & interviews**

**Writer's Comments and Impressions**

- With strong support and collaborating LBVD, 11 ex-Participants, we met. (Only 2 trainees were not attained due to their inconvenience stay in remote area)
- Almost of participants were shy, and they did not have a good explanation through the interviews, maybe the difficulty of express opinion in front of others.
- The impression was; 1) the participants are willingness of training and have a high motivation individually.
- The most of participants have an opportunity to utilize the training outcomes, but some are difficult of conduct due to the shortage of equipment.
- Some are interested in the research of sophisticated technology as academically.
- Only copy, protocol or brief papers were provided during the training, it is better to provide necessary manual or handbook for them.

## **RESULTS ON THE ANALYSIS OF EX-PARTICIPANTS**

Interviewed Numbers: 11 at Yangon, Myanmar

Additional Information

- 10 Female & only 1 Male
- 7 Yangon (working Central laboratory), 3 Mandalay, 1 Patay(?)
- 7 First overseas training, 4 second time overseas training (1 JICA training, 1 NIAH, Thailand, 1 England, 1 Thailand)
- Training satisfaction: Very satisfactory, but too short time period
  
- **Visible Impacts:**
  - After the training, she started to produce a vaccine of Brucellosis by utilizing instruments and chemicals supported by JICA.
  - Before the training, it can produce FMD vaccine for cattle, not produced FMD vaccine for pig. After the training, the trainee tried to produce FMD vaccine for pig (3,900 doses by aluminum hydroxide gel method)
  - Even after the training, the participants are being contacted with training institution (Pakchong, Thailand) and other countries' participants through the e-mail aimed to the support of advice and exchanging update information.
  
- Comments: Not/short equipment in their laboratory

Responded Questionnaire: 12 (including one trainee who is undertaken at Thailand)

**Q1: Are there the same working place and/or position before and after the training?**

Answer: Same 12 (100%)

- All of them are same working under LBVD as same as before, but some are different unit/in charge. For instance, one trainees worked in cell Culture Unit of FMD Section, but now she was moved to Virus Typing and Serology Unit of FMD Section

**Q2: What is the most useful subject which you attained the training?**

FMD Vaccine production 2

ND (New Castle) Disease vaccine production and quality control 2

SID(Single Intradermal Tuberculin test) 2

FMD Typing ELISA

ELISA method fro HS antibody detection

Production of Brucellosis vaccine and antigen

Antigen Detection

PCR Method

FA test to detect the CSV disease

**Q3: Do you have an opportunity to utilize the technology and knowledge gained through the training?**

Answer: Yes 12(100%)

**Q3(1): If you have an opportunity, how do you utilize the results of the training? Please describe the example in detail.**

- Bring back the Brucella seed from Thailand and some instruments and chemicals supported by JICA.
- By advanced technology of vaccine production, she is using stationary cell culture method for cell production.
- Start of SID for two time by using PPD antigen, which she brought. The first SID test was done in 47 goats and second test was done in 18 buffalos at Mandalay. The result was negative for TB.
- She can learn the different media preparation of micro bacteria TB. And she can manage the field practice of SID test.
- She has an opportunity of 3,900 doses of FMD vaccine for pig was produced at Jan, 2004 by aluminum hydroxide gel method.

**Q4: After the training, do you share the knowledge and technology with your colleagues and other staff within the same organization?**

Answer: Yes 11 (92%)

Some examples are below.

- How to do the SID test as a field practice
- Not only colleagues in same organization, but also other staff within the FMD laboratory

Answer: No 1 (8%)

- Because renovation of Brucellosis the laboratory an facility have not been completed

**Q5: How about the extension and share the knowledge and technology gained through the training into the regional and/or provincial laboratory?**

Answer: Yes 10 (83%)

- Share the knowledge and technology into the Upper Myanmar (regional diagnostic laboratory, Mandalay)
- After the training, she was selected to visit again to Thailand as international secondee in SEAFMD campaign to control the FMD in ASEAN countries.
- Yes, she shared how to prepare the different media for isolation, maintenance of precaution of micro bacteria species.

Answer: No 2 (10%)

- Because Myanmar it has only one FMD vaccine production laboratory in Yangon.
- It is up to the Director decision.

**Q6: Please feel to give comments, desires and/or necessary changes related to the training.**

- The training is very useful, effective and applicable for FMD control not only Myanmar and other CLV countries. 3 answer
- Too short of training period (e.g., need 3 month training for ND diagnosis, 6 month for FMD vaccine production and quality control) 3
- Request an expert got Serodiagnosis and SID test for upper Regional Diagnosis laboratory.
- Need an expert and technology of SPF eggs production facilities 2
- The training period is rather short.
- More effective FMD vaccine for pig by oil adjuvant method. Need of mineral oil and other chemical for those. Need an expert to test run the oil adjuvant method
- In the laboratory, there is no PCR technology. Require the PCR equipments, reagents and experts.

**Analysis on Questionnaire & Interviews  
for the Mid-term Evaluation  
(Thailand)**

**TARGETED GROUP OF QUESTIONNAIRE & BREIF INTERVIEWS**

(Please refer the attached list)

Training Place	Number of Participants	Distribution of Questionnaire	Responded/Returned Numbers	Interviews	Respondent rate (%)
<b>Ex-participants</b>					
Japan	9	8	4	4	4(50%)
Total	9	8	4	4	4(50%)

**RESULTS ON THE ANALYSIS OF EX-PARTICIPANTS**

Responded Questionnaire: 4

**Q1: Are there the same working place and/or position before and after the training?**

Answer: Same 4 (100%)

**Q2: What is the most useful subject which you attained the training?**

PCR and Nucleotide sequencing

How to provide Swine fever use

Quality control techniques in seedvirn test cell control test

Swine fever vaccine production by use tyrosine for digestion tissue

Capsular and typing

**Q3: Do you have an opportunity to utilize the technology and knowledge gained through the training?**

Answer: Yes 2(50%)

- Use the computer software for analysis of sequencing data
- Tracing back to original outbreak of FMD disease
- Typing the field isolates to compare the relation with vaccine strain to be the basic data in my research of multocida.

Answer: No 2(50%)

- We change the method production fro, primary tissue culture to cell line (S-S-C3)
- My organization uses the other kind of vaccine production method, which is different from the method of Japan. In the near future, my lab may be change to the same method if Japan.
- Not fully utilized because not enough manpower

**Q4: After the training, do you share the knowledge and technology with your colleagues and other staff within the same organization?**

Answer: Yes 3 (75%) No 1 (25%)

- I wrote report about the produce swine fever by use primary cell culture and send to other staff in my lab.
- Some technique only
- Not yet share

**Q5: How about the extension and share the knowledge and technology gained through the training into the regional and/or provincial laboratory?**

Answer: Yes 1 (25%) No 13(75%)

Most of the trainees, their job is to undertake analysis and no specific relation with regional lab.

**Q6: Please feel to give comments, desires and/or necessary changes related to the training.**

- I appreciate the support from JICA
- Not only the knowledge from the course but also the living in Japan
- The training is very useful.
- The course period is very short and need more time.

**RESULTS ON THE ANALYSIS OF TRAINERS/SECTION LEADERS**  
**(THAILAND)**

Responded Questionnaire: 6

**Q1: Relevance**

*“How about the training your agency conducted ? Please self-evaluate the training as its relevance, such as the training field, curriculum, technical level of trainees, quality of trainers, training period and duration, etc)”*

Answer: Yes 6 (100%)

- Request if the participating country
- Laboratory practice
- Duration is suitable (FMD subject, TB and Brucellosis, Vaccine production) 2
- Trainees are sufficient of basic knowledge, and they were qualified and experienced.
- The training is appropriate and well organized.
- Some period of training time is inconvenient for trainers (shortage of number of trainers, busy time for trainers, difficult to arrange by trainers to take care of trainees)
- HS diagnosis using traditional method, the participants can do in their lab. However, some participants' lab still lack of most chemical reagents or media essential.
- The curriculum, technical level of trainees, quality of trainers, training period and duration is appropriated.

**Q2: Outcomes**

*“How about the training outcomes? Please describe the achievement and extreme examples if you have.”*

Answer: Positive 4 (67%) ? 2 (33%)

- Trainees gained much more knowledge (e.g., FA techniques, tissue-culture techniques, Virus isolation and identification)
- 70-80% with good satisfied level (self-evaluation)
- The outcome is quite satisfactory.
- Transfer to the trainees
- Do no know because no contact after the training

**Q3: Monitoring**

*“What do you or your agency monitor the training?”*

Answer: Yes 1 ( 11%)

- The agency monitors the training at rate of attendance, participation of activity and accomplishment o trainees in carry out assigned tasks.

No: 4 (78%) 1: No answer (11%)

- Necessary to follow-up the result of training
- Currently no agency to monitor
- No feedback from the participants (Trainees should provide their progress work)
- Need evaluation form
- JICA coordination should be helpful to let us know what is going on in the participants' labs.

**Q4: Tackling Issues and Lessons Learnt**

*“Through the training conducted, do you have any specific matters that we need to tackle and solve? And if you have any lesson learned, please describe in detail.”*

- English proficiency is limited in some cases, and need communication skill.
- Occasionally the agency receives trainees without appropriate work background resulting in the lack of enthusiasm and problem solving skill.
- The trainees' level and qualification are very differ one by one, so it is difficult to arrange and manage how to apply.
- Some of trainees would like to learn update techniques in spite of that she/he has not yet basic knowledge.
- Limited number of trainees, such as some person trained 2-3 times

**(All the above matters are related to the selection and qualification of trainees)**

- Trainees is not engaging in the filed of training.
- I want to know that the trainees are continuously working in the same lab or move elsewhere, and whether the techniques they learned was presented.

**Q5: Comments**

*“Please feel to give comments, desires and/or necessary activities related to the training.”*

- Need “Training for trainers” for the Thai staff to improve advance technology and trainers' skills as well as communication skill. 2
- Need evaluation and follow-up to how improved the trainees' ability on laboratory diagnosis
- Trainees should be reported their progress at least 1 times.
- Need English course both for trainers and trainees
- Transportation from hotel to NIAH
- Need to submit reports by experts and Thai staff in order to describe the country situation and also the follow-up the trainees



**Analysis on Questionnaire & Interviews  
for the Mid-term Evaluation  
(Vietnam)**

**TARGETED GROUP OF QUESTIONNAIRE & INTERVIEWS ON 3/12/04**

Training Place	Number of Participants	Distribution of Questionnaire	Responded/Returned Numbers	Interviews	Respondent rate (%)
<b>Ex-participants</b>					
Thailand	10* <sup>1</sup>	9	8	5	8(80%)
Malaysia	1	0	0	0	0(0%)
<b>Total</b>	<b>11</b>	<b>9</b>	<b>8</b>	<b>5</b>	<b>9(82%)</b>

\*<sup>1</sup> In total training was ten (10) numbers from Vietnam with 14M/M.

**RESULTS ON THE ANALYSIS OF EX-PARTICIPANTS**

Interviewed Numbers: 5

Additional Information

- Three were attached at Dept of Animal Health (DAH) and two trainees were attached at NIVR (National Institute of Veterinary Research).
- All trainees are working as the same section as same as the previous working. And they replied the training was very useful.
- The training was mostly acquired for basic knowledge and the contents are relevant.
- One trainee wishes to support further training in Vietnam in order to disseminate new techniques and method to other technical staff and regional laboratory staff.
- All trainees were young and, the age is 20's.
- After the training, they cannot contact with the trainers and other country participants.
- One trainee was conducted a training which aims to transfer the knowledge of bovine tuberculosis and skills of tuberculin tests. The tuberculin tests have rarely been done before in Vietnam, and he taught the method to animal health workers and university students through the training. The evaluation team observed that the training was very useful not only the technical transfer but also the precious experience and motivation for the trainer.

Responded Questionnaire: 8

**Q1: Are there the same working place and/or position before and after the training?**

Answer: Same 8 (100%)

**Q2: What is the most useful subject which you attained the training?**

- HS vaccine production and quality control
- Epidemiology principles and methods
- Diagnostic methods of duck viral hepatitis
- Bovine tuberculosis as well as diagnostic method by tuberculin test in live animal
- Tissue culture and virus isolation
- RT-PCR
- Border animal quarantine and domestic animal management
- Virus isolation
- IHA for Capsular Serology
- ELISA test to detect antibodies in cattle serum after vaccination

**Q3: Do you have an opportunity to utilize the technology and knowledge gained through the training?**

Answer: Yes 7 (88%) ? 1(12%)

**Q3(1): If you have an opportunity, how do you utilize the results of the training? Please describe the example in detail.**

- Utilized the technology for working
- After the training, colleagues and I conducted a survey on the disease in cattle by testing tuberculin in live animal and by observing lessons in suspected dead animal and using diagnostic techniques in laboratory.
- Drafting the plan of animal quarantine and animal movement management
- Applied ELISA for FMD typing and antibody detection in regional health center. Up to now, completed protocol of virus isolation from knowledge and technology

**Q3(2): The reason of no opportunity is below;**

- Difficult to apply for tissue culture due to lack of equipment and material for run the test 3

**Q4: After the training, do you share the knowledge and technology with your colleagues and other staff within the same organization?**

Answer: Yes 10 (100%)

- Share the experience, and discuss how to apply in the work. As a result, we got a lot of efficient solution for diagnosis of duck viral hepatitis.

**Q5: How about the extension and share the knowledge and technology gained through the training into the regional and/or provincial laboratory?**

Answer: Yes 8(100%)

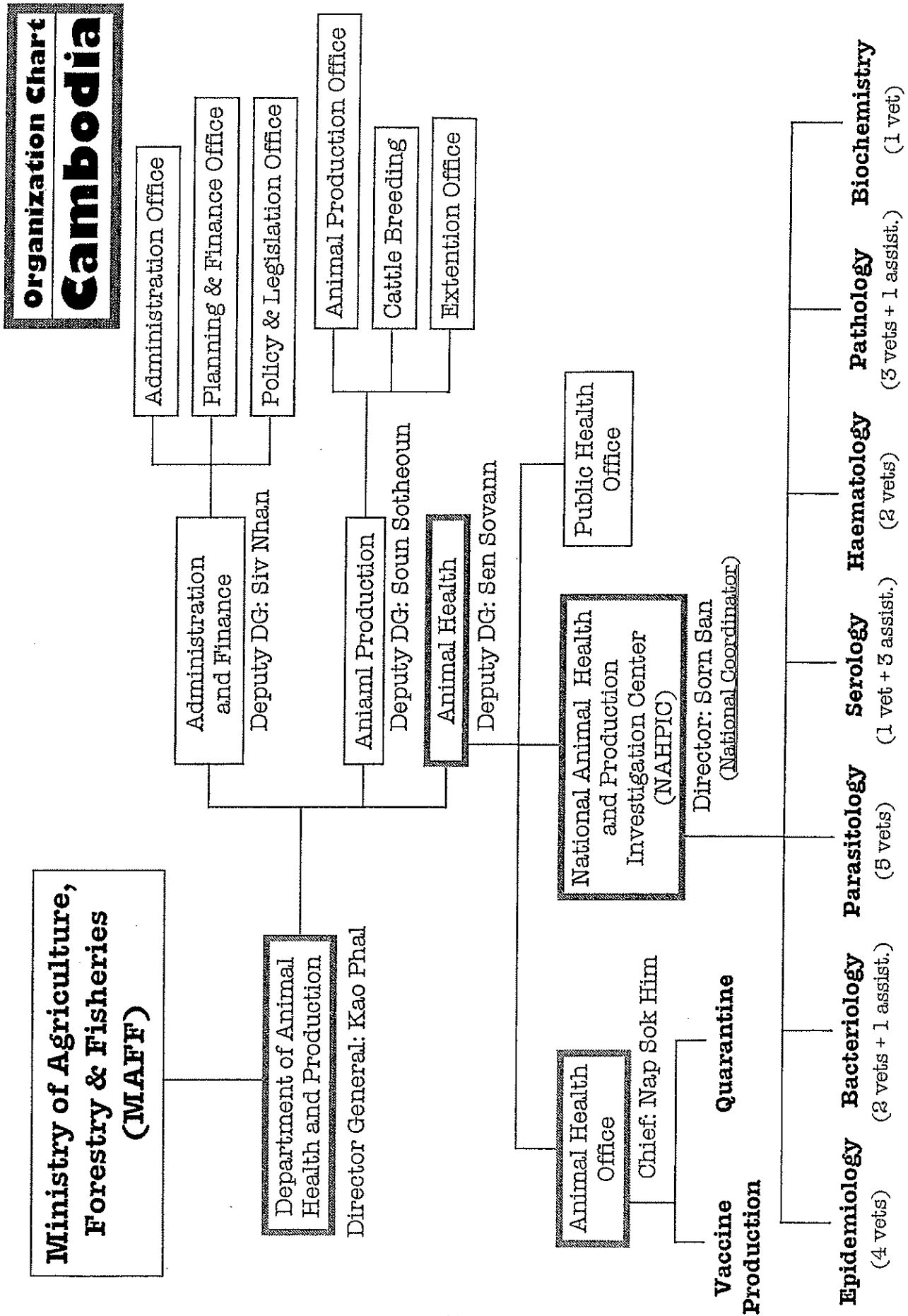
- Wish to open short training into the regional Lab or to organize seminar in Vietnam
- Ready to transfer the knowledge gained through the training into the regional Lab, but I need

support of responsible authorities, my office's leaders, and especially the help of JICA NIVR project

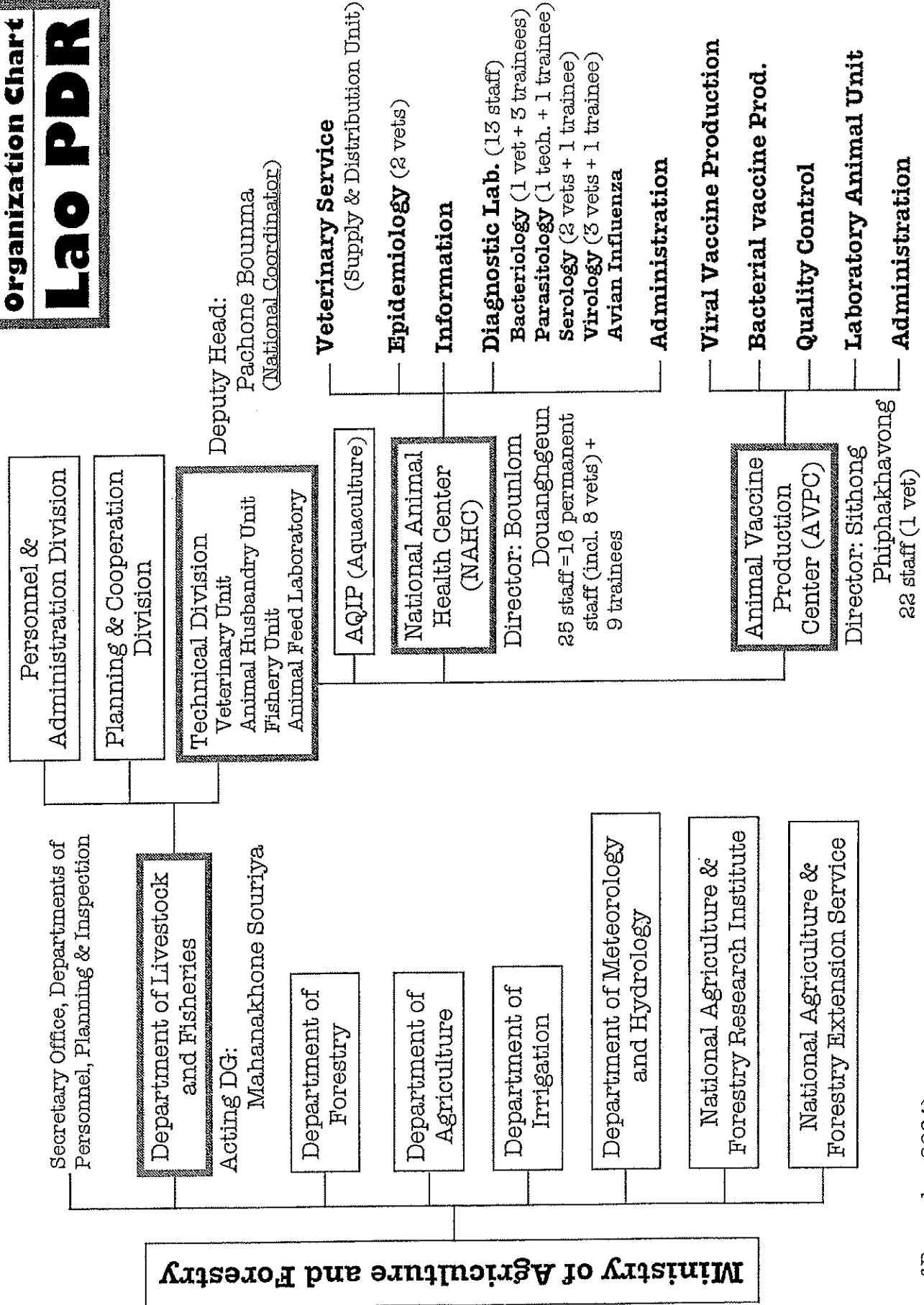
**Q6: Please feel to give comments, desires and/or necessary changes related to the training.**

- More longer period of training which have an opportunity to practice in order to effectiveness 2
- The training is really interesting, useful and suitable. 2
- The course was well organized, and the lectures were very enthusiastic.
- Necessity of organizes the meeting after training for talk about experience, knowledge, and technology what they learned. Wish to JICA can introduce or open short training for teaching into regional or laboratory
- More training courses
- The time for new techniques like RTPCT was rather limited.

6. 各国組織図

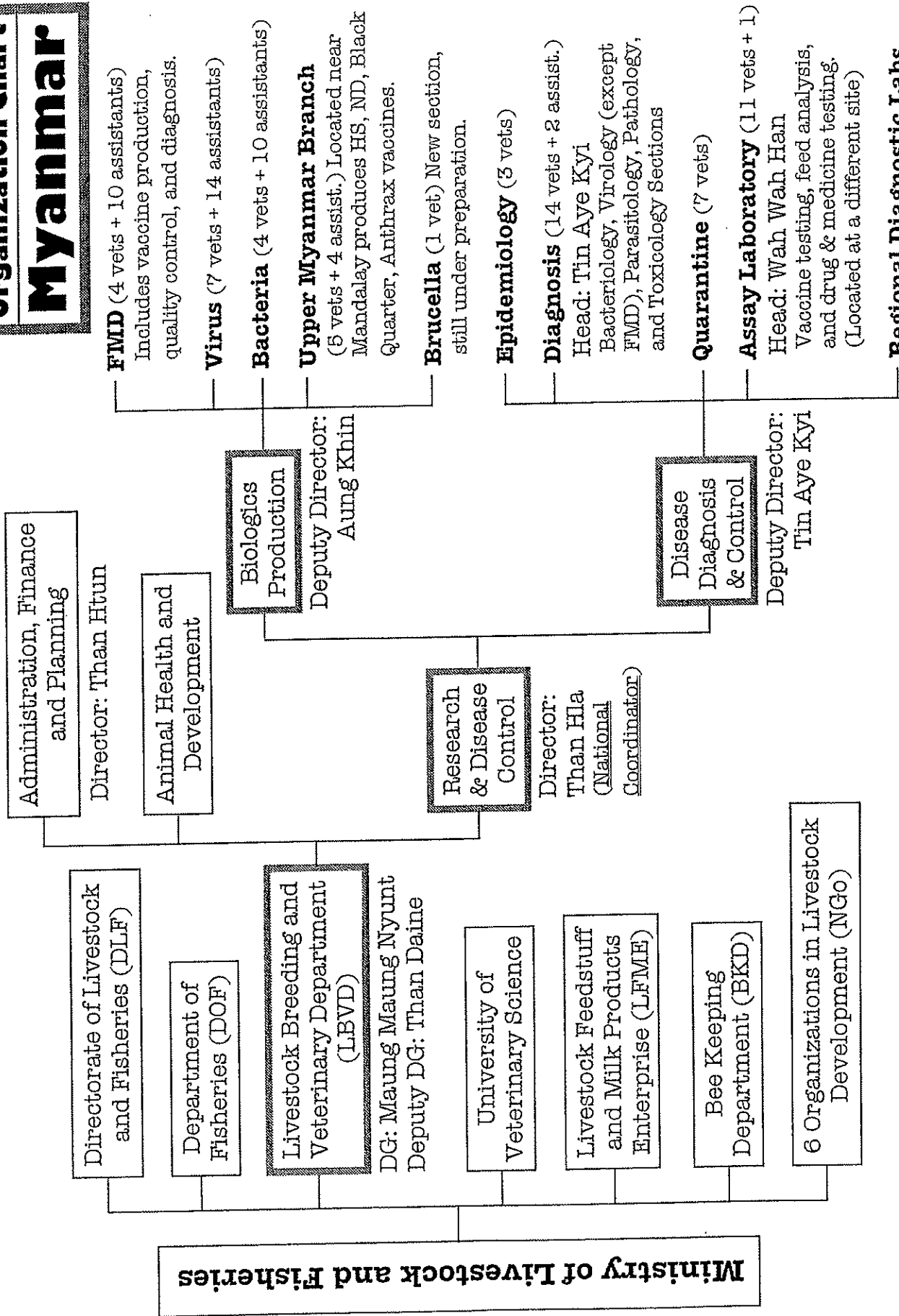


**Organization Chart**  
**Lao PDR**



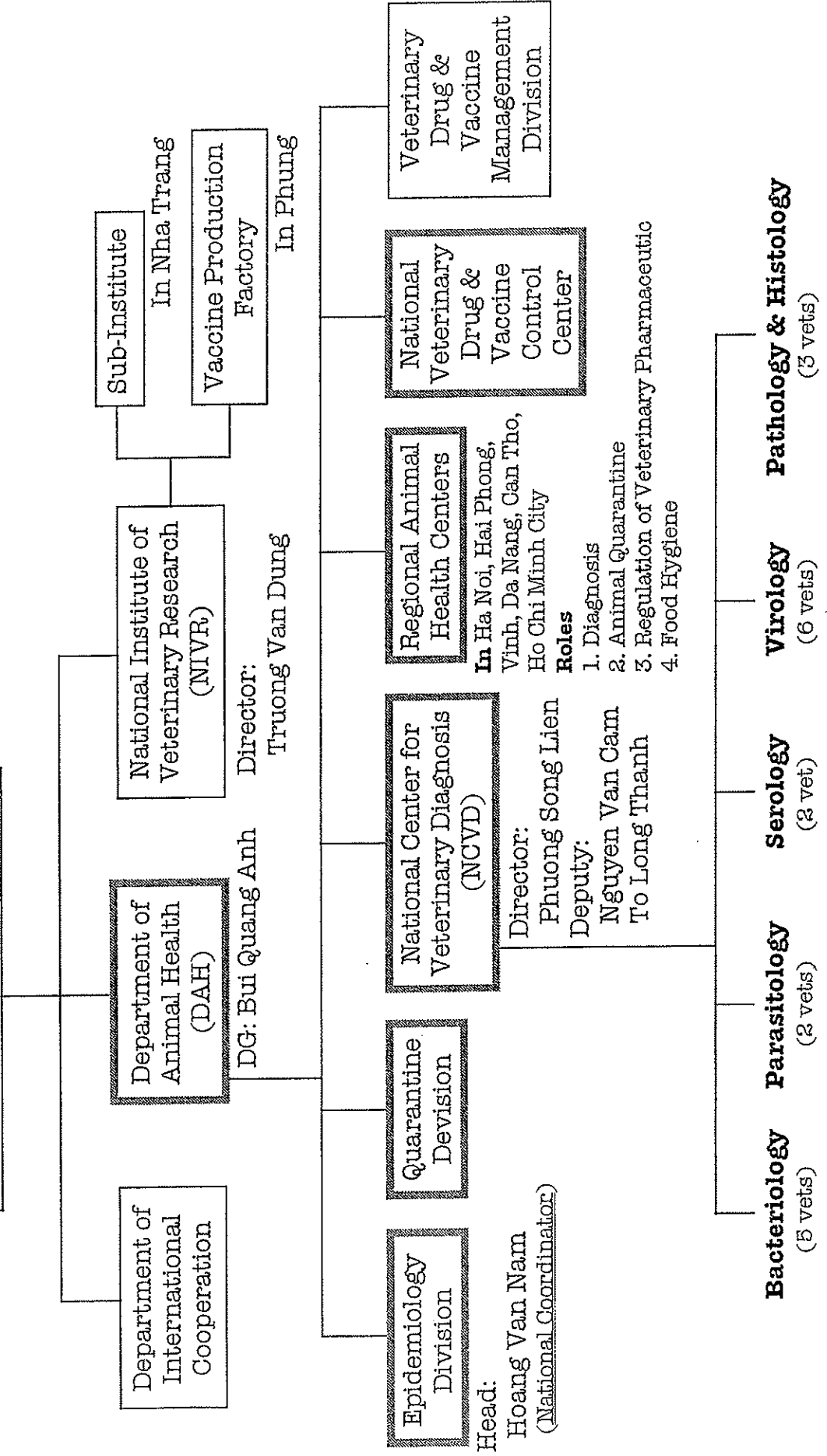
(As of December 2004)

# Organization Chart Myanmar



**Organization Chart  
Vietnam**

**Ministry of Agriculture  
& Rural Development  
(MARD)**



## 7. 広域協力を実施する上での留意点

### 1 タイの状況と広域協力の位置づけ

タイ事務所は2004年10月1日にアジア地域支援事務所を併設し、アジア地域各国事務所に対し、次のような業務を行うことになった。これは新生JICAが打ち出した在外事務所の機能強化の一環であり、全世界6地域でこの広域事務所が設置されている。

- (1) 案件発掘・形成及び横断的課題への技術的支援
- (2) 地域協力/南南協力
- (3) 援助協調
- (4) 経理・調達等業務支援

日本政府とタイ国政府とは、2003年12月第二回目のパートナーシップ協力協定(JTPP2)が締結され、双方が対等な立場で、周辺国に対して協力することになっている。ASEAN地域内の遅れたCLMVに対する協力が主体であるが、それだけに留まらず、TCAD3にて提唱されたアジアアフリカ協力についても実施する方向で日タイ合同の案件形成を推進している。

2004年11月にはタイ国の援助の受入窓口機関であったDTEC(外務省の一部局)がその名称と機能をTICA(Thailand International Development Cooperation Agency)に変更され、エマーシング・ドナーという体制を整えつつある。しかし、中進国になりつつあるタイであるとはいえ、援助予算がTICAだけで邦貨で5億円と少なく、日本始めパートナーシップ協力(第三国研修など)に対するより多くの貢献を期待されている。

一方、我が国の家畜衛生と畜産分野のタイへの協力については、1970年代初めから行われ、およそ30年間の歴史がある。その成果と厚い信頼関係を土台として、この地域協力が行われている。このプロジェクトは、当初はいわゆる供給サイドの形で提案されているが、本来家畜疾病防除については地域横断的課題であり、各国の実情に合わせたプロジェクト実施計画が作成されることもあって、各国とも協調性があり、かつ熱心に取り組んでいる。本プロジェクトの目的は、動物衛生の改善であるが、各国の行政的、技術的、組織的レベルが異なり、体制、予算、人材、インフラなどさまざま、地域で共通に活用でき、訓練できる技術が確立しているわけではない。従って、各国への技術移転では個別的にならざるを得ない実情であるとともに、各国の状況に合わせたプロジェクト目標のブレークダウンを設定することも必要となっている。(広域プロジェクトの性質、目標によっては、各国の諸条件に関係なく、各国共通な技術を普及しなければならぬ場合もある。しかし、この場合プロジェクト遂行には非常に困難を伴う。)



本プロジェクトでは、タイでの研修とタイ人専門家派遣の相乗効果により、人的ネットワークの構築が期待され、将来的には地域の防疫体制構築へ向けての礎になることも期待されている。その意味でも C/P である DLD に地域協力へ取り組む積極的な体制の構築を望むものである。

## 2 各国の視点からの留意点

### 2-1 カンボジア

#### (1) 広域協力の位置づけ

カンボジアにおける動物検疫体制はメコン地域内において、その整備が必須なものであり、本案件によって、動物検疫体制のうち、技術的な側面の強化は意義があると考えている。組織体制が脆弱なカンボジアでは、本分野での地道な技術協力活動が必要と考えられ、本案件によりプロジェクトから長・短期専門家がカンボジアに派遣されることにより、プロジェクトの推進、モニタリングのみならず、今後の動物検疫体制の整備のためのバイの協力に向けた検討も当プロジェクトの助言を得て進めていくことも考えていく。

#### (2) 運営上の課題と提案

##### ア 各国政府との協力枠組の形成

口上書の交換、R/D の締結といった国際約束の形成がない現状では、今回の入谷短期専門家（一般細菌病診断及びウイルス病診断）の派遣の際にも、カンボジアから特別に要請書提出を別途行なうことで対応した。但し R/D に実施機関が同意するという M/M だけでは、カンボジア側との国際約束が未締結の状況である。現行では、短期専門家を派遣する際に、そのつど対応をすることとなり、特権、免除項目の確保に係る多大な労力を継続的に費やすことになり、円滑な事業実施を考えた場合、負担は大きい。

さらに、16 年度、技術協力協定が締結され、17 年度から包括国際約束を年度当初に交わす予定でもあり、今後、どのように本件を整理するべきかという問題が残されている。

以上のことから、今後の新規案件の形成の際には、R/D を各国と締結することが望ましいと考えており、そのことが広域プロジェクトの短期専門家の派遣などをカンボジアに対する JICA の投入として、明確に位置づけるうえで重要な点と考える。

##### イ 運営管理の課題

モニタリングについては、JOCV が同機関に配属されていることもあり、現場で活動する専門性を有した日本人が常駐し、監視できる体制となっている。従って、プロジェクトからの短期専門家派遣やプロジェクト長期専門家の業務出張による運営指導、モニタリングに加え、これ

らのリソースを活用した、より効率的なパイロットプロジェクトの運営方法について検討することも一案であろう。

また、必要な公電のやり取りについては、TOR さえきちんと明確にすれば、カンボジア事務所としては、プロジェクトと実施機関とが直接行う方向（cc で事務所に同報）に賛成とのことであった。

#### ウ パイロットプロジェクトの現地業務費示達、及び機材調達について

本プロジェクトのカンボジア NC は、実務能力も高く、モチベーションも高い。さらに過去に試行的に行った HS 出血性敗血症のパイロットプロジェクトにより、ある程度人材開発も行われ、現地業務費の管理についても可能な状況と考えられる。またパイロットプロジェクトの実施の際は、カンボジア事務所への示達により進める方向で可能である。

また、機材調達については、地域支援事務所が本部調達と JICS の機能を持つのであれば、調達資機材の持続的な活用の側面も含め、より望ましいと考える。なお、英語の説明書の添付や機器の据付技術者の派遣などが確保されることは前提条件であることはいうまでもない。仕様書等の作成など、プロジェクトの支援は不可欠であり、これらについては、プロジェクトが実質的に作業することが望まれる。

#### エ 案件形成

案件の形成にあたっては、各国からのニーズを集約し、その最大公約数となる部分を活動内容とした場合、十分な効果が期待できないことが、これまでの広域案件の経験からわかってきている。また、たとえ PDM や PO は同じ内容であっても、その投入内容については、その国ごとのレベルに合わせた投入を行うことができないと、持続性を考えた場合、その困難性はより大きくなる。案件形成時及びその投入内容の特定など、それぞれの段階で、これまで以上に十分な配慮をすることが必要である。

#### オ C/P の旅費等の予算措置

カンボジアでは援助機関による宿泊、日当、及び賃金補助が多く行われており、JICA 事務所としては、原則的には認めていないものの、必要に応じ、残業代、翻訳代として追加的な手当を出しているのが現状である。この点については、国ごとに状況が異なるものであり、プロジェクトごとではなく、国ごとの整理をすることが必要。

外国旅費については、統一的な取り扱いでも問題ない模様である。

## カ 研修員について

第三国研修などについて、タイ外務省からタイ在外公館を通じての研修員募集は、カンボジア外務省が窓口となって行われるが、外務省にはそれぞれの研修と実施機関とのマッチングを判断することができておらず、場合によっては、研修意図と反するリソースに結びつくこともありうる。従って、効果的な研修を行うためには、A1 フォームに実施機関及びコンタクトパーソンを記入するなどの工夫が必要である。

## 2-2 ラオス

### (1) 各国における広域協力の位置づけ

ラオスにおいては、畜産に関するニーズが非常に高く、この分野で EU や AusAID、ADB 等が協力を行ってきている。こうしたなかで、広域協力という枠組みに基づき、各援助機関との協調、ネットワークの構築、ラオス側との協力基盤の構築を行うことは非常に効果的であると考えている。

### (2) 運営上の課題と提案

#### ア 各国政府との協力枠組の形成

現状では、タイと日本との間には国際約束を締結しているものの、ラオスとの間には国際約束などの締結は行っていない。しかしながら、ラオスにおいては、これにより大きな支障が生じることはないと考えている。国際約束やそれに基づく A1 フォームの提出をラオス側に依頼すれば、手続きを煩雑にするのみと思われる。形式論に固執することなく、より柔軟に対応することで、ラオス国内における活動の効果的な実施に焦点をあてるべきであると考えている。

#### イ 運営管理の課題

本件については、専門家がラオスに常駐していないということからも、全体像が見えにくく、それぞれの投入がどこに位置づけられるのか分かりにくい面がある。これまでは、タイにおける研修が中心であったことがその背景にあるが、今後は周辺国における活動に軸足を移すことになる。従って、全体像をクリアにしたうえで、ラオスの実情に合わせた入念な検討を行う、投入のモニタリングをしっかりと行うことがきわめて重要であると考えている。当然のことながら、個々の投入が終了後ラオス側でどの程度継続して活用できるのか、他の援助機関と重複するものはないか、などの検討が必要である。こうした、基本的な検討には駐在しているラオス事務所が最も適応可能かと思われ、積極的に参加を促したい。また、事務所が強く参加することによって、他援助機関、JICA 他プロジェクトとの連携を強固なものにし、「農業・農村開発」というプログラム全体での効果的な実施を検討できる。まずは、本プロジェクトの計画やモニタリングについて、事務所の立場から議論ができる場を作ることが重要であると考えている。例

例えば、半年ごとに行っている NC 会議にラオスからも事務所員が出席し、プロジェクト関係者と十分な検討を行うことが解決策の一つである（テレビ会議でも）。また、ラオス国内でのモニタリングや調整については、ナショナルスタッフが最も活躍できる分野であることから、ナショナルスタッフに情報が伝わるように、環境の整備が重要であると考えている。NC の活用も考え方としてあるが、ラオスでは技術者が限られているなかで非常に多忙であり、ラオス側をサポートする意味でも、事務所の関与は必要不可欠と考えている。

#### ウ 機材調達など（携行機材を含む）、現地業務費

携行機材や供与機材の引き取りには基本的に問題はない。但し、ラオスには冷蔵品を保管することができないなどの制約もあるため、基本的には専門家の方がタイから、活動に必要な範囲で持ち込むということで対応するのが妥当である。

ラオス国内で手に入るものは極端に限られているが、もしも必要性、妥当性が明確であれば、プロジェクトの現地業務費で事務所が薬品や消耗品の購入を行うことも可能である。

### 2-3 ミャンマー

#### (1) 各国における広域協力の位置づけ

ミャンマーにおける政治・経済状況から新たな案件を立ち上げることは非常に難しく、時間を要する。こうしたなかで、現在実施中の案件で、いかにミャンマー側のニーズをカバーするかが当面の課題となっている。従って、広域協力などの枠組みのなかで小規模ではありながら、地道な活動が行えることは非常に有効であり、ミャンマー事務所としても歓迎とのことであった。

#### (2) 運営上の課題と提案

##### ア 各国政府との協力枠組の形成

ミャンマーでは、専門家の派遣等も含めて、閣議決定事項となっており、指導分野等の検討までなされたうえで、口上書及び A1 フォームを通じて各投入の要請が上げられる。従って、個々の投入要素ごとに国際約束が締結されるという形である。但し、閣議の遅れや手続きの関係等から A1 フォームの取り付けに 2~3 カ月、又はそれ以上の期間を要する場合もあり、1~2 週間の専門家の派遣ごとにこうしたプロセスを踏むことは非効率的である。

##### イ 運営管理の課題（各国活動のモニタリング方法等、NC、プロジェクト、事務所の役割）

第一に、ミャンマーでの活動の到達点をどこに置くのか明確にする必要がある。個々の技術者のタイでの研修成果のフォローという位置づけもあるであろうし、それを受けてミャンマー

の PDM を作って活動を行うことも考えられる。いずれにせよ、このプロジェクトとしてどうするのか、明確にするべきである。

第二に、本プロジェクトの全体の活動状況等について、ミャンマー事務所に十分な情報が入っていないため、全体像が見えない状況が生じている。NC を通じてミャンマー側でこのプロジェクトの全体像や戦略がどの程度認識されているかは不明であるが、もしも同じような状況であれば、専門家の派遣等もその位置づけがミャンマー側に理解されないままに行われることになり、プロジェクトの成果としては結びつかないことが懸念される。全体の状況については、ニューズレターの発信等でカバーできるであろうし、短期専門家を例にあげれば、活動のどこに位置づけられ、派遣中の達成目標を何に置くのか、明確な認識を事前に共有することで課題の解消につながると思われる。

これらのことの整理をしたうえで、第三としてタイ事務所、ミャンマー事務所、本部、プロジェクト（専門家とタイ人 C/P）、NC の役割分担を明確にするべきである。他の広域プロジェクトでも整理の仕方が違うが、例えば「タイ人 C/P と NC を中心とした運営」が、周辺国から見た場合にも効率的であり、かつ、自立発展性を担保できるものと思われる。具体的には、上記 2 点について、タイ人 C/P と NC とが日本人専門家のフォローを受けながら主体的に情報交換を行い、その経緯が E-mail の cc 等を通じて事務所のナショナルスタッフと共有される、という仕組みが構築できれば良いと考える。また、JICA 内としては、タイ事務所が主導的な役割をし、「タイ事務所が実施しているプロジェクトを各国事務所が支援する」という形を取ることができれば、JICA 内の事務的な整理もつきやすいのではないかと考えられる。

#### ウ 機材調達など

携行機材も含めて空送・海送される機材の引き取りについては、通常 2～3 カ月要することから日本から送ることは効率的ではない。基本的には、専門家が同時携行として持ち込める範囲とするか、ミャンマーで購入できる薬品などもあるので、それらについては事前に事務所を通じて購入する等の方法がある。これについても、NC を通じて事前に検討ができていればナショナルスタッフ等を通じた支援も、スムーズに行くと思われる。また、この場合も本部からの示達ではなく、タイ事務所から示達されれば連絡系統が明確であるため、混乱は避けられる。

#### エ ナショナルスタッフの活用

専門家が常駐しないプロジェクトの場合、ミャンマー国内のネットワークを有するナショナルを通じて事務所として支援することが最も効率的であると考えられる。従って、通常のメールのやり取り等や公電についても、英語を基本として行えば効率的に実施できるのではないかと。

## 2-4 ベトナム

### (1) 運営上の課題と提案

#### ア 各国政府との協力枠組の形成

ベトナムでは、ほぼR/Dと同様という位置づけのMinutes of Discussionを締結し、特権免除事項は実質的には担保されている。したがって、パイロットプロジェクト運営のための短期専門家がベトナムに来て特権は確保されることになる。また、A1については、ベトナム側からは提出されたとしても、個別短期専門家として1つ1つ処理されることになるため、それぞれが確実に採択する必要があるという問題が残る。また、包括国際約束(CIA)に含まれていないプロジェクトの短期専門家のA1提出の根拠について十分に突き詰めて議論していないため、A1取り付けは困難な可能性がある。

#### イ 運営管理の課題

研修の成果が研修生の日常の業務を行ううえで反映されていることから、研修が無駄に行われているわけではないが、必ずしもプロジェクトの目的に合致した対象者に研修が行われているわけではない。原因の1つとして、DAH(Department of Animal Health)のチーフレベル(1セクションの長)がNCとなっており、プロジェクト全体を見渡して研修員を選定することやプロジェクトの目標に合致した研修員の選定を行うことができていないことが挙げられる。ベトナム側の構造的な問題もあることから、このような場合は、プロジェクト側で研修員の選定の際に適切な助言をすることも必要であろう。特に、今後、NIVR(National Institute of Veterinary Research)で実施中のプロジェクト(国立獣医学研究所強化計画)が3月に終了することを考えると、タイ側からの研修実施を通知する際には、通知文書のccをNCにも送付することは必須である。

また、必要な公電のやり取りについては、基準さえ明確にすれば、ベトナム事務所としては、プロジェクトと実施機関と直接行う方向(ccで事務所に同報)でもかまわないが、広域プロジェクト間で統一したほうが良いと考える。

#### ウ パイロットプロジェクトの現地業務費示達、及び機材調達について

ACIPACプロジェクト(国際寄生虫対策アジアセンタープロジェクト)でも行っており、できないことはないだろう。本件に関していえば、ベトナム側の経理システムをどうするかといった問題があり、別途プロジェクトマネージャーを雇用するといった体制の拡充などの検討も必要である。

また、パイロットプロジェクトのイメージが各人で異なっており、とりあえずやったというようなことにならないようにプロジェクト後を見据えたフレームワークを明確にしてから進め

たほうがよい。NIVR のプロジェクトが終了する前の2月までに確定させることが望ましく、また、NC が NIVR の活動についてもきちんと理解しておくことも今後の本分野での展開を考えるうえでは重要である。

#### エ 案件形成

案件の形成にあたっては、各国のバイの案件の形成につながるような支援も広域プロジェクトには期待している。人工授精や酪農技プロなどと、本プロジェクトとの連携も考える必要がある。

#### カ 研修員について

第三国研修などについて、タイ外務省からタイ在外公館を通じての研修員募集は、ベトナム外務省が窓口となって行なわれるが、外務省にはそれぞれの研修と実施機関とのマッチングを判断することができておらず、場合によっては、研修意図と反するリソースに結びつくこともありうる。従って、効果的な研修を行うためには、NC に直接 cc を送付することや AI フォームに実施機関及びコンタクトパーソンを記入するなどの工夫が必要である。また、研修員のフォローアップが非常に重要であり、短期専門家派遣とリンクすることや、JICA-Net を活用するなど、研修で習得した技術のフォローアップができるしくみがあることが望ましい。