

1. Outline of the Project	
Country names: Thailand (base country) and neighboring countries (Malaysia [cooperating country], Cambodia, Laos, Myanmar, Vietnam)	Project name : The Project of the Japan-Thailand Technical Cooperation on Animal Disease Control in Thailand and Neighboring Countries
Fields: Agricultural/Rural development- Agricultural development	Assistance type: Technical cooperation project
Supervising office: Paddy Field-Based Farming Area Team II, Group I, Rural Development Department	Monetary amount of cooperation (at time of evaluation): Total of approximately 420 million yen
Period of cooperation	December 25, 2001, to December 24, 2006 (Signing of R/D: December 24, 2001)
	Counterpart organizations: Thailand: Department of Livestock Development, Ministry of Agriculture and Cooperatives; Cambodia: National Animal Health and Production Investigation Center, Ministry of Agriculture, Forestry, and Fisheries; Laos: Department of Livestock and Fisheries, Ministry of Agriculture and Forestry; Malaysia: Division of Epidemiology & Veterinary Science, Ministry of Agriculture; Myanmar: Livestock Breeding and Veterinary Department, Ministry of Livestock-Fisheries; Vietnam: Department of Animal Health, Ministry of Agriculture and Rural Development
	Cooperating organizations in Japan: Ministry of Agriculture, Forestry and Fisheries; National Institute of Animal Health; etc.
	Other associated cooperation from JICA: - Project of Strengthening of National Institute of Veterinary Research in Vietnam - Technical Cooperation Project for the Forest Management and Community

1-1 Background and outline of the Project

In recent years, the political and economic situation in Thailand and its neighbors has stabilized and improved to the point that distribution of agricultural and other products is flourishing across national borders. In particular, cross-border movement of livestock between Thailand and its neighbors is increasing, and as a result conditions surrounding animal health are deteriorating in border countries given the lack of sufficient organizational and technical frameworks for dealing with animal diseases. This situation is having a negative impact on livestock productivity as well as trade in livestock and livestock products. Because outbreaks of animal diseases cause significant losses for livestock industry, the establishment of a regional strategy to improve animal health and prevent diseases has become an urgent task.

Given this situation, in 1998 the Thai government submitted a request to the Japanese government for regional technical cooperation to be called the "Project for Animal Disease Control in Thailand and Neighboring Countries." In response to this request, the JICA conducted a study carried out over five occasions and held discussions with Thailand and other planned participants in the project (Cambodia, Laos, Myanmar, Vietnam, and Malaysia) that led to the formulation of a framework for activities. As a result, cooperation was commenced in the form of a five-year project on December 25, 2001, with the goal of improving technologies for controlling animal diseases in the relevant region.

1-2 Description of cooperation

(1) Overall Goal

The improvement of animal health is promoted in Thailand and neighboring countries.

(2) Project Purpose

The technology of animal disease control is improved in Thailand and neighboring countries.

(3) Outputs of the project

- 1) Strengthening of the 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.

(4) Inputs (at time of evaluation)

Japanese side

Dispatch of long-term experts:	Total of 6 experts
Dispatch of short-term experts:	Total of 19 experts
Provision of machinery and equipment:	45,001,867 baht (approximately 123.3 million yen)
Assumption of local costs:	33,585,108 baht (approximately 93 million yen)
Training of C/Ps:	In Japan: total of 17 C/Ps (27 man-months)

Thai side

Allocation of C/Ps:	Total of 27 C/Ps (at time of evaluation)
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Provision of land and facilities

Implementation of training:	40 courses, total of 88 participants (98.17 man-months; Cambodia: 16 participants; Laos: 15; Malaysia: 14; Myanmar: 23; Vietnam: 17; Thailand: 3)
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Financial support for support staff

Provision of Project office

Malaysian side

Provision of land and facilities

Implementation of training:	5 courses in Malaysia, total of 16 participants (4.24 man-months; Cambodia: 2 participants; Laos: 2; Malaysia: 3; Myanmar: 4; Vietnam: 3; Thailand: 2)
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Thai and Malaysian experts (dispatched to neighboring countries):

Total of 55 experts (April 2002 to March 2006)

Neighboring countries (Cambodia, Laos, Myanmar, Vietnam)
 Provision of land and facilities
 Assignment of National Coordinators (NC) and allocation of C/Ps

2. Outline of the Evaluation Team

Members	Field of responsibility	Name	Official position
	Team leader:	Hideki Tomobe	Head, Group I, Rural Development Department, JICA
	Asst. team leader, control of animal diseases:	Yusuke Tada	Senior Advisor, Institute for International Cooperation, JICA
	Animal health:	Shoko Suzuki	Section chief; Poultry Disease Section; National Veterinary Assay Laboratory; Ministry of Agriculture, Forestry and Fisheries
	Animal quarantine:	Kazuhiro Suzuki	Principal Officer; Animal Quarantine Service Kansai AP Branch; Ministry of Agriculture, Forestry and Fisheries
	Planning management:	Shinjiro Amameishi	Staff member, Paddy Field-Based Farming Area Team II, Group I, Rural Development Department, JICA
	Evaluation analysis:	Akira Matsumoto	President, A&M Consultant Inc.
*It should be noted that the Thai side also assigned evaluation team members to conduct the evaluation jointly with the abovementioned personnel.			
Evaluation period	June 21 to July 8, 2006 (evaluation analysis member dispatched from June 4)	Evaluation type: Final evaluation	

3. Outline of Evaluation Results

3-1 Confirmation of achievements

(1) Project Purpose

Indicator 1: A common system on animal health information shared among the member countries of the Project

Meetings of National Coordinators were held regularly, and mutual collaboration was strengthened through discussions of activity progress and plans for future activities.

Moreover, information-sharing in the animal health field was promoted through dispatch of Japanese, Thai, and Malaysian experts and implementation of training on diagnostic methods, vaccine production/quality management technologies, and animal quarantine.

Indicator 2: Numbers of internationally recognized methods that are commonly introduced among the member countries of the Project

1) Overall

A wide variety of training was conducted through Project activities in the areas of diagnosis, vaccine production/quality control, and animal quarantine. In addition, 25 Japanese experts, 51 Thai experts, and four Malaysian experts were dispatched to member countries to improve technical capacities in these fields. As a result, necessary knowledge and techniques were transferred satisfactorily.

2) Diagnosis

Many laboratory staff members in each country obtained knowledge and techniques pertaining to diagnosis of the five major animal diseases (Food-and-Mouth Disease, Hog Cholera, Hemorrhagic Septicemia, Newcastle Disease, Avian Influenza) as well as other major diseases. Said knowledge and techniques were sufficiently shared with other staff members.

3) Vaccine production

Production of HS oil adjuvant vaccine in Laos, FMD oil adjuvant vaccine for pigs and brucellosis vaccine and diagnostic reagent in Myanmar, and CSF cell-culture vaccine in Thailand became possible through the activities of the Project. Techniques for quality control in production processes and laboratory and field evaluation of these vaccines were introduced. Moreover, mutual understanding and information-sharing on the production capacities, production technologies, and quality of veterinary biologics produced in individual countries has been promoted through the technical exchange activities of the Project.

4) Animal quarantine

Two seminars on animal quarantine and management of animal movement were organized by JICA, OIE, and FAO. As a result, official routes for animal movements were defined in each country.

It should be noted that tackling animal quarantine and management of animal

movement through a single project is not easy. Thus, further efforts to apply the diagnostic techniques for trans-boundary animal diseases that were established through the Project to livestock quarantine will be necessary in the future.

(2) Overall Goal

The team could not evaluate achievement of the Overall Goal (i.e., “the improvement of animal health is promoted in Thailand and neighboring countries”) at this stage because of difficulties collecting quantitative data and identifying animal-disease control methods.

However, considerable human resources were trained in each member country as a result of transfer of animal-disease diagnostic techniques and technologies for vaccine production and quality management that was conducted through the Project. This will serve as a foundation for “promoting improvement animal health in Thailand and neighboring countries.” Furthermore, the Project is doing more than contributing to government policy regarding animal disease control; it is also having a major impact in terms of socio-economic aspects. In addition, the Project is serving to promote human and organizational capacity development in concerned organizations of the member countries.

Accordingly, the Project is thought to be contributing to achievement of the Overall Goal.

3-2 Outline of evaluation results

(1) Relevance

a. Consistency with the development policies of partner countries

Agriculture and livestock remain key industries in the nations of the region, and particularly the CLMV countries. All of these nations list livestock promotion as a priority policy in their national development plans, and all are implementing animal health measures. From these standpoints, the Project can be said to have extremely high consistency with member countries’ policies.

b. Consistency of Project’s goals and cooperation content with the target region and its social needs

Although each country must tackle animal diseases individually and take steps to protect its national borders, no single country can solve the problem of animal diseases

on its own due to the difficulty of controlling animal movement. Therefore, it is essential that all concerned countries pull their efforts together, as is being demonstrated in this Project, to tackle the issue in a concerted manner. At the same time, the most appropriate way for controlling and eradicating diseases that affect an entire region is to effectively combine and utilize the limited resources of each country. Accordingly, the objective of this Project—i.e., to establish Thailand as a base country and Malaysia as a cooperating country for improvement of basic animal health conditions in four other neighboring countries—remains sufficiently matched with regional and social needs on the Indochinese Peninsula, and therefore the Project's relevance is maintained.

c. Consistency with the needs of the target group

The problem of major animal diseases is shared throughout the region, and therefore the Project has high relevance in that it targets Cambodia, Laos, Myanmar, and Vietnam (the “CLMV countries”). Moreover, given that the main target group of the Project is staff members of research institutes that provide animal health services, that the needs of these staff members for basic diagnostic technologies and knowledge pertaining to disease control are extremely high, that the Project also provides and presents knowledge of diseases and necessary information to livestock farmers, it is clear that the Project is also matched to the needs of end beneficiaries. Meanwhile, almost all trainees are core researchers/technicians, and all go back to their workplaces after returning to their home countries to continue activities in the fields in which they were trained. It should be further noted that, while conditions vary depending on the country, there were many women included among the trainees, and therefore the Project successfully maintained gender balance.

d. Consistency with Japan's support and aid policy, and comparative superiority of Japanese technology and know-how

The Project is consistent with Japanese policy, which seeks to reinforce interregional cooperation in order to control animal diseases. Japan has been implementing technical cooperation in the animal health field in both Thailand and Malaysia for many years, and it has made maximum use of the human resources and facilities that have been fostered through this experience to improve animal health conditions in neighboring countries. Furthermore, both Thailand and Malaysia have shown strong interest in improving animal health in the CLMV countries, and both are playing increasingly important roles as “donor” countries. On the other hand, the CLMV

countries look to acquire many useable technologies from Thailand and Malaysia. For these reasons, the Project is highly appreciated among the member countries. Moreover, the team observed that the Project, which targets six countries in the region, is appropriate in terms of strategy for and direction toward interregional cooperation, and that it is a fitting response from the standpoints of necessity and harmonization.

(2) Effectiveness

a. Prospects for achieving the Project Purpose

Most of the Project's activities and inputs have been implemented as scheduled. Positive developments are apparent in strengthening of activities and cooperation through various meetings, workshops, and training: in deepening mutual understanding of the animal-disease control situation in each country; and in improving disease diagnostic techniques as well as vaccine production and quality control technologies. Thus, the Project is expected to achieve the Project Purpose for the most part. However, there are still areas in which the level of achievement is insufficient due to delays in budget application and arrival of equipment, delays in in-country activities (sampling analysis, etc.), and insufficient implementation on animal quarantine activities.

b. Cause and effect (Did the Project Outputs make a sufficient contribution toward achievement of the Project Purpose?)

The results obtained from dispatch of experts in accordance with the Project plan, and particularly to neighboring countries, produced significant outputs in each country. Dispatches of not only Japanese experts but also Thai and Malaysian experts to the target countries contributed considerably to reinforcement of the regional cooperation system and human resources (Output 1). And these experts' activities within each country continue to produce results in the forms of improved knowledge and techniques and return of results to society. Moreover, all trainees are acquiring and practically applying appropriate disease surveillance techniques (Output 2) and vaccine production and quality control techniques (Output 3) with guidance and advice from the experts. As for improvement of animal quarantine techniques (Output 4), activities in this field will need to be further reinforced going forward.

c. Changes and effects of the important assumptions

Although immediate activities to address an outbreak of Avian Influenza were conducted in addition to those for the target diseases, there was no other impact caused

by major changes in the important assumptions. The member countries, and in particular those bureaus responsible for animal health, were hard-pressed to respond to the outbreak, and therefore there was a time when they could not sufficiently participate in Project activities. Thus, the outbreak of Avian Influenza turned out to be a major burden for all concerned. On the other hand, concerns that the disease may infect human beings resulted in an active response from the national governments as well as donors and the allocation of budgetary funding for disease surveys and other activities. This resulted in an improved relationship of trust between veterinarians and livestock farmers and helped promote information accumulation and interregional network.

(3) Efficiency)

① Efficiency of the inputs (quality, quantity, and timing)

In general, the Project activities—including laboratory training in Thailand, Malaysia, and Japan; dispatch of experts to neighboring countries; holding of regional meetings; diffusion of information through publication of newsletters; and conduct of in-country activities—were implemented efficiently and according to project planning.

a. Japanese experts

The period during which a long-term expert was absent and a delay in the decision to extend dispatch affected Project activities. Looking at short-term experts, with the exception of insufficient work to standardized antigens for Hog Cholera due to a delay of dispatch, short-term experts were largely dispatched efficiently and according to plan. Moreover, the fact that flexible responses were taken as warranted, as was evidenced by the immediate dispatch of specialists during the Avian Influenza outbreak, can be evaluated highly. And the dispatch of both long-term and short-term technical experts to the neighboring countries (occasionally together with Thai experts) produced effective and efficient outputs.

b. Dispatch of Thai and Malaysian experts

In the latter stage of the Project, many Thai and Malaysian experts were dispatched to neighboring countries to transfer diagnostic techniques and provide guidance for the purpose of regional training follow-up. The neighboring countries highly evaluated this approach as effective. This approach is also recognized as being more efficient in terms of cost when compared to dispatch of Japanese experts.

c. Deployment of Thai C/Ps

Thai C/Ps were deployed according to plan, without any significant changes being made.

d. Training (in Japan, Thailand, and Malaysia)

Implementing training in Thailand and Malaysia was very efficient in terms of the economic and technical aspects. Nearly all of the trainees said that the training subjects, curriculum, period, technical level, teaching and technical ability of instructors, and hospitality of training implementation agencies were appropriate. Moreover, holding training in these countries is recognized as being efficient in terms of cost compared to training held in Japan. However, the process for selecting trainees was insufficient, a point that was also made during the mid-term evaluation.

e. Provision of equipment

Although most of the equipment was appropriate in terms of quantity and quality and was effectively utilized, there were some items that had little connection with training and in-country activities, as they were provided based on requests from individual countries and did not receive detailed assessment. There were also items whose arrival was delayed due to procurement issues. On the other hand, a local consultant was dispatched to each country to maintain and repair equipment; this approach was extremely effective and highly praised by all countries.

f. Assumption of costs

Throughout the Project Period, the Thai side assumed a portion of training expenses. This made it possible to implement training at a low expense; thus it can be deemed highly efficient. It should be noted that utilization of local cost for the project and provision of consumables and antigens, which were supplied independently by the Thai training implementation agency, were effectively used in each country through the trainees. Moreover, purchase of consumables procured in Thailand was also efficient.

g. Deployment of NCs

NCs were deployed to each country, where they took on coordinating duties particularly in the latter half of the Project. However, the roles and functions of the NCs varied from country to country, and therefore it cannot be said with 100% certainty that they functioned sufficiently to coordinate monitoring of in-country activities and Project operation.

h. Other inputs

Each member country is providing land and facilities for Project activities. However, the neighboring countries have limited activity budgets, and therefore there were some cases in which training outputs could not be fully utilized or continued.

② Efficiency of activities and outputs (degree of input use)

All inputs are being appropriately utilized in Project activities. However, some input effects and ultimate activity outputs cannot be ascertained because final reports that are results of in-country activity implementation and former trainee's report after it returns home doesn't exist.

③ Project management

In the latter stage of the Project, Project operation in such areas of trainee acceptance, holding of seminars, and dispatch of experts have been chiefly conducted by Thai C/Ps and NCs, and this can be praised in that, as a result, participation and contributions by each country are increasing. However, the team observed that there are some weaknesses in the linkage between training and other Project activities, particularly in-country training. Moreover, the team discovered that involvement by training implementation agencies and monitoring functions were insufficient.

④ Linkage with other projects and agencies

Regarding Avian Influenza, as donor-led support becomes concentrated in each country, the Project has proved efficient in providing bottom-up support to central researchers and technicians of core laboratories by promoting the implementation of such aid. Meanwhile, amid a tendency for aid and cooperation to be skewed toward Avian Influenza, the Project's activities have been implemented in a balanced manner that involves handling of many major diseases, and for this it has received high appreciation from member country.

(4) Impact

a. Prospects for achieving the Overall Goal

Prospects for achieving the Overall Goal of the Project ("improvement of animal health is promoted in Thailand and neighboring countries") cannot be evaluated at the present time due to difficulties in collection of quantitative data and determination of animal-disease control methods. However, the following various impacts are being manifested through development of human resources and reinforcement of national

laboratories:

b. Direct/indirect impact

Human resources in animal disease control are being developed in each country, and progress is being made toward establishing a regional network and personnel exchanges between the central and local levels.

c. Policy and institutional impact

Although measuring impact in terms of policy and institution is not easy, results of the regional cooperation are gradually steadily advanced. Examples include the establishment of regulations in Cambodia; further promotion of policies pertaining to animal health by personnel directly concerned with animal-health policymaking (Director-General of a Bureau, Chief of an Institute, Director of a department, etc.), particularly with regard to Avian Influenza, in each country; and growing understanding of the necessity for cooperation in dealing with common agenda in the region.

d. Technical impact

It was confirmed through this evaluation that implementation of technical training and dispatch of experts to neighboring countries improved the technical level of individual researchers and technicians that received technical transfer as well as veterinarians and technicians that received training during the in-country activities. However, in many cases the Project's impact in the neighboring countries stops at the individual level, and clear impact that extends to the national and regional levels has not been ascertained with certainty. Specific examples of technical impact include the following:

- Activation of laboratories in each country through the Project has resulted in stronger functions in these laboratories, as is evidenced by their gathering of diagnostic samples and the gradual establishment of diagnostic techniques. In addition, in the case of Vietnam, cooperation effects are being manifested in ways that include direct instruction to regional research facilities, students, and rural veterinarians by the former trainees through the implementation of in-country training.
- In Myanmar, a new section for producing Brucellosis vaccine was established within a laboratory using technologies learned in training, and this section has begun manufacturing vaccines. The former trainee who took the lead in promoting the vaccine's manufacture received an award from the government in recognition for her

significant achievement in the country's development.

- And in Cambodia, the preparation of more reliable data has become possible through sample collection and accumulation.

e. Cultural and social impact

The implementation of training and dispatch of Thai and Malaysian experts to neighboring countries is having a major benefit for not only the trainees but also for the implementing side; namely, the training instructors and experts. The Thai and Malaysian experts accumulated valuable experience by providing appropriate advice that matched the situations and needs in each country using a variety of techniques under limited conditions, and this helped them gain considerable confidence and experience.

f. Unanticipated positive impacts and ripple effects

The Project made it possible to cope with the serious outbreak of Avian Influenza and strengthened linkage among related personnel.

(5) Sustainability

① Systematic, policy, and institutional aspects

a. Institutional sustainability in each member country

The team has determined that, depending on the policies and laboratory funding of the countries involved, overall institutional sustainability may face a difficult situation. In the case of Thailand and Malaysia, both countries have policies to develop their livestock sectors as semi-advanced countries, and therefore future sustainability can be expected. However, for the CLMV countries, although improvements are being made in terms of animal-health policy, insufficient human resources, facilities, and funding mean that future sustainability remains uncertain.

b. Sustainability of Thai and Malaysian training implementation agencies

As a result of long-term cooperation provided by Japan, the two training implementation agencies of Thailand—i.e., the National Institute of Animal Health (NIAH) and Bureau of Veterinary Biologics (BVB)—already possess the facilities and equipment needed to function as core laboratories and reference laboratories in Asia. Both agencies also have their own budgets and personnel, and therefore no major problems exist with regard to sustainability. The Veterinary Research Institute (VRI) of Malaysia has also secured a certain level of personnel and funding, and therefore no

problems should exist as far as institutional sustainability is concerned.

② Technical sustainability

a. Sustainability of animal disease control activities

Because animal disease control is one of the highest priorities in each country's policy, Project activities are expected to continue into the future. In the latter half of the Project Period, development of human resources and organizations have progressed as a result of efforts to promote in-country activities in response to conditions in each country whenever possible as well as of cooperation in organizational strengthening of laboratories in each country, and particularly development of core human resources and establishment and/or extension of diagnostic techniques. Accordingly, these human resources have the potential to pursue further development following the end of the Project so long as activities focused on them are continued in a steady manner. It should be noted that there are considerable differences in the levels and conditions of organizational and personnel frameworks in the member countries, and that technical capabilities have not penetrated to the organizational level in any of the countries; therefore, autonomy has not yet been achieved.

b. Sustainability of technical guidance to neighboring countries by Thailand and Malaysia

NIAH and BVB of Thailand and VRI of Malaysia continuously accept trainees through not only JICA's third-country training scheme but also joint programs implemented with organizations other than JICA, such as the FAO. Thus, these agencies have considerable experience in training and have established frameworks for administering some areas of training activity. Accordingly, the team finds that their organizational frameworks are complete, and therefore there are almost no concerns with regard to technical aspects. However, they will need to develop young personnel as their staffs age and foster international sensibilities by enhancing English-language ability, etc.

c. Equipment sustainability

For the most part, the equipment provided to Thailand and the neighboring countries is being used and maintained appropriately. In 2005, the dispatch of a local consultant to the neighboring countries to maintain and repair the equipment is thought to have raised the Project's sustainability in terms of maintenance aspects. It is expected that appropriate maintenance and management will be practiced in the member countries in the future.

③ Financial sustainability

Thailand and Malaysia are securing their own funding to a certain degree, and are already implementing technical cooperation with Asian countries on their own. Moreover, because the training implementation agencies of both countries are established as foundations for national research institutes or vaccine production centers, it is expected that steady sustainability at the institutional level is possible. However, looking at sustainability as it pertains to the continuation of activities in each country, Thailand and Malaysia will find it difficult to support the CLMV countries on their own (even if Thailand and Malaysia are securing a certain degree of funding on their own, it is not enough to continue full-scale activities in their present form); coordination among countries and other issues will add to the difficulty. Furthermore, the neighboring countries of Cambodia and Laos cannot sufficiently cover daily operating expenses on their own, and it will be difficult to ask these countries to attain financial autonomy for at least the next several years. And although Myanmar and Vietnam can obtain some independent funding for daily operations, it is not enough.

3-3 Factors contributing to emergence of effects

The following points can be mentioned as factors that contributed to the manifestation or promotion of Project effects.

(1) Factors pertaining to planning content

Matching of resources and needs among the concerned countries was sufficiently pursued at the Project planning stage. In addition, responses to Avian Influenza and other serious diseases were made as appropriate. In the latter half of the Project, efforts were made to implement in-country activities in neighboring countries and to dispatch Thai and Malaysian experts, and these steps responded to needs in each country and provided follow-up to trainees. They also led to increased capacity among staff members and contributed significantly to improved animal disease control techniques. Furthermore, technical training was implemented using manuals and textbooks prepared through past JICA cooperation or revised manuals/textbooks. These training materials were shared not only by trainees but also their colleagues after the end of training, and were used effectively as work resources when conducting diagnoses.

(2) Factors pertaining to the implementation process

Project activities in each country were implemented in collaboration with other forms of

cooperation or support. Examples include cooperation and collaboration with JICA technical cooperation projects in Laos and Vietnam and with JOCVs dispatched to Cambodia. As for cooperative relationships with other donors, continuing activities in coordination with the Office International des Epizooties (OIE) and FAO deserve particular mention, while at the same time the Project is serving roles for or collaborating with such important donors as the EU, World Bank, and FAO/IFAD. These efforts are evaluated as being both efficient and effective.

3-4 Problem areas and factors leading to problems

The following points can be mentioned as factors that hindered the manifestation or promotion of Project effects.

(1) Factors pertaining to plan content

The fact that progress in some activities was delayed can be attributed to the formulation of an overly large work plan that exceeded the Project's implementation capacity. Accordingly, it will be important to formulate an appropriate work plan that fully considers the scope of the Project's implementation capacity based on sufficient discussions with concerned interests. Furthermore, while much of the equipment was suitable in terms of quantity and quality and was used appropriately, there were some items that were provided based on requests from individual countries and thus did not receive detailed assessment, items that had little relevance to training and in-country activities, and items whose arrival was delayed due to procurement issues. Also, because the Project involved a variety of inputs and its activities covered a broad range, there were cases in which monitoring and evaluation as well as ascertainment of outputs for individual activities could not be conducted easily. It is a fact that the outputs of some training are not being sufficiently applied, and that the existence of mismatches between trainee selection and training needs is partially accountable for this. As for animal quarantine, the impact of factors that include insufficient inputs as well as difficulty by the Project in responding to each country's policies and its opinions regarding establishment of an effective animal control system resulted in a situation in which clear outputs have yet to be manifested. And, as for gathering of data on animal diseases and animal health from each country, progress in line with the original plan has not been witnessed due to, among other factors, delayed introduction of information systems for animal health that are being promoted by international organizations.

(2) Factors pertaining to the implementation process

It was recognized that establishment of the functions and roles of the Project office and NCs was insufficient, and that there were inadequacies in Project management in the areas of work plan formulation, activity monitoring, etc.

3-5 Conclusion

The team has reached the following conclusions based on field observations and discussions with Project personnel and others involved with the Project:

- (1) Despite delays in some activities, Project activities as a whole were conducted according schedule, successfully, and smoothly.
- (2) It is anticipated that the Project Purpose as defined in the PDM will be achieved by the end of the Project Period.
- (3) Although conditions vary from country to country, technical and sustainable development of animal disease control in Thailand and neighboring countries is expected.
- (4) Based on the above, the Project will end according to schedule in December 2006.

3-6 Recommendations

(1) Strengthening Project management during the remaining Project Period

The results of the evaluation indicate that there are cases in which the work plan and actual activities are not in conformity, and cases in which linkage between provided equipment and Project activities are insufficient. Thus, the team recognized that it will be necessary to further reinforce the functions and roles of the Project office and NCs.

Accordingly, in order to implement future Project activities smoothly and effectively and, by extension, to conclude the Project successfully and achieve the Overall Goal, it will be necessary to define the functions and roles of the Project office and NCs in accordance with the items below and to ensure that the Project office and NCs both precisely execute their required functions and roles during the remaining Project period.

1) Project office

- The Project office should play the central role in Project management. In doing so, it should seek sufficient collaboration with the NCs.
- The Project office should closely examine and finalize work plans that are compiled by the NCs. It should also formulate an overall work plan that covers the six member countries.
- The Project office should examine and finalize input plans prepared by the NCs.

- The Project office should management overall Project progress.

2) NCs

- The NCs should play the leading role in Project management in their relevant countries. In doing so, they should seek sufficient collaboration with the Project office and other concerned organizations in the relevant countries.
- The NCs should prepare work plans in accordance with the PO.
- The NCs should arrange inputs plan that will be necessary for Project activities in their relevant countries.
- The NCs should manage the progress of Project activities in their relevant countries.

(2) Activities to be completed during the remaining Project period

In general, the Project is successfully accomplishing its activities and many beneficial outputs have already been manifested. However, the team found that there are some areas that are behind schedule, and that further efforts will be necessary in this area.

Accordingly, particular attention must be paid to activities in the following areas for the successful conclusion of the Project and later achievement of the Overall Goal:

- 1) Implementation of in-country activities in the CLMV countries
- 2) Implementation of activities pertaining to “Output 4: animal quarantine techniques are improved.”
 - Holding of workshops on “animal movement management” for the purpose of promoting legal import/export of animals and animals products between member countries
 - Application of animal disease-control techniques that were introduced through Project activities to important quarantine points along national borders

(3) Strengthening networks at the institutional level

As a result of various forms of technical training and seminars held by Thailand and Malaysia as well as dispatches of Malaysian personnel as experts, personal networks are being formed to a substantial degree among the member countries. However, although there has been steady network building among domestic organizations and organizations in the member countries, the building of institutional networks has not reached a sufficient level. It is hoped that there were be increased strengthening of

institutional networks so as to facilitate further sharing of animal-health information both domestically and with member countries.

In addition, several international organizations, including the OIE, FAO, WB, and ADB, are implementing a broad range of support in the animal health field, with emphasis on Avian Influenza. Accordingly, it is hoped that information sharing will be strengthened with these international organizations.

(4) Fostering Thai and Malaysian human resources to be dispatched as experts

A total of 55 Thai and Malaysian experts were dispatched to the CLMV countries. Not only did these experts contribute significantly to Project activities, but their fine work received high praise in the CLMV countries. However, in both countries, the people qualified for dispatch as experts are limited to senior personnel.

Consequently, the team hopes that both countries (and particularly NIAH in Thailand and VRI in Malaysia) will make further efforts to foster human resources (and particularly young staff members) that can be dispatched as experts to the CLMV countries with assistance from Japan.

(5) Future activities

The team feels that, if Project activities continue to be implemented as planned, the Project will reach a successful conclusion. The team has confirmed that the member countries intend to reinforce their animal disease surveillance capacities based on the Project's outputs as a next step.

Therefore, it is expected that each member country will make continuous efforts after the completion of the Project to not only maintain and develop current activities using the technologies it acquired through the Project and its own human and budgetary resources, but also to work toward reinforcement of its own surveillance capacity.

3-7 Lessons learned

(1) Importance and effectiveness of flexible responses

Since the outbreak of Avian Influenza in member countries of the Project at the end of 2003, the Project has added Avian Influenza as one of the major diseases, dispatched Japanese and Thai experts to each member country, held training and seminars in Japan and Malaysia, made swift and flexible responses (provision of necessary

equipment, etc.) and conducted necessary technical transfer, all based on recognition that response to Avian Influenza is an urgent issue. These actions were in line with the need for cooperation and assistance to combat Avian Influenza of each country and thus they were highly appreciated by the member countries.

From this, it is important to take appropriate actions in response to emergency cooperation/assistance needs and changing situations when implementing project activities.

(2) Importance of combination and harmonization of activities

Because training is an effective tool for developing the capacities of individuals, the Project implemented a large number of training sessions; such training included not only training in Japan but also onsite training in Thailand and Malaysia. Furthermore, the effectiveness of training results are enhanced through later follow-up, such as dispatch of experts following training and provision of necessary equipment. The Project implemented in-country activities in the CLMV countries for the latter half of the Project Period so as to apply the knowledge and techniques that were acquired through the Project. And the implementation of “onsite training,” which took the form of a “package” that combined dispatch of Thai experts and supply of necessary reagents, in combination with in-country activities proved to be a very successful approach. Thus, activities such as this, in which multiple inputs are combined into a package form, are very effective.

(3) Effectiveness of regional approaches and use of regional resources

Regional cooperation is an extremely effective approach when tackling region-wide issues, such as trans-boundary animal diseases. When tackling such issues, it is both effective and efficient to promote sharing of knowledge and techniques among the region’s countries while also maximizing use of the local resources of each country.

3-8 Follow-up situation

It is expected that each member country will work to maintain and develop current activities using the technologies it acquired through the Project and its own human and budgetary resources. It should be mentioned that each member country has expressed a desire for implementation of a “phase 2” of the Project that will focus on strengthening of animal disease surveillance capacities following the end of the Project.