# Cambodia

| No. | Activity Plan | Responsible by | JFY | | | | | Activities | | Target (Future Plan) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2002 | 2003 | 2004 | 2005 | 2006 | Input | Output | |
| **Output 1** | **Strengthening of capacity for regional cooperation system and human as well as other resources for effective animal disease control** | | | | | | | | | |
| **1.1** | **Development of available manpower and institutional resources for regional cooperation** | NAHPIC (Cambodia) | | | | | | | 1. Personnel network for cooperation in the region was well established through the training courses, seminars and dispatch of experts.<br>2. Mutual understanding on personnel, technology and organization was deepened through activities, which resulted in close relationship among organizations or staff.<br>3. The system for cooperation was established through NC who could readily manage the domestic issues and arrangement.<br>4. The database for the personnel and organizations was not established though the lists were available. | 1. The 10th NC and 6th JCC meetings<br>2. Dispatch of Thai and Malaysian experts<br>3.Training courses in Thailand and Malaysia<br>4. The closing seminar of the Project. |
| 1.1.1 | Studying on important and practical topic and subjects | NAHPIC (Cambodia) | ■ | ■ | ■ | ■ | | Participation in NC Meetings<br>Discussion with experts | | |
| 1.1.2 | Development of the database of training institutions in the region | NAHPIC (Cambodia) | ■ | ■ | ■ | ■ | | Project home page developed (the lists of personnel and organizations uploaded) | | |
| 1.1.3 | Development of the database of available human resources in the region | NAHPIC (Cambodia) | ■ | ■ | ■ | ■ | | | | |
| **1.2** | **Plan and implement country plans under the Project including staff training and equipment** | NAHPIC (Cambodia) | | | | | | | | |
| 1.2.1 | Making PO and APO | Project office DLD (Thailand) | ■ | ■ | ■ | ■ | ■ | **2002**: 2 Thai experts, Participation in NC & JCC Meetings | | |
| **Output 2** | **Improvement of disease surveillance** | | | | | | | | | |
| **2.1** | **Improvement of diagnostic techniques** | | | | | | | | 1. Training courses were arranged for the diseases in the list and followed up by dispatch of experts.<br>2. The standardized diagnostic techniques were established at NAHPIC for FMD, CSF and AI.<br>3. For the other disease such as TB, erysipelas and parasitic diseases the diagnostic techniques were improved through the training courses in Thailand, dispatch of Thai , Malaysian and Japanese experts, and JOCV staff.<br>4. The activities were carried out in all the sections at NAHPIC. | 1. Dispatch of Thai and Malaysian experts<br>2. Continuation of serosurveys on FMD and CSF as In-Country Activities for JFY2006<br>3. Individual training in Thailand and Malaysia |
| **Training of Cambodian staff by Japan and Thai expert in Cambodia** | | | | | | | | | | |
| 2.1.1 | Training of laboratory diagnosis | | | | ■ | ■ | | 2 Malaysian experts (pathology, 1 wk)<br>2 Thai experts (AI-1 wk, pathology-1 wk) | | |
| 2.1.2 | Training of field investigation | | | | | ■ | | Thai expert (survey on schistosomiasis, 1 wk) | | |
| 2.1.3 | Active surveillance of FMD, CSF, HS, Br, ND etc | NAHPIC (Cambodia) | | | | ■ | ■ | Implementation of In-Country Activity (FMD & CSF) | | |

| No. | Activity Plan | Responsible by | JFY | | | | | Activities | | Target (Future Plan) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2002 | 2003 | 2004 | 2005 | 2006 | Input | Output | |
| **Foot and mouth disease** | | | | | | | | | **5.** As a result, the number of diseases which can be diagnosed at NAHPIC increased and diagnostic techniques were also greatly improved.<br>**6.** Utilizing those skills the surveillances have been operated under the support by JICA, FAO and other donors. The ADC Project initiated In-Country Activities in which serosurveys on FMD and CSF were implemented by the staff of NAHPIC.<br>**7.** The number of samples brought into NAHPIC is still few (except avian samples), therefore, the opportunities for the staff to utilize their learned techniques are still limited. | |
| 2.1.4 | Training of Cambodian counterpart in Thailand | FMD center (Pakchong) | | | | | | Training in Thailand (2 staff, 2 m each) | | |
| 2.1.5 | Dispatch of expert | Project office<br>FMD center (Pakchong) | | | | | | Thai expert (2 times, 1 wk + 2 wks) | | |
| 2.1.6 | Participating for the seminar | NAHPIC (Cambodia) | | | | | | Seminar/meeting organized by OIE/SEAFMD | | |
| 2.1.7 | Training of Cambodian staff by C/P | NAHPIC (Cambodia) | | | | | | Sharing between the section staff | | |
| **Classical swine fever** | | | | | | | | | | |
| 2.1.8 | Training of Cambodian counterparts | Project office<br>NIAH (DLD) | | | | | | 2002: Japan (1 m)<br>2003, 05: Thailand (2 staff, 1 m each) | | |
| 2.1.9 | Dispatch of expert | Project office<br>NIAH(DLD) | | | | | | 2 Japanese experts (1 m, 1.5 m) | | |
| 2.1.10 | Participating for the seminar | Project office | | | | | | Workshop in Vietnam & Philippines | | |
| 2.1.11 | Training of Cambodian staff by C/P | NAHPIC (Cambodia) | | | | | | Sharing between the section staff | | |
| **Hemorrhagic septicemia(HS)** | | | | | | | | | | |
| 2.1.12 | Training of Cambodian counterpart in Thailand | NIAH (DLD) | | | | | | Training in Thailand (1 m) | | |
| 2.1.13 | Training of Cambodian staff by C/P | NAHPIC (Cambodia) | | | | | | Sharing between the section staff | | |
| **Brucellosis** | | | | | | | | | | |
| 2.1.14 | Training of Cambodian counterpart in Thailand | NIAH (DLD) | | | | | | Training in Thailand (1.5 m) | | |
| 2.1.15 | Training of Cambodian staff by C/P | NAHPIC (Cambodia) | | | | | | Japanese & Thai experts (1.5 + 1 wks) | | |
| **Newcastle disease** | | | | | | | | | | |
| 2.1.16 | Training of Cambodian counterpart in Thailand | Project office<br>NIAH (DLD) | | | | | | Training in Thailand (1 m) | | |
| 2.1.17 | Training of Cambodian staff by C/P | NAHPIC (Cambodia) | | | | | | Sharing between the section staff | | |

| No. | Activity Plan | Responsible by | JFY | | | | | Activities | | Target (Future Plan) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2002 | 2003 | 2004 | 2005 | 2006 | Input | Output | |
| **2.2** | **Improvement of data collection, analysis and distribution of epidemiological information** | | | | | | | | 1. The staff became very well informed of epidemiology of the diseases in the country.<br>2. Data collection and analysis have been carried out through surveillances on FMD, CSF, AI and HS, and haematological examination, which is expected to establish a solid system to process epidemiological information at NAHPIC. | 1. Continuation of serosurveys on FMD and CSF as In Country Activities for JFY2006<br>2. Dispatch of Thai and Malaysian experts |
| 2.2.1 | Training of Cambodian counterpart in Thailand | Division of Epidemiology (DLD) | | | | | | Veterinary Epidemiology Workshop (1 wk) | | |
| 2.2.2 | Training of Cambodian staff by C/P | NAHPIC (Cambodia) | | | | | | Sharing between the section staff | | |
| 2.2.3 | Planning of the active surveillance | NAHPIC (Cambodia) | | | | | | *Planning of In-Country Activity<br>*Sampling for haematological study (organized by JOCV) | | |
| 2.2.4 | Utilizing for the active surveillance | NAHPIC (Cambodia) | | | | | | Utilizing for In-Country Activity (2003: HS vaccine, 2005: FMD & CSF)<br>Haematological study | | |
| 2.2.5 | Publishing of animal disease statistic | NAHPIC (Cambodia) | | | | | | | | |
| **2.3** | **Development of basic disease information system** | | | | | | | | **(Remarks)**<br>1. AHPISA cannot be relied on since it's not functioning properly.<br>2. OIE introduced a new system called 'ARAHIS' and the Project is going to support it.<br>3. Staff participated in the meeting of ARAHIS in Singapore, however, no progress has been made since then.<br>4. TADinfo (Transboundary Animal Disease Information System) was introduced by FAO and currently under preparation. | |
| 2.3.1 | Training of Cambodian counterpart in Thailand | Division of Epidemiology (DLD) | | | | | | | | |
| 2.3.2 | Training of Cambodian staff by C/P | NAHPIC (Cambodia) | | | | | | | | |
| 2.3.3 | Making the data base of animal disease | NAHPIC (Cambodia) | | | | | | | | |
| 2.3.4 | Planning to provide the data for animal disease control | NAHPIC (Cambodia) | | | | | | | | |
| **Output 3** | **Improvement of vaccine production** | | | | | | | | | |
| **3.1** | **Improvement of NS vaccine production** | | | | | | | | 1. The vaccine production and its quality control has long been out of operation in Cambodia, however, the production of HS vaccine was planned to resume in 2006 and vaccine seed provided from Thailand and Laos.<br>2. Field evaluation of HS vaccine efficacy was implemented as ICA for 2003-4.<br>3. Currently, Cambodian Gov't places the higher priority on HS vaccine but still needs a sustainable supply system. | |
| 3.1.1 | Dispatch of expert to examine facilities and feasibility | Project office<br>Division of Veterinary Biologics (DLD) | | | | | | | | |
| **3.2** | **Improvement of HS vaccine production** | | | | | | | | | |
| 3.2.1 | Dispatch of expert to examine facilities and feasibility | Project office<br>Division of Veterinary Biologics (DLD) | | | | | | **2003**: Thai expert (1 wk)<br>**2004**: Thai expert (2 d) | | |

| No. | Activity Plan | Responsible by | JFY | | | | | Activities | | Target (Future Plan) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2002 | 2003 | 2004 | 2005 | 2006 | Input | Output | |
| Output 4: Improvement of Animal quarantine technology | | | | | | | | | | |
| 4.1 | **Promotion of technical concepts and practical procedure of animal Quarantine** | | | | | | | | 1. The official route across the border for animal movement and system were defined through the seminar and workshop jointly organized by JICA, OIE and FAO.<br>2. Quarantine for the exportation of cattle to Malaysia and Vietnam by a private sector became in operation although it was closed afterwards due to FMD outbreak. The diagnostic technologies improved by the Project partially contributed to this new system. | 1. One day seminar on quarantine and animal movement for the officers and animal buyers at the selected border point |
| 4.1.1 | Training of Cambodian counterpart | Project office AQ (Thailand) | | | | | | Training in Thailand (1 wk) | | |
| 4.1.2 | Dispatch of expert | Project office Disease Control Division (DLD) | | | | | | | | |
| 4.1.3 | Training of Cambodian staff by C/P | | | | | | | Sharing between the Section staff | | |
| 4.1.4 | Participation of regional seminar and workshop | Disease Control Division and Project office | | | | | | Workshop on animal movement management (2 wks) | | |
| 4.2 | **Strengthening of disease detection system at the selected border points** | | | | | | | | | |
| 4.2.1 | Training of Cambodian counterpart | Project office Disease Control Division (DLD) | | | | | | Training in Thailand (animal quarantine, 1 wk) | | |
| 4.2.2 | Training of Cambodian staff by C/P | Animal Health Office | | | | | | Sharing between the section staff | | |
| 4.2.3 | Making a new manual for animal quarantine | Animal Health Office | | | | | | | | |
| 4.2.4 | Practical use of new disease detection techniques | Animal Health Office | | | | | | | | |

| Out scope of the activities specified in PO | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Diagnosis | Training of Cambodian counterpart in Thailand (parasitic disease diagnosis) | NIAH (DLD) | | | | | | (2 m) | | |
| Diagnosis | Training of Cambodian counterpart in Thailand (bovine tuberculosis diagnosis) | NIAH (DLD) | | | | | | (2 staff, 1 m each) | | |
| Diagnosis | Training of Cambodian counterpart in Thailand (pathological diagnosis) | NIAH (DLD) | | | | | | (1 m) | | |
| Diagnosis | Training of Cambodian counterpart in Thailand (diagnosis on swine erysipelas) | NIAH (DLD) | | | | | | (1 m) | | |
| Diagnosis | Participation of regional seminar on avian influenza in Malaysia | VRI (Ipoh) | | | | | | (2004-1 wk, 2005-2 wks) | | |

## Lao PDR

| No. | Project Activities | Responsible by | JFY | | | | | Activities | | Target (Future Plan) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2002 | 2003 | 2004 | 2005 | 2006 | Input | Output | |
| **Output 1** | **Strengthening of capacity for regional cooperation system and human as well as other resources for effective animal disease control** | | | | | | | | | |
| **1.1** | **Development of available manpower and institutional resources for regional cooperation** | Department of livestock and fisheries (Lao) | | | | | | | **1.** Personnel network for cooperation in the region was well established through the training courses, seminars and dispatch of experts.<br>**2.** Mutual understanding on personnel, technology and organization was deepened through activities, which resulted in close relationship among organizations or staff.<br>**3.** The system for cooperation was established through NC though the Project experienced difficulties in communication as the NC does not belong to the project site in Lao PDR.<br>**4.** The database for the personnel and organizations was not established (only the lists were available). | **1.** The 10th NC and 6th JCC meetings<br>**2.** Dispatch of Thai and Malaysian experts<br>**3.**Training courses in Thailand and Malaysia<br>**4.** The closing seminar of the Project. |
| 1.1.1 | Studying on important and practical topic and subjects | DLF in Lao PDR | | | | | | Participation in NC Meetings, Discussion with experts | | |
| 1.1.2 | Development of the database of training institutions in the region | DLF in Lao PDR | | | | | | Project home page developed (the lists of personnel's and organizations uploaded) | | |
| 1.1.3 | Development of the database of available human resources in the region | DLF in Lao PDR | | | | | | | | |
| **1.2** | **Plan and implement country plans under the Project including staff training and equipment supply** | DLF in Lao PDR | | | | | | | | |
| 1.2.1 | Making of PO and APO | Project office DLD (Thailand) | | | | | | **2002**: 3 Thai experts<br>**2004**: 3 Thai experts, Participation in NC & JCC Meetings | | |
| **Output 2** | **Improvement of disease surveillance** | | | | | | | | | |
| **2.1** | **Improvement of diagnostic techniques** | | | | | | | | **1.** In Lao PDR the diseases with higher priorities in the list were especially focused on for cooperation due to lack of personnel. The standardized diagnostic techniques were established at NAHC for FMD, CSF, HS, ND and AI.<br>**2.** The serological diagnostic techniques for leptospirosis, melioidosis and brucellosis were transferred by a Thai expert and the samples collected through In-Country Activities 2005 examined.<br>**3.** Cell culture was established by a Japanese short-term expert and virus isolation at NAHC became feasible. | **1.** Dispatch of Thai and Malaysian experts<br>**2.** Serosurveys as In-Country Activities for JFY2006<br>**3.** Continuation of collaborative field work with FORCOM Project<br>**4.** Individual training in Thailand and Malaysia |
| **Foot and mouth disease** | | | | | | | | | | |
| 2.1.1 | Training of Lao PDR counterpart in Thailand | FMD Center (Pakchong) | | | | | | Training in Thailand (3 staff, 2 m x 2, 1 m x 1) | | |
| 2.1.2 | Dispatch of expert | Project office/ FMD Center (Pakchong) | | | | | | | | |
| 2.1.3 | Participating for the seminar | DLF in Lao PDR | | | | | | Organized by OIE | | |
| 2.1.4 | Training of Lao PDR staff by C/P | DLF in Lao PDR Project office | | | | | | Sharing between the section staff | | |
| 2.1.5 | Active surveillance of FMD | DLF in Lao PDR | | | | | | | | |

| No. | Project Activities | Responsible by | JFY | | | | | Activities | | Target (Future Plan) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2002 | 2003 | 2004 | 2005 | 2006 | Input | Output | |
| **Classical swine fever** | | | | | | | | | | |
| 2.1.6 | Training of Lao PDR counterpart in Japan | NIAH (Japan and Thailand) | | | | | | **2002**: Japan (1 m)<br>**2003-05**: Thailand<br>(3 staff, 1 m each) | | |
| 2.1.7 | Dispatch of expert | Project office/ NIAH(Thailand) | | | | | | 2 Japanese experts<br>(1 m, 1.5 m) | **4.** The pathology section didn't function at all and histopathological examination was not possible at NAHC. However, autopsy, tissue embedding, sectioning and staining techniques were transferred through frequent visits by a Thai expert and histopathological diagnosis established at the center.<br><br>**5.** Animal health service has been provided to the farmers in the sites of Forest Management and Community Support (FORCOM) Project. This is a collaborative activity with JICA FORCOM Project and a Thai expert is the key person. Through his regular visits and efforts good relationship was established between the farmers and ADC Project as well as the staff of FORCOM and ADC. Further cooperation including training of selected farmers is expected.<br><br>**6.** Through the activities mentioned above the number of samples brought into the center is increasing and the further improvement of diagnostic capability of NAHC is expected. | |
| 2.1.8 | Participating for the seminar | Project office | | | | | | Workshop in Vietnam & Philippines | | |
| 2.1.9 | Training of Lao PDR staff by C/P | DLF in Lao PDR | | | | | | Sharing between the section staff | | |
| 2.1.10 | Practical Diagnosis of classical swine fever | DLF in Lao PDR | | | | | | Japanese long-term expert on NPLA | | |
| **Pasteurellosis (Diagnosis and serotyping)** | | | | | | | | | | |
| 2.1.11 | Training of Lao PDR counterpart in Thailand | Project office/ NIAH (DLD) | | | | | | Training in Thailand<br>(1 m) | | |
| 2.1.12 | Dispatch of expert | Project office/ NIAH (DLD) | | | | | | Japanese long-term expert on ELISA | | |
| 2.1.13 | Training of Lao PDR staff by C/P | DLF in Lao PDR | | | | | | Sharing between the section staff | | |
| 2.1.14 | Active surveillance of Pasteurellosis | DLF in Lao PDR | | | | | | In-Country Activity | | |
| **Newcastle disease** | | | | | | | | | | |
| 2.1.15 | Training of Lao PDR counterpart in Thailand | Project office/ VRI (Ipoh) | | | | | | Training in Malaysia<br>(1 m) | | |
| 2.1.16 | Dispatch of expert | Project office/ NIAH (DLD) | | | | | | Thai expert on AI<br>(1 wk) | | |
| 2.1.17 | Training of Lao PDR staff by C/P | DLF in Lao PDR | | | | | | Sharing between the section staff | | |
| 2.1.18 | Active surveillance of Newcastle disease | DLF in Lao PDR | | | | | | | | |
| **Duck plague** | | | | | | | | | | |
| 2.1.19 | Training of Lao PDR counterpart in Thailand | NIAH (DLD) | | | | | | | | |
| 2.1.20 | Dispatch of expert | Project office/ NIAH (DLD) | | | | | | | | |
| 2.1.21 | Training of Lao PDR staff by C/P | DLF in Lao PDR | | | | | | | | |
| 2.1.22 | Active surveillance of Duck plague disease | DLF in Lao PDR | | | | | | | | |

| No. | Project Activities | Responsible by | JFY | | | | | Activities | | Target (Future Plan) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2002 | 2003 | 2004 | 2005 | 2006 | Input | Output | |
| **Infectious bursal disease** | | | | | | | | | | |
| 2.1.23 | Training of Lao PDR counterpart in Thailand | Project office/ VRI | | | | | | | | |
| 2.1.24 | Dispatch of expert | Project office/ NIAH (DLD) | | | | | | | | |
| 2.1.25 | Training of Lao PDR staff by C/P | DLF in Lao PDR | | | | | | | | |
| 2.1.26 | Active surveillance of Infectious bursal | DLF in Lao PDR | | | | | | | | |
| **Paratuberculosis** | | | | | | | | | | |
| 2.1.27 | Training of Lao PDR counterpart in Thailand | NIAH(DLD) | | | | | | | | |
| 2.1.28 | Dispatch of expert | Project office/ NIAH (DLD) | | | | | | | | |
| 2.1.29 | Training of Lao PDR staff by C/P | DLF in Lao PDR | | | | | | | | |
| 2.1.30 | Active surveillance of Paratuberculosis | DLF in Lao PDR | | | | | | | | |
| **Pathological diagnosis** | | | | | | | | | | |
| 2.1.31 | Training of Lao PDR counterpart in Thailand | NIAH (DLD) | | | | | | Training in Thailand (2 m) | | |
| 2.1.32 | Dispatch of expert | Project office/ NIAH (DLD) | | | | | | Thai expert (3 times, 1 wk each) | | |
| 2.1.33 | Training of Lao PDR staff by C/P | DLF in Lao PDR | | | | | | Sharing between the section staff | | |
| 2.1.34 | Pathological diagnosis | DLF in Lao PDR | | | | | | | | |
| **Toxicological diagnosis** | | | | | | | | | | |
| 2.1.35 | Training of Lao PDR counterpart in | NIAH (DLD) | | | | | | | | |
| 2.1.36 | Dispatch of expert | Project office/ NIAH (DLD) | | | | | | | | |
| 2.1.37 | Training of Lao PDR staff by C/P | DLF in Lao PDR | | | | | | | | |
| 2.1.38 | Toxicological diagnosis | DLF in Lao PDR | | | | | | | | |

| No. | Project Activities | Responsible by | JFY | | | | | Activities | | Target (Future Plan) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2002 | 2003 | 2004 | 2005 | 2006 | Input | Output | |
| **2.2** | **Improvement of data collection, analysis and distribution of epidemiological information** | | | | | | | | **1.** The staff became very well informed of epidemiology of the diseases in the country.<br>**2.** Data collection and analysis have been carried out through surveillances on CSF, AI and HS, which is expected to establish a solid system to process epidemiological information at NAHC.<br>**3.** A brochure on major disease prevalences and vaccination rates according to the provinces in the country is available. In addition reports on melioidosis and brucellosis was also produced. | **1.** Dispatch of Thai experts on epidemiology<br>**2.** Serosurveys as In-Country Activities for JFY2006 |
| 2.2.1 | Training of Lao PDR counterpart in Thailand | Division of Veterinary Epidemiology (DLD) | | | | | | Veterinary Epidemiology Workshop (1 wk) | | |
| 2.2.2 | Training of Lao PDR staff by C/P | DLF in Lao PDR | | | | | | Sharing between the section staff | | |
| 2.2.3 | Planning of the active surveillance | DLF in Lao PDR | | | | | | Planning of In-Country Activity | | |
| 2.2.4 | Utilizing for the active surveillance | DLF in Lao PDR | | | | | | Utilizing for In-Country Activity (2005: HS & CSF) Field work with FORCOM | | |
| 2.2.5 | Publishing the statistics of the animal disease | DLF in Lao PDR | | | | | | Technical transfer by Thai expert | | |
| **2.3** | **Development of basic disease information system** | | | | | | | | **(Remarks)**<br>**1.** AHPISA cannot be relied on since it's not functioning properly.<br>**2.** OIE introduced a new system called 'ARAHIS' and the Project is going to support it.<br>**3.** The actual application of ARAHIS depends on the forthcoming activities of the Project.<br>**4.** TADinfo was introduced by FAO and currently under preparation. | |
| 2.3.1 | Training of Lao PDR staff by C/P | Division of Veterinary Epidemiology (DLD) | | | | | | | | |
| 2.3.2 | Training of Lao PDR staff by C/P | DLF in Lao PDR | | | | | | | | |
| 2.3.3 | Making the data base of animal disease | DLF in Lao PDR | | | | | | | | |
| 2.3.4 | Planning to provide the data for animal disease control | DLF in Lao PDR | | | | | | | | |

| No. | Project Activities | Responsible by | JFY | | | | | Activities | | Target (Future Plan) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2002 | 2003 | 2004 | 2005 | 2006 | Input | Output | |
| Output 3 | Improvement of vaccine production and quality control | | | | | | | | | |
| **3.1** | **Haemorrhagic septicemia vaccine production (oil adjuvant vaccine) and quality control** | | | | | | | | **1.** The project activity was focused on the production of oil-adjuvant vaccine for HS due to administrative and budgetary limitations in Lao, Thai, and Project sides.<br>**2.** The vaccine was successfully produced through effective input of training in Thailand, dispatch of Thai expert and supply of equipment.<br>**3.** The efficacy of the new vaccine was proved satisfactory by vaccine field test as In-Country Activity of the Project. The new vaccine was effective for over a year while the former aluminum vaccine lost its efficacy in 6 months. | |
| 3.1.1 | Training of Lao PDR counterpart in Thailand | Division of Veterinary Biologics (DLD) | | | | | | Training in Thailand 2 staff (2 wks) | | |
| 3.1.2 | Dispatch of expert | Project office/ Division of Veterinary Biologics (DLD) | | | | | | Thai expert (2 times, 3 d each) | | |
| 3.1.3 | Training of Lao PDR staff by C/P | DLF in Lao PDR | | | | | | Sharing between the section staff | | |
| 3.1.4 | Production of experimental vaccine | DLF in Lao PDR | | | | | | Equipment (homogenizing tank, crossflow filtration system, storage tank | | |
| 3.1.5 | Field test of experimental vaccine | DLF in Lao PDR | | | | | | In-Country Activity for JFY2003-4 | | |
| 3.1.6 | Production of HS vaccine (oil adjuvant) | DLF in Lao PDR | | | | | | Equipment (Mixing tank) | | |
| **3.2** | **Classical swine fever vaccine production and quality control** | | | | | | | | | |
| 3.2.1 | Training of Lao PDR counterpart in Thailand | Division of Veterinary Biologic (DLD) | | | | | | | | |
| 3.2.2 | Dispatch of expert | Division of Veterinary Biologic (DLD) | | | | | | | | |
| 3.2.3 | Training of Lao PDR staff by C/P | DLF in Lao PDR | | | | | | | | |

| No. | Project Activities | Responsible by | JFY | | | | | Activities | | Target (Future Plan) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2002 | 2003 | 2004 | 2005 | 2006 | Input | Output | |
| 3.2.4 | Production of experimental vaccine | DLF in Lao PDR | | | | | | | | |
| 3.2.5 | Field test of experimental vaccine | DLF in Lao PDR | | | | | | | | |
| 3.2.6 | Production of CSF vaccine | DLF in Lao PDR | | | | | | | | |
| 3.3 | **Newcastle disease vaccine (inactivated vaccine) production and quality control** | | | | | | | | | |
| 3.3.1 | Training of Lao PDR counterpart in Thailand | Division of Veterinary Biologic (DLD) | | | | | | Training in Thailand (2 m) | The trainee sent to the Philippines for master's degree (German Scholarship). | |
| 3.3.2 | Dispatch of expert | Division of Veterinary Biologic (DLD) | | | | | | | | |
| 3.3.3 | Training of Lao PDR staff by C/P | DLF in Lao PDR | | | | | | | | |
| 3.3.4 | Production of experimental vaccine | DLF in Lao PDR | | | | | | | | |
| 3.3.5 | Field test of experimental vaccine | DLF in Lao PDR | | | | | | | | |
| 3.3.6 | Production of ND inactivated vaccine | DLF in Lao PDR | | | | | | | | |

| No. | Project Activities | Responsible by | JFY | | | | | Activities | | Target (Future Plan) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2002 | 2003 | 2004 | 2005 | 2006 | Input | Output | |
| Output 4 | Improvement of animal quarantine technology | | | | | | | | | |
| 4.1 | **Promotion of technical concepts and practical procedures of quarantine** | | | | | | | | 1. The official route across the border for animal movement and system were defined through the seminar and workshop jointly organized by JICA, OIE and FAO. | 1. One day seminar on quarantine and animal movement for the officers and animal buyers at the selected border point |
| 4.1.1 | Training of Lao PDR counterpart | Project office AQ (Thailand) | | | | | | Training in Thailand (1 wk) | | |
| 4.1.2 | Dispatch of expert | Project office | | | | | | | | |
| 4.1.3 | Training of Lao PDR staff by C/P | DLF in Lao PDR | | | | | | Sharing between the section staff | | |
| 4.1.4 | Participation of regional seminar and workshop | Disease Control Division and Project office | | | | | | Workshop on animal movement management (2 wks) | | |
| 4.2 | **Strengthening disease detection techniques at selected important border points** | | | | | | | | | |
| 4.2.1 | Training of Lao PDR counterpart | Project office AQ (Thailand) | | | | | | Training in Thailand (animal quarantine, 1 wk) | | |
| 4.2.2 | Training of Lao PDR staff by C/P | DLF in Lao PDR | | | | | | Sharing between the section staff | | |
| 4.2.3 | Making a new manual for animal quarantine | DLF in Lao PDR | | | | | | | | |
| 4.2.3 | Practical use of new technology | DLF in Lao PDR | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Out-scope of the activities specified in PO | | | | | | | | | | |
| Diagnosis | Dispatch of Japanese expert | NAHC | | | | | | Japanese expert (1.5 wks) | | |
| Diagnosis | Participation of regional seminar on avian influenza in Malaysia | VRI (Ipoh) | | | | | | (2 wks) | | |
| Diagnosis | Dispatch of Thai expert (field work collaborating with FORCOM Project) | Project office/ NIAH (DLD) | | | | | | 1 wk x 3 times | | |
| Diagnosis | Dispatch of Thai expert (serological diagnosis) | Project office/ NIAH (DLD) | | | | | | 1 wk x 3 times | | |
| Diagnosis | Active surveillance of CSF | NAHC | | | | | | In-Country Activity | | |
| Vaccine | Dispatch of Thai local consultant (equipment maintenance and management) | Project office | | | | | | 3 d | | |

# Malaysia

| No. | Project Activities | Responsible by | JFY | | | | | Activities | | Target (Future Plan) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2002 | 2003 | 2004 | 2005 | 2006 | Input | Output | |
| Output 1 | Strengthening of capacity for regional cooperation system and human as well as other resources for effective animal disease control | | | | | | | | | |
| 1.1 | **Development of available manpower and institutional resources for regional cooperation** | Department of Veterinary Services (Malaysia) | | | | | | | **1.** Personnel network for cooperation in the region was well established through the training courses, seminars and dispatch of experts.<br>**2.** Mutual understanding on personnel, technology and organization was deepened through activities, which resulted in close relationship among organizations or staff.<br>**3.** The system for cooperation was established through NC though the Project experienced communication problem as the NC does not belong to the project site in Malaysia.<br>**4.** The database for the personnel and organizations was not established (only the lists were available). | **1.** The 10th NC and 6th JCC meetings<br>**2.** Dispatch of Malaysian experts<br>**3.** Training courses in Thailand and Malaysia<br>**4.** The closing seminar of the Project. |
| 1.1.1 | Studying on important and practical topic and subjects | DVS (Malaysia) | | | | | | Participation in NC Meetings | | |
| 1.1.2 | Development of the database of training institutions in the region | DVS (Malaysia) | | | | | | Project home page developed (the lists of personnel and organizations uploaded) | | |
| 1.1.3 | Development of the database of available human resources in the region | DVS (Malaysia) | | | | | | | | |
| 1.2 | **Plan and implement country plan under the Project including staff training and equipment supply** | DVS (Malaysia) | | | | | | | | |
| 1.2.1 | Making of PO and APO | Project office DLD (Thailand) | | | | | | **2002:** 3 Thai experts, Participation in NC & JCC Meetings | | |
| Output 2 | Improvement disease surveillance | | | | | | | | | |
| 2.1 | **Improvement of diagnostic techniques** | | | | | | | | **1.** Malaysia sent a number of staff for the training courses in Thailand contrary to the Project's expectation and trainees studied diagnostic techniques on many diseases including the ones not listed in PO. They could manage to apply those techniques in their laboratory in Malaysia without any help of Thai expert.<br>**2.** The Diagnosis for FMD was improved at the regional veterinary diagnostic center in Kotabaru.<br><br>**3.** Malaysian contribution to the region through dispatch of Malaysian experts and training courses was not satisfactory. | **1.** Dispatch of Malaysian experts<br>**2.** Organization of individual training courses in Malaysia |
| **Training of Malaysian counterpart** | | | | | | | | | | |
| **Foot and Mouth Disease** | | | | | | | | | | |
| 2.1.1 | Training of Malaysian counterparts in Japan and Thailand | NIAH (Japan)<br>FMD center (Pakchong) | | | | | | 2003: Japan (2 m)<br>2003, 05: Thailand (2 m & 1 m) | | |
| 2.1.2 | Dispatch of expert | Project office<br>Kotabaru center | | | | | | Japanese expert (1 wk) | | |
| 2.1.3 | Participating for the seminar | DVS (Malaysia) | | | | | | Organized by OIE | | |
| 2.1.4 | Training of Malaysian staff by C/P | DVS (Malaysia) | | | | | | Sharing between the section staff | | |
| 2.1.5 | Active surveillance of FMD | DVS (Malaysia) | | | | | | | | |
| **Brucellosis** | | | | | | | | | | |
| 2.1.6 | Training of Malaysian counterparts in Thailand | NIAH (Thailand) | | | | | | Training in Thailand (3 staff, 1 m each) | | |

| No. | Project Activities | Responsible by | JFY | | | | | Activities | | Target (Future Plan) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2002 | 2003 | 2004 | 2005 | 2006 | Input | Output | |
| 2.1.7 | Training of Malaysian staff by C/P | DVS (Malaysia) | | | | | | Thai expert (1 wk)<br>Sharing between the section staff | 4. Malaysian C/Ps are capable of providing larger commitment to the region and it is expected to cooperate with the neighboring countries by closer relationship with the Project office. | |
| 2.1.8 | Active surveillance of Brucellosis | DVS (Malaysia) | | | | | | | | |
| **Anthrax** | | | | | | | | | | |
| 2.1.9 | Training of Malaysian counterparts in Thailand | NIAH (Thailand) | | | | | | Training in Thailand<br>(3 staff, 1 m each) | | |
| 2.1.10 | Training of Malaysian staff by C/P | DVS (Malaysia) | | | | | | Sharing between the section staff | | |
| 2.1.11 | Active surveillance of Anthrax | DVS (Malaysia) | | | | | | | | |
| **Training for staff of neighboring countries** | | | | | | | | | | |
| 2.1.12 | Training of participant from neighboring country in Malaysia | VRI | | | | | | **2003**: ND (My)<br>**04**: IBD (V), ND (L)<br>Seminar on AI<br>(C, Ma, My, T, V)<br>**05**: Seminar on AI<br>(C, L, My, T, V) | | |
| 2.1.13 | Dispatch of Malaysian experts to the neighboring countries | VRI | | | | | | 2 pathologists to C & My (1 wk each) | | |
| 2.1.14 | Consultation and information services of poultry disease diagnosis | VRI | | | | | | | | |
| 2.2 | **Improvement of data collection, analysis and distribution of epidemiological information** | | | | | | | | 1. Data collection and analysis have been carried out through surveillances on AI and FMD by the Malaysian institutes, which is expected to establish a solid system to process epidemiological information. | |
| 2.2.1 | Training of Malaysia counterpart in Thailand | Project office<br>Division of Epidemiology (DLD) | | | | | | Veterinary Epidemiology Workshop (1 wk) | | |
| 2.2.2 | Training of Malaysia staff by C/P | DVS (Malaysia) | | | | | | Sharing between the section staff | | |
| 2.2.3 | Planning of the active surveillance | DVS (Malaysia) | | | | | | | | |
| 2.2.4 | Utilizing for the active surveillance | DVS (Malaysia) | | | | | | | | |
| 2.3 | **Development of basic disease information system** | | | | | | | | **(Remarks)**<br>1. AHPISA cannot be relied on since it's not functioning properly.<br>2. OIE introduced a new system called 'ARAHIS' and the Project is going to support it.<br>3. The actual application of ARAHIS depends on the forthcoming activities of the Project. | |
| 2.3.1 | Training of Malaysia of C/P in Thailand | Project office<br>Division of Epidemiology (DLD) | | | | | | | | |
| 2.3.2 | Training of Malaysia staff by C/P | DVS (Malaysia) | | | | | | | | |
| 2.3.3 | Making the data base of animal disease | DVS (Malaysia) | | | | | | | | |

| No. | Project Activities | Responsible by | JFY | | | | | Activities | | Target (Future Plan) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2002 | 2003 | 2004 | 2005 | 2006 | Input | Output | |
| Out-scope of the activities specified in PO | | | | | | | | | | |
| Diagnosis | Dispatch of Japanese expert | LBVD | | | | | | Japanese expert for cell culture (1 m) | | |
| Diagnosis | Training of Myanmar counterpart in Thailand (hog cholera & Aujeszky's disease diagnosis) | NIAH (DLD) | | | | | | (2 staff, 1 m each) | | |
| Diagnosis | Training of Myanmar counterpart in Thailand (diagnosis on haemorrhagic septicemia) | NIAH (DLD) | | | | | | (1 m) | | |
| Diagnosis | Training of Myanmar counterpart in Thailand (rabies diagnosis) | NIAH (DLD) | | | | | | (1 m) | | |
| Diagnosis | Training of Myanmar counterpart in Thailand (diagnosis on parasitic diseases) | NIAH (DLD) | | | | | | (2 staff, 2 m) | | |
| Diagnosis | Training of Myanmar counterpart in Thailand (diagnosis of zoonotic diseases including TB, anthrax, brucellosis, leptospirosis & rabies) | NIAH (DLD) | | | | | | (5 wks) | | |
| Diagnosis | Participation of regional seminar on avian influenza in Malaysia | VRI (Ipoh) | | | | | | (2004-1 wk, 2005-2 wks) | | |
| Diagnosis | Dispatch of Malaysian expert | Project office | | | | | | 2 Malaysian experts (1 wk) | | |
| Diagnosis | Dispatch of Thai expert (leptospirosis) | Project office | | | | | | (1 wk) | | |
| Diagnosis | Dispatch of Thai expert (brucellosis) | Project office | | | | | | (1 wk) | | |
| Diagnosis | Active surveillance of CSF | Mandalay Lab. | | | | | | In-Country Activity for JFY2005 | Collected 1,000 samples and established cell culture lab. | |
| Vaccine | Dispatch of Thai local consultant (equipment maintenance and management) | Project office | | | | | | 1 wk x 2 times | Repair 11 items of lab. equipments by the Project | |

| No. | Project Activities | Responsible by | JFY | | | | | Activities | | Target (Future Plan) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2002 | 2003 | 2004 | 2005 | 2006 | Input | Output | |
| **Out-scope of the activities specified in PO** | | | | | | | | | | |
| Diagnosis | Dispatch of Japanese expert | VRI | | | | | | Japanese expert for AI diagnosis (1 wk) | | |
| Diagnosis | Training of Malaysian counterparts in Thailand (leptospirosis diagnosis) | NIAH (DLD) | | | | | | (1 m) | | |
| Diagnosis | Training of Malaysian counterparts in Thailand (parasitic disease diagnosis) | NIAH (DLD) | | | | | | (2 m) | | |
| Quarantine | Training of Malaysian counterparts in Thailand (animal quarantine) | Project office AQ (Thailand) | | | | | | (1 wk) | | |
| Quarantine | Participation of regional seminar and workshop | Disease Control Division and Project office | | | | | | Workshop on animal movement management (2 wks) | | |
| Diagnosis | Training of Malaysian counterparts in Thailand (hog cholera & Aujeszky's disease diagnosis) | NIAH (DLD) | | | | | | (1 m) | | |
| Diagnosis | Training of Malaysian counterparts in Thailand (immunohistochemistry on swine diseases) | NIAH (DLD) | | | | | | (1 m) | | |
| Diagnosis | Training of Malaysian counterparts in Thailand (rabies diagnosis) | NIAH (DLD) | | | | | | (1 staff-1 m, 1 staff-1 wk) | | |
| Diagnosis | Participating in workshop on CSF | Project office | | | | | | In Vietnam & Philippines | | |
| Diagnosis | Training of Malaysian counterparts in Japan | Project office | | | | | | Viral diseases (1.5 m) | | |
| Diagnosis | Dispatch of Thai local consultant (equipment maintenance and management) | Project office | | | | | | 3 d | | |

## Myanmar

| No. | Project Activities | Responsible by | JFY | | | | | Activities | | Target (Future Plan) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2002 | 2003 | 2004 | 2005 | 2006 | Input | Output | |
| **Output 1:** | **Strengthening of capacity for regional cooperation system and human as well as other resources for effective animal disease control** | | | | | | | | | |
| **1.1** | **Development of available manpower and institutional resources for regional cooperation** | Livestock Breeding and Veterinary Department (Myanmar) | | | | | | | **1.** Personnel network for cooperation in the region was well established through the training courses, seminars and dispatch of experts.<br>**2.** Mutual understanding on personnel, technology and organization was deepened through activities, which resulted in close relationship among organizations or staff.<br>**3.** The system for cooperation was established through NC who could readily manage the domestic issues and arrangement.<br>**4.** The database for the personnel and organizations was not established though the lists of human resources were available. | **1.** The 10th NC and 6th JCC meetings<br>**2.** Dispatch of Thai and Malaysian experts<br>**3.**Training courses in Thailand and Malaysia<br>**4.** The closing seminar of the Project. |
| 1.1.1 | Studying on important and practical topic and subjects | LBVD (Myanmar) | | | | | | Participation in NC Meetings, Discussion with experts | | |
| 1.1.2 | Development of the database of training institutions in the region | LBVD (Myanmar) | | | | | | Project home page developed (the lists of personnel's and organizations uploaded) | | |
| 1.1.3 | Development of the database of available human resources in the region | LBVD (Myanmar) | | | | | | | | |
| **1.2** | **Plan and implement country plan under the Project including staff training and equipment supply** | LBVD (Myanmar) | | | | | | | | |
| 1.2.1 | Making of PO and APO | Project office<br>DLD (Thailand)<br>LBVD for the 8th NC meeting | | | | | | Participation in NC & JCC Meetings (organization for the 8th NC meeting) | | |
| **Output 2:** | **Improvement of disease surveillance** | | | | | | | | | |
| **2.1** | **Improvement of diagnostic techniques** | | | | | | | | **1.** Myanmar sent a number of staff for the training courses in Thailand and Malaysia, and trainees studied diagnostic techniques on many diseases including the ones not listed in PO (see the table "Out-scope of the activities specified in PO" below). The techniques were actually rooted in the laboratories in Myanmar under the support of Thai experts, which resulted in the improvement of diagnostic capability of diagnostic laboratories in Yangon and Mandalay. | **1.** Dispatch of Thai and Malaysian experts<br>**2.** Serosurveys as In-Country Activities for JFY2006<br>**3.** Individual training in Thailand and Malaysia |
| **Foot and mouth disease** | | | | | | | | | | |
| 2.1.1 | Training of Myanmar counterpart in Thailand | FMD center (Pakchong) | | | | | | Training in Thailand (4 staff, 2 m x 2, 1 m x 2) | | |
| 2.1.2 | Dispatch of expert | Project office<br>FMD center (Pakchong) | | | | | | Japanese expert (1 wk) | | |
| 2.1.3 | Participating in the seminar | LBVD (Myanmar) | | | | | | Organized by OIE | | |
| 2.1.4 | Training of Myanmar staff by C/P | LBVD (Myanmar) | | | | | | Sharing between the section staff | | |
| 2.1.5 | Active surveillance of Foot and mouth disease | LBVD (Myanmar) | | | | | | In-Country Activity for JFY2005 | | |

| No. | Project Activities | Responsible by | JFY | | | | | Activities | | Target (Future Plan) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2002 | 2003 | 2004 | 2005 | 2006 | Input | Output | |
| **Poultry disease (Newcastle Disease)** | | | | | | | | | **2.** The Project supported the surveillance on FMD, which has been carried out by SEAFMD, as In-Country Activity. **3.** The activities for Newcastle disease was tied-in with avian influenza. The project dispatched 3 Japanese short-term experts to establish AI diagnosis in Myanmar since Myanmar was the only AI-free country in the region. Lately, the outbreaks of the disease were reported and the technologies transferred by the Project was utilized. In addition, a Thai expert was urgently dispatched to tackle the AI in Myanmar. **4.** A preliminary survey on TB was carried out by Thai and Japanese experts, who pointed out the prevalence of TB in the country can be very high. **5.** Serosurvey on CSF was implemented in Mandalay as In-Country Activity and a Japanese long-term expert is transferring the technique of neutralizing peroxidase-linked assay (NPLA). | |
| 2.1.6 | Training of Myanmar counterpart in Thailand | NIAH (DLD) | | | | | | Training in Malaysia (1 m) | | |
| 2.1.7 | Dispatch of expert | Project office/ NIAH (Japan/Thailand) | | | | | | 2 Japanese experts on AI (1 wk, 1 wk) 1 Thai expert on AI (2 wks) | | |
| 2.1.8 | Training of Myanmar staff by C/P | VRI (Myanmar) | | | | | | Sharing between the section staff | | |
| 2.1.9 | Active surveillance of poultry disease (ND) | LBVD (Myanmar) | | | | | | | | |
| **Tuberculosis** | | | | | | | | | | |
| 2.1.10 | Training of Myanmar counterpart | NIAH (Japan/ Thailand) | | | | | | 2002: Japan (1 m) 2003: Thailand (1 m) | | |
| 2.1.11 | Training of Myanmar staff by C/P | LBVD (Myanmar) | | | | | | Japanese & Thai experts (1.5 + 1 wks) Sharing between the section staff | | |
| 2.1.12 | Active surveillance of Tuberculosis | LBVD (Myanmar) | | | | | | Pilot survey carried out by the experts | | |
| **Classical Swine Fever** | | | | | | | | | | |
| 2.1.13 | Participating in the seminar | Project office | | | | | | Workshop in Vietnam & Philippines | | |
| **2.2** | **Improvement of data collection, analysis and distribution of epidemiological information** | | | | | | | | **1.** The staff became very well informed of epidemiology of the diseases in the country. **2.** Data collection and analysis have been carried out through surveillances on CSF (In-Country Activity 2005), AI and FMD (through SEAFMD Project by OIE and In-Country Activity 2005), which is expected to establish a solid system to process epidemiological information in LBVD. | **1.** Serosurveys as In-Country Activities for JFY2006 **2.** Dispatch of Thai and Malaysian experts |
| 2.2.1 | Training of Myanmar counterpart in Thailand | Project office Division of Epidemiology (DLD) | | | | | | Veterinary Epidemiology workshop (3 staff, 1 wk) | | |
| 2.2.2 | Training of Myanmar staff by C/P | LBVD (Myanmar) | | | | | | Sharing between the section staff | | |
| 2.2.3 | Planning of the active surveillance | LBVD (Myanmar) | | | | | | Planning of In-Country Activity | | |
| 2.2.4 | Utilizing for the active surveillance | LBVD (Myanmar) | | | | | | Utilizing for In-Country Activity (2005: FMD & CSF) | | |
| 2.2.5 | Publishing the statistics of the animal disease | LBVD (Myanmar) | | | | | | | | |
| **2.3** | **Development of basic disease information system** | | | | | | | | **(Remarks)** **1.** AHPISA cannot be relied on since it's not functioning properly. **2.** OIE introduced a new system called 'ARAHIS' and the Project is going to support it. **3.** The actual application of ARAHIS depends on the forthcoming activities of the Project. | |
| 2.3.1 | Training of Myanmar counterpart in Thailand | Project office Division of Veterinary Biologics (DLD) | | | | | | | | |
| 2.3.2 | Training of Myanmar staff by C/P | LBVD (Myanmar) | | | | | | | | |
| 2.3.3 | Making the data base of animal disease | LBVD (Myanmar) | | | | | | | | |
| 2.3.4 | Planning to provide the data for animal disease control | LBVD (Myanmar) | | | | | | | | |

| No. | Project Activities | Responsible by | JFY | | | | | Activities | | Target (Future Plan) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2002 | 2003 | 2004 | 2005 | 2006 | Input | Output | |
| Output 3 | Improvement of vaccine production and quality control | | | | | | | | | |
| 3.1 | **FMD vaccine Production and quality control** | | | | | | | | 1. The project activity was focused on the production of FMD oil-adjuvant vaccine for pigs and Brucella vaccine due to administrative and budgetary limitations in Myanmar, Thai, and Project sides.<br>2. The vaccine was successfully produced through effective input of training in Thailand, dispatch of Thai expert and supply of equipment. This was the first time for Myanmar to produce FMD vaccine for pigs.<br>3. The production of FMD vaccine for cattle increased to 150,000 doses from 100,000 doses in last 4 years. | 1. Continuation of the support (Thai expert, supply of disposables, etc.) |
| 3.1.1 | Training of Myanmar counterpart in Thailand | FMD center (Pakchong) | | | | | | Training in Thailand (2 staff, 4 m each) | | |
| 3.1.2 | Dispatch of expert | Project office FMD center (Pakchong) | | | | | | 2 Thai experts (1 wk each) | | |
| 3.1.3 | Training of Myanmar staff by C/P | LBVD (Myanmar) | | | | | | Sharing between the section staff | | |
| 3.1.4 | Improvement of procedure of vaccine production | LBVD (Myanmar) | | | | | | | | |
| 3.1.5 | Production of improved FMD vaccine | LBVD (Myanmar) | | | | | | Equipment (large capacity refrigerated centrifuge, etc.) | | |
| 3.2 | **Newcastle disease vaccine production and quality control** | | | | | | | | | |
| 3.2.1 | Training of Myanmar counterpart in Thailand | Division of Veterinary Biologics (DLD) | | | | | | Training in Thailand (2 staff, 2 m each) | | |
| 3.2.2 | Dispatch of expert | Project office Division of Veterinary Biologics (DLD) | | | | | | | | |
| 3.2.3 | Training of Myanmar staff by C/P | LBVD (Myanmar) | | | | | | Sharing between the section staff | | |
| 3.2.4 | Improvement of procedure of vaccine production | LBVD (Myanmar) | | | | | | | | |
| 3.2.5 | Production of improved ND vaccine | LBVD (Myanmar) | | | | | | | | |
| 3.3 | **Rabies Vaccine Production and quality control** | | | | | | | | | |
| 3.3.1 | Training of Myanmar counterpart in Japan | Project office | | | | | | | | |
| 3.3.2 | Dispatch of expert | Project office | | | | | | | | |
| 3.3.3 | Training of Myanmar staff by C/P | LBVD (Myanmar) | | | | | | | | |
| 3.3.4 | Setting of Rabies vaccine production equipment | LBVD (Myanmar) | | | | | | | | |
| 3.3.5 | Experimental vaccine production | LBVD (Myanmar) | | | | | | | | |
| 3.3.6 | Field test of experimental vaccine | LBVD (Myanmar) | | | | | | | | |
| 3.4 | **Infectious bursa disease vaccine production and quality control** | | | | | | | | | |
| 3.4.1 | Training of Myanmar counterpart in Thailand | Division of Veterinary Biologics (DLD) | | | | | | | | |
| 3.4.2 | Dispatch of expert | Project office Division of Veterinary Biologics (DLD) | | | | | | | | |
| 3.4.3 | Training of Myanmar staff by C/P | LBVD (Myanmar) | | | | | | | | |

| No. | Project Activities | Responsible by | JFY | | | | | Activities | | Target (Future Plan) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2002 | 2003 | 2004 | 2005 | 2006 | Input | Output | |
| 3.4.4 | Setting of IBD vaccine production equipment | LBVD (Myanmar) | | | | | | | | |
| 3.4.5 | Experimental vaccine production | LBVD (Myanmar) | | | | | | | | |
| 3.4.6 | Field test of experimental vaccine | LBVD (Myanmar) | | | | | | | | |
| **3.5** | **Brucellosis vaccine and antigen production and quality control** | | | | | | | | **4.** Brucella vaccine and reagents for diagnosis was successfully produced. At the beginning even the facility did not exist but LBVD invested most of the necessary equipment and the production initiated within a year since the trainee came back from Thailand. This was also supported by a Thai expert. | **1.** Continuation of the support (Thai expert, supply of disposables, etc.) |
| 3.5.1 | Training of Myanmar counterpart in Thailand | Division of Veterinary Biologics (DLD) | | | ■ | | | Training in Thailand (1 m) | | |
| 3.5.2 | Dispatch of expert | Project office Division of Veterinary Biologics (DLD) | | | | | ■ | Thai expert (1 wk) | | |
| 3.5.3 | Training of Myanmar staff by C/P | LBVD (Myanmar) | | | ▒ | ▒ | ▒ | Sharing between the section staff | | |
| 3.5.4 | Setting of vaccine production equipment | LBVD (Myanmar) | | | ■ | ■ | | By LBVD | | |
| 3.5.5 | Experimental vaccine production | LBVD (Myanmar) | | | | ■ | ■ | By LBVD | | |
| 3.5.6 | Field test of experimental vaccine | LBVD (Myanmar) | | | | | | By LBVD | | |
| **Output 4** | **Improvement of animal quarantine technology** | | | | | | | | | |
| **4.1** | **Promote technical concepts and practical procedures of quarantine** | | | | | | | | **1.** The official route across the border for animal movement and system were defined through the seminar and workshop jointly organized by JICA, OIE and FAO. | **1.** One day seminar on quarantine and animal movement for the officers and animal buyers at the selected border point |
| 4.1.1 | Dispatch of expert | AQ (Thailand) | | | | | | | | |
| 4.1.2 | Participating in regional seminar and workshop | Disease Control Division and Project office | | | | ■ | | Workshop on animal movement management (2 wks) | | |
| **4.2** | **Strengthen disease detection techniques at selected important border points** | | | | | | | | | |
| 4.2.1 | Training of Myanmar counterpart in Thailand or Japan | Project office AQ (Thailand) | | ■ | | | | Training in Thailand (animal quarantine, 1 wk) | | |
| 4.2.2 | Training of Myanmar staff by C/P | LBVD (Myanmar) | | ▒ | ▒ | ▒ | ▒ | Sharing between the section staff | | |
| 4.2.3 | Making a new manual for animal quarantine | LBVD (Myanmar) | | | | | | | | |
| 4.2.4 | Practical use of new disease detection techniques | LBVD (Myanmar) | | | | | | | | |

| No. | Project Activities | Responsible by | JFY | | | | | Activities | | Target (Future Plan) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2002 | 2003 | 2004 | 2005 | 2006 | Input | Output | |
| Outputs of the activities specified in PO | | | | | | | | | | |
| Diagnosis | Dispatch of Japanese expert | LBVD | | | | | | Japanese expert for cell culture (1 m) | | |
| Diagnosis | Training of Myanmar counterpart in Thailand (hog cholera & Aujeszky's disease diagnosis) | NIAH (DLD) | | | | | | (2 staff, 1 m each) | | |
| Diagnosis | Training of Myanmar counterpart in Thailand (diagnosis on haemorrhagic septicemia) | NIAH (DLD) | | | | | | (1 m) | | |
| Diagnosis | Training of Myanmar counterpart in Thailand (rabies diagnosis) | NIAH (DLD) | | | | | | (1 m) | | |
| Diagnosis | Training of Myanmar counterpart in Thailand (diagnosis on parasitic diseases) | NIAH (DLD) | | | | | | (2 staff, 2 m) | | |
| Diagnosis | Training of Myanmar counterpart in Thailand (diagnosis of zoonotic diseases including TB, anthrax, brucellosis, leptospirosis & rabies) | NIAH (DLD) | | | | | | (5 wks) | | |
| Diagnosis | Participation of regional seminar on avian influenza in Malaysia | VRI (Ipoh) | | | | | | (2004-1 wk, 2005-2 wks) | | |
| Diagnosis | Dispatch of Malaysian expert | Project office | | | | | | 2 Malaysian experts (1 wk) | | |
| Diagnosis | Dispatch of Thai expert (leptospirosis) | Project office | | | | | | (1 wk) | | |
| Diagnosis | Dispatch of Thai expert (brucellosis) | Project office | | | | | | (1 wk) | | |
| Diagnosis | Active surveillance of CSF | Mandalay Lab. | | | | | | In-Country Activity for JFY2005 | Collected 1,000 samples and established cell culture lab. | |
| Vaccine | Dispatch of Thai local consultant (equipment maintenance and management) | Project office | | | | | | 1 wk x 2 times | Repair 11 items of lab. equipment by the Project | |

## Thailand

| No. | Project Activities | Responsible by | JFY | | | | | Activities | | Target (Future Plan) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2002 | 2003 | 2004 | 2005 | 2006 | Input | Output | |
| Output 1 | **Strengthening of capacity for regional cooperation system and human as well as other resources for effective animal disease control** | | | | | | | | | |
| 1.1 | **Development of available manpower and institutional resources for regional cooperation** | | | | | | | | 1. Personnel network for cooperation in the region was well established through the training courses, seminars and dispatch of experts.<br>2. Mutual understanding on personnel, technology and organization was deepened through activities, which resulted in close relationship among organizations or staff.<br>3. The database for the personnel and organizations was not established though the lists were available. | 1. Organization of the 10th NC and 6th JCC meetings<br>2. Dispatch of Thai experts to the neighboring countries<br>3. Training courses in Thailand<br>4. Organization of the closing seminar of the Project. |
| 1.1.1 | Studying on important and practical topic and subjects | Thai counterpart | | | | | | Discussion in NC Meetings | | |
| 1.1.2 | Development of the database of training institutions in the region | Thai counterpart | | | | | | Project home page developed (the lists of personnel's and organizations uploaded) | | |
| 1.1.3 | Development of the database of available human resources in the region | Thai counterpart | | | | | | | | |
| 1.2 | **Plan and implement country plans under the Project including staff training and equipment supply** | | | | | | | | | |
| 1.2.1 | Making of PO and APO | Project office<br>DLD (Thailand) | | | | | | Dispatch of experts (C, L, Ma, V)<br>Organization & Participation in NC & JCC Meetings | | |
| 1.3 | **Development of the training program and producing of the training materials** | Division of Training and other related organizations | | | | | | | 1. The manuals for diagnostic techniques contributed to standardization of diagnosis in the region since they are often hampered by personal mistakes and prejudice. | |
| 1.3.1 | Development of the training modules | Division of Training and other related organizations | | | | | | Technical manuals for laboratory diagnosis produced by the section responsible for each training course<br>Standard Diagnostic Manual re-edited | | |
| 1.3.2 | Development and producing of training material in Thai and English language | Division of Training and other related organizations | | | | | | | | |

| No. | Project Activities | Responsible by | JFY | | | | | Activities | | Target (Future Plan) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2002 | 2003 | 2004 | 2005 | 2006 | Input | Output | |
| Output 2: | Improvement of disease surveillance | | | | | | | | | |
| 2.1 | **Improvement of diagnostic techniques** | | | | | | | | 1. Training courses in Japan were applied to younger staff in the field of advance technologies, which are expected to be utilized in the neighboring countries in near future. The senior staff have already acquired decent knowledge and ability for international cooperation through the long-term relationship with Japanese aid. | 1. Dispatch of Thai experts<br>2. Organization of individual training courses in Thailand |
| **Training for Thai counterpart** | | | | | | | | | | |
| 2.1.1 | **Foot and Mouth Disease** | FMD Diagnostic Center | | | | | | | | |
| 2.1.1.1 | Training of Thai counterpart in Japan | Project office | | | | | | FMD diagnosis (2 m)<br>Swine vesicular diseases (2 m) | | |
| 2.1.1.2 | Dispatch of expert | Project office | | | | | | 2 Japanese experts<br>(1.5 m, 1 wk) | | |
| 2.1.2 | **Classical Swine Fever** | NIAH | | | | | | | 2. The input of Japanese short-term experts were very effective and useful for the improvement of diagnostic technologies in Thailand.<br><br>3. A total of 26 training courses in 14 subjects were organized and 54 trainees participated in the courses. Those trainees became well informed and skilled of diagnosis, which resulted in the improvement of diagnostic capability of their institutes.<br>4. A total of 44 Thai experts were dispatched to the neighboring countries in order to complement the training courses and establish the diagnosis in each country. The techniques were modified and became more adaptable according to the conditions of each laboratory through the experts' guidance in respective countries. These mutual visits and activities brought up close relationship between the staff of the institutes in the region. | |
| 2.1.2.1 | Training of Thai counterpart | Project office | | | | | | | | |
| 2.1.2.2 | Dispatch of expert | Project office | | | | | | 2 Japanese experts<br>(1 m, 1 m) | | |
| 2.1.3 | **Other diseases** | NIAH | | | | | | | | |
| 2.1.3.1 | Dispatch of expert | Project office | | | | | | 3 Japanese experts for avian influenza<br>(1 wk, 1 m, 1 wk)<br>1 Japanese expert for anthrax (1 m) | | |
| 2.1.3.2 | Training of Thai counterpart in Japan | Project office | | | | | | HS (2 m), AI (2 m),<br>Bacterial diseases (2 m), Immunohisto-chemistry (2 m) | | |
| **Training for staff of neighboring country** | | | | | | | | | | |
| 2.1.4 | Foot and Mouth Disease | FMD Diagnostic Center | | | | | | C-2, L-3, Ma-2, My-4, V-4 | | |
| 2.1.5 | Classical Swine Fever | NIAH (DLD)<br>NIAH (Japan) | | | | | | C-2, L-3, Ma-1, My-2 | | |
| 2.1.6 | Hemorrhagic Septicemia | NIAH (DLD) | | | | | | C-1, L-1, My-1, V-2 | | |
| 2.1.7 | Tuberculosis | NIAH (DLD)<br>NIAH (Japan) | | | | | | C-1, My-1, V-1 | | |
| 2.1.8 | Brucellosis | NIAH (DLD) | | | | | | C-1, Ma-2 | | |
| 2.1.9 | Newcastle disease | NIAH (DLD) or VRI (DVS) | | | | | | C-1 | | |
| 2.1.10 | IBD | NIAH (DLD) or VRI (DVS) | | | | | | | | |
| 2.1.11 | Other diseases | NIAH (DLD) | | | | | | **2002**: Duck viral hepatitis (V)<br>**2003**: Anthrax (Ma-2), Leptospira (Ma), Parasites (C, Ma), Pathology (L, V)<br>**2004**: Immunohisto-chemistry (Ma), Rabies(Ma, My), Parasites (My-2, V), Pathology (C), Swine erysipelas (C)<br>**2005**: Zoonosis (Ma, My, V) | | |

| No. | Project Activities | Responsible by | JFY | | | | | Activities | | Target (Future Plan) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2002 | 2003 | 2004 | 2005 | 2006 | Input | Output | |
| **Providing consultation for diagnostic technology for the region** | | | | | | | | | | |
| 2.1.12 | Providing consultation for diagnostic technology for the region | NIAH (DLD) and FMD diagnostic center | | | | | | 49 Thai experts dispatched in total (15 subjects on diagnosis and 4 on vaccine production). | | |
| **2.2** | **Collating of technical information on diseases** | Division of Veterinary Epidemiology | | | | | | | 1. Individual researchers has been accumulating data and references, however, the database has not been developed so that the researchers can share the information. The responsible section and personnel are also unclear. | |
| 2.2.1 | Development of database for research on FMD | Division of Veterinary Epidemiology | | | | | | | | |
| 2.2.2 | Development of database for research on Classical swine fever | Division of Veterinary Epidemiology | | | | | | | | |
| 2.2.3 | Development of database for research on other diseases | Division of Veterinary Epidemiology | | | | | | | | |
| **2.3** | **Improvement of data collection, analysis and distribution of epidemiological information** | | | | | | | | 1. Data collection and analysis have been carried out through surveillances on AI (nationwide, twice a year) and FMD by the Thai institutes, which is expected to establish a solid system to process epidemiological information.<br>2. Veterinary Epidemiology Workshop was organized to standardize the epidemiological information system in the region. However, it has not become utilized due to incomplete establishment of equipment and software's in the neighboring countries.<br><br>(Remarks)<br>3. AHPISA cannot be relied on since it's not functioning properly.<br>4. OIE introduced a new system called 'ARAHIS' and the Project is going to support it.<br>5. The actual application of ARAHIS depends on the forthcoming activities of the Project. | |
| 2.3.1 | Harmonizing forms for collecting and reporting of disease, analysis technology, and information distribution system using AHPISA concepts | Division of Veterinary Epidemiology | | | | | | | | |
| **Training on information technology for Thai counterpart** | | | | | | | | | | |
| 2.3.1.1 | Training on disease surveillance and investigation | Division of Veterinary Epidemiology | | | | | | Training in Japan (1 m) | | |
| **Training on information technology for staff of neighboring country** | | | | | | | | | | |
| 2.3.1.2 | Training on disease surveillance and investigation | Division of Veterinary Epidemiology | | | | | | Veterinary Epidemiology Workshop (1 wk) | | |
| 2.3.1.3 | Workshop on harmonizing of disease information system | Division of Veterinary Epidemiology | | | | | | Veterinary Epidemiology Workshop (1 wk) | | |
| 2.3.2 | Establishment of basic disease information system | Division of Veterinary Epidemiology | | | | | | | | |
| 2.3.2.1 | Establishment of basic disease information system on the internet | Division of Veterinary Epidemiology | | | | | | | | |
| 2.3.2.2 | Development of contents of information to be distributed | Division of Veterinary Epidemiology | | | | | | | | |
| 2.3.2.3 | Development of interactive information supply system | Division of Veterinary Epidemiology | | | | | | | | |

| No. | Project Activities | Responsible by | JFY | | | | | Activities | | Target (Future Plan) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2002 | 2003 | 2004 | 2005 | 2006 | Input | Output | |
| Output 3 | **Improvement of vaccine production and quality control** | | | | | | | | | |
| **3.1** | **Improvement of vaccine production technology** | Division of Veterinary Biologics | | | | | | | 1. The pilot production of cell-culture CSF vaccine was successful through training in Japan and cooperation by Japanese expert and Thai researcher. Mass production will be initiated in near future.<br><br>2. Division of Veterinary Biologics organized 7 training courses on 4 subjects, in which 9 trainees participated. Those trainees contributed to improve the production technologies in their respective centers after participation in the courses. Especially, their effect were remarkable in Myanmar and Lao PDR, where vaccine production has high priority as national policy.<br>3. FMD vaccine for pigs and Brucella vaccine were newly produced in Myanmar and HS oil-adjuvant vaccine in Lao PDR.<br>4. Thai experts were dispatched and supported these vaccine development in the neighboring countries by providing effective cooperation and advice. | |
| 3.1.1 | Improvement of technology for selection and maintenance of vaccine seeds | Division of Veterinary Biologics | | | | | | | | |
| 3.1.2 | Introduction of GPE-vaccine for CSF | Division of Veterinary Biologics | | | | | | | | |
| 3.1.2.1 | Dispatch of expert | Project office | | | | | | Japanese expert (2 m) | | |
| 3.1.2.2 | Training of Thai counterpart in Japan | Project office | | | | | | CSF vaccine production (2 m) | | |
| 3.1.3 | Setting up GMP system for vaccine production factory | | | | | | | | | |
| 3.1.3.1 | Dispatch of expert | Project office | | | | | | 2 Japanese experts (1 m, 1 m) | | |
| **Training for staff of neighboring country** | | | | | | | | | | |
| 3.1.4 | FMD vaccine production | Division of Veterinary Biologics | | | | | | My-2 | | |
| 3.1.5 | Newcastle Disease vaccine production | Division of Veterinary Biologics or VRI (DVS) | | | | | | L-1, My-2 | | |
| 3.1.6 | Hemorrhagic Septicemia vaccine production | Division of Veterinary Biologics | | | | | | L-2, V-1 | | |
| 3.1.7 | Other vaccines except rabies vaccine production | Division of Veterinary Biologics | | | | | | 2004: brucellosis (My) | | |
| **3.2** | **Improvement of vaccine quality control** | Division of Veterinary Biologics | | | | | | | | |
| 3.2.1 | Assessment of current situation following the OIE and ASEAN guidelines and providing recommendation and technical support to earn standardized accreditation | Division of Veterinary Biologics | | | | | | | | |
| 3.2.1.1 | Dispatch of expert | Project office | | | | | | Japanese expert (1 m) | | |

| No. | Project Activities | Responsible by | JFY | | | | | Activities | | Target (Future Plan) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2002 | 2003 | 2004 | 2005 | 2006 | Input | Output | |
| Output 4 | Improvement of animal quarantine technology | | | | | | | | | |
| **4.1** | **Promotion of technical concepts and practical procedures of animal quarantine** | Division of Disease Control | | | | | | | **1.** The official route across the border for animal movement and system were defined through the seminar and workshop jointly organized by JICA, OIE and FAO.<br>**2.** FMD diagnosis was established at Kanchanaburi Quarantine Station. | **1.** One day seminar on quarantine and animal movement for the officers and animal buyers at the selected border point |
| 4.1.1 | Dispatch of expert | Project office | | | | | | 2 Japanese experts (2 wks, 1 m) | | |
| 4.1.2 | Promotion of technical concepts and practical procedures of animal quarantine | Division of Disease Control and Project office | | | | | | Training course on animal quarantine (C, L, Ma, My, V) | | |
| **4.2** | **Strengthening of disease detection system at selected important border points** | Division of Disease Control | | | | | | | | |
| 4.2.1 | Training of Thai staff in Japan | Project office AQ (Japan) | | | | | | Animal quarantine inspection | | |
| 4.2.2 | Practical training for Thai field staff | Division of Disease Control | | | | | | Workshop on Animal Movement Management (2 wks, C, L, Ma, My, T, V) | | |
| 4.2.3 | Training for staff of Neighboring Country | Division of Disease Control | | | | | | | | |
| Out-scope of the activities specified in PO | | | | | | | | | | |
| Diagnosis | Participating in workshop on CSF | Project office | | | | | | In Vietnam & Philippines | | |
| Diagnosis | Participation of regional seminar on avian influenza in Malaysia | VRI (Ipoh) | | | | | | (2004-1 wk, 2005-2 wks) | | |
| Manage-ment | Training of Thai staff in Japan | Project office | | | | | | Field study (2 staff, 2 wks each) | | |
| Vaccine | Training of Thai staff in Japan | Project office | | | | | | Vaccine production & quality control (2 m) | | |

## Vietnam

| No. | Project Activities | Responsible by | JFY | | | | | Activities | | Target (Future Plan) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2002 | 2003 | 2004 | 2005 | 2006 | Input | Output | |
| **Output 1** | **Strengthening of capacity for regional cooperation system and human as well as other resources for effective animal disease control** | | | | | | | | | |
| **1.1** | **Development of available manpower and institutional resources for regional cooperation** | Department of Animal Health (Vietnam) | | | | | | | 1. Personnel network for cooperation in the region was well established through the training courses, seminars and dispatch of experts.<br>2. Mutual understanding on personnel, technology and organization was deepened through activities, which resulted in close relationship among organizations or staff.<br>3. The system for cooperation was established through NC though the Project experienced difficulties in communication as the NC does not belong to the center which carry out the activities in Vietnam.<br>4. The database for the personnel and organizations was not established (only the lists were available). | 1. The 10th NC and 6th JCC meetings<br>2. Dispatch of Thai and Malaysian experts<br>3.Training courses in Thailand and Malaysia<br>4. The closing seminar of the Project. |
| 1.1.1 | Studying on important and practical topic and subjects | DAH (Vietnam) | | | | | | Participation in NC Meetings, Discussion with experts | | |
| 1.1.2 | Development of the database of training institutions in the region | DAH (Vietnam) | | | | | | Project home page developed (the lists of personnel and organizations uploaded) | | |
| 1.1.3 | Development of the database of available human resources in the region | DAH (Vietnam) | | | | | | | | |
| **1.2** | **Plan and implement country plans under the Project including staff training and equipment** | DAH (Vietnam) | | | | | | | | |
| 1.2.1 | Making PO and APO | Project office | | | | | | **2002**: 1 Thai expert, Participation in NC & JCC Meetings | | |
| **Output 2** | **Improvement of Disease surveillance** | | | | | | | | | |
| **2.1** | **Improvement of diagnostic technology** | | | | | | | | 1. In the training courses in Thailand and Malaysia, and trainees studied diagnostic techniques on many diseases including the ones not listed in PO (see the table "Out-scope of the activities specified in PO" below). The techniques were actually rooted in NCVD under the support of Thai experts, which resulted in the improvement of diagnostic capability of the center.<br>2. For avian diseases differential diagnosis was instructed by a Thai expert in histopathology.<br>3. Cell culture was established by a Thai expert and virus isolation at NCVD became feasible (the staff have experienced cell culture several times during the training courses abroad but never been able to initiate at NCVD).<br>4. A standardized technique for CSF (neutralizing peroxidase-linked assay) was established. | 1. Dispatch of Thai and Malaysian experts<br>2. Serosurveys on TB and trypanosomiasis as In-Country Activities for JFY2006<br>3. Individual training in Thailand and Malaysia |
| **Foot and Mouth Disease** | | | | | | | | | | |
| 2.1.1 | Training of Vietnam counterpart in Thailand | FMD center (Pakchong) | | | | | | Training in Thailand (4 staff, 2 m x 2, 1 m x 2) | | |
| 2.1.2 | Dispatch of expert | Project office/ NIAH (DLD) | | | | | | | | |
| 2.1.3 | Participating in the seminar | DAH (Vietnam) | | | | | | | | |
| 2.1.4 | Training of Vietnam staff by C/P | DAH (Vietnam) | | | | | | Sharing between the section staff | | |
| 2.1.5 | Active surveillance of FMD | DAH (Vietnam) | | | | | | | | |
| **Infectious bursal disease** | | | | | | | | | | |
| 2.1.6 | Training of Vietnam counterpart in Malaysia | Project office/ VRI (Ipoh) | | | | | | Training in Malaysia (1 m) | | |
| 2.1.7 | Dispatch of expert | Project office/ VRI (Ipoh) | | | | | | Thai expert on histopathology | | |
| 2.1.8 | Training of Vietnam staff by C/P | DAH (Vietnam) | | | | | | Sharing between the section staff | | |
| 2.1.9 | Active surveillance of poultry disease | DAH (Vietnam) | | | | | | | | |

| No. | Project Activities | Responsible by | JFY | | | | | Activities | | Target (Future Plan) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2002 | 2003 | 2004 | 2005 | 2006 | Input | Output | |
| **Duck viral hepatitis** | | | | | | | | | | |
| 2.1.10 | Training of Vietnam counterpart in Malaysia | Project office/ NIAH (DLD) | | | | | | Training in Thailand (2 m) | | |
| 2.1.11 | Dispatch of expert | Project office/ VRI (Ipoh) | | | | | | Thai expert on histopathology | | |
| 2.1.12 | Training of Vietnam staff by C/P | DAH (Vietnam) | | | | | | Sharing between the section staff | | |
| 2.1.13 | Active surveillance of poultry disease | DAH (Vietnam) | | | | | | | | |
| **Classical swine fever** | | | | | | | | | | |
| 2.1.14 | Participating in the seminar | Project office | | | | | | Workshop in Philippines & Vietnam | | |
| **Rabies** | | | | | | | | | | |
| 2.1.15 | Training of Vietnam counterpart in Thailand | Project office/ NIAH (DLD) | | | | | | Training in Thailand (1 wk) | | |
| 2.1.16 | Dispatch of expert | Project office/ NIAH (DLD) | | | | | | | | |
| 2.1.17 | Training of Vietnam staff by C/P | DAH(Vietnam) | | | | | | Sharing between the section staff | | |
| 2.1.18 | Utilizing for practical diagnosis of rabies | DAH(Vietnam) | | | | | | | | |
| **2.2** | **Implement of data collection, analysis and distribution of epidemiological information** | | | | | | | | **1.** The staff became very well informed of epidemiology of the diseases in the country. **2.** Data collection and analysis have been carried out through surveillances on CSF and HS (In-Country Activities 2003) and AI, which is expected to establish a solid system to process epidemiological information in NCVD. | **1.** Serosurveys on TB and trypanosomiasis as In-Country Activities for JFY2006 |
| 2.2.1 | Training of Vietnam counterpart in Thailand | Division of Epidemiology (DLD) | | | | | | Veterinary Epidemiology Workshop (1 wk) | | |
| 2.2.2 | Training of Vietnam staff by C/P | DAH (Vietnam) | | | | | | Sharing between the section staff | | |
| 2.2.3 | Planning of the active surveillance | DAH (Vietnam) | | | | | | Planning of In-Country Activity (HS vaccine & CSF) | | |
| 2.2.4 | Using of epidemiological information system | DAH (Vietnam) | | | | | | | | |
| **2.3** | **Development of basic disease information system** | Division of Epidemiology (DLD) | | | | | | | **(Remarks)** **1.** AHPISA cannot be relied on since it's not functioning properly. **2.** OIE introduced a new system called 'ARAHIS' and the Project is going to support it. **3.** The actual application of ARAHIS depends on the forthcoming activities of the Project. | |
| 2.3.1 | Training of Vietnam counterpart in Thailand | Division of Epidemiology (DLD) | | | | | | | | |
| 2.3.2 | Training of Vietnam staff by C/P | DAH (Vietnam) | | | | | | | | |
| 2.3.3 | Making the data base of animal disease | DAH (Vietnam) | | | | | | | | |
| 2.3.4 | Planning to provide the data for animal disease control | DAH (Vietnam) | | | | | | | | |

| No. | Project Activities | Responsible by | JFY | | | | | Activities | | Target (Future Plan) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2002 | 2003 | 2004 | 2005 | 2006 | Input | Output | |
| Output 3 | Improvement of vaccine production and quality control | | | | | | | | | |
| **3.1** | **Improvement of Hemorragic Septicemia vaccine production and quality control** | | | | | | | | **1.** In Vietnam several semi-state companies produce HS and CSF vaccines, which are exported to the neighboring countries.<br>2. Guidelines for vaccines have been made and their qualities controlled by DAH.<br>2. The Project accepted one trainee for quality control training and the field evaluation of HS vaccine was carried out as In-Country Activity 2005 (one domestic vaccine tested). | |
| 3.1.1 | Training of Vietnam counterpart in Thailand | Division of Veterinary Biologics (DLD) | | ■ | | | | Training in Thailand (2 m) | | |
| 3.1.2 | Dispatch of Thai expert | Division of Veterinary Biologics (DLD) | | | | | | | | |
| 3.1.3 | Training of Vietnam staff by C/P | DAH (Vietnam) | | ▒ | ▒ | ▒ | ▒ | Sharing between the section staff | | |
| 3.1.4 | Improvement of procedure of vaccine production | DAH (Vietnam) | | | | | | | | |
| 3.1.5 | Production of improved HS vaccine | DAH (Vietnam) | | | | | | | | |
| **3.2** | **Improvement of classical swine fever vaccine production and quality control** | | | | | | | | | |
| 3.2.1 | Training of Vietnam counterpart in Japan | Project office | | | | | | | | |
| 3.2.2 | Dispatch of expert | Project office | | | | | | | | |
| 3.2.3 | Training of Vietnam staff by C/P | DAH (Vietnam) | | | | | | | | |
| 3.2.4 | Production of experimental vaccine | DAH (Vietnam) | | | | | | | | |
| 3.2.5 | Field test of experimental vaccine | DAH (Vietnam) | | | | | | | | |
| Output 4 | Improvement of animal quarantine technology | | | | | | | | | |
| **4.1** | **Promotion of technical concepts and practical procedures of quarantine** | DAH (Vietnam) | | | | | | | **1.** The official route across the border for animal movement and system were defined through the seminar and workshop jointly organized by JICA, OIE and FAO. | **1.** One day seminar on quarantine and animal movement for the officers and animal buyers at the selected border point |
| 4.1.1 | Dispatch of expert | Project office AQ (Thailand) | | | | | | | | |
| 4.1.2 | Participating in regional seminar and workshop | Disease Control Division and Project office | | | | ■ | | Workshop on animal movement management (2 wks) | | |
| **4.2** | **Strengthening of disease detection system of selected important border points** | DAH (Vietnam) | | | | | | | | |
| 4.2.1 | Training of Vietnam counterpart in Thailand or Japan | Project office AQ (Thailand) | | ■ | | | | Training in Thailand (animal quarantine, 1 wk) | | |
| 4.2.2 | Training of Vietnam staff by C/P | DAH (Vietnam) | | ▒ | ▒ | ▒ | ▒ | Sharing between the section staff | | |
| 4.2.3 | Making a new manual for animal quarantine | DAH (Vietnam) | | | | | | | | |
| 4.2.4 | Practical use of new technology | DAH (Vietnam) | | | | | | | | |

| No. | Project Activities | Responsible by | JFY | | | | | Activities | | Target (Future Plan) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2002 | 2003 | 2004 | 2005 | 2006 | Input | Output | |
| Out-scope of the activities specified in PO | | | | | | | | | | |
| Diagnosis | Dispatch of Japanese expert (AI diagnosis) | Project office NCVD, NIVR | | | | | | (1 wk) | | |
| | Dispatch of Japanese expert (brucellosis) | Project office NCVD | | | | | | (1.5 wk) | | |
| Diagnosis | Training of Vietnamese counterpart in Thailand (pathological diagnosis) | NIAH (DLD) | | | | | | (2 m) | | |
| Diagnosis | Training of Vietnamese counterpart in Thailand (bovine tuberculosis diagnosis) | NIAH (DLD) | | | | | | (1 m) | | |
| Diagnosis | Training of Vietnamese counterpart in Thailand (diagnosis on HS) | NIAH (DLD) | | | | | | (2 staff, 1 m each) | | |
| Diagnosis | Training of Vietnamese counterpart in Thailand (diagnosis on parasitic diseases) | NIAH (DLD) | | | | | | (2 m) | | |
| Diagnosis | Training of Vietnamese counterpart in Thailand (diagnosis of zoonotic diseases) | NIAH (DLD) | | | | | | (1 m, includes TB, anthrax, brucellosis, leptospirosis) | | |
| Diagnosis | Participation of regional seminar on avian influenza in Malaysia | VRI (Ipoh) | | | | | | (2004-1 wk, 2005-2 wks) | | |
| Diagnosis | Dispatch of Thai expert (leptospirosis) | NIAH/NCVD | | | | | | (1 wk) | | |
| Diagnosis | Dispatch of Thai expert (pathology) | NIAH/NCVD | | | | | | (1 wk) | | |
| Diagnosis | Dispatch of Thai expert (immunohisto-chemistry) | NIAH/NCVD | | | | | | (1 wk) | | |
| Diagnosis | Dispatch of Thai expert (brucellosis) | NIAH/NCVD | | | | | | (1 wk) | | |
| Diagnosis | Dispatch of Thai expert (cell culture) | NIAH/NCVD | | | | | | (1 wk) | | |
| Diagnosis | Dispatch of Thai expert (trypanosomiasis) | NIAH/NCVD | | | | | | (1 wk) | | |
| Diagnosis | Field evaluation of HS vaccines | NCVD | | | | | | In-Country Activity for JFY2005 | | |
| Diagnosis | Active surveillance of CSF | NCVD | | | | | | In-Country Activity for JFY2005 | | |