

Appendix 2. Knowledge lesson sheets in the field of infectious disease control

List of knowledge lessons

| #                            | Sub-theme                        | Title  | Knowledge lessons (outline) |   | Page |
|------------------------------|----------------------------------|--|-----------------------------|---|------|
| Infectious disease control 1 | Project implementation structure | Effective project implementation structure   | 1                           | Coordination and partnership with other donors  | 2    |
|                              |                                  |  | 2                           | Partnership with external organizations other than donors   |      |
|                              |                                  |  | 3                           | Partnership with other JICA cooperation schemes   |      |
|                              |                                  |  | 4                           | Measures to improve structures within projects  |      |
| Infectious disease control 2 | Project management               | Project progress management                  | 1                           | Increase in collaborative work time through effective schedule management   | 9    |
|                              |                                  |  | 2                           | Improvement of an inspection system and motivation increase in the recipient country by adding epidemic diseases and diseases requiring international emergency response as training subjects during the project period |      |
| Infectious disease control 3 | Project management               | Communication between stakeholders           | 1                           | Periodical progress monitoring and sharing research results through meetings in the laboratory  | 12   |
|                              |                                  |  | 2                           | Sharing of goals and vision of the project, and stakeholders' roles in the project  |      |
| Infectious disease control 4 | Project management               | Expansion of outputs, the national rollout   | 1                           | Development of national guidelines for a national rollout   | 16   |
|                              |                                  |  | 2                           | The successful national rollout of the external quality assurance system for tuberculosis diagnosis   |      |
| Infectious disease control 5 | Training                         | Quality training                             | 1                           | Appropriate duration, facility, number of lecturers and language of training  | 19   |
|                              |                                  |  | 2                           | Using local instructors and former training participants as lecturers   |      |
|                              |                                  |  | 3                           | Enriching training contents   |      |
|                              |                                  |  | 4                           | Flexible revision of the training plans (target disease, country, program content)  |      |
|                              |                                  |  | 5                           | Review of training  |      |
| Infectious disease control 6 | Capacity development             | Capacity development of project counterparts | 1                           | Measures to promote skill transfer  | 24   |
|                              |                                  |  | 2                           | Involvement of Japanese experts to facilitate effective learning  |      |
|                              |                                  |  | 3                           | Importance of assistance in studying for degrees  |      |
|                              |                                  |  | 4                           | Various measures to supplement cascade training   |      |
| Infectious disease control 7 | Others                           | Others                                       | 1                           | Securing financial resources to make the activity sustainable   | 28   |
|                              |                                  |  | 2                           | Determining equipment specs that meet or nearly meet the needs  |      |

| Knowledge Lessons Sheet      |                                  |  |
|------------------------------|----------------------------------|--|
| Infectious disease control 1 | Project implementation structure | Effective project implementation structure |

|                      |                       |   |                       |                       |   |
|----------------------|-----------------------|---|-----------------------|-----------------------|---|
| Applicable Scheme(s) | T                     | P | G                     | L                     | O |
|                      | <input type="radio"/> |   | <input type="radio"/> | <input type="radio"/> |   |

|                     |                       |                       |                       |       |       |
|---------------------|-----------------------|-----------------------|-----------------------|-------|-------|
| Applicable Stage(s) | Form                  | Plan                  | Exec                  | Compl | After |
|                     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |       |       |

|                      |                            |
|----------------------|----------------------------|
| Applicable Subsector | Infectious disease control |
|----------------------|----------------------------|

| Lessons Learned |  |
|-----------------|--|
|-----------------|--|

|           |   |   |
|-----------|---|---|
| Type(s)   | <input type="radio"/>   | Generic aspects of project management (cross-cutting among themes)          |
|           | <input type="radio"/>   | Specific to characteristics of the sector                                   |
|           |   | Specific to characteristics of the country/region (incl. geographical ones) |
| Key Words | Other donors, partnership, organizational structure, project implementation structure |   |

| Applicable Cases   | Summary/Background of the Issues   |
|--|--|
| <p>An applicable case refers to "Under what circumstances (country, region, politics, system/institution) the measures on the right are effective." As the measures vary, it is impractical to identify common applicable cases.</p> <p>However, the measures tend to highly applicable.</p> | <p>The implementation structure is a basis of project implementation. Generally, a project team consists of personnel from both Japan and the recipient country. The team monitors the project's progress regularly by such means as the Joint Coordinating Committee (JCC). It is possible to make the implementation structure smoother or stronger by taking various measures for improvement. In each of the following four sub-themes, this sheet presents measures contributing to the establishment of an appropriate implementation structure from both the macro and micro perspectives.</p> <ol style="list-style-type: none"> <li>1. Coordination and partnership with other donors</li> <li>2. Partnership with external organizations other than donors</li> <li>3. Partnership with other JICA cooperation schemes</li> <li>4. Measures to improve structures within projects</li> </ol> |

| Risks (Or points to keep in mind)  | Counter Measures  |
|--|---|
| <p>Note: Risks mean “risks, problems, and issues that may arise when measures presented as lessons are not implemented.” Points to keep in mind mean “Points to be careful about when such measures/lessons are applied.”</p> <p>The primary risk that arises when those measures are not taken is that a positive influence or effect expected by applying the measures does not appear. Other risks are as follows.</p> <ol style="list-style-type: none"> <li>1. Coordination and partnership with other donors: If information exchange among donors is insufficient, duplication or imbalance of aid activities in the same country can happen. If the partnership is only limited to the level of information exchange, then high cost-effectiveness is not possible.</li> <li>2. Partnership with external organizations other than donors: Particularly, when operating in the same country, if there is no good coordination among related agencies, a top-down or cross-sectional</li> </ol> | <p><b>1. Coordination and partnership with other donors</b></p> <p>At the time of commencing a new project, other donors may have already planned or implemented projects in the target country or area of a JICA project. In such cases, the following three options are possible:</p> <ol style="list-style-type: none"> <li>1) To reduce financial vulnerability of the JICA project by receiving financial support from other donors;</li> <li>2) To share the knowhow and good practices accumulated in the project with other organizations; and</li> <li>3) To achieve deliberate donor coordination by using the opportunity of international conferences</li> </ol> <p>Here are a few concrete examples. In point 1) above, there are cases of JICA’s grant aid and technical cooperation where assistance for making proposals to obtain public funds and for fund management was provided, and the projects were able to purchase examination reagent and medicine and procure equipment, which were necessary for continuing the projects, by other donors’ assistance. (Reference no.1)</p> <p>In point 2), in a JICA technical cooperation project, the experience of the project was summarized as good practices in a manual and shared with other donors and local NGOs. Then, the donors and local NGOs conducted refresher training to health workers and laboratory technicians in the areas other than JICA’s project site by using the manual produced by the JICA project. (Reference no.2)</p> <p>In point 3), not only JICA but also WHO and other bilateral aid agencies implemented measures against tuberculosis in a country, and donor coordination has been conducted considering the sustainability of the project. Specifically, “to strengthen the capacity of international donor coordination of the implementing agency” was identified as an official project activity and the health ministry of the recipient country conducted donor coordination through the opportunity such as the Country Coordination Mechanism (CCM). CCM functioned as monitoring system, as the progress situation of the project was shared and understood by all the participants in the meetings. It led to the improved efficiency and effect of the</p> |

|  |  |
|--|--|
| <p>chain of command on the same policy issues can be confused, and a project effect may be less likely to appear.</p> <p>Points to keep in mind are as follows.</p> <ol style="list-style-type: none"> <li>1. Coordination and partnership with other donors: Coordination and partnership incur a transaction cost on the basis of time because the number of meetings increases. In addition, for stakeholders in a project, be they either on the Japanese side or the recipient country side, to exercise leadership, they need skills for negotiation and reaching a consensus. The presence of a key person equipped such skills is critical.</li> <li>2. Partnership with external organizations other than donors: Same as point 1 above.</li> <li>3. Partnership with other JICA cooperation schemes: It is important to communicate intensively and closely from the stages of project formulation and planning</li> </ol> | <p>project by preventing the duplication of the cooperation activities by donors. Such well planned donor coordination is more effective than mere information exchange.</p> <p>(Reference no.3)</p> <p><b>2. Partnership with external organizations other than donors</b></p> <p>This is to conduct smooth operation and increase a project's effect by working with external organizations in a flexible manner according to the environment or situation where a project is located.</p> <p>External organizations other than donors include the recipient country's related governmental agencies, local government agencies, and other countries' government agencies. In El Salvador in Central America, there was a successful project in which almost all of those organizations were mobilized. The division of roles in the project are as follows. (Reference No.4)</p> <ul style="list-style-type: none"> <li>- Support of the health minister: Strong commitment by the minister (The minister himself became the project director and conducted organizational reform in support of the project.)</li> <li>- Participation of the education ministry: The Health ministry and the Education ministry disseminated information jointly in the form of awareness-raising materials and through the media.</li> <li>- Participation of local government: The maintenance phase of project activities was strengthened by the participation of several departments.</li> <li>- Wide regional partnership: The experience of the project was shared by multiple countries that face the same problems as El Salvador (information exchange in COMISIA, which is the meeting of health ministers in Central America).</li> <li>- Participation of residents: Measures against Chagas disease were undertaken by establishing a monitoring system in which residents participated.</li> </ul> <p>The standard methods of partnership with external organizations other than donors are presented below with an asterisk (*).</p> |
|--|--|

|  |  |
|--|--|
| <p>in order to maximize the synergy effect among projects. It is recommended to share the Overall Goal and the Project Purpose among different schemes. It would also be effective to make a unified PDM as a program, if possible.</p> <p>4. Measures to improve structures within projects: Modification of the original organization and change in the TOR of a project member may need an additional budget and adjustment cost. Moreover, to unite many stakeholders effectively, it is important to involve a high government official(s) with authority and discretion.</p> | <p>In addition, there is a case where partnership between a tertiary hospital and a primary health care facility was strengthened by the cooperation between a hospital, a project implementing agency, and an NPO. (Reference no.2) Furthermore, it was recognized that if the division of work is necessary with organizations (such as the laboratory of a university) other than the counterpart agency, prior research and confirmation of the situation related to their budget acquisition and other requirements is necessary to avoid the delay of activities of such partner organizations. (Reference no.2)</p> <p><b>3. Partnership with other JICA cooperation schemes</b></p> <p>This is to make partnership with other JICA project schemes as necessary in a flexible and dynamic manner. Lessons identified from a few cases are shown below.</p> <ul style="list-style-type: none"> <li>- Partnership between grant aid and technical cooperation: In Kenya, two technical cooperation projects (Research and Control of Infectious Diseases Project, and the International Parasite Control Project) worked with a grant aid project. For example, the chairperson of the committee that supported the Research and Control of Infectious Diseases Project in Japan participated in the basic design research of a grant aid project. Consequently, equipment necessary to produce an examination kit in the technical cooperation project (Research and Control of Infectious Diseases Project) was included in the basic design of the grant aid project, and specifications of equipment procured in the grant aid project became the most suitable ones for the project members in Kenya. (Reference no.5) In addition, it is important to have the periods of multiple projects overlap sufficiently to maximize the partnership effect.</li> </ul> <p>In Ghana as well, there was a close partnership between a grant aid project and a technical cooperation. The establishment of a bio-safety committee and the formulation of rules and manuals on bio-safety in the technical cooperation project enabled safe and efficient use of the buildings for experiments constructed in the grant aid project. (Reference no.6)</p> |
|--|--|

#### 4. Measures to improve structures within projects

This means modifying the original project structure in a flexible manner.

Here are a few concrete examples. In a SATREPS project, the long-term assignment of a Japanese researcher in the project office, which was not originally planned, made it possible to not only implement international joint research but also build smooth relationships with related agencies as a liaison. (Reference no.7)

There is a case where the recipient government added a project member voluntarily despite a tight budget. (Reference no.8 and 9) Furthermore, there is a case where a Japanese expert designed a laboratory, which was not within his original TOR (Reference no.10), obtained budget necessary for equipment, reagent, and consumables, and became a focal point between the project and the Central Medical Institute. Such undertakings contributed to smooth operation of research. (Reference no.9)

#### \* Methods of partnership with external organizations other than donors

| Major external organizations other than donors                                       | Expected roles in project implementation   | Points to keep in mind or discuss   |
|--|--|---|
| 1. Governmental agencies of the recipient country other than the implementing agency | For example, in a project to tackle Chagas disease, while the implementing agency was the Health ministry, the Education ministry conducted information dissemination through awareness-raising materials and the media because it was very important to make people familiar with the Health ministry's measures. | To maximize a project's effect, it is necessary to select government agencies related to the project, which are likely to support the project. Then, research relations between the implementing agency and such agencies with regard to the relationships between leaders and those between their duties and functions. If it seems possible or effective to gain support from the related agencies, propose a partnership between the implementing agency and such related agencies at the formulation stage of the project. It is also important to contact the related agencies and request cooperation unofficially at an early stage. |
| 2. Local government agencies   | When the scope of a project is broad such as the entire nation, involvement of local government in the approaches of both top-down (to disseminate policies broadly) and bottom-up (to collect information such as the current situation or problems) is very effective.   | First, it is important to confirm the features and the Overall Goal of the project. If the project is confirmed to be like the one on the left, understand the entire administrative system including central and local agencies. More specifically, identify both the tasks conducted in a top-down approach (e.g., formulation of a guideline on the provision of healthcare services and monitoring, and provision of medical supplies) and tasks conducted in a bottom-up approach (e.g., reporting on local health issues and sending requests from village health   |

|   |  |  |
|---|--|--|
|   |  | committees, referral of patients from the lower-tier health facilities to the higher-tier ones, and application to a medical supply center from health facilities on medical supplies).<br>Based on the research above, discuss with the implementing agency proper methods to deliver relevant information and instructions to appropriate local agencies.  |
| 3. Government agencies of other countries | In a project whose scope should be expanded beyond national borders (such as the one on measures against Chagas disease), a neighboring country that will implement a similar project should obtain information from the project for formulating a project of its own. The government agency that is conducting the existing project may be able to provide useful information and lessons to the neighboring country. | Identify the government agency of a country that is close to the country of the project operation, and confirm that its functions and responsibilities are similar to those of the implementing agency of the country of the existing project. Then, if there is no working relationship between the two agencies, JICA can request WHO or PAHO (in the case of the health sector) to mediate between those agencies in order to proceed with wide-area measures against infectious diseases. For that purpose, JICA can contact such international organizations first, then, JICA and such international organizations can be joint mediators. |

### Expected Effects

|    |  |
|----|--|
| 1. | Coordination and partnership with other donors: The deeper the coordination and partnership with other donors become beyond mere information exchange, the bigger the possibility of making a good program approach. In other words, if a JICA project pursues the same Overall Goal with other donors, the possibility of achieving the goal becomes higher. In addition, JICA and its partners can save their resources compared with an individual approach.  |
| 2. | Partnership with external organizations other than donors: Because of an increase in the agencies supporting the project, both the project's coverage by its activities and the number of participants increase; they all contribute to the increase of the project's effects.   |
| 3. | Partnership with other JICA cooperation schemes: A partnership between technical cooperation and grant aid is not necessarily new. However, implementing a small measure for improvement at the stage of project formulation is expected to contribute to the creation of a more significant synergy effect between projects.  |
| 4. | Measures to improve structures within projects: An increase in posts and number of staff as necessary will make project outputs and the Project Purpose more likely to be achieved. In addition, by having both the Japanese and recipient country sides try harder than originally expected, the morale of the stakeholders will be boosted on the basis of strengthened commitment, improved teamwork, and the creation of dynamism in the project activities. |

#### References of originated projects

| No. | Country     | Project Title   | Key Words  |
|-----|-------------|---|--|
| 1   | Afghanistan | G: "The Project for Construction of Hospital for Communicable | Application for funds, funds for purchase, "Global Fund to Fight |

|    |             |  |   |
|----|-------------|--|---|
|    |             | Disease"   | <u>Tuberculosis and Malaria"</u>  |
| 2  | Pakistan    | T: "Tuberculosis Control Project in Pakistan"  | Tertiary hospital, primary health care facility, NPO  |
| 3  | Philippines | T: "Project for Quality Tuberculosis Control Programme"  | Donor coordination, by-country coordination mechanism, common target  |
| 4  | El Salvador | T: "Chagas Disease Control Project Phase 2"  | Health minister, partnership in a wide area, residents' participation   |
| 5  | Kenya       | G: "Project for Improvement of Facilities for Control of Infectious and Parasitic Diseases at Kenya Medical Research Institute"  | Domestic support committee, partnership between technical cooperation and grant aid                                   |
| 6  | Ghana       | G: "Project for Improvement of Noguchi Memorial Institute for Medical Research"  | Bio-safety committee, bio-safety control system   |
| 7  | Laos        | T: "Project for Development of Innovative Research Technique in Genetic Epidemiology of Malaria and Other Parasitic Diseases in Lao PDR for Containment of Their Expanding Endemicity" | Continuous presence of a Japanese expert in the recipient country, international joint study, information sharing     |
| 8  | Brazil      | T: "Project for New Diagnostic Approaches in the Management of Fungal Infections in AIDS and Other Immunocompromised Patients"   | Clinical laboratory technician, increase in staff, budget austerity   |
| 9  | Kenya       | T: "Research and Control of Infectious Diseases Project"   | Full-time coordinator for a project   |
| 10 | Zambia      | T: "Establishment of Rapid Diagnostic Tools for Tuberculosis and Trypanosomiasis and Screening of Candidate Compounds for Trypanosomiasis"   | Japanese researchers, operation and maintenance at low costs, equipment specifications suitable for local researchers |

Note [ **T**: Technical Cooperation, **P**: Technical Cooperation for Development Planning, **G**: Grant Aid, **L**: ODA Loan, **O**: Knowledge Co-Creation Program, Public-Private Partnerships, Volunteers, etc. ]

| Knowledge Lessons Sheet             |                           |                                    |
|-------------------------------------|---------------------------|------------------------------------|
| <b>Infectious disease control 2</b> | <b>Project management</b> | <b>Project progress management</b> |

|                      |                       |                       |                       |                       |   |
|----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---|
| Applicable Scheme(s) | T                     | P                     | G                     | L                     | O |
|                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |   |

|                     |      |      |                       |       |       |
|---------------------|------|------|-----------------------|-------|-------|
| Applicable Stage(s) | Form | Plan | Exec                  | Compl | After |
|                     |      |      | <input type="radio"/> |       |       |

|                      |                            |
|----------------------|----------------------------|
| Applicable Subsector | Infectious disease control |
|----------------------|----------------------------|

| Lessons Learned |  |
|-----------------|--|
|-----------------|--|

|                  |  |   |
|------------------|--|---|
| <b>Type(s)</b>   | <input type="radio"/>                                      | Generic aspects of project management (cross-cutting among themes)          |
|                  | <input type="radio"/>                                      | Specific to characteristics of the sector                                   |
|                  |  | Specific to characteristics of the country/region (incl. geographical ones) |
| <b>Key Words</b> | Schedule management, emergency response, training, changes |   |

| Applicable Cases   | Summary/Background of the Issues   |
|--|--|
| There are no specific applicable conditions, and it can be applied to various projects.  | <p>Effective project progress management is extremely important for smooth operation and achievement of the Project Purpose. In this theme, the following two lessons are taken up as reference for project progress management related to infectious diseases.</p> <ol style="list-style-type: none"> <li>1. Increase in collaborative work time through effective schedule management</li> <li>2. Improvement of an inspection system and motivation increase in the recipient country by adding epidemic diseases and diseases requiring international emergency response as training subjects during the project period</li> </ol> |
| Risks (Or points to keep in mind)  | Counter Measures   |
| Note: Risks mean "risks, problems, and issues that may arise when measures presented as lessons are not implemented." Points to keep in mind mean "points to be careful about when such measures/lessons are applied." | <p><b>1. Increase in collaborative work time through effective schedule management</b></p> <p>In particular, when Japanese researchers and researchers in the recipient countries conduct a collaborative research, it is important for them to have time to work directly on analysis and data interpretation together through detailed progress management. Efficient schedule management is essential to secure such time and</p>   |

|  |   |
|--|---|
| <p>(Risk)</p> <ol style="list-style-type: none"> <li>1. If ad hoc measures are taken without detailed schedule management, omission or delay in work may occur.</li> <li>2. Sticking to the initial training plan, the training may deviate from the actual situation in the recipient country, or lead to low satisfaction.</li> </ol> <p>(Points to keep in mind)</p> <ol style="list-style-type: none"> <li>1. Too close schedule management can increase the burden on both C/P and Japanese experts.</li> <li>2. Flexible revision of the plan is needed, but planning should be focused on what is essential to achieve Outputs and the Project Purpose so that unplanned activities do not increase unnecessarily.</li> </ol> | <p>promote capacity building. In particular,</p> <ol style="list-style-type: none"> <li>1) project coordinators (JICA experts), local project administrative staff, and local project managers as a project management unit, should maintain close contact with related organizations.</li> <li>2) Before Japanese experts' traveling, a brief summary including their visiting schedule, purpose, outputs during their stay should be shared with accepting organizations in advance. To avoid excessively detailed schedule management, the visiting schedule of Japanese researchers should be limited to the date, place, purpose, etc., and not every schedule change should be described.</li> <li>3) Before Japanese researchers' traveling, preparation for joint research with C/P and adjustment of their schedule should be proceeded.</li> </ol> <p>(Reference No. 1)</p> <p><b>2. Improvement of an inspection system and motivation increase in the recipient country by adding epidemic diseases and diseases requiring international emergency response as training subjects during the project period</b></p> <p>By allowing flexibility in the scope of the project according to the changing situation of the recipient country, urgent issues can be responded, leading to higher satisfaction in the recipient country.</p> <p>At the time of project implementation, Hand, Foot and Mouth Disease (HFMD) and measles were sweeping across Vietnam (recipient country) with many deaths. In West Africa, Ebola hemorrhagic fever was epidemic as an international issue. Stakeholders agreed to specify these three infectious diseases as new target pathogens. (Reference No. 2)</p> |
| <b>Expected Effects</b>  |   |
| <ol style="list-style-type: none"> <li>1. Activities are implemented as originally planned to prevent delays. In addition, collaborative work time increases and relationships improve.</li> <li>2. By adding epidemic diseases and diseases requiring international emergency response as the training subject during the project period, it is possible to improve responsiveness to field needs in the recipient country and increase the motivation of C/P.</li> </ol>   |   |

References of originated projects

| No. | Country | Project Title   | Key Words   |
|-----|---------|---|---|
| 1   | Vietnam | T: "Determine the Outbreak Mechanisms and Development of a Surveillance Model for Multi-Drug Resistant Bacteria"                              | Schedule management, schedule adjustment, collaborative work time, relationship of trust  |
| 2   | Vietnam | T: "Project for Capacity Development for Laboratory Network in Vietnam of Biosafety and Examination of Highly Hazardous Infectious Pathogens" | Flexible changes in research objects, diseases requiring international emergency response |

Note [ **T**: Technical Cooperation, **P**: Technical Cooperation for Development Planning, **G**: Grant Aid, **L**: ODA Loan, **O**: Knowledge Co-Creation Program, Public-Private Partnerships, Volunteers, etc. ]

| Knowledge Lessons Sheet             |                           |   |
|-------------------------------------|---------------------------|---|
| <b>Infectious disease control 3</b> | <b>Project management</b> | <b>Communication between stakeholders</b> |

|                      |                       |                       |                       |                       |                       |
|----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Applicable Scheme(s) | T                     | P                     | G                     | L                     | O                     |
|                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

|                     |      |      |                       |       |       |
|---------------------|------|------|-----------------------|-------|-------|
| Applicable Stage(s) | Form | Plan | Exec                  | Compl | After |
|                     |      |      | <input type="radio"/> |       |       |

|                      |                            |
|----------------------|----------------------------|
| Applicable Subsector | Infectious disease control |
|----------------------|----------------------------|

| Lessons Learned  |   |
|--|---|
| <b>Type(s)</b>   | <input type="radio"/> Generic aspects of project management (cross-cutting among themes)  |
|  | <input type="radio"/> Specific to characteristics of the sector   |
|  | <input type="radio"/> Specific to characteristics of the country/region (incl. geographical ones)   |
| <b>Key Words</b>   | Lab meetings, collaborative activities, sharing of research outputs, unified vision   |
| Applicable Cases   | Summary/Background of the Issues  |
| There are no specific applicable conditions, and it can be applied to various projects.  | <p>"Communication between stakeholders" is important to promote the smooth operation including strengthening promotional factors and dealing with obstructive factors, and finally, to realize the project objective. In this theme, the following two sub themes are taken up as lessons for strengthening communication among the project stakeholders related to infectious diseases.</p> <ol style="list-style-type: none"> <li>1. Periodical progress monitoring and sharing research results through meetings in the laboratory</li> <li>2. Sharing of goals and vision of the project, and stakeholders' roles in the project</li> </ol> |
| Risks (Or points to keep in mind)  | Counter Measures  |
| Note: Risks mean "risks, problems, and issues that may arise when measures presented as lessons are not implemented." Points to keep in mind mean "points to be careful about when such measures/lessons are applied." | <p><b>1. Periodical progress monitoring and sharing research results through meetings in the laboratory</b></p> <p>1-1.Strengthen communication among stakeholders by holding regular lab meetings (collaborative research meeting or research/operational management meeting) in research-based projects.</p> <p>In the SATREPS project in Brazil, a lab meeting (collaborative</p>  |

|   |  |
|---|--|
| <p>(Risk)</p> <p>All of the countermeasures on the right stimulate research activities and lead to increased research outputs, but if such measures are not taken, the emergence of research outputs may be limited.</p> <p>(Points to keep in mind)</p> <p>The measures on the right are intended to enhance communication, which ultimately can help promote efficient project implementation, but in the short term, it can lead to increased meeting time and decreased individual free time, so a reasonable sense of balance is necessary. In addition, it should be avoided to make meetings a purpose, and take too much time and energy for preparation and approval of minutes.</p> | <p>research meeting) was held with the initiative from Brazilian side once a week. There were lively discussions at the meetings such as checking the research progress and examination of ideas and directions for new experiments based on the research progress, sharing of critical issues in proceeding with research, and confirmation of future schedule. Regarding daily communication, an open relationship was created based mainly on the strong communication line between experts (Project Coordinator) and C/P. They maintained an open environment where they could discuss everything from daily activities to small talk, and in some cases, they were able to have meetings by phone late at night and early in the morning. (Reference No. 1) To build such lines of communication, it is desirable to start not only with project activities but also using various aspects of daily life to talk to C/P and consult with them when they are in trouble.</p> <p>Such lines of communication are useful in SATREPS as well as Grant Aid projects and ODA loan projects because it can contribute to close communication among Japanese staff and the JICA office in a given country or Japanese consultants who manage the construction on site, so that they can improve the quality of structures.</p> <p>1-2. Improve policies and health systems by timely sharing of research outputs</p> <ul style="list-style-type: none"> <li>• There is a space of improvement in active dissemination of information on research output from the research institute, the implementing agency to Ministry of Health, which would have contributed to prevent that useful research outputs were not necessarily fully used in policy and health system improvement. For the research outputs to be reflected in policies and health system improvements, it is effective for the research institute to hold regular project meetings to share the outputs and appeal it to decision makers such as working-level officials of the Ministry of Health.</li> <li>• Owing to the absence of Japanese experts and KEMRI deputy director, and the short period of dispatch of short-term experts to cover the absence of the chief advisor, there were some cases where communication with C/P was partly difficult, and technology transfer could not be implemented smoothly.</li> </ul> |
|---|--|

Adjusting the dispatch period of experts is a primary measure, but even if it is difficult, holding the regular meeting for sharing of outputs as shown in 1-1. is expected to alleviate the lack of communication.

(Reference No. 3)

## **2. Sharing of goals and vision of the project, and stakeholders' roles in the project**

2-1. In research-based projects, sharing perceptions of research goals through close communication can make great progress in research.

In the first half of the project, it was confirmed that there were problems in project management, communication, and communication coordination (from the mid-term review result), and efforts were made for improving the situation. As a result, all research agents involved in the collaborative research had a unified vision for the project goals. Accordingly, those stakeholders deepened their understanding of the necessity to share research progress and outputs effectively and efficiently with related agents.

More concretely, core member meetings were held regularly on the Japanese side, where they continuously discussed research and operational management of the entire project. On the recipient country side, a project management unit was established at the principal research institute. The unit kept close communication with each research institute and shared the activity records and the schedule of the entire project. These efforts mean they were able to share important information among research groups and research institutes. Consequently, under such good project management system, joint research advanced significantly after mid-term of the project period. (Reference No. 4)

2-2. Implementation of joint activities to strengthen the initiative of C/P

In the beginning of a technical cooperation project in Pakistan, there was a perception of NTP (National Tuberculosis Control Program), the major C/P, that it is a donor (Japanese experts) that would disseminate the effect of the project.

Later on, the project encouraged C/P to actively participate in the project activities and increased the opportunity of communication

|  |   |
|--|---|
|  | <p>such as sharing the roles and results of the project.</p> <p>In particular, the effect of measures using the guideline and manuals was gradually recognized by C/P and, in the latter half of the project, C/P took the lead in information dissemination activities.</p> <p>(Reference No. 2)</p> |
|--|---|

**Expected Effects**

1. Improvement in the efficiency of activities and the quality of deliverables through sharing progress regularly and research results in a timely manner
2. Promotion of joint research by sharing goals of research and increasing participation of C/P with stronger initiative

References of originated projects

| No. | Country  | Project Title  | Key Words  |
|-----|----------|--|--|
| 1   | Brazil   | T: "Project for New Diagnostic Approaches in the Management of Fungal Infections in AIDS and Other Immunocompromised Patients" | Collaborative research meeting, sharing of critical issues, revision of research schedule          |
| 2   | Pakistan | T: "Tuberculosis Control Project in Pakistan"  | Cooperation between tertiary hospitals and primary health care facilities, promotion of manual use |
| 3   | Kenya    | T: "The Research and Control of Infectious Diseases Project"   | Information dissemination of research outputs, meetings for sharing outputs                        |
| 4   | Vietnam  | T: "Determine the Outbreak Mechanisms and Development of a surveillance Model for Multi-Drug Resistant Bacteria"               | Unified vision, Japanese core member meeting, project management unit, collaborative research      |

Note [ **T**: Technical Cooperation, **P**: Technical Cooperation for Development Planning, **G**: Grant Aid, **L**: ODA Loan, **O**: Knowledge Co-Creation Program, Public-Private Partnerships, Volunteers, etc. ]

## Knowledge Lessons Sheet

|                                     |                           |   |
|-------------------------------------|---------------------------|---|
| <b>Infectious disease control 4</b> | <b>Project management</b> | <b>Expansion of outputs, the national rollout</b> |
|-------------------------------------|---------------------------|---|

|                      |                            |                            |                            |                            |                            |
|----------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Applicable Scheme(s) | T<br><input type="radio"/> | P<br><input type="radio"/> | G<br><input type="radio"/> | L<br><input type="radio"/> | O<br><input type="radio"/> |
|----------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|

|                     |                               |                               |                               |                                |                                |
|---------------------|-------------------------------|-------------------------------|-------------------------------|--------------------------------|--------------------------------|
| Applicable Stage(s) | Form<br><input type="radio"/> | Plan<br><input type="radio"/> | Exec<br><input type="radio"/> | Compl<br><input type="radio"/> | After<br><input type="radio"/> |
|---------------------|-------------------------------|-------------------------------|-------------------------------|--------------------------------|--------------------------------|

|                       |                            |
|-----------------------|----------------------------|
| Applicable Subsectors | Infectious disease control |
|-----------------------|----------------------------|

### Lessons Learned

|                  |  |   |
|------------------|--|---|
| <b>Type(s)</b>   | ○  | Generic aspects of project management (cross-cutting among themes)          |
|                  | ○  | Specific to characteristics of the sector                                   |
|                  | ○  | Specific to characteristics of the country/region (incl. geographical ones) |
| <b>Key Words</b> | National guidelines development, verification in pilot regions, positive involvement of public health ministries |   |

| Applicable Cases   | Summary/Background of the Issues  |
|--|---|
| Cases where expanding project outputs to other regions broadly | The knowledge and lessons learned from other projects are useful in disseminating new models and approaches generated as project outputs or applying noteworthy outputs examples to other regions, or rolling them out nationwide. It is particularly important to learn about driving factors for successful nationwide rollout. |

| Risks (Or points to keep in mind)  | Counter Measures  |
|--|---|
| <p>Note: Risks mean "risks, problems, and issues that may arise when measures presented as lessons are not implemented." Points to keep in mind mean "points to be careful about when such measures/lessons are applied."</p> <p>The risk involved is as follows:</p> <p>(For both 1 and 2 in the right) Despite applicability to other regions and existing</p> | <p><b>1. Development of national guidelines for a national rollout</b></p> <p>Since the output of a tuberculosis (TB) control project implemented in the Punjab Province, Pakistan, was highly recognized by the National Tuberculosis Program (NTP), the counterpart agency aimed to roll out an external quality assurance (EQA) system, which was introduced through the JICA project, to enhance technical skills and management capabilities of the reference laboratory. Before starting the nationwide rollout of the EQA system, the project developed the "National Guidelines Concerning Antitubercular Drug Management," which include the standard operational procedures. The project also conducted operational</p> |

|  |  |
|--|--|
| <p>effective outputs, they may be limited in the use of certain specific regions.</p> <p>Points to keep in mind are as follows:</p> <ol style="list-style-type: none"> <li>1. It is important to present the project output to the health ministry throughout the project period. Stakeholders in the pilot province will be key supporters for the nationwide rollout.</li> <li>2. A bottom-up approach of the nationwide rollout is highly likely to help ensure proper adjustment to the health systems. Thus, if possible, cooperation from national authorities should be sought. Although incentives for introducing the knowledge obtained to neighboring countries may be gained, a project output should be redesigned to suit the healthcare systems in each country.</li> </ol> | <p>research to assess the effectiveness of the EQA system before presenting it to the health ministry. These factors facilitated the nationwide rollout. (Reference No. 1)</p> <p><b>2. The successful national rollout of the external quality assurance system for tuberculosis diagnosis</b></p> <p>The EQA system for TB testing, proved successful in enhancing the country's HIV and TB testing skills and management capabilities, was disseminated across the country in a technical cooperation project in Zambia. Factors behind the successful nationwide rollout include the following: improvement in testing skills of the staff working at the Testing Department of the Teaching University Hospital of Zambia; development of easy-to-understand national guidelines; accumulation of actual cases with successful results in the pilot province during the project period; clear goal-setting for accuracy assurance by the National Public Health Strategy to exercise strong initiative of the health ministry toward the nationwide rollout; and the continuous attainment of external funds such as those from the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) and the Centers for Disease Control and Prevention (CDC). (Reference No. 2)</p> |
| <b>Expected Effects</b>  |  |
| <ol style="list-style-type: none"> <li>1. The nationwide rollout of project outputs leads to expanding the outputs to broader areas and creating further impact. This serves as an important step toward the prevention or elimination of infectious diseases.</li> <li>2. The nationwide expansion of new models and approaches generated as the result of the project improves the testing systems of infectious disease control. Moreover, it helps neighboring countries adapt these to address similar issues related to infectious disease control.</li> </ol>   |  |

References of originated projects

| No. | Country  | Project Title                                 | Key Words  |
|-----|----------|---|--|
| 1   | Pakistan | T: "Tuberculosis Control Project in Pakistan" | National guidelines development, verification in the pilot region, operational research                                    |
| 2   | Zambia   | T: "Integrated HIV TB Project (provisional) " | Improved skills of participants, national guidelines development, pilot project, involvement of the public health ministry |

Note [ **T**: Technical Cooperation, **P**: Technical Cooperation for Development Planning, **G**: Grant Aid, **L**: ODA Loan, **O**: Knowledge Co-Creation Program, Public-Private Partnerships, Volunteers, etc. ]

## Knowledge Lessons Sheet

|                                     |                 |                         |
|-------------------------------------|-----------------|-------------------------|
| <b>Infectious disease control 5</b> | <b>Training</b> | <b>Quality training</b> |
|-------------------------------------|-----------------|-------------------------|

|                      |                       |   |   |   |                       |
|----------------------|-----------------------|---|---|---|-----------------------|
| Applicable Scheme(s) | T                     | P | G | L | O                     |
|                      | <input type="radio"/> |   |   |   | <input type="radio"/> |

|                     |                       |                       |                       |                       |       |
|---------------------|-----------------------|-----------------------|-----------------------|-----------------------|-------|
| Applicable Stage(s) | Form                  | Plan                  | Exec                  | Compl                 | After |
|                     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |       |

|                       |                            |
|-----------------------|----------------------------|
| Applicable Subsectors | Infectious disease control |
|-----------------------|----------------------------|

### Lessons Learned

|                  |   |
|------------------|---|
| <b>Type(s)</b>   | <input type="radio"/> Generic aspects of project management (cross-cutting among themes)          |
|                  | <input type="radio"/> Specific to characteristics of the sector                                   |
|                  | <input type="radio"/> Specific to characteristics of the country/region (incl. geographical ones) |
| <b>Key Words</b> | Training, training for thematic Issues, capacity building, plan modification                      |

| Applicable Cases   | Summary/ Background of the Issues  |
|--|--|
| None in particular.  | <p>Training develops human capital and serves as a foundation that drives project outputs upward. Well-designed training content and approaches enhance the learning of participants and make their training experience fulfilling. In this theme, we discuss our lessons learned on the following five sub-themes that may be informative for other training projects concerning infectious diseases.</p> <ol style="list-style-type: none"> <li>1. Appropriate duration, facility, number of lecturers and language of training</li> <li>2. Using local instructors and former training participants as lecturers</li> <li>3. Enriching training contents</li> <li>4. Flexible revision of the training plans (target disease, country, program content)</li> <li>5. Review of training</li> </ol> |
| Risks(Or points to keep in mind)   | Counter Measures   |
| Note: Risks mean "risks, problems, and issues that may arise when measures presented as lessons are not implemented." Points to keep | <p><b>1. Appropriate duration, facility, number of lecturers and language of training</b></p> <p>Training programs, including those conducted overseas and in Japan, need to be designed to fit the skills and attributes of participants.</p>   |

|  |  |
|--|--|
| <p>in mind mean “points to be careful about when such measures/lessons are applied.”</p> <p>Risks:</p> <ol style="list-style-type: none"> <li>1. Appropriate duration, facility, number of lecturers and language of training: It is impossible to provide effective training for participants and raise their understanding to intended levels, if the choice of the training period, facilities, number of lecturers, or languages is inappropriate.</li> <li>2. Using local instructors and former training participants as lecturers: It is not usually required, and not using them carries no risk; however, they will contribute to the implementation of training programs more smoothly and the better understanding by participants.</li> <li>3. Enriching training contents: Participants will find training unfulfilling if the difficulty or scope of the training program is not properly adjusted to fit the job types or understanding levels of participants.</li> <li>4. Flexible revision of the training plans: Inflexible planning may end up making the training unfit to the local</li> </ol> | <ol style="list-style-type: none"> <li>1) To conduct training programs in both English (or French, or Spanish) and the local language based on the job types or skills of participants.</li> <li>2) To set each training duration to be long enough and allocate a sufficient number of lecturers and facilities in order to reach intended learning outcomes of participants.</li> </ol> <p>To be more specific on 1): In a public-private partnership project, in order to introduce hand sanitizers, a private company conducted trainings in both English and the local language, considering that the English skills of participants working at hospitals varied depending on the job type. As the result, the training participants understood the importance of hand hygiene and the use of hand sanitizers at the target hospitals increased after the trainings. It was also reported that the cases of nosocomial infections in pediatrics in a hospital decreased according to the follow-up survey after the public-private partnership project. (Reference No. 1)</p> <p>In the training for the Knowledge Co-Creation Program conducted in Japan, JICA set the sufficient training duration to be six weeks and allocated one PC per participant and a facilitator per group. This helped participants to reach the intended learning level and build good relationships among them. (Reference No. 2)</p> <p><b>2. Using local instructors and former training participants as lecturers</b></p> <p>Using local instructors trained in a project and former participants of the Knowledge Co-Creation Program as training lecturers helps the learning of participants, because such instructors and teachers can have higher empathy with participants, in addition to having better familiarity with local situations. (Reference No. 3)</p> <p>With regard to the training of instructors, efforts to improve the content of training, such as having instructors evaluate each other's presentations, point out problems, and prepare answers to questions that will be asked in the training, were introduced in a survey for the project formulation by the private company.</p> <p>(Reference No. 1)</p> <p><b>3. Enriching training contents</b></p> <p>Depending on the level of participants, advanced lectures on infectious diseases should be provided besides standard lectures. It is also important to ensure that participants will not only acquire</p> |
|--|--|

|  |  |
|--|--|
| <p>needs.</p> <p>5. Review of training: The quality of training will remain unimproved, if no thorough post-training review is conducted.</p> <p>Points to keep in mind</p> <p>1. Appropriate duration, facility, number of lecturers and language of training: It is important to keep in mind that translation from English into a local language might cause some changes in the content. It is also important to manage budget and remember that such translation process tends to require additional costs due to extra input of manpower and materials.</p> <p>None in particular for 2-4.</p> | <p>technical knowledge on infectious diseases and skills for using sophisticated testing instruments, but also learn how to develop plans and practical approaches for controlling infectious diseases, how to maintain testing instruments, and how to establish procurement networks for test reagents in their countries.</p> <p>In JICA's training on tuberculosis (TB) control, JICA involved WHO in the early stage of the training, thereby enabling JICA to deliver advanced lectures by WHO's world-class experts to the training participants. This contributed to enhance the training modules. In the training, JICA also placed an emphasis on the learning of effective methods for improving daily activities, such as how to use the Project Cycle Management method to analyze problems, develop improvement plans, and evaluate measures, beyond the scope of infectious disease control. (Reference No. 3)</p> <p><b>4. Flexible revision of the training plans (target disease, country, program content)</b></p> <p>When we conduct trainings, it is important to make flexible adjustments to training plans based on the changing local needs so that we can produce outstanding outputs of the training. In fact, flexible responses are particularly important in the fight against infectious diseases, because many such outbreaks occur suddenly, as did SARS and COVID-19. Possible measures are shown as below:</p> <p>1) To include diseases in trainings that were prevalent in training target countries or those that might require international emergency response.</p> <p>2) To revise part of original training plans (training country or training content) based on local circumstances.</p> <ul style="list-style-type: none"> <li>● JICA changed a location of blood supply management training from Japan to Bangkok where the technical level of the blood supply service was more comparable to the level of that in Indonesia. The change allowed us not only to make the training more relevant to participants, but also to reduce the costs; in other words, the change resulted in higher effectiveness and efficiency.</li> <li>● JICA replaced a planned medical equipment management training within a JICA project with a program on services provided by equipment suppliers. The change made easier the tasks of training lecturers both in Japan and the</li> </ul> |
|--|--|

|  |  |
|--|--|
|  | <p>counterpart country, and the training content was specialized in the use of procured equipment.</p> <ul style="list-style-type: none"> <li>• A field study and supervisory survey conducted by project management service (PMS) and engineering service (E/S) consultants indicated the necessity of training on civil engineering work management and equipment procurement. In response to that finding, JICA added training programs on these two areas to the training plan after obtaining agreement from the Ministry of Health of the counterpart country. (Reference Nos. 4, 5)</li> </ul> <p><b>5. Review of training</b></p> <p>It is important to evaluate the trainings by conducting post-training questionnaire surveys with participants and review them at the evaluation meeting in order to improve the quality of upcoming trainings conducted locally and the Knowledge Co-Creation Program in Japan. In JICA’s trainings for TB control, JICA held an evaluation meeting upon the completion of each training program. This repeated process of applying the review results enabled continual improvement of the trainings every year. It is also useful to use Google Forms, a questionnaire tool available on the JICA-VAN (Virtual Academy Network) and slido,<sup>1</sup> to collect feedback on the training from participants. (Reference No. 3)</p> |
|--|--|

**Expected Effects**

1. Appropriate duration, facility, number of lecturers and language of training  
Appropriately chosen training duration, facilities, and number of lecturers and languages will help the learning by participants.
2. Using local instructors and former training participants as lecturers  
Using local instructors and former training participants as lecturers will enhance the understanding level of participants and the quality of training. Moreover, it will enhance the skills of instructors and lecturers themselves, serving as an opportunity of capacity building for relevant sectors.
3. Enriching training contents  
Depending on the level of participants, inclusion of advanced lectures beyond standard ones in a part of the trainings will enrich the training contents and help meet the needs of participants.
4. Flexible revision of the training plans (target disease, country, program content)  
Flexibly changing training plans to add a prevalent disease in target countries or a disease that might

<sup>1</sup>It is a tool for collecting opinions from participants in a ballot style and analyzing those opinions.

require international emergency response to training programs, and changing venues for training and contents will lead to the early establishment of a testing and treatment setting in the countries. In addition, training participants will be highly motivated for the training.

#### 5. Review of training

Examining approaches taken for training programs and the post-training understanding levels of participants will help to reflect those learnings to upcoming trainings and improve the quality of trainings.

#### References of originated projects

| No. | Country   | Project Title   | Key Words  |
|-----|-----------|---|--|
| 1   | Uganda    | O: "Preparatory Survey on BoP Business on Infectious Disease Prevention with New Alcohol Hand Sanitizer in Uganda"                            | Training, language, lecturer, instructor, TOT  |
| 2   | Japan     | O: "Strengthening Laboratory Techniques and Surveillance System for Global Control of HIV and Related Infectious Diseases"                    | Indicators, target values, training duration, facility   |
| 3   | Japan     | O: "International Training Courses on Tuberculosis Control"   | Training content, lecture, review, evaluation meeting  |
| 4   | Vietnam   | T: "Project for Capacity Development for Laboratory Network in Vietnam of Biosafety and Examination of Highly Hazardous Infectious Pathogens" | Plan modification/revision, training, needs, flexible changes to research subjects, diseases requiring international emergency response          |
| 5   | Indonesia | L: "Project for Strengthening District Health in Sulawesi"  | Training planning in consideration of local circumstances, flexible revision of training content, flexible revision of training venue/locations. |

Note [ **T**: Technical Cooperation, **P**: Technical Cooperation for Development Planning, **G**: Grant Aid, **L**: ODA Loan, **O**: Knowledge Co-Creation Program, Public-Private Partnerships, Volunteers, etc. ]

| Knowledge Lessons Sheet      |                      |  |  |  |  |
|------------------------------|----------------------|--|--|--|--|
| Infectious disease control 6 | Capacity development |  | Capacity development of project counterparts |  |  |

|                      |                       |   |   |                       |                       |
|----------------------|-----------------------|---|---|-----------------------|-----------------------|
| Applicable Scheme(s) | T                     | P | G | L                     | O                     |
|                      | <input type="radio"/> |   |   | <input type="radio"/> | <input type="radio"/> |

|                     |                       |                       |                       |       |       |
|---------------------|-----------------------|-----------------------|-----------------------|-------|-------|
| Applicable Stage(s) | Form                  | Plan                  | Exec                  | Compl | After |
|                     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |       |       |

|                       |                            |
|-----------------------|----------------------------|
| Applicable Subsectors | Infectious disease control |
|-----------------------|----------------------------|

| Lessons Learned |  |
|-----------------|--|
|-----------------|--|

|                  |  |   |
|------------------|--|---|
| <b>Type(s)</b>   | <input type="radio"/>  | Generic aspects of project management (cross-cutting among themes)          |
|                  | <input type="radio"/>  | Specific to characteristics of the sector                                   |
|                  | <input type="radio"/>  | Specific to characteristics of the country/region (incl. geographical ones) |
| <b>Key Words</b> | Capacity building, human resource development, technology transfer, skill acquisition, knowledge sharing |   |

| Applicable Cases | Summary/Background of the Issues |
|------------------|----------------------------------|
|------------------|----------------------------------|

|   |  |
|---|--|
| For those projects including the capacity development of counterparts, such as administrative agencies, healthcare professionals, laboratory technicians, and researchers | The process of developing individual, organizational, and social capabilities to identify and solve issues involved in infectious disease control and set goals and attain them is relevant to various project schemes, including technical cooperation projects. Capacity development is an important element of the JICA projects aimed at helping developing countries improve their fight against infectious diseases. |
|---|--|

| Risks (Or points to keep in mind) | Counter Measures |
|-----------------------------------|------------------|
|-----------------------------------|------------------|

|  |  |
|--|--|
| Note: Risks mean "risks, problems, and issues that may arise when measures presented as lessons are not implemented." Points to keep in mind mean "points to be careful about when such measures/lessons are applied." | <p><b>1. Measures to promote skill transfer</b></p> <p>Establishing the environment where laboratory technicians who were working as project counterparts (and seeking to earn academic degrees) can easily access laboratory equipment facilitated their acquisition of necessary skills and helped improve their technical capabilities. (Reference No. 1)</p> <p><b>2. Involvement of Japanese experts to facilitate effective learning</b></p> <p>The project's Japanese experts gradually decreased their</p> |
|--|--|

|   |  |
|---|--|
| <p>The risk involved is as follows:</p> <ol style="list-style-type: none"> <li>1. Measures to promote skill transfer: a delay in skill acquisition by laboratory technicians leaves the testing capabilities unimproved, resulting in the unavailability of accurate testing/diagnoses and causing a critical issue of the infectious disease control.</li> <li>2. Involvement of Japanese experts to facilitate effective learning: a delay in skill acquisition and capacity building by counterparts will obstruct their self-reliant activity and may also threaten the technical sustainability of the project.</li> <li>3. Importance of assistance in studying for degrees: if researchers lose their motivation, their technical skills will not improve, and the intended research results may not be obtained.</li> <li>4. Various measures to supplement cascade training: if the quality of training worsens toward the lower cascade stages, the project may end up not producing its intended output.</li> </ol> <p>Points to keep in mind are as follows:</p> <ol style="list-style-type: none"> <li>1. Measures to promote skill</li> </ol> | <p>involvement in manufacturing testing kits, adjusting on the progress of skill acquisition by local counterparts. This helped develop the counterparts' capabilities to produce the kits on their own. (Reference No. 2)</p> <p><b>3. Importance of assistance in studying for degrees</b></p> <p>During the project period, the counterpart researchers were permitted to pursue a master's or doctoral degree, and they could relate their research work to academic activities to earn a degree. Researchers at the Kenya Medical Research Institute earned scholarships from JICA and the Ministry of Education, Culture, Sports, Science and Technology of Japan, and a university to which one of the experts belongs served as the host organization, supporting their research activities. Project stakeholders also built favorable relationships and networks between medical institutions, blood transfusion centers in Kenya, and university laboratories in Japan, thereby maintaining an environment promoting their research activities. (Reference No. 2)</p> <p><b>4. Various measures to supplement cascade training</b></p> <p>Project members made supplementary efforts for the cascade training method to ensure the skill development of officers in charge of tuberculosis (TB) control and laboratory technicians at all the cascade stages. For example, they developed Standard Operating Procedures (SOPs) and training materials, provided equipment, and improved the work environment for officers in charge of TB control. According to stakeholders, their cascade training turned out to be very effective in improving the skills of officers and laboratory technicians, and a problem occasionally observed in training conducted with a cascade method (i.e., training quality degradation toward lower cascade stages) was minimal. (Reference No. 3)</p> |
|---|--|

transfer: it is important to understand knowledge and skills the project counterparts wish to acquire and to try to build trusting relationship with them.

2. Involvement of Japanese experts to facilitate effective learning: The levels of skills acquired by counterparts need to be observed and monitored routinely.

3. Importance of assistance in studying for degrees: Japanese experts should consider providing their project counterparts with information about scholarships for studying in Japan, and should provide support for project counterparts to win such scholarships by, for instance, creating letters of recommendation.

4. Various measures to supplement cascade training: It is important to accurately measure and evaluate training effects and post-training skills at each cascade stage.

### Expected Effects

1. Enhancing the capabilities of project counterparts heightens the effect of the project and promotes the achievement of the project purpose.

2. Achieving skill acquisition by project counterparts decreases their reliance on Japanese experts and improve technical sustainability.

3. Improving and properly evaluating the capabilities of the counterparts and supporting their academic degree acquisition raises their motivation to work.

4. Making supplementary efforts for a cascade training method minimizes the possible risk of gradual quality degradation and improves the accuracy of technology transfer.

References of originated projects

| No. | Country   | Project Title  | Key Words  |
|-----|-----------|--|--|
| 1   | Zambia    | T: "Establishment of Rapid Diagnostic Tools for Tuberculosis and Trypanosomiasis and Screening of Candidate Compounds for Trypanosomiasis" | Laboratory technicians, laboratory, skill acquisition, trustful relationship                           |
| 2   | Kenya     | T: "The Research and Control of Infectious Diseases Project"   | Skill acquisition, technical self-reliance and sustainability, support for academic degree acquisition |
| 3   | Indonesia | T: "Tuberculosis Control Project"  | Knowledge sharing, annual report meeting   |

Note [ **T**: Technical Cooperation, **P**: Technical Cooperation for Development Planning, **G**: Grant Aid, **L**: ODA Loan, **O**: Knowledge Co-Creation Program, Public-Private Partnerships, Volunteers, etc. ]

| Knowledge Lessons Sheet             |               |               |
|-------------------------------------|---------------|---------------|
| <b>Infectious disease control 7</b> | <b>Others</b> | <b>Others</b> |

|                      |                       |                       |                       |                       |                       |
|----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Applicable Scheme(s) | T                     | P                     | G                     | L                     | O                     |
|                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

|                     |                       |                       |                       |                       |                       |
|---------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Applicable Stage(s) | Form                  | Plan                  | Exec                  | Compl                 | After                 |
|                     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

|                       |                            |
|-----------------------|----------------------------|
| Applicable Subsectors | Infectious disease control |
|-----------------------|----------------------------|

| Lessons Learned   |  |
|---|--|
| <b>Type(s)</b>  | <input type="radio"/> Generic aspects of project management (cross-cutting among themes)   |
|   | <input type="radio"/> Specific to characteristics of the sector  |
|   | <input type="radio"/> Specific to characteristics of the country/region (incl. geographical ones)  |
| <b>Key Words</b>  | Sustainability, needs, financial resources   |
| Applicable Cases  | Summary/Background of the Issues   |
| None in particular  | <p>The following two lessons learned are shown which are not mentioned under the other categories but may be informative for other projects concerning infectious diseases.</p> <ol style="list-style-type: none"> <li>1. Securing financial resources to make the activity sustainable</li> <li>2. Determining equipment specs that meet or nearly meet the needs</li> </ol>  |
| Risks (Or points to keep in mind)   | Counter Measures   |
| <p>Note: Risks mean "risks, problems, and issues that may arise when measures presented as lessons are not implemented." Points to keep in mind mean "points to be careful about when such measures/lessons are applied."</p> <p>Risks:</p> <ol style="list-style-type: none"> <li>1. Securing financial resources to make the activity sustainable: There is a risk</li> </ol> | <ol style="list-style-type: none"> <li><b>1. Securing financial resources to make the activity sustainable</b> <p>It is necessary to secure post-project financial resources by the time the project is completed, in order to have sustainable testing and treatment settings of infectious diseases.</p> <p>For instance, one of the projects discussed herein secured budget allocation for some years by involving not only WHO and donors but also Japanese companies, and forming a joint research scheme between the private companies and the implementing agencies/organizations. (Reference No. 1)</p> </li> </ol> |

|  |   |
|--|---|
| <p>that project outputs will not last long if no financial resources are available for the post-project activities.</p> <p>2. Determining equipment specs that meet or nearly meet the needs: There is a risk that equipment will not be used effectively and continuously, if it does not meet the medium- to long-term needs.</p> <p>Points to keep in mind: None in particular.</p> | <p><b>2. Determining equipment specs that meet or nearly meet the needs</b></p> <p>It is important to consider consistency with the policies and meet the medium- to long-term needs in the selection of equipment.</p> <p>The ODA loan project discussed herein was planned for and conducted in China for enhancing the post-SARS (Severe acute respiratory syndrome) testing standards. When selecting equipment to be introduced, this project reflected the country's policies in real time so that the project met the medium- to long-term needs. In the process of making a procurement list, the project members had meetings with operators assigned to the tasks concerned at the target institutions in order to capture their needs. As the result, equipment spec that meet or nearly meet the needs was selected (Reference No. 2)</p> |
|--|---|

**Expected Effects**

1. Securing financial resources to make the activity sustainable  
Making financial resources available for testing and treatment of infectious diseases will encourage the sustainable capacity building and transfer of skills.
  
2. Determining equipment specs that meet or nearly meet the needs  
From a medium- to long-term perspective, the needs for equipment will be satisfied. As the result, this will lead to the effective use of resources and increase the cost performance of the project.

References of originated projects

| No. | Country | Project Title  | Key Words                           |
|-----|---------|--|-------------------------------------|
| 1   | Laos    | T: "The Project for Development of Innovative Research Technique in Genetic Epidemiology of Malaria and Other Parasitic Diseases in Lao PDR for Containment of Their Expanding Endemicity" | Financial resources, sustainability |
| 2   | China   | L: "Public Health Project (Jilin Province)"  | Procurement, equipment, needs       |

Note [ **T**: Technical Cooperation, **P**: Technical Cooperation for Development Planning, **G**: Grant Aid, **L**: ODA Loan, **O**: Knowledge Co-Creation Program, Public-Private Partnerships, Volunteers, etc. ]