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

\leq Infectious Diseases Control : List of knowledge lessons>

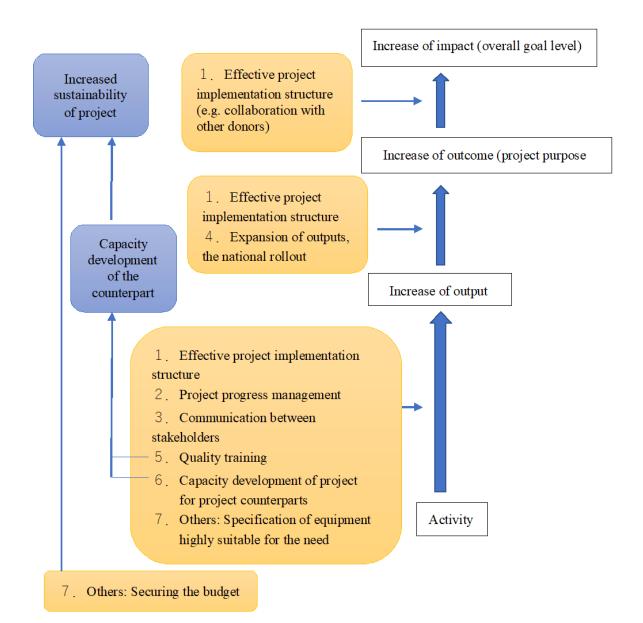


Figure. Illustrative drawing to show how knowledge lessons lead to generating impacts

Knowledge Lessons Sheet								
Infectious disease control 1		nplem	oject				implementation ture	
Applicable Scheme(s) Applicable Stage(s)	T O Form O	P Plan O	G O Exec O	L O Compl	O After			
Applicable Subs	ector		Infec	tious dis	sease con	trol		
Type(s) Key Words	Lessons Learned O Generic aspects of project management (cross-cutting among themes) O Specific to characteristics of the sector Specific to characteristics of the country/region (incl. geographical ones) Other donors, partnership, organizational structure, project implementation structure							
Applicabl	e Case	s		:	Summar	y/Background of	the Issues	
"Under what circ (country, region system/institution measures on the effective." As the vary, it is impract identify common cases. However, the me	applicable case refers to nder what circumstances untry, region, politics, tem/institution) the asures on the right are ective." As the measures y, it is impractical to ntify common applicable es.The impleme Generally, a p and the recip regularly by s smoother or s In each of th measures cor implementati perspectives.wever, the measures tend highly applicable.1. Coordinat 3. Partnersh					am consists of perso try. The team monit ns as the Joint Coord make the implemen	tation structure easures for improvement. this sheet presents at of an appropriate acro and micro er donors s other than donors n schemes	

Risks (Or points to keep in mind)

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."

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.

- 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 costeffectiveness is not possible.
- 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 topdown or cross-sectional

Counter Measures

1. Coordination and partnership with other donors

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:

- To reduce financial vulnerability of the JICA project by receiving financial support from other donors;
- 2) To share the knowhow and good practices accumulated in the project with other organizations; and
- To achieve deliberate donor coordination by using the opportunity of international conferences

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)

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)

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 chain of command on the same policy issues can be confused, and a project effect may be less likely to appear.

Points to keep in mind are as follows.

- 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.
- Partnership with external organizations other than donors: Same as point 1 above.
- Partnership with other JICA cooperation schemes: It is important to communicate intensively and closely from the stages of project formulation and planning

the meetings. It led to the improved efficiency and effect of the project by preventing the duplication of the cooperation activities by donors. Such well planned donor coordination is more effective than mere information exchange.

(Reference no.3)

2. Partnership with external organizations other than donors

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.

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)

- 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.)
- 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.
- Participation of local government: The maintenance phase of project activities was strengthened by the participation of several departments.
- 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).
- Participation of residents: Measures against Chagas disease were undertaken by establishing a monitoring system in which residents participated.

The standard methods of partnership with external organizations other than donors are presented below with an asterisk (*).

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.

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. 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)

3. Partnership with other JICA cooperation schemes

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.

 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.

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)

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)

Major external organizations other than donors	Expected roles in project implementation	Points to keep in mind or discuss
 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

* Methods of partnership with external organizations other than donors

			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). Based on the research above, discuss with the implementing agency proper methods to deliver relevant information and instructions to appropriate local agencies.
3. Governmer agencies of o 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.
		Exported Eff	ocho

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	Application for funds, funds for

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

Knowledge Lessons Sheet							
Infectious disease control 2	ma	Project management				oject progress management	
Applicable Scheme(s)	T O	P O	G O	L	0		
Applicable Stage(s)	Form	Plan	Exec C O	ompl	After		
Applicable Subse	ector		Infectiou	us dise	ase cont	rol	
				Lessoi	ns Learr	ed	
Type(s)	O Spe	O Specific to characteristics of the			of the sec	nent (cross-cutting among themes) tor intry/region (incl. geographical ones)	
Key Words	Schedul	e man	agement,	emerg	jency res	ponse, training, changes	
Applicable CasesThere are no specificapplicable conditions, and itcan be applied to variousprojects.		smooth of theme, the project p 1. Increa mana 2. Impr in the disea	projec operation he follo rogres ease in agement oveme e recip uses recip	t progres on and a owing tw s manag collabora nt nt of an ient cour quiring ir ring the	/Background of the Issues as management is extremely important for chievement of the Project Purpose. In this to lessons are taken up as reference for ement related to infectious diseases. Ative work time through effective schedule inspection system and motivation increase atry by adding epidemic diseases and aternational emergency response as training project period		
Risks (Or points to keep in mind)			Counter Measures				
Note: Risks mean "risks, problems,			1. Increase in collaborative work time through effective schedule management				
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."		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					

(Risk)

1. If ad hoc measures are taken without detailed schedule management, omission or delay in work may occur.

2. Sticking to the initial training plan, the training may deviate from the actual situation in the recipient country, or lead to low satisfaction.

(Points to keep in mind)

1. Too close schedule management can increase the burden on both C/P and Japanese experts.

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. promote capacity building. In particular,

- 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.
- 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.
- Before Japanese researchers' traveling, preparation for joint research with C/P and adjustment of their schedule should be proceeded. (Reference No. 1)

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

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.

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)

Expected Effects

1. Activities are implemented as originally planned to prevent delays. In addition, collaborative work time increases and relationships improve.

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.

References of originated projects

No.	Country	Project Title	Key Words
1	Vietnam	T: "Determine the Outbreak Scl	chedule management, schedule
		Mechanisms and Development of a adj	djustment, collaborative work
		Surveillance Model for Multi-Drug tim	me, relationship of trust
		Resistant Bacteria"	
2	Vietnam	T: "Project for Capacity Fle	exible changes in research
		Development for Laboratory ob	ojects, diseases requiring
		Network in Vietnam of Biosafety int	ternational emergency response
		and Examination of Highly	
		Hazardous Infectious Pathogens"	

Knowledge Lessons Sheet								
Infectious disease control 3	n	Pro nanag	ject ement	t	Comm	unication between stakeholders		
Applicable	Т	Р	G	L	0	1		
Scheme(s)	0	0	0	0				
Applicable	Form	Plan	Exec	Compl	After			
Stage(s)			0					
Applicable Subsector				tious dis	ease con	rol		

			Lessons Learned					
	0	Generic aspects of project management (cross-cutting among themes)						
Type(s)	0	Specific t	Specific to characteristics of the sector					
		Specific t	to characteristics of the country/region (incl. geographical ones)					
Key Words	Lab	meetings,	, collaborative activities, sharing of research outputs, unified vision					
Applicabl	e Ca	ses	Summary/Background of the Issues					
	 "Communication between stakeholders" is important to promote the smooth operation including strengthening promotional factor and dealing with obstructive factors, and finally, to realize the project objective. In this theme, the following two sub themes taken up as lessons for strengthening communication among the project stakeholders related to infectious diseases. Periodical progress monitoring and sharing research results through meetings in the laboratory 		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.1. Periodical progress monitoring and sharing research results					
Risks (Or po in mi		to keep	Counter Measures					
Note: Risks mean		problems.	1. Periodical progress monitoring and sharing research					
and issues that ma			results through meetings in the laboratory					
measures presente			1-1.Strengthen communication among stakeholders by holding					
not implemented."	mplemented." Points to keep regular lab meetings (collaborative research meeting or							
in mind mean "points to be careful			research/operational management meeting) in research-based					
about when such			projects.					
measures/lessons	are ap	plied."						

(Risk)

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.

(Points to keep in mind)

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.

In the SATREPS project in Brazil, a lab meeting (collaborative 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. 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.

1-2. Improve policies and health systems by timely sharing of research outputs

 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.

 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. 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

(Reference No. 2) Expected Effects			
	activities.		
	the project, C/P took the lead in information dissemination		
	manuals was gradually recognized by C/P and, in the latter half of		
	In particular, the effect of measures using the guideline and		
	such as sharing the roles and results of the project.		
	project activities and increased the opportunity of communication		

- 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	Collaborative research meeting,
		Approaches in the Management of	sharing of critical issues, revision
		Fungal Infections in AIDS and	of research schedule
		Other Immunocompromised	
		Patients"	
2	Pakistan	T: "Tuberculosis Control Project in	Cooperation between tertiary
		Pakistan"	hospitals and primary health care
			facilities, promotion of manual use
3	Kenya	T: "The Research and Control of	Information dissemination of
		Infectious Diseases Project"	research outputs, meetings for
			sharing outputs
4	Vietnam	T: "Determine the Outbreak	Unified vision, Japanese core
		Mechanisms and Development of	member meeting, project
		a surveillance Model for Multi-	management unit, collaborative
		Drug Resistant Bacteria"	research

			Know	vleda	eless	ons Sheet			
Infectious disease control 4	Infectious disease manage		ject	ct Expansion of outputs, the r		on of outputs, the national rollout			
Applicable	Т	Р	G	L	0				
Scheme(s)	0			0	0				
Applicable Stage(s)	Form O	Plan O	Exec O	Compl O	After				
Applicable Subs	ectors		Infec	tious dis	sease cor	trol			
					ons Lear				
	0	Generi	c aspect			gement (cross-cutting among themes)			
Type(s)	0	Specifi	c to cha	racterist	ics of the	sector			
		Specifi	c to cha	to characteristics of the country/region (incl. geographical ones)					
Key Words		nal guid blic hea		-	nent, veri	fication in pilot regions, positive involvement			
Applicab	le Case	es	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 poi in mi		keep				Counter Measures			
Note: Risks mean and issues that ma	°risks, pi		1. Development of national guidelines for a national rollout						
 measures presented as lessons are not implemented." Points to keep in mind mean "points to be careful about when such measures/lessons are applied." The risk involved is as follows: (For both 1 and 2 in the right) Despite applicability to 			in the Natior aimed which techni labora syster	Punjab nal Tube l to roll o was int ical skills ntory. Be n, the p	Province rculosis F out an ex roduced s and ma fore start roject de	uberculosis (TB) control project implemented , Pakistan, was highly recognized by the Program (NTP), the counterpart agency ternal quality assurance (EQA) system, through the JICA project, to enhance nagement capabilities of the reference cing the nationwide rollout of the EQA veloped the "National Guidelines Concerning anagement," which include the standard			
right) Despite a other regions ar			2	anagement," which include the standard anagement," which include the standard and a standard					

effective outputs, they may be limited in the use of certain specific regions.

Points to keep in mind are as follows:

 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.

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. 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)

2. The successful national rollout of the external quality assurance system for tuberculosis diagnosis

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)

Expected Effects

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.

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.

References of originated projects

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

		ĸ	nowle	dae L	essons Sheet				
Infectious disease control 5	Training				cy training				
Applicable Scheme(s)	T O	Р	G	L	0 O				
Applicable Stage(s)	Form O	Plan O	Exec O	Compl O	After				
Applicable Subs	ectors		Infectiou	us disease	e control				
			L	essons	Learned				
Type(s) Key Words	0 0 Trainin								
			Summary/Background of the Issues						
Applicable Cases None in particular.			 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. 1. Appropriate duration, facility, number of lecturers and language of training 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 						
-	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			 Appropriate duration, facility, number of lecturers and language of training Training programs, including those conducted overseas and in Japan, need to be designed to fit the skills and attributes of participants. 						

in mind mean "points to be careful about when such

measures/lessons are applied."

Risks:

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.

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.

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.

4. Flexible revision of the training plans: Inflexible planning may end up making the training unfit to the local

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.

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.

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)

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)

2. Using local instructors and former training participants as lecturers

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)

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.

(Reference No. 1)

3. Enriching training contents

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

needs.

5. Review of training: The quality of training will remain unimproved, if no thorough post-training review is conducted.

Points to keep in mind

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.

None in particular for 2-4.

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.

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)

4. Flexible revision of the training plans (target disease, country, program content)

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:

1) To include diseases in trainings that were prevalent in training target countries or those that might require international emergency response.

2) To revise part of original training plans (training country or training content) based on local circumstances.

- 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.
- 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

counterpart country, and the training content was specialized in the use of procured equipment. 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) 5. Review of training It is important to evaluate the trainings by conducting posttraining 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,¹, to collect feedback on the training from participants. (Reference No. 3)

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

¹It 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.

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

References of originated projects

	de T O	Сара				ons Sheet			
					-	acity development of project counterparts			
		Р	G	L	0 0				
	orm O	Plan O	Exec O	Compl	After				
Applicable Subsect	tors		Infec	tious di	sease con	trol			
				Less	ons Lear	ned			
Type(s)	Type(s) O Specifie Specifie Specifie Key Words Capacity build				 aspects of project management (cross-cutting among themes) to characteristics of the sector to characteristics of the country/region (incl. geographical ones) ling, human resource development, technology transfer, skill nowledge 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 point in mind		eep	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."			Establ were acade facilita their t 2. I learn	lishing t working mic deg ated the echnica nvolve ing	the environ as projec grees) can eir acquisit al capabilit ment of .	mote skill transfer ment where laboratory technicians who t counterparts (and seeking to earn easily access laboratory equipment tion of necessary skills and helped improve ies. (Reference No. 1) Japanese experts to facilitate effective experts gradually decreased their			

The risk involved is as follows:

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.

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.

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.

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.

Points to keep in mind are as follows:

1. Measures to promote skill

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)

3. Importance of assistance in studying for degrees

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)

4. Various measures to supplement cascade training

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)

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.

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

References of originated projects

		K	nowle	dge Le	essons	Sheet	
InfectiousdiseaseOthcontrol 7		Oth			Others		
Applicable Scheme(s)	T O	P O	G O	L	0 0		
Applicable Stage(s)	Form O	Plan O	Exec O	Compl O	After O		
Applicable Subs	sectors		Infectiou	is disease	e control		
Type(s) Key Words	O O Sustain	Specific t	co charact	ent (cross-cutting among themes) or htry/region (incl. geographical ones)			
Applicab None in particu	-	Summary/Background of the Issues 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. 1. Securing financial resources to make the activity sustainable 2. Determining equipment specs that meet or nearly meet the needs					
Risks(Or po in m		keep	Counter Measures				
Note: Risks mean and issues that ma measures present not implemented.' in mind mean "po about when such measures/lessons Risks: 1. Securing fina to make sustainable: Th	hen	sust It is no time the and treat For ins allocation also Japa between	ainable ecessary project is ment set tance, or for some anese co the	to secure s complet tings of ir ne of the e years by mpanies, private	resources to make the activity e post-project financial resources by the ted, in order to have sustainable testing infectious diseases. projects discussed herein secured budget y involving not only WHO and donors but and forming a joint research scheme companies and the implementing eference No. 1)		

that project outputs will not	2. Determining equipment specs that meet or nearly meet						
last long if no financial	the needs						
resources are available for the	It is important to consider consistency with the policies and meet						
post-project activities.	the medium- to long-term needs in the selection of equipment.						
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. Points to keep in mind: None in particular.	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)						
	From a start Effecta						

Expected Effects

 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	Financial resources, sustainability
		Innovative Research Technique in	
		Genetic Epidemiology of Malaria	
		and Other Parasitic Diseases in Lao	
		PDR for Containment of Their	
		Expanding Endemicity"	
2	China	L: "Public Health Project (Jilin	Procurement, equipment, needs
		Province)"	