

Country Name	Project on Capacity Development of Animal Health Laboratory
Republic of Indonesia	

I. Project Outline

Background	<p>The Government of Indonesia has made efforts for animal disease control for a long time as a vital challenge for development of and improvement of productivity of the livestock industry. It was necessary to quickly respond to and to promptly distribute information on incidence of animal diseases. Although 8 Disease Investigation Centers (DICs) were established in the country for animal disease control, the linkage among the different types of laboratories at regional and provincial levels was weak partly due to the decentralization, which brought about insufficient establishment of the animal disease control system under DICs nationwide. Under those situations, JICA implemented a grant aid project, “The Project for Improvement of Animal Health Laboratories for Diagnosis of Avian Influenza and Other Major Diseases of Animals” (2009), aiming at newly constructing DIC in Subang and partially refurbishing existing DIC in Medan and Lampung. However, many of the staff members assigned to DIC Subang had limited practical experiences and insufficient skills on animal diseases diagnosis.</p>														
Objectives of the Project	<p>Through technical transfer on diagnostic techniques to staff of DIC Subang, planning, implementation and feedback on diagnosis services by staff of DIC Subang, and implementation of awareness activities and technical supports to livestock relatives, the project aimed at improving quality and quantity of the animal diseases diagnosis service at DIC Subang, thereby contributing to strengthening of measures for animal disease control in West Java province (Jurisdictional area of DIC Subang).</p> <ol style="list-style-type: none"> Overall Goal: Measures for animal disease control in West Java province (Jurisdictional area of DIC Subang) are strengthened. Project Purpose: The quality and quantity of animal diseases diagnosis service at DIC Subang are improved. 														
Activities of the Project	<ol style="list-style-type: none"> Project Site: DIC Subang Main Activities: 1) Technical transfer on diagnostic techniques to staff of DIC Subang, 2) Planning, implementation and feedback on diagnosis services by staffs of DIC Subang, 3) Implementation of awareness activities and technical supports by staff of DIC Subang to persons involved in livestock industry such as field vets and farmers, etc. Inputs (to carry out above activities) <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Japanese Side</td> <td style="width: 50%;">Indonesia Side</td> </tr> <tr> <td>1. Experts: 20 persons</td> <td>1. Staff Allocated: 64 persons</td> </tr> <tr> <td>2. Trainees Received: 16 persons</td> <td>2. Land and facilities: a project office in DIC Subang</td> </tr> <tr> <td>3. The Third Country Training: 1 person (Malaysia) and 2 persons (Thailand)</td> <td>3. Local expense: utility cost, field survey cost, maintenance cost for vehicle, etc.</td> </tr> <tr> <td>4. Equipment: vehicle, microscope with CCD (Charge Coupled Device) camera and monitor, refrigerated micro centrifuge, etc.</td> <td></td> </tr> <tr> <td>5. Local expense: cost for local staff, project activities</td> <td></td> </tr> </table> 			Japanese Side	Indonesia Side	1. Experts: 20 persons	1. Staff Allocated: 64 persons	2. Trainees Received: 16 persons	2. Land and facilities: a project office in DIC Subang	3. The Third Country Training: 1 person (Malaysia) and 2 persons (Thailand)	3. Local expense: utility cost, field survey cost, maintenance cost for vehicle, etc.	4. Equipment: vehicle, microscope with CCD (Charge Coupled Device) camera and monitor, refrigerated micro centrifuge, etc.		5. Local expense: cost for local staff, project activities	
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Project Period	July 2011 – July 2015	Project Cost	(ex-ante) 250 million yen, (actual) 221 million yen												
Implementing Agency	Directorate of Animal Health (DAH), Directorate General of Livestock and Animal Health Services (DGLAHS), the Ministry of Agriculture (MOA) Disease Investigation Center Subang (DIC Subang)														
Cooperation Agency in Japan	Ministry of Agriculture, Forestry and Fisheries (MAFF)														

II. Result of the Evaluation

<Special Perspectives Considered in the Ex-Post Evaluation>

- The project set “Number of sub-district where the animal disease control is monitored by DIC Subang amounts to all sub-district required in West Java province by the year of 2018.” as one of the indicators to verify the achievement status of the Overall Goal “Measures for animal disease control in West Java province (Jurisdictional area of DIC Subang) are strengthened.” However, according to DIC Subang, the implementing agency, because of the reasons such as the low number of animals raised, monitoring all sub-districts is not necessary. Thus, this ex-post evaluation will make a judgement on effectiveness/impact of the project, putting more weights on the Project Purpose and the continuous status of the project effects.

1 Relevance

<Consistency with the Development Policy of Indonesia at the Time of Ex-Ante Evaluation and Project Completion>

The project was consistent with Indonesia’s development policy of “The Livestock Industry Development Mid-term Plan” (2010-2014) (2015-2019) focusing on establishment of novel system for animal health program as one of the prioritized areas at the time of ex-ante evaluation and at the time of project completion.

<Consistency with the Development Needs of Indonesia at the Time of Ex-Ante Evaluation and Project Completion >

The project was consistent with Indonesia’s development needs of fostering staff members with practical experiences and sufficient skills on animal diseases diagnosis at DIC Subang.

<Consistency with Japan’s ODA Policy at the Time of Ex-Ante Evaluation>

The project was consistent with “The Country Assistance Program for Indonesia” (2004) highlighting “democratic and equitable social development” as one of the three prioritized areas, including poverty reduction such as the improvement of public services on health care.

<Evaluation Result>

In light of the above, the relevance of the project is high.

2 Effectiveness/Impact

<Status of Achievement of the Project Purpose at the time of Project Completion>

The Project Purpose was achieved by the time of project completion. In 2014, the number of animal disease diagnosis performed at DIC Subang was 61,566, and 32 kinds of animal diseases were tested (Indicator 1). 7 chiefs of laboratories acquired a capacity to provide proper final diagnosis; as a result, the time needed to give the results back to clients was shortened to the standard duration (Indicator 2). Active Surveillance was conducted in 2012 and 2014, targeting bovine brucellosis and abortion in cattle in consideration of the characteristics of the jurisdiction areas of DIC Subang and was shared with the stakeholders through opportunities such as meetings and workshops every year (Indicator 3). According to the clients’ satisfaction survey conducted in 2014, the ratio of respondents who answered “satisfied” or “almost satisfied” towards the animal diseases diagnosis services at DIC Subang reached more than 90%, exceeding the target of 80% (Indicator 4).

<Continuation Status of Project Effects at the time of Ex-post Evaluation>

The project effects have been continued since the project completion. Although the number of animal disease diagnosis performed at DIC Subang had fluctuated since the project completion, the figures had been constantly over the target of 35,000. Also, the kind of the diagnosis reduced in comparison with the one at the time of project completion but continuously exceeded the target value of 16 kinds. The feedback time after the diagnosis differs according to types of diagnosis, having at least 2 days and at most 45 days. Yet, it has been within the time determined by the Standard Operation Procedure (SOP), ISO17025 and ISO9001 prepared or obtained through the project. Since the project completion, Active Surveillance have been carried out every year, exceeding the target of more than 2 times in a year. The client satisfaction survey toward the animal diseases diagnosis services at DIC Subang is conducted twice per a year, and the results always show the high level of satisfaction.

Even after the project, the staff members of DIC Subang have continued to perform technical support activities to laboratory workers, field vets and farmers through information exchange and awareness raising activities on animal health improvement due to its usefulness. Additionally, DIC Subang has undertaken preventive maintenance of testing instruments, equipment and facilities based on a manual prepared by the project.

<Status of Achievement for Overall Goal at the time of Ex-post Evaluation>

The Overall Goal has been partially achieved by the time of ex-post evaluation. Type-B/C laboratories have performed tests of animal diseases diagnoses 44 times and 14 times every year, respectively. Although the number of the tests performed has not reached the target value set by the project, it does the times determined by the laboratories. Also, according to DIC Subang, PUSKESWAN has also continued to conduct tests of animal diseases diagnosis. The number of sub-districts where the animal disease control has been monitored by DIC Subang has not reached the target figure set by the project even at once after the project. The reasons are because, although West Java has 626 sub-districts in total, some of them have lower necessity to be monitored in the first place due to the low number of animals raised and the non-occurrence of animal disease.

<Other Impacts at the time of Ex-post Evaluation>

No other positive or negative impacts were observed at the time of ex-post evaluation.

<Evaluation Result>

Therefore, as the project effects are considered to have been continued in that the monitoring for animal disease control has continued to be implemented (as indicated in the results of the indicator 3 of the Project Purpose and of the indicator 2 of the Overall Goal), the effectiveness/impact of the project is high.

Achievement of Project Purpose and Overall Goal

Aim	Indicators	Results															
(Project Purpose) The quality and quantity of animal diseases diagnosis service at DIC Subang are improved.	1. The number and the kind of animal disease diagnosis at DIC Subang becomes more than 35,000 samples in a year and 16 kinds at the end of the Project.	<p>Status of the Achievement: Achieved (Continued) (Project Completion)</p> <ul style="list-style-type: none"> The number of animal disease diagnosis performed at DIC Subang in 2014 was 61,566, and 32 kinds of animal diseases were tested. <p>(Ex-post Evaluation)</p> <ul style="list-style-type: none"> The number of animal disease diagnosis: although it had fluctuated between around 60,000 and 70,000 because some of the budget of DIC Subang were transferred to other programs or activities, the figures had been over the target. The kind of animal disease diagnosis: it has fluctuated for the last four years because some of the budget of DIC Subang were transferred to other programs or activities, but it has continuously exceeded the target over the period. <p>[Implementation Status of animal disease diagnosis at DIC Subang]</p> <table border="1"> <thead> <tr> <th>Item / Year</th> <th>2015</th> <th>2016</th> <th>2017</th> <th>2018</th> </tr> </thead> <tbody> <tr> <td>No. of animal disease diagnosis</td> <td>60,365</td> <td>72,501</td> <td>60,311</td> <td>61,521</td> </tr> <tr> <td>No. of kind of animal disease diagnosis</td> <td>17</td> <td>20</td> <td>22</td> <td>21</td> </tr> </tbody> </table>	Item / Year	2015	2016	2017	2018	No. of animal disease diagnosis	60,365	72,501	60,311	61,521	No. of kind of animal disease diagnosis	17	20	22	21
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2. The feedbacks of diagnosis (Passive Surveillance) to the customers are returned promptly in prescribed days set by the		<p>Status of the Achievement: Achieved (Continued) (Project Completion)</p> <ul style="list-style-type: none"> 7 chiefs of laboratories acquired the capacity to provide proper final 															

	Project.	<p>diagnosis; as a result, the time needed to give the results back to clients was shortened to standard duration (for example, bacteriological culture testing and histopathological diagnosis: approximately two weeks, other tests such as serological diagnosis and parasite examination: two days).</p> <p>(Ex-post Evaluation)</p> <ul style="list-style-type: none"> The feedback time differs according to types of diagnosis, having at least 2 days and at most 45 days. Yet, it has been within the time set by SOP, ISO17025 and ISO9001 prepared or obtained through the project. 																																						
	3. The DIC Subang staff is ready to conduct Active Surveillance (Planning, Implementing, Monitoring, and Feedback the results to next survey) on animal health considering with livestock/poultry industry promotion in the pilot sites more than 2 times/site in a year.	<p>Status of the Achievement: Achieved (Continued) (Project Completion)</p> <ul style="list-style-type: none"> Active Surveillance was conducted in 2012 and 2014, targeting bovine brucellosis and abortion in cattle in consideration of the characteristics of the jurisdiction areas of DIC Subang. It was shared with the stakeholders through the opportunities such as meetings and workshops every year. (2012:8 times, 2013: 22 times, 2014: 17 times) <p>(Ex-post Evaluation)</p> <ul style="list-style-type: none"> Active Surveillance has been conducted every year as indicated in the following table. The reason why the number has fluctuated throughout the period is because some of the budget of DIC Subang were transferred to other programs or activities. The figures have continued to be over the target. <p>[No. of Active Surveillance undertaken by DIC Subang]</p> <table border="1" data-bbox="774 757 1528 824"> <thead> <tr> <th></th> <th>2015</th> <th>2016</th> <th>2017</th> <th>2018</th> </tr> </thead> <tbody> <tr> <td></td> <td>125</td> <td>176</td> <td>165</td> <td>99</td> </tr> </tbody> </table>		2015	2016	2017	2018		125	176	165	99																												
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	4. Eighty percent (80%) of inquired customers (stakeholders such as DINAS staff, Field vets, and Farmers) recognize improvement of diagnosis services of DIC Subang by the end of the Project.	<p>Status of the Achievement: Achieved (Continued) (Project Completion)</p> <ul style="list-style-type: none"> According to a client satisfaction survey, the ratio of respondents who answered “satisfied” or “almost satisfied” towards animal diagnosis services at DIC Subang increased from 87.4% in 2011 to 94.8% in 2014. <p>(Ex-post Evaluation)</p> <ul style="list-style-type: none"> The client satisfaction survey is conducted twice per a year, and the result always show the high level of satisfaction towards animal diagnosis services at DIC Subang. 																																						
<p>(Overall Goal) Measures for animal disease control in West Java province (Jurisdictional area of DIC Subang) are strengthened.</p>	<p>1. The number of tests performed for animal disease diagnoses at the DIC Subang, type-B/C laboratories and PUSKESWAN in the jurisdiction area of the Center increases 10% by the year of 2018 in comparison with that in 2015.</p> <p>2. Number of sub-district where the animal disease control is monitored by DIC Subang amounts to all sub-district required in West Java province by the year of 2018.</p>	<p>(Ex-post Evaluation) Partially achieved</p> <ul style="list-style-type: none"> Type-B/C laboratory: they have performed the tests for determined number of times they set. PUSKESWAN: PUSKESWAN has continued to conduct tests for animal disease diagnosis, but the data was not available. <p>[No. of tests for animal disease diagnoses performed by type-B/C laboratories]</p> <table border="1" data-bbox="774 1310 1528 1451"> <thead> <tr> <th>Facility / Year</th> <th>2015</th> <th>2016</th> <th>2017</th> <th>2018</th> <th>2019</th> </tr> </thead> <tbody> <tr> <td>Type-B laboratory</td> <td>44</td> <td>44</td> <td>44</td> <td>44</td> <td>44</td> </tr> <tr> <td>Type-C laboratory</td> <td>14</td> <td>14</td> <td>14</td> <td>14</td> <td>14</td> </tr> </tbody> </table> <p>(Ex-post Evaluation) not achieved</p> <ul style="list-style-type: none"> The number of sub-districts where the animal disease control is monitored by DIC Subang had fluctuated because DIC Subang has arranged the number of the sub-districts to be monitored by considering the number of animals raised and the occurrence status of animal disease. <p>[No. of sub-districts where the animal disease control is monitored by DIC Subang]</p> <table border="1" data-bbox="774 1641 1528 1883"> <thead> <tr> <th>Item / Year</th> <th>2015</th> <th>2016</th> <th>2017</th> <th>2018</th> </tr> </thead> <tbody> <tr> <td>Total no. of sub-districts in West Java province</td> <td>626</td> <td>626</td> <td>626</td> <td>626</td> </tr> <tr> <td>No. of sub-districts where the animal disease control is monitored by DIC Subang</td> <td>236</td> <td>358</td> <td>245</td> <td>215</td> </tr> <tr> <td>Rate of sub-districts where the animal disease control is monitored by DIC Subang (%)</td> <td>37</td> <td>57</td> <td>39</td> <td>35</td> </tr> </tbody> </table>	Facility / Year	2015	2016	2017	2018	2019	Type-B laboratory	44	44	44	44	44	Type-C laboratory	14	14	14	14	14	Item / Year	2015	2016	2017	2018	Total no. of sub-districts in West Java province	626	626	626	626	No. of sub-districts where the animal disease control is monitored by DIC Subang	236	358	245	215	Rate of sub-districts where the animal disease control is monitored by DIC Subang (%)	37	57	39	35
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Source : Terminal Evaluation Report, Annual Report of DIC Subang, Interview and questionnaire with DIC Subang

3 Efficiency

The project cost and period were within the plan (ratio against the plan: 88% and 100%, respectively). The outputs were produced as planned. Therefore, the efficiency of the project is high.

4 Sustainability

<Policy Aspect>

“The Livestock Industry Development Mid-term Plan” (2015-2019) raises the establishment of novel system for animal health program as one of the prioritized areas and the “Strategic Plan 2015-2019 of the Directorate General of Livestock and Animal Health Ministry of

Agriculture, Ministry of Agriculture Regulation No.44 Year 2007 on Good Veterinary Laboratory Practice” (2015-2019) sets the improvement of the accountability and quality of public services in livestock and animal health as one of the missions. As the project aimed at improving the quality and quantity of animal diseases diagnosis service at DIC Subang, it has been backed up by the national policies.

<Institutional Aspect>

There have not been any changes in the organizational setting for operating the animal diseases diagnosis service targeted by the project. DIC Subang consists of 8 laboratories, and they take their respective responsibilities such as collection of test results to issue a certificate, implementation of virus identification, and so on. 32 staff members in total have been assigned to DIC Subang, and according to DIC Subang, the number of the staff members has been sufficient, in that they have been able to fulfill the responsibilities without any major problems.

<Technical Aspect>

The staff members of DIC Subang have sustained the necessary knowledge and skills for operating the animal disease diagnosis service targeted by the project. DIC Subang has an internal training system to transfer the related knowledge and techniques among the members.

All of standards for animal diseases diagnosis (ISO9001, ISO17025, and SOP) prepared or obtained through the project have continued to be utilized even after the project completion. This is because these standards have contributed to the improvement of the quality and quantity of the animal diseases diagnosis service at DIC Subang.

<Financial Aspect>

The budget for the animal disease diagnosis service targeted by the project has been allocated from Ministry of Agriculture since the project completion. In addition, the one for preventive maintenance of testing instruments, equipment and facilities has been secured even though the budget allocation decreased after 2017 due to the inception of a new program. According to DIC Subang, the budgets have been sufficient as there have not been any major problems in their activities given so far. The budget will continue to be secured.

Budget of DIC Subang

(Unit: Thousand Rupiah)

Item	2015 (Actual)	2016 (Actual)	2017 (Actual)	2018 (Actual)	2019 (Plan)
Animal diseases diagnosis service	10,866,430	10,957,345	11,457,555	5,594,791	5,751,470
Preventive maintenance	243,000	200,000	270,000	90,200	170,000

<Evaluation Result>

Therefore, the sustainability of the effects through the project is high.

5 Summary of the Evaluation

The project achieved the Project Purpose aiming at improving the quality and quantity of animal diseases diagnosis service at DIC Subang and partially achieved the Overall Goal aiming at strengthening measures for animal disease control in West Java province.

Considering all of the above points, this project is evaluated to be highly satisfactory.

III. Recommendations & Lessons Learned

Lessons Learned for JICA:

- This project was useful and beneficial to the Government of Indonesia. One of the reasons was because DIC Subang, an implementing agency, has already had a capacity in undertaking animal disease diagnosis at a certain level. With this background, the project aimed to further strengthen their capacity. Strengthening a capacity of an implementing agency could be one of the keys to achieve the project goal. Therefore, it is recommended that JICA do comprehensive mapping to grab the capacity of an implementing agency at the appraisal/survey stage, which leads to securing the sustainability of the project.



Animal Disease Diagnosis 1 at DIC Subang



Animal Disease Diagnosis 2 at DIC Subang