

Evaluation Summary

1. Outline of the Project		
Country: The Republic of Indonesia		Project Title: The Project to Enhance Surveillance System for Avian Influenza
Issue/Sector: Healthcare and medical treatment		Cooperation Scheme: Technical Cooperation Project
Division in charge: Health Division 2, Health Group 3, Human Development Department		Total Cost: 197million JPY
Period of Cooperation	(R/D): 20/Oct/2008-19/Oct/2011	Partner Country’s Implementing Organization: immunization and Quarantine, the Ministry of Health, South Sulawesi Provincial Health Office and District Health Offices
		Supporting Organization in Japan: National Center for Global Health and Medicine, National Institute of Infectious Diseases
		Other Related Projects: N/A
1-1 Background of the Project <p>Since the first human case of Avian Influenza H5N1 (AI) was detected in July 2005 in the Republic of Indonesia (hereinafter referred to as “Indonesia”), one-hundred and seventy-seven (177) AI human cases has been reported continuously and resulting in 146cases of the world’s highest number of human fatalities as of May 13, 2011¹. The situation raises deep concern about emerging novel influenza virus attributed to the mutation of AI virus in the process of spread of AI human infection, and pandemic not only in Indonesia but also all over the world. Thus, it is required for not only Indonesia but also international society to minimize the social influence of novel influenza through the early detection and rapid response.</p> <p>Especially in the South Sulawesi Province, greater emphasis was placed upon the reinforcement of surveillance system due to the following reasons:</p> <ol style="list-style-type: none"><i>Less international assistances to the South Sulawesi Province, which is classified as hi-risk Province in comparison with others by the Government of Indonesia due to high densities of poultry and population,</i><i>Less reported suspected AI human cases in comparison with high number of avian cases, which implies insufficient surveillance capability for the detection of AI human cases, and</i><i>South Sulawesi Province has been a key junction as a gateway to eastern Indonesia.</i> <p>For these reasons, the Government of Indonesia submitted an application for technical cooperation to the Government of Japan with regard to the strengthening of surveillance system for AI human cases at South Sulawesi as a target area of a project.</p> <p>Based on the request of technical assistance by the government of Indonesia to the Japanese government, Japan International Cooperation Agency (JICA) launched the technical cooperation project entitled “the Project to enhance surveillance system for Avian Influenza” (hereinafter referred to as ‘the Project’) with the Project Purpose of strengthening of the surveillance of AI human cases through the comprehensive surveillance system of local priority communicable diseases in South Sulawesi Province. At the time of the Mid-term review survey, it was confirmed that certain results were about to be generated in quality AI surveillance system thanks to strong commitment from both Indonesian and Japanese sides.</p>		
1-2 Project Overview <p>(1) <u>Super Goal</u> Surveillance system of priority communicable diseases is strengthened in Indonesia.</p> <p>(2) <u>Overall Goal</u></p>		

¹ Cumulative Number of Confirmed Human Cases of Avian Influenza A/(H5N1) Reported to WHO

Surveillance of AI human cases is strengthened, through the comprehensive surveillance system of local priority communicable diseases, in other provinces in Indonesia.

(3) Project Purpose

Surveillance of AI human cases is strengthened, through the comprehensive surveillance system of local priority communicable diseases, in South Sulawesi Province.

(4) Outputs

- 1) Detection, reporting and recording of suspected AI human cases are strengthened, through the comprehensive surveillance system, at each level from public and private health facilities to MOH.
- 2) Early reporting system of suspected AI human cases, as well as local priority communicable diseases, is developed in the community in some health centers.
- 3) Capacity of outbreak investigation of provincial and district rapid response teams is enhanced.
- 4) Sampling and shipment of specimens from suspected AI human cases and their close contacts and management of their test results are streamlined.
- 5) Collaboration of surveillance and response among the central level, the province and districts is enhanced.

(5) Input (as of the evaluation)

Japanese Side

Dispatch of Experts: 56.22 M/M

Provided Equipment: PC with modem system for EWARS, Server for SMS Gateway

Local Cost: Approx. Rp. 5, 890,000,000

Training in Japan: 22 personnel

Indonesian Side

Counterparts: 22 personnel

Land and Facilities: Project office spaces in the Ministry of health (MOH) and the South Sulawesi Provincial Health Office (PHO)

Operational Cost: Preparation of Training and Seminar, etc.

2. Terminal Evaluation Team

Members	Leader	Dr. Mitsuhiro USHIO	Executive Technical Advisor to the Director General, Human Development Department, JICA
	Dr. Kaname KANAI	Epidemiology	Director-General, Department of International Cooperation, National Center for Global Health and Medicine (NCGM)
	Dr. Chiaki MIYOSHI	Surveillance	Director, 2nd Expert Service Division, Department of International Cooperation, NCGM
	Mr. Seiji KATO	Cooperation Planning	Advisor, Health Division 3, Health Group 2, Human Development Department, JICA
	Evaluation and Analysis	Dr. Yoichi INOUE	Consulting Division, Japan Development Service Co., Ltd.
Period of Evaluation	May 17, 2011 – July 1, 2011		Study Type: Terminal Evaluation

3. Summary of Evaluation Results

3-1 Achievements

(1) Output 1

The Objectively Verifiable Indicators (OVIs) for Output 1 are generally achieved at the time of the Terminal Evaluation.

Based on these findings from the base line survey, the Technical Protocol was prepared and methods for detecting, reporting, recording, assessing surveillance conditions and reporting surveillance data were standardized. The Technical Protocol has been put into operation via the District Surveillance Officers (DSO) training, etc. and it was officially recognized as a provincial governor's decree in May 2010. The Technical Protocol has been made more practical through conducting revisions based on actual application and the results of table-top exercise. Since improvement of test results following training has been confirmed and operations according to the Technical Protocol are taking root, it can be confirmed that the knowledge and skill of surveillance human resources have been enhanced. Regarding detection, reporting, recording and feedback of information too, human resources have been developed via the trainings and hardware systems utilizing SMS gateways and the Internet have been bolstered.

(2) Output 2

It is anticipated that the OVIs for Output 2 will be achieved in general by the end of the project period.

In the trainings for the Rapid Response Team (RRT), DSO, Early Warning Alerting and Response System (EWARS) and Health Centers, the trainees learned how to raise public awareness in cases where suspected AI human infection occurs in the community. Moreover, the Technical Protocol specifies the roles of community health volunteers (Kader) regarding surveillance. In the Community-based Surveillance (CBS) training, guidance was carried out on early reporting of infectious outbreaks using the training module based on the Technical Protocol. Based on good cooperative relations with the PHO and health centers, since community health volunteers are starting to give reports on AI and other important infections (including zero reporting) in accordance with a module for Kader, a great contribution to the surveillance system can be anticipated in the future.

(3) Output 3

It is anticipated that Output 3 will be achieved in general by the end of the project period, though an OVI hasn't been fulfilled.

The Technical Protocol was prepared and RRT activities were standardized based on the findings of the baseline survey. Also, RRT training using the training module prepared based on the Technical Protocol was implemented, and the improvement in the knowledge and skills of human resources in charge of rapid response to AI and other infectious outbreaks can be explained through the improvement between pre-training and post-training test results and the fact that rapid response has been appropriately implemented according to the Technical Protocol.

Concerning the periodic sharing of information with the livestock sector and the health promotion sector, so far there has not been sufficient preparation of documents, and this point is likely to be stressed in the RRT refresher training scheduled for the second quarter in fiscal 2011. However, there is strong awareness that joint response by health centers and the livestock sector regarding AI is needed, and information sharing is routinely conducted on the central level, province level, district level and lower.

(4) Output 4

Considering the target scope (target group) and term of the Project, it is difficult to achieve this Output 4 during the project period, however, it may be said that the environment for enhancing sampling, shipment of samples and management of test results has been established.

Based on the baseline survey results, the method for sampling, shipment of samples and test results management was standardized in the Technical Protocol. Using the training module that was prepared based on the Technical Protocol, training including practical sampling, shipment of

samples and control of test results was implemented for the personnel who actually handle samples. In the table-top training too, procedures have been reconfirmed. When a suspected AI human case was reported on September 2010, samples were obtained by the RRT, demonstrating that RRT sampling was possible.

Since improper handling of samples was occasionally found as of the Final Evaluation, it is hard to say that this Output has been fully realized. The officers responsible for actually handling samples are laboratory technicians, so there is a limit to how far this issue can be tackled in terms of the project scale including the target group. However, the BBLK is applying the checklist on handling of samples that was prepared by the Project, and it has promised cooperation in future training, etc. Since the Technical Protocol has standardized the handling of samples and a system has been constructed for monitoring appropriateness in the sampling and its shipment, a certain degree of improvement can be anticipated from now on.

(5) Output 5

It is anticipated that the OVIs for Output 5 will be achieved in general by the end of the project period.

The baseline survey revealed problems in collaboration between the central level, South Sulawesi Province and the districts, and the Technical Protocol standardized the method of collaboration between each level regarding surveillance, epidemiological response, information transmission and supervision and guidance, etc. In the RRT training, DSO training and table-top exercises too, guidance is conducted on the strengthening of collaboration according to the Technical Protocol. Moreover, introduction of EWARS and SMS gateway has made it possible to synchronously share information; in particular, concerning outbreaks that need to be responded to jointly, significant improvement has been seen in the timing of collaboration between the district and provincial RRT.

(6) Project Purpose

Although the numerical targets have not been attained under OVIs for reporting timeliness and feedback, sure improvement has been continued and, considering that appropriate outbreak investigation is implemented, surveillance of suspected AI human cases including important local infections has been strengthened and the project targets have generally been achieved.

However, in line with the introduction of EWARS and SMS Gateway following the Mid-term Review, major improvement occurred in the timeliness of weekly reporting and immediate sharing of information, and if the present monitoring, supervision and guidance are maintained, it is anticipated that these OVIs can be comfortably achieved. Moreover, at the time of the suspected AI human infection and poultry AI outbreak during the project period, information was communicated pertinently within the health sector and with the livestock and other sectors, and rapid response by the RRTs was appropriately implemented according to the Technical Protocol.

3-2 Summary of Evaluation Results

(1) Relevance

The MOH emphasize on the importance of AI control in the National Long-term Health Development Plan 2005-2025 and its concrete measures of the Health Sector Strategic Plan 2010-2014. Since it is confirmed that the priority of surveillance system reinforcement for local priority communicable diseases including AI is being maintained at the time of the Final Evaluation, the Project Purpose aiming to strengthen the surveillance for local priority communicable diseases via AI surveillance is highly consistent with Indonesian health policies at this time. Moreover, improvement of actual operation of surveillance based on the National AI Guidelines through the development and installation of “Technical Protocol”, consequent capacity building to health personnel in charge of surveillance, and reinforcement of disease surveillance are consistent with the respective needs of the MOH, PHO and DHOs.

The importance of preparedness and international collaboration against emerging and reemerging infectious diseases is clearly cited in “the Japan’s Global Health Policy 2011-2015” as well as the Japanese ODA policy. Thus, the Project, aiming to assist AI surveillance in Indonesia with high

incidence of AI human cases, also meets the Japan's aid policies.

(2) Effectiveness

Although Indonesia does have the national guidelines on surveillance, its contents do not adequately reflect actual operations on the ground. In order to remedy this situation, the Technical Protocol has been prepared and actual operation has been reinforced in accordance with the national guidelines and the International Health Regulations (IHR) and based on ample discussions with stakeholders. The various training programs of the Project have been implemented according to the Technical Protocol and human resources have been developed in order to appropriately conduct surveillance. Moreover, it has been confirmed that surveillance on the ground is conducted according to the Technical Protocol and that appropriate responses based on the Protocol have been taken in actual cases of suspected AI human infection outbreaks occurring during the Project period.

However, concerning the degree of achievement of OVIs, the targets that were indicated in the Mid-term Review have not been attained. These targets were set according to national criteria and are deemed to be appropriate as eventual marks, however, it cannot be denied that they were difficult to attain by the end of the Project. Having said that, in line with the introduction of EWARS and SMS Gateway, major improvement occurred in the timeliness and completeness of weekly reporting and the targets have generally been achieved since the start of 2011. If the present monitoring, supervision and guidance are maintained, it is anticipated that these OVIs can be comfortably achieved, and from the viewpoint of "has the surveillance system been strengthened," it is deemed that the Project Purpose are generally being attained. From these reasons, it is considered the effectiveness of the Project is generally high.

(3) Efficiency

Several factors, such as delay in budget implementation from Indonesian side attributed to the difference in fiscal year system between Indonesia and Japan, dispatch of long-term JICA expert, delay in publication of the Technical Protocol, and insufficient communication amongst stakeholders, affected progress of activities at the initial phase of the Project, though the project activities have been implemented in accordance with Plan of Operation (PO).

Though the Project efficiency was impeded by these delays from the viewpoint of advancing the project activities according to schedule within the project period specified in the PO, project period itself was effectively utilized in the Project. Moreover, since revision of the Technical Protocol was completed as of the time of the Final Evaluation and distributed to the MOH and relevant organizations in the South Sulawesi Province, and remaining activities such as RRT refresher training will be conducted as scheduled. Therefore, it is considered that aforementioned issue arose in the project period did not cause severe influences on ultimate achievement of the Project Purpose.

Summing up, in terms of the progress of the Project activities, efficiency was generally maintained.

(4) Impact

The surveillance system including early detection and response, reporting system and other related procedures were standardized and streamlined, and thus, it is considered that the necessary foundation has been formed for surveillance system for local priority communicable diseases including AI in the South Sulawesi Province. The Technical Protocol, revised with sufficient reflection with actual situation in South Sulawesi, is being distributed to relevant institutions and facilities. Accordingly, further improvement in surveillance system can be anticipated.

The MOH appreciates the model of surveillance system established in the South Sulawesi Province, and expressed their vision for deployment of the model to nationwide in a stepwise manner, beginning by the Central Sulawesi Province. In fact, the MOH held an advocacy meeting on April 2001 at the Central Sulawesi, and is planning to install EWARS around June to July 2011. Moreover, the MOH is considering utilization of South Sulawesi PHO personnel nurtured by the Project for lecturers at the time of actual implementation. Thus, it is obvious that the Project exerts a beneficial impact on Indonesian surveillance system from the perspective of probability of achievement for the Overall Goal of the Project.

(5) Sustainability

The importance of comprehensive AI control is clearly cited in the National Long-term Health Development Plan 2005-2025 and the Health Sector Strategic Plan 2010-2014, which prescribes the concrete measures and policies for achieving this, and the MOH expressed verbally that the importance and priority would be maintained for many years to come. Indeed, the MOH made a practical effort to step-by-step deployment of the surveillance model for suspected AI human cases developed in the South Sulawesi Province, starting by the Central Sulawesi Province as a most probable candidate. Based on these facts observed, it is considered that political sustainability can be anticipated in some degree.

The MOH made a practical effort to step-by-step deployment of the surveillance model for suspected AI human cases developed in the South Sulawesi Province, starting by the Central Sulawesi Province. However, at the time of practical introduction, it is considered that the MOH and provincial government should reinforce the commitment of securing human and financial resources. Having said that the Project nurtured personnel in PHO as supervisors and/or lecturers, it is desirable to estimate the human resources and contents of activities that can be used as a reference material.

As was stated above, a certain degree of self-sustainability from technical perspective was secured since the practical operation of AI surveillance system based on the Technical Protocol has established and human resources in charge of surveillance are favorably nurtured. However, it is suggested that further technical assistance will be needed for expansion and deployment of the surveillance model to other provinces. Moreover, from the financial and technical aspects, further commitment from provincial and district governments will be required for maintenance of current activities in the South Sulawesi Province and for the deployment to other provinces. Greater sustainability could be secured if continuous technical assistances including some financial support were obtained by any means in addition to continuous effort from Indonesian side.

3-3 Factors that promoted the attainment of the Project

(1) Concerning the project design

Good cooperative relations with other sectors were maintained through the project period. Activities have been conducted in collaboration with the livestock sector and laboratory sector via the RRT, and the information sharing setup improved greatly following the start of the Project. Moreover, since cooperation was obtained from them by dispatching lecturers in the project training courses and in the Technical Protocol revision work, this can be viewed as a contributing factor to the achievement of Outputs.

(2) Concerning the implementation process of the Project

EWARS, RRT and DSO were respectively introduced to Indonesia by the WHO, USCDC and USAID, however, these resources had not been adequately introduced on the ground level. In the Project, these existing systems were utilized and modified according to conditions in South Sulawesi in an effort to support concrete introduction. Also, the modules used in the training were prepared based on those created by other development partners. Accordingly, although collaboration has been indirect, since effective synergy has been obtained with other resources, the resulting impact has in a sense been greater than that arising from ordinary collaboration.

3-4 Factors that impeded the attainment of the Project

(1) Concerning the project design

No major obstacles have been observed as far as the project design is concerned.

(2) Concerning the implementation process of the Project

Financial autonomy is improving and budget steps for the project activities have generally been appropriately conducted. However, as a result of measures to promote decentralization, some district health offices have only managed to secure enough budgets for the minimum necessary outbreak response activities and it is difficult for them to conduct regular feedback, supervision and

guidance in the health centers.

3-5 Conclusions

The OVIs for the Project Purpose of final year are under the process of measurement at the time of Final Evaluation Survey. Nevertheless, it could be estimated to be able to achieve the OVIs because of in recent 3 weeks those indicators have been more than 80%.

The Technical Protocol, which is expected as essential output of the project activity, has already been elaborated and revised based on the results of the actual practice in the project sites. Furthermore, the Technical Protocol was authorized officially as a provincial governor's decree so that that is major outcome of the Project and it is highly evaluated.

Moreover, the MOH implemented advocacy at the Central Sulawesi Province on the Technical Protocol elaborated by the Project and several provinces expressed their interests to get it.

Through the mentioned above, we can see signs to step into the Overall Goal "Surveillance of AI human cases is strengthened, through the comprehensive surveillance system of local priority communicable diseases, in other provinces in Indonesia" in spite of short time (3 years) of project activities. It could be said that the Project has achieved brilliant success.

3-6 Recommendations

< The MOH >

1. The MOH should continue to exert a strong commitment to local priority communicable diseases, including AI.
2. It is strongly suggested that the MOH should exert efforts to introduce and/or establish the surveillance system for the local priority communicable diseases at provinces where hasn't been yet.
3. The MOH should provide opportunities to enhance sharing of experiences and information amongst PHO.

< The PHO >

1. The PHO should continue to exert efforts to secure budget necessary for operation of the surveillance system, and to develop human resources further.
2. The PHO should provide opportunities to enhance sharing of experiences and information amongst DHOs regularly.

< DHOs >

1. DHOs should continue to exert efforts to secure budget necessary for operation of the surveillance system, and to develop human resources further.
2. DHOs should provide opportunities to enhance sharing of experiences and information amongst Health Centers regularly.

< The Project / JICA Experts >

1. The Project should clarify the contents in the Technical Protocol where to be subject to modification in accordance with regional circumstances, when Indonesian side introduce the South Sulawesi surveillance model established by the Project to other provinces.
2. The Project should compile project experiences in the South Sulawesi Province, such as operational process by component and challenges, so that the experiences can be utilized as references.

< Common Element >

1. Counterparts at all levels should exert efforts to maintain and enhance the relationship with related partners such as livestock sector and laboratory sector.

3-7 Lessons Learned

1. This Project almost achieved its purpose to develop the AI surveillance model development in Indonesia despite that it was in a short term of three years with several administrative levels concerned. The reason was to have obtained a strong commitment of the both of central and provincial level under the project design that aimed to achieve the national strategy by making existing surveillance systems as a package adjusting to a local situation.
2. It might be necessary to design the Project in terms of the dissemination to other provinces considering the short cooperation period of 3 years.
3. Local staffs' technical basis and also ownership have been developed by the following project activities; first elaborating "Technical Protocol" adapted for the current situation of the region, and then revising it through the job and table-top exercise. Consequently, their self-sustainability has been enhanced, which is proved by acquisition of the local budget securing and also by the strong motivation for expanding the project activities to another provinces.
4. Cost sharing, which the Project had introduced intensively, brought the change of consciousness on cost and the acquisition of budget at the provincial and district levels, eventually leading to the an important change regarding to the self-sustainability after the termination of the Project.
5. The Project Purpose is to strengthen the surveillance system of AI, and it is essential to develop capacity of the concerned staff to achieve its purpose. Furthermore, it is regarded that strengthening close relation among the implementing organizations through the project activities such as trainings and supervision etc. enabled to establish the system finally.
6. At the time when official agreement was issued for the commencement of the Project after the detailed planning survey, budget for the Project by the Indonesian side could not be allocated for the first year of project period, since deadline for budget application had passed. Accordingly, the activities of the Project planned for the first year was interrupted. Therefore, Japan side should give attention to budget allocation process in partner countries at the planning stage of projects.

3-8 State of the follow-up

#####