Evaluation Summary

1. Outline of the Project				
Country: The Republic of Indonesia	of Project Title: the Project for Enhancement of Nursing Competency through In-Service Training			
Issue/Sector: Healthcare and medical treatment	Cooperation Scheme: Technical Cooperation Project			
	Total Cost: 430 million JPY (Sum of the total cost from JFY 2012 to JFY 2016 and estimation for JFY 2017 as of July 2017)			
Period of (R/D): Cooperatio 15/10/2012-14/10/2 n 017	The Board for Development and Empowerment of Human Resources for Health, the Ministry of Health Directorate General for Health Services, the Ministry of Health, the Ministry of Health University of Indonesia, Padjajaran University, Airlangga University, North Sumatera University, Hassanuddin University Supporting Organization in Japan: N/A Other Related Projects: N/A			

1-1 Background of the Project

In recent years in the Republic of Indonesia (hereinafter referred to as *sIndonesia*" ndonesia years in the Republic of Indonesia (hereinafter referred to as stry of Healthf Heac growth and improvement of the quality and quantity of health service delivery. Meanwhile, emerging problems such as widening regional gaps, transition of disease structure, aging society, declining family involvement in care, and increasing role of private sector in health and medical service provision and training health personnel are coming to the surface; therefore, a new regime needs to be developed in order to address these issues. Given the fact that the nursing staff plays a significant role in the health and medical service provision, the Government of Indonesia (hereinafter referred to as "*GOI*") has commenced political efforts for the enhancement of nursing competency through the introduction of nursing registration renewal system as well as the reinforcement of in-service training. However, in-service training in Indonesia has usually focused on nurturing specialists in each professional discipline, and systematized training was not necessarily sufficient.

On the other hand, under the rapid globalization of health workforces, it is a common recognition that the GOI calls for urgent attention to enhance competencies of nurses to the global standardso level. The Government of Japan has started receiving Indonesian candidates for nurses and care workers from 2008 on the basis of the Japan-Indonesia Economic Partnership Agreement. In this context, the Japan International Cooperation Agency (hereinafter referred to as "*JICA*"), on the basis of the request from the GOI, commenced a five-year technical cooperation project entitled "The Project for Enhancement of Nursing Competency through In-service Training" (hereinafter referred to as "*the Project*") from October 2012 with the Board for Development and Empowerment of Human Resources for Health (hereinafter referred to as "*BPPSDMK*"), the Ministry of Health (hereinafter referred to as "*MOH*") as a principal counterpart organization of the Indonesian side.

1-2 Project Overview

(1) Overall Goal

In-service training system for enhancement of nursing competency is disseminated in other areas in Indonesia.

(2) Project Purpose

In-service training system for enhancement of nursing competency is strengthened in target areas.

(3) Outputs

1) Career Development Ladder System (hereinafter referred to as 'the Ladder System') is introduced in pilot hospitals which are approved by the Ministry of Health.

2) In-service training program of targeted subjects is strengthened in order to be accredited as training(s) which can receive credits for nurse registration renewal.

3) The results of Output 1 and 2 are shared with other institutions which conduct in-service training for nurse.

(4) Input (as of the evaluation)

the Japanese Side

- Dispatch of JICA Experts: Long-term Experts: a total of 4 persons, 95.5 M/M (Chief Advisor/Nursing Administration and project coordinators) (1 for predecessor and 1 for successor, respectively), Short-term Experts: a total of 37 persons (Nursing Administration, Ladder System, Disaster Nursing, Critical Care, Emergency Nursing), a total of 14.7 M/M, and Project Consultation Mission: a total of 17 persons, a total of 9.3 M/M
- Employment of Local Staff: Six (6) staff members in total: 2 in Jakarta, 1 in Makassar, 1 in Medan, 1 in Surabaya, and 1 in Bandung
- Provision of Equipment: Simulators for skill practices, etc., Emergo Train System (ETC) for the table-top simulation training system of Emergency and disaster medicines
- Training in Japan: Total number: 130 persons (40 for Ladder System, 7 for Disaster Nursing (H.E.L.P.), 43 for curriculum development in Emergency Nursing, Critical Care and Disaster Nursing, and 40 for curriculum development in Geriatric Nursing, Total days: 163 days
- Meeting Package: costs for a total of 83 meetings / seminars /assessment / trainings

the Indonesian Side

- Allocation of Counterpart Personnel: Project Director: a total of 2 persons (1 for predecessor and 1 for successor), Project Managers: a total of 6 persons (2 persons at the same time and 4 was replaced), Secretary: 2 persons, and Other counterpart personnel: a total of 83 persons
- Facilities, Equipment and Materials: A project office room in the BPPSDMK, the MOH with utility costs, furniture and internet facility, and Office spaces in 5 Universities with utility costs, furniture and internet facility
- Local Costs: A total of 83 meetings/seminars/assessment activities/trainings, All travelling costs including allowance for Indonesian personnel except for study trip to the Fatmawati Hospital, Printing costs for the draft guidelines for the Ladder System, documents for workshop (partially), draft documents for curriculum and modules (partially)

2. Termin	2. Terminal Evaluation Team			
Members	Mr. Tomoya	Leader	Director, Health Team 3, Health Group 2, Human	
Prof. Yayo TAMURA Prof. Yoko HAMAM Ms. Sachi KUNO	YOSHIDA		Development Department, JICA	
	Prof. Yayoi	Technical Advisor	President, Japanese Red Cross Kyushu	
	TAMURA	(Nursing Education)	International College of Nursing	
	Prof. Yoko	Technical Advisor	Dean, National College of Nursing, Japan	
	НАМАМОТО	(Nursing Education)		
	Ms. Sachiko	Cooperation Planning	Associate Expert, Health Team 3, Health Group 2,	
	KUNO		Human Development Department, JICA	
	Dr. Yoichi	Evaluation Analysis	Senior Consultant, Consulting Division, Japan	
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3. Summary of Evaluation Results

3-1 Achievements

(1) Output 1

The concept and the procedures for the introduction of the Ladder System was disseminated to over 100 hospitals under the umbrella of the MOH through the National Seminar following the distribution of the provisional version of the National Guidelines in 2013, and the JICA experts continued related project activities directly with the local counterpart personnel. Though the level of progress of the introduction of the Ladder System in each hospital, 8 out of 9 target hospitals performed the competency assessment for certifying PK levels of nursing staffs, and subsequent planning and implementing CPD training in light of the PK levels.

On the other hand, the Project was supposed to conduct monitoring and evaluation of the Ladder System operated in accordance with the novel Guidelines; following those processes, the Project was also supposed to perform further revision of the Guidelines by the end of the project period. However, the Joint Terminal Evaluation Team observed crucial problems in the practical operation of the Ladder System in hospitals as well as the effective operation of CPD training by utilizing the System; in particular, the overlapping of the indicators for the evaluation of nursing competencies in the Ladder System with that for the determination of the Clinical Privileges under the Credentials for nurses, as well as the mismatching of nursing competency (PK level) with existing in-house training programs at each hospital.

At the time of the interview session with the MOH, it is inferred that the National Guidelines of the Ladder System is under the final inspection at the legal section of the MOH via the signing by the health minister, and is anticipated to be published very soon. However, the said problems regarding the practical operation of the Ladder System simultaneously with the Credentials will take place in other hospitals and make it difficult to apply the Ladder System nationwide at current conditions. Therefore, it is suggested for the BPPSDMK of the MOH to commence the prompt actions for discussing practical countermeasures among relevant parties such as counterpart universities and hospitals.

For these reasons, it is deemed that the achievement level of the Output 1 is intermediate as of the time of the Terminal Evaluation.

(2) Output 2

Two working groups, consisting of the participants of the Training in Japan, took initiative for the developing work of the curriculums of Emergency Nursing, Critical Care and Disaster Nursing (Group for Output 2A) and Geriatric Nursing (Group for Output 2B) with the technical advices of the JICA experts as needed basis. The Project has completed the developing work of the curriculum with training modules for each topic in general. As for the Disaster Nursing and Geriatric Nursing, the MOH conducted TOTs and nurtured a total of 60 trainers in each subject in various areas of Indonesia as of the time of the Terminal Evaluation. Since the costs for the implementation of TOT were borne by the MOH in consideration of sustainability, the TOT for Critical Care has not been conducted due to the budget constraints as of the time of the Terminal Evaluation. The MOH is planning to conduct the TOT of Critical Care in August 2018 using the next year's budget. The curriculum and the training modules for basic geriatric nursing were certified as a National Standards by the MOH. The working groups for other topics are supposed to move forward for acquiring the certification of the curriculums as National Standards by taking necessary procedures such as the verification of them by trial-based training, followed by the revision work as needed.

Meanwhile, the Indonesian counterpart personnel indicated the intention to maintain the working groups by any means and continue to develop and/or revise curriculums in consort with related nursing associations even after the end of the project period; therefore, it is expected that the verification of the training effects on the knowledge and skills of nursing staffs will be performed in future by the Indonesian counterparts to a certain extent.

For these reasons, the achievement level of the Output 2 is deemed to be appropriate at the time of the Terminal Evaluation.

(3) Output 3

A variety of activities for the dissemination of the achievements of the Project have been done during the 1st half of the project period through the dissemination seminars of the National Guidelines, the Annual Assembly of Specialized Hospitals and the Training of Trainers held in various parts of Indonesia. In addition, the Project, especially following the time of the Mid-term Review, has held seminars and workshops for the dissemination of the training curriculum with training modules geared not only to health professionals but also to master's and undergraduate students in neighboring places to the project sites; indeed, the sum total of the participants was over 4,000.

Meanwhile, the Project, at the initiative of the MOH, is planning to hold the National Seminar geared to approx. 100 flagship hospitals in August 2017, and to share the achievements, findings and experiences gained through the 5-year project.

For these reasons, the achievement level of the Output 3 is deemed to generally be appropriate at the time of the Terminal Evaluation

(4) Project Purpose

The Project, under the Output 1, has established a foundation of the Ladder System from the technical point of view through the project activities at 9 target hospitals; whereas, several crucial problems regarding the practical operation on the ground are remained in relation to the simultaneous operation with the Credentials. Meanwhile, the Project, under the Output 2, has been working on the development of curriculums and training modules for the said 4 prioritized themes in Indonesia, resulted in the development of cross-organizational networks. Concerning the Output 3, some experiences and achievements have already been shared with non-targeted areas of the Project.

In summary, several problems especially for the practical operation of the Ladder System in hospitals; therefore, it is necessary for the Indonesian counterparts including the target hospitals to re-examine the original concept and ideal operation of the Ladder System. As has been described, the Project did not reach at the initially-envisaged achievement level; however, the foundation of the in-service training system for the reinforcement of nursing competency (the Project Purpose) was established from the technical point of view.

For these reasons, the achievement level of the Project Purpose is deemed to be moderate at the time of the Terminal Evaluation.

3-2 Summary of Evaluation Results

(1) Relevance

The relevance of the Project is generally maintained

With regard to the consistency of the Project Purpose with the Indonesian Health Policies, the needs of the target groups, and Japan's aid policies that were confirmed at the Ex-ante Evaluation of the Project, there has not been any alteration of the Indonesian health policies since then as well as the needs of the target group. The Team can therefore conclude that there has not been any change that may have undermined the relevance of the Project, and therefore the consistencies have been maintained at the time of the Terminal Evaluation.

Meanwhile, Indonesia, likewise Japan, has experienced many disasters such as earthquakes and tsunami, and population aging is advancing rapidly in recent years. Under these circumstances, the MOH stated in an interview session that they put priorities in the enhancement of knowledge and clinical skills of nursing staffs especially in disaster nursing as well as geriatric nursing, and also attach importance to the revision and/or development of curriculums with training modules as means for realizing the said end. The Project has been assisting the Indonesian side to revise or

develop curriculums and teaching modules for the prioritized topics such as disaster nursing and geriatric nursing, and also to nurture health personnel to be trainers. For these reasons, the Project has been assisting the counterparts in accordance the needs from Indonesia.

Japan Country Assistance Policy for the Republic of Indonesia (issued in April 2012 and effective as of July 2017), on the other hand, states that Japan focuses on improvement of Indonesian's capacity to cope with global and regional challenges as one of the key strategies of cooperation; the Project aim, which is to strengthen competencies of nurses to the global standards' level under rapid globalization of health workforces is consistent with the Japanese Government's policy.

(2) Effectiveness

The effectiveness of the Project is considered to be moderate.

The Project is aiming to strengthen the in-service training system that meet the policies of competency raising of nurses as well as situations and environments of hospitals in Indonesia. To this end, the Indonesian organizations took initiative to project activities for the strengthening of the Ladder System as well as the development of training curriculum with materials following the Training in Japan. Further, policymaker(s), research and education institutes and medical facilities conducted these activities in tandem; especially, the pilot hospitals have a variety of backdrops such as the size, history, type (governmental, university or private). Since the Project is operated under such circumstances and conditions, it is deemed that the Project has accomplished to presented a "*system*" ystemals have a variety of backdrice training with high applicability and feasibility.

Having said that, as was described in the Achievement of the Project Purpose section, though the development of curriculums and training modules under the Output 2 has made a good progress including its unionization, several crucial agendas, which are continuously struggled by the Indonesian side even after the end of the project period, are remained in the Ladder System (Output 1), and consequently, the Ladder System cannot be applied in non-targeted areas as of now (Output 3). For these reasons, it is deemed that the Project Purpose will have not been achieved by the end of the project period.

As just described, the Project has been running with strong ownership of the Indonesian organizations despite of many challenges and obstacles. It is difficult to estimate the possibility of the achievement of the project Purpose at this point due to several uncertainties like the budget for the project activities; however, it is anticipated to some extent that the establishment of in-service training system with high applicability and feasibility as well as the reinforcement of institutional function can be attained by the end of the project period given that the project activities progresses as planned.

(3) Efficiency

Since the progress of research activities have partially been impaired by some internal and external factors, the efficiency of the Project is deemed to be moderate.

The Project has commenced in October 2012; however, the arrival of the Chief Adviser of the Project (JICA expert) was 11 months after the commencement of the Project. Eventually, full-scale operation was commenced thereafter. The baseline survey was supposed to be conducted at very beginning of the project period; nevertheless, preparatory work for the survey was practically commenced after the arrival of the Chief Advisor due to various reasons. Finally, the field survey of was started in January 2014 via the determination of the contents of investigation and subsequent approval process in the MOH. Moreover, there were several problems in an outsourcing contractor of the field survey, resulting in ineffective baseline survey. As for the endline survey, likewise, several crucial problems such as the improper conditions for the survey as well as insufficient analyses, data interpretations and discussions were found in the endline survey; therefore, the results of the survey were not used as objective evidences for verifying the effect of the introduction of the Ladder System.

Especially in the 1st half of the project period, the Indonesian side has been exerting strong financial commitment to the Project, and it is considered that ideal cost sharing is realized from the

viewpoint of sustainability. Having said that, the principle of the cost share was maintained following the time of the Mid-term Review, especially after the dissolution of the BUK in December 2015, the limitation of the budget for the project activities became more severe, and some important project activities were also subject to significant delay. For instance, the TOT of Critical Care was postponed for several times and has not been implemented as of the time of the Terminal Evaluation. Under the circumstances, the Project had assisted a part of activity costs of the Indonesian side as special exception (not for the TOT of Critical Care).

Meanwhile, a total of 130 Indonesian counterpart personnel participated trainings in Japan in the theme of Ladder System, in-service training system, curriculum development focusing on three subjects as follows: Disaster Nursing (H.E.L.P.); Critical Care; Emergency Nursing; and Geriatric Nursing, as of the time of the Terminal Evaluation. After coming back from the Training in Japan, the participants took initiative to promote the project activities with indirect support from JICA experts in accordance with the plan of actions developed by them. Thus, the knowledge and techniques are not only used as a basis as well as a starting point for the project activities in Indonesia but also used for CPD trainings at the target hospitals. The instruments and equipment provided by the Project such as simulators have been used for the trainings effectively.

(4) Impact

The following positive as well as negative impacts are confirmed and/or expected by the implementation of the Project.

The Team observed that nursing competency assessment was performed on the basis of two similar evaluation processes of the Ladder System and the Credentials in the target hospitals. Though some hospitals managed to run the two evaluation processes efficiently by simplifying the procedures, other hospitals are suffering from the increased work burden. It is confirmed that the Minister's decree of the Ladder System is anticipated to be published very soon, all hospital in Indonesia will be obliged to take the evaluation process of the Ladder System on top of that of the Credentials, that is to say, the Ladder System cannot be promoted to distribute to non-targeted areas unless some effective countermeasures are taken.

On the other hand, as for the development of curriculums and training modules, through TOT of Critical Care has not been done as of the time of the Terminal Evaluation, the verification work of other topics such as Disaster Nursing and Geriatric Nursing moved forward steadily to acquire the certification as National Standards from the MOH. It is unlikely for the curriculum and the modules to be certified by the end of the project period; however, each working group presented an in intention to maintain the network by any means. Thus, it is anticipated that the activities for the acquisition of the certifications will be maintained even after the end of the project period.

As was just described above, the development of curriculums and training modules is anticipated to be continued or even enhanced by themselves and it is anticipated the benefits are also be distributed nationwide in future. In contrast, several problems were found in the Ladder System from the political and organizational aspects; thus, prompt actions should be taken by the Indonesian side to address the issue for the steady achievement of the Overall Goal in approx. 3 years following the termination of the Project.

On top of that, several positive impacts of the Project are observed or expected as follows: 1) Influences on Nursing Education at Universities; and 2) Preparatory actions for the establishment of the Geriatric Nursing Association. Nevertheless, it was confirmed that some of target hospitals encountered increased workload for operation the Ladder System on top of the Credentials. This can be regarded as a negative impact of the Project.

(5) Sustainability

Several crucial problems are observed for self-sustainability as well as self-deployment of the benefits provided by the Project at the time of the Terminal Evaluation.

It is highly anticipated that political significance of the reinforcement of nursing competency in Indonesia will be sustained even after the end of the project period. However, two similar evaluation processes, the competency assessment of the Ladder System and the evaluation items for the Clinical privileges under the Credentials, are simultaneously operated in the project target hospitals, implying that some of the target hospitals managed to run the processes with an unexpected burden of work. It is confirmed that the National Guidelines of the Ladder System will be effective very soon, i.e., the Ladder System is supposed to be operated together with the Credentials, the same problems and/or burden will be induced at every hospital nationwide. It is strongly suggested that MOH should start immediately to take necessary measures to avoid the same problems.

For the development of curriculums and training modules supported by the Project, financial sustainability is secured to a certain level since the funding from the MOH and other related organization is expected to be maintained. For example, funding from the BPPSDMK, the PUSRENGUN and the YANKES will be allocated to Disaster Nursing working group. For Geriatric Nursing working group, once the Geriatric Nursing Association is established (as of July 2017, regulation of the society is drafted), activities will be continued by the income from membership fee and training fee. Meanwhile, once the Minister's decree for the Ladder System become effective, all the hospitals in Indonesia are supposed to bear the responsibility for the operation, including operational costs, of the Ladder System; implying that the financial sustainability of the Ladder System will be secured.

The Project had developed the National Guidelines of Carrier Ladder Systems for Nurses (provisional version) and the indicators of the competency assessment. Besides, the Team observed that some target hospitals operate the Ladder System efficiently together with the Credentials, and created benefits of the System for CPD as well as professional relocation on the basis of nursing competency. For these reasons, it is deemed that the Ladder System is established in Indonesia from the technical point of view. However, it is strongly suggested that the Project should take measures to cope with the said operational problems by investigating and reviewing the actual situation of the operation of the Ladder System in hospitals. As for the development of curriculums and modules, the working group members have acquired a know-how of the development of curriculums and training modules though the project activities enough to continue the said activities independently even after the end of the project period. Actually, the working group for geriatrics autonomously progressed the development of the curriculum and modules geared to intermediate level; this can be regarded as a typical example for explain the technical autonomy of the Indonesian side.

3-3 Factors that promoted the attainment of the Project

(1) Concerning the project design

The working group member of the Ladder System participated a study tour at the Fatmawati Hospital, one of the pilot hospitals of the Project, where the System was operated since 2007. This experience made them comprehends the Ladder System easily, resulting in smooth introduction of it.

(2) Concerning the implementation process of the Project

A professional organization of the PPNI and subordinating HIPGABI and HIPERCCI, as external supporters of the Project, provided each working group as well as universities with technical support. It is considered that this external support enhanced the efficiency of the Project to a certain extent.

3-4 Factors that impeded the attainment of the Project

(1) Concerning the project design

Both Baseline and Endline surveys were consigned to local consultant enterprises; unfortunately, the Project found several problems for their performances of the survey and the quality of the report such as the compliance of survey protocol, insufficient data analyses and so on, and the results of the surveys could not be used for grasping actual situation and measuring the intervention effect of

the Project, respectively. Thus, it is considered that this has hindered the efficiency of the Project to a certain extent.

(2) Concerning the implementation process of the Project

The curriculums in hospitals existing before the introduction of the Ladder System are not always specifies the target PK levels, and sometimes, insufficient coordination between the departments responsible for capacity development of nursing staffs and in-service training as well as insufficient understanding the original purpose of the Ladder System happened in the target hospitals, resulted in the mismatch of PK levels with the contents of the trainings. It is considered that the said mismatch diminished the efficacy of the Ladder System to some extent; therefore, is also regarded as a hindering factor against the effectiveness of the Project.

Meanwhile, as has been described, the competency assessment of the Ladder System and the evaluation items for the Clinical Privileges under the Credentials are overlapping in many parts of evaluation processes, resulted in a unexpected burden in the project target hospitals. As a possible cause of this burden, the Project could not forecast the likelihood of the occurrence of the burden for operating two evaluation processes correctly, and any actions were not taken for coordinate the two Directorate Generals responsible for the systems. It is considered that this could hindered the effectiveness of the Project to a certain extent.

3-5 Conclusions

As the result of the persistent efforts of the Project, the curriculums and the training modules were developed for the themes of important health challenges such as disaster nursing and geriatric nursing, and the networks for that purpose were also developed. Meanwhile, it is deemed that the foundation of the Ladder System with high advantages for effective CPD training as well as professional relocation was established from the technical perspectives as the National Guidelines and the indicators for the assessment of nursing competency by the Project. However, several problems in the Ladder System are observed for more efficient operation in hospitals as of the time of the Terminal Evaluation.

With regard to the results of based on the five evaluation criteria, it is confirmed that the relevance of the Project was maintained since the Project has continuously assisted the Indonesian side to address the important health challenges in Indonesia. Meanwhile, it is deemed that the effectiveness, the efficiency and the sustainability of the Project were deemed to be moderate from the perspective of practical operation of the Ladder System despite that its technical foundation was established. In order to ensure the steady achievement of the Overall Goal in future (Impact), it is desired for the Indonesian side to continue the efforts to address the challenges even after the end of the project period.

3-6 Recommendations

(1) It is necessary for hospitals to modify the training contents in light of target PK levels of the trainees to avoid a mismatch between the contents and PK levels, the Ladder System can exert its characteristics and advantage effectively. In addition, it is recommended for the target hospitals to review the existing training courses, which are not supported by the Project, and revise them in consideration of planning and implementation of CPD on the basis of the Ladder System.

(2) It is important to search effective and efficient operational procedure for better practices of two systems of Ladder System and Credentials. The BPPSDMK should commence discussions on the standardized operational procedure as soon as possible to solve the current challenges observed in some hospitals; in particular, the governing system of the Ladder System at the ministry level especially after the end of the Project as well as the standardization of the operational procedures of Credentials in harmonized way with Ladder System.

(3) It is recommended that the BPPSDMK will continue to nurture trainers for the trainings that the project developed and to disseminate in cooperation with stakeholders such as nursing associations

even after the project period.

(4) It is recommended that the Indonesian side will continue to develop curriculums by utilizing the networks formed through the working groups formed under the Project especially for the project-assisted topics (development of a curriculum of advanced level, etc.).

(5) It is recommended for the universities to play a leading role for in-service training in neighboring hospitals in order to maintain or even enhance the quality of CPD training for nurses; in addition, the universities and related hospitals should have practical discussions on the implementation system as well as its cooperation including affective use of instruments provided by the Project.

(6) The BPPSDMK should continue the efforts for the improvement of CPD program for better quality of nursing care with an eye on the changing society and its health challenges in Indonesia.

3-7 Lessons Learnt

(1) The Mid-term Review Team confirmed that some OVIs stipulated in the PDM needed to be revised to appropriately identify the achievement levels of the Project Purpose and Outputs, and provided recommendations for modifying the PDM, clarifying some words and terms and the definition of "achievement levels," and fostering common understanding between concerned parties. At the JCC meeting held after the Mid-term Review, however, no discussion took place as to revising the PDM, while project members on the both Indonesian and Japanese sides were not sufficiently aware that the OVIs should also be the yardstick by which the Project should manage the achievement levels of the Project Purpose and Outputs. Consequently, it was difficult to evaluate the achievement levels of some Outputs and the Project Purpose at the Terminal Evaluation because they could not be evaluated using the OVIs stipulated in the PDM.

Here are two major lessons to be learned from the above: (1) it is necessary to establish adequate understanding between concerned parties as to how JICA projects should be monitored and what roles the PDM should play as a monitoring tool and (2) it is vital for JICA (office/headquarters) to work, through occasions such as activities of the JCC and Project Consultation Committee in Japan, to ensure the implementation of all recommendations made based on the Mid-term Review, jointly held by the Indonesian and Japanese sides. Improving the precision of the PDM at the beginning of cooperation is also important.

(2) The directorate in charge of Output 1: Ladder System in the Ministry of Health, a major counterpart organization in the Project, was dissolved as part of the large-scale restructuring of the ministry in December 2015, resulting in 10 months of vacancy.

This restructuring coincided with the stage in which the system was introduced to actual services (hospitals) in accordance with the National Guidelines of the Ladder System (provisional version) and competency assessment indicators, which had been created with the support of the Project. Following are three possible results of the MOH directorate in charge being vacant that were identified at the time of the Terminal Evaluation:

- ① Monitoring and evaluation as to introduction to services could have been inappropriate;
- ② It could have been impossible for MOH to identify problems like double standards (Ladder System and Credentials) in time;
- ③ It could have been impossible to detect it in time when the Ladder System was not used in line with its original characteristics, purposes or effects.

Furthermore, it has also been suggested that the above could cause negative impacts on the achievement levels of Output 1 and the overall Project Purpose.

In this way, a change to the structure of a counterpart organization can significantly affect not only the implementation of project activities but also the achievement levels of the Outputs and Project Purpose. There has also been evidence to suggest that a major restructuring can hinder communication between experts and the counterpart. This means that when such is the case, it is necessary to provide the counterpart organization with consultation opportunities etc., for example by sending a mission from the JICA headquarters to it, in a timely manner, in addition to doing various on-site coordination work.