

## Summary of Evaluation

I. Outline of the Project		
Country: People's Republic of Bangladesh		Project title: Strengthening the Capacity of Teacher Training at Primary Teachers Training Institutes to Improve Classroom Teaching <sup>1</sup>
Issue/Sector: Education- Primary Education		Cooperation scheme: Technical Cooperation Project
Division in charge: Human Development Department		Total cost (at the time of evaluation): Approx. 876 million yen
Period of Cooperation	(R/D) August 2010 (Project Period) October 2010- December 2017 (7 years and 3 months)	Partner Country's Implementing Organization: Directorate of Primary Education, Ministry of Primary and Mass Education (DPE, MOPME)
		Supporting Organization in Japan: None
<p>Related Cooperation:</p> <p>Basic Education Improvement Program (Grant Aid for Poverty Reduction Strategy, Primary Education Advisor, Japan Overseas Cooperation Volunteers)</p>		
<p>1. Background</p> <p>The Ministry of Primary and Mass Education (MOPME) of the People's Republic of Bangladesh together with the Japan International Cooperation Agency (JICA) commenced "JICA Support Program for Strengthening the Capacity of Teacher Training in Primary Teachers Training Institutes to Improve Classroom Teaching under Component 1 of Third Primary Education Development Programme (PEDP3)" (hereinafter referred to as "JSP2") in October 2010 with a planned project period of six years (and later extended to seven years and three months in line with the extension of PEDP3). JSP2 has been positioned as part of Technical Assistance (TA) in PEDP3, which is a form of the Sector-Wide Approach (SWAp). Therefore, JSP2 has been designed and implemented to contribute to the achievement of PEDP3's goal of "quality education for all our children". With the project completion planned in December 2017, a Terminal Evaluation Study was conducted in accordance with the Record of Discussions of the Project signed and exchanged on August 25, 2010 between the Government of the People's Republic of Bangladesh and JICA.</p>		
<p>2. Project Overview</p> <p>(1) Overall Goal</p> <p>The new teaching method* is disseminated in mathematics and science in primary education.</p> <p>* "New teaching method" means to the exploratory/ problem-solving lesson guided in "Teaching Package" developed in the previous phase of this project.</p>		

<sup>1</sup> While this is the official project title specified in the Record of Discussions (R/D) signed between Bangladeshi and Japanese Governments, "JICA Support Program for Strengthening the Capacity of Teacher Training in Primary Teachers Training Institutes to Improve Classroom Teaching under Component 1 of PEDP3", or JSP2, is the project title and acronym commonly used by the project implementers and stakeholders in Bangladesh.

(2) Project Purpose

The new teaching method is implemented in math and science in primary education.

(3) Outputs

1. The contents of the textbooks in math and science in primary education are improved.
2. The systems and contents of teacher training are improved.
3. Effective environment for the implementation of the new teaching method is promoted.

(4) Inputs (at the time of terminal evaluation)

Bangladeshi Side:

- Counterpart personnel (C/P): 49 in total during JSP2 from DPE, NAPE, and NCTB (23 at the time of terminal evaluation)
- Land and facilities: Office space (at 2 locations), copying machine, internet access, running cost of the offices
- Local cost: Borne as part of PEDP3

Japanese side:

- Short-term Expert: 31 positions (147.37 M/M) (as of May 2017)
- Trainees received: 21 persons
- Equipment: 9.07 million yen
- Local cost: 2.04 million yen

II. Evaluation Team

Members of Evaluation Team	The Bangladeshi side		
	Mr. Md. Gias Uddin Ahmed	Evaluator	Additional Secretary, MOPME
	Dr. Md Abu Hena Mostofa Kamal, ndc	Evaluator	Director General, DPE
	Mr. Md. Ruhul Amin	Evaluator	Deputy Secretary, Economic Relations Division, Ministry of Finance
	The Japanese side		
	Dr. Keiko Mizuno	Leader	Senior Advisor (Education), JICA
	Ms. Chiaki Yamagami	Evaluation planning	Human Development Department, JICA
	Ms. Masako Iwashina	Evaluation analysis	Senior Consultant, Icons Inc.

Period of Evaluation	1 <sup>st</sup> – 20 <sup>th</sup> July, 2017	Type of Evaluation: Terminal Evaluation
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III. Results of Evaluation

1. Project Performance

1-1. Inputs

Inputs from both Japan and Bangladesh were done as planned. Especially, contents of the training in

Japan and curriculum seminars were highly recognized from the staff of NCTB and IER as appropriate to learn the curriculum, textbooks and teaching methods of mathematics and science education at the international level. The project offices in DPE and NCTB largely contributed to the close communication and information sharing between the project and C/P.

#### 1-2. Outputs

##### (1) Output 1: expected to be achieved by the end of the project

Textbooks and teacher's editions for Grade 1-5 mathematics and science were refined as planned. The Grade 1-3 textbooks were distributed nation-wide for free in January 2015 and the Grade 4-5 textbooks were distributed in January 2016. The refined textbooks and teacher's editions reflect the new teaching method that the project pursued. On the other hand, the printing and distribution of the teacher's editions (except for the Grade 1-2 environment studies, which is still underway) were delayed until February-March 2017. Contents of the teacher's editions of Grade 1-2 environment studies are now in the process of confirmation by NCTB and its printing and distribution is expected to be completed by the end of the project. Primary school teachers have raised the need to include more explanation in teacher's editions how to make education materials with locally available materials, and it is desirable for this issue to be addressed in the next revision of teacher's editions.

##### (2) Output 2: partly achieved

JSP2 provided significant technical and academic inputs to the development of Teacher Education Development Action Plan (TED Plan) and the math and science training manuals for Diploma in Primary Education (DPed). JSP2 also provided technical and academic inputs to the development of In-service teacher training that was implemented nationwide by the expense of PEDP3 based on the TED Plan, such as Teacher Support Network through Lesson Study (AOP No. 054), Need-based Sub-cluster Training (AOP No. 050a), Subject-based Training for math and science (AOP No. 044, 046), the Curriculum Dissemination Training (AOP No. 013) and Leadership Training to Head Teachers (AOP No. 135). JSP2 also conducted follow-up training to PTI superintendents and PTI math and science instructors for 5 times each. However, according to the comparative results of lesson evaluation between DPed graduates and C-in-Ed graduates, statistical significance was not confirmed. The result of math and science post-test and the result of lesson evaluation by the PTI math and science instructors both did not meet the target. Further capacity development of the PTI instructors as well as the national trainers is necessary. Regarding the understanding of the refined textbooks and teacher's editions, according to the results of the Impact Study held in May 2017, approximately 50% of 1,252 primary school teachers replied that they do not have problems to understand them.

##### (3) Output 3: partly achieved

JSP2 produced and broadcasted the TV drama, community radio, newspaper advertisements and school monitoring and pilot activities for strengthening teacher support network to change the teacher's mindset and create supportive environment for the new teaching method. This TV drama promotes the understanding on the concept and implementation of the new teaching method as well as how to

organize Need-based Sub-cluster Training. Recognition on the refined textbooks among URC instructors and AUEO/ATEO, who are mainly in charge of monitoring school teachers, is higher than the target, with 95.3% and 76.8% of them respectively answering that they are confident in explaining about learner-centered teaching methods. On the other hand, as for the support for implementation of the new teaching method, around 20-40% of URC instructors and AUEO/ATEO feel difficulty in explaining the contents of the new textbooks and the lack of information and explanation in the new textbooks. Also, some teachers mentioned that they feel depressed after receiving monitoring by AUEO/ATEOs rather than feel encouraged.

### 1-3. Achievement of Project Purpose

Indicator 1 “the results of lesson evaluation of mathematics and science in primary schools” did not reach the target according to the results of lesson evaluation in 2016-2017 by the project experts of 146 Grade 3 and 5 math and science lessons that were recorded in 2015. Regarding indicator 2 “More than 50% of primary school teachers use contents or concepts of “Teaching Package”, according to the results of the Impact Study held in May 2017, 98.7% of the approximately 1,300 primary school teachers use the newly refined textbooks and 74.7% of teachers use the teacher’s edition. On the other hand, the same Impact Study organized math and science pedagogical test with 15 points maximums. The percentage of the math teachers who marked 50% and more (8 points and more) was 36.8% and that of the science teachers was 85.0%. Therefore, Indicator 2 was achieved in science and was not achieved in math. Regarding Indicator 3 “Lesson study is conducted at least once a year at more than 50% of URC model schools”, according to the results of the same Impact Study in May 2017, 86.1% of Head Teachers of the URC model schools and 64.5% of teachers of URC model schools answered that they conduct Lesson Study at least once a year, while by double checking with the activity record etc., only 44.0% of teachers can be confirmed that they actually conduct Lesson Study. However, Lesson Study is continuously encouraged through the Teacher Support Network activities, so Indicator 3 is expected to be achieved.

### 1-4. Implementation process

Monitoring system was structured as part of the project activities, such as school monitoring and Post-Activity Study. Although the strengthening of record-keeping and measurement of the training effects were recommended in the Mid-term Review of the project, the monitoring system of C/P organizations such as DPE, NAPE, PTI, URC and UEO/TEO have not been reformed during the project period. This is partly because the structural and capacity development is needed not only for DPE Training Division, the current main project C/P, but also for DPE Monitoring & Evaluation Division. It is deemed necessary to review the roles and responsibilities in monitoring and mentoring at district and Upazila/Tana level and support their capacity development. Project offices in DPE and NCTB highly contributed for the close communication and networking between the JSP2 members and the C/Ps.

## 2. Summary of Evaluation Results

### (1) Relevance

Relevance is high. The project is consistent with the Bangladeshi Seventh Five Year Plan (2016-2020), the National Education Policy (2010) and PEDP3, in aiming for improvement of quality of education through improvement of textbooks, teacher's editions, teaching methods, and teacher trainings. This project is also consistent with the Japanese Official Development Assistance (ODA) policy, which mentions contribution for improvement of primary completion rate in Bangladesh. The project's main activities for the quality improvement of math and science education utilize the Japan's technical comparative advantage and Lesson Study that was born and developed in Japan. The project's activities effectively meet the needs of the target groups. In addition, JSP2 has been implemented as part of JICA's "Basic Education Improvement Program", together with the Primary Education Advisor, JOCVs, and the Grant Aid for Poverty Reduction Strategy. JSP2 activities were also implemented as part of PEDP3 with coordination with other PEDP3 donors. Therefore, the project design was highly relevant.

### (2) Effectiveness

Effectiveness is fair. Lesson Study has been expanding, but the project purpose "the new teaching method is implemented in math and science in primary education" has not been achieved yet. The causes include the delay of the printing and distributing teacher's editions and the limited coverage of the Curriculum Dissemination Training, which has only been delivered to Head Teachers, meaning that the majority of teachers have not been trained on the revised curriculum. The other factor that has influenced the achievement of the target is the necessity of further capacity development of PTI instructors as shown from the results of Output 2.

### (3) Efficiency

Efficiency is fair. The inputs from both countries were implemented as planned. JICA's "Basic Education Improvement Program" was working as a contributing factor for JSP2. Grant Aid for Poverty Reduction Strategy enabled JSP2 to have full membership status in the discussion of PEDP3. The JICA Primary Education Advisor, who co-chaired the PEDP 3 "Quality of Education Working Group" until February 2017, positioned JSP 2 activities within PEDP 3, and played an important role for ensuring appropriate budgeting from PEDP3 pool fund for printing and distribution of textbooks and nationwide implementation of in-service teacher training. JOCVs working at PTIs provided JSP2 with information on a variety of challenges and issues that are faced by primary schools and training held at the PTIs. Based on such information, JSP2 could take appropriate actions to rectify them in the project activities. Furthermore, JOCVs worked on disseminating Lesson Study at the PTIs and the primary schools in their vicinity. Training in Japan greatly contributed to the capacity development of IER and NCTB members who wrote and edit textbooks. Project cost exceeded initial budget, but the increase was necessary in order to adjust the Project activities to appropriately align with PEDP3 activities. Project period was extended for one year, but this also was necessary for the Project to adjust to the extension of PEDP3 period.

#### (4) Impact

Impact is expected to be high in the future. Teacher's understanding on and implementation of the new teaching method will progress further considering that the teacher's editions were just distributed in February-March 2017. In addition, Lesson Study will be continued through Teacher Support Network and enable teachers to understand and implement the new teaching method adequately. The Curriculum Dissemination Training to teachers is planned to be implemented this year (the last year of PEDP3) and in the period of PEDP4, which is planned to commence in January 2018. As an intended impact, nationwide distribution of textbooks and teacher's edition and nationwide implementation of in-service teacher training were realized with the budget from PEDP3 and awareness on monitoring and mentoring among DPE, PTI, URC and other concerned organizations have been increasing.

#### (5) Sustainability

Sustainability is fair. Policy and institutional sustainability is high, which PEDP4 now being prepared and PEDP-related activities being prioritized within the C/P agencies. Financial sustainability has enhanced since mid-term review with the steady implementation of PEDP3 with the support of donors and functioning Joint Annual Review Mission (JARM). However, technical sustainability is a concern due to the frequent personnel transfer and difficulty of institutional accumulation of knowledge and experiences.

### 3. Factors that promoted realization of effects

#### (1) Factors concerning the planning

As stated above, cooperation with Grant Aid for Poverty Reduction Strategy, JICA Primary Education Advisor and JOCVs within the framework of JICA's "Basic Education Improvement Program" was working as a contributing factor for JSP2. The training in Japan was also a contributing factor in its contribution for the capacity development of C/P.

#### (2) Factors concerning the implementation process

Having project offices in DPE and NCTB is a contributing factor for increasing efficiency. Hiring the former senior officials of the major C/P organizations such as DPE and NCTB as local consultants greatly helped the project by enabling close communication with C/P organizations and networking.

### 4. Factors that impeded realization of effects

#### (1) Factors concerning the planning

There is no major problem. However, there is a discrepancy between project's super goal and overall goal and many factors outside the project scope will influence the indicators of super goals, especially Net Enrolment Rate and Dropout Rate.

#### (2) Factors concerning the implementation process

Hindering factors to achieve project purpose include the delay of printing and distributing teacher's edition and insufficient implementation of the Curriculum Dissemination Training, along with frequent

*hartal* and intermission of the experts' dispatch due to the security conditions. Another hindering factor in the implementation process was two times of delay in the revision of PDM during the project period.

## 5. Conclusion

Although there were various hindering factors as mentioned above, the project activities were implemented according to the plan. Relevance of the project is high, but the realization of the outputs and project purpose has not yet been seen because the hindering factors. The new teaching method is expected to be further implemented for the better-quality teaching-learning through the refined textbooks, teacher's editions and continuous in-service teacher training including Lesson Study by the budget of PEDP3. Quality of input was high, but the amount was increased in order to respond to and adjust with the needs and progress of PEDP3. Thus, efficiency is fair. Policy, institutional and financial sustainability would be high, but technical sustainability is a concern.

## 6. Recommendations

The discussion to finalize PEDP4 framework is on-going. Thus, the recommendations include the measures to be taken during the project period and those to be taken in the period of PEDP4 to continue and utilize the experiences, outputs and lessons learned from JSP2.

### 6-1. Recommendations to be implemented during the project period

(1) Completion of the Grade 1-2 teacher's editions for environment studies

(2) Implementation of the Curriculum Dissemination Training for teachers

Since there are still many teachers who have not received the Curriculum Dissemination Training, the training should be continued in PEDP4 if it cannot be completed within PEDP3 period.

(3) Utilization of the methods and outcomes of the studies conducted by JSP2

JSP2 organized various studies, i.e. Impact Study, assessment of the outputs of the training (pre- and post-test), and lesson evaluation at the school level. Those assessment/study methods and learnings from the study results should be summarised and widely shared with those concerned in the C/P organizations to utilize them in the following studies/surveys that are planned in PEDP4.

- (a) The studies on effectiveness of curriculum and Teaching and Learning Materials, the Needs/Situation analysis on teaching and learning, and the Teaching-Learning Practice Study that will be organized by NCTB and DPE, particularly ME Division,
- (b) Teacher Training plan for PEDP4 that will be designed by DPE Training Division.

### 6-2. Recommendations for training to bring about improvement in classroom teaching-learning during PEDP4

(1) Setting-up a consistent system of lesson/classroom observation which contribute to the planning of next training by DPE Training Division

The current lesson/classroom observation tools need to be improved so that the teacher monitoring that

is done by Head Teachers and URC/AUEO/ATEO/UEO/TEO focus more on the quality of teaching-learning. At the same time, the monitoring and evaluation system which is currently only accumulating information should be reviewed, including defining the roles and tasks of each level, such as Upazila, District, Division and DPE, to set-up a consistent system in which the collected information is utilized for the further improvement of the various training provided.

- (2) Further capacity development of DPE Training Division on recording, assessing and analysing the results/outcomes of training

A large number of training has been provided nationwide by the C/P organizations. However, the concerned authorities have not appropriately reviewed, assessed and analyzed the results/outcomes of such training. Further capacity development is needed for DPE Training Division to assess and evaluate the quality of training as well as to analyze the outcomes of training.

- (3) Further capacity development of master trainers etc. with more intensified technical support for Training of Trainers (TOT) to be provided by Japanese Experts

Quality of training delivery/method is critically important in the system of cascade training to ensure that high-quality training is delivered to the lower layers. However, during the PEDP3 period, it was observed that the capacity of the master trainers etc. had not been developed enough to adequately train the TOT participants, so it is recommended to organize trainings on training delivery for master trainers etc. by the Japanese experts.

- (4) Further capacity development of URC/UEO/TEO and AUEO/ATEO on monitoring and mentoring through focused training

Considering the situation in which school teachers are not encouraged but rather depressed by the current monitoring done by URC/UEO/TEO and AUEO/ATEO, it is necessary to provide a focused training on effective monitoring and mentoring.

- (5) Further capacity development on revision of textbooks and teacher's editions according to the revised curriculum and DPED assessment

According to the interview, teachers/AUEO/URC pointed out some gaps between curriculum and textbooks and also between textbooks of the different grades. Consistency of curriculum and textbooks and textbooks among grades requires high professional knowledge and understanding of not only the subject but also how children develop and learn. Therefore, it is recommended to develop further the capacity of human resources for the curriculum and textbook revision that have the right backgrounds and teaching experiences.

In addition, teacher's editions need to enable teachers to implement the new teaching method in their classrooms, including making teaching materials with the locally available resources that are easy to get and not expensive. Some teachers mentioned that it is not so easy to understand how they could make teaching materials from the current teacher's edition. Therefore, it is recommended to increase illustration or pictures in teacher's editions to support teachers develop teaching materials

(6) Ensuring that the personnel trained utilize the learnings in their activity implementation

The case was reported that some members who were trained in Japan were not fully utilized in the refinement process of textbooks and teacher's editions after coming back to Bangladesh. Thus, it is necessary to institutionally appoint the trained personnel to the related activities to utilize their learnings. In addition, selection of the training participants should be carefully done based on their background and experience so that they are able to take charge in appropriate activities upon their return from the training.

7. Lessons learned

(1) The use of impact study

In JSP2, four kinds of studies were implemented in total, namely the pre-activity (baseline) survey, situation analysis survey, impact survey and post-activity (endline) survey. Impact studies were effective for the Bangladeshi side and Japanese side to understand the progress of activities and the actual situation of classroom teaching-learning. However, the studies could not strictly analyse the difference between groups "with" and "without" project interventions or the impact "before" and "after" the interventions. That was because PEDP3 is a national project and all activities are supposed to be implemented nation-wide, according to PEDP3 consortium decision the project could not implement a major baseline survey on its own, and PDM of the project was revised during the project period in accordance with progress of PEDP3 activities. In the projects that are implemented as a part of a bigger national program, as was the case of JSP2, at the initial stage of the project, the design and schedule of the impact studies should be carefully discussed and shared among the stakeholders, taking into consideration the aims of conducting the studies and any limitations there may be, effects that may be caused by activities by other donors, and also the possibility of utilizing the studies that are done in PEDP3 itself.