1. Outline of the Project			
Country: The Republic of Ghana Project Title: Project for Strengthening the Capacit INSET Management			
Issue/Sector: Basic Education	Cooperation Scheme: Technical Cooperation		
Division in Charge: JICA Ghana Office	Total Cost (at the time of the evaluation): JPY 368 million		
Period of Cooperation: Partner Country's Implementing Organization:			
June 15, 2009 – March 14, 2013	National INSET Unit (NIU), Teacher Education Division		
(3 years and 9 months)	(TED), Ghana Education Service (GES)		
	Ministry of Education (MoE)		
	Supporting Organization in Japan:		
	PADECO Co., Ltd.		

Summary of the Joint Terminal Evaluation

Related Cooperation:

Technical Cooperation:

- Project of Improvement of Educational Achievement in Science, Technology, and Mathematics in Basic Education (2000-2005)
- Project to Support the Operationalization of the In-Service Training Policy (2005 2008)

1-1 Background of the Project

The Government of Ghana (GoG) positions education as key to national development and has provided for free, compulsory, universal basic education in its 1992 Constitution. As a result, the gross enrolment rate of primary schools in Ghana increased from 78% in 2004 to 95% in 2008; however, the quality of education remains a challenge. One of the major reasons for the low academic achievement among pupils in public primary schools is that the number of teachers with appropriate and effective teaching skills is insufficient due to the absence of a structured and quality INSET system for teachers.

Under such circumstances, JICA supported the Project of Improvement of Educational Achievement in Science, Technology, and Mathematics in Basic Education (STM Project) from 2000 to 2005 and the Project to Support the Operationalization of the In-Service Training Policy (INSET Project Phase 1) from 2005 to 2008. In the INSET Project Phase 1, the School-Based INSET (SBI)/Cluster-Based INSET (CBI) model was developed as an INSET model for improving mathematics and science in Ghana through pilot activities in ten districts. In the course of developing the INSET model, the INSET Project Phase I developed INSET implementation guidelines and teaching manuals and strengthened the INSET implementation system and the capacity of stakeholders.

Building on the achievements of these projects, the GoG made a request to JICA for technical support in effectively and efficiently implementing a programme to conduct the nationwide dissemination of the INSET model. In response to the request, JICA launched the Project for Strengthening the Capacity of INSET Management (INSET Project Phase 2) in June 2009 for the duration of three years and nine months in collaboration with the National INSET Unit (NIU), Teacher Education Division (TED), Ghana Education Service (GES), whose role is to formulate and implement a strategy on INSET.

1-2 Project Overview

The Project aims to strengthen the INSET management system and improve the quality of INSET in order for the GoG to implement the nationwide dissemination of the INSET model (SBI/CBI) established in the STM Project and the INSET Project Phase 1.

	Super Goal: Pupil's performance is improved.			
		oal : Teaching abilities of public primary school teachers in the area of mathematics and improved		
		ience are improved. oject Purpose: The nationwide management system for a structured and quality INSET of		
	•	tics and science is established and reinforced.		
(4)	Outputs			
1)	The capacity of the National INSET Unit (NIU) for managing INSET is strengthened.			
2)	2) The capacity of the Regional Master Trainers (RMTs) and District Master Trainers (DMTs) for INSET			
	delivery is	enhanced.		
3)	3) The capacity of the District INSET Committee (DIC) for managing INSET and the District Teach			
	Support Team (DTST) for INSET delivery is enhanced.			
4)		g and evaluation (M&E) system is established and enhanced for a structured and quality		
	INSET.			
5)		rting system for INSET is strengthened.		
	Inputs	Total cost JPY 368 million		
Japanese Government:				
Japanese Experts:9 persons*Equipment: JPY 21.1 million				
Local Consultants: 8 persons* Local Expenses: JPY 55.9 million				
		as Training: Japan (51 persons), Kenya (27 persons), and Uganda (8 persons)		
(Government:		
	C/Ps: 12 persons * Facility: Project offices Budget: GHS 366,000 * Aggregate			
2. E	Evaluation 7			
	Members of • Mr. Koichi Kito (Leader: Senior Representative, JICA Ghana Office) Max Envi Nickibeta (Texclection Planning: Depresentative)			
Team	EvaluationMs. Emi Nishihata (Evaluation Planning: Representative [Education & Governance].JICA Ghana Office)			
	Japanese Side): • Ms. Mama Laryea (Education Policy: Education Advisor, JICA Ghana Office)			
• Mr. Tsutomu Takahashi (INSET Management: Consultant, International Development)				
Associates Ltd.)				
		• Ms. Setsuko Kanuka (Evaluation Analysis 1, Consultant, IMG Inc.)		
		• Ms. Ayako Kimura (Evaluation Analysis 2, Monitoring and Evaluation Consultant,		
		JICA Ghana Office)		
Evalu	uation Peric	od : 30 th October – 24 th November 2012 Type of Evaluation: Terminal Evaluation		
3. E	Evaluation I	Results		
3-1 Achievements of the Project				
(1) Achievements of the Outputs				
Outp	ut 1(Capac	ity strengthening of NIU in INSET management) : Mostly Achieved		
Out	tput 1 is as	sessed to be mostly achieved based on INSET activities conducted by the NIU, and the		

Output 1 is assessed to be mostly achieved based on INSET activities conducted by the NIU, and the feedback on NIU members' performance from the JICA Expert Team, the NIU members themselves and those who participated in the training and workshops managed by the NIU. The NIU members' capacity to plan and implement INSET activities has been strengthened by the On-the-Job Training (OJT) as well as the overseas training in Japan, Kenya and/or Uganda, but their analytical capacity for monitoring data needs further improvement. While Output 1's indicator is set as that "All the districts prepare district budget which include INSET components," when the number of districts that budgeted INSET components in 2012 (85

districts) is compared with the number of districts that covered the cost of participating in INSET activities (140 districts), there is a gap between budget request/approval and actual disbursement. Although the indicator has not been achieved yet at the time of the Terminal Evaluation, following the Mid-term Review's recommendation, the Project conducted sensitization workshops for District Directors of Education (DDE) to increase their awareness of the importance of INSET. Given the fact that these workshops have already resulted in a significant increase in the numbers of district-level INSET training for Head Teachers (HTs)/Circuit Supervisors (CSs) and Curriculum Leaders (CLs), it is expected that the number of districts that include INSET components in their budgets will increase in the future.

Output 2 (Capacity enhancement of RMTs¹ and DMTs in INSET delivery): Mostly Achieved

Output 2 is assessed to be mostly achieved based on the achievement levels of its indicators, the feedback on their performance from district and school level stakeholders, and the quality of advice given in SBI by DMTs. The Project has conducted DMT training, comprised of two sessions, to improve their INSET delivery capacity. As of 2012, DMTs from 160 districts have attended one of or both sessions of the DMT training. As for the achievement levels of the indicators, the orientation/training on INSET Management for HTs and CSs monitored by DMTs has been implemented in 98 districts (57.6%) and the orientation/training on INSET Delivery for CLs monitored by DMTs has been implemented in 100 districts (58.8%) (as of August 2012). From the monitoring data and the progress in appointing DMTs, it is confirmed that most training conducted after the appointment of DTMs has been monitored by DMTs.

Output 3 (Capacity enhancement of DIC in INSET management and of DTST in INSET delivery) : Achieved

Output 3 is assessed to be achieved based on the achievement levels of its indicators, feedback on the district level stakeholders" performance from school-level stakeholders, and the quality of advice given in SBI by them. All training under Output 3 has been conducted as planned. The DIC orientation/training in INSET management was conducted to key DIC members from all 170 districts (100%) by 2011. The second round of the DIC training, attended by all districts was conducted in 2012. As of August 2012, the number of districts that have implemented the orientation/training in INSET delivery for DTST members was 169 districts (99.4%). Furthermore, the number of districts that have implemented orientation/training on INSET delivery for HTs and CSs was 164 districts (96.5%), greatly exceeding the target value of 60%.

Output 4 (Establishment and enhancement of INSET M&E system): Achieved

Output 4 is assessed to be achieved based on the achievement level of its indicator and the Project's successful efforts to utilize existing information sources to further improve the monitoring system, following the Mid-term Review's recommendation (e.g., Ministry of Education's Education Management Information System [EMIS]). The percentage of the Annual INSET Progress Report (AIPR) submitted to the NIU from DEOs which have conducted CL Sourcebook² Training was 100% (94 districts out of 94 districts) in 2011 and 99.4% (153 districts out of 154 districts) in 2012, greatly exceeding the target value (80%).

¹ Under decentralization, it was decided that two master trainers be appointed in each district. Since the INSET activity costs for RMTs and DMTs are covered from the district budget, NIU has considered that it would be more beneficial to focus on the capacity enhancement of DMTs for the development of a quality INSET structure as they are placed closer to schools (beneficiaries), given the limited district financial resources.

 $^{^{2}}$ The INSET Sourcebooks is comprised of six modules (five volumes), Modules 1/2 for the district level stakeholders (one volume), and Modules 3-6 for the school level stakeholders (four volumes).

Output 5 (Strengthening of INSET supporting system): Mostly Achieved

Output 5 is assessed to be mostly achieved based on the achievement levels of its indicators. To sensitize stakeholders on the INSET concept and activities, the Project printed 20,000 copies of an INSET information booklet in 2010 and 15,000 copies of the first edition of the Nationwide INSET Programme Newsletter in 2011, and distributed them to all Regional Education Offices (REOs), District Education Offices (DEOs), and primary schools nationwide. In addition, 30,000 copies of the second edition were printed in November 2012 and will be distributed to the REOs, DEOs, and schools. As to the Project's efforts to institutionalize the Nationwide INSET Programme, the Education Strategic Plan (ESP) 2010-2020, which is one of the key education policies, discusses INSET as a part of the Pre-tertiary Teacher Professional Development and Management (PTPDM) policy (draft). In the draft policy, the SBI/CBI model is positioned as a part of the pre-tertiary teacher professional development and management structure. Moreover, INSET is incorporated in the Head Teacher's Handbook as well as in the three-year Ghana Partnership for Education Grant (GPEG) Project's budget plan³ for implementing INSET activities at 57 deprived districts.

(2) Achievement of the Project Purpose: The prospect of its achievement is promising.

The prospect for achieving the Project Purpose (the establishment and reinforcement of the nationwide management system for a structured and quality INSET of mathematics and science) by the end of the project period is assessed as promising based on the achievement level of its indicators. The number of districts that have completed INSET Sourcebook Training for CLs who are considered to have a large influence over the quality of INSET has reached 90.6% (154 districts) by September 2012, greatly exceeding the target value of 60%. The proportion of the districts that have completed the CL Sourcebook Training and SBI/CBI in the target frequency is 57.7% (as of August 2012). Although the figure is still under the target value (80%), it is projected that the implementation coverage will reach 90% by September 2013 because the past tendency observed in the pilot districts in the INSET Project Phase 1 demonstrates that the increase in SBI/CBI implementation is directly proportional to the increase in HT/CS and CL training implementation. As to the quality of SBI/CBI, the teachers' satisfaction level with INSET (SBI/CBI) (1 to 4 rating scale) at the schools selected nationwide in the sampling survey was 2.9, exceeding the target value of 2.8.

3-2 Summary of Evaluation Results

(1) Relevance: High

The Relevance of the Project is assessed as high because the improvement of the quality in the basic education sector is in line with the needs of Ghanaian people, the GoG's development policy, and the Japanese Government's aid policy to Ghana. Moreover, the project approach (SBI/CBI) is deemed appropriate for the improving teachers' teaching skills.

With the increase in the enrollment of pupils, a large number of new teachers, many of whom were untrained, were recruited, creating an urgent need to improve the quality of education. Given this situation, the Ghana Shared Growth and Development Agenda (GSGDA) 2010-2013, the medium-term development policy framework, sets forth the institutionalization of INSET as one of the necessary policy interventions at the primary level as it will enhance the teaching abilities of primary school teachers and improve learning outcomes. The ESP 2010-2020, the key policy document of the education sector, also includes the PTPDM Policy (draft), which provides for the institutionalization of the Nationwide INSET Programme, as one of the educational sub-sector policies. In Japan's Country Assistance Policy for the Republic of Ghana (2012),

³ Funded by the Global Partnership for Education Fund (former Education for All-Fast Track Initiative [EFA-FTI])

"Health and Science/Mathematics Education" is positioned a priority area of assistance. The Project is also in line with the Japan's Education Cooperation Policy 2011-2015 and the Yokohama Action Plan (2008). Moreover, the SBI/CBI model can be conducted at a low cost. Given the limited budget available for non-salary recurrent spending in the education sector in Ghana, the cost-effectiveness of SBI/CBI enables for more teachers to be trained. The project approach that promotes the pupil-centered approach in teaching is an appropriate strategy to improve the quality of education.

(2) Effectiveness: Relatively High

The Effectiveness of the Project is assessed as relatively high because the prospect of the Project Purpose (the establishment and reinforcement of the nationwide management system for a structured and quality INSET of mathematics and science) being achieved by the end of the project period is deemed promising and there is a clear linkage between the achievement of the Project Purpose and the successful production of the five planned Outputs. For the INSET's quality to further improve, there is need to improve the subject based knowledge of the NIU and district level stakeholders by providing more materials for SBI/CBI such as lesson plans, sharing experiences and refresher trainings..

The Project has already achieved the target values set for two out of three indicators: the implementation rate of the CL Sourcebook Training and the teachers' satisfaction rating with INSET. As for the coverage of implementation of SBI/CBI among primary schools of which CLs have participated in the CL Sourcebook Training, it is projected that the coverage of SBI implementation will reach about 90% by September 2013, achieving the target value (80%); this projection is made from the past tendency, which is that the increase in SBI/CBI implementation is directly proportional to the increase in HT/CS and CL training.

The five Outputs cover all the components (INSET management capacity at the central level [Output 1], INSET management and delivery capacity at the district level [Outputs 2 and 3], M&E [Output 4] and institutional support system [Output 5]) that are necessary to establish the nationwide management system for a structured and quality INSET. Therefore, the successful production of the five Outputs is directly linked to the achievement of the Project Purpose. As discussed in the "Achievement of the Outputs" section, most of the expected Outputs have been either achieved or mostly achieved, it is therefore evaluated that a solid technical and administrative foundation for the nationwide INSET management system has been established.

(3) Efficiency: Medium

The Efficiency of the Project is assessed as medium because most inputs that are necessary for the implementation of activities have been allocated and used effectively to contribute to the output production but there have been some constraints on the production of Outputs caused by issues such as the high attrition rates among the project stakeholders and the delays in the GoG's budget disbursement.

In the Project, a large number of stakeholders, including NIU members, DMTs, and DIC members, have attended training in Japan, Kenya, and/or Uganda. Based on the interviews with project stakeholders, it was confirmed that training participants have utilized the knowledge they have gained through the overseas training in performing their roles and responsibilities in the Nationwide INSET Programme. The factors that have increased the Project's Efficiency include: the use of the INSET training materials (e.g. Sourcebooks) developed in INSET Project Phase 1, the use of the existing information sources for the establishment of the INSET monitoring and evaluation system, and the use of CSs for school-level monitoring. On the other hand, the high attrition rates among district and school level stakeholders, the delay in the GoG's budget provision and insufficient budget allocation have decreased the Project's Efficiency.

(4) Impact: Medium

The Impact of the Project is assessed as medium. It is likely that it will take longer than five years for the Overall Goal to be fully achieved, but there are some positives, such as feedback from school-level stakeholders, the support of the Nationwide INSET Programme by other donors, and ripple effects to other subjects. However, there are hindering factors, namely high attrition rates among stakeholders and the late release of budget.

The Overall Goal (the improvement in teachers' teaching abilities in mathematics and science) is evaluated based on the satisfaction rating on teachers' teaching rated by pupils and the level of teachers' teaching skills rated by lesson observation in the sampling survey. The result of the sampling survey targeting 3,000 pupils from 12 districts nationwide shows that the pupils' satisfaction rate with teachers' teaching skills has consistently increased in the course of the project period: 85.3% in 2009, 87.9% in 2010 88.3% in 2011, and 88.4% in 2012. Based on this trend, it is likely that the target value will be achieved in the three to five years of the project completion. The teachers' teaching level has increased from 2.6 in 2009 to 2.8 in 2012. The increase in the rating as well as the feedback from teachers' teaching skills have improved over the course of the project period due to the implementation of INSET activities and will continuously improve after the project's completion; however, considering the rate of increase it is likely that it will take longer than five years from the completion of the project for the target value (3.5) to be achieved. It should be noted that above 3.0 is considered the pupil-centered teaching and the average teaching level for teachers in Japan is between 3.0 and 4.0; therefore, 3.5 is rather an ambitious target value.

(5) Sustainability: Medium

The Sustainability of the Project has been evaluated as medium. The institutional aspect of the Project's sustainability has been secured because the PTPDM Policy (draft) that provides for the institutionalization of the Nationwide INSET Programme has been included in the ESP 2010-2020. As to the organizational aspect, stakeholders' roles and responsibilities in the Nationwide INSET Programme implementation and monitoring are clearly defined in the revised INSET Sourcebooks and the INSET administrative structure has been widely acknowledged by development partners who are involved in improving the quality of basic education and has been used by them when implementing similar projects. In order to further improve the organizational aspect of the Project's sustainability, there is need for the Project to cooperate with the National Teaching Council (NTC), which was newly established based on the Education Act 778 (2008), in initiating the implementation of the PTPDM Policy. The financial aspect of the Project's sustainability has been secured for at least the 57 districts that are target districts of the Ghana Partnership for Education Grant Project, but it is uncertain whether sufficient budget will be released for the rest of the districts. From the technological aspect, the Project has established a solid technical foundation for the establishment of the Nationwide INSET Programme owing to the various training (including OJT) conducted throughout the Project. There is still room for improvement in the NIU members' capacity in analyzing monitoring data and the proper use of LOS among the district and school level stakeholders.

3-3 Factors Promoting the Production of Effects

(1) Factors Concerning to Planning

- Since the capacity strengthening of teachers using the SBI/CBI model can be conducted at a low cost, the proportion of the districts that have implemented SBI/CBI has increased, despite the delays in the release of the GoG's budget.
- JICA has been providing technical assistance in establishing the INSET model for primary school

teachers in mathematics and science in Ghana since 2000. The training materials (e.g. INSET Sourcebooks) developed in the previous projects were effectively utilized in the Project.

• SBI/CBI under the Nationwide INSET Programme provides a mandatory forum in which peer teaching takes place. This has created an environment conducive for teachers to learn from each other.

(2) Factors Concerning to the Implementation Process

- The Project has been conducted with a strong sense of commitment to the Nationwide INSET Programme by NIU members and many district and school level stakeholders.
- The Project has responded flexibly to internal and external risk-factors, such as increase in the number of target districts (from 138 districts to 170 districts) and the transfer of INSET-related budget from the national level to the district level.
- The Project categorized all the districts based on their performance in implementing INSET activities and shared the result of the categorization with the districts in the workshop, attended by the District Training Officers (DTOs). This increased a sense of competition among districts and facilitated each district to become more accountable for its performance on INSET implementation.

3-4 Factors inhibiting project progress

(1) Factors related to planning

• The high attrition rates among the project stakeholders and the delay in the GoG's budget provision have negatively affected the overall INSET management. Due to the high attrition rates, the NIU needs to provide/ promote training to newly assigned stakeholders at district level upon necessity. On the other hand, the GoG budget for the Nationwide INSET Programme has heavily relied on the sector budget support from the Department for International Development (DFID). NIU members have kept a close communication with DEOs to be fully informed of the DFID's budget disbursement timing and these training were arranged according to the disbursement timing of the DFID's sector budget support to the district level. Furthermore, the Japanese side has allocated additional inputs to facilitate the project implementation especially at national level.

(2) Factors Concerning to the Implementation Process

- Due to the transfer of INSET-related budget to the district level, DDEs became responsible for securing the INSET related budget. This new fiscal arrangement restricted the NIU's control over the INSET-related budget, which initially resulted in a temporary halt in the district-level INSET training. Following the Mid-term Review's recommendation, the Project organized various activities targeting district stakeholders, such as sensitization workshops for DDEs to increase their awareness on INSET's importance and to secure INSET-related budget at the district level. Following the Mid-term Review's recommendation, the Project has adjudged several districts as model districts and gave priority in providing inputs such as overseas training and promotes experience sharing among districts. These efforts have resulted in an increase in the motivation and ownership towards INSET activities among stakeholders at the district level, and subsequently the implementation of district-level INSET training has drastically increased from 2011 to 2012.
- The increase in the number of target districts has increased the numbers of stakeholders to train and to monitor. The Project originally planned to introduce the INSET system in two batches to 128 districts excluding 10 pilot districts in the Project Phase 1 in two years. As the number of districts increased from 138 to 170, the Project decided to cover the 170 districts in three batches in three years.

3-5 Conclusions

The Project has produced the intended outputs by flexibly adjusting its design and activities to the changing external operating environment, caused by factors such as increase in the number of districts and the financial devolution.

The Relevance of the Project is assessed as high because it is in line with the needs of Ghanaian people, the GoG's development policy, and the Japanese Government's aid policy to Ghana. The project approach (SBI/CBI) is deemed appropriate for the improving teachers' teaching skills. The Effectiveness is assessed as relatively high because the prospect of the Project Purpose being achieved by the end of the project period is deemed promising and there is a clear linkage between the achievement of the Project Purpose and the successful production of Outputs. However, there is need to improve the subject based knowledge of district level stakeholders for further improvement of INSET's quality and the achievement of the Project Purpose depends on the premise that there is no significant change in INSET operational environment, such as further worsening of the budget conditions. The high attrition rates among stakeholders and the late release of the GoG's budget are considered as hindering factors for the Project's Efficiency, Impact and Sustainability. They are assessed as medium.

The Terminal Evaluation Team concludes that the Project Purpose will be achieved by the end of the project period; therefore, the Project is to be completed as scheduled.

3-6 Recommendations (Measures to Be Taken by the GoG after the Project)

- The Terminal Evaluation Team recommends the MoE/GES and the National Teaching Council jointly launch the PTPDM policy in the first half of 2013. It is further recommended that NIU drafts the implementation plan of the policy to facilitate discussions between TED, GES and NTC. In the process, the roles and responsibilities of GES (TED) and NTC for the Nationwide INSET Programme need to be further defined. As to course contents on various INSET training, TED should lead the development process with the cooperation of various relevant organizations.
- For the Nationwide INSET Programme's sustainability, it is highly important that sufficient budgets are released in a timely manner to all administrative level. It is also recommended that the MoE/GES at the central level continuously engage the Ministry of Finance and Economic Planning to disburse the needed amount for the programme.
- The high attrition rate among project stakeholders trained in the Project is a major inhibiting factor for the Project's Sustainability. It is recommended that the NIU keep an updated-record of human resources trained in the Project through monitoring and provide/promote training to newly assigned stakeholders and/or refresher training to existing ones upon necessity.
- There are some schools that have not ensured that teachers have access to the INSET Sourcebooks. The Terminal Evaluation Team recommends that DEOs advise schools to ensure the INSET Sourcebooks are made available to teachers at the schools. The Team further recommends that GES ensures sufficient copies of the INSET Sourcebooks are made available to districts and schools according to emerging needs (e.g. increase in the number of districts and schools). NIU should take a lead in revising as the need arises, for example, curriculum revision and changes in the administrative structure in INSET implementation.

3-7 Lessons Learned

• When compared with the cascade training model, the costs needed for the SBI/CBI model is small. The number of SBI/CBI conducted has increased in spite of delays in budget disbursement causing financial constraints because the implementation cost of SBI/CBI is within the range that can be covered by the personal money of HTs and teachers. The Project's experience has demonstrated that SBI/CBI is a model that can be implemented within the limited budget. This works based on the head teachers' and teachers' high motivation and belief that their personal money will be reimbursed someday when the budget is released; however, if the budget delays continue, it may negatively lead to a decrease in motivation and willingness among head teachers and teachers to conduct SBI/CBIs using their personal money.

- Since most of the INSET related budget has been devolved to districts due to decentralization, DDEs become key persons for the implementation of INSET activities at the district level. Under this situation, the Project conducted two sensitization workshops for DDEs, which resulted in the drastic increase in the implementation of district level training. As this shows, Identifying and sensitising the most influential stakeholders is a must for the successful implementation of a technical cooperation project.
- The INSET implementation structure developed by the Project uses as much existing administrative structure, human resources and information sources as possible by adding new roles and responsibilities on INSET implementation to their regular operation. This made it cost-effective and the administrative structure strengthened by the Project will remain after the Project's completion. The use of existing human resources also increases the likelihood that their increased capacities may be effectively utilized in their regular public service duties. The use of existing structure and human resources promote the Project's sustainability and facilitate the production of ripple effects.