Country Name Republic of Ghana		Project for Strengthening the Capacity of INSET Management				
I. Project Outline	in and a second s					
Background	The government of Ghana has identified education as a key development tool for the nation, and it is identified as a focused area in the development policies and strategies. The gross enrolment rate of primary schools in Ghana had reached over 90% (2006). However, improvement in quality of education, especially in terms of the quality of primary school teachers remained a challenge. Upon request from the government of Ghana, JICA conducted technical cooperation from 2000, in order to develop an in-service training (INSET) model through piloting activities in the pilot districts. The government has made efforts for disseminating INSET model nationwide and requested JICA in order to support Ghana to establish and reinforce the management system for a structured and high quality INSET in mathematics and science.					
Objectives of the Project	Through reinforced INSET management system and capacity of the district-level personnel, the project aimed at strengthening INSET delivery in science and mathematics at the primary education level, in order to improve the teachers' teaching abilities. Overall Goal: Teaching abilities of public primary school teachers in the area of mathematics and science are improved. Project Purpose: The nationwide management system for a structured and quality INSET of mathematics and science is established and reinforced.					
Activities of the project	 Science is established and reinforced. Project site: 170 districts in the country (After the creation of new districts. Initially 138 districts) Main activities: capacity building of NIU (National INSET Unit) for overall management of INSET, revise of INSET Sourcebook and LOS (lesson observation sheet) Manual, capacity building of the region-district-level personnel for delivery and quality control of INSET, establishment of INSET monitoring systect. Inputs (to carry out above activities) Japanese Side Experts: 9 persons Training in Japan: 52 persons Training in the third country: 35 persons Chanaian Side Equipment: Motorbikes, vehicle, PC, etc. Operation cost for hiring local consultants, equipment maintenance, travel expenses, etc. 				management of INSET, revision city building of the region- and ent of INSET monitoring system, 2 persons es: Office and meeting space. r training, material printing, etc.	
Ex-Ante Evaluation	2009	Project Period	June 2009 to March 2013	Project Cost	(ex-ante) 390 million yen (actual) 432 million yen	
Implementing Agency	Ministry of Education					
Cooperation Agency in Japan	PADECO Co., Ltd.					

II. Result of the Evaluation

< Special perspectives considered in the ex-post evaluation and end of project completion report.>

• The project was completed in March 2013. However, in the indicators 2 and 3 of the Project Purpose, the time target was set as "by the year 2013". Therefore, by confirming the status at the end of 2013, achievement of the Project Purpose was judged. As for the indicators of the Overall Goal, the time target had been set for 2016. Since the data for 2016 was not available in this ex-post evaluation survey, achievement in 2016 was estimated and judged by examining the achievement by 2015.

- The number of the target districts was 138 at the time of the ex-ante evaluation, but after that some of these districts were restructured, which resulted in the total target number 170. The creation of new district was conducted by the Ministry of Local Government and Rural Development due to the population growth of the existing districts.
- 1 Relevance

<Consistency with the Development Policy of Ghana at the time of ex-ante evaluation and project completion>

The project was consistent with Ghana development policies, as strengthening of INSET was prioritized in the Ghana Poverty Reduction Strategy II (2006-2009) and Ghana Shared Growth and Development Agenda (2010-2013). In addition, improvement of the teaching/learning methodology was included in the Education Strategic Plan (ESP) (2003-2015, 2010-2020). Therefore, this project has been consistent with the development policy of Ghana at the time of both ex-ante evaluation and project completion.

<Consistency with the Development Needs of Ghana at the time of ex-ante evaluation and project completion >

Although the gross enrolment rate at the primary level reached over 90% in 2006, low quality of the primary school teachers was pointed out as a challenge. As there were many teachers who had not been sufficiently trained against the increasing pupil enrollment even at the time of project completion, there were great needs for INSET.

<Consistency with Japan's ODA Policy at the time of ex-ante evaluation>

In the Country Assistance Program of the Republic of Ghana (September 2006), one of the four strategic objectives was "improvement of basic social services in deprived areas". Related to this, one of the sub objectives was "improvement of access and quality of basic education".

<Evaluation Result>

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

2 Effectiveness/Impact

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

The Project Purpose (reinforcement of INSET of mathematics and science at the primary education level) was partially achieved. By the project completion, the training for the Curriculum Leaders (CL) was conducted in most of the target districts (154 districts). Less than half of CLs realized more than 3 SBI (School-based INSET)¹ and 1 CBI (Cluster-based INSET)² in mathematics and science per year, because some schools lacked funding for materials of SBI/CBI and refreshment. Other schools did not conduct SBI/CBI because they considered that they had already completed necessary training to cover the challenging topics until the previous year. On the other hand, in the schools where SBI/CBI was conducted more than three times per year, it was proved that the training was successful as the teachers' satisfaction was more than planned.

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

INSET established by the project has continued. CL Sourcebook training was implemented in all the districts where the training was not conducted during the project period, except one district. The only one district could not undertake the training because the district structure for INSET was not ready at that time and also lacked the budget. After CL Sourcebook training, most of the participated CLs have conducted more than three SBI/CBI per year until 2015. According to the schools of 10 districts survyed at the ex-post evaluation, more teachers are satisfied with INSET than planned. Frequency of INSET is affected by the fund availability, as INSET requires many materials such as Teaching and Learning Materials (TLMs).

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

It is judged that the Overall Goal has been achieved, although the data was not available for 2016. As a result of INSET, teaching abilities of the teachers (teaching skills, teachers' knowledge on the subject, etc.) in mathematics and science have been improved. The students rated as high as 4.7 among 5 points for the teaching method of their teachers who were trained by INSET. The rating of the District Master Trainers (DMTs) on the teaching skills reached 4.7 among 5 points. There are not much difference in the rating results of the students and DMT among the pilot districts and 3 batches. According to DMT and NIU, the teachers now prepare better lesson and TLM, and teach challenging topics with more confidence. They also observe that the classes are now more learner-centered. <Other Impacts at the time of Ex-post Evaluation>

First, the project experience has been extended to all 32 non-target districts except one. The District INSET Committees (DIC) members in these districts were trained and in addition all CLs in these Districts were also trained on CL Sourcebook. Second, the system of INSET developed by the project has been applied to other subjects (English and Ghanaian Language), and DMTs of 75 districts were trained on these two subjects with support of Ghana Partnership for Education Grant (GPEG). Third, the experience of the project is planned to be applied in mathematics and science at the senior high school levels on a pilot base, in which the process from planning to monitoring of INSET will be referred to. No negative impacts on the natural and social environment have been produced by the project.

<Evaluation Result>

In light of the above, the achievement of the Project Purpose was partially at the time of the completion, but after the project completion it was achieved and its effects have mostly continued. In other words, the number of conducted SBI/CBI did not reach the target by the project completion, but SBI/CBI have partially continued in the target districts. This has resulted in the achievement of the Overall Goal (improvement of the teaching abilities in mathematics and science). Several positive impacts have been reported. Therefore, the effectiveness/impact of the project is high.

Achievement of project purpose and overall goal					
Aim	Indicators	Results			
(Project Purpose)	1. More than 60% of districts conduct the CL (Project Completion) Achieved.				
The nationwide	Sourcebook training 1 in INSET delivery for CLs.	- 90.6% of the districts (154 districts among 170 districts) conducted			
management system for a		CL Sourcebook training.			
structured and quality		(Ex-post Evaluation) Continued.			
INSET of mathematics		- CL Sourcebook training has been conducted in 45 among the 46			
and science is established		remaining districts.			
and reinforced.	2. More than 80% of primary schools whose CLs				
		- In the reported 115 districts, 38.3% of the primary schools whose			
		CLs participated in CL sourcebook training 1 implemented at least			
	and science per year by the year 2013.	three SBI/CBI in mathematics and science by 2013.			
		(Ex-post Evaluation) Partially continued.			
		- In the surveyed 10 districts, 84.5% of the primary schools whose			
		CLs participated in CL sourcebook training 1 implemented at least			
		three SBI/CBI from 2013 to 2015 on average.			
	3. Satisfaction ratings of teachers attain more than				
		- Satisfaction ratings of the teachers attained 2.9 on average with			
		reference to INSET (SBI/CBI) at the schools selected nationwide (12			
		pilot districts and first batch districts) in the sampling survey.			
	the sampling survey by the year 2013.	(Ex-post Evaluation) <u>Continued.</u>			
		- Satisfaction ratings of the teachers attained 3.25 on average at the 4			
		schools surveyed in the 4 pilot districts and first batch districts,			
		according to the ex-post evaluation survey.			
		- Satisfaction ratings of the teachers attained 3.0 on average at the 6			
		schools surveyed in the second and third batch districts, according to			

¹ The following is a SBI example. Before the academic term begins, the teachers come together to discuss challenging topics in mathematics and science. Based on the timetable prepared by CL and HT, a teacher who can handle the topic conducts the training to their colleagues. If there is no teacher who can handle the topic, HT asks DMT to come to INSET. Also MTs are invited to monitor INSET. Modules 3-6 are used. Also LOS is used as an assessment tool of INSET.

² <u>Usually 3 SBIs</u> and 1 CBIs are counted together per academic year. SBIs are conducted more often as compared to CBIs.

		the ex-post evaluation survey.
(Overall goal)	1. Satisfaction ratings of students attain more than	(Ex-post Evaluation) Achieved.
Teaching abilities of	90 % on average with reference to the teaching	- Satisfaction ratings of students against the teaching skills attained
public primary school		96% on average at the 4 schools surveyed at the ex-post evaluation
teachers in the area of	teachers at the schools selected nationwide (the 10	in the pilot districts and first batch district.
mathematics and science	pilot districts and the first batch districts) by the year	- Satisfaction ratings of students against teaching skills attained 92%
	2016.	on average at the 6 schools surveyed at the ex-post evaluation in the
are improved.		second and third batch districts.
	2. The rating of teachers' teaching skills attains	
	more than 3.0 (1 to 5 scale) on average at the	- Ratings of the teachers' teaching skills (judged based on LOS)
	· •	attained 3.5 on average at the 4 schools surveyed at the ex-post
	and the first batch districts) by the year 2016.	evaluation in the pilot districts and first batch district Ratings of the
		teachers' teaching skills (judged based on LOS) attained 3.6 on
		average at the 6 schools surveyed at the ex-post evaluation in the
		second and third batch districts.

Source: NIU.

Note: "CL Sourcebook training 1" in the indicators of the Project Purpose means the first CL Sourcebook training. Obtained data includes all CL Sourcebook trainings including the first one.

3 Efficiency

The project period was as planed (ratio against the plan: 100%). The project cost exceeded the plan (ratio against the plan: 111%), because there were more teachers needed to be trained than planned due to the creation of new districts. The increase in the cost is commensurate with the required workload due to the increase in districts (32). Therefore, the project efficiency is high. 4 Sustainability

<Policy Aspect>

Improvement of the teaching/learning quality through INSET has been prioritized in the Pre-tertiary Teacher Professional Development and Management (PTPDM) (2014-2018) and in ESP (2010-2020). <Institutional Aspect>

The organizational structure for INSET has remained the same since the project completion, and additionally the Regional INSET Committees (RICs) were established in all 10 regions to strengthen collaboration between the Ghana Education Service (GES) and Regional Education Offices (REOs). The number of the personnel of NIU is four after two was retired and is not sufficient. At the district level, the personnel turnover occurs frequently as it did during the project period, but trainings are conducted to the newly appointed personnel and therefore the number of the personnel is sufficient. For the head teachers (HTs) and Circuit Supervisors (CSs) in the 170 target districts have been trained on INSET delivery. Monitoring of INSET is conducted by CS through observation of SBI/CBI, but it is at an ad hoc basis due to the fund deficit. District Training Officers (DTOs) prepare the Annual INSET Progress Report, and it is submitted by all District Education Offices (DEOs) to NIU through RICs.

<Technical Aspect>

The personnel at the national regional levels have sufficient knowledge and skills for management of INSET including monitoring and data analysis, as most of them are the project counterpart personnel who received trainings from the project. The Head of NIU considers so also from their working output. So do the personnel at the district levels (DMT, District Teacher Support Team (DTST), DTO, and CS), as they were trained on INSET management and actually can perform their responsibilities, according to NIU. It is clear who to consult with in case they face any technical difficulty related to INSET (DTST to NIU, DTO to DEO, CS to DIC, etc.) All DEOs have the LOS Manuals but not Modules 1/2 of INSET Sourcebook, due to the fund shortage. The Module for Science and Pedagogy was once revised by NIU with support of GPEG but not printed due to the fund shortage. The Modules, LOS Manuals and HT Handbook have been distributed and utilized by the schools except newly established schools.

The budget of GES comes from the Central Government. No financial data on INSET related activities is available directly from GES, but according to the Teacher Education Division (A division under GES), the budget has fluctuated after the project completion due to no specific budget for INSET. There is no specific budget for INSET; however GES sometimes receives financial support directly from donors such as UNICEF for INSET-related activities. In addition and as mentioned above, some activities such as training of new personnel and printing of revised Modules have not been realized due to fund shortage. Also, financial difficulties still remains at school level. For the last three years, no capitation grant for school activities has not been released by the Central Government. Though no particular reason was given by GES for Government's inability to pay the capitation grant, the recent economic down turn in the country has culminated in Government's inability to make statutory payments such as the capitation grant, according to the Teacher Education Division. This has indeed hindered INSET delivery at some schools.

<Evaluation Result>

In light of the above, problems have been observed in terms of the institutional, technical and financial aspects of the implementing agency. Therefore, the sustainability of the effectiveness through the project is fair.

5 Summary of the Evaluation

The achievement of the Project Purpose was partial at the time of the completion, but after the project completion it was achieved and its effects have mostly continued. In other words, the number of conducted SBI/SBI reached the target after the project completion, and SBI/CBI have largely continued in the target districts. This has resulted in the achievement of the Overall Goal (improvement of the teaching abilities in mathematics and science). For the sustainability and expansion of INSET management and delivery, the lack of the fund has been a major issue. Since no specific budget is assigned to INSET, monitoring of SBI/CBI has not been systematic and the revised Module has not been printed. Regarding the project efficiency, the project cost exceeded the planned because there were more teachers needed to be trained than planned due to the creation of new districts, which is commensurate with the additionally required workload.

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

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

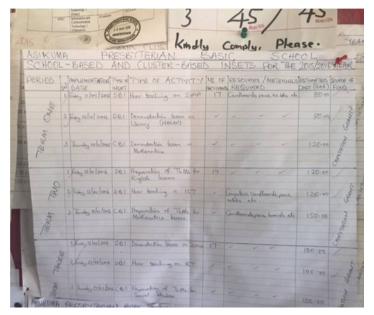
- Due to the fund shortage, some INSET-related activities have not been realized, including trainings of newly appointed HTs and CTs, regular monitoring of SBI/CBI, printing and distribution of the Modules, etc. In order to further promote INSET delivery and management, it is recommended to prioritize the budget execution in the limitedly available funds, by examining in what order the unrealized activities should be conducted. There is the need for INSET activities to be institutionalized so that, it becomes part of teacher's schedule nationwide.

Lessons learned for JICA:

- SBI/CBI have not been undertaken as planned in some schools due to the fund shortage for catering some refreshment during INSET activities. During the project period, teachers had been promised by GES that they would be given some money for refreshment. When they found that they could not receive any refreshment, some showed negative attitudes toward INSET delivery. On the other hand, some schools have implemented SBI/CBI through effective coordination among HTs and CLs with administrative support from DTOs and supervision from CS even without sufficient financial compensation. When the project plans any activities to be accomplished with the teachers' initiative, sensitization of HTs and teachers and regular monitoring by the district office should be considered for motivating the teachers, instead of financial or material compensation for the sustainability. It is important to convey a message in which SBI/CBI is a part of the teachers' duties instead of something which requires financial or material compensation.



(A teacher undertaking SBI activity with other teachers observing at the St. Paul's R/C Primary School in the SENE District of the Brong Ahafo Region of Ghana)



(Time table for SBI/CBI activities for the 2015/2016 academic year of the ASIKUMA Presbyterian Basic School in the ASIKUMA /ODOBIN/ BRAKWA District of the Central Region of Ghana)