Evaluation Summary

<table>
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<th>1. Outline of the Project</th>
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<td><strong>Country:</strong> Republic of Ghana</td>
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<td><strong>Issue/Sector:</strong> Basic Education</td>
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<td><strong>Main division in charge:</strong> JICA Ghana Office</td>
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<td><strong>Supporting division:</strong> Division II, Human Development Department</td>
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<td><strong>Period of cooperation</strong></td>
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<td>(R/D): August 15, 2005</td>
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<td>December 2005 – November 2008 (3 years)</td>
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1-1. Background of the Project

The Government of Ghana sets education as the important agenda for national development. The Constitution mandates the major tenets of the “free, compulsory, universal basic education (FCUBE)” initiative. In addition, education is also set as one of the prioritized areas in the Ghana Poverty Reduction Strategy. As a result of the efforts thus far, the total enrollment ratio in primary education in the country exceeds 80%, reaching the highest level in West Africa. However, there is still a notable gap between public and private schools in terms of students’ academic capabilities, and improvement in the quality of education has yet to be achieved.

The biggest cause for the low attainment level of children is the poor quality of teachers (insufficiency in their basic academic capabilities and instruction ability). As a background, it is a fact that a systematic INSET institution has yet to be constructed. Although supports for In-Service Training (INSET) have been provided by many donors, there had been overlapping contents as well as confusions at the frontline, caused by a variety of approaches. Therefore, there has been an urgency to continue to develop the capacities of teachers and promote the harmonization of systems through the institutionalization of INSET (model building) by the Ghana Education Service (GES).

Based on the above, this project conducted the construction of the implementation system of INSET, development of modules, development of the capacity to carry out INSET works, development of a monitoring and evaluation system and implementation of educational activities in 10 pilot districts, aiming for the construction of the INSET model in science and mathematics in primary schools and the improvement of INSET policies.

1-2. Project Overview

(1) Project Purpose

A structured and replicable INSET model of science and mathematics for primary school teachers is in operation in 10 pilot districts.
(2) Overall Goal

[Mid-Term Goals: 2011]

(1) Capacity of GES INSET Unit, District Teacher Support Teams (DTSTs), Head Teachers (HTs), Circuit Supervisors (CSs) and Curriculum Leaders (CLs) in supporting School-Based INSET (SBI) is improved in the pilot districts.

(2) The INSET model is conducted nationwide.

[Long-Term Goal: 2013]

The teaching capacity of primary school teachers is improved through continuous INSET.

(3) Outputs

(1) The INSET implementation structure is established in 10 pilot districts.
   1) Develop guidelines for the selection of pilot districts
   2) Select 10 pilot districts
   3) Develop guidelines (national level)
   4) Develop guidelines (district level)
   5) Establish or strengthen District INSET Units (DIUs) in the pilot districts
   6) Support the DIUs to identify members of the District Teacher Support Team (DTST)

(2) Needs-based INSET modules and guidelines for the use of a source book (collection of modules) are developed.
   1) Appoint resource persons
   2) Review the existing INSET documents
   3) Develop the modules of the source book in science and mathematics
   4) Develop the modules of the source book in English as a tool for supporting the understanding of science and mathematics
   5) Develop guidelines for the use of the source book
   6) Print and distribute the source books to the pilot districts

(3) Capacity of the key actors (National INSET Units [NIUs], DIUs, DTSTs, HTs, CSs, CLs and teachers) to support the delivery of INSET is developed.
   1) Conduct a base-line survey by applying the performance standards to be developed in 4.1 below
   2) Appoint National Trainers (NTs) and provide them with an orientation
   3) Provide an orientation to District Education Officers (DEOs), DIUs, DTSTs, HTs and CSs on the Guidelines (1.4)
   4) Support the DIUs and DTSTs to develop the INSET Programme and the Action Plan
   5) Support the DIUs and DTSTs (in collaboration with HTs and CSs) to identify CLs
   6) Support DTSTs to conduct the following INSET to CLs
7) Support HTs and CLs to conduct SBI
8) Support DTSTs in programming the annual INSET for CLs (based on the results of monitoring reports from HTs/CSs and the consequence analysis of CL opinion exchanges/planning meeting)
9) Support the DIUs to revise the Action Plan annually, taking the annual district monitoring report (4.4) into account.

(4) Monitoring and evaluation system for the district INSET model are developed and implemented.

1) Develop the performance standards for key actors (NIUs, DIUs, DTSTs, HTs, CSs, CLs and teachers) in supporting the operation of the INSET model (used for base-line survey, post-project monitoring and the evaluation of the achievement of the Overall Goal)
2) Support DTSTs to develop and update an information management system
3) Support DTSTs to analyze teachers’ training needs (based on the results of monitoring reports from HTs/CSs and the consequence analysis of CL opinion exchanges/planning meeting)
4) Support the DIUs to evaluate the annual progress of the Action Plan of the INSET Programme (support the preparation of district monitoring reports)
5) Support NIUs and resource persons to conduct the (annual) national evaluation of the INSET model and to update the source book (every five years)

(5) Participation in and support for INSET are encouraged, and the INSET Policy is improved so that the institutionalization of INSET is smoothly implemented by the government of Ghana.

1) Hold workshops introducing the project (at national, district and school levels)
2) Support the DIUs to establish/strengthen a linkage between the INSET programme and appraisal system for teachers
3) Support DEOs to conduct workshops to encourage the reinforcement of linkages among district stakeholders
4) Support GES to make the necessary review/amendments on INSET Policy for the effective institutionalization of INSET Policy
5) Support GES to make implementation guidelines for the effective institutionalization of INSET Policy
6) Issue newsletters quarterly
7) Produce and broadcast TV programmes about the effectiveness of INSET for teachers
1-3. Inputs

Japanese side:

- Dispatch of experts: 11 people, 83.96M/M
- Equipment (general equipment): 13,394,000 yen (GHS170,000)
- Trainees received: 6 people trained in Japan
- Activity expenses:
  Executed budget for FY 2005–07: 89,182,000 yen; Budget to be executed in FY 2008:
  13,919,000 yen

Ghanaian side:

- Counterpart
  Director-General of the Ghana Education Service (GES), Director of the Teacher Education
  Division (TED), 4 full-time counterpart personnel, 7 national trainers
- Driver
- Facilities: Facilities for project office, central training center and district training centers
- Local costs:
  (1) Counterpart labor costs: approx. GHS 29,000
  (2) Activities expenses:
    Collateral funds: From December 2006 to December 2007; Total: GHS 246,000
    Districts activities expenses: From January 2008 (differ by district)

2. Evaluation Team

Members of the Evaluation Team:

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<th>Role</th>
<th>Name</th>
<th>Organization</th>
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<tr>
<td>Leader</td>
<td>Kunihiro YAMAUCHI</td>
<td>Chief Representative, JICA Ghana Office</td>
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<td>INSET operation management</td>
<td>Atsushi MATACHI</td>
<td>JICA Senior Advisor (Education)</td>
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<td>Research planning</td>
<td>Hiromichi MORISHITA</td>
<td>Basic Education Division II, Basic Education Group,</td>
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<td>Human Development Department, JICA</td>
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<td>Cooperation planning 1</td>
<td>Yuji WAKASUGI</td>
<td>JICA Ghana Office</td>
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<td>(Education and Industry Team Leader)</td>
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<td>Cooperation planning 2</td>
<td>Mama OWUSU</td>
<td>Education Advisor, JICA Ghana Office</td>
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<tr>
<td>Evaluation analysis</td>
<td>Takeshi SEKIYA</td>
<td>Crystal Intelligence Inc.</td>
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Period of evaluation: From June 22, 2008 to July 10, 2008
(arrival at and departure from the site)

Type of Evaluation: Terminal evaluation

3. Overview of Evaluation Results

3-1. Achievements

(1) Project Outputs

The INSET implementation structure had been established at both the national and the local levels, and the INSET implementation guidelines, source book (collection of modules) and manuals related to
its use had been developed.

In addition, capacities of stakeholders were reinforced and school-based INSET (SBI)/cluster-based INSET (CBI) had been implemented. A monitoring and evaluation system was also developed and implemented, resulting in the amendment of related documents. In addition, educational activities were implemented in non-pilot districts with the diffusion of INSET in mind to motivate participation in INSET.

Thus, it is judged that the desired outputs had been achieved through the implementation of activities as scheduled.

(2) Project Purpose:

A structured and replicable INSET model of science and mathematics for primary school teachers is in operation in 10 pilot districts

Capacity of stakeholders at the district level to carry out INSET improved, and the Action Plan was also improved to a highly feasible level. According to this plan, SBI/CBI is now implemented twice as much in one semester in nearly all schools. Monitoring also contributed in the improvement of the system. Therefore, the Project Purpose is considered to be achievable.

(3) Overall Goal

[Mid-Term Goals: 2011]

(1) Capacity of GES INSET Unit, DTSTs, HTs, CSs and CLs in supporting School-Based INSET (SBI) is improved in the pilot districts.

(2) The INSET model is conducted nationwide.

DEOs in the pilot districts are engaged in educational activities for neighboring districts, and incentives in non-pilot districts to participate in INSET are increasing. Because INSET is already being implemented in some districts under their own budget, and because there is already a national budget for implementation throughout the country, the evaluation team judged it highly probable that the Mid-Term Overall Goals will be achieved.

[Long-Term Goal: 2013]

The teaching capacity of primary school teachers is improved through continuous INSET.

According to the impact assessment report, tendencies such as improvement in capacities to prepare lesson plans, the effective use of guidance materials and blackboards in lessons, and learner-centered learning are observed. If the SBI/CBI is being continued in an expansive manner, the Long-Term Overall Goal is expected to be reached.

3-2. Summary of Evaluation Results

(1) Relevance: High

Establishment of the INSET system to reinforce the district level capacity in minimum costs matches the needs of Ghana. Priority has also been consistently high in terms of policies both in Ghana and Japan, as can be seen in facts such as the activities of INSET that are clearly stated in the review for the educational sector plan in FY 2008. Therefore the relevance is evaluated to be high.

(2) Effectiveness: High
Because systems such as the planning, implementation, monitoring and feedback of INSET, the management capacities of stakeholders, and needs-based educational materials are already established and developed, the effectiveness was evaluated to be high.

(3) **Efficiency: High**
As for the implementation of INSET, because DTST, which is an organization that already exists in Ghana, is being revitalized, and the outputs and personnel of the STM Project that had been implemented before are being utilized, the efficiency was evaluated to be high.

(4) **Impact: High**
Counterpart organizations in Ghana are currently working to secure a budget and formulate an action plan for implementation throughout the country. Because it is assumed there are possibilities, to some extent, that the nationwide development of the INSET model, which is the overall goal, and changes in lessons by continuing such diffusion are realized, the impact is evaluated as high.

(5) **Sustainability: Moderately high**
Thanks largely to the ownership of Ghana, the development and continuation of INSET are expected in terms of policy and budget. However, technical issues must also be solved in order to ensure the quality of education. Therefore, the sustainability of the project was evaluated as moderately high.

3-3. Factors that Promoted the Realization of Effects

(1) **Factors Concerning Planning**
The trend toward national development is accelerating the coordination within the organizations of the Ministry of Education, Science and Sports (MOESS) and resulting in the active attitude of the counterparts.

(2) **Factors Concerning Implementation Process**
Indirect support from experts assigned to the MOESS worked to achieve smooth coordination of project implementation within the MOESS and GES, and contributed in the efficient operation of the project.

3-4. Factors that Impeded the Realization of Effects

(1) **Factors Concerning Planning**
(a) Partly due to geographical problems, the plan to utilize highly capable CPs (teachers for TTCs) developed through the previous Project of Improvement of Educational Achievement in Science, Technology and Mathematics in Basic Education, as NTs could not be realized.

(2) **Factors Concerning Implementation Process**
(a) Because the Ghanaian side had a sense of uncertainty towards the cooperation of other donors that were led by consultants, they also felt resistance to this project, which is not directly operated by JICA, when it started. Therefore, the relationship between the Ghanaian side and PADECO Co. Ltd., which undertook the implementation of the project, was not a favorable one at first.
(b) DEO is positioned under the district assembly in the context of decentralization. Therefore, DEOs
are receiving instructions both from GES (national organization) and district assembly, causing confusion and sometimes hindering the activities of INSET.

3-5. Conclusion

It was confirmed through this evaluation that an INSET system tailored to the needs in Ghana is being developed and that it is possible that the model can be developed nationwide under the ownership of Ghana in the future. This INSET system can be constructed within the project period, and manuals and guidelines (source book) are being developed according to the needs of the users. Therefore, it is judged that the Project Purpose can be achieved before the end of the project period. However, there are some issues left in terms of a qualitative improvement that ensures the improvement of lessons. In addition, from the perspective of sustainability, it is necessary to provide opportunities for continuous improvement of the capacities of NTs and DTSTs.

4. Recommendations

The evaluation team judges that the Project Purpose can be achieved for the most part before the end of the project period. However, this project aims to construct a model that can also be applied to regions other than the pilot districts, and focuses on the organizational and operational aspects necessary for implementing in-service training. Consequently, the evaluation above is basically made from a similar perspective. The evaluation team made recommendations for the future development of the project in terms of the quality of training, national development and a reporting/monitoring system.

4-1. Improvement of the Quality of SBI/CBI and Improvements Made at the Classroom Level

The quality of INSET is very important. Even if INSET is institutionalized, if the training implemented does not cause actual improvement in the level of teaching, the participants may lose interest in the training and the rate of teachers’ participation may decline in the long run. Therefore, it is important that those who implement INSET put continuous effort into improving the quality of the training so that the teachers will be able to attain new knowledge and skills every time they participate.

4-1-1. Strengthening the Capabilities of the DTST Members Visiting and Giving Guidance

Advice and comments by DTST members that are provided after the training session (including simulated lessons and development of educational materials) are critical factors for ensuring the quality of INSET. There is a wide variety of areas wherein the participants expect training, including the content of the subject, teaching method, educational material and how to ask questions to children. Therefore, the DTST members are required to visit schools as much as they can and meet these expectations. In addition, in order to provide adequate comments in such areas, it is necessary for the DTST members to constantly update information and knowledge. Therefore, it is required to establish a system related to such continuous capacity improvement.
4-1-2. Improvement of Teaching Practices in Classrooms

In order to improve the lessons, the teachers are required not only to utilize the educational materials but also to acquire pedagogical knowledge and capacities, such as in understanding the content of the subject, motivating children and analyzing incorrect answers. According to the visit by the evaluation team, the following points were found to be issues common to many teachers. Children’s incorrect answers are not being treated adequately. Incorrect answers in arithmetic are perfect occasions to acquire accurate understanding, and it is desirable that both teachers and children change their attitudes towards “incorrectness.”

It seems that some teachers became confused that utilizing the educational materials is itself a purpose of the lesson. While it is important to use educational materials, it may confuse the children when they are used inadequately. Therefore, it is necessary for teachers to acquire appropriate knowledge on the subject. Consequently, the capabilities of the DTST should also be strengthened so that they can instruct adequate usage of materials to teachers.

4-1-3. Reinforcement of Source Book

In order to improve the quality of the training, it is also important to reinforce the content of the source book (which is a collective term for manuals and guidelines). For example, it is worth considering the improvement of Modules 5 and 6 (arithmetic and science) through the reinforcement of the content of the subject and introduction of good practices by CLs and teachers.

4-2. National Development of the INSET Model

4-2-1. INSET Policy

Strong commitment by the stakeholders concerning INSET was confirmed. However, in order to carry forward the institutionalization, it is necessary to clarify the organizational commitment as the GES. INSET is clearly stated in the educational white paper and the GES has already secured the necessary budget for the national development. In addition to these steps, the evaluation team recommended that continuous efforts be made so that matters related to INSET are clearly included in the existing educational policies, such as the Education Sector Program (ESP) that is currently being prepared based on the trend of educational reform in reaction to the white paper.

4-2-2. Strengthening the Capacities of NIU/NT

This project focused mainly on the organizational operation at district level for developing a model. However, at the stage of developing the model nationwide, national level organizations are expected to play an even more important role in terms of the quality control of the training. There are ten NTs appointed so far. Among them, six are working at local levels. As for the national development, it is assumed that the number of NTs must be increased. Although the plan to increase the number is being formulated, it is also important to employ new high-quality NTs or to strengthen their capacities. Thus the establishment of systematic training system for NT is considered to be necessary.
4-2-3. Development of Coordination System Between National and Regional Levels for NTs

There is a plan to employ NTs at the regional level, from teacher training colleges (TTCs) and from among teachers with experience. It was thus confirmed that regions will serve an important role at the stage of national development. For example, a seminar to share experiences that is currently held only at the district level could be held at the regional level. Establishment of such mechanism should be considered. In addition, it is also necessary to establish a framework for NTs to cooperate at both national and regional levels.

4-2-4. Reinforcement of Coordination Within the Relative Departments of the GES

For implementing various activities as stated above, coordination between relative departments is essential, so it will be necessary to establish a system allowing for such coordination. For example, the project is already partly engaged in the amendment of handbooks for HTs and CSs implemented by the Basic Education Division (BED). The scale of such involvement and the number of departments involved are expected to increase in the future when the model is developed nationwide.

4-2-5. Analysis of Impediments for Implementing SBI/CBI at the School Level

More than 90% of schools are already implementing more than two training sessions per semester. However, when the model is developed nationwide, it is expected to become more difficult to grasp the details of the reality compared to the current stage of being implemented at only ten districts. For national development, it is desirable to take measures beforehand against factors that may impede the smooth implementation of INSET. Several impediments were already pointed out in past project reports with the recommendation of specific countermeasures, and the GES should continuously follow-up such countermeasures.

4-2-6. Establishment of Incentive System

It is necessary to include adequate incentives in the INSET model in order to increase the cost-effectiveness of the current INSET model. As is pointed out in 3-1 above, the evaluation team believes that the quality of the training itself should serve as an important incentive to participate the training. In addition, the following new format can also be considered. A method to link the participation in INSET with the promotion of teachers or a compensation system such as the “Best Teachers Award.” To run articles of good practices in newsletters by specifying the teachers’ names.

4-3. Improvement of Reporting and Monitoring System

4-3-1. Reinforcement of the Utilization of Information Included in Reports

One of the purposes of the reporting system is to discover good practices and issues. Although some of the issues should be addressed at the district level, there are some issues that are common to many districts, which should be analyzed at the national level and provided with adequate solutions. It is also necessary to prepare a system to feed back the results of such solutions in some form, including...
the remedial training, in annual reports by the NTs, or in newsletters. In order to realize this, it will also be necessary to improve the skills of NIUs for analysis and education.

4-3-2. Integration of the INSET Reporting System into the Existing System

The evaluation team confirmed that the part of information collected through the current INSET reporting system at the district level are to be incorporated into the District Performance Report. However, the purpose of the reporting system and the District Performance Report is different, with the latter collecting a wider variety of information. Therefore, only a small amount of information focusing on INSET can be included in the District Performance Report. It is considered that more specific information should be collected via the current INSET reporting system.