

4. ミニッツ (M/M) (プロジェクト・ドキュメントを含む)

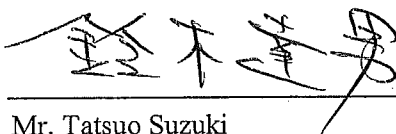
MINUTES OF MEETING
BETWEEN
JAPAN INTERNATIONAL COOPERATION AGENCY
AND
THE REPUBLIC OF HONDURAS
ON
JAPANESE TECHNICAL COOPERATION
FOR
THE IMPROVEMENT OF TEACHING METHOD IN MATHEMATICS (PROMETAM)
PHASE II

Resident Representative of Japan International Cooperation Agency (hereinafter referred to as "JICA") Honduras Office had a series of discussions with the Honduran authorities concerned about the formation of the Project on the improvement of teaching method in mathematics (PROMETAM) Phase II (hereinafter referred to as "the Project").

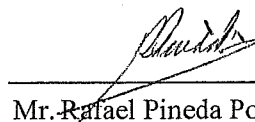
As a result of the discussions, both sides agreed to summarize the matters referred to in the document attached hereto as a supplement to the Record of Discussions.

These texts were done in both English and Spanish. Each text is equally authentic. In case, of any divergence of interpretation, the English text shall prevail.


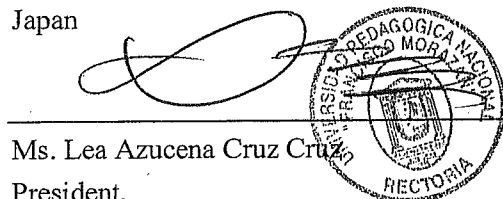
Tegucigalpa, Honduras, March 28th, 2006



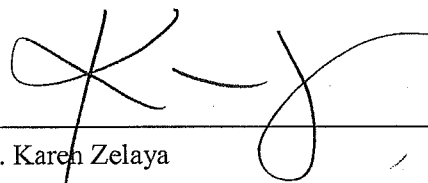
Mr. Tatsuo Suzuki
Resident Representative
Honduras Office
Japan International Cooperation Agency
Japan



Mr. Rafael Pineda Ponce
Secretary
Secretariat of Education
The Republic of Honduras



Ms. Lea Azucena Cruz Cruz
President,
National Pedagogic University Francisco
Morazán
The Republic of Honduras



Ms. Karen Zelaya
Honorable Witness
Secretary
Technical Secretariat of International
Cooperation (SETCO)
The Republic of Honduras

ATTACHED DOCUMENT

The discussions were held at Tegucigalpa with the participants listed below:

The Honduran Side	
Mr. Rafael Pineda Ponce	Secretary, Secretariat of Education
Ms. Lilian Esperanza Girón	Vice Secretary for Technical Pedagogy Issues, Secretariat of Education
Ms. Lea Azucena Cruz Cruz	President, National Pedagogic University "Francisco Morazán"
Mr. Julián Sierra Olivera	Executive Director of INICE, Secretariat of Education
Ms. Vilma Alicia Pagoaga	Project Coordination Unit, Secretariat of Education
Ms. Lorena Chavarria	Project Coordination Unit, Secretariat of Education
Ms. Sandra Ramirez	Department of External Cooperation, Secretariat of Education
Ms. Xiomara Portillo	Planning and Performance Evaluation Unit, Secretariat of Education
Mr. Ramón Ulises Salgado	General Coordinator of the Unit for Transformation of "Escuela Normal", National Pedagogic University "Francisco Morazán"
Mr. Julio Navarro	General Coordinator of the "Programa de Formación Continua", National Pedagogic University "Francisco Morazán"
Project Side	
Mr. Donaldo Cárcamo	National Counterpart in Mathematics Education, Secretariat of Education
Mr. Luis Antonio Soto	National Counterpart in Mathematics Education, National Pedagogic University "Francisco Morazán"
Mr. Norihiro Nishikata	Japanese Expert
Ms. Tamako Ago	Japanese Expert
Ms. Shiori Abe	Japanese Expert
Ms. Asami Shimoda	Consultant
Ms. María Dolores Meléndez	Consultant
The Japanese Side	
Mr. Tatsuo Suzuki	Resident Representative, JICA Honduras Office
Mr. Seiji Tomiyasu	Vice Resident Representative, JICA Honduras Office
Mr. Junichi Miura	Assistant Resident Representative, JICA Honduras Office
Ms. Keiko Shiraishi	Japanese Expert
Mr. Osmán Jeovanny Martínez	Consultant on Basic Education, JICA

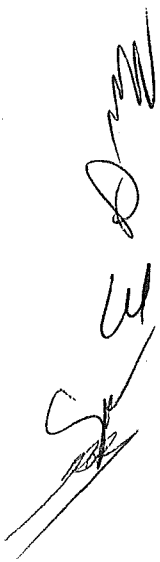
As a result of discussions, both sides admitted the Project Document is for rationalizing and justifying the plan and implementation of the Project as attached herewith.

ANNEX Project Document

Project Document
for
Project for Improvement of Teaching Method
in Mathematics
Phase II

Prepared by:
Secretariat of Education, Honduras
Japan International Cooperation Agency (JICA)

March 2006

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1. Introduction

The goals set forth in the EFA-FTI¹ of the Republic of Honduras are the achievement of hundred percent school attendance in primary education by 2015, and the improvement of academic achievement in the subject area of Spanish and mathematics.

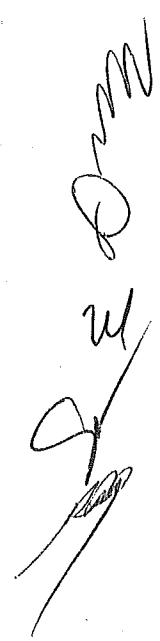
From the 1980's, JICA has been dispatching the Japan Overseas Cooperation Volunteers in the fields of mathematics education in order to give support to the training of in-service teachers. Their activities have been one of the pillars for the support from JICA in the education sector of Honduras. These activities were recognized by the Honduran government, and in 2002, the government requested technical cooperation from Japan aiming to the "development of a teachers' guidebook and students' workbook for the primary education curriculum" as well as the "improvement of mathematics teaching technique of in-service teachers" through the "training of in-service teachers", and the "Project of Improvement of Teaching Method in Mathematics (PROMETAM)" (2003.4.1. ~ 2006.3.31.) (hereunder "Phase I") was implemented.

In Phase I, the mathematics teachers' guidebook and the students' workbook were developed, and these teaching materials were distributed nationwide as government-designated textbooks in 2005 through the funding of the EFA-FTI Common Fund Group. In addition, the training for in-service teachers was provided by the Japan Overseas Cooperation Volunteers, who worked as lecturers for the mathematics teaching method lectures within the "In-service teachers' on-going training program (1998-2006) implemented by National Pedagogic University Francisco Morazán by the loan from the World Bank. Other major achievements during Phase I included development of lesson analysis method and specific guidelines required for improving teaching method in mathematics, as well as the improved abilities of the C/Ps in the said field.

Moreover, by training the lecturers group of the nationwide in-service teachers training, Phase I gave indirect support to a nationwide training for in-service teachers, which was implemented in 2005 by the Secretariat of Education in order to introduce them newly developed teaching material as the nationwide distribution of the guidebooks and workbooks for primary school children of all grades proceeded.

In October, 2005, the activities in Phase I was evaluated by an expert, and the following were confirmed: (1) The teacher training given by using the teachers' guidebook developed in Phase I is to contribute to the improvement of the teaching

¹ Education for All - Fast Track Initiative: Framework of cooperation between donors and governments of developing countries set up to achieve the education development goals set out as MDG by 2015.



ability of teachers; (2) The academic achievement of children improves when the students' workbook is used appropriately.

Meantime, concerning the challenges related to mathematics education in the region, it was acknowledged through the regional seminar on the mathematics teaching method held in 2002 and 2003, and the ministers' meeting organized by the Central American Education and Culture Coordination (hereunder CECC) in 2003 and 2005, that there are common challenges in primary mathematics education in Central America and Caribbean countries, just as in Honduras. The achievements of Phase I in Honduras were recognized in Central America and Caribbean countries as a solution for such common challenges mainly through CECC, which resulted in Guatemala, the Dominican Republic, El Salvador, and Nicaragua to start developing the teachers' guidebook and students' workbook based on the teaching materials developed in Phase I by Honduras, and technical assistance on teaching material development and training having been provided to these countries by Phase I.

Acknowledging these situations, the Honduran government officially put in a request for the "Project of the Improvement of Teaching Method in Mathematics (PROMETAM) Phase II", stating the necessity for a continuous technical assistance by the Japanese government in the training on the usage of mathematics teachers' guidebook and the students' workbooks for all primary grades, and in the sharing of Honduras's achievements in Central America and Caribbean regions.

2. Background Information

2-1 Honduras's social conditions

The Republic of Honduras lies in Central America, and it has a total land area of 112,492 km² and a population of approximately 7.2 million². The country is one of the most underdeveloped countries in Central and South Americas, and it has the fifth lowest standard of living from the viewpoint of Gross National Income (GNI) per person (930 US dollars/person), disclosed by the World Bank in 2004, following Haiti, Nicaragua, Guyana and Bolivia. In addition, according to the 2005 Human Development Reports published by UNDP, its human development indicator is also lower than the Central American average, and it remains in 116th place.

The percentage of families below the poverty line was 64.3% in 2004, and the majority of the poverty was found in rural areas, but poverty in its western region is

² Instituto Nacional de Estadísticas, INE., Dic., 2005

particularly serious.

2-2 Conditions of the education sector

2.2.1 Preschool education

For children aged five and six, education is provided through official kindergartens or Preschool Education Centers (CEPREB: Centros de Educación Prebásica).

2.2.2 Basic education

Basic education is provided for children aged from six to 15 years old, and it is composed of the following three three-year cycles (total nine years). Although there is a move to make the nine years of basic education compulsory, at the present time, its 1st and 2nd cycles (total of six years) are compulsory.

Table 1
Framework of Basic Education

1 st cycle Three years			2 nd cycle Three years			3 rd cycle Three years		
6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15
Age six to nine			Age nine to 12			Age 12 to 15		

2.2.3 Secondary education

Two or three-year education is for children aged 15 to 17 or 18 years old. It is roughly divided into ordinary high school and technical training high school.

Table 2
Types of Secondary Education

Ordinary high school Two years		Technical training high school Three years		
15 - 16	16 - 17	15 -16	16 - 17	17 -18
Age 15 to 17		Age 15 to 18		

2.2.4 Tertiary education

Tertiary education is provided for 17-year olds or over 18. After four years of University program, it continues to a two year of master's program and two years of a doctoral program. A three-year program is provided in higher education institutions other than universities.

2-3 Policies of the education sector

The current education reform has been promoted with the progress of the 2001 Poverty Reduction Strategy Paper³ (PRSP) and the 2002 EFA-FTI based on the recommendation of the 2000 National Forum of Convergence (FONAC)⁴, and Maduro Administration (Jan. 2002–Jan. 2006) has also adopted education policies in accordance with the PRSP and EFA-FTI.

As for the principal policies of the education sector in Honduras, the following is an overview of the details of the FONAC recommendations and the plans of PRSP and EFA-FTI.

(1) Recommendations of the National Forum of Convergence (FONAC: Foro Nacional de Convergencia)

In 1999, the FONAC submitted a proposal on education reform. In the proposal, it advocated basic education (1st grade to 9th grade) in place of primary education (1st grade to 6th grade) for a total dissemination of a 9-year basic education program. It also proposed to guarantee a minimum one year for preschool education.

(2) Poverty Reduction Strategy Paper (PRSP)

Just as with the after-mentioned EFA Action Plan, Honduras promptly created its national strategy paper, and had completed its Poverty Reduction Strategy Paper (PRSP) in August, 2001. The PRSP is a long-term plan for human resource development, and it describes education from the perspective of human resource training in one of its six pillars, "Investment in human capital".

The following are the specific goals set out in the paper. 1) Modernization of the education system, 2) Increase of the quantity of education, 3) Improvement of the quality of education, 4) Improvement of community participation, 5) Promotion of the decentralization process of education, and 6) Promotion of the efficiency of tertiary education and aid for the innovation process of non-formal education.

Moreover, the programs of the education sector that were prioritized in the PRSP are as follows.

- Improvement of the quality of education.
- Improvement of preschool education and education from 7th to 9th grades.
- Increase in the quantity of education through alternative education.
- Adult education through alternative education.
- Education, production and development.

³ República de Honduras, "Estrategia para la Reducción de la Pobreza" 2001.8. Poverty Reduction Strategy Paper

⁴ Foro Nacional de Convergencia, "Propuesta de la Sociedad Hondureña para la Transformación de la Educación Nacional" 2000.1. Proposals for Reform in National Education

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- Bursary for students from poor families.
- Development of an infrastructure of education through community participation.

(3) EFA (Education for All) Action Plan

In the international conferences on education development held in 1990 in Jomtien, Thailand and in 2000 in Dakar in Senegal, agreement was made toward the achievement of Education for All.

However, it subsequently became evident in many countries that achieving the goal of “universal primary education by 2015” agreed upon in the abovementioned two conferences is difficult, and as an initiative for concentrating the aid of donors selectively for a limited period to those countries, the EFA-FTI (Education For All- Fast Track Initiative) was born.

Honduras was approved as one of the first countries subject to the initiative in 2002, and established its EFA Action Plan in 2003. The following three are the goals of its EFA.

- Improvement of academic achievement for mathematics and Spanish.
- Reduction of drop-out rate.
- Reduction of repetition rate.

Five action components were prepared to achieve these goals: 1. Efficiency and effectiveness of education, 2. Training of teachers of a high standard and ability, 3. Improvement of preschool education, 4. Alternative education, multicultural and multilingual education, and 5. Building of a local education network. Various donors are carrying out their activities in each component under in conjunction with the Honduran government.

Furthermore, donor cooperation is actively being carried out in Honduras for the achievement of the EFA goals, but this trend of donor cooperation was created by the birth of the education sector donor meeting⁵ (MERECE: Mesa Redonda de Cooperantes Externos en Educación) formed by donor volunteers for the reconstruction of education from hurricane Mitch in November, 1998. MERECE aims to carry out educational cooperation through donor cooperation by treating the whole education sector (preschool, primary, secondary, tertiary) as well as the primary education sector as its theme. As the majority of the donors who are currently members of MERECE are providing support to

⁵ MERECE currently has the following 14 member organizations: Canadian International Development Agency (CIDA), Agencia Española de Cooperación Internacional (AECI), United States Agency for International Development (USAID), Swedish International Development Cooperation Agency (SIDA), KfW Entwicklungsbank, Inter-American Development Bank (IDB), GTZ, Organización de Estados Iberoamericanos (OEI), World Food Program (WFP), World Bank (WB), United Nations Population Fund (UNFPA), UNICEF, European Union, and Japan International Cooperation Agency.

achieve the EFA goals, donor cooperation in MERECE and exchange of information between the donors can be described as the driving force that contributes to the goals of EFA.

2-4 Education budget

As for the education budget, Honduras prepared US\$195.10 million as public spending for education in 1990 according to the report on Honduras's education progress "Education: Future is in today" (PREAL-FEREMA) of 2005, this amount increased at a rate of 14.8 percent annually as it grew to US\$435.10 million in 2002. Spending for education subsequently continued to increase at the same rate, and it reached US\$722.0 million in 2004. When contributions from the private sector and family investments are added to this figure, the investment towards the education sector in Honduras works out to be approximately US\$1.06 billion. Approximately 88 percent of the total amount is invested into formal education (preschool, basic education and secondary education), 10 percent into tertiary education, and 2 percent into technical education of non-formal education (quoted by the World Bank (2002) and the Secretariat of Education (2002)).

In the gross domestic product ratio of 2004, approximately 7.1 percent was used as education related budget. Spending for the education sector is paid out by priority, and it made up 28 percent of the national annual expenditure in 2004, which was higher than the percentage of other sectors.

Among education spending of 2004, 18.8 percent was spent as national university management expense (including personnel costs and general expense), and 75.9 percent was spent as salary for preschool, basic education and secondary education teaching staff. Only 5.9 percent was spent as general expense other than personnel costs⁶. It proves that Honduras is in a difficult condition for implementing a project for improving education with its own financial resources.

As for the stages of education, the basic education stage, and in particular, the 1st and 2nd cycles are given priority in education spending. After the 90's, the overall amount of education spending has grown, but the rate of education spending in each education stage is almost identical. Between 1990 and 1997, 12 percent of the overall education spending was allocated to preschool education, 60.8 percent to the 1st and 2nd cycles of basic education, 19.5 percent to the 3rd cycle, and 19.6 percent to tertiary education. Similarly in 2004, 7.4 percent of the education spending was allocated to preschool education, 50.8 percent of the 1st and 2nd cycles of basic education, 22.1 percent to the

⁶ Informe de Progreso Educativo HONDURAS 2005 (FEREMA)

3rd cycle, and 19.6 percent to tertiary education.

2-5 Related projects of Japan and other leading international institutions (preschool and basic education)

(1) Japan International Cooperation Agency (JICA)/ the Government of Japan

It implements Phase I with the Secretariat of Education and National Pedagogic University Francisco Morazán. As well as developing teachers' guidebooks and students' workbooks for 1st to 6th grades, it provides training for in-service teachers utilizing these teaching materials (Aid amount: Approx. US\$3.87 million).

It is also providing technical cooperation in preschool and basic education stages by developing the project of synthetic reinforcement model for basic education (changed the name to PROEPA from February, 2006, and currently implementing its 2nd phase) by the dispatch of Japan Overseas Cooperation Volunteers in El Paraiso.

As other contributions to EFA-FTI from Japan, local INICE infrastructures were constructed and equipment are being provided using the Counterpart Fund of Non-Project Grants Aid (Aid amount: Approx. US\$90 thousand).

(2) Canadian International Development Agency (CIDA)

The agency mainly provides support through financial assistance, and the total amount of financial assistance for 2006 in education sector is approximately US\$2.5 million⁷. Among this financial assistance, it also provides aid for printing students' workbooks for 1st to 6th grades.

(3) Swedish International Development Cooperation Agency (SIDA)

In support of EFA-FTI, the agency plans to contribute a total of 140 million Swedish Krona (Approx. US\$16 million) by 2006, and by September 2005, it contributed 120 million Krona (Approx. US\$13 million) through the World Bank trust fund. ⁸The contribution includes the printing of the mathematics teachers' guidebooks and students' workbooks for the year 2005, and free provision for school bags and teaching material sets.

(4) United States Agency for International Development (USAID)

The agency has been implementing three projects: The in-service teacher's center project (CETT: CETT: Centros de Excelencia para la Capacitación de Maestros. Aid

⁷ MERECE meeting project overview paper (2005)

⁸ Ibid.

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amount: Approx. US\$8.08 million) for improving the reading and writing abilities of children up to 3rd grade, the learning effectiveness improvement project, which is the project for developing learning standards and standardized tests, and in-service teacher training (MIDEH: Mejorando el Impacto al Desempeño Estudiantil de Honduras. Aid amount: Approx. US\$9.17 million), and the basic education for all projects for creating the model of alternative education of basic education for 1st to 9th grades ((EDUCATODOS: Educación Básica para Todos. Aid amount: US\$9.90 million) ⁹.

(5) Agencia Española de Cooperación Internacional (AECI)

The agency provided support for the teachers' on-going training program of National Pedagogic University Francisco Morazán (PFC), and held short courses on the national curriculum and mathematics to support the in-service teacher training (Luís Landa Project. Aid amount: Approx. US\$2.40 million) ¹⁰.

(6) KfW Entwicklungsbank (KfW)

The bank expressed its commitment to contribute to the common fund for the first time in the EFA joint assessment meeting in December, 2005 (Amount of contribution: Approx. US\$17 million from 2006 to 2008).

(7) Inter-American Development Bank (IDB)

The bank has implemented the following projects: Project No.1069 (Programa de Transformación de la Educación Nacional – Tercer Ciclo de Educación Básica y de la Educación Media) for the improvement of education practices at the 3rd cycle of basic education (Aid amount: US\$29.50 million), Project No. 350 (Fondo Nórdico de Desarrollo) for the improvement of educational practices and the cover rate of the 3rd cycle of basic education in rural areas (Aid amount: US\$13.60 million, of which US\$6.60 million is contributed by Nordic Fond and US\$7.0 million is on loan from IDB), and Project 1069 and 1532 (Programa de Apoyo a la Reducción de la Pobreza) for the Honduran government to implement and follow up on the Poverty Reduction Strategy Paper.

(8) World Bank (WB)

The bank has implemented a community education project for improving the quality of education from 1st to 6th grades in basic education as well as preschool education in

⁹ Ibid.

¹⁰ MERECE

rural areas including bilingual and multicultural education in native settlements through community education participation (AECOs: Asociaciones Educativas Comunitarias. Aid amount: US\$41.80 million).

(9) GTZ

GTZ has implemented the Education and Society Development Program (PRODES : Programa de Educación y Desarrollo Social) for contribution to education reform in Honduras.

(10) European Union

The EU has developed the education and health sector reinforcement project (PRRAC-Salud y Educación : Proyecto Fortalecimiento del Sector Salud y Educación en Honduras. Aid amount: EURO 14.758 million) in preschool and basic education programs, and the contents of its cooperation include community education participation, infrastructure establishment, and teaching material provision.

(11) UNICEF

UNICEF has implemented the Friends Project for schools aiming to reform the attitudes of teachers to create an environment in which schools can protect students' rights in the basic education program and in preschool (Proyecto Escuelas Amigas de la Niñez).

3. Challenges in Primary Mathematics Education and the Current Situation

3-1. Analysis of the framework of primary education

3-1-1. School attendance rate

In the 2001 statistics, 87.7 percent of the age groups in the 1st and 2nd cycles of basic education, which correspond to six-year primary education, actually attended school. However, the school attendance rate in the 3rd cycle only reached 31.3 percent, and it dropped to 15.3 percent in secondary education.

Table 3

School Attendance Rate of Education - 2001

School attendance rate	%
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Preschool	31,3
1 st and 2 nd cycles	87,7
3 rd cycle	31,3
Secondary education	15,3

Source: Programa de Encuesta de Hogares 2001 (INE)

3-1-2. Repetition and drop-out rate

As seen in the table 4, the national average repetition rate of 1st and 2nd cycle of basic education is especially high in the lower grades. The average drop-out rate among 1st and 6th grade is 3.4% in 2000. The rate to finish 1st and 2nd cycles of basic education with six years is only 31.9%. The national average year to finish these cycles is 9.4 year. Therefore, it is important to reduce the repetition and drop-out rates to achieve perfect attendance in primary education by 2015.

Table 4
Repetition and Drop-out rate

	2000	EFA target rate for 2015
Grade 1	18.50%	4.00%
Grade 2	10.80%	3.00%
Grade 3	8.10%	2.00%
Grade 4	5.20%	2.00%
Grade 5	3.50%	1.00%
Grade 6	1.00%	1.00%
Drop-out (Grade 1-6)	3.40%	0.00%

Source : "Plan Todos con Educacion(EFA-FTI)2003-2005"

3-1-3. Academic achievement test

It was in UNESCO's LLECE¹¹ in 1998 when Honduras undertook the international academic achievement comparative test for the first time. Although the report¹² says that it is impossible to compare academic abilities by nations based on the results of the

¹¹ Laboratorio Latinoamericano de Evaluación de la Calidad de la Educación

¹² Latin American Laboratory for Assessment of Quality in Education/UNESCO, "First International Comparative Study of language, mathematics, and associated factors for students in the third and fourth years of primary school-Second Report", 2000.8. Santiago de Chile, Chile.

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test¹³, Honduras came in last for academic achievement among 11 Latin American countries in terms of raw scores.

Although the results of 3rd and 6th grade students in mathematics have improved in the standard academic achievement test implemented by the UMCE (External Unit for Measurement of Quality of Education) of National Pedagogic University Francisco Morazán from 1997 as shown in Table 4, it is still not sufficient. The goal set as the mathematics ability target for 6th graders by 2015 by EFA-FTI is 70 percent¹⁴.

UMCE has stated in the said report concerning the factors of academic achievement that the use of textbooks in lessons have an affirmative correlation on academic achievement, and that there was also an affirmative correlation between academic achievement and homework.

Table 5
Results of Honduras's Standard Academic Achievement Test

	1997	2002	2004
Mathematics: 3 rd graders	36%	43%	44%
Mathematics: 6 th graders	34%	39%	39%

Source: Universidad Pedagógica Nacional Francisco Morazán, La Unidad Externa de Medición de la Calidad de la Educación “Informe Comparativo Nacional del Rendimiento Académico 2002-2004 Tercer y Sexto grados” 2004.7.

3-1-4. Teacher training

As for pre-service teacher training, until recently, Honduras was one of the few Latin American countries including Guatemala and Nicaragua that trained primary school teachers at secondary education level. In other words, teachers became primary school teachers after a total of 12 years of education including three years of teacher training education after completing basic education. However, due to the reform after 2001, currently it is required that Honduran primary school teachers hold a university diploma to be so. With this reform, the function of the 12 teacher training schools (“Escuela Normal”) as training institution was abolished, and reorganized as Basic Education Teacher Training Program of the National Pedagogic University Francisco Morazán, the Regional Center of National Institute for Educational Investigation and Training (INICE), and Distance Education Center of the National Pedagogic University Francisco Morazán.

The in-service teacher training system was taken on by INICE established in 1989

¹³ Ibid.pp24-25.

¹⁴ Provisional targets of EFA-FTI are 45 percent for 2005, 55 percent for 2008 and 61 percent for 2011.

with the cooperation of Japan, and activities by teacher learning centers (CAD¹⁵) independently operated by teachers groups by respective educational districts have been carried out for teacher training. From 1998, the Continuous Training Program (PFC¹⁶) by the National Pedagogic University Francisco Morazán for in-service teachers to obtain degrees has been implemented through financial assistance from the World Bank.

As a recent turn of events, the National System for Teacher Training (SINFOD¹⁷) is being formulated for providing a more consistent and efficient teacher training system by integrating the pre-service training for teachers implemented by the National Pedagogic University Francisco Morazán and in-service teacher training implemented by the Secretariat of Education.

3-1-5. Other efforts

As mentioned in the previous chapter, policies that conform to PRSP and EFA-FTI have also been adopted in primary education, and other donors and international aid institutions have also been developing various activities under aid coordination to achieve the development targets. In the context of EFA-FTI, besides the nationwide distribution of Spanish and mathematics guidebooks and workbooks based on the new curriculum, school bags, and teaching material sets until today, such activities as the development of learning standards and standard tests, and teacher training support have been carried out by donors (Refer to 2-5 for details).

As other issues, although the legal number of school days has been set as 200 days from mid February to early November, schools close for various reasons such as teacher training, resulting in a significant fall in the number of days per annum. Furthermore, the Secretariat of Education is frequently in conflict with the teachers' union over pay, marking a constant inherent risk that teacher strikes may occur resulting in periods of no-lessons.

3-2. Current status of primary mathematics education and analysis of the challenges

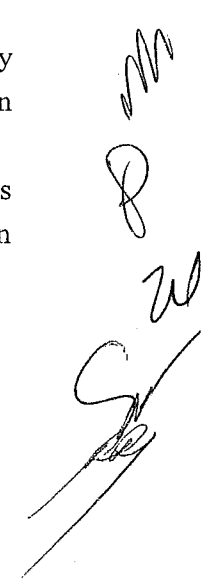
As seen in the previous section, overcoming holdovers and drop outs are the primary challenges for achieving the EFA-FTI goals, but the primary cause of holdover in Honduras is said to be underperformance in Spanish and mathematics.

Based on the request of the Honduran government, the Government of Japan has implemented Phase I with the Government of Honduras in an aim to "create a condition

¹⁵ Centro de Aprendizaje Docente,

¹⁶ Programa de Formacion Continua

¹⁷ Sistema Nacional de Formación Docente



in which trained teachers in the subject areas can provide lessons in line with the teacher guidebooks”, striving to solve problems through the improvement of the teaching abilities of teachers as the strategy against underperformance in mathematics, which is said to be one of the challenges.

The primary activities of Phase I were the development of teacher guidebooks and student workbooks, and teacher training that utilized those teaching materials, the said teaching materials were not only utilized in teacher training, but were designated as government-designated teaching materials by the Secretariat of Education of Honduras, and created a significant impact on a national level, as they were distributed to primary school teachers and children nationwide in 2005. As for the achievements of teacher training, as a result of the analysis carried out on the lesson evaluation findings of trained teachers by a short-term specialist of “Evaluation of Education” in November 2005, it was proved that the mathematics teaching ability of trained teachers had improved. It was also found that the full usage of the workbooks could contribute to improving the students’ academic achievement.

Therefore, it can be concluded that the project purpose of Phase I was basically achieved, and the strategy of “improving the teaching ability of teachers using the guidebooks” adopted by Phase I was effective in solving the problems and was validated to a certain extent.


However, the following challenges still remain concerning teaching material development and teacher training in primary education.

(1) Teaching material development

Teaching materials for 1st to 6th graders were developed in Phase I, but the following points remain as future challenges.

- There is a need to regularly review the curriculum that corresponds to the changing times.
- There is a need to revise the teaching materials with the review of the curriculum.
- The training of personnel who will take on these series of processes is insufficient.

Although the teaching materials developed in Phase I were distributed nationwide in 2005, there is a report which says that there is a substantial lack of distributed amounts in every region. The Secretariat of Education is planning distribution to schools as soon as possible based on the result of a survey recently completed by the Secretariat on the quantity and location of the teaching materials in stock. For the year 2006, only the students’ workbooks are to be printed using the funds from Canada. Therefore dealing with the insufficient numbers of teacher guidebooks and the printing and distributing of the workbooks after 2007 are the future challenges.



(2) Teacher training

Although the teaching ability of trained teachers in Phase I had generally improved, the number of teachers who had received training was limited, and there is a need for on-going teacher training in view of the dissemination of teaching materials on a national level in the future.

In time for the distribution of the teaching materials in 2005, the Secretariat of Education of Honduras provided training for in-service teachers in different areas throughout the country with the cooperation of donors including JICA (PROMETAM). However, due to the following reasons, the contents of the training was insufficient in both quantity and in quality for teachers to be able to provide effective lessons utilizing the teaching materials in their classes.

- There was a lack of coordination such as the schedule adjustment in implementing the training by region, and arrangement for the lecturers.
- Despite being a short training schedule of two and a half days, the purpose of the training was not concretized, and the contents of the training were not unified.
- As the cascade was divided into three stages, nation, prefecture and district, and the quality of the lecturers on the training provider's side was not properly managed, the quality of the training for on-the-scene teachers had deteriorated significantly.
- Although the utilization method of the new teaching materials was the main purpose of the training, the training was provided without the guidebooks being provided to the teachers.
- As most of the training were given in mass where participants were gathered in one place to be trained, an enormous amount of expense was required such as traveling and accommodation for the participants. On the other hand, as the budget hit the bottom on the district level and there was no financial aid, there were complaints from the participants (besides the problems of not being able to secure the required lecturers for the training, and many teachers not being able to participate, there were some districts that cancelled the training).

From these problems, it is observed that the challenges of teacher training for Honduras is the nonexistence of a constant in-service teacher training system, the lack of proper human resources to take on the responsibility of the training, and the limited budget for providing the training.

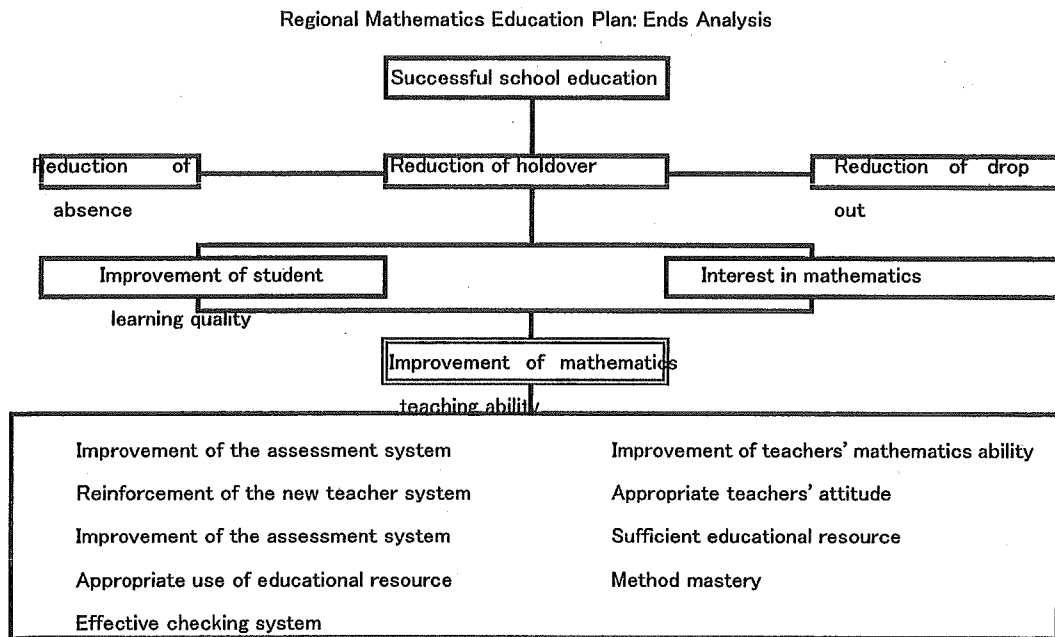
The future challenges are to look for a more effective form of training while making use of these reflections, and to develop human resources that can become the core in providing on-going training.

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(3) Common challenges of the region

At the Regional Preparation Meeting held with the participation of education officials from Dominican Republic, El Salvador, Nicaragua, Guatemala and Honduras in March, 2005 in Tegucigalpa, Honduras, the issues of mathematics education in each country were analyzed, and the following consensus-building was planned.

Through this, although each country has differences, it became evident that there are many common challenges.



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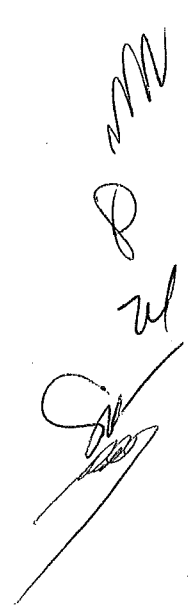
4. Project Strategy

To deal with the above mentioned teaching material development and teacher training challenges, cooperation for the pre-service teacher training and in-service teacher training utilizing the teachers' guidebooks and students' workbooks developed in Phase I, and support for the revision of the teaching materials will be provided as cooperation for Honduras in Phase II. In addition, for the country subject to regional cooperation, Phase II will provide technical assistance on the localization of the teachers' guidebooks and the students' workbooks, and also train core human resources to promote the improvement of the teaching ability of teachers in each country. (With a view to supporting the localization work of PROMETAM teaching materials in the respective countries, JICA has confirmed that it could make use of digital data of the original materials overseas for the purpose of international cooperation by signing an agreement on the issue with other co-developers of the materials, which are Secretariat of Education and National Pedagogic University Francisco Morazán.).

Specifically, the following will be the strategies based on the experience in Phase I and the current condition of other education sectors.

【Honduras】

- (1) Improve capacity of Honduran mathematics education Counterparts (C/P).
- (2) Revise the teaching materials that meet the needs and the requirements of the times.
- (3) Provide teacher training that utilizes a permanent system that integrates pre-service teacher training and in-service teacher training.
 - * Endeavors to unify the new teacher training and in-service teacher training that had been carried out separately to establish it as SINFOD is advancing. Through this, in-service teachers and new teachers can learn the same method through the same teaching materials. In addition, in order to maintain the number of days of lessons as much as possible, it aims to provide various forms of training in one system in a unified manner.
- (4) The in-service teacher training is to be decentralized and an implementation system adopted centering on the former regular schools of each region.
 - * By utilizing the teachers of "Escuelas Normales" on a full-time basis, which are expected to have quite a few extra personnel through the reorganization, the quality of the lecturers can be improved, multi-layered cascading can be avoided, and training costs can be reduced.
- (5) Improve the new teacher training mathematics education seminar.



【Countries subject to regional cooperation】

- (1) Sharing Honduras's knowledge as the basic strategy, the project's efficiency will be strived for by providing technical assistance from Honduras's main project (Phase II) for common challenges in the region.
- (2) Aim to train human resources to play a core role in developing teaching materials and training teachers in countries subject to regional cooperation.
- (3) Share the experiences of the countries subject to regional cooperation among those concerned, and implement efforts that can be utilized in solving common challenges.
- (4) Respect each country's needs and circumstances, and not only provide common support for countries subject to regional cooperation, but also build a framework of cooperation for each country individually from Honduras's main project.

4-2. Implementation Structure

- (1) The implementing organizations of the Project are the Secretariat of Education and the National Pedagogic University Francisco Morazán. The vice-secretary for technical pedagogic issues will work as the Project Director and will take overall responsibility for the administration and implementation of the Project. The president of UNPFM will work as the Vice-Project Director and will support the Project Director.
- (2) The Executive Director of INICE, which is a subordinate organization of the Secretariat of Education, will work as the Project Manager and take responsibility for the managerial and technical matters of the Project.
- (3) Planning and Performance evaluation Unit (UPEG), SE will settle the Project into the overall sector plan and will secure the budget and personnel necessary for the implementation of the Project.
- (4) Department of External Cooperation of the Secretariat of Education will coordinate and communicate with other member countries of the Project and/or neighboring countries as the need arises.
- (5) INICE and the Unit for Transformation of "Escuela Normal", UNPFM will cooperate together and take responsibility for the planning, implementing, monitoring and evaluating the Project.
- (6) Three C/Ps exclusive to the Project, two of whom selected from the Secretariat of Education and one from UNPFM, will play key role for the effective implementation of the Project as the Core Group of the Project with the support from Japanese experts.
- (7) Five C/Ps, selected from the "Escuela Normal" in La Paz to work exclusively for the

Project, will conduct trainings on the use of teaching materials for in-service teachers in the department of La Paz with the support from the Core Group.

- (8) Two C/Ps selected from the “Escuela Normal” in Intibucá will work to improve their practice of mathematics pedagogy class.
- (9) The Japanese Chief Advisor will provide necessary recommendations and advice to the Project Director, Vice-Project Director and the Project Manager on any matters related to the Project.
- (10) The Japanese experts will provide necessary technical advice and guidance to above-mentioned Honduran C/Ps and mathematics teachers and instructors selected from twelve “Escuela Normales”
- (11) For the effective and successful implementation of the Project, all the parties concerned will establish the Joint Coordinating Committee where they make important decisions on the Project.

5. Project Design

5-1. Project purpose

【Honduras】

The mathematics teaching ability of in-service teachers (La Paz) who teach 1st to 6th graders, and the students of FID Intibucá improved through the utilization of the teacher guidebooks and students’ workbooks.

〈Indicator / Target〉 The results of the lesson analysis¹⁸ for lessons provided by in-service teachers of La Paz and students of FID Intibucá improved.

【Regional】

The ability of the core group for improving the mathematics teaching method in subject countries is developed.

〈Indicator / Target〉 Contents of the mathematics teaching method improvement activities planned and implemented by the core group in subject countries.

5-2. Overall goal

【Honduras】

The mathematics ability of 1st to 6th graders mainly in regions subject to cooperation (Intibucá, La Paz) improved.

〈Indicator / Target〉 The results of the mathematics ability test of UMCE (Honduras’s

¹⁸The lesson assessment method developed in Phase 1 in which the assessor observes and notes the result of the lesson of the subject teacher based on the check list consisting of six categories such as the appropriate use of teaching materials.

standard ability test) for 1st to 6th graders taught by in-service teachers of La Paz and teachers who had graduated from the Intibucá FID shows improvement on an overall average basis.

【Regional】

Mathematics teaching ability of teachers in the subject countries improved.

〈Indicator / Target〉 The lesson analysis result for mathematics improves.

5-3. Outputs and activities

【Honduras】

(1) Output: The mathematics teachers' guidebooks and students' workbooks for 1st to 6th graders were revised.

Activity: Planning and implementing of the revision of the teaching materials.

〈Indicator / Target〉 The revised teaching materials were approved by the Secretariat of Education.

(2) Output: Mathematics instructors of teacher training schools nationwide became able to provide instructions on the usage method of the mathematics teachers' guidebooks and students' workbooks for 1st to 6th graders.

Activity: Planning and implementing of teaching material usage training for mathematics instructors of teacher training schools.

〈Indicator / Target〉 The results of academic achievement and teaching method test for mathematics instructors in teacher training schools has improved in comparison to the results prior to training.

(3) Output: The students of Intibucá teacher training school FID became able to use the teachers' guidebooks and students' workbooks for 1st to 6th graders.

Activity: Development of the mathematics instructor training manual, formulation of the training and monitoring plan, and lesson monitoring.

〈Indicator / Target〉 The lesson analysis results on the mathematics teaching method improved.

(4) Output: In-service teachers of La Paz became able to use the mathematics teachers' guidebooks and students' workbooks for 1st to 6th graders.

Activity: Development of the teaching material usage training manual, the formulation and implementation of the training and monitoring plan.

〈Indicator / Target〉 The lesson analysis results for mathematics improved.

(5) Output: General interest towards mathematics education increased.

Activity: Publication of the newsletter, publicity and education on the effects on mathematics teaching materials.

〈Indicator / Target〉 Over 10 project newsletters were issued, and publicity and education events on mathematics teaching materials were held more than once a year.

【Regional】

(1) Output: The core group members acquired the ability required for developing and revising the teachers' guidebooks and students' workbooks in each country based on the teaching materials developed in Phase I.

Activity: Formulation of the training plan, and implementation of training (overseas and domestic) and monitoring.

〈Indicator / Target〉 More than three core group members from each country completed training of the area in question.

(2) Output: Core group members acquired the ability required for implementing in-service teacher training and new teacher training in each country.

Activity: Formulation of the training plan, implementation of training (overseas and domestic) and monitoring.

〈Indicator / Target〉 More than three core group members from each country completed the training of the area in question.

(3) Output: The experiences of the Project were shared between the subject countries and other countries.

Activity: Formulation of the training plan, implementation of training (overseas and domestic) and monitoring.

〈Indicator / Target〉 An international symposium was held more than twice. Over 10 project newsletters were issued, and the number of participants in the communication network increased (mailing list).

5-4. Input

5-4-1. Japanese side (Total amount: Approx. US\$6.6 million)

1) Dispatch of expert

Long term: Chief advisor, Coordinator, Mathematics education 1, Mathematics education 2.

Short term: Training plan, lesson improvement, evaluation of education and IEC (Information, Education and Communication).

- 2) Training of counterpart personnel of Honduras and other target countries in Japan and/or the third countries.

About 15 trainees each year (3 trainees each from 5 countries) for teaching material development, mathematics education, and teacher training plan.

- 3) Provision of Equipment: Vehicle for monitoring.
- 4) Local activity expenses (training materials document costs, regional training travel expense in Honduras, etc.)

5-4-2. Honduran Side

- 1) Buildings, Offices and other facilities necessary for the Project.
- 2) Assignment of counterparts (Secretariat of Education, INICE, National Pedagogic University Francisco Morazán, etc.)
- 3) Assignment of administrative personnel.
- 4) Facilities necessary for the implementation of the Project.
- 5) Expenses necessary for the implementation the Project (car insurance, gasoline, domestic travel expense etc.)

5-5. Analysis of external conditions and risks

【Honduras】

- 1) Precondition

The Secretariat of Education is to position the counterparts in teacher training schools nationwide and guarantee their activities.

- 2) External condition (from activity to output)

Teacher training school instructors and in-service teacher instructors serve continually.

- 3) External condition (from output to project purpose)

The educational policies in the area of mathematics in basic education are not to be changed.

- 4) External condition (project purpose to overall goal)

The education policies related to the basic education curriculum are not to be changed.

- 5) External condition (Overall goal and more)

The teachers are to provide lessons and are not to be influenced by teachers' strikes.



【Regional】

1) Precondition

The Secretariat of Education of each country positions the core group members and schedules their activities.

2) External condition (from activity to output)

The core group members continue the activities related to mathematics in the education system.

3) External condition (from output to project purpose)

The educational policies in the mathematics area of basic education in subject countries are not to be changed.

4) External condition (from project purpose to overall goal)

The educational policies related to the curriculum of mathematics in basic education in subject countries are not to be changed.

5) External condition (overall goal and more)

The educational policies of in-service teacher training and pre-teacher training in subject countries are not to be changed.

5-6. Dispatch of JOCV (Japan Overseas Cooperation Volunteers)

JOCV will be dispatched in collaboration with the Project to conduct activities at district and/or school level.

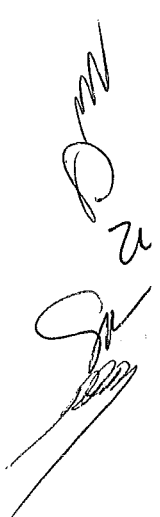
6. Ex-ante Evaluation

(1) Relevance

The Project is deemed to have high relevance for the following reasons.

【Honduras】

The objectives of PRSP and EFA-FTI are to create and distribute mathematics teaching materials for primary education, to improve in-service teacher training and to train new university-level teachers, which are reflected in the government plan of their respective administrations and the action plan of the Secretariat of Education. They also match with the priority areas of Japanese ODA task force and the JICA country implementation plan for Honduras. Furthermore, the western region of Honduras where the areas subject to cooperation (La Paz and Intibucá) are situated, have the highest concentration of poor towns and villages in the country, and is JICA's priority cooperation area in Honduras. In view of the condition that inhibits many of the in-service teachers from acquiring sufficient teaching ability prior to employment



(teacher training program), the necessity to select the pre-service teacher training program, which was not covered in Phase I, as subject of this project is high.

【Regional】

Just as with Honduras, Central American and Caribbean countries are having a problem with sluggish completion rate while their school attendance rate for primary education is generally high. As such, the need for improvement in the quality of primary education is high, and it is included in the strategy plan of CECC. In addition, it was also taken up as the primary theme in the intraregional symposium (participated by 12 Central and South American countries including five countries subject to this project in 2005).

(2) Effectiveness

The Project has potential for the following reasons.

【Honduras】

It has been made evident in the impact study of Phase I that the mathematics teaching ability of teachers improves by using the teaching materials developed in Phase I appropriately. The lesson analysis method for assessing the mathematics teaching ability has already been developed in Phase I, and it is possible to measure the target achievement level of this project accurately and continually.

【Regional】

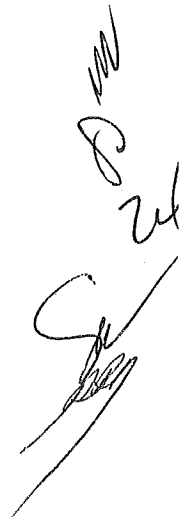
The principal areas of knowledge and experience required (teaching material development, teacher training, etc.) for the ability development of core group members of subject countries have already been accumulated in the Phase I cooperation of Honduras. It would be possible to deepen the understanding in areas (lesson improvement, school operation, etc.) where there is insufficient experience in Honduras by further striving for an active sharing of experiences between Central and South American countries including the subject counties.

(3) Efficiency

Efficient implementation of the Project is expected for the following reasons.

【Honduras】

Long-term specialists have already been secured, and most of them have experience as both in-service teachers in Japan and Overseas Cooperation Volunteers in Honduras. As such, they have a deep understanding on the conditions of the educational scene in



Honduras, and as they have excellent communication skills, efficient activities can be implemented. Moreover, as the lesson analysis method, which is the indicator of project achievement, has already been developed in Phase I, it would be possible to measure the achievement level accurately and continually.

【Regional】

Long-term specialists of mathematics will be intensively positioned in Honduras for this project, and they will be in charge of the training lecturers for the core group, and a lot of the local monitoring. As such, dispatching a specialist from Japan for each endeavor is far more efficient in terms of required expenses and time compared to dispatching a long term mathematics specialist to each subject country.

(4) Impact

The impact of the Project can be estimated as follows.

【Honduras】

It was made evident from the findings of the impact study of Phase I that using the teaching materials developed in Phase I and having teachers with sufficient teaching ability improves the mathematics ability of children. Therefore, the probability of achieving the overall goal is high. Moreover, UMCE used for the indicator of the overall goal is an existing standard ability test regularly implemented by the Secretariat of Education of Honduras and National Pedagogic University Francisco Morazán, and it can measure the achievement level continually.

【Regional】

The core group members trained in this project will play a central role in the planning and implementing of the training for pre-service and in-service teachers in the technical cooperation project developed in subject countries. Therefore, the probability of success of the overall goal; “Improvement of the mathematics teaching ability of pre-service and in-service teachers of subject countries” is very high. In addition, the lesson analysis method, which is the indicator of the top target, has already been developed in Phase I, and it can measure the achievement level accurately and continually.

(5) Sustainability

Sustainability of the Project is expected for the following reasons.

【Honduras】

The printing and distributing of mathematics teaching materials is required to be

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carried out continually and regularly. As they are set as the goals in the long-term plan of PRSP and EFA-FTI in terms of policies, there is less impact from change of power. In terms of finance, although the budget of the Secretariat of Education is not enough, aid from donors can be expected using the framework of EFA-FTI (Sweden and Canada are already providing financial aid). In terms of technology, as the human resources from Honduras (central level and prefectural level) that have accumulated experience of teaching material development and teacher training in Phase I are due to participate in this project, a continuous development of activities including textbook revisions according to need even after the completion of the cooperation is expected.

【Regional】

Cooperation will be made in the Project by utilizing the teaching materials and assessment methods that have already been tried and developed in Honduras. Therefore, from the technical aspect, it is thought to be easy to establish in Central America and Caribbean countries where there are a lot of commonalities in language and culture. In addition, as it is a project agreed upon in the Japan-Central America Summit Action Plan, the continuation of policy support in subject countries even after the completion of the project can also be expected.

(6) Overall Conclusion

The Project is considered to be quite relevant and feasible in terms of attaining overall goal and expanding positive impact in Honduras and the region, based on the evaluation results in above 5 categories for Phase I. With regard to sustainability, in Honduras, periodical distribution of teaching materials (teachers' guidebook and students' workbook) and implementation of SINFOD as national policy are expected with strong commitment of Honduran Government. Regional collaboration through the Project activities also meets Japanese Policy. In conclusion, the overall relevance of the Project implementation is very high.

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7. Appendix

Appendix-1 Project Design Matrix (PDM) (for Honduras and Regional)

Appendix-2 Plan of Operation (for Honduras and Regional)

Appendix-3 Implementation Structure of PROMETAM Phase II

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**PROJECT TITLE: PROJECT FOR THE IMPROVEMENT OF TEACHING METHOD IN MATHEMATICS
(PROMETAM) PHASE II**

Duration: April 2006 - March 2011

NARRATIVE SUMMARY	VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>[OVERALL GOAL] Students' academic achievement in mathematics for Grade 1-6 mainly in pilot areas improved.</p>	Results of achievement test for the students in mathematics by UMCE	Report of UMCE	Classes are conducted by teachers and not affected by teachers strikes and etc.
<p>[PROJECT PURPOSE] Teaching method of teachers and FID students in mathematics for Grade 1-6 mainly in pilot areas improved.</p>	Results of lesson analysis of mathematics*	Report of the Project	The education policy regarding basic education curriculum is not changed.
<p>[OUTPUTS] 1. Teachers' guidebook and students' workbook for Grade 1-6 in mathematics is revised. 2. Teachers of 12 "escuela normal" have capacity to work as trainers on the use of teachers' guidebook and students' workbook in mathematics for Grade 1-6. 3. FID students of "escuela normal" in the department of Intibuca have capacity to utilize teachers' guidebook and students' workbook in mathematics for Grade 1-6. 4. In-service teachers in the department of La Paz have capacity to utilize teachers' guidebook and students' workbook in mathematics for Grade 1-6. 5. General interests in Mathematics education are increased.</p>	<p>1 Authorization by Secretariat of Education</p> <p>2(a) Results of test of achievement and teaching method. 2(b) Results of evaluation of trainers' training.</p> <p>3. Results of lesson analysis of mathematics*.</p> <p>4. Results of lesson analysis of mathematics*</p> <p>5(a) Frecuency and number of copies of the Project Newsletter. 5(b) Recognition of the Project.</p>	<p>1. Secretariat of Education</p> <p>2. Report of the Project</p> <p>3. Report of the Project</p> <p>4. Report of the Project</p> <p>5. Report of the Project</p>	The education policy is not changed in the area of mathematics of basic education.

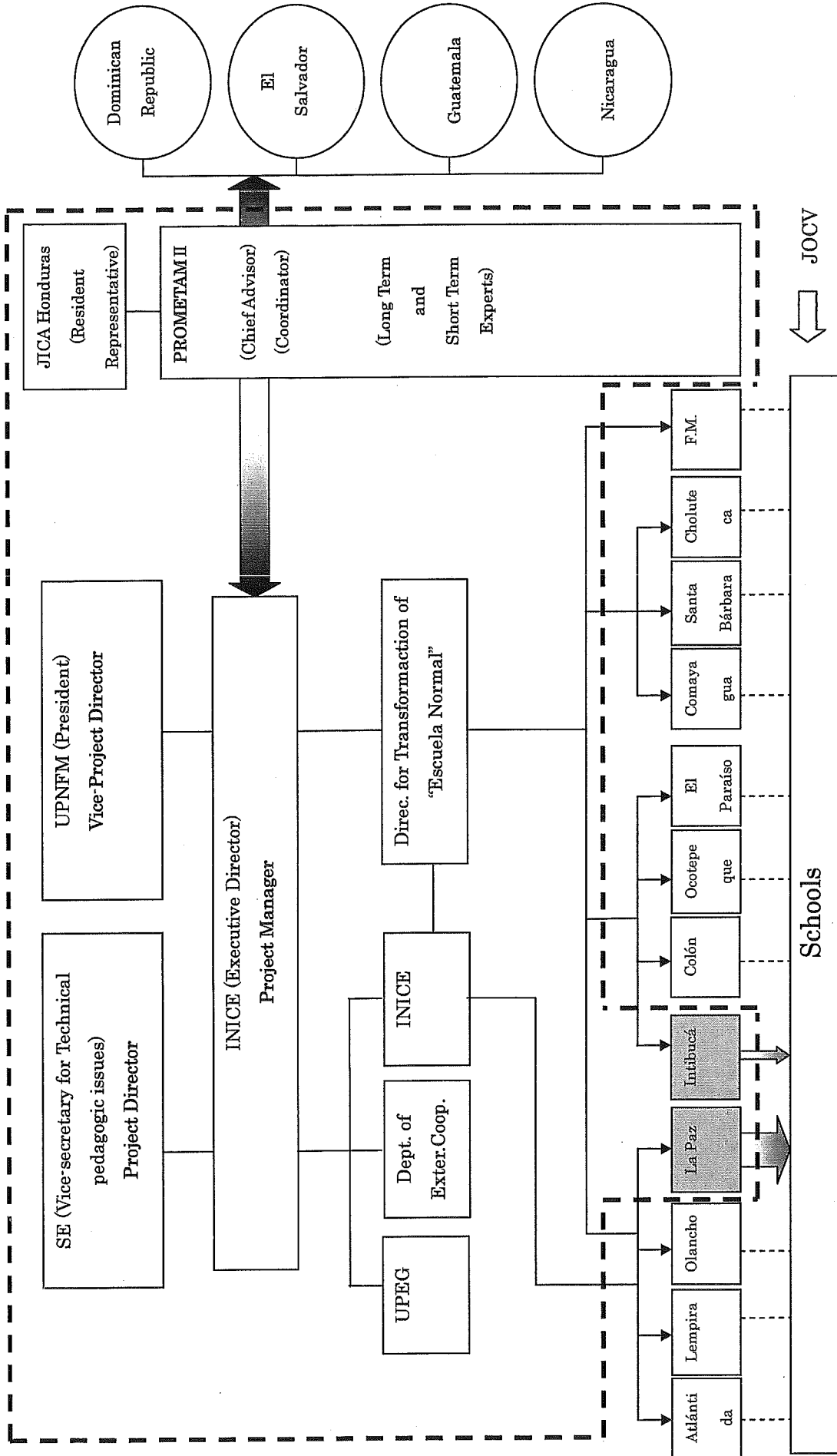
[ACTIVITIES]	[INPUTS]		
<p>1-1 To plan revision process of teachers' guidebook and students' workbook in mathematics for Grade 1-6.</p> <p>1-2 To revise teachers' guidebook and students' workbook in mathematics for Grade 1-6.</p> <p>2-1 To plan training for mathematics teachers in 12 "escuela normal" on the use of teachers' guidebook and students' workbook in mathematics for Grade 1-6.</p> <p>2-2 To train mathematics teachers in 12 "escuela normal" about the use of teachers' guidebook and students' workbook in mathematics for Grade 1-6.</p> <p>3-1 To make plans on training manual development, trainers' training and monitoring for mathematics teachers in the "escuela normal" in the department of Intibucá to enable their FID students to utilize teachers' guidebook and students' workbook in mathematics for Grade 1-6.</p> <p>3-2 To make Lesson plans on the use of teachers' guidebook and students' workbook in mathematics for Grade 1-6 at the "escuela normal" in the department of Intibucá.</p> <p>3-3 To implement additional trainings to 2-2 for mathematics teachers of the "escuela normal" in the department of Intibucá.</p> <p>3-4 To carry out monitoring of FID classes on the use of teachers' guidebook and students' workbook implemented by the mathematics teachers in the "escuela normal" in the department of Intibucá.</p> <p>4-1 To make plans on training manual development, trainers' training and monitoring for teachers in the department of La Paz to conduct trainings for in-service teachers in the department of La Paz.</p> <p>4-2 To develop training manual for in-service teachers in the department of La Paz on the use of teachers' guidebook and students' workbook in mathematics for Grade 1-6.</p> <p>4-3 To implement additional trainings for mathematics teachers of the "escuela normal" in the department of La Paz.</p> <p>4-4 To support in-service teacher training implemented by teachers of the "escuela normal" of La Paz on the use of teachers' guidebook and students' workbook in mathematics for Grade 1-6.</p> <p>4-5 To carry out monitoring of the trainings implemented in 4-4.</p> <p>5-1 To publish and distribute the Project Newsletter periodically.</p> <p>5-2 To conduct IEC(Information, Education and Communication) activities to promote the effectiveness on teachers' guidebook and students' workbook in mathematics for Grade 1-6.</p>	<p>Japanese side:</p> <p>a. Dispatch of long-term experts in the following field:</p> <ul style="list-style-type: none"> - Chief Advisor (1) - Coordinator (1) - Mathematics Education (2) <p>b. Dispatch of short-term experts in the following field:</p> <ul style="list-style-type: none"> - Planning of Training - Improvement of Teaching Method - Education Evaluation - Information, Education and Communication - Others (as necessary) <p>c. Training of counterpart personel in Japan.</p> <p>d. Training of counterpart personel in Honduras and in other countries.</p> <p>e. Provision of equipment.</p> <ul style="list-style-type: none"> - Vehicle <p>f. Expenses necessary for the implementation of the Project.</p>	<p>Honduran side:</p> <p>a. Assignment of the following Honduran C/Ps:</p> <ul style="list-style-type: none"> (1) National - Vice-Secretary for Technical Pedagogic Issues of the Secretariat of Education (SE): Project Director - President of National Pedagogic University "Francisco Morazan"(UNPFM): Vice Project Director - Executive Director of National Institute of Educational Investigation and Training (INICE): Project Manager - General Coordinator of the Unit for Transformation of "Escuela Normal", UNPFM - Coordinator of pre-service teachers' training (FID), UNPFM - Director of the Planning and Performance evaluation Unit (UPEG), SE - One National Counterpart (exclusively work for the project) in mathematics education, UNPFM - 2 National Counterparts (exclusively work for the project) in mathematics education, SE - Person in charge, INICE <p>(2) Department and District</p> <ul style="list-style-type: none"> - At least 2 teachers in charge of mathematic teaching method in each of "Escuelas Normales" - At least 5 full-time teachers (exclusively work for the project) as instructors for in-service training in the "Escuela Normal" in La Paz - Directors of the department 	<p>Preconditions:</p> <p>The Secretariat of Education allocates C/Ps in 12 "escuela normal" and guarantees their activities in the Project.</p>

* Concrete method will be developed by Japanese short-term expert in Educational Evaluation and core group through training in Honduras (April-May 2006) and in Japan (June-July 2006).

Outputs	Activities	Actions to take	2006												2007												2008												2009												2010											
			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
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1. The core group members obtain the necessary competence for development and adjustment of teachers' guidebook and students' workbook in each country, based on the materials developed by PROMETAM.	1-1 To make training plans related to development and adjustment of teachers' guidebook and students' workbook. 1-2 To implement trainings in Japan related to development and adjustment of teachers' guidebook and students' workbook. 1-3 To implement trainings related to development and adjustment of teachers' guidebook and students' workbook in Honduras and other countries. 1-4 To implement additional trainings and monitoring related to development and adjustment of teachers' guidebook and students' workbook depending on the needs of service and/or in-service teacher training.		[Shaded]												[Shaded]												[Shaded]												[Shaded]												[Shaded]											
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2. The core group members obtain the necessary competence to implement pre-service and/or in-service teacher training in each country.	2-1 To make training plans related to pre-service and/or in-service teacher training. 2-2 To implement trainings in Japan related to pre-service and/or in-service teacher training. 2-3 To implement trainings related to pre-service and/or in-service teacher training in Honduras and other countries. 2-4 To implement additional trainings and monitoring related to pre-service and in-service teacher training depending on the needs of each targeted country.		[Shaded]												[Shaded]												[Shaded]												[Shaded]												[Shaded]											
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3. The project experiences are shared among targeted countries and others.	3-1 To establish a communication network through internet (mailing list, HP etc.) among the actors related to the Project. 3-2 To make plans for International Symposiums. 3-3 To hold International Symposiums. 3-4 To publish the Project Newsletter.		[Shaded]												[Shaded]												[Shaded]												[Shaded]												[Shaded]											
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Appendix 3 Implementation Structure of PROMETAM Phase II



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