

1. Introduction

This report, entitled the Project Document, was drawn up for the following purposes.

(1) To explain the relevance of Project implementation

- To explain the necessity and priority of the Project by providing an outline of the social situation in the country in question, the situation in the sector to be covered by the Project, and the strategy of the government of the country.

(2) To share among the parties concerned, the study process and relevant information in the preparation of the project plan.

- By bringing together in one volume important information relating to the Project, to share information on problem awareness, strategy, and goals among those concerned in the Project
- At the same time, the document constitutes reference material for the parties concerned to study measures to maximize the impact of the Project and policies to ensure sustainability.

In order for the advance preparations for a technical cooperation project to be carried out effectively, it is necessary that the Project Document be drawn up through the cooperation of the Japanese government and the Secretariat of Education of Honduras, the Honduran organization in charge. In the case of the present Project, the draft of the Project Document was drawn up on the basis of the preliminary evaluation study of January 2003, approved by both the Honduran and Japanese side with agreement of the Record of Discussion of the Project in March 2003.

2. Project Implementation Background

2-1 Socioeconomic Context

This section outlines changes in economic development and the present situation in Honduras, using macroeconomic indices.

Table 2-1 Economic growth rate per capita income increase rate

	(Annual growth rate : %)				
	1980-90	1990-00	1999	2000	2000-04 *
GDP	2.7	3.2	-1.9	5.0	4.1
Per capita GDP	-0.4	0.3	-4.5	2.3	1.6
Exports	1.1	1.5	-11.2	4.9	9.0

Source: World Bank Honduras at-a-glance (Sept. 2001)

Notes: *Figures represent projected values.

Table 2.1 shows the GDP, per capita GDP, and average annual growth rate of exports of the past twenty years, and projected growth up to 2004 according to the World Bank.

The economy of Honduras was stagnant in the 1980s due to the debt crisis. However, with the economic reforms of the early 1990s and the prosperity of the manufacturing and construction industries, the economy grew. Between 1980-90 and 1990-2000, the GDP growth rate rose from 2.7% to 3.2% and the per capita GDP improved from a minus growth rate of 0.4 percent to 0.3 percent. The growth rate of exports also increased from 1.1% to 1.5%. However, because of the effects of Hurricane Mitch in 1998, the GDP for 1999 showed minus growth and exports dropped drastically. The following year, the year 2000, with recovery after the Hurricane, both the GDP growth rate and the rate of increase of exports recovered to their pre-hurricane levels.

Table 2-2 compares the indices of Honduras with the low income, low-to-medium income, and medium-to-high income countries of Central and South America. The per capita gross national income (GNI) of Honduras is US\$850, lower than the average of the low-to-medium income countries. The per capita GNI of Honduras is less half than that of El Salvador, which

belongs to the same low-to-medium income group of countries and has a population of similar size. Thus, the income level of Honduras is among the lowest of the Central and South American countries.

Table 2-2 Comparison of income with other Central and South American countries

	Honduras	Central and South American countries	Nicaragua (low income country)	El Salvador (low income country)	Guatemala (low-to-medium income country)	Costa Rica (low-to-medium income country)	Panama (medium-to-high income country)
2000							
Population (tens of thousands)	650	51,600	500	630	1,140	370	290
GNI (Atlas method, in US\$100,000,000)	55	18,950	21	126	192	145	93
Per capita GNI (Atlas method, in US\$)	850	3,680	420	1,990	1,690	3,970	3,260
PPP (Atlas method, in US\$100,000,000) ^{*1}	150	36,240	110	280	430	300	160
Average annual rate of increase (1994 - 2000)							
Population (%)	2.8	1.6	2.6	2.1	2.6	1.9	1.7
Working population (%)	3.7	2.3	3.7	3.4	3.3	2.4	2.5
Percentage of population below poverty line (%) ^{*2}	40.5	-	-	26.0	10.0	6.9	10.3

Source: World Bank At-a-Glance Table (Sept. 2001)

Notes: *1: Drawn up from the World Development Indicator 2002.

*2: Percentage of the population living on less than a dollar a day (purchase power parity dollar (PPP US\$) (The latest data available between 1983 and 1999) UNDP, Human Development Report 2001

The rate of increase of the population and of the working population of Honduras is extremely high, higher than in other Central and South American countries. Rapid population growth is a primary factor holding back the growth of per capita national income, leading to a large population living below the poverty line. The class of impoverished people living on less

than a dollar a day accounts for 40.5 percent of the population of Honduras, high compared with the 26.0 percent of El Salvador.

2—2 Description of the Sector / Sub-Sectors

The Republic of Honduras (hereafter referred to as "Honduras") has set itself the goal of attaining "full coverage and completion of six years of primary education for all children of school age of both sexes, by 2015," and has been tackling the problem with the support of many donor countries. The present state of primary education is that the rate of school attendance is high, at 95 percent (as of 2000), with hardly any difference between boys and girls. From this, it appears that children's access to school education has improved, and the spread of education has progressed.

However, the percentage of children completing their education is low, at 68.5 percent (as of 2000), and it can be surmised that there has not been a sufficient improvement in the quality of education. Furthermore, of those children completing primary education, only 31.9 percent have completed the education course in the regular six years. Dropouts and grade repeats are the most important issues in the educational development of present-day Honduras.

2—3 Honduran Government Strategy

The main cause of grade repeats in Honduras is poor achievement in Spanish (the official language) and mathematics. Another problem cited is the low quality of the teachers. The Honduran government is working on a reform of the teacher training and retraining system on the basis of the Plan for Educational Reform, which is one of the main items of the National Reconstruction and Transformation Plan. At present, the government is into its Continuous Teacher Education Program (Programa de Formación Continua: PFC), started in August 1998, mainly at the Universidad Pedagógica Nacional (UPN).

Over the past twelve years the Japanese government has supported the training of teachers through the dispatch of JOCVs in mathematics (the total number of dispatched members is 60). These achievements have been evaluated and there has recently been a request from the Honduran government for the cooperation of Japan in mathematics, a subject with one of the highest levels of grade repeats in the PFC. The request specifically included the improvement and implementation of continuous training of teachers in mathematics, the preparation of teachers' guidebooks for the government-designated mathematics textbook (hereafter referred to as the "guidebooks"), and workbooks in mathematics for children (hereafter referred to as the "workbooks"), and the improvement of educational evaluation methods using standard achievement tests for children.

2-4 Ongoing and Past Projects conducted by the Government and Other Organizations in Relation with the New Projects

(1) General Trend of Other Donors

The educational development of Honduras is characterized by two main points, namely ① donors are very active and cooperation among donors is fairly advanced, and ② donors are directly involved in the national curriculum.

As a background to the energetic activities of donors in the educational sector, the need for educational development is of course high. In addition, policies and the system for the acceptance of support are relatively well laid out in Honduras, and hurdles to the implementation of support are lower than in other countries. Strategic documents such as the Poverty Reduction Strategy Paper (PRSP) or the Education for All (EFA) activity plan were drawn up more quickly than in other countries, and Honduras was recently approved for the Fast Track Initiative (FTI). These are very important preconditions for donors to take action. In addition, as the tight financial situation forces donors to 'select and concentrate', the tendency for grant aid cooperation in Central America to be concentrated in Honduras can be taken as a natural turn

of events.

In this situation, the Education Sector Donor Conference (Mesa Redonda de Cooperaciones Externas en Educación: MERECE), an unofficial donor group, was organized in 1998. This organization holds free discussions on education in Honduras, coordinates support from donors in the educational sector, and makes various recommendations to the Secretariat of Education. Considering that because of the weak financial base of the Secretariat of Education almost all new projects contributing to educational development are supported by donor funding, it is not difficult to imagine that the power of MERECE is enormous. It is no exaggeration to say that the initiative for educational development in Honduras is directed by MERECE.

In keeping with this situation, Japan has dispatched a JICA expert to press forward active support cooperation. Through the efforts of this expert, Japan will hold the vice-chairmanship of MERECE from January 2003, and will chair MERECE for half a year from July 2003.

(2) Major Donor's Trend

1) The World Bank (especially with regard to IMF and FTI)

At the present time a study team from the International Monetary Fund (IMF) visits Honduras regularly, to examine whether Honduras can be exempted from its debts as a Heavily Indebted Poor Country, on the condition of progress by March or April of 2003 in the review of macro indices on the financial deficit and the pay structure for public officials.

The Fast Track Initiative (FTI) put forward by the World Bank tries to contribute common funds for the improvement of the present situation, whereby the already limited human resources of the Secretariat of Education are consumed in negotiations with donors, each of which has a characteristic style. Basically, the FTI follows the same thinking as the previous sector-wide approach. In Honduras, the submission of proposals and MERECE assessment of the proposals was completed last year, and it has been decided that the FTI will proceed with information being shared with Nicaragua. From now on, we enter the stage of implementation of the content of the proposals, and this will be done through discussions between the Honduran

government and MERECE.

The Secretariat of Education is to submit to the World Bank by March 2003 an Action Plan with a target year of 2015, a medium-term plan for each three years, a cost estimation and analysis of implementation. The United States Agency for International Development (USAID) and Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) has offered technical cooperation in the drawing up of the Action Plan.

2) IDB (on the agreement between the IDB and the Honduran government, and wide area cooperation in Central America)

The Inter-American Development Bank (IDB) has already signed two educational projects, the National Educational Reform (Transformation de Education Nacional #1000: 9 million dollars) and the Basic Educational Reform for Grades 6 to 9 (Transformation de Educacion Nacional: Tercer Ciclo de Educacion Basica, #1069: 29 million dollars). However, the amount of 4 million dollars and 20 million dollars, respectively, for these projects has not yet been forthcoming. As a condition for progress, the IDB cited to the Honduran government a revision of the basic curriculum, and the Honduran government made a commitment to draw up a curriculum by the end of this year and officially approve the curriculum during the next fiscal year. However, the present administration is tackling education aggressively: it is planned to speed up the initial schedule, so that the curriculum will be drawn up by September 2003 and officially approved by December 2003, text books will be prepared by the end of the next fiscal year, and education using the new curriculum and new textbooks will start from the beginning of fiscal 2005 (February 2005).

If things are speeded up in this way, the new curriculum and new textbooks will come into use during the implementation period of the Project. Dra. Claudia Torres, the Vice-Minister of Education, has said that the revision of the mathematics curriculum and the preparation of new text books will be done in line with the outputs of Japan, so that the revision should not involve too much work. However, it will be necessary to keep continually up to date with the trend of future curriculum revision.

In November 2002, a conference of the Secretaries of Education of Central American countries was held in Washington chaired by the IDB, on the subject of wide-area cooperation in Central America. As the minutes describing the establishment of the Conference on the Approval and Promotion of Educational Project in Central America (Comision de Acreditacion y Promocion de Proyectos Educativos para la Region Mesoamericana: CAPP) and the specific content of its activities¹ state that priority in funding will be given to projects approved by CAPP, careful studies were carried out in the preliminary evaluation study.

Behind wide-area cooperation in Central America lies the experience of the Executive Council for the Panama Test Plan (La Comision Ejecutiva del Plan Prueba-Panama). This was originally undertaken to unify standards in the sectors where standardization of the construction and legal systems is necessary, such as roads, communications, energy and customs. This experience was applied to social development sectors such as education or health.

However, the Honduran office of IDB recognized that education was different from the above-mentioned infrastructure projects, and difficult to standardize. It also recognized that the council could not have a large impact in an area like Central America, where major policies change with a change of administration. On the other hand, it is true that the educational problems of Central America have some things in common, such as the literacy rate, number of teachers, and educational evaluation. Therefore, the IDB recognizes that it is important for the experiences of one country to be made use of in the other neighboring countries.

3) USAID (especially CETT)

The Center of Excellence for Teacher Training (CETT) is a scheme based on the 'Learning and Literacy' program initiated by the President's Office in April 2001, with the purpose of improving the reading and writing abilities of children up to the third grade in three regions of Central and South America, namely, ① Caribbean English speaking region, ② Caribbean and

¹ Obtained from the JICA Honduras office. Countries covered by CAPP are Belize, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua and Panama.

Central American Spanish speaking region, and ③ Andes region. This is a wide-area project under the responsibility of the Washington headquarters, but with each country having its own part to play. The subject dealt with by CETT is language (Spanish or English), but it also includes the component of training, and is thus similar to this Project.

Thus, the preliminary evaluation study confirmed that this Project and the reinforcement of language by CETT can be linked in parallel. For example, it is considered that in areas implementing the CETT project use of methods to improve teaching ability in mathematics that are developed by the Project will be effective in increasing the impact of the Project.

4) GTZ (Kreditanstalt fuer Wiederauf: KfW)

GTZ has eight years of experience in the improvement of primary education in Lempira and Intibuca provinces, from 1994 to 2002. Improvements included a revision of the curriculum, the development of textbooks, and the provision of teacher training. The educational administration of the Secretariat of Education also carried out a revision. Furthermore, Germany conducted a project to improve the quality of basic education through joint funding by the World Bank and KfW.

When Dr. Wolfgang P. Teschuner, who is presently in charge of education, took up his post, he recognized that while there was no problem with the curriculum or the textbooks developed by FEBLI, there was insufficient follow-up of the educational administration not using the curriculum and textbooks. He told the preliminary evaluation study group that he was very interested in support with regard to policy.

3. Problems to be Addressed

3-1 Institutional Framework for the Sub-sector

This section outlines the institutional framework of the education sector in Honduras, the state of continuous teacher training, and the parties concerned.

(1) Recent Administration in Education Sector

Since the end of World War II, Honduras has lagged behind other countries in education². In recent years, the Honduran government has tried to develop the country by increasing national productivity; it has also placed emphasis on education. The Callejas administration, which came to power in 1990, introduced as part of its National Modernization Policy the Education Modernization Program³, aiming at the active participation of children in the educational process and the improvement of the quality of education. At the Education For All (EFA) Conference held in Thailand in 1990, Honduras announced as its objectives the enrichment of education for preschool children, the standardization of primary education, improvement of the literacy rate, and the enrichment of vocational education.

The Reina administration that followed made a start on educational reform under the slogan 'Escuela Morazanica' (in English, Morazan School) named after Francisco Morazan, a hero of Central America. The main objectives of this reform were the improvement of internal efficiency in primary education, the improvement of teachers, textbooks, and teaching materials, a higher percentage of preschool age children attending nursery school, rectification of regional discrepancies, and the improvement of the organization and functions of the Secretariat of Education⁴. The Florence administration that took power in 1998 took the same line on policy

² According to the International Monetary Fund (IMF), "Honduras: Selected Issues 1998" (<http://www.imf.org/external/pubs/cat/longres.cfm?sk=2827.0>), the fact that the economic growth of Honduras is stagnant despite more favorable investment, economic policy, and efficiency compared with other countries is due to the low quality of manpower and human resources. It also mentions the indices related to education and the low literacy rate.

³ JICA, "Evaluation of Specific Theme, Education Sector of Honduras", June 1996, pp.23-24

⁴ Ditto

as previous administrations, placing importance on education. However, the education sector was dramatically affected in 1998 by Hurricane Mitch⁵. The National Reconstruction and Transformation Plan (Plan Maestro de la reconstrucción y Transformación Nacional Estrategia para impulsar el desarrollo acelerado, equitativo sostenible y participativo) submitted to the CG Conference in Stockholm in the aftermath of Hurricane Mitch included the early recovery of the education sector from the disaster and a review of the national education plan following Hurricane Mitch⁶.

Since then, the Honduran government has continued to place emphasis on the improvement of education. In the PRSP published in 2001, four of the eleven overall objectives (meta global) to be achieved by 2015 were related to education⁷. The new Ricardo Maduro administration, which came to power in 2002, has been adopting an education policy based on the PRSP⁸.

(2) Outline of the Educational Reform

Under the guidance of the World Bank, a start was made in 1994 on the drawing up of a draft for organizational reform, with a view to decentralization and greater efficiency. Before the organizational reform, the Secretariat of Education had Departments for each educational level, such as the Department of Primary Education, the Department of Intermediate Education and the Department of Adult and Literacy Education. After the reform, these departments were disbanded. Instead, the present Secretariat of Education is organized according to function, such as Curriculum Design, Education and Technology, Teacher Training, Educational Evaluation, Monitoring, Adult Education, Community Education, and Special Programs. In

⁵ According to the World Bank, 9548 elementary schools or 17% of the whole were destroyed, and over 170,000 children lost the school they had attended.

⁶ Inter-American Development Bank, "Plan Maestro de la reconstrucción y Transformación Nacional Estrategia para impulsar el desarrollo acelerado, equitativo sostenible y participativo", (www.iadb.org/regions/re2/consultative_group/plans/honduras.htm), 1999

⁷ "Estrategia para reducción de la Pobreza" (PRSP), p.56. Its four objectives are 1) to double the number of five year olds completing preschool education, 2) to achieve a completion rate of 95% for six years of primary education, 3) to achieve a completion rate of 70% for the 7th to 9th grades and 4) for 50% of new workers to have finished middle school.

⁸ According to an interview with the Secretariat of Education of Honduras on April 18, 2002, during the survey period

Honduras, two organizations are in charge of educational administration: the Secretariat of Education is in charge of the education of preschool age children, primary education, and Intermediate Education, while the Higher Education Council supervises higher education⁹.

The education administration of Honduras is expensive and inefficient. In a report by the World Bank, excessive labor costs and misapplied equality in the determination of teachers' salaries (resulting in increased salary expenditure)¹⁰ throughout the education sector were pointed out as being behind the unsatisfactory and insufficient educational facilities, such as schools. The Basic Education Project of the World Bank, started in the mid-1990s, included as a major activity the organizational strengthening of the Secretariat of Education: specifically, it tackled the organizational reform of the Secretariat of Education and the transfer of its authority to local governments, abolished unnecessary posts and rationalized the salary system.

At present, PFC is being carried out with the UPN as the implementing agency. In this program, continuous training is given to teachers, and certificates equivalent to a university degree are awarded to those teachers completing the training.

(Reference information; The Education System of Honduras)

The education system of Honduras has used the 6-3-3-4 system, from elementary to higher education. Under this system, the six years of primary education constitute compulsory education¹¹. At present, the system is being changed to a 9-3-4 system, in which the first nine years are considered 'Basic Education'. (See Figure 3-1.)

⁹ The World Bank, "Honduras Country Economic Memorandum/Poverty Assessment", November 1994, p.74

¹⁰ The World Bank, "Honduras Country Economic Memorandum/Poverty Assessment", November 1994, pp.76-77

¹¹ Ley Orgánica de Educación (Honduras Education Organization Law), Article 6

Figure 3-1 The Education System of Honduras

Preschool education	Basic education		Intermediate Education, special studies course	Higher education	
	Elementary education	Intermediate Education, general course			
Two years	Six years	Three years	Three years	University	Graduate School
			Ordinary education	Four years	Two years ~
			Teacher training		
			Commercial education		
			Technical education		
Vocational training					
Vocational schools					
Age	5 6 7	12 13	15 16	18 19	22 23 ~

Source: Secretaria de Educación (Secretariat of Education), Currículo Nacional Básico, December 2000

The figure above summarizes the education system of Honduras, showing the number of years in education and the standard ages for education. In primary education, the school year lasts for ten months, from February 1 to November 30, with a minimum of 200 school days¹².

3-2 Outline of the Problems to be Addressed

Of the problems facing the education sector of Honduras, this section describes the

¹² Reglamento General de Educación Primaria (General rules for primary education), Article 110

problems of primary education, which has a high priority and close links with the Project.

(1) Low quality and Internal Efficiency of Education

The Table below shows school attendance percentages and the indices of internal efficiency of four Central American countries including Honduras and of the entire Caribbean region.

Table 3-1 Comparison of school attendance percentages and internal efficiency in Central American and Caribbean countries

Primary education	Honduras	Guatemala	El Salvador	Nicaragua	Average for Central America and Caribbean region
Total percentage of school attendance Male	96%	100%	94%	101%	104%
Female	98%	89%	94%	104%	104%
Net percentage of school attendance Male	85%	81%	78%	76%	92%
Female	86%	75%	78%	79%	92%
Percentage of children entering school and advancing to the 5th grade	58%	51%	77%	51%	76%

Source: UNICEF, The State of the World Children 2001

One big problem in primary education is the low internal efficiency. One of the causes of low internal efficiency is the failure to pass the advancement tests in mathematics and the Spanish language¹³. One of the reasons for the high total percentage of school attendance in Honduras is thought to be students repeating the year and remaining in the same grade. In 1997 the average number of years needed for a child to graduate from elementary school was 9.4 years, and for every 1000 children entering elementary school the number able to graduate was 509, or approximately half¹⁴. (See Figure 3-2.)

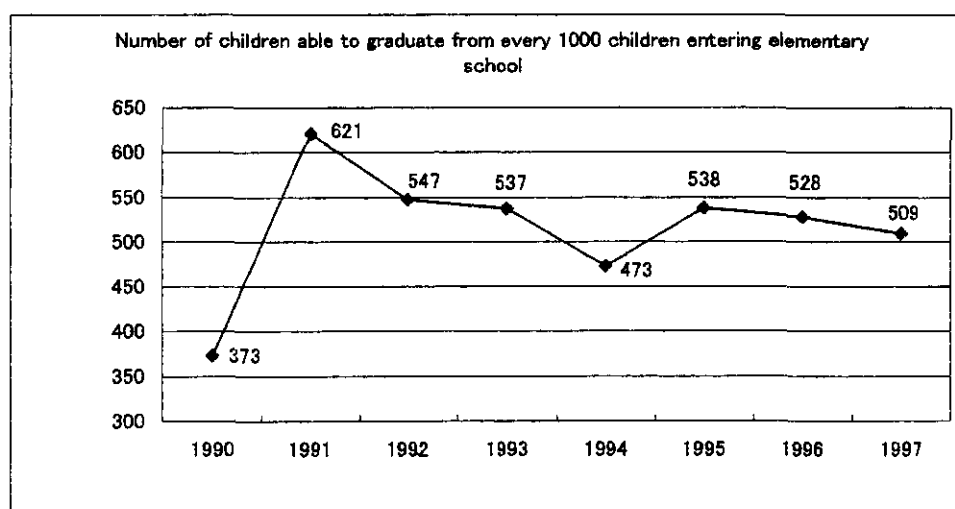
¹³ Reglamento General de Educación Primaria (Rules of primary education), Article 110

¹⁴ Secretaría de Educación, "Educación en Cifras Decada de 1990 al 1999", 2000

One of the reasons cited for these problems is the low quality of education. A lack of teacher skills, a shortage of textbooks and teaching materials, a deficiency in educational management, an insufficiency of teaching hours due to teacher absenteeism¹⁵, a weak evaluation and supervisory system, and a low level of participation by guardians and the local community, are all significant problems¹⁶. A recent evaluation of Central and South American education conducted by UNESCO and Oficina Regional de Educación para América Latina y el Caribe (OREALC) in eleven Central and South American countries ranked Honduras last in terms of quality¹⁷.

Figure 3-2

Number of children able to graduate per 1000 children entering elementary school



Source: La Educación en Cifras, Secretariat of Education, January 2000

(2) Regional Disparity

Another problem that cannot be ignored is regional disparity. Figure 3-3 compares the

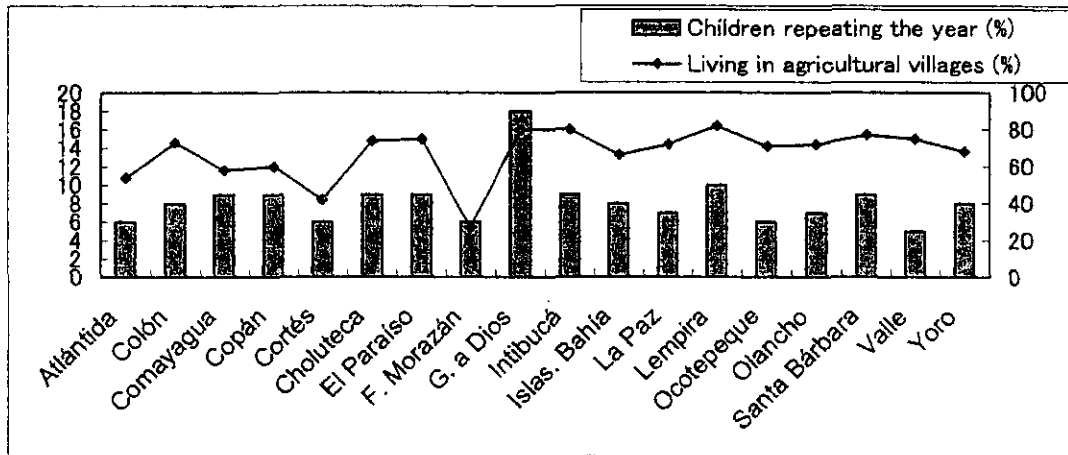
¹⁵ According to a finding of the Japanese expert during the study period, April 2002

¹⁶ The World Bank, "Honduras Country Assistance Strategy", 2000

¹⁷ The World Bank, Operational Report, "Honduras-Community Based Education Project", 2000

percentage of elementary school children repeating the year with the percentage living in agricultural villages. Generally, provinces with a higher ratio of residents living in agricultural villages tend to have a higher percentage of children repeating the year¹⁸. The reason for this trend is thought to be that conditions unfavorable to the domestic and learning environment are compounded in the agricultural villages, such as cash income, guardians' awareness with regard to education, quality of teachers, time needed to get to school, ease of access, etc.

Figure 3-3 Percentage of elementary school children repeating the year in each province and the percentage living in agricultural villages



Source : Secretaria de Educación, "Censo Escolar 2000 sobre Maestros, Matricula e Infraestructura para los Niveles Preescolar, Primaria y Secundaria, 2000

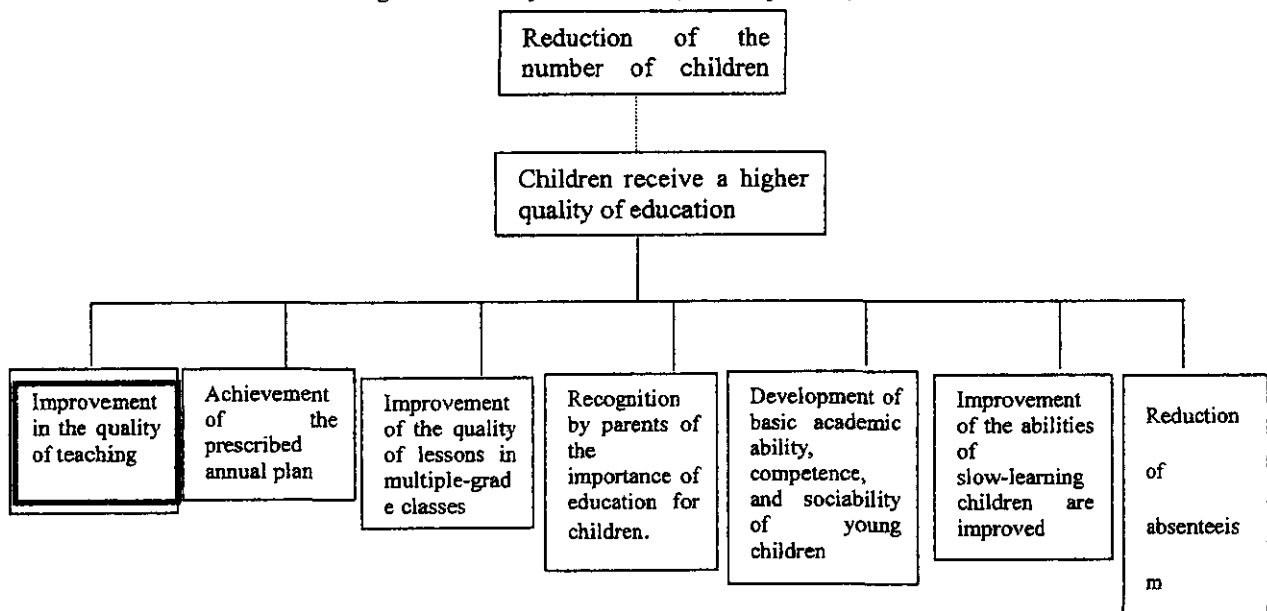
¹⁸ JICA, The Republic of Honduras, "Strengthening of Primary Education", Report of the Project Formation Study, May 2001

4. Project Strategies

4-1 General Strategy

This section explains the strategies to be used for the problems to be faced, based on the objective chart and the items examined during the selection process of the Project. The measures necessary for "children to receive primary education of a higher quality," including approaches not included within the scope of the Project, are summarized with reference to an analysis of the objectives in the problem analysis workshop (continuous teacher training, elevation of teachers' motivation, support for multiple-grade classes, enlightenment of parents, preschool education, supplementary lessons, and health and hygiene education) held in June 2001 by the dispatched JICA expert in charge of educational evaluation. (See Figure 4-1.)¹⁹

Figure 4-1 Objective chart (central portion)



The content of each of the cards in the objective chart and supposed measures are summarized below.

¹⁹ Analysis of the overall strategy is linked to the project strategy for the "General support model project for local education" at present being implemented by JOCV. (From the expert Project report, January 2002)

Issue to be developed	Content	Supposed measures
Improvement in the quality of teaching	In order to solve problems relating to the teachers - most teachers have not received any systematic teacher training, the morale of teachers is low, absenteeism among teachers is high, - teachers must be re-educated.	Supposed measures include the implementation of training to raise teachers' academic and teaching abilities, the preparation of teaching materials, the development and implementation of teaching evaluation methods, class monitoring, the evaluation of impact through the implementation of standard achievement tests, etc.
Achievement of the prescribed annual plan	It is necessary to elevate teachers' motivation and strengthen the system for supervising teachers.	Supposed measures include the reorganization of the functions of local education committees (province and educational district), the implementation of training for members of these committees and the implementation of seminars aiming at raising teachers' motivation.
Improvement of the quality of lessons in multiple-grade classes	Combinations of multiple-grade classes are diverse and it is difficult to develop a uniform model.	Main measures are assumed to be support for teachers' ability to teach main subjects, and the improvement of enhanced learning to promote private study by children
Recognition by parents of the importance of education for children	Parents' own academic abilities in intellectual subjects must be improved, and their socio-economic difficulties alleviated.	Supposed measures include a study of the activities in which parents are interested, the implementation of training to support the same, and the implementation of vocational training and training to raise scholastic ability
Development of basic academic ability, competence, and sociability of young children	Because of the importance of preschool education, formal and informal preschool education must be strengthened.	Supposed measures include the implementation of teacher training for teachers and volunteers, the holding of seminars on the running of kindergartens, preparation and implementation of tests for kindergarten children, etc.
Improvement of the abilities of slow-learning children	Supplementary classes are needed for children who for a variety of reasons cannot	Supposed measures include the implementation of training for community

	keep up with regular classes.	volunteers for the construction of a supplementary learning system, and the construction and monitoring of the supplementary learning system.
Reduction of absenteeism	The reduction of absenteeism due to poor health is a priority issue.	Supposed measures include the implementation of a health survey and consultations to improve health and hygiene, as well as hygiene education for teachers, parents, and children.

4-2 Project Strategy

In the general strategy described above, the aim of the development issues covered by the Project is the improvement of the quality of teaching in mathematics, which is a huge factor in the reduction of the number of dropouts and grade repeats, both important issues for the "improvement of the quality of teaching" in the Honduran education sector.

The selection of this approach was made through continuous discussions between the expert currently on site, the Secretariat of Education, UPN, INICE, and the JICA office in Honduras.

The reason this approach was selected with regard to the issues covered by the Project can be summarized as follows.

- Japan has already spent thirteen years working on the improvement of mathematics education in Honduras, mainly through the dispatch of JOCVs, and has a certain reputation in the country of Honduras.
- The teacher's guidebooks and children's workbooks for the 1st and 2nd grades, which were developed in 2002 with the cooperation of JICA experts, senior volunteers, and JOCVs, and

the training of teachers using these materials, are judged to be valued extremely highly in the classroom, and there are hopes for their further development.

- Implementation of the Project within the existing PFC will give a high degree of certainty to achievement of assumed outputs, namely the development of guidebooks and workbooks for all grades and teacher training using these materials.

5. Project Design

This Chapter describes in more detail the basic plan of the Project as indicated in the attached PDM. It also discusses the system for operation and implementation of the Project

5-1 Project Purpose

Purpose to be achieved on completion of the Project

To improve the teachers' ability to teach mathematics in primary education (first course; 1st to 3rd grades; second course; 4th to 6th grades) in the three provinces (El Paraiso, Colon and Ocotepeque) covered by the Project, through the use of guidebooks.

In selecting the Project area, the JICA experts currently on site have carried out a detailed qualitative and quantitative analysis based on the field survey, taking into account also the reliability of the published statistic materials. As a result of an overall evaluation of the capacity, geographical and social environment, and environment for acceptance of the project needed to provide teacher training by JOCVs under the PFC program, El Paraiso, Ocotepeque, and Colon provinces were selected.

The direct target group is the approximately 300 participants of PFC in the above-mentioned three provinces. At present only the first half of the course has started²⁰. For participants in the first half of the course, training is given using the guidebooks and workbooks for grades 1 to 3; for participants in the second half of the course, training for grades 4 to 6 will be implemented. The aim of the project is the improvement of teaching ability in mathematics throughout the country, and in support of this aim the project will achieve the development of guidebooks and workbooks and the establishment of training methods, class monitoring methods and evaluation methods. The ultimate target group of the Project is schoolchildren throughout

²⁰ In the first half of the PFC course leading to a qualification equal to a certification from a junior college, training is provided free of charge from the national budget, with the support of IDB and others. Participants advancing to the second half of the course, leading to a qualification equal to a bachelor's degree, will have to pay tuition costs (expected to be approximately US\$800).

the country. Thus, it was confirmed in the preliminary discussions that the size of population was not that significant, as the purpose of the direct target group is monitoring and evaluation.

5-2 Overall Goal

Goal expected to be achieved after completion of the Project

To extend the fruits of the Project and improve teachers' ability to teach mathematics in primary education in provinces other than the three provinces covered by the Project. (first course, 1st to 3rd grades; second course, 4th to 6th grades)

The Secretary of Education expects that with the leadership of the Secretariat of Education the use of guidebooks and workbooks in provinces other than those covered by the project will commence during the project period, and that an improvement of the teachers' ability to teach mathematics will be achieved over a wide area.

5-3 Outputs and Activities

In order to achieve the above-mentioned project purposes , the following outputs will be achieved in the project.

Outputs to be achieved in the Project

- 1) The teachers' guidebooks for the government-designated mathematics textbooks at primary level will be developed.
- 2) The mathematics workbooks for children at primary level will be developed.
- 3) Teachers in the three provinces who have undertaken the training will be able to teach according to the teachers' guidebooks for the government-designated mathematics textbooks.
- 4) The competence of the counterparts will be improved through activities 1) to 3) above.

Activities to achieve outputs 1) to 4) above and the approximate implementation schedule are summarized as follows.

Figure 5.1 Implementation schedule for Project activities

	2003	2004	2005	2006
	4-----12	1-----12	1-----12	1--3
1)-1 Preparation of guidebook	←-----→			
1)-2 Trial use and monitoring of draft guidebook	←-----→			
1)-3 Revision of draft guidebook	←-----→			
1)-4 Completion of guidebook		←-----→		
2)-1 Preparation of draft workbook	←-----→			
2)-2 Trial use and monitoring of draft workbook	←-----→			
2)-3 Revision of draft workbook	←-----→			
2)-4 Completion of workbook		←-----→		
3)-1 Drawing up of continuous training in mathematics for primary teachers	←-----→			
3)-2 Implementation of continuous training under PFC using guidebook and workbook	←-----→			
3)-3 Preparation of class analysis sheet for mathematics	←-----→			
3)-4 Class evaluation for mathematics	←-----→			
3)-5 Preparation and implementation of achievement tests for children	←-----→			
3)-6 Preparation and implementation of achievement tests for children	←-----→			
4)-1 Transfer of knowledge and technologies to counterparts via the above activities	←-----→			
4)-2 Sharing of experiences through seminars for those involved in education	←-----→			

5-4 Strategies to Implement Activities

Strategic implementation of the following policies is considered important in order to combine the separate activities carried out in the project so as to produce a synergetic effect.

① Strengthening of counterpart capabilities

The Secretariat of Education, INICE, and UPN, the organizations concerned on the Honduran side, have highly evaluated the outputs of the projects Japan has implemented in the past, and the positive attitude of Japan to make a commitment on the assignment of counterparts in each organization was recognized in the preliminary evaluation study. Positive reinforcement of the capabilities of the counterparts in Honduras, including training in Japan, is

important.

With regard to training in particular, a request was submitted from the UPN for the implementation of training for fifty PFC lecturers. As this will have a favorable effect on the implementation of training in the new mathematics teaching methods in provinces other than the three provinces, which is the overall purposes of the project, it is hoped that a positive response towards the realization of this training will be made.

② The importance of team building

In the preliminary evaluation study, discussions with the related parties on the Japanese side reaffirmed the importance of teamwork between Project members. In particular, teamwork between the JOCVs who will draw up the guidebooks and workbooks and take the initiative in teacher training is the key to the achievement of the project outputs.

For the new JOCVs that will be dispatched, attention must be paid to the provision of information and confirmation of will at each stage of the recruiting, selecting and training process. There was a request at the time of the preliminary evaluation study from JOCVs now on site for the highest priority to be given to the ability to work with others in the selection of their successors.

③ The importance of the provision and sharing of information

The reports of volunteers dispatched to the mathematics project include instances of both successes and failures, as well as descriptions of the various measures they have taken in the training. It is important to sort and share this information. Specifically, it is desirable that instruction manuals be drawn up for the preparation of the guidebooks and workbooks and for the implementation of training and evaluation, so that know-how can be accumulated little by little. These instruction manuals may be used not only when handing over to new members, but may also be translated into Spanish as necessary, to be used as manuals for the Honduran

PFC training instructors²¹. However, as this kind of work involves a relatively large amount of labor, it should not be obligatory but kept within the bounds of possibility.

A Project home page featuring the outputs could be easily accessed by volunteers in other countries. If the Honduran side agrees, the guidebooks and workbooks could also be posted on the home page, to be used by anyone regardless of whether the user is a private or a public school, and this may lead to the spread of the outputs.

In order to use the project as a model for similar future projects, including the possibility of future wide-area projects, the know-how accumulated during the process of Project implementation needs to remain with JICA as systematic knowledge. For example, at the completion of the project it is assumed the following outputs will have been achieved.

Table 5-1 Outputs it is hoped will be used for information sharing

Output	Use	Remarks
1. Guidebooks and workbooks	- Models for future projects to improve teaching ability in mathematics in primary education	
2. Achievement test for children	- Ditto	
3. Instruction manuals for preparation of guidebooks and workbooks	- Use in other projects with the goal of improving the teaching ability of a wide range of teachers, not limited to mathematics	
4. Teaching ability test for teachers	- Ditto	
5. Class analysis check sheet	- Ditto	
6. Instruction manual for the implementation of training	- Ditto	- The instruction manual drawn up in the South-America project can be used as a model.
7. Instruction manual for the implementation of evaluation (training level and classroom level)	- Ditto	- At the training level, the instruction manual drawn up in the Kenya project can be used as a model.

²¹ Furthermore, it may be assumed that they will be used not only in Honduras, but also as reference materials by experts and JOVC volunteers teaching mathematics in other countries.

5-5 Monitoring and Evaluation

① Monitoring and Evaluation

A baseline study of class evaluation for the trainees followed by regular class evaluation will be carried out, and the results will be used as the objectively verifiable indicators. The method of class evaluation will be developed within the project.

② Monitoring of the overall goal

It is assumed that the method of class evaluation to be developed in the project will be used and monitored by provinces other than the three provinces covered by the project. As reference information, the results of the children's achievement tests in the schools in the project area (the results of the standard achievement test implemented by the UPN will be used; preparation of the mathematics part of this achievement test will be supported by the project) will also be monitored to measure the impact.

③ Monitoring of the outputs

Of the project outputs, the objectively verifiable indicators of the outputs 1) and 2) are "the completion of the teacher's guidebooks for mathematics in primary education" and "the completion of the children's workbooks for mathematics in primary education", respectively. Under the supervision of the expert on site, JOCVs will take the initiative in drawing up the guidebooks, and the guidebooks and workbooks actually used in the training will be prepared through a series of time-consuming processes, including translation into Spanish, revision by those experienced in the mathematics education of Honduras, and the preparation of the final version. The guidebooks and workbooks will be finally completed through feedback from the results of monitoring and evaluation of the trainees.

For output 3) it is assumed that the objectively verifiable indicators will be the number of teachers completing the training, the number of teachers taking the training and successfully

passing the achievement and teaching ability tests, and the results of the class monitoring of teachers participating in the training, to be carried out at the time of training and afterwards.

With regard to output 4), the establishment of special objectively verifiable indicators is difficult at present, but points used to measure the attainment of output will be textbook development, continuous implementation of training, and the situation with regard to sustainability of monitoring and evaluation.

④ Future evaluation plan

An evaluation will be made on completion of the project (half a year before the completion of the project), and after completion of the project (the aim is five years after completion).

5-6 Inputs

(1) Japanese Side

① **Dispatch of experts:** Two long-term experts (chief advisor and mathematics education) will be dispatched

② **Short-term experts:** Two short-term experts will be dispatched each year. It is assumed they will support the preparation of guidebooks and workbooks and carry out class evaluation. Specific fields of work and Terms of Reference (TOR) will be decided according to the state of progress after the Project has started.

③ **Senior Volunteers and JOCVs:** Approximately fifteen volunteers for the preparation of draft guidebooks and workbooks, and to take charge of training.

④ **Receiving of trainees in Japan:** Plans are for about three trainees to be received every year. Training subjects are assumed to be Education Administration, Teacher Training, and Mathematics Education.

⑤ **Provision of Equipment:** In addition to vehicles, computers, projectors, PC software, etc., the repair of the water supply system of INICE, which will be the base for the preparation of the guidebooks and workbooks

⑥ **Others:** Costs to secure a means of communications for the Project and costs for information sharing, eg, the building of a home page

(2) Honduran Side

① **Assignment of counterparts:** Counterpart staff will be assigned in the Secretariat of Education, INICE, municipal Boards of Education and the UPN

② **Facilities:** Offices for the experts will be provided in the Secretariat of Education, and a base for the preparation of the guidebooks and workbooks in INICE

③ **Local costs:** Costs related to the implementation of continuous training to teachers and achievement tests

④ **Others:** Customs exemptions on equipment

5—7 Important Assumptions

(1) Preconditions

The Project will develop mathematics guidebooks and workbooks and carry out training and educational evaluation of teachers because the quality of education must be improved in order to reduce the number of children repeating the year due to poor achievement in mathematics in elementary school. If there is little prospect of the use of the guidebooks and workbooks throughout the country, the impact will be limited only to the project area during the project period. Hence, the expected impact would be very small and the significance of project implementation would fall.

Therefore, whether the Honduran government plans to distribute the (to be developed) guidebooks throughout the country constitutes a precondition for starting the project.

The Secretariat of Education has announced that the guidebooks and workbooks developed by the project will be distributed throughout the country, and the preliminary study confirmed that the Secretariat of Education had the following concrete national expansion plan. These undertakings may be considered to have gained consensus in Honduras, but attention must

be paid continuously to whether they will actually be budgeted for.

However, these undertakings are ranked as separate tasks linked to the project.

- 1) Distribution of the guidebooks and workbooks throughout the country by means of 2) to 4) below
- 2) Deployment of the guidebooks and workbooks to other PFC sites (there are fifty centers throughout the country.)
- 3) Deployment of the guidebooks and workbooks in the education of new teachers at UPN and Escuela Normal
- 4) Deployment of the guidebooks and workbooks at the four continuous teacher training centers belonging to INICE

(2) Important Assumptions to Connect Outputs to Project Objective

In order to link outputs 1) to 4) with the achievement of project objectives, i) the counterparts will not be changed during the Project period and ii) there will be no large-scale strike or assembly that hinders the implementation of classes.

With regard to item 1), the promise of the Secretary of Education was obtained at the time of the preliminary evaluation study. With regard to item 2), even with the occurrence of a strike or assembly lasting up to a month and a half, which is the average, the possibility of the attainment of the project goals is considered to be fairly good. However, there is the possibility that a strike or an assembly exceeding this scale may occur, and in that case, the PDM may need to be reviewed.

(3) Important Assumptions to Connect Project Purpose to Overall Goal

An important assumption to link the Project Purpose with the overall goal is the need for the continuous teacher training system determined by the government to be implemented smoothly. The existing PFC program is being implemented smoothly, and the Secretariat of

Education ranks the establishment of a permanent PFC as an issue of the highest priority. Therefore, the probability that these important assumptions will be satisfied is high.

5-8 Commitments from the Counterpart Organizations and Honduran Government

In the preliminary evaluation study, the following commitments regarding the project were confirmed by the Secretariat of Education, the UPN and INICE.

① Revision of basic mathematics curriculum

The basic curriculum in all subjects is being revised for all grades at present. According to the plan with the IDB promising the provision of funds, the draft curriculum is to be drawn up by December 2003 and formally approved in 2004. However, the Secretariat of Education plans to complete this earlier than the IDB plan²². The Vice Secretary in Charge of Curriculum Design at the Secretariat of Education has indicated that the content of the project will be reflected as far as possible in the revision of the mathematics curriculum.

② Deployment of guidebooks and workbooks to other PFC sites

Many requests have been received by the UPN from participants of the PFC outside the three provinces of the project area wishing to participate in the training assisted by Japan. It is necessary to instruct fifty PFC lecturers across the country in the training method using the guidebooks and workbooks and to distribute the workbooks to the schools of the teachers who participate in the training. UPN considers that the cost of training the fifty participants can be covered by the PFC, and would also like to take positive measures with regard to the cost of the

²² The revision of the curriculum is an issue that directly affects the drawing up of the guidebooks and workbooks. As the state of progress of the revision must be taken into consideration on an ongoing basis, advice by the Japanese policy adviser expert should be continued.

workbooks for the schools of the participants. (Support for the training of the above-mentioned fifty teachers is declared in the project.)²³

③ Deployment of guidebooks and workbooks in the training of new teachers

The UPN, which is in charge of the new education, plans to teach mathematics using the guidebooks and workbooks. It is hoped that student education will continue under the leadership of the UPN.

④ Deployment of the guidebooks and workbooks at the four Continuous Teacher Training Centers (formerly Escuela Normal) belonging to INICE

The Secretariat of Education plans to strengthen INICE, which is in charge of the re-education of teachers, and plans to make the four regional schools (Escuela NORMAL) in Tela, La Paz, Santa Barbara and Gracias, Continuous Teacher Training Centers attached to INICE. In the training of mathematics teaching at these centers, training using the guidebooks and workbooks is planned²⁴.

5-9 Implementation Structure of the Project

(1) Management / Operation System

The vice secretary in charge of Pedagogic Technology at the Secretariat of Education will be the general supervisor of the entire project, and the project will be run as follows.

²³ However, the monitoring and evaluation of the teacher training by PFC lecturers and subsequent classroom teaching are not possible under the planned scope of the Project. It is recommended that these not be covered by the monitoring and evaluation.

²⁴ With regard to this matter, the Minister of Education has personally given a concrete explanation and promised to provide materials.

Preparation of guidebooks and workbooks: Department of Curriculum Design at the Secretariat of Education, INICE

Continuous teacher training: PFC program leader and a team of mathematics lecturers at the UPN, municipal Boards of Education

Educational evaluation: Department of Pedagogic Evaluation, Secretariat of Education

To supervise the project, a joint coordination committee chaired by the general supervisor and consisting of the vice secretary in charge of Pedagogic Technology at the Secretariat of Education, the director of INICE, the president of UPN, and the PFC program leader, will be set up to confirm the outputs of the project, draw up a yearly plan, and monitor the project.

(2) Capacity of Counterpart Organization

In the preliminary evaluation study, a SWOT analysis²⁵ was conducted for the Secretariat of Education, UPN, and INICE. (See Annex 6: Report on organization analysis.) From the results of the analysis, the following counterpart organizations and system were confirmed.

① Secretariat of Education

The following was confirmed from an analysis of the organization of the Secretariat of Education.

- Ninety-six percent of the budget is allocated for recurrent costs, and the project budget is almost totally dependent on donors. It was reconfirmed that with the exception of securing the counterpart staff it would be impossible to depend on the budget of the Secretariat of Education in designing the project.
- However, as the improvement of teaching ability in mathematics in primary education is ranked as a national issue of high priority, there is little possibility that the priority will change or that the support of the Secretariat of Education will be reduced during the project

²⁵ A method to analyze the "strength", "weakness" inside the organization and the "opportunities" and "threats" from outside the organization. The preliminary evaluation study analyzed these in the participation-type workshop method according to the Institution Development and Organization Strengthening (ID/OS) method by the MDF Company, which is technically affiliated with IC Net, a consulting company in the Netherlands.

period.

- The present project design is set up in a range that can be implemented without depending on the budget of the Secretariat of Education, including the preparation of guidebooks and workbooks and implementation of training by experts and the JOCVs, the provision of facilities by INICE, and an expansion of the impact through the UPN and donor funds. Within this framework it is considered appropriate for experiences to be shared as far as possible with the counterparts.
- The Secretariat of Education must fully communicate the goals and content of the project to the provinces and local Boards of Education in order to secure the smooth implementation of the training by the JOCVs.

② UPN

It is hoped that as counterpart staff the lecturers of the UPN, in particular the PFC mathematics department, will share their experience in the planning, operation, and evaluation of training and will widely expand the methods of improving mathematics teaching developed in the project. However, the PFC is a temporary program and in the present project, the aim of which is to improve the quality of primary education in schools, it ranks as a subordinate organization receiving support. An analysis of the organization of the UPN confirmed the following.

- UPN receives, in addition to the government budget (approximately 200 million lempira in 2002), program budgets from the World Bank, IDB etc., and has its own budget (approximately 6 million lempira) from tuition fees and the dispatch of lecturers. The demand for teachers for the PFC is large, and many of those who have completed the free-of-charge junior college course wish to advance to the bachelor's course, for which tuition costs approximately US\$1,000. A budgetary system to extend training to teachers covered by the PFC is considered to have been prepared already. The UPN is considered to be a prospective implementing organization for the extension of impact to areas outside the project area.
- In technical terms, the UPN has already trained 6000 teachers of the 20,000 to be covered

by the PFC, and has a wealth of experience in training. The organization is also experienced in educational evaluation, as the implementing organization of the standard achievement test program. Information is shared within the organization through regular presentations.

- As far as could be ascertained from the recent hearing survey, there was no significant problem in terms of management, including budgetary management, equipment management, personnel management, etc.

③ INICE

It is expected that INICE will be the organization to which JOCVs will be attached after the project starts. INICE will provide the facilities for the preparation of the guidebooks and workbooks and for the parties concerned to hold discussions. An analysis of the organization of INICE confirmed the following.

- Apart from a budget from the Secretariat of Education (approximately 26 million lempira for 2002, of which salaries account for 18 million lempira), INICE's own budget is only approximately 240,000 lempira, from the rental fees for classrooms and a tearoom and the preparation of video tapes. As INICE cannot afford to pay travel expenses for lecturers, INICE is not at present considered able to function as an implementing organization for training in the project. Therefore, it is necessary to confirm how the Secretariat of Education will push ahead with the current PFC of INICE in the future.
- INICE has just started to digitize information for sharing within the organization.
- As far as could be ascertained from the recent hearing survey, there was no significant problem in terms of management, including budgetary management, equipment management, personnel management, etc.

5-10 Obligations and Requirements in Advance

The following can be pointed out as future issues: a policy for handling them should be determined promptly.

① Revision of the curriculum currently being implemented by the Secretariat of Education (the final draft is to be presented in September 2003) and the accompanying revision of textbooks

② An examination of the cooperation policy at INICE, which will be the organization supervising the implementation of teacher training

③ An examination of how to handle the 'national deployment' so eagerly desired by the Secretariat of Education

- An examination of the possibility of procuring the funds necessary for the nationwide distribution of teacher's guidebooks and children's workbooks.
- An examination of the possibility of procuring funds presupposing a stepped deployment
- An examination of the possibility of procuring funds on site, including the contribution of funds from the private sector or the payment of some expenses by parents

6. Project Justification

6-1 Special Remarks on the Project

Special characteristics of the planned project for the Improvement of Teaching Methods in Mathematics (Proyecto de Mejoramiento de Enseñanza Técnica en el Area de Matemática: PROMETAM) that may be cited are that ① it is a cooperation project that is narrowed right down to the preparation of a teacher's guidebooks and aims at a concrete output, ② JOCV is officially included in the technical support project, and ③ it is a cooperation project based on the experiences of Japan.

Characteristic ① adopts the ODA concept of placing importance on immediate outputs and aiming at efficient cooperation, and indicates an answer to the criticism that "cooperation in the educational field does not easily display outputs in the short term." Although the project aims at the improvement of teaching through the improvement of the academic and teaching abilities of teachers and the reduction of the number of children repeating the year by eventually improving the academic ability of children, the fact that teachers can teach according to the guidebooks even as a transitional measure to keep the quality of teaching at a certain level, and that repetition of this kind of teaching will build a standard method of teaching among teachers at a certain level, make this an extremely realistic way of handling the problem, taking the present state of Honduras into account. Without going through this kind of process, the teachers themselves cannot develop their own teaching methods to meet the present needs of the children or the community. Thus, it is hoped that the project will build a foundation for the teaching ability of the teachers.

Characteristic ② is accompanied by a number of risks due to the inclusion of JOCV in the implementation system, namely a) coordination within JICA is more difficult compared to ordinary projects, b) the special qualities of JOCV activities are limited, and c) the success of the Project largely depends on the quality of the JOCVs. On the other hand, the impact that can be expected includes d) fewer cases of missing or misunderstood information than in training by the cascade system (a method of extension similar to a pyramid scheme), e) the efficient and prompt collection of correct information relating to the improvement of the guidebooks, and f) the

opening of an avenue to the development of the process, from the pilot stage to the scale-up stage. In any case, JICA sees this project as very much a trial project that may become a leading case with a huge impact on the formation of future projects.

With regard to ③, the project has two characteristics: the project utilizes throughout the experiences of educational cooperation in mathematics so far in Honduras, and takes as its model the experiences of Japan's educational development in improving the quality of education using teacher's guidebooks produced to deal with the decline in educational quality accompanying the mass employment of substitute teachers after World War II. The latter characteristic in particular is one of the focal points of present educational cooperation projects. From the standpoint of applying the Japanese experience to developing countries, the trend of this project will be watched.

6-2 Evaluation using the Five Evaluation Criteria

The five criteria, namely relevance, effectiveness, efficiency, impact and sustainability, were examined in the preliminary evaluation study using the checklist given at the end of this Chapter. The principal results of the examination can be summarized as follows.

(1) Relevance

- As the Project puts into effect the PFC, which is based on the Plan for Education Reform, one of the main items of the National Reconstruction and Transformation Plan, the Project is in complete conformity with the needs of Honduras.
- The Project is mapped out as a participatory approach, and the concerned parties on the Honduran side have a good understanding of the content of the Project.
- Over the past twelve years, the Japanese government has supported the training of teachers through the dispatch of JOCVs in mathematics (the total number of dispatched members is 60). These achievements have been the priority for Japan to cooperate in this project.

(2) Effectiveness

- In drawing up these plans, the problems and aims of the primary education sector of Honduras were analyzed through workshops by the parties concerned. As a result, the parties concerned agreed that improvement of the teachers' ability to teach mathematics is the main measure indicated to reduce the ratio of grade repeats due to poor achievement. Therefore, the Project conforms to the actual situation.
- From the experiences of past cooperation by the Japan Overseas Cooperative Volunteers (JOCVs), it is judged that in order to maintain a certain level of quality in lessons, the use of a teachers' guidebook and children's workbook is effective. Improvement of these teaching materials and the provision of training to teachers using these materials as the text, so that teachers can use the teaching materials in class, are effective in 'improving the teachers' ability to teach mathematics', which is the Project goal.
- The Honduras government plans to distribute guidebooks and workbooks (from 1st to 6th grades) across the country through implementation of the project. That will be considered relevancy of the project from the viewpoint of equal benefit.

(3) Efficiency

- In this Project, JOCVs will carry out training at each site using guidebooks and workbooks coming after the edition prepared by dispatched experts, and the JOCVs will provide feedback for an updated edition of guidebooks and workbooks. JOCVs, who work close to the site of education, can provide opinions from incumbent teachers for direct input to the revised edition of guidebooks and workbooks, enhancing the efficiency of the Project.
- A systematic project operation is available through clear involvement of JOCVs as members of the Project and appropriate combination of dispatched experts and JOCVs utilizing their strengths.
- As the agencies involved in Honduras have a good understanding of the content of the Project thanks to the activities of the pipeline expert dispatched to Honduras in September 2002 to start up the Project, it can be expected that the Project will have a smooth start.
- The inputs from the Japanese side will not be dependent solely on resources within Japan;

the input of an excellent local consultant well versed in the local situation is also planned, so that effective measures are being taken to make use of local resources.

(4) Impact

- The impact that can be expected is that the Project will lead to the improvement of the teaching ability in mathematics of 20,000 teachers across the country, through the training of 50 PFC teachers.

(5) Sustainability

- The Secretariat of Education has almost no project budget, but it can assign counterpart staff and provide facilities. In addition, continuous training will be provided under the budget of the PFC, which receives funding from other donor countries. Therefore, the Project is planned so that a good output can be obtained within a very small budget.
- By incorporating the Project outputs into the established system of the Ministry Secretariat of Education, such as medium to long-term programs, new curricula, the training of new teachers, standard achievement tests, the continuous training of teachers, etc., it is possible to improve sustainability.

6-3 Overall Project Justification

As a result of evaluating the project from the aforementioned standpoints, the provision of grant aid is determined necessary and relevant, although efforts will be needed to ensure efficiency and sustainability in the project.

However, the project will be implemented under the limited budget and staff of the Secretariat of Education. In order to ensure sustainability after completion of the project, special consideration is thought to be necessary. For example, attention must be paid to the

following points:

① Ranking of the national deployment of guidebooks and workbooks in the medium to long-term program of the Secretariat of Education

The primary education of Honduras has many initiatives supported by many donors. Under the present situation, the Secretariat of Education does not have the capacity to fully coordinate these, and the direction of development is not clear. The Secretariat of Education has promised donors that it will draw up an Action Plan by 2015 (and a medium-term Action Plan for each three years). It is necessary to support the drawing up of the medium to long-term program of the Secretariat of Education through the activities of the project and dispatched experts, as well as through cooperation with other donors, and within the program to start a concrete project to deploy guidebooks and workbooks across a wide area.

② Systematization to deploy guidebooks and workbooks throughout the country

Systematization is needed so that the Honduran side can take the initiative in using the outputs of the project, namely the guidebooks and workbooks, in a form suited to the outputs. For example, it is considered important to include the use of the guidebooks and workbooks in the systems for revision of the curriculum, revision of the standard achievement tests, the teacher re-education program, and the training of new teachers.

③ Use of local staff

After completion of the project, the appropriate training ability to use the guidebooks and workbooks must be transmitted to the Honduran side. Therefore, it is important as far as possible to carry out joint training with the central and local Boards of Education, PFC and INICE lecturers and the UPN. During the process of drawing up the guidebooks and workbooks, efforts are being made to sufficiently include the opinions of the mathematics specialists of Honduras. These repeated efforts are indispensable to elevating the sustainability of the Project.

Table 6-1 Results of the evaluation of the five criteria using the checklist

Five evaluation criteria	Items specifically evaluated	Examination in the preliminary evaluation study	Remarks
1. Relevance	1) Is the content of the Project fitting for public ODA?	- The Project is relevant as a technical cooperation project.	
	2) Has the Project been planned with the participation of the parties concerned?	- The parties concerned on the Honduran side have a good understanding of the content of the Project.	
	3) Has an appropriate operating system been constructed?	- Operation of the Project is within the range that can be managed by the leaders.	
	4) Has an evaluation and monitoring system been established in the drawing up of the plan?	- There is an appropriate evaluation and monitoring plan	
2. Effectiveness	1) Is the plan logical?	- The mutual relationship between items is clear.	
	2) Is the goal clear, and is the establishment of objectively verifiable indicators relevant?	- Coordination of teaching evaluation methods and standard achievement tests, which are the objectively verifiable indicators of the overall goal, with the Project is important.	
	3) Are Japanese skills predominant?	- The guidebook method has been used to ensure a certain quality in substitute teachers in Japan. - The experiences of JOCVs in over 10 years of mathematics projects are put to use: Japan has a strong predominance.	
3. Impact	1) To what extent can a socioeconomic impact be expected?	- An impact can be expected that will lead to the improvement of the mathematics teaching ability in three provinces and of 20,000 teachers covered by PFC.	- What percent of children in the three provinces benefit indirectly from the Project must be monitored?
	2) Does the Project goal conform to the needs of the partner country?	The Project crystallizes the education policy and conforms completely to the needs of the partner country.	
	3) Has consideration been paid to the environmental aspects, etc? Will there be no adverse effect?	- No adverse effect is anticipated	

	4) Is there a high possibility that the important assumptions necessary for linking the Project outputs to the Project goal, and the Project goal to the overall goal, will be satisfied?	<ul style="list-style-type: none"> - The Minister of Education has promised the stability of the counterparts and the probability is high. - Although there is a possibility of a large-scale strike or assembly that may hinder the implementation of teaching, these do not necessarily occur every year. 	If a large-scale strike or assembly actually occurred, it would be necessary to review evaluation methods
	5) Have the risks that might hinder the achievement of the Project goals or overall goal been considered?	A revision of the PDM will be necessary if the overall revision of the basic curriculum or amendment of the textbooks is earlier than planned	
	6) Does the Project have great significance for the support strategy of the Japanese side?	- Primary education is a priority issue in the implementation policy of the JICA country program.	
4. Efficiency	1) Is the input of an appropriate quality and quantity of equipment and staff planned that will generate the Project outputs?	<ul style="list-style-type: none"> - As Project efficiency greatly depends on the quality of JOCVs, preliminary briefings to the volunteers using video tapes and introductory materials, and training and team building after dispatch, are important. - The input of excellent JOCVs able to work with others is necessary, including the shift system. - Use of the short-term emergency member dispatching system will enhance efficiency further. 	
	2) Does the expected Project impact conform to the quality and quantity of equipment and staff to be input into the Project?	- If the guidebooks and workbooks are deployed throughout the country, a sufficiently large impact for the input can be expected.	- It is necessary to determine a concrete draft for national deployment during the Project implementation period.
5. Sustainability	1) Does the implementing agency have basic organizational and financial abilities at the start of the Project	<ul style="list-style-type: none"> - The basic personnel expenses are ensured by the government treasury. - The Secretariat of Education has almost no budget for the Project, but the Project is planned so that the outputs can be achieved within that budget. 	

The Project for the Improvement of Teaching Method in Mathematics in Honduras
Project Document

	<p>2) Is there a system to ensure the independent deployment of the outputs after completion of the Project?</p>	<p>- It is important to pay attention to the following in order to enhance sustainability.</p> <p>① To include the PROMETAM-type education into the medium to long-term program of the Secretariat of Education</p> <p>② To systematize the PROMETAM-type education into the new curriculum, standard achievement tests, and training for the re-education of teachers</p> <p>③ To involve as many local staff personnel as possible</p>	<p>- It is impossible to include all of the following in the Project: preparation of a medium to long-term program by the Secretariat of Education, revision of the new curriculum, revision of the standard achievement tests, and a re-education program for teachers. Measures are needed to support the continuation of the advisory expert to the Secretariat of Education.</p>
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PDM: IMPROVEMENT OF METHOD OF TEACHING METHOD IN MATHEMATICS IN THE REPUBLIC OF HONDURAS

Date: 2003.3

Term of Cooperation: April 1, 2003 ~ March 31, 2006 (3 years)
Japanese implementing agency: JICAPrepared by: Secretariat of Education, UPNFM, JICA Experts
Counterpart agency: S.E., UPNFM

Project area: Tegusigalpa, Dept. of El Paraiso, Ocotepeque and Colón, The Republic of Honduras

Target group: Teachers in the 1st and 2nd cycles of basic education

Narrative Summary	Objectively Verifiable Indicators	Means of Verifications	Important Assumptions
<p>[Super Goal] To decrease the number of repeaters for low academic achievement in mathematics in the 1st and 2nd cycles of basic education, especially in the rural area</p>	<p>1. To reduce the number of repeaters</p> <p>2. Reference: To improve the achievement test for the children in mathematics in the 1st and 2nd cycles of basic education</p>	<p>1. Statistical data of Secretariat of Education</p> <p>2. Results of the achievement test for the children in mathematics in the 1st and 2nd cycles of basic education (UMCE)</p>	
<p>[Overall Goal] To improve the teaching method in mathematics in the 1st and 2nd cycles of basic education, in other departments than three targeted departments namely El Paraiso, Ocotepeque and Colón through disseminating the project results</p>	<p>To improve the results of analysis of mathematics classes</p>	<p>Analysis of mathematics classes</p>	<p>Children's absence in class does not increase.</p>
<p>[Project Purpose] To improve the teaching method in mathematics in the 1st and 2nd cycles of basic education in three targeted departments namely El Paraiso, Ocotepeque and Colón, applying the teacher's guidebooks and the workbooks</p>	<p>To improve the results of analysis of mathematics classes carried by the teachers who receive the in-service teacher training</p>	<p>Analysis of mathematics classes</p>	<p>The plan of Honduran Government about the in-service teacher training is implemented successfully.</p>
<p>[Output]</p> <p>1. To elaborate the teacher's guidebooks in mathematics in the 1st and 2nd cycles of basic education</p> <p>2. To elaborate the workbooks in mathematics for the children in the 1st and 2nd cycles of basic education</p> <p>3. The teachers who receive the in-service teacher training in the three targeted departments can develop their classes according to the instruction of the teacher's guidebooks</p> <p>4. To improve teaching capacities of the counterparts through those three processes from (1) to (3) above</p>	<p>1. To publish the teacher's guidebooks in mathematics</p> <p>2. To publish the workbooks in mathematics</p> <p>3-1. The number of teachers who finish the in-service teacher training</p> <p>3-2. The number of teachers who get the score more than 60% in the test of achievement and teaching method</p> <p>3-3. The monitor of the classes by the teachers who are in the in-service teacher training.</p>	<p>1. Dictation by Secretariat of Education</p> <p>2. Dictation by Secretariat of Education</p> <p>3-1. The mark of the in-service teacher training</p> <p>3-2. Results of the test of achievement and teaching method</p> <p>3-3. The monitor of the classes</p>	<p>1. There is no strike or meeting to disturb the in-service teacher training by teachers.</p> <p>2. The counterparts keep their position during the Project.</p>

[Activities]	[Input]	
<p>1-1 To elaborate a draft of the teacher's guidebooks in mathematics in the 1st and 2nd cycles of basic education</p> <p>1-2 To apply and prove the draft of the teacher's guidebooks in mathematics classes</p> <p>1-3 To monitor how the draft of the teacher's guidebooks is used</p> <p>1-4 To feed back monitoring results to the teacher's guidebooks</p> <p>1-5 To complete the teacher's guidebooks</p> <p>2-1 To elaborate a draft of the workbooks in mathematics for the children in the 1st and 2nd cycles of basic education</p> <p>2-2 To apply and prove the draft of the workbooks in mathematics classes</p> <p>2-3 To monitor how the draft of the workbooks is used</p> <p>2-4 To feed back monitoring results to the workbooks</p> <p>2-5 To complete the workbooks</p> <p>3-1 To plan the in-service teacher training of mathematics for teachers in the 1st and 2nd cycles of basic education</p> <p>3-2 With the help of the workbooks and the teacher's guidebooks, the in-service teacher training in mathematics will be carried in the "Programa de Formación Continua"</p> <p>3-3 To elaborate and apply the test of achievement and teaching method in mathematics for the teachers</p> <p>3-4 To elaborate a format for the analysis of mathematics classes</p> <p>3-5 To implement the evaluation of mathematics classes</p> <p>3-6 To elaborate and apply the achievement test in mathematics for the pupils in the 1st and 2nd cycles of basic education</p> <p>4-1 To transfer know how to the counterparts through those activities from (1) to (3) above mentioned</p> <p>4-2 To share the experiences about the in-service teacher training to the person concerned through seminars</p>	<p>Japan:</p> <p>1-a Long-term Expert</p> <p>1) Chief Advisor</p> <p>2) Mathematics Pedagogy</p> <p>1-b Short-term Experts</p> <p>1-c Japan Overseas Cooperation Volunteers</p> <p>1) Teachers in the elementary school education</p> <p>2) Provision of Machinery and Equipment</p> <p>3) Training of Honduran Personnel in Japan</p> <p>4) Budget for the teacher's guidebooks and the workbooks necessary in the project</p> <p>5) Budget for local consultants</p> <p>Honduras:</p> <p>1) Counterpart Personnel</p> <p>1) INICE</p> <p>2) Department of Curriculum Design</p> <p>3) Department of Educational Evaluation</p> <p>4) "Programa de Formación Continua" (UPN/FM)</p> <p>5) Department Directions (El Paraíso, Ocotepeque y Colón)</p> <p>6) District Directions (Danlí, Guinope, Trujillo, Sonaguera y Nueva Ocotepeque)</p> <p>7) Local base of "Programa de Formación Continua"</p> <p>8) Other related fields mutually agreed upon as necessary</p> <p>2) Building and Facilities</p> <p>3) Adequate Budget for Running of the Project</p> <p>4) Privileges, Exemptions and Benefits for Japanese Experts and Volunteers</p>	<p>Preconditions</p> <p>Secretariat of Education has a plan to publish the teacher's guidebooks and the workbooks.</p>

Report of the Organization Analysis

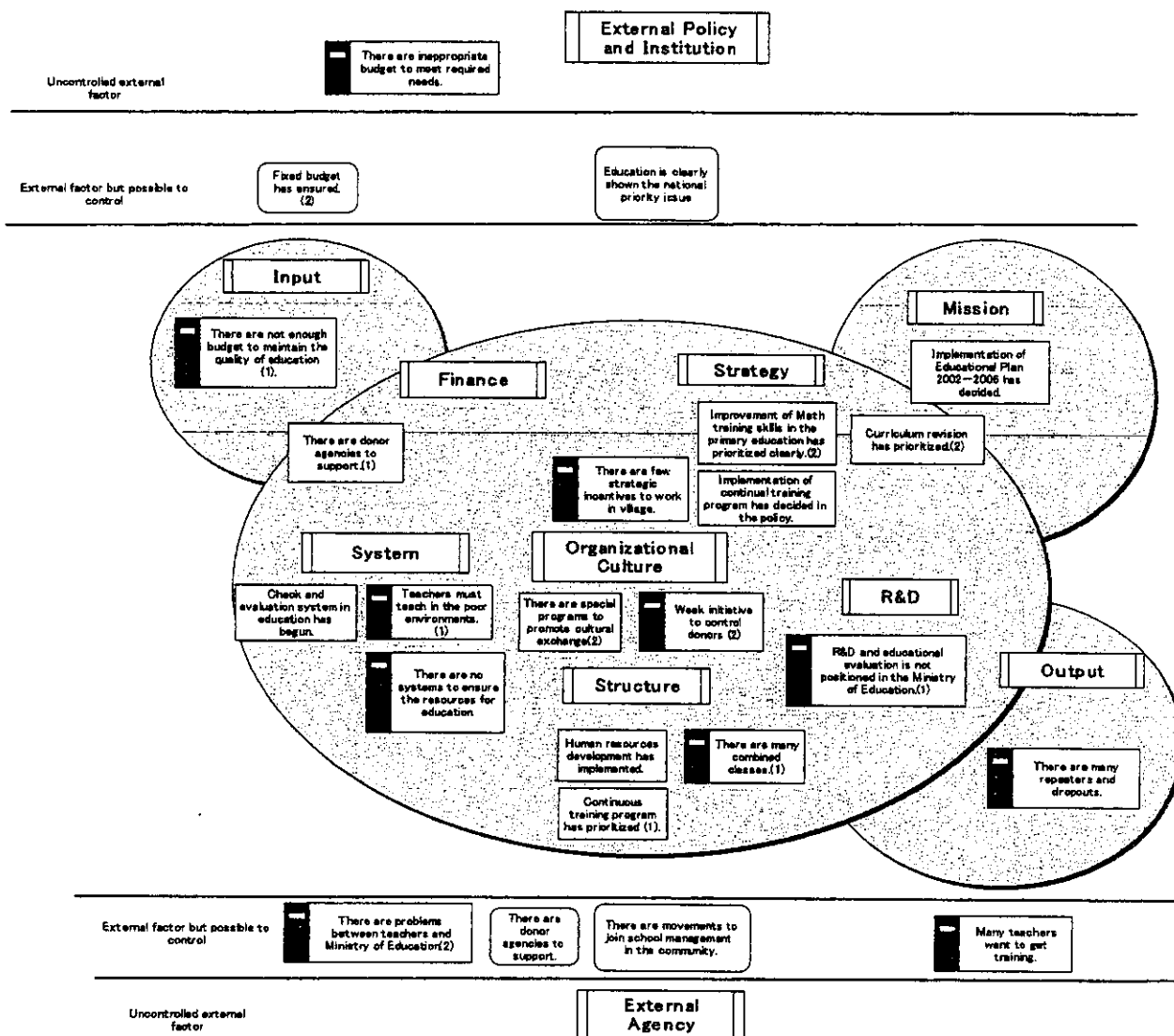
In this preliminary evaluation study of this project, the organization analysis of the Secretariat of Education (main C/P), UPN (sub C/P), and INICE was implemented by participatory workshops based mainly on the ideas of staff members of the organization.

After explaining the purpose of the workshop, we requested that participants filled in cards as described below:

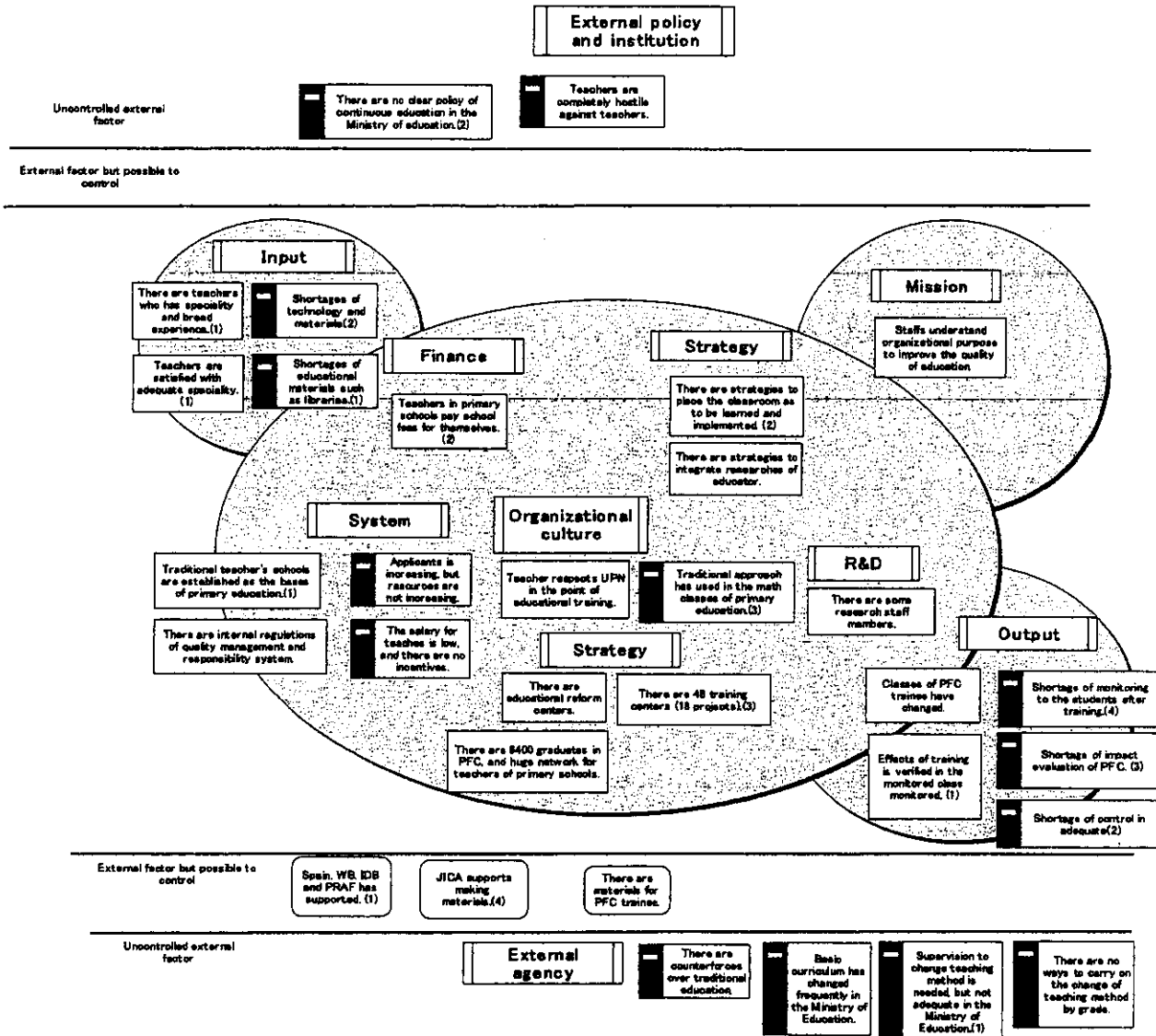
- ① Participants filled in cards using the brainstorming method; what “strengths” and “weaknesses” each organization possessed in terms of mission inside the organization, inputs, strategies, finance, organizational cultures, organizational structures, system, R&D, and output which would impact on the improvement of “The teaching ability of Mathematics in primary education” (“strengths” and “weaknesses” cards were color coded) .
- ② Participants filled in the cards using brainstorming method; what “opportunities” and “threats” exist in the external factors (External policies, institutions, and agencies) surrounding these organizations, and whether the target organization could influence those external factors (“opportunities” and “threats” cards were color coded).
- ③ Participants voted on the three most important ideas in each of the categories—“strengths”, “weaknesses”, “opportunities”, and “threats”.

This work made it possible to prepare the comprehensive organization model charts on the forthcoming pages on the Secretariat of Education, UPN, and INICE. In these charts, squares represent “strengths”, squares with a minus sign represent “weaknesses”, squares in the external area represent “opportunities”, and those with a minus sign represent “threats”.

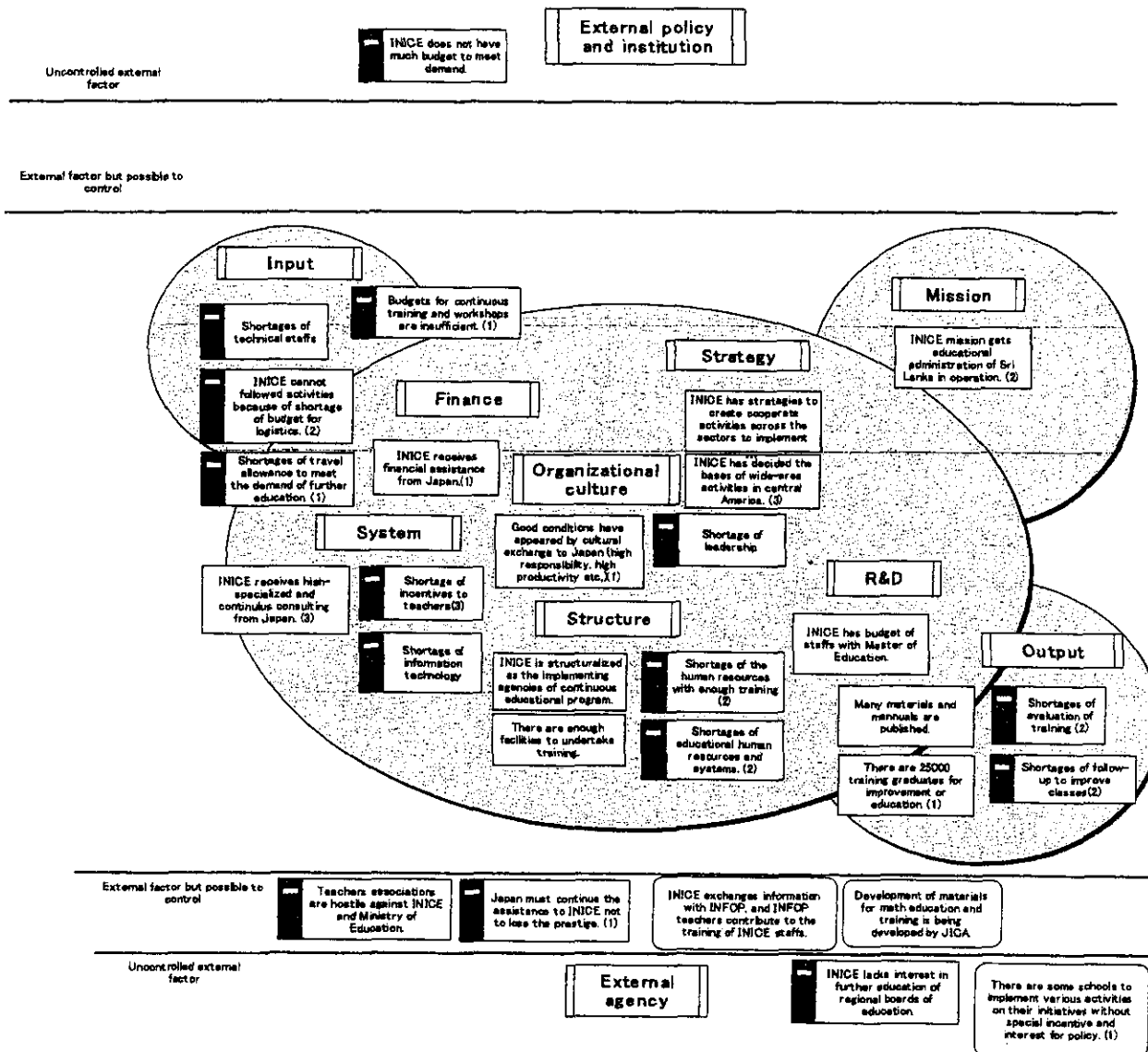
Comprehensive organizational model of IMO



Comprehensive organizational model of UPN



Comprehensive organization model of INICE



TOR for Long-Term Experts

Long-term Expert

1. Team Leader

- (1) Overall coordination of the Project

2. Mathematics Education

- (1) Preparation of draft version of teachers' guidebooks and children's workbooks in mathematics for grades 3 to 6
- (2) Preparation of revised version of teachers' guidebooks and children's workbooks in mathematics for grades 1 to 6
- (3) Technical support and monitoring of PFC, pursued with a focus on mathematics
- (4) Implementation of class evaluation
- (5) Preparation and implementation of achievement test for children

Short-term Expert

1. Class Evaluation

- (1) Development of class evaluation methods relevant to current conditions in Honduras
- (2) Technical support for PFC, with consideration of class contents
- (3) Technical support for revision of teachers' guidebooks and children's workbooks for grades 1 to 6, with particular focus on class contents of multiple-grade classes

2. Data Analysis

- (1) Collection and analysis of data on test results for teaching abilities of PFC participants
- (2) Collection and analysis of data on class evaluation
- (3) Collection and analysis of data on results of achievement test for children

TOR for C/P

1. Vice Secretary in charge of Pedagogic Technology (Project leader)
 - (1) Overall coordination of the Project
2. President of the Universidad Pedagógica Nacional Francisco Morazán
 - (1) Overall sub-coordination of the Project
3. Executive Director of INICE (Project coordinator)
 - (1) Overall coordination for work group
4. Department of Curriculum Design
 - (1) Preparation of draft version of teachers' guidebooks and children's workbooks in mathematics for grades 3 to 6
 - (2) Preparation of revised version of teachers' guidebooks and children's workbooks in mathematics for grades 1 to 6
5. Department of Evaluation
 - (1) Preparation of teaching ability test for PFC participants
 - (2) Preparation, implementation and evaluation of class evaluation methods
 - (3) Preparation, implementation and evaluation of achievement test for children
6. Department of Training
 - (1) Formulation and implementation of a training plan for PROMETAM as a part of PFC
 - (2) Logistic support for PROMETAM as a part of PFC

TOR for JOCV

1. Organize local needs and suggestions regarding contents in draft version of teachers' guidebooks and children's workbooks, and enforce a feedback within the Department of Curriculum Design
2. With the participation of C/P, formulate a plan on PFC teaching methods in mathematics for in-service teachers, and implement and evaluate the training program
3. Implement respective class evaluations for PROMETAM participants and teachers in the control group

5. ホンジュラス算数プロジェクトの経過

1. 1988年までの小学校教諭及び理数科教師隊員の活動

特に系統だった活動はなく、各々のJOCVが教科・地域を設定し、短期間(1～2週間程度)の講習会等を実施していた。この活動にはホンジュラス文部省もあまり協力的ではなく、計画的・継続的な活動が難しかった。

文部省中等局配属の理数科教師隊員は、5か年計画で異なった地域での短期講習会も実施した。短期講習会は多くの地域を巡回できる利点をもっていたが、内容が限定されたり、表面的・その場限りの指導しかできず、現場に生かされないなどの問題がJOCVからあげられていた。

2. 1989、1990年における算数グループ活動

1989年3月から11月まで長期講習会をテグシガルパ市周辺5か所にて実施した。講習内容は「水道方式」による数・量関係分野であったが、算数を取り上げた理由は以下のとおりである。

- ・生活に必要な知識・技能であるうえに、思考力を高めるのに役立つ。
- ・教師の能力や授業技術に問題がある。
- ・中等・高等教育において初等教育の基礎知識が十分でないことが内容の習得の障害になっている。

講習会終了時には優秀な教員5人を選出し、彼らがマエストロ・ギア(指導教員の意)として自分の勤務校の同僚に同じ内容の講習を実施し、更にその講習を受けた教師の授業をJOCVが効果を測ろうとした。同活動にはグループ活動の原型が試みられた(1990年)。

3. 1991年からの活動(JOCV算数プロジェクトの開始)

4人のJOCVと文部省初等教育局教育課、地区教育委員長及び文部省隊員活動調整室が実施主体となり「初等教育における算数の基礎に関する基礎的活動(Una Experiencia sobre Matematica Basica en el nivel primaria)」として以下の目的・活動計画の下、6年間の計画で算数プロジェクトが開始された(実施にあたっては1991年7月にJICA/文部省間で合意文書が交わされている)。

(1) JOCVグループ活動の目的

初等算数を改善することにより、ホンジュラスの国民生活を向上させる。特に、①初等算数科を通して教員の質を向上させる。そのために教員が必要な知識・授業技術を身に付けられるようにする。②ホンジュラス人自身が自分たちでできるシステムづくりを援助する。

(2) JOCV活動内容

- 1) マエストロ・ギア(指導教員)の育成：長・短期講習会の実施、授業観察を通しての指導技術指導。研究授業実施。
- 2) 教員による研修システムづくり：指導教員を中心として教員自らがグループで研

修が行えるよう助言・指導する。

3)教材研究作成：講習会テキスト、生徒用問題集、その他教材の作成と改定。

4)学力検査：JOCV自らの活動評価としてJOCVが活動校とその他の小学校に協力を求めて実施。結果分析後、文部省・教育委員会へ提出。

4.1996年算数一プロジェクト評価

(1996年12月に“算数プロジェクト評価及び計画委員会”より提出された評価報告書より抜粋)

(1) 算数プロジェクトの効果

毎年度実施されてきた学力検査により講習会に参加した教員(マエストロ・ギア)のクラス(MG)の学力と算数プロジェクトにかかわらなかった教員のクラス(MC)の学力には、1993年：2.99%、1994年：9.83%、1995年：12.83%、1996年9.5%の回答率の差が確認されており、算数プロジェクトの効果がうかがえる。

学年末学力テスト結果

	1993			1994			1995			1996		
	MG	MC	差	MG	MC	差	MG	MC	差	MG	MC	差
1年	65	62	3.55	61	50	11	69	48	21	73	62	11
2年	59	60	-0.7	60	49	11	63	53	10	60	52	8
3年	39	37	2.61	38	34	4	44	34	10	43	38	5
4年	36	33	3.14	36	22	14	39	27	12	42	34	8
5年	25	22	2.74	32	19	13	31	21	10	39	28	11
6年	27	21	6.58	29	23	6	35	21	14	32	18	14
平均	42	39	2.99	42.7	32.8	9.83	46.8	34	12.8	48.2	38.7	9.5
クラス数	229	175		271	157		252	182		252	1182	
児童数	6,747	5,460		8,337	4,485		8,072	5,254		8,072	5,254	

(2) 算数プロジェクトの講習会・授業観察を受けた教員数

算数プロジェクト開始後6年間の受講教員数は以下のとおりであり、特に、ホンジュラスでの小学校算数で基本領域ととらえられている自然数領域の受講者数の上昇が注目される。

年度別 講習・授業観察を受けた教員数

領域	1991	1992	1993	1994	1995	1996	計
自然数	188	558	680	1,162	1,769	2,328	6,712
小数	118	57	261	241	180	383	1,240
分数	0	106	220	215	125	151	817
幾何1	109	345	61	171	17	1,207	1,910
幾何2	0	28	75	64	29	29	225
量と測定	0	0	0	35	42	56	133
数量関係	0	0	0	0	35	0	35
受講者数	415	1,121	1,297	1,888	2,197	4,154	11,072
授業観察数	49	142	314	310	320	397	1,532

(3) 教材開発実績

教材開発は、プロジェクトで実施される講習会の質を一定に保ち、児童の計算力と問題解決力を高める目的で、以下のとおり数々の教材が開発された。特に注目すべき点は、1994～1995年に文部省から全国児童に配布された練習問題帳に算数プロジェクトが推進していた授業法が取り入れられたことである。

1991	「算術関係」テキスト作成 「幾何3～6年」テキスト作成 練習問題帳1年、2・3年、4・5・6年作成 指導案集1年、2年作成 練習問題帳1年、2年改訂
1992	指導案集3年作成 練習問題帳3年改訂 学年別算数指導内容一覧表作成 講習会用テキスト「自然数」「小数」「分数」作成
1993	指導案集4年作成 練習問題帳4年改訂 練習問題帳回答集作成 学年別算数指導内容一覧表改訂 講習会用テキスト「幾何1」「幾何2」「量と測定」「指導技術」作成
1994	指導案集5年、6年作成 練習問題帳5年、6年改訂 練習問題帳2年、3年改訂 講習会用テキスト「数量関係」作成
1995	練習問題帳1年、4年改訂

(4) 指導教員養成実績

算数プロジェクト第1フェーズは、6年間で8県（フランシスコ・モラサン、チョルテカ、コマヤグア、レンピーラ、コルテス、エル・パライツ、オランチョ、バジェ）において実施され、110名の指導的教員を養成した。

(5) 算数プロジェクトJOCV投入実績

6年間のプロジェクト実施中に計35名（うち1名はSV隊員）のJOCVが投入されている。

5. 1997年以降のJOCV活動

1991年から6年間にわたって実施された算数プロジェクトは、対象児童が対象外児童より10点以上成績が向上するなど一定の成果をあげたが、その活動がホンジュラス政府とは独立したJOCVだけの活動として行われるようになり、その結果、ホン

ジュラスの教育方針とのずれが生じ、様々な問題がみられるようになった(ホンジュラスとは異なる教育手法の導入など)。

1996年末に第2フェーズ案が作成・提出されたが、ホンジュラスで1996年ごろより進められてきた地方分権化が1997年7月に教育行政にも実施され、「行政・予算・人事」権が全国18県の教育委員会の根限下に置かれることになり、JOCVも各県教育委員会配属となった。また、各教育委員会では、急激な組織改革が実施されたため人材不足や体制が整わず、算数プロジェクト第2フェーズの計画は、文部省内で案件作成機関として存在していた「中央実行委員会」とともに自然消滅状態となった。

その後派遣された小学校教諭JOCVは、第1フェーズ時代に作成された教材や自作教材を利用したりしながら、各配属県の実情に沿って講習会や年2回程度のJOCV間情報交換会などを実施してきたが、2000年までの4年間は特に足並みをそろえたグループ的活動は実施されず、各県(各JOCV)独自に協力が進められてきた。

2000年に文部省副大臣が提案した2001年より開始された“SALVEMOS PRIMER GRADO(1年生を救おう)”プログラムの算数分野に、派遣中の小学校算数関連JOCVの大半が参加することになった。このプログラムは文部省が直接管轄するプログラムであったため、再び文部省・JOCV間の直接的関係ができ、JOCVが作成したテキストが文部省公認テキストに採用されるなど公的機関からの評価も高く、算数グループのダイナミックな活動が展開された。こうして算数分野でのグループ的活動が再開され、算数プロジェクト第2フェーズの基盤ができ上がったといえる。

なお、2001年末に大統領選挙を控えて、同プログラムは前政権のプログラムであるため、今後存続されるか否かは定かではない。

6. 算数プロジェクトの再編

これまでの約12年間、小学校算数分野での協力実績は実施県10県、投入JOCV数58名を数えるが、実際には現場教員のプロジェクト評価は高いにもかかわらず、ホンジュラス政府に正しく認知されていなかった。そのため十分な支援を受けられず、効果が拡大されない状況が続いていた(特に地方分権化によりJOCVが県教育委員会配属になってからは更に顕著となっていた)。

この状況を改善すべく2000年から2001年にかけて算数プロジェクト再編が手掛けられ、第1フェーズでの効果拡大の問題点となっていた文部省やUPNとの協力も取り付け、再編後の「算数指導力向上プロジェクト(PROMETAM)」は、現職教員へのフォーマル教育の一環として位置づけられ、準備が進められている。現時点でのプロジェクト実施概要は別添PDM(2001年10月1日現在)のとおりであり、実際のプロジェクト実施は2001年11月からの教材開発を皮切りに2002年より現職教員へのセミナー開始が予定されている。

実施県はオコテペケ県、コロソ県、エル・パラソ県の3県が選定され、選定にあたっては最小人数で最大インパクトが得られるよう、県内教員数、アクセス、県土地面積、県教育委員会の協力体制、ホンジュラス全土での位置的バランス等が考慮されており、選定された3県全域での現職教員への算数指導能力向上を期待するものである。

算数指導力向上プロジェクトPDM(案)

プロジェクトの要約	指 標	指標データ入手手段	外部条件
<p>上位目標</p> <p>基礎教育における子どもの算数科学力向上</p>	<p>標準テストで有意に子どもの学力が向上する</p> <p>算数科における落第点取得者が減少する</p>	<p>標準テスト</p> <p>教員による子どもの評価</p>	<p>標準テストによって得たノウハウを広く応用する</p>
<p>プロジェクト目標</p> <p>基礎教育における充実した算数科指導の実現</p> <p>成 果</p> <ol style="list-style-type: none"> 1. 教員の算数科基礎学力向上 2. 教科書に添った指導書の完成 3. 教科書を使った指導法の改善 4. 中核教員を通じた成果の拡大 5. 子どもの学習を支援する副教材の完成 6. 大学単位認定による研修の公教育化 	<p>授業評価の結果が向上する</p> <ol style="list-style-type: none"> 1. 標準テストで有意に教員の学力が向上する 2. 指導書への文部省認定 3. 教室内への研修内容の反映 4. 選定県の30%以上の教員の研修終了 5. 副教材への文部省認定 6. 研修終了者への単位認定 	<p>授業評価</p> <ol style="list-style-type: none"> 1. 標準テスト 2. 文部省検定結果 3. モニタリング 4. 研修済みリスト 5. 文部省検定結果 6. 大学の証明書 	<p>子どもが学校を休まない</p> <p>教員による授業実施を妨げる大規模なストライキや集会などが行われない</p> <p>教員の無断欠勤がない</p>
<p>活 動</p> <ol style="list-style-type: none"> 1. 教員への算数科基礎学力向上をめざした研修 2. 教科書に添った指導書の開発 3. 教科書に添った指導法の指揮 4. 中核教員を育成するシステムづくり 5. 子どもの学習を支援する副教材の開発 6. 公教育科をめざした文部省・大学との交渉 7. 評価のための標準テスト作成 8. 授業評価法の作成 	<p>投 入</p> <ol style="list-style-type: none"> 1. 選定された研修実施権3県への隊員投入(12名×4交代) 2. INICEへの教材開発隊員投入(2名×4交代) 3. INICEへの教材開発リーダー、SV投入(1名×3交代) 4. プロジェクト総括専門家投入(1名×3交代) 5. プロジェクト運営経費としてノン・プロジェクト無償援助の見返り資金の投入 	<p>研修実施に支障となる事態が発生しない</p> <p>前提条件</p> <p>文部省・UPNの合意が得られること</p> <p>見返り資金が投入されること</p>	

