

No. 1

JAPAN INTERNATIONAL COOPERATION AGENCY  
THE DEPARTMENT OF EDUCATION, CULTURE AND SPORTS  
THE REPUBLIC OF THE PHILIPPINES

BASIC DESIGN STUDY REPORT

ON

THE PROJECT FOR

THE IMPROVEMENT OF THE EDUCATIONAL FACILITIES (PHASE II)

IN

THE REPUBLIC OF THE PHILIPPINES

MARCH 1994

MOHRI, ARCHITECT & ASSOCIATES, INC.

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BASIC DESIGN STUDY REPORT ON THE PROJECT FOR THE IMPROVEMENT OF  
THE EDUCATIONAL FACILITIES (PHASE II) IN THE REPUBLIC OF THE PHILIPPINES  
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**MARCH 1994**

**MOHRI, ARCHITECT & ASSOCIATES, INC.**



## PREFACE

In response to request from the Government of the Republic of the Philippines, the Government of Japan decided to conduct a basic design study on the Project for the Improvement of the Educational Facilities (Phase II) and entrusted the study to the Japan International Cooperation Agency (JICA).

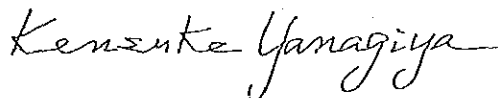
JICA sent to the Philippines a study team headed by Mr. Fumio Kikuchi Deputy Director of Consultant Contract Division, Procurement Department, JICA, and constituted by members of Mohri, Architect & Associates, Inc. from November 9 to December 9, 1993.

The team held discussions with the officials concerned of the Government of the Philippines and conducted a field study at the study area. After the team returned to Japan, further studies were made. Then, a mission was sent to the Philippines in order to discuss a draft report and the present report was prepared.

I hope that this report will contribute to the promotion of the project and to the enhancement of friendly relations between our two countries.

I wish to express my sincere appreciation to the officials concerned of the Government of the Republic of the Philippines for their close cooperation extended to the study team.

March 1994



Kensuke Yanagiya

President

Japan International Cooperation Agency





March 1994

Mr. Kensuke Yanagiya  
President  
Japan International Cooperation Agency  
Tokyo, Japan

**Letter of Transmittal**

We are pleased to submit to you the basic design study report on the Project for the Improvement of the Educational Facilities (Phase II) in the Republic of the Philippines.

This study was conducted by Mohri, Architect & Associates, Inc., under a contract to JICA, during the period of November 6, 1993 to March 25, 1994. In conducting the study, we have examined the feasibility and rationale of the project with due consideration to the present situation of the Philippines and formulated the most appropriate basic design for the project under Japan's grant aid scheme.

We wish to take this opportunity to express our sincere gratitude to the officials concerned of JICA, the Ministry of Foreign Affairs. We would also like to express our gratitude to the officials concerned of the Department of Education, Culture and Sports, the JICA Philippines Office, and the Embassy of Japan in the Philippines for their cooperation and assistance throughout our field survey.

Finally, we hope that this report will contribute to further promotion of the Project.

Very truly yours,

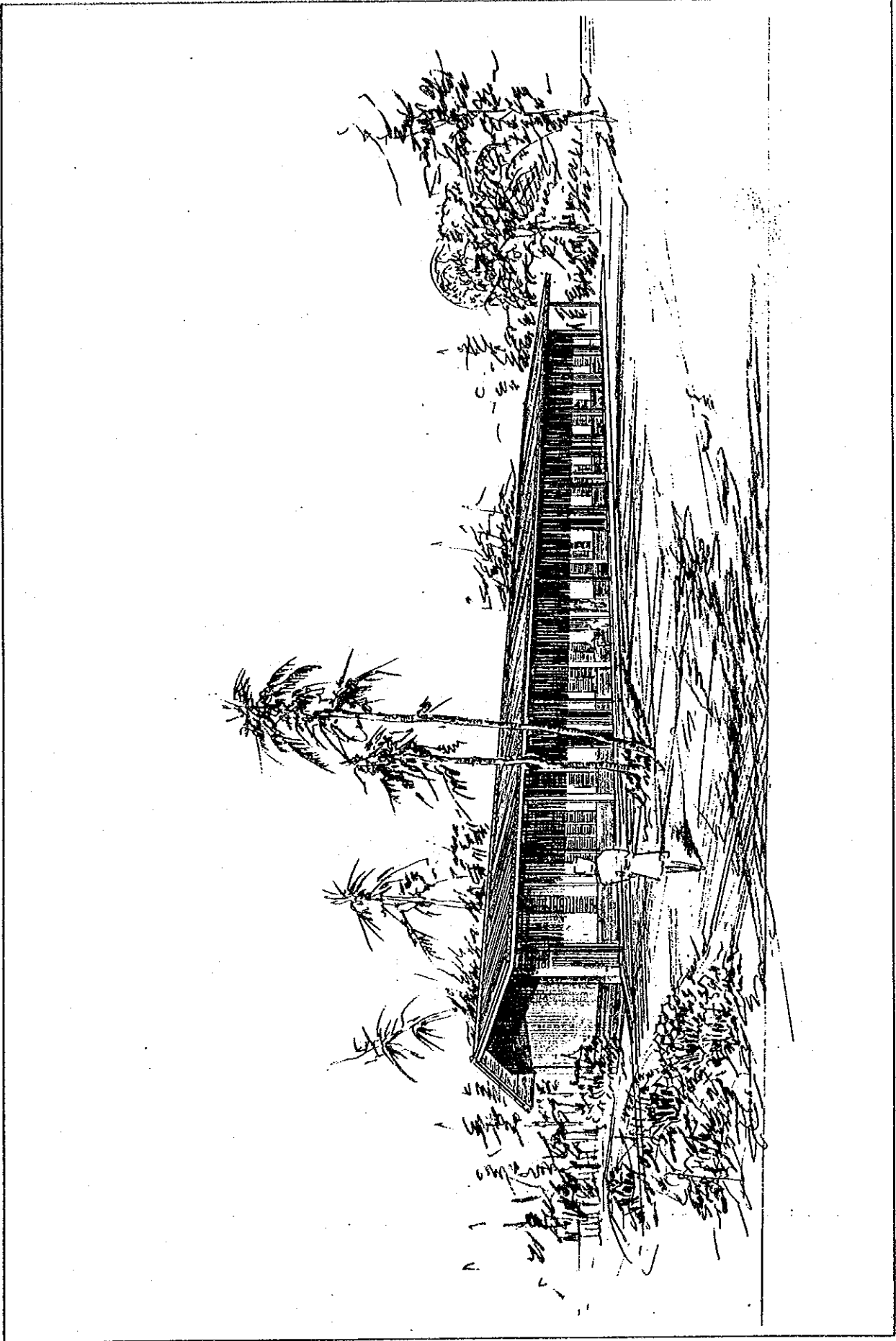


Takenobu Mohri

Project manager

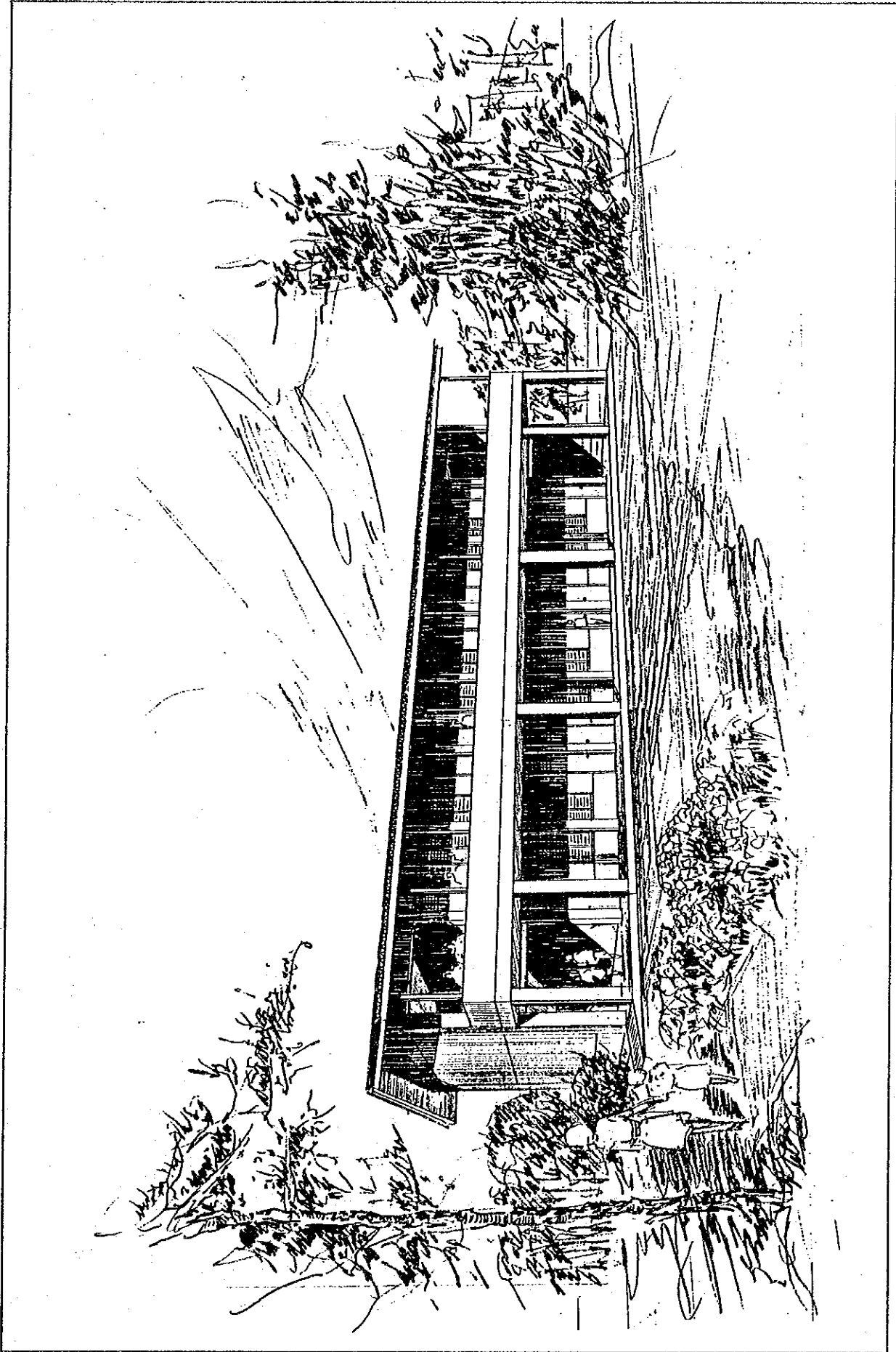
Basic design study team on the  
Project for the Improvement of  
the Educational Facilities (Phase II)  
Mohri, Architect & Associates, Inc.





PERSPECTIVE DRAWING TYPE C

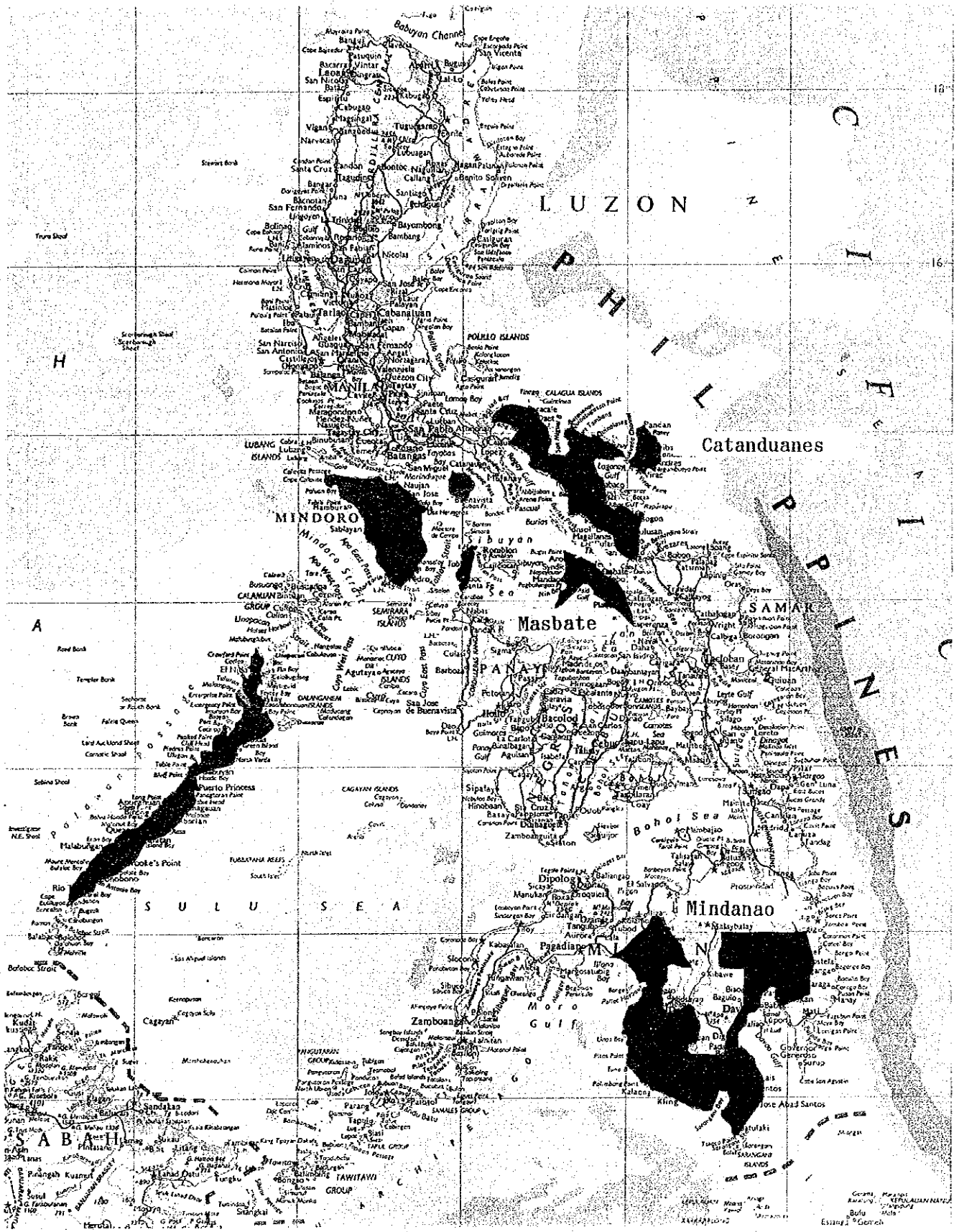




PERSPECTIVE DRAWING TYPE D



# MAP OF THE PHILIPPINES

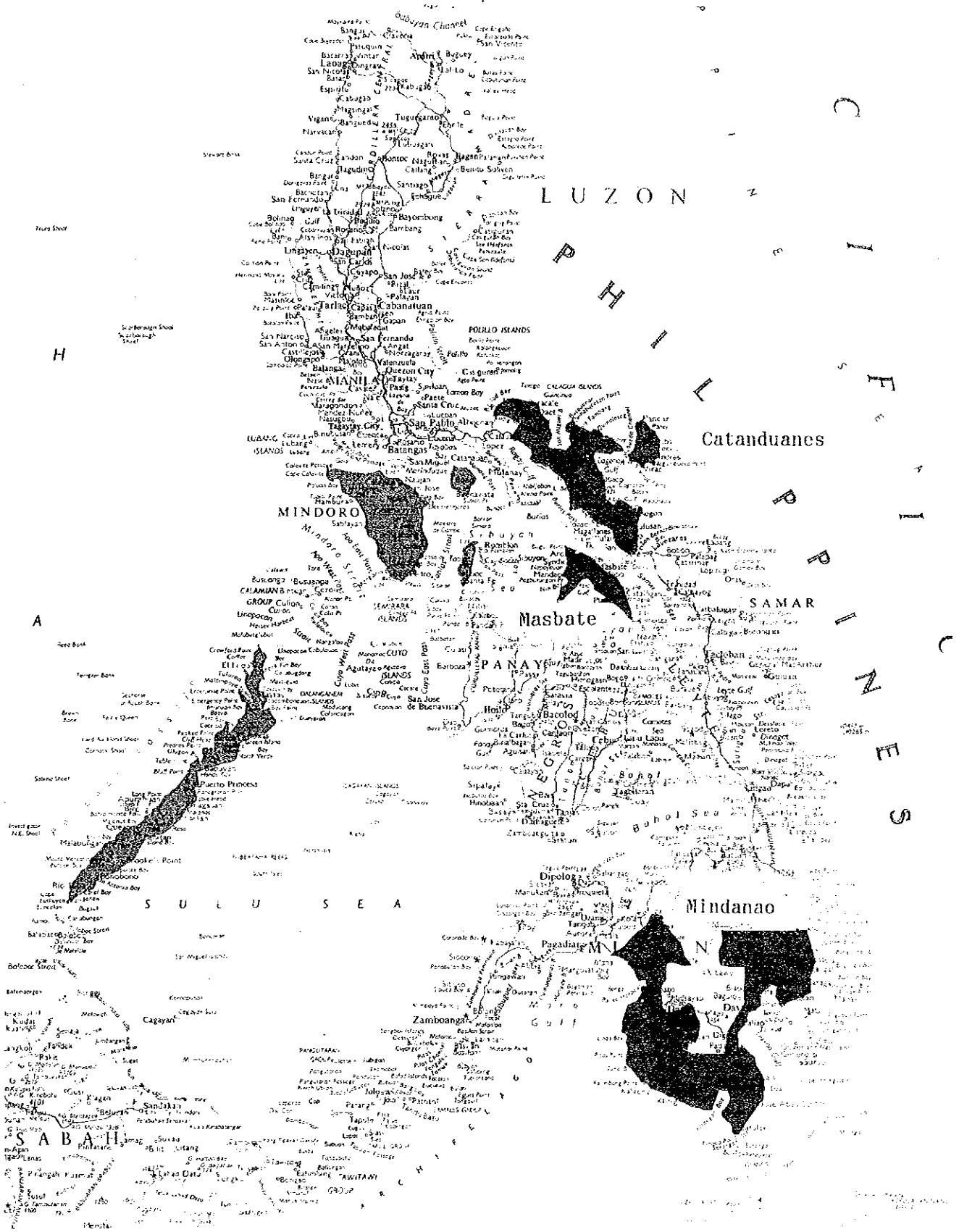


**EPIP I : Region IV (Southern Tagalog) - Mindoro, Palawan, Marinduque, Tablas**



**EPIP II : Region V (Bicol) - Luzon, Masbate, Catanduanes  
 Region XI (Southern Mindanao) - Mindanao  
 Region XII (Central Mindanao) - Mindanao  
 ARMM - Mindanao**

# MAP OF THE PHILIPPINES



**EFIP I** : Region IV (Southern Tagalog) - Mindoro, Palawan, Marinduque, Tablas

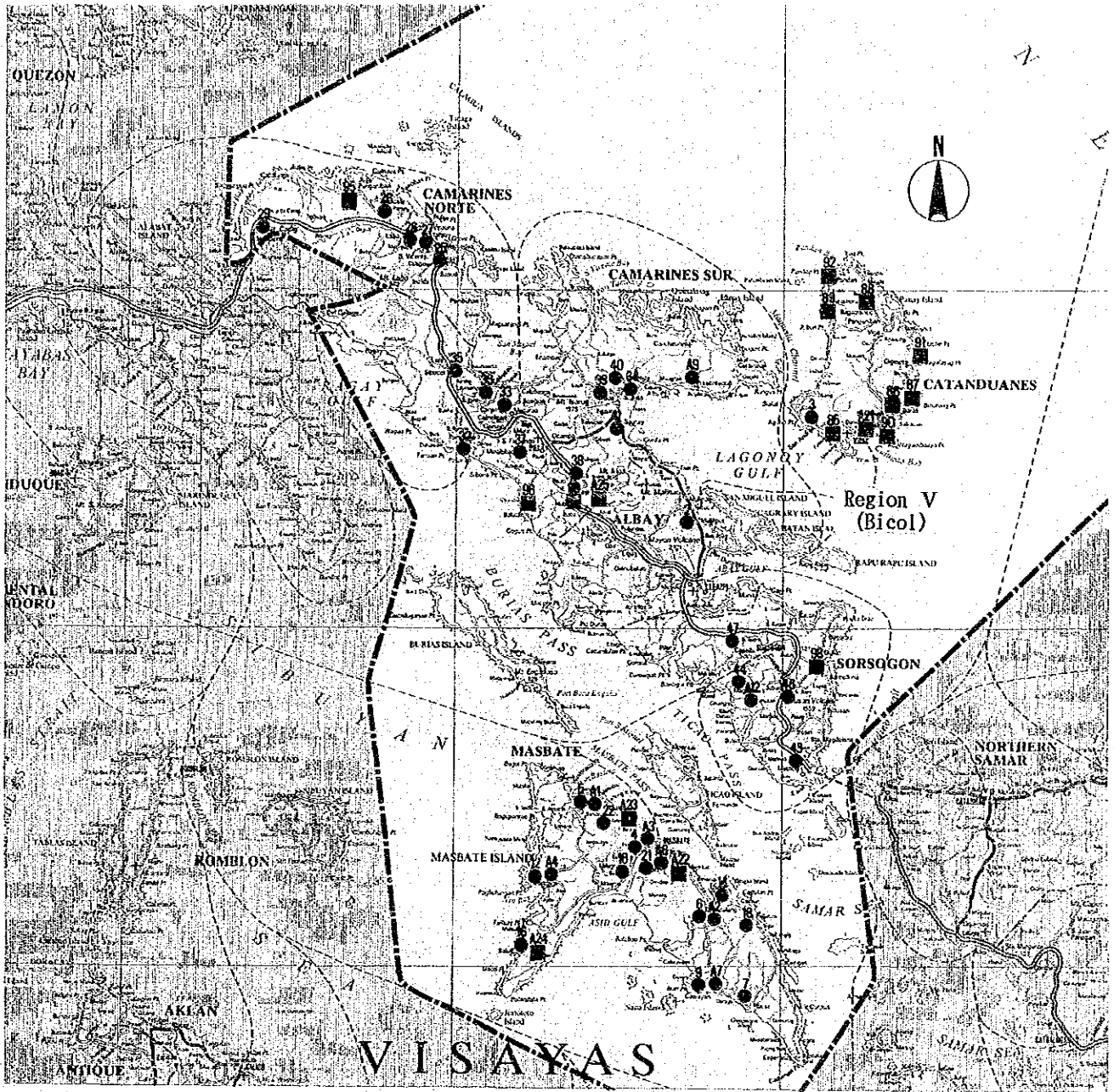


**EFIP II** : Region V (Bicol) - Luzon, Masbate, Catanduanes  
 Region XI (Southern Mindanao) - Mindanao  
 Region XII (Central Mindanao) - Mindanao  
 ARMM - Mindanao





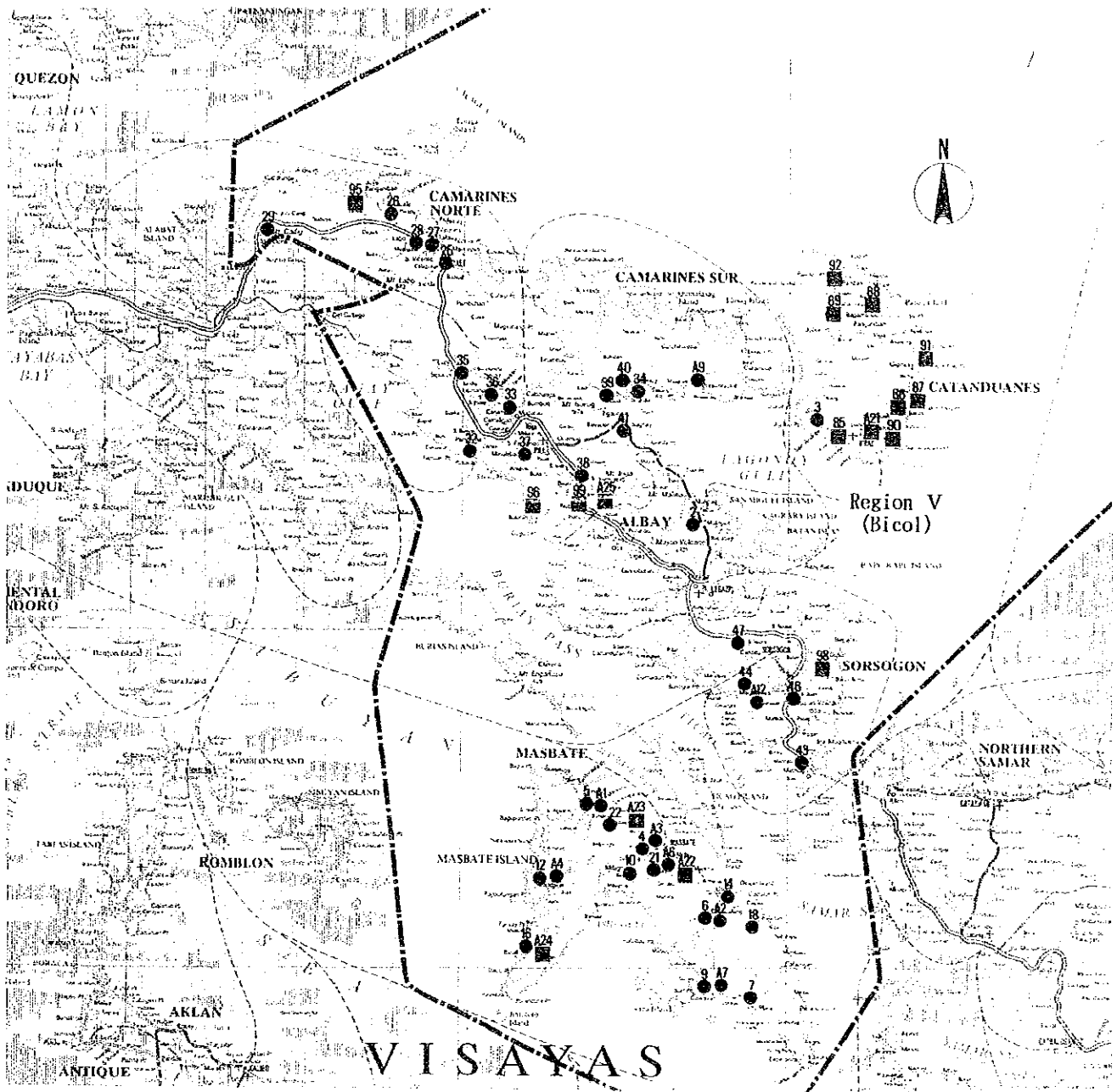
### Project Location Map (1)



| <input type="checkbox"/> ELEMENTARY SCHOOL<br>REGION V |   |  |   |
|--|---|--|---|
| E- 2. MALIPIOT ELEMENTARY SCHOOL                       | E- 25. MERCEDES CENTRAL SCHOOL            | E- 44. EDUARDO LEE CRAN MEMORIAL SCHOOL        | S- 87. BAEAS RURAL HIGH SCHOOL                  |
| E- 3. TIRANG ELEMENTARY SCHOOL                         | E- 26. PARACALE CENTRAL ELEMENTARY SCHOOL | E- 46. ALINDOGAN CENTRAL ELEMENTARY SCHOOL     | S- 88. BAGAMANOC HIGH SCHOOL                    |
| E- 4. J. ZURBITO ELEMENTARY SCHOOL                     | E- 27. TALISAY ELEMENTARY SCHOOL          | E- 47. COMADCAD ELEMENTARY SCHOOL              | S- 89. CARAMORAN RURAL HIGH SCHOOL              |
| E- 5. R. PAJES CENTRAL ELEMENTARY SCHOOL               | E- 28. LABO ELEMENTARY SCHOOL             | AE- 1. PANIQUE ELEMENTARY SCHOOL               | S- 90. BATO RURAL HIGH SCHOOL                   |
| E- 6. DIMASALANG ELEMENTARY SCHOOL                     | E- 29. M. HEBRADO ELEMENTARY SCHOOL       | AE- 2. BOLACAVE ELEMENTARY SCHOOL              | S- 91. GIGMOTO RURAL HIGH SCHOOL                |
| E- 7. C. INOCENCIO ELEMENTARY SCHOOL                   | E- 32. PASACAO CENTRAL SCHOOL             | AE- 3. NURSERY ELEMENTARY SCHOOL               | S- 92. TABUGOC NATIONAL HIGH SCHOOL             |
| E- 9. RECODO ELEMENTARY SCHOOL                         | E- 33. CANAMAN CENTRAL SCHOOL             | AE- 4. MANDAON CENTRAL SCHOOL                  | S- 95. LABAP NATIONAL HIGH SCHOOL               |
| E- 10. HILAGROS WEST CENTRAL SCHOOL                    | E- 34. SAN JOSE CENTRAL SCHOOL            | AE- 6. UMABAY INT. ELEMENTARY SCHOOL           | S- 96. TAPAYAS HIGH SCHOOL                      |
| E- 12. CABITAN ELEMENTARY SCHOOL                       | E- 35. CALAGHANGAN ELEMENTARY SCHOOL      | AE- 7. DIVISORIA CENTRAL SCHOOL                | S- 98. BARCELONA NATIONAL HIGH SCHOOL           |
| E- 14. ARACENIA ELEMENTARY SCHOOL                      | E- 36. PANDAN ELEMENTARY SCHOOL           | AE- 9. MAANGAS ELEMENTARY SCHOOL               | S- 99. STO. NIÑO NATIONAL HIGH SCHOOL           |
| E- 16. BALUD CENTRAL SCHOOL                            | E- 37. ASTIPOLO ELEMENTARY SCHOOL         | AE- 12. MAGALLANES NORTH CENTRAL SCHOOL        | AS-21. CATANDUANES NATIONAL HIGH SCHOOL (Annex) |
| E- 18. PALAMAS CENTRAL SCHOOL                          | E- 38. BAO WEST ELEMENTARY SCHOOL         |  | AS-22. MOBO HIGH SCHOOL                         |
| E- 21. MOBO CENTRAL SCHOOL                             | E- 39. GOA ELEMENTARY SCHOOL              | <input type="checkbox"/> SECONDARY SCHOOL      | AS-23. BALENO NATIONAL HIGH SCHOOL              |
| E- 22. BALENO CENTRAL SCHOOL                           | E- 40. BINAHUAN ELEMENTARY SCHOOL         | REGION V                                       | AS-24. BALUD NATIONAL HIGH SCHOOL               |
|  | E- 41. SAGNAY ELEMENTARY SCHOOL           | S- 85. CATANDUANES NATIONAL HIGH SCHOOL (Main) | AS-25. PERPETUAL HELP HIGH SCHOOL               |
|  | E- 43. MATNOC CENTRAL SCHOOL              | S- 86. SAN MIGUEL RURAL HIGH SCHOOL            |   |

LEGEND : ● ELEMENTARY SCHOOL  
 ■ SECONDARY SCHOOL

### Project Location Map (1)

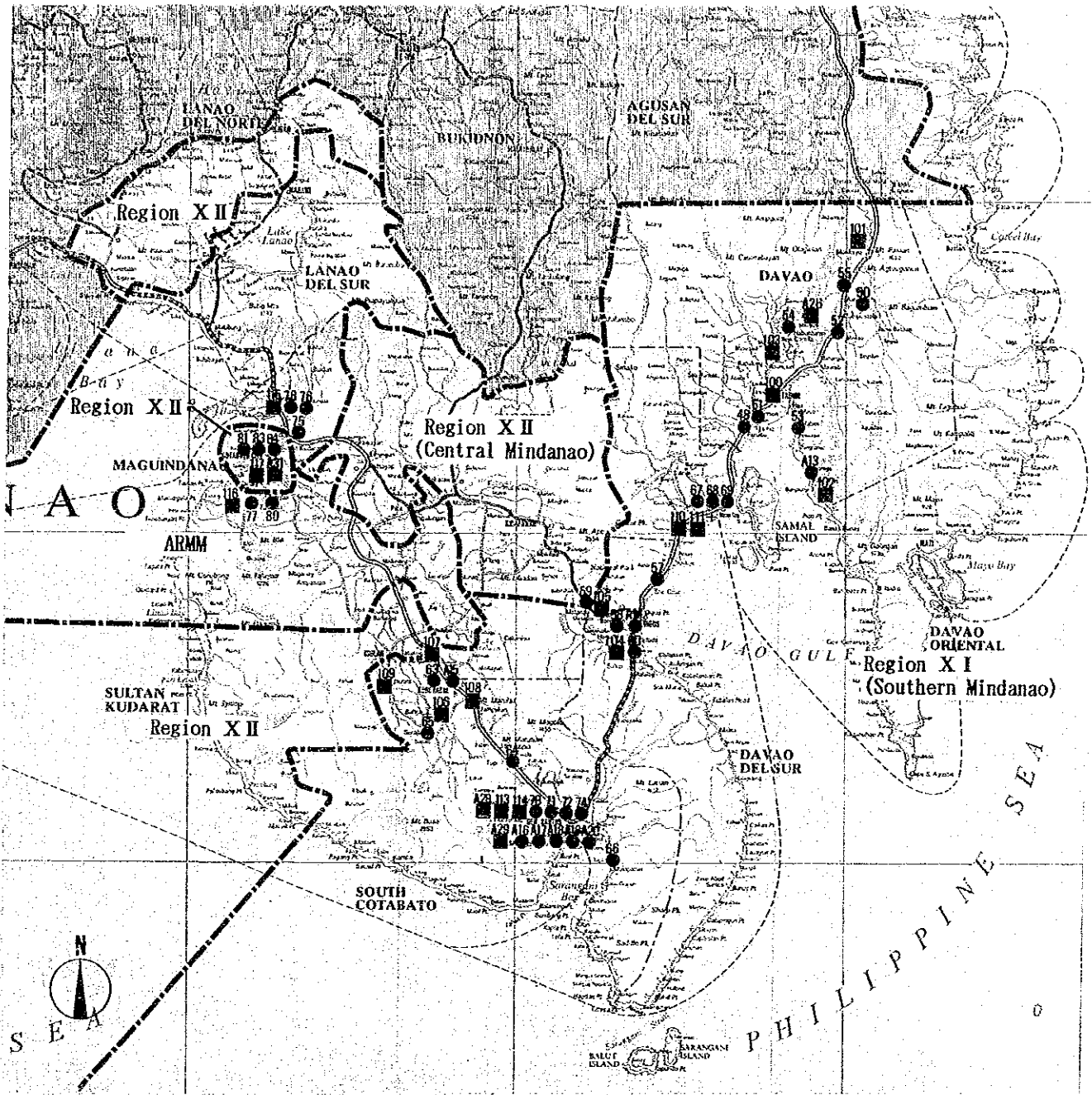


|  |   |   |   |
|--|---|---|---|
| <p><b>ELEMENTARY SCHOOL.</b></p> <p><b>REGION V</b></p> <p>E- 2. MAELIPIOT ELEMENTARY SCHOOL</p> <p>E- 3. TIBANG ELEMENTARY SCHOOL</p> <p>E- 4. J. ZORBITO ELEMENTARY SCHOOL</p> <p>E- 5. R. PAJES CENTRAL ELEMENTARY SCHOOL</p> <p>E- 6. DIMASALANG ELEMENTARY SCHOOL</p> <p>E- 7. C. INOCENCIO ELEMENTARY SCHOOL</p> <p>E- 9. NECODO ELEMENTARY SCHOOL</p> <p>E- 10. MILAGROS WEST CENTRAL SCHOOL</p> <p>E- 12. CABTAN ELEMENTARY SCHOOL</p> <p>E- 14. ARMENIA ELEMENTARY SCHOOL</p> <p>E- 16. BALUD CENTRAL SCHOOL</p> <p>E- 18. PALANAS CENTRAL SCHOOL</p> <p>E- 21. MORO CENTRAL SCHOOL</p> <p>E- 22. BALENO CENTRAL SCHOOL</p> | <p>E- 25. MERCEDES CENTRAL SCHOOL</p> <p>E- 26. PARACALE CENTRAL ELEMENTARY SCHOOL</p> <p>E- 27. TALISAY ELEMENTARY SCHOOL</p> <p>E- 28. LABO ELEMENTARY SCHOOL</p> <p>E- 29. M. HERRADO ELEMENTARY SCHOOL</p> <p>E- 32. PASACAO CENTRAL SCHOOL</p> <p>E- 33. CANAMAN CENTRAL SCHOOL</p> <p>E- 34. SAN JOSE CENTRAL SCHOOL</p> <p>E- 35. CALAGBANGAN ELEMENTARY SCHOOL</p> <p>E- 36. PANDAN ELEMENTARY SCHOOL</p> <p>E- 37. ANTIPOLO ELEMENTARY SCHOOL</p> <p>E- 38. BAAO WEST ELEMENTARY SCHOOL</p> <p>E- 39. GOA ELEMENTARY SCHOOL</p> <p>E- 40. BINANHUAN ELEMENTARY SCHOOL</p> <p>E- 41. SAGNAY ELEMENTARY SCHOOL</p> <p>E- 43. MATNOC CENTRAL SCHOOL</p> | <p>E- 44. EDUARDO LEE CHAN MEMORIAL SCHOOL</p> <p>E- 46. ALINDOGAN CENTRAL ELEMENTARY SCHOOL</p> <p>E- 47. CUMADCAD ELEMENTARY SCHOOL</p> <p>AE- 1. PANIQUE ELEMENTARY SCHOOL</p> <p>AE- 2. BOLACAWE ELEMENTARY SCHOOL</p> <p>AE- 3. NURSERY ELEMENTARY SCHOOL</p> <p>AE- 4. MANDAN CENTRAL SCHOOL</p> <p>AE- 6. DMABAY INT. ELEMENTARY SCHOOL</p> <p>AE- 7. DIVISORIA CENTRAL SCHOOL</p> <p>AE- 9. MAANGAS ELEMENTARY SCHOOL</p> <p>AE- 12. MAGALANES NORTH CENTRAL SCHOOL</p> <p><input type="checkbox"/> SECONDARY SCHOOL.</p> <p><b>REGION V</b></p> <p>S- 85. CATANDUANES NATIONAL HIGH SCHOOL (Main)</p> <p>S- 86. SAN MIGUEL RURAL HIGH SCHOOL</p> | <p>S- 87. BAGAS RURAL HIGH SCHOOL</p> <p>S- 88. RAGAMANOC HIGH SCHOOL</p> <p>S- 89. CARAMORAN RURAL HIGH SCHOOL</p> <p>S- 90. BATO RURAL HIGH SCHOOL</p> <p>S- 91. GIGMOTO RURAL HIGH SCHOOL</p> <p>S- 92. TAHUGOC NATIONAL HIGH SCHOOL</p> <p>S- 95. LABAP NATIONAL HIGH SCHOOL</p> <p>S- 96. TAPAYAS HIGH SCHOOL</p> <p>S- 98. BARCELONA NATIONAL HIGH SCHOOL</p> <p>S- 99. STO. NIÑO NATIONAL HIGH SCHOOL</p> <p>AS- 21. CATANDUANES NATIONAL HIGH SCHOOL (Annex)</p> <p>AS- 22. MORO HIGH SCHOOL</p> <p>AS- 23. BALENO NATIONAL HIGH SCHOOL</p> <p>AS- 24. BALUD NATIONAL HIGH SCHOOL</p> <p>AS- 25. PERPETUAL HELP HIGH SCHOOL</p> |
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**LEGEND :** ● ELEMENTARY SCHOOL.  
 SECONDARY SCHOOL.



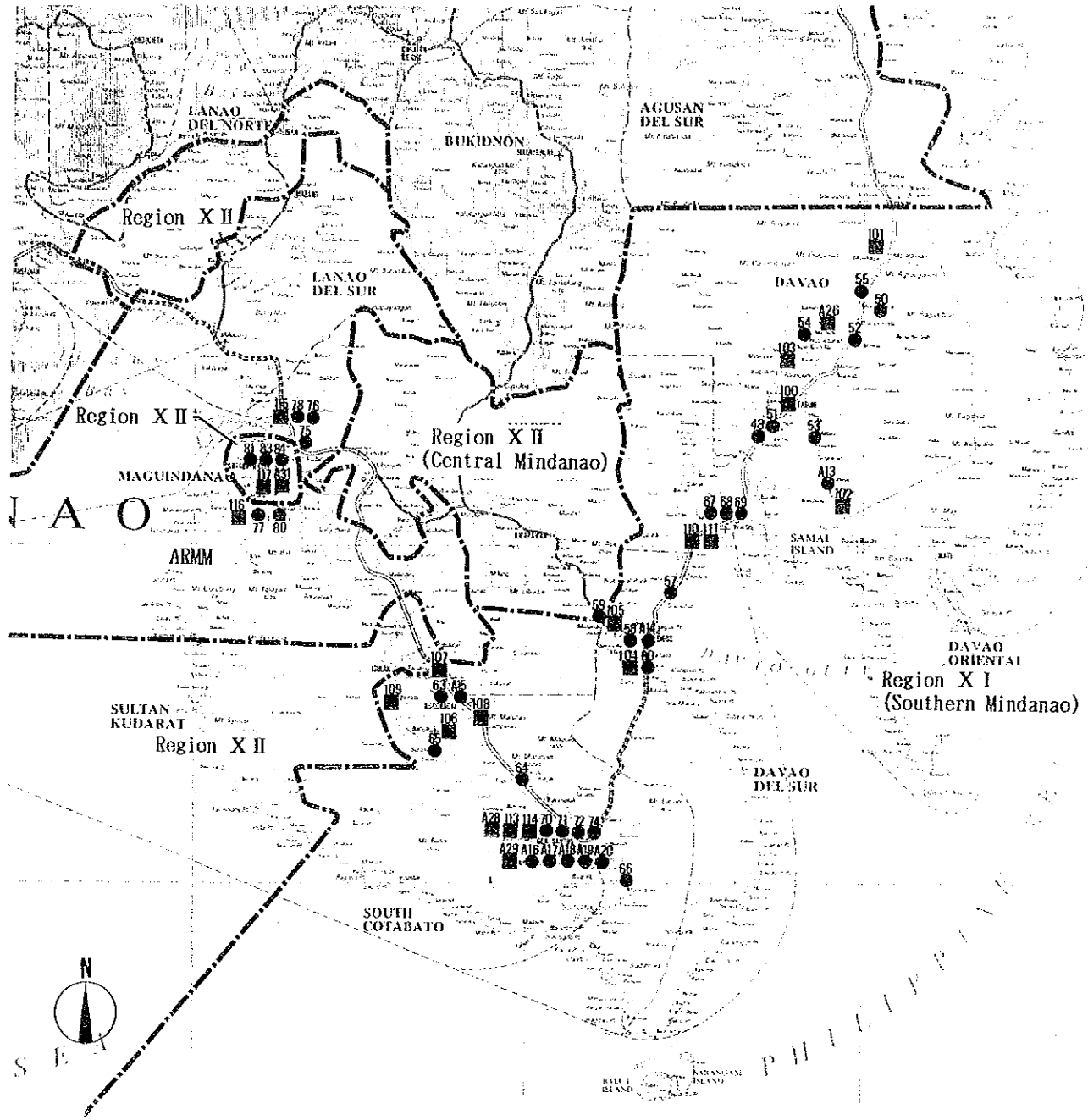
## Project Location Map (2)



| □ ELEMENTARY SCHOOL<br>REGION XI  | E- 67. WAA ELEMENTARY SCHOOL<br>E- 68. DON JUAN DELA CRUZ ELEMENTARY SCHOOL<br>E- 69. BASTIDA ELEMENTARY SCHOOL<br>E- 70. DADIANGAS WEST CENTRAL ELEM. SCHOOL<br>E- 71. CAHILSOT ELEMENTARY SCHOOL<br>E- 72. P. ORINGO ELEMENTARY SCHOOL<br>E- 74. SAAVEDRA SAWAY ELEMENTARY SCHOOL<br>AE-13. KINGKING CENTRAL ELEMENTARY SCHOOL<br>AE-14. RUPARAN ELEMENTARY SCHOOL<br>AE-15. KORONADAL I CENTRAL ELEMENTARY SCHOOL<br>AE-16. UPPER TAMBLER ELEMENTARY SCHOOL<br>AE-17. ROMANA ACHARON ELEMENTARY SCHOOL<br>AE-18. FATIMA ELEMENTARY SCHOOL<br>AE-19. P. ACHARON SR. ELEMENTARY SCHOOL<br>AE-20. BANTISIL ELEMENTARY SCHOOL<br>ARMM<br>E- 75. SIMUAY JUNCTION CENTRAL ELEM. SCHOOL | E- 76. SARMIENTO CENTRAL SCHOOL<br>E- 77. DALICAN PILOT ELEMENTARY SCHOOL<br>E- 78. PARANG CENTRAL SCHOOL<br>E- 80. TENORIO ELEMENTARY SCHOOL<br>REGION XII<br>E- 81. COTABATO CITY ELEM. SCH., Poblacion V<br>E- 83. NOTRE DAME VILLAGE ELEM. SCH., Pob. VI<br>E- 84. SERO CENTRAL ES., Rosary Heights IV | □ SECONDARY SCHOOL<br>REGION XI<br>S-100. DAVAO NATIONAL HIGH SCHOOL<br>S-101. MONKAYO NATIONAL HIGH SCHOOL<br>S-102. BONGABONG NATIONAL HIGH SCHOOL<br>S-103. ASUNCION NATIONAL HIGH SCHOOL<br>S-104. HAGONOY NATIONAL HIGH SCHOOL<br>S-105. MARBER NATIONAL HIGH SCHOOL<br>S-106. BANGA HIGH SCHOOL<br>S-107. TANTANGAN NATIONAL HIGH SCHOOL<br>S-108. MALTANA HIGH SCHOOL<br>S-109. SAN NIGUEL NATIONAL HIGH SCHOOL<br>S-110. MABINI NATIONAL HIGH SCHOOL<br>S-111. BUSTAMANTE NATIONAL HIGH SCHOOL<br>S-113. LAGAO NATIONAL HIGH SCHOOL<br>S-114. LABANGAL NATIONAL HIGH SCHOOL<br>AS-26. MANAT NATIONAL HIGH SCHOOL<br>AS-28. ALABEL NATIONAL HIGH SCHOOL<br>AS-29. CONEL NATIONAL HIGH SCHOOL<br>ARMM<br>S-115. PARANG HIGH SCHOOL (Annex)<br>S-116. CAMP SIONGCO HIGH SCHOOL<br>REGION XII<br>S-117. COTABATO CITY HIGH SCHOOL (Main)<br>AS-31. COTABATO CITY HIGH SCHOOL (Tamontaka) |
|---|---|--|--|
| E- 48. PANABO CENTRAL ELEMENTARY SCHOOL<br>E- 50. COMPOSTELA CENTRAL ELEMENTARY SCHOOL<br>E- 51. CARMEN CENTRAL ELEMENTARY SCHOOL<br>E- 52. NABUNTURAN CENTRAL ELEMENTARY SCHOOL<br>E- 53. CADUNAN ELEMENTARY SCHOOL<br>E- 54. NEW CORELLA ELEMENTARY SCHOOL<br>E- 55. LINDAN ELEMENTARY SCHOOL<br>E- 57. STA. CRUZ ELEMENTARY SCHOOL<br>E- 58. MATTI ELEMENTARY SCHOOL<br>E- 59. MATAHAO CENTRAL ELEMENTARY SCHOOL<br>E- 60. PADADA SOUTH ELEMENTARY SCHOOL<br>E- 63. KORONADAL II CENTRAL ELEMENTARY SCHOOL<br>E- 64. CROSSING RUBBER ELEMENTARY SCHOOL<br>E- 65. LAUNTONG ELEMENTARY SCHOOL<br>E- 66. ALABEL CENTRAL ELEMENTARY SCHOOL |   |  |  |

LEGEND : ● ELEMENTARY SCHOOL  
 ■ SECONDARY SCHOOL

## Project Location Map (2)



|   |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|
| <b>□ ELEMENTARY SCHOOL</b><br><b>REGION X I</b><br>E- 48. PANABO CENTRAL ELEMENTARY SCHOOL<br>E- 50. COMPOSTELA CENTRAL ELEMENTARY SCHOOL<br>E- 51. CARMEN CENTRAL ELEMENTARY SCHOOL<br>E- 52. NABUNTURAN CENTRAL ELEMENTARY SCHOOL<br>E- 53. CADUNAN ELEMENTARY SCHOOL<br>E- 54. NEW CORELLA ELEMENTARY SCHOOL<br>E- 55. LINDAN ELEMENTARY SCHOOL<br>E- 57. STA. CRUZ ELEMENTARY SCHOOL<br>E- 58. MATTI ELEMENTARY SCHOOL<br>E- 59. MATANAO CENTRAL ELEMENTARY SCHOOL<br>E- 60. PADADA SOUTH ELEMENTARY SCHOOL<br>E- 63. KORONADAL II CENTRAL ELEMENTARY SCHOOL<br>E- 64. CROSSING RUBBER ELEMENTARY SCHOOL<br>E- 65. LAMBUNTOG ELEMENTARY SCHOOL<br>E- 66. ALABEL CENTRAL ELEMENTARY SCHOOL |  |  |  | E- 67. MAA ELEMENTARY SCHOOL<br>E- 68. DON JUAN DELA CRUZ ELEMENTARY SCHOOL<br>E- 69. BASTIDA ELEMENTARY SCHOOL<br>E- 70. DADIANGAS WEST CENTRAL ELEM. SCHOOL<br>E- 71. CAHILSOT ELEMENTARY SCHOOL<br>E- 72. P. ORINGO ELEMENTARY SCHOOL<br>E- 74. SAAYEDRA SARAY ELEMENTARY SCHOOL<br>AE-13. KINGKING CENTRAL ELEMENTARY SCHOOL<br>AE-14. RUPARAN ELEMENTARY SCHOOL<br>AE-15. KORONADAL I CENTRAL ELEMENTARY SCHOOL<br>AE-16. UPPER TAMBLER ELEMENTARY SCHOOL<br>AE-17. ROMANA ACHARON ELEMENTARY SCHOOL<br>AE-18. FATIMA ELEMENTARY SCHOOL<br>AE-19. P. ACHARON SR. ELEMENTARY SCHOOL<br>AE-20. BANISIL ELEMENTARY SCHOOL<br>ARMM<br>E- 75. SIMCAY JUNCTION CENTRAL ELEM. SCHOOL |  |  |  | E- 76. SARMIENTO CENTRAL SCHOOL<br>E- 77. DALICAN PILOT ELEMENTARY SCHOOL<br>E- 78. PARANG CENTRAL SCHOOL<br>E- 80. TENORIO ELEMENTARY SCHOOL<br><b>REGION X II</b><br>E- 81. COTABATO CITY ELEM. SCH., Poblacion V<br>E- 83. NOTRE DAME VILLAGE ELEM. SCH., Pob. VII<br>E- 84. SERO CENTRAL ES., Rosary Heights IV |  |  |  | <b>□ SECONDARY SCHOOL</b><br><b>REGION X I</b><br>S-100. DAVAO NATIONAL HIGH SCHOOL<br>S-101. MONKAYO NATIONAL HIGH SCHOOL<br>S-102. BONGABONG NATIONAL HIGH SCHOOL<br>S-103. ASCUNCION NATIONAL HIGH SCHOOL<br>S-104. HAGOYON NATIONAL HIGH SCHOOL<br>S-105. MARBER NATIONAL HIGH SCHOOL<br>S-106. RASDA HIGH SCHOOL<br>S-107. TANTANGAN NATIONAL HIGH SCHOOL<br>S-108. MALTANA HIGH SCHOOL<br>S-109. SAN MIGUEL NATIONAL HIGH SCHOOL<br>S-110. MARIKI NATIONAL HIGH SCHOOL<br>S-111. MUSTAMANTE NATIONAL HIGH SCHOOL<br>S-113. LAGAO NATIONAL HIGH SCHOOL<br>S-114. LABANGAL NATIONAL HIGH SCHOOL<br>AS-26. MANAT NATIONAL HIGH SCHOOL<br>AS-28. ALABEL NATIONAL HIGH SCHOOL<br>AS-29. COSEL NATIONAL HIGH SCHOOL<br>ARMM<br>S-115. PARANG HIGH SCHOOL (Annex)<br>S-116. CAMP SINGCO HIGH SCHOOL<br><b>REGION X II</b><br>S-117. COTABATO CITY HIGH SCHOOL (Main)<br>AS-31. COTABATO CITY HIGH SCHOOL (Tantontaka) |  |  |  |
|---|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|

**LEGEND :** ● ELEMENTARY SCHOOL  
 □ SECONDARY SCHOOL



## **SUMMARY**





## SUMMARY

The Government of the Republic of the Philippines (hereinafter referred to as the Philippines) established the Medium-term Philippine Development Plan 1987-1992 and the Updates of the Philippine Development Plan 1990-1992 and has been making every effort to improve the country's educational situation by strengthening education management and improving educational facilities. As a result, the number of elementary and secondary school children increased from 13.1 million in 1987 to 15.1 million in 1992. However, due to the two large typhoons that devastated the country in 1987, a great deal of damage was inflicted on school facilities. Thus, the Government of Japan has been providing grant aid cooperation to the Project for Constructing Primary and Secondary Schoolbuildings that aims at building schoolbuildings with typhoon-resistant prefabricated structures for 360 schools located in the areas most severely damaged by the typhoons. Phase V of the project will be completed in fiscal year 1993.

The Government of the Philippines is preparing the New Medium-term Philippine Development Plan 1993-1998 and, in particular, is willingly preparing the foundation for elementary education aimed at furthering manpower development. In spite of the Government's efforts, there still remains a serious lack of school facilities. In addition to the damage to school facilities caused by such natural calamities as typhoons and the eruptions of volcanoes, the construction of new educational facilities to meet the annual school-age population increase of 3.0% is a foremost subject for the Government.

For the above reason, the government emphasized building many low-cost elementary and secondary schoolbuildings and established the Project for the Improvement of the Educational Facilities to build the schoolbuildings of approximately 630 schools during a six year period employing Philippine construction methods. The Government selected 30 schools in Region IV (Southern Tagalog) for the Phase I Project and requested grant aid cooperation from the Government of Japan. In response to this request, the Government of Japan decided to provide grant aid cooperation. An Exchange of Notes for Phase I of this project was made in August 1993 (to be completed in September 1994). Following this, the Government of the Philippines requested grant aid

cooperation from the Government of Japan for Phase II of the project which concerns the construction of 120 schools in Region V, XI, XII and the Autonomous Region of Muslim Mindanao (ARMM). In response, the Government of Japan decided to conduct a basic design study and had the Japan International Cooperation Agency (JICA) dispatched a Basic Design Study Team from November 9 to December 9, 1993. The Study Team held a series of discussions with the Department of Education, Culture and Sports (DECS) which is the project implementing agency and with officials from DECS regional offices of Regions V, XI, XII and ARMM. The Team also conducted field surveys in the Project Area.

Upon returning to Japan and after carefully examining the appropriateness of the Project, the Project management structure, and the effects of the Project based on the field survey results, the Study Team determined the facility size of each Project school and the most adequate types of equipment and materials to be used. As a result, the Team prepared the Draft Report of the Project and visited the Philippines from February 21 to March 2, 1994 to present the report, along with explanations, to the Philippine side.

Education in the Philippines comes under the supervision of DECS. The formal education system has four stages: 1) 1-3 years of pre-school (optional); 2) 6 years of elementary school; 3) 4 years of secondary school; 4) 3-8 years of higher education. Elementary school is compulsory. Both elementary and secondary schooling are free of charge. As the Philippine Government is placing priority on the development of manpower, it is placing great emphasis on the improvement of basic education in elementary and secondary schools.

As for elementary school education, the years 1990-2000 are set as the years for "Education For All." The target is to have 100% school participation by the year 2000.

As for secondary education, the 5-year Secondary Education Development Plan (SEDP) has been in progress since 1989. The aim of the plan is to improve secondary education through curriculum improvement, teacher training, and the improvement of school facilities.

The project is receiving grant aid cooperation from Japan and other foreign agencies, such as the Asian Development Bank. However, due to the financial condition of the Philippines, the frequent natural calamities and an annual 3% increase in the school-age population, the situation is such that there are still many inadequate school facilities.

The purpose of the Project is to improve the inadequacies of the school facilities and to build the schoolbuildings of 117 schools (79 elementary and 38 secondary schools) in Regions V, XI, XII and ARMM with reinforced concrete structures employing Philippine construction methods. In the Basic Design, 4 standard schoolbuilding types for elementary schools and secondary schools, having different numbers of classrooms were set up and a proper type was selected from the standard types according to size, needs, and the site conditions of each Project school.

The Project's elementary and secondary schools were selected by the Philippine side by giving priority to those seriously lacking classrooms. Schools which may receive financial assistance from other countries or international organizations are not included in the Project.

Following are the summaries of the schoolbuildings to be built and the equipment units to be provided by the Project:

#### 1. Summary of Schoolbuildings

|                    | Building Type | Features  | Area                  |
|--------------------|---------------|---|-----------------------|
| Elementary Schools | A Type        | Classrooms (3) + Toilet                               | 239.45 m <sup>2</sup> |
|                    | B Type        | Classrooms (4) + Toilet                               | 305.95 m <sup>2</sup> |
|                    | C Type        | Classrooms (5) + Toilet                               | 372.45 m <sup>2</sup> |
|                    | D Type        | Classrooms (6/2 stories) + Toilet                     | 611.15 m <sup>2</sup> |
|                    | C+A Type      | Classrooms (8) + Toilet                               | 571.95 m <sup>2</sup> |
|                    | C+B Type      | Classrooms (9) + Toilet                               | 638.45 m <sup>2</sup> |
| Secondary Schools  | A Type        | Classrooms (3) + Science Laboratory, Toilet           | 350.27 m <sup>2</sup> |
|                    | B Type        | Classrooms (4) + Science Laboratory, Toilet           | 416.77 m <sup>2</sup> |
|                    | C Type        | Classrooms (5) + Science Laboratory, Toilet           | 483.27 m <sup>2</sup> |
|                    | D Type        | Classrooms (6/2 stories) + Science Laboratory, Toilet | 721.97 m <sup>2</sup> |
|                    | C+A Type      | Classrooms (8) + Science Laboratory, Toilet           | 682.77 m <sup>2</sup> |
|                    | C+B Type      | Classrooms (9) + Science Laboratory, Toilet           | 749.27 m <sup>2</sup> |

•One classroom is to accommodate 40 elementary school students or 42 secondary school students.  
 •One separate toilet will be built at each primary school. One separate toilet and science laboratory will be built at each secondary school. However, two secondary schools that have already have science laboratories through the aid of the Asian Development Bank will only have toilets built.

## 2. Summary of Equipment

| Equipment                      | School Type       | Room Type/<br>Class Name | Equipment Item   |
|--------------------------------|-------------------|--------------------------|--|
| Academic Equipment             | Elementary School | Classroom                | Teacher's Desk & Chair, Student's Chair-desks (large, medium & small), Teacher's Filing Cabinet, Student's Closets, Blackboard, Bulletin Board |
|                                | Secondary School  | Classroom                | Teacher's Desk & Chair, Student's Chair-desks, Teacher's Filing Cabinet, Student's Closets, Blackboard, Bulletin Board                         |
|                                |                   | Science Laboratory       | Experiment Workbenches, Student's Closets, Demonstration Table, Stools, Blackboard, Bulletin Board, Storage Shelve, Steel Shelve               |
| Science Laboratory Instruments | Secondary School  | General Science          | Platform Balance, Anemometer, Hand Lens, Magnetic Compass, Stop Watch, Mercury Thermometer   |
|                                |                   | Biology                  | Compound Microscope, Slide Glass, Cover Glass  |
|                                |                   | Chemistry                | Triple Beam Balance  |
|                                |                   | Physics                  | Dynamic Carts, Electroscope, Prism Set, Multitester, Logic Gates, Tuning Fork Set and other miscellaneous instruments                          |

Science laboratory instruments will not be provided to the Project's twelve secondary schools that was included in the Secondary Education Instructional Equipment Program (Phase II) or that received aid from the Asian Development Bank.

The main characteristic of the Project is to construct the schoolbuildings of 117 schools in a short period of time on the four widely scattered islands in Region V (Southern Luzon, Masbate, Catanduanes), Regions XI, XII and ARMM in Mindanao Island. Accordingly, it will be necessary to draw up an appropriate construction schedule and management plan. It is planned that all science laboratory instruments and part of building construction materials will be procured in Japan and that all other building construction materials and equipment will be procured in the Philippines. The selection of materials and equipment was conducted by carefully taking into consideration the easy maintenance of the facilities.

The Project implementing agency's budget that will be necessary for the maintenance and management of elementary and secondary schools is distributed to the Department of Public Works and Highways (DPWH) by DECS according to each school principal's request. However, the alterations in June 1994 will allow DECS to allot the appropriate budget to the schools, according to their size, through its regional offices. As the schoolbuildings to be built in the project are to be built on already existing school sites, the management and

operations will only be an extension to the present system.

The maintenance of management costs were set at a minimum in this project. An increase in the number of teachers will be necessary to cope with the additional classrooms. There are to be 510 classrooms in this project. A teacher's average annual income is 40,000 Pesos and the necessary budget for the increase of teachers will be 20.40 million Pesos. As this is 0.06 % of DECS's budget for 1993, it is thought to be sufficient.

The implementation of the Project will have the following effects:

(1) Increased Opportunities for Children to Attend School

A total of 546 classrooms (334 for elementary schools and 212, including 36 science laboratories, for secondary schools) will be constructed under the Project. These classrooms will accommodate 20,752 students. As a result, this Project will represent a significant contribution towards increasing the opportunities for children to attend school.

(2) Contribution to Area Residents

The Project's school facilities will not only be used for formal education purposes (including two or three shift classes), it will also be used for non-formal education as well as for places of refuge for area residents during periods of natural calamities and for meetings. Such additional use of the Project's school facilities will be a beneficial contribution to the area residents.

(3) Activation of Rural Economies

The construction of many schoolbuildings in the rural areas of the Philippines will provide employment opportunities for rural residents. The local procurement of construction materials and equipment other than science laboratory instruments will make a substantial contribution towards stimulating the rural economies of the Philippines.

#### (4) Transfer of Architectural Technology

As a part of the construction management work under the Project, construction schedule management and quality control management on-the-job training will be provided to the local consultants and to the architectural engineers of the subcontractors. As the result of this training, Project construction will contribute immensely to the transfer of technology to the Philippine architectural engineers.

In view of the above, it is expected that the implementation of the Project will result in bringing about beneficial effects in various fields and is deemed to be appropriate and extremely worthwhile to carry out the Project with Japanese grant aid cooperation.

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## **CHAPTER 1. INTRODUCTION**



## CHAPTER 1 INTRODUCTION

The Government of the Philippines established the Medium-term Philippine Development Plan (1987-1992) and has made an effort to build a foundation for the country's manpower development. Due to the annual occurrence of natural hazards, such as typhoons, and an annual population increase rate of 2.4%, the country still lacks 12,914 classrooms (8,287 for elementary schools; 4,627 for secondary schools). Thus, the Government launched the Project for the Improvement of the Education Facilities to construct schoolbuildings for approximately 630 schools throughout the country using domestic construction methods within a 6-year period. Following the Phase I Project in the Southern Tagalog Region (scheduled to be completed by September 1993), the Government selected Regions V, XI, XII and ARMM as the Phase II Project and requested the Government of Japan for grant aid to construct the schoolbuildings in those regions.

Based on the request, JICA dispatched (for the period from November 9 through December 9, 1993) to the Philippines the Basic Design Study Team headed by Mr. Fumio Kikuchi, Deputy Director, Procurement Dept., Consultant Contract Division (Note: Please refer to Appendices 2, 3, 4, and 5 for information concerning the members of the Study Team, the Study schedule, and members of concerned personnel of the Government of the Philippines, and the Minutes of Discussions).

The Basic Study Team and members of the Philippine side held a series of meetings. The Study Team conducted a site study of the Phase II Project schools and their related facilities and engaged in the collection of necessary data. The Team also confirmed such matters as the range of cooperation by the Government of Japan and the undertakings to be borne by the Philippine side.

Upon returning to Japan, and after reviewing the results of the field study, the Study Team determined the size of each schoolbuilding, prepared a list of appropriate and essential classroom equipment and materials, made a rough estimate of the Project cost, prepared the Project construction plan, and the results were written up in the Basic Design Draft Report.

JICA sent to the Republic of the Philippines a draft report explanation team headed by Mr. Senichi Kimura, Deputy Director, Second Basic Design Study Division, Grant Aid Study & Design Department, JICA from February 21 to March 2, 1994. The team held a series of discussions with officials concerned from the Government of the Philippines on the Basic Design Study Draft Report. The matters agreed upon at the discussions were written up in the Minutes of Discussions and were signed by both sides on February 24, 1994.

Based on the above, this report compiles information pertaining to schoolbuilding sizes, the basic design, and the Project construction plan. This report also provides an evaluation of the Project and makes certain recommendations.

## **CHAPTER 2. BACKGROUND OF THE PROJECT**





## CHAPTER 2 BACKGROUND OF THE PROJECT

### 2-1 Education Situations in the Philippines

#### (1) Present Education Situations in the Philippines

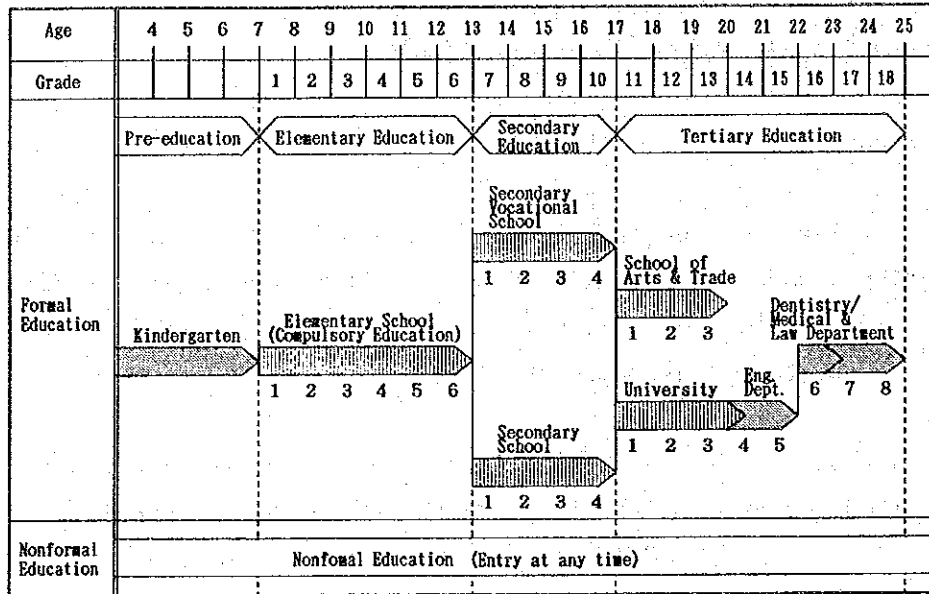
Starting from the 16th century and lasting for four centuries, the Philippines was under the rule of Spain, the United States of America, and Japan. Even now the education system in the Philippines is strongly influenced by the Spanish and American systems.

The major education system introduced by the Americans was the 7-4-4 centralized education system -- 7 years of elementary education, 4 years of secondary education, and 4 years of higher education -- with free elementary education, the establishment of pilot schools, and coeducation.

The present system is 6 years of elementary school education, 4 years of secondary school education and then on to a university. Recently, the decentralization of the education system has been attempted. The school year in the Philippines is from June through May of the following year.

Elementary education is free of charge, and since 1988, secondary education has been also free and all local public elementary and secondary schools have been nationalized and placed under the administration of the central government. Apart from the above-mentioned formal education, non-formal education is also free. Basic reading and writing skills, mathematics and technical skills are taught to those youths who could not receive formal education. The courses can be taken at any time. The Philippine education system is shown in Table 2-1.

Table 2-1. The Philippine Education System



1) Elementary School Education

According to Article XIV of the Constitution mandated in 1987, elementary school education was to be free and compulsory. The participation rate is high, being 95.2% in 1990. The Philippine Government is aiming at 100% participation rate by the year 2000, and at improving the quality of education. There was a total of 34,570 schools in 1992 (32,630 public; 1,940 private) with 10.68 million students (9.89 million public; 0.79 million private). The number of children reaching school age is increasing by 3% every year. Thus, there needs to be an increase of nearly 8,000 classrooms every year. However, due to the government's difficult financial situation and damages caused to the schools by natural disasters, such as typhoons, it is very difficult to increase the number of educational facilities. The Department of Education, Culture and Sports (hereinafter referred to as DECS) is therefore coping with the situation by having double and triple shift school systems, double grades, addition of one class, use of other facilities and temporary classrooms. There are 296,399 teachers in the public schools, but they cannot cope with the increasing number of students. In 1991, there was a shortage of 9,000 teachers. To handle this problem, DECS increased the number of classes per teacher, reassigned teachers, and called on administrative personnel to conduct classes.

Although participation rate may be high, the conditions for education are unsatisfactory. Thus, only 66 out of 100 students entering grade 1 may get to finish sixth grade. The rate of school leavers is 9.06% which shows the need for improving the quality of education. Table 2-2 shows the number of schools, students and teachers. Table 2-3 shows the education performance indicators.

Table 2-2 Number of Elementary Schools, Students and Teachers(1992)

| Region      | Number of Schools |         |          | Number of Students |         |            | Number of Teachers |         |          |
|-------------|-------------------|---------|----------|--------------------|---------|------------|--------------------|---------|----------|
|             | Public            | Private | Subtotal | Public             | Private | Subtotal   | Public             | Private | Subtotal |
| NCR         | 466               | 339     | 805      | 879,102            | 310,696 | 1,189,798  | 26,813             | N/A     | N/A      |
| CAR         | 1,107             | 41      | 1,148    | 180,889            | 23,615  | 204,504    | 6,130              | N/A     | N/A      |
| Region I    | 2,202             | 127     | 2,329    | 577,472            | 25,038  | 602,510    | 19,641             | N/A     | N/A      |
| Region II   | 1,757             | 58      | 1,815    | 394,660            | 13,942  | 408,602    | 11,709             | N/A     | N/A      |
| Region III  | 2,478             | 198     | 2,676    | 952,715            | 97,064  | 1,049,779  | 27,625             | N/A     | N/A      |
| Region IV   | 3,930             | 473     | 4,403    | 1,340,903          | 106,759 | 1,447,662  | 39,044             | N/A     | N/A      |
| Region V    | 2,826             | 76      | 2,902    | 759,380            | 24,053  | 783,433    | 23,267             | N/A     | N/A      |
| Region VI   | 3,020             | 126     | 3,146    | 924,119            | 36,307  | 960,426    | 29,571             | N/A     | N/A      |
| Region VII  | 2,556             | 86      | 2,642    | 722,408            | 34,731  | 757,139    | 21,551             | N/A     | N/A      |
| Region VIII | 3,042             | 27      | 3,069    | 564,081            | 10,424  | 574,505    | 18,985             | N/A     | N/A      |
| Region IX   | 1,795             | 44      | 1,839    | 444,935            | 12,044  | 456,979    | 13,346             | N/A     | N/A      |
| Region X    | 2,420             | 93      | 2,513    | 627,128            | 23,796  | 650,924    | 18,156             | N/A     | N/A      |
| Region X I  | 2,224             | 160     | 2,384    | 756,517            | 47,690  | 804,207    | 20,648             | N/A     | N/A      |
| Region X II | 1,212             | 82      | 1,294    | 358,563            | 15,700  | 374,263    | 10,390             | N/A     | N/A      |
| ARMM        | 1,595             | 10      | 1,605    | 411,544            | 3,474   | 415,018    | 9,523              | N/A     | N/A      |
| Total       | 32,630            | 1,940   | 34,570   | 9,894,416          | 785,333 | 10,679,749 | 296,399            | N/A     | N/A      |

Note) N/A: No data available  
Source: DECS-Office of Planning Service (OPS)

Table 2-3 Education Performance Indicators of the Public Elementary Schools (1990)

| Region      | Participation Rate | Cohort Survival Rate | Retention Rate | Graduation Rate | Dropout Rate | Completion Rate | Transition Rate | Repetition Rate | Rate of School Leavers | Gross Teacher-Pupil Ratio |
|-------------|--------------------|----------------------|----------------|-----------------|--------------|-----------------|-----------------|-----------------|------------------------|---------------------------|
| NCR         | 80.85%             | 89.51%               | 96.57%         | 99.38%          | 0.45%        | 88.96%          | 98.87%          | 1.26%           | 3.63%                  | 1:33                      |
| CAR         | 95.76%             | 61.33%               | 86.65%         | 95.84%          | 0.73%        | 58.78%          | 90.83%          | 2.62%           | 13.02%                 | 1:30                      |
| Region I    | 99.36%             | 82.96%               | 97.41%         | 98.60%          | 0.82%        | 81.80%          | 99.50%          | 1.90%           | 3.28%                  | 1:29                      |
| Region II   | 89.73%             | 68.13%               | 92.00%         | 98.68%          | 0.93%        | 67.23%          | 93.29%          | 1.37%           | 7.68%                  | 1:34                      |
| Region III  | 99.88%             | 81.97%               | 96.58%         | 98.41%          | 0.94%        | 80.67%          | 97.47%          | 0.78%           | 3.66%                  | 1:35                      |
| Region IV   | 99.41%             | 77.29%               | 92.90%         | 96.72%          | 1.16%        | 74.75%          | 94.99%          | 1.50%           | 7.07%                  | 1:35                      |
| Region V    | 98.15%             | 65.64%               | 92.13%         | 97.18%          | 2.05%        | 63.79%          | 93.56%          | 2.84%           | 8.65%                  | 1:33                      |
| Region VI   | 92.61%             | 65.91%               | 89.61%         | 94.95%          | 1.99%        | 62.58%          | 92.92%          | 2.66%           | 11.41%                 | 1:31                      |
| Region VII  | 93.69%             | 63.97%               | 91.03%         | 95.05%          | 3.26%        | 60.81%          | 91.94%          | 3.71%           | 10.33%                 | 1:33                      |
| Region VIII | 92.89%             | 55.68%               | 88.14%         | 95.28%          | 3.21%        | 53.06%          | 89.74%          | 1.96%           | 11.78%                 | 1:28                      |
| Region IX   | 97.87%             | 49.54%               | 83.89%         | 95.36%          | 2.22%        | 47.24%          | 86.20%          | 2.81%           | 16.26%                 | 1:34                      |
| Region X    | 95.76%             | 82.42%               | 86.82%         | 95.86%          | 2.06%        | 59.83%          | 88.40%          | 2.90%           | 14.47%                 | 1:35                      |
| Region X I  | 97.43%             | 62.64%               | 88.42%         | 97.18%          | 1.73%        | 60.88%          | 92.01%          | 1.89%           | 11.33%                 | 1:37                      |
| Region X II | 107.24%            | 50.12%               | 86.81%         | 94.11%          | 2.40%        | 47.17%          | 88.93%          | 1.64%           | 12.83%                 | 1:39                      |
| ARMM        | -                  | -                    | -              | -               | -            | -               | -               | -               | -                      | -                         |
| Total       | 95.26%             | 68.15%               | 91.25%         | 96.83%          | 1.69%        | 65.99%          | 93.47%          | 2.05%           | 9.06%                  | 1:33                      |

Note) CAR: Cordiller Administrative Region  
ARMM: Autonomous Region in Muslim Mindanao  
Source: DECS-Office of Planning Service (OPS)

A new elementary school curriculum was introduced in 1985. Compared to the former curriculum, emphasis was placed on basic skills, such as reading, writing, calculating, building self-consciousness as a Filipino, and the development of human qualities. Furthermore, to improve the level of English, mathematics and science, classes for these subjects were increased by 20-40 minutes a day since 1993.

Elementary school education is now being conducted in three languages: the official languages of English and Filipino and the regional language. Although it would be desirable to implement bilingual education (Tagalog-English), to do so at the present time would impose an undue hardship on teacher and student alike. Table 2-4 shows the elementary school curriculum.

Table 2-4 The Elementary School Curriculum

| Subject  | Grade      |            |            |            |            |            |
|--|------------|------------|------------|------------|------------|------------|
|  | 1          | 2          | 3          | 4          | 5          | 6          |
| Character Building                                     | 20         | 20         | 20         | 20         | 20         | 20         |
| Tagalog Language                                       | 60         | 60         | 60         | 60         | 60         | 60         |
| English Language                                       | 80         | 80         | 80         | 80         | 80         | 80         |
| Math   | 60         | 60         | 60         | 40         | 40         | 40         |
| Citizen and Culture<br>(History/Geography/Work Ethics) | 40         | 40         | 40         |            |            |            |
| (History/Geography/Civics)                             |            |            |            | 40         | 40         | 40         |
| Science and Health                                     | 40         | 40         | 40         | 40         | 40         | 40         |
| Art and Physical Education                             |            |            | 40         | 40         | 40         | 40         |
| H.E. and Livelihood Education                          |            |            |            | 40         | 60         | 60         |
| <b>Total</b>   | <b>300</b> | <b>300</b> | <b>340</b> | <b>360</b> | <b>380</b> | <b>380</b> |

## 2) Secondary Education

Secondary education was popularized in the 1940s; however, most of the schools were run by the regional government while a few vocational schools were run by the national government. In the 1950s, some lower secondary schools were established by municipalities. In 1964-65, experimental barangay secondary schools were approved in order to provide opportunities for barangay children who were unable to attend secondary schools ran by the national and regional government. Thus, secondary schools were run by the country, regional government, municipalities and barangays and were named according to the operating bodies. However, due to the free secondary school policy, the regulations were changed in June 1987 (effective June 1988) by Administrative Order 189 which nationalized all

public schools. The schools came under DECS and the salaries for the teachers were to be paid by the central government.

In 1992, there were 5,711 secondary schools (3,514 public; 2,197 private) with 4.42 million students (2.88 million public; 1.54 million private).

Since secondary education became free, there has been an average annual increase of 4.6% students (170,000) in the four years from 1988 to 1992.

An additional 4,000 classrooms have become necessary every year.

Furthermore, the barangay secondary schools that were using elementary school facilities needed to have their own school facilities. Thereby, same as for elementary schools, secondary schools have the problem of inadequacy of school facilities.

There are 89,063 public school teachers. However, in 1991, there was a shortage of about 3,000 teachers. The same as for elementary schools, the increase in the number of teachers is not adequate to cope with the increasing number of students.

Table 2-5 shows the number of secondary schools, students and teachers.

Table 2-6 shows the education performance indicators.

The same as for elementary schools, bilingual education is being conducted in Filipino and English. The education level is similar to Japanese lower and higher secondary schools but is shorter by two years. As six years of education is crammed into four, the contents are rich and the level is high but it places a great burden on the students and results in a high rate of school leavers.

According to the Secondary Education Development Program (SEDP) that was put into operation in 1989, a new curriculum was introduced as shown in Table 2-7.

Table 2-5 Number of Secondary Schools, Students and Teachers (1992)

| Region      | Number of Schools |         |          | Number of Students |           |           | Number of Teachers |         |          |
|-------------|-------------------|---------|----------|--------------------|-----------|-----------|--------------------|---------|----------|
|             | Public            | Private | Subtotal | Public             | Private   | Subtotal  | Public             | Private | Subtotal |
| NCR         | 103               | 245     | 348      | 366,800            | 246,938   | 613,738   | 12,692             | N/A     | N/A      |
| CAR         | 106               | 79      | 185      | 49,991             | 89,259    | 89,250    | 1,699              | N/A     | N/A      |
| Region I    | 360               | 165     | 525      | 219,189            | 83,741    | 302,930   | 6,343              | N/A     | N/A      |
| Region II   | 148               | 91      | 239      | 109,831            | 61,990    | 171,821   | 3,106              | N/A     | N/A      |
| Region III  | 279               | 201     | 477      | 262,177            | 209,213   | 471,390   | 8,097              | N/A     | N/A      |
| Region IV   | 484               | 354     | 838      | 389,590            | 270,051   | 659,641   | 12,377             | N/A     | N/A      |
| Region V    | 332               | 148     | 480      | 201,730            | 89,295    | 291,025   | 6,308              | N/A     | N/A      |
| Region VI   | 377               | 148     | 525      | 328,610            | 86,551    | 415,161   | 11,219             | N/A     | N/A      |
| Region VII  | 205               | 168     | 373      | 156,224            | 138,009   | 294,233   | 4,234              | N/A     | N/A      |
| Region VIII | 301               | 74      | 375      | 152,841            | 44,626    | 197,467   | 4,880              | N/A     | N/A      |
| Region IX   | 152               | 63      | 215      | 144,492            | 32,037    | 176,529   | 3,541              | N/A     | N/A      |
| Region X    | 236               | 166     | 402      | 155,595            | 84,785    | 240,380   | 5,039              | N/A     | N/A      |
| Region XI   | 222               | 175     | 397      | 198,790            | 95,599    | 294,389   | 5,598              | N/A     | N/A      |
| Region XII  | 141               | 91      | 232      | 96,481             | 51,190    | 147,671   | 2,832              | N/A     | N/A      |
| ARMM        | 71                | 29      | 100      | 46,019             | 10,005    | 56,024    | 1,098              | N/A     | N/A      |
| Total       | 3,514             | 2,197   | 5,711    | 2,878,360          | 1,543,289 | 4,421,649 | 89,063             | N/A     | N/A      |

Note) N/A: No data available  
Source: DECS-Office of Planning Service (OPS)

Table 2-6 The Education Performance Indicators of the Public Secondary Schools (1990)

| Region      | Participation Rate | Cohort Survival Rate | Retention Rate | Graduation Rate | Dropout Rate | Completion Rate | Transition Rate | Repetition Rate | Rate of School Leavers | Gross Teacher-Pupil Ratio |
|-------------|--------------------|----------------------|----------------|-----------------|--------------|-----------------|-----------------|-----------------|------------------------|---------------------------|
| NCR         | 42.08%             | 78.86%               | 90.84%         | 94.97%          | 7.98%        | 74.89%          | 78.45%          | 2.44%           | 9.00%                  | 1:27                      |
| CAR         | 33.33%             | 69.06%               | 88.79%         | 93.97%          | 6.64%        | 64.90%          | 67.78%          | 2.78%           | 10.79%                 | 1:26                      |
| Region I    | 44.55%             | 85.41%               | 92.73%         | 97.48%          | 4.38%        | 83.26%          | 74.24%          | 0.86%           | 7.61%                  | 1:31                      |
| Region II   | 29.49%             | 72.55%               | 85.83%         | 95.04%          | 5.78%        | 68.95%          | 62.65%          | 1.33%           | 12.43%                 | 1:28                      |
| Region III  | 30.43%             | 78.34%               | 88.60%         | 96.69%          | 5.68%        | 75.75%          | 60.21%          | 1.29%           | 10.14%                 | 1:36                      |
| Region IV   | 32.65%             | 79.69%               | 89.51%         | 93.65%          | 6.73%        | 74.63%          | 59.47%          | 1.82%           | 9.87%                  | 1:31                      |
| Region V    | 30.97%             | 86.40%               | 81.26%         | 93.65%          | 6.38%        | 62.18%          | 64.09%          | 1.98%           | 16.44%                 | 1:33                      |
| Region VI   | 45.01%             | 89.82%               | 86.69%         | 89.07%          | 6.22%        | 80.00%          | 84.75%          | 2.72%           | 12.60%                 | 1:33                      |
| Region VII  | 24.36%             | 63.92%               | 87.07%         | 92.08%          | 7.56%        | 58.84%          | 57.48%          | 3.48%           | 15.36%                 | 1:36                      |
| Region VIII | 30.79%             | 63.76%               | 84.93%         | 94.33%          | 9.08%        | 60.14%          | 72.76%          | 2.75%           | 15.89%                 | 1:31                      |
| Region IX   | 27.48%             | 64.07%               | 81.09%         | 92.60%          | 8.65%        | 59.33%          | 66.09%          | 2.36%           | 17.00%                 | 1:34                      |
| Region X    | 30.82%             | 66.27%               | 83.72%         | 91.96%          | 8.21%        | 60.94%          | 64.28%          | 2.74%           | 16.49%                 | 1:32                      |
| Region XI   | 33.61%             | 69.55%               | 86.12%         | 94.36%          | 7.38%        | 65.63%          | 65.90%          | 2.15%           | 13.24%                 | 1:34                      |
| Region XII  | 30.17%             | 74.91%               | 74.20%         | 87.50%          | 6.71%        | 65.55%          | 64.38%          | 2.74%           | 22.97%                 | 1:29                      |
| ARMM        | -                  | -                    | -              | -               | -            | -               | -               | -               | -                      | -                         |
| Total       | 33.82%             | 74.97%               | 86.61%         | 93.50%          | 6.89%        | 70.09%          | 67.42%          | 2.19%           | 12.74%                 | 1:31                      |

Note) Source: DECS-Office of Planning Service (OPS)

Table 2-7 Secondary School Curriculum

| Subject                             | Grade 1 |          | Grade 2 |          | Grade 3 |          | Grade 4 |          |
|-------------------------------------|---------|----------|---------|----------|---------|----------|---------|----------|
|                                     | Unit    | min./day | Unit    | min./day | Unit    | min./day | Unit    | min./day |
| Filipino                            | 1       | 40       | 1       | 40       | 1       | 40       | 1       | 40       |
| Araling Panlipunang PE/Health/Music | 1       | 40       | 1       | 40       | 1       | 40       | 1       | 40       |
| Values Education                    | 1       | 40       | 1       | 40       | 1       | 40       | 1       | 40       |
| English                             | 1       | 40       | 1       | 40       | 1       | 40       | 1       | 40       |
| Mathematics                         | 1       | 40       | 1       | 40       | 1       | 40       | 1       | 40       |
| Science & Technology                | 1.5     | 80       | 1.5     | 80       | 1.5     | 80       | 1.5     | 80       |
| Roma Economics                      | 1.5     | 80       | 1.5     | 80       |         |          |         |          |
| Technology                          |         |          |         |          | 2       | 80       | 2       | 80       |
| Total                               | 9       | 400      | 9       | 400      | 9.5     | 400      | 9.5     | 400      |

### 3) Teacher Training

There were 809 public and private universities and institutes of which 36 have teacher training courses for elementary schools, 87 have courses for secondary schools and 299 have both. Thus, 422 schools have some kind of teacher training course. About 49,000 students graduated from these courses in 1991.

To obtain teaching credentials after graduating, a student must pass the Board Examination for Teachers. In 1991, 14,848 students passed the examination.

The required courses and credits needed to become a elementary or secondary teacher are shown in Table 2.8

Table 2-8 Required Courses and Credits for Teacher Credentials

| Required Courses              | Elementary School Teacher | Secondary School Teacher |
|-------------------------------|---------------------------|--------------------------|
| General Education             | 107 Units                 | 63 Units                 |
| Professional Education        | 37                        | 32                       |
| Major/Field of Specialization | 0                         | 30 - 35                  |
| Total                         | 144 Units                 | 125 - 130 Units          |

### 4) Education Administration

Education administration in the Philippines is conducted by DECS. According to the educational laws of 1982 and the 1987 constitution, DECS is responsible for the operation of public elementary and secondary schools and public universities, and for the authorization and supervision of private schools.

The Office of Planning Service of DECS is responsible for planning. The Bureaux of Elementary and Secondary Education are responsible for developing the actual curriculum, instructing teachers, and for providing guidance concerning the construction of school facilities.



The agency responsible for implementing foreign-assisted projects is the Educational Development Project Implementing Task Force (hereinafter referred to as EDPITAF) which is attached agency of DECS.

The main body of DECS is located in Manila, with 15 Regional Offices, 126 School Division Offices. DECS organization chart is shown in Fig. 2-1.

#### 5) Education Budget

The 1992 education budget was about 34.5 billion pesos (172.5 billion yen). This was about 11.2% of the Government of the Philippine's total budget and, excluding the payment of debts, represents the largest percentage. From these figures it can be understood that the government is placing great emphasis on the country's educational policies. However, 70% of the budget goes towards paying the personnel expenses such as the teaching staff, leaving little for the improvement of educational facilities.

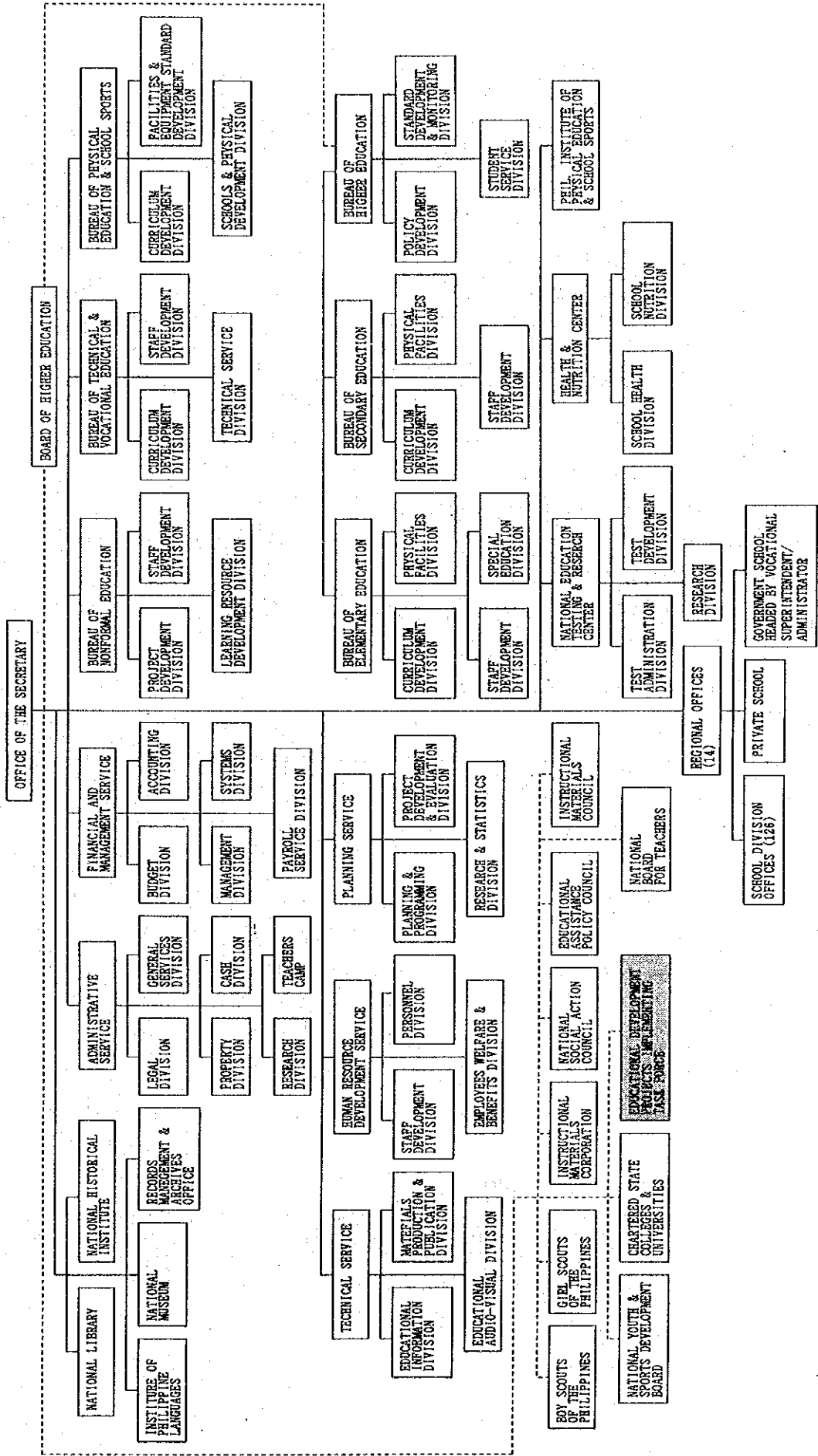
The percentage of education expenditures in relation to the Government's total expenditures from 1984 through 1992 are shown in Table 2-9.

Table 2-9 Budget of the Department of Education, Culture and Sports as a Percentage of the National Government Budget:1984 to 1992

| Fiscal Year | Budget (in million Peso) |          | Percentage(%) |
|-------------|--------------------------|----------|---------------|
|             | Government               | DECS     |               |
| 1984        | 92,107.0                 | 5,613.1  | 6.09          |
| 1985        | 92,511.0                 | 6,145.9  | 6.64          |
| 1986        | 115,102.0                | 8,712.2  | 7.57          |
| 1987        | 194,266.0                | 12,321.9 | 6.34          |
| 1988        | 162,250.0                | 15,100.3 | 9.31          |
| 1989        | 227,421.0                | 23,578.8 | 10.37         |
| 1990        | 255,780.0                | 28,177.8 | 11.02         |
| 1991        | 298,950.0                | 32,950.0 | 11.02         |
| 1992        | 308,370.0                | 34,530.0 | 11.20         |

Source: DECS-OPS

**Figure 2-1 DECS Organization Chart**



## **2-2 Outline of Related Projects**

### **2-2-1 National Development Plan**

The Government of the Philippines established the Medium-term Philippine Development Plan 1987-1992 to improve the standard of living and maintain the growing economy and society by restoring the country's economy, stabilizing prices, increasing income, leveling out regional differences, increasing job opportunities, increasing competitiveness in the industrial field, and improving the balance of international payments. The final objective of the plan is to decrease the low income group and improve the living standards of the Philippine people.

Due to frequent natural disasters and political instability, the country is facing economic problems, such as a drop in GNP growth and employment rate. Thus, the Medium-term Philippine Development Plan 1987-1992 was revised and the Update of the Philippine Development Plan 1990-1992 was launched.

The most important policy of the Government of the Philippines is the stabilization of the economy. But, more importance has been placed on manpower development to promote the development of industries. For this reason, the Government has been aiming to improve fundamental education, elementary and secondary education.

The new government under President Ramos, that came into power in June 1992, has been preparing the New Medium-term Philippine Development Plan 1993-1998 that will succeed the Medium-term Philippine Development Plan 1987-1992.

In the new plan, the following manpower development objects are clarified:

- 1) Meet basic minimum needs of the population.
- 2) Provide focused basic services to the more disadvantaged sectors.
- 3) Harness the country's human resources towards international competitiveness.

## 2-2-2 Education Related Projects

### (1) Elementary School Education: "Education For All" (EFA)

For the improvement of basic education, Presidential Ordinance No. 480 was announced in 1989. The term for the EFA project was to be from 1990 to 2000. The following objectives have been set for the improvement of basic education:

- The institutionalization of early childhood development as a basic service for all children in the country.
- The improvement in the quality and efficiency of primary education.
- The eradication of illiteracy.
- The provision of basic knowledge, skills and values that allows adults and out-of-school youth to improve the quality of their life and increase their opportunities to participate in the development process.

The primary goal of basic education is to meet basic learning needs or the knowledge, skills, attitudes and values necessary for people to survive, to improve the quality of their lives, and to continue learning. From 1990 to the year 2000, the education sector together with other sectors of society aims to provide basic education for all Filipinos.

One of the problems in elementary school education is the increase in the school-age population. There was about 3% increase from 9.90 million in 1988 to 10.20 million in 1989. Although the participation rate has increased from 91.87% in 1988 to 95.25% in 1989, the cohort survival rate in 1989 was 68%, the rate of school leavers was 7.59%, and the students' achievement rate was 55.1%. Thus, the objective is to decrease the rate of school leavers to 2.0%, increase the cohort survival rate by 80%, and the achievement rate to 75% by the year 2000. To achieve this, it is essential to secure a adequate number of classrooms. Thus, this project that concerns the construction of schoolbuildings is expected to greatly improve the educational environment.

Table 2-10 Educational Index Improvement Targets

| Region      | Participation Rate |       |       |        | Cohort Survival Rate |       |       |       | Achievement Rate |       |       |       | Rate of School Leavers |       |      |      |
|-------------|--------------------|-------|-------|--------|----------------------|-------|-------|-------|------------------|-------|-------|-------|------------------------|-------|------|------|
|             | 1989               | 1991  | 1995  | 2000   | 1989                 | 1991  | 1995  | 2000  | 1989             | 1991  | 1995  | 2000  | 1989                   | 1991  | 1995 | 2000 |
| NCR         | 99.99              | 99.99 | 99.99 | 100.00 | 93.09                | 93.20 | 93.65 | 94.20 | 60.61            | 63.90 | 70.47 | 78.69 | 2.80                   | 2.54  | 2.02 | 1.37 |
| CAR         | 99.99              | 99.99 | 99.99 | 100.00 | 64.46                | 65.76 | 70.99 | 77.53 | 55.75            | 59.33 | 66.47 | 75.39 | 12.63                  | 10.82 | 7.19 | 2.66 |
| Region I    | 99.99              | 99.99 | 99.99 | 100.00 | 80.52                | 81.16 | 83.70 | 86.88 | 56.19            | 59.73 | 66.82 | 75.69 | 6.22                   | 5.42  | 3.82 | 1.82 |
| Region II   | 92.67              | 93.40 | 96.34 | 100.00 | 69.06                | 70.18 | 74.64 | 80.21 | 50.29            | 54.18 | 61.96 | 71.68 | 8.07                   | 6.98  | 4.79 | 2.06 |
| Region III  | 99.99              | 99.99 | 99.99 | 100.00 | 80.67                | 81.30 | 83.82 | 86.97 | 60.00            | 63.32 | 69.97 | 78.28 | 4.14                   | 3.67  | 2.72 | 1.55 |
| Region IV   | 99.99              | 99.99 | 99.99 | 100.00 | 77.60                | 78.36 | 81.39 | 85.18 | 66.58            | 65.92 | 75.40 | 82.75 | 5.14                   | 4.51  | 3.25 | 1.68 |
| Region V    | 98.49              | 98.64 | 99.65 | 100.00 | 66.05                | 67.29 | 72.26 | 78.46 | 58.00            | 61.44 | 68.32 | 76.92 | 9.31                   | 8.02  | 5.45 | 2.23 |
| Region VI   | 97.87              | 98.08 | 98.94 | 100.00 | 64.62                | 65.92 | 71.13 | 77.63 | 46.83            | 50.92 | 59.10 | 69.33 | 9.62                   | 8.28  | 5.61 | 2.27 |
| Region VII  | 96.88              | 97.19 | 98.44 | 100.00 | 62.08                | 63.48 | 69.11 | 76.14 | 61.00            | 64.26 | 70.79 | 78.96 | 8.09                   | 6.99  | 4.80 | 2.07 |
| Region VIII | 98.57              | 98.71 | 99.29 | 100.00 | 55.45                | 57.13 | 63.87 | 72.29 | 51.39            | 55.21 | 62.86 | 72.42 | 7.98                   | 6.90  | 4.75 | 2.05 |
| Region IX   | 98.72              | 98.85 | 99.36 | 100.00 | 56.85                | 58.48 | 64.98 | 73.10 | 54.08            | 57.75 | 65.08 | 74.25 | 10.71                  | 9.20  | 6.18 | 2.41 |
| Region X    | 99.99              | 99.99 | 99.99 | 100.00 | 62.97                | 64.34 | 69.82 | 76.67 | 52.08            | 55.86 | 63.43 | 72.89 | 9.01                   | 7.77  | 5.29 | 2.19 |
| Region XI   | 99.99              | 99.99 | 99.99 | 100.00 | 63.09                | 64.45 | 69.91 | 76.73 | 54.85            | 58.47 | 65.72 | 74.78 | 9.20                   | 7.93  | 5.39 | 2.21 |
| Region XII  | 99.99              | 99.99 | 99.99 | 100.00 | 55.88                | 57.55 | 64.21 | 72.54 | 59.00            | 62.38 | 69.14 | 77.60 | 12.57                  | 10.77 | 7.16 | 2.66 |
| ARMM        | 99.69              | 99.72 | 99.85 | 100.00 | 37.45                | 39.89 | 49.36 | 61.80 | 41.07            | 45.50 | 54.35 | 65.41 | 16.04                  | 13.69 | 8.99 | 3.11 |
| National    | 99.05              | 99.50 | 99.69 | 100.00 | 68.70                | 69.19 | 73.75 | 80.00 | 55.18            | 60.00 | 66.88 | 75.00 | 7.59                   | 6.50  | 4.50 | 2.00 |

(2) Secondary School Education: Secondary Education Development Plan (SEDP) 1989-93

In order to improve the secondary school education, a 5-year Secondary Education Development Plan was introduced in 1989. The objective of the plan is to improve secondary education through the improvement of the curriculum, teacher training and the improvement of school facilities. To achieve this, aid is being provided by many countries including Japanese grant aid cooperation (For details, please refer to Section 3-2-3 Similar Projects and Relationship to Other Grant Aid Programs). Table 2-11 shows the target level of performance of the secondary education sector under the SEDP, and table 2-12 shows the Programs of various aid agencies.

Table 2-11 The Target Level of performance of the Secondary Education Sector under the SEDP

|                        | Present | Target |
|------------------------|---------|--------|
| Participation Rate     | 51.5%   | 60.0%  |
| Drop-out Rate          | 5.8%    | 3.0%   |
| Achievement Scores     | 43.0%   | 60.0%  |
| Cohort Survival Rate   | 72.0%   | 82.0%  |
| Textbook/Student Ratio | 1:7     | 1:1    |
| Teacher/Student Ratio  | 1:53    | 1:50   |

Table 2-12 Foreign Aided Projects for the Secondary Education Development Program (SEDP)

| Fund/Year              | Components   | Area                         | Details   |
|------------------------|--|------------------------------|---|
| ADB<br>1988-1994       | Facilities   | Nationwide                   | 680 school buildings including laboratory and furniture   |
|                        | Equipment  |                              | Equipment of math I-VI, science and IA/HE for 673 schools   |
|                        | Curriculum and instructional materials             |                              | Development & printing of instructional materials   |
|                        | Staff Development                                  |                              | In-service training: teachers & administrators training<br>Fellowship: 199 local fellowship of 3 months & 82 slots for short-term and 6 slots for long-term fellowships |
|                        | Assistance to private secondary education          |                              | Private school teachers & administrators training   |
|                        | Sector management, evaluation & reserch            |                              | Implementation of research topics   |
| AIDAB<br>1989-1992     | Teacher in-service training                        | II, VII, X                   | Australian advisers   |
|                        |  | National                     | Trainers and TTIs/RLSs staff training in Australia  |
|                        |  | II, VII, X                   | Financial assistance  |
|                        | Curriculum & management support services           | National                     | Australian advisers<br>In Australia training for Senior DECS officials  |
|                        | Science Equipment                                  | Nationwide                   | Provision of laboratory equipment for Chemical and Physics covering 122 schools   |
|                        |  | II, VII, X<br>(Core Regions) | Provision of laboratory equipment for Chemical and Physics covering 255 schools   |
| GTZ<br>1989-1993       | Expert services, training, materials and equipment | NCR, VII, X                  | Development of instructional equipment & expertise to develop science equipment   |
| JICA<br>1989-1993      | Facilities   | National                     | Construction of National Learning Resource Center for Teacher Training in Science and Mathematics Education   |
|                        |  | I, II, III, IV, V, VII, VIII | 219 school buildings  |
|                        | Equipment  | V, VIII                      | Science and IA/HE equipment for 210 Schools   |
| USAID-ESF<br>1986-1992 | Facilities & Equipment                             | Nationwide                   | School building & equipment   |
| CIDA<br>1991-          | Printing papers for textbooks                      | Nationwide                   | 1st year to 4th year printing papers for textbooks  |

Note: Projects listed above are SEDP related only.

### **2-2-3 Public Elementary and Secondary School Construction Program**

The Government of the Philippines established the 6-year School Construction Plan (1987-1992) as part of the Medium-term Philippine Development Plan (1987-1992) with the objective of building 40,252 elementary and secondary school classrooms, 3,598 multipurpose facilities, 1,608 workshops, and 804 science laboratories, rebuilding 28,553 classrooms and repairing 58,876 classrooms. However, due to damages brought about by natural disasters, such as annual typhoons, deterioration of schoolbuildings, and the increase in the number of students due to population growth, there is a chronic lack of education facilities.

Apart from DECS's own budget, the construction of elementary and secondary schools is funded by the school construction project of the President's Social Fund. For this project, DECS selects the project schools and the entire project comes under the direction of the Office of the President.

Apart from the Japanese grant aid, the construction of secondary schools is being conducted as part of the Secondary Education Development Plan with the help of a loan from the Asian Development Bank.

The plans for schoolbuilding construction in the new Mid-term Philippine Development Plan (1993-1998) that is being drawn up have not yet been announced. However, the following plans have been declared by DECS:

1. Establish elementary schools in a least 8,000 remote barangays without schools
2. Establish secondary schools in 61 municipalities without either a public or private high school
3. Provide adequate new classrooms, additional teachers, textbooks and school desks in existing schools
4. Upgrade the quality of instructional materials, textbooks and school facilities

In 1992, there were 9,894,416 public elementary school children and 2,878,360 public secondary school children. As shown in Table 2-13, the average annual increase rates of school children were 1.5% for elementary schools

and 5.6% for secondary schools.

It is estimated that there were 10,042,832 elementary school children and 3,039,548 secondary school children in 1993. As the classroom capacities are 40 students for elementary schools and 42 students for secondary schools. Thus, the number of classrooms needed during 1993 were as follows:

$$10,042,832 \div 40 = 251,070 \text{ elementary school classrooms}$$

$$3,039,548 \div 42 = 72,370 \text{ secondary school classrooms}$$

In reality, however, in 1992 there were actually 242,783 elementary school classrooms and 67,743 secondary school classrooms. Thus, it is believed that in 1993 there was a shortage of 8,287 elementary school classrooms and 4,627 secondary schools classrooms.

Table 2-13 Rate of Increase of Children in Public Elementary and Public Secondary Schools (1988-1992)

| Year    | Elementary School |               | Secondary School |               |
|---------|-------------------|---------------|------------------|---------------|
|         | No. of Students   | Increase Rate | No. of Students  | Increase Rate |
| 1988    | 9,323,637         | -             | 2,354,620        | -             |
| 1989    | 9,604,422         | + 3.01%       | 2,516,729        | + 6.88%       |
| 1990    | 9,727,575         | + 1.28%       | 2,564,045        | + 1.88%       |
| 1991    | 9,804,717         | + 0.79%       | 2,695,541        | + 5.13%       |
| 1992    | 9,894,416         | + 0.91%       | 2,878,360        | + 6.78%       |
| Average | -                 | + 1.53%       | -                | + 5.56%       |

DECS planned to build 4,595 elementary and 1,433 secondary classrooms in 1993 as shown in Table 2-14. However, even if new classrooms were built in 1993 with foreign aid, 4,962 would still be lacking (2,927 elementary and 2,035 secondary), and further classrooms would be required.



Table 2-14 Elementary and Secondary Schoolbuilding Construction Program (1993)

| Region      | Elementary School  |       |        |                        |        |        | Secondary School   |       |        |                        |       |           |        |
|-------------|--------------------|-------|--------|------------------------|--------|--------|--------------------|-------|--------|------------------------|-------|-----------|--------|
|             | Academic Classroom |       |        | Multi-Purpose Workshop |        | Toilet | Academic Classroom |       |        | Multi-Purpose Workshop |       | Sci. Lab. | Toilet |
|             | Add.               | Repl. | Rehab. | Add.                   | Rehab. | Add.   | Add.               | Repl. | Rehab. | Add.                   | Repl. | Add.      | Add.   |
| NCR         | 59                 | 325   | 107    | 4                      | 7      | 2      | 82                 | 20    | 20     | 0                      | 8     | 0         | 1      |
| CAR         | 203                | 0     | 0      | 0                      | 0      | 0      | 22                 | 0     | 0      | 5                      | 0     | 3         | 0      |
| Region I    | 63                 | 21    | 142    | 5                      | 15     | 19     | 131                | 0     | 0      | 24                     | 0     | 22        | 0      |
| Region II   | 33                 | 11    | 39     | 6                      | 6      | 0      | 34                 | 0     | 0      | 8                      | 0     | 0         | 0      |
| Region III  | 209                | 23    | 180    | 33                     | 9      | 6      | 81                 | 0     | 3      | 20                     | 0     | 15        | 0      |
| Region IV   | 673                | 119   | 823    | 176                    | 150    | 96     | 129                | 0     | 0      | 28                     | 0     | 33        | 0      |
| Region V    | 80                 | 29    | 351    | 37                     | 10     | 1      | 58                 | 0     | 0      | 13                     | 0     | 13        | 0      |
| Region VI   | 52                 | 17    | 121    | 13                     | 7      | 0      | 80                 | 0     | 0      | 14                     | 0     | 15        | 0      |
| Region VII  | 419                | 0     | 0      | 0                      | 0      | 0      | 47                 | 0     | 0      | 12                     | 0     | 10        | 0      |
| Region VIII | 136                | 40    | 102    | 17                     | 8      | 7      | 62                 | 0     | 72     | 0                      | 0     | 1         | 0      |
| Region IX   | 514                | 33    | 124    | 19                     | 12     | 8      | 250                | 0     | 0      | 15                     | 0     | 11        | 7      |
| Region X    | 314                | 0     | 307    | 34                     | 0      | 0      | 87                 | 0     | 0      | 9                      | 0     | 0         | 0      |
| Region XI   | 650                | 70    | 587    | 136                    | 70     | 61     | 71                 | 0     | 0      | 29                     | 0     | 38        | 0      |
| Region XII  | 800                | 46    | 419    | 36                     | 10     | 8      | 232                | 0     | 0      | 40                     | 0     | 17        | 0      |
| ARMM        | 390                | 22    | 169    | 36                     | 8      | 12     | 67                 | 8     | 33     | 5                      | 0     | 4         | 0      |
| Total       | 4,595              | 756   | 3,471  | 552                    | 321    | 220    | 1,433              | 28    | 128    | 222                    | 8     | 182       | 8      |

Table 2-15 Schoolbuilding Construction Plan and Number of Inadequate Classrooms (1993)

|                    | No. of Clrms. Needed | Own Budgetary Fund Project |          | Foreign Assisted Project |           | Total No. of Clrms. to be const. | No. of Addnl. Clrms. Needed |
|--------------------|----------------------|----------------------------|----------|--------------------------|-----------|----------------------------------|-----------------------------|
|                    |                      | DECS                       | PSF      | ADB                      | JICA      |                                  |                             |
| Elementary Schools | 8,287                | 4,595                      | 686      | -                        | 79        | 5,360                            | 2,927                       |
| Secondary Schools  | 4,627                | 1,433                      | -        | 964                      | 195       | 2,592                            | 2,035                       |
| Total              | 12,914 (100%)        | 6,028 (47%)                | 686 (5%) | 964 (7%)                 | *274 (2%) | 7,952                            | 4,962                       |

Notes) \* : Number of classrooms constructed for TRSBP IV  
PSF : President's Social Fund

### 2-3 Outline of Project Areas

The project areas requested by DECS cover an area of 910 km in a north-south direction and 360 km in an east-west direction. The areas include Regions V, XI, XII and ARMM.

From Manila to Legazpi in the center of Region V is about 50 minutes flying time. It takes about an hour and a half to fly to Davao in the center of Region XI, or to the centers of Region XII and ARMM.

An outline of the regions is as follows:

## 1. Region V (Bicol Region)

Considered another depressed region of the country, Region V posted in 1989 the third lowest Gross Regional Domestic Product (GRDP), although it performed better in terms of employment levels in the same year, by ranking sixth among the highest regions.

Sixty-five percent of the population are below poverty threshold, making it the region with the highest poverty incidence. This is attributed to several factors; a) population growth; b) lack of nonfarm employment opportunities; c) seasonality of farm work; d) lack of infrastructure; e) inadequate capital and credit; f) poorly organized market; g) lack of knowledge, information and information channels; and h) lack of entrepreneurial, management and technical expertise.

In education, the region registered levels of performance below the national mean except in achievement level where it ranked sixth highest among the 15 regions in 1989. The following factors contributed to poor performance; a) poor health and nutritional status of pupils; b) inadequate facilities; c) low salaries for teaching and nonteaching personnel, and d) lack of appropriations for training of teaching personnel, extension positions and hiring of substitute teachers.

Japanese grant aid was given for the construction of 72 schools (22 elementary and 50 secondary) under the project for constructing primary and secondary schoolbuildings (Phase I) in 1988.

## 2. Region XI (Southern Mindanao)

This region is substantially endowed with metallic and nonmetallic minerals. It has performed quite well for the past five years. Its GRDP in 1989 is the fifth highest among the 15 regions, standing at P7.655 billion or 7.1% of Gross Domestic Product (GDP).

Major gains have been achieved in its social development efforts for the last five years, owing to a shared concern of government and nongovernment organizations, private business and the communities for the plight of the

marginalized sectors of the population. Various community-based joint projects that focus on community development, health care and livelihood have been conducted. A major health project has resulted in improvements in the region's health status and the nutritional status of school children. However, malnutrition problems remain. About 78% of preschoolers were found to be mildly malnourished in 1989.

In educational performance, the region registered a high participation rate at the elementary level but, it has to improve cohort survival and achievement rates, which are both falling below national mean. Such achievement performance has been attributed to the following; a) inadequate preparation of teacheres; b) lack of effective supervision by administrators and supervisors; c) poverty and unstable peace and order conditions which affect pupils' performance; d) disparity in the distribution of instructional materials; e) lack of home guidance and follow-up of parents; and f) lack of library facilities and classrooms.

The region, however, maintains a high literacy level, with both simple and functional literacy rates rising slightly above the national mean.

### 3. Region XII (Central Mindanao)

This region is adopting a rural-based agro-industrial development strategy. However, labor productivity must be improved and employment opportunities generated. In 1989, it ranked fifth lowest among the 14 regions in terms of GRDP. Population-wise, Region XII registered the fourth lowest level among all regions in 1990.

Central Mindanao faces a number of social problems, the most critical of which are; a) malnutrition, especially among preschoolers and school children; b) proliferation of out of school youth; and c) its inability to provide basic services to the highlanders/cultural minorities who abound in the region.

The educational performance of the region is mixed. It ranks among regions with high participation and achievement rates in the elementary level but its schools exhibit poor holding power, with cohort survival

rate way below the national mean. The literacy status of the region is also discouraging, with simple literacy and functional literacy rates falling below the national figures.

#### 4. Autonomous Region in Muslim Mindanao (ARMM)

This area's autonomy was granted by the Philippine Government in August 1989 by virtue of Administrative Order No. 6734 which was enacted in November 1990. The area then became a self-governing Muslim body separate from Region XII.

This region is endowed with abundant natural resources, including wide tracts of agricultural lands and a shoreline containing rich marine and oil resources. Despite this abundance, it is among the most depressed areas. A low level of investments and economic opportunities have left its economic resources idle.

The educational sector is also beset by serious problems. The region registered the lowest cohort survival, achievement and literacy rates nationwide. Moreover, attention must be given to the improvement of Madaris schools as a way of delivering basic educational services to the Muslim populace.

The number of elementary and secondary schools, students and teachers in these Regions are shown in Tables 2-16 and 2-17.

### **2-4 Background and Contents of the Request**

#### 1) Background of the Request

The Government of the Philippines established the Medium-term Philippine Development Plan 1987-1992 and has continued its efforts to build the foundation of manpower development. However, due to natural disasters, such as the destruction caused every year by typhoons, and its 3% annual school population growth, the country has a chronic shortage of elementary and secondary school facilities. In 1993, there was a requirement for constructing 12,914 classrooms (8,287 for elementary schools and 4,627

for secondary schools).

Table 2-16 Number of Elementary Schools, Students and Teachers

| Region             | Number of Schools |            |              | Enrolment      |               |                | Number of Teachers |            |               |
|--------------------|-------------------|------------|--------------|----------------|---------------|----------------|--------------------|------------|---------------|
|                    | Public            | Private    | Subtotal     | Public         | Private       | Subtotal       | Public             | Private    | Subtotal      |
| <b>Region V</b>    |                   |            |              |                |               |                |                    |            |               |
| Albay              | 496               | 17         | 513          | 151,069        | 2,235         | 153,304        | 4,481              | 74         | 4,555         |
| Camarines Norte    | 228               | 4          | 232          | 72,652         | 1,430         | 74,082         | 2,120              | 40         | 2,160         |
| Camarines Sur      | 781               | 18         | 799          | 216,161        | 3,421         | 219,582        | 5,966              | 100        | 6,066         |
| Catanduanes        | 214               | 0          | 214          | 35,901         | 0             | 35,901         | 1,875              | 0          | 1,875         |
| Masbate            | 543               | 12         | 555          | 129,756        | 507           | 130,263        | 4,068              | 52         | 4,120         |
| Sorsogon           | 467               | 7          | 474          | 107,248        | 1,108         | 108,356        | 3,556              | 39         | 3,595         |
| Iriga City         | 38                | 5          | 43           | 11,892         | 3,102         | 14,994         | 398                | 87         | 485           |
| Legazpi City       | 40                | 6          | 46           | 19,562         | 3,365         | 22,927         | 629                | 84         | 713           |
| Naga City          | 21                | 12         | 33           | 19,519         | 5,944         | 25,463         | 542                | 175        | 717           |
| <b>Total</b>       | <b>2,828</b>      | <b>81</b>  | <b>2,909</b> | <b>763,760</b> | <b>21,112</b> | <b>784,872</b> | <b>23,635</b>      | <b>651</b> | <b>24,286</b> |
| <b>Region X I</b>  |                   |            |              |                |               |                |                    |            |               |
| Davao              | 537               | 34         | 571          | 191,685        | 5,380         | 197,065        | 4,840              | 159        | 4,999         |
| Davao Oriental     | 284               | 10         | 294          | 73,781         | 2,083         | 75,864         | 2,202              | 64         | 2,266         |
| Davao del Sur      | 358               | 10         | 368          | 107,074        | 2,509         | 109,583        | 3,252              | 50         | 3,302         |
| Sarangani          | 175               | 7          | 182          | 51,490         | N/A           | 51,490         | N/A                | N/A        | N/A           |
| South Cotabato     | 275               | 45         | 320          | 94,530         | 9,047         | 103,577        | 3,765              | 295        | 4,060         |
| Surigao del Sur    | 51                | 27         | 78           | 46,746         | 4,856         | 51,602         | 1,055              | 130        | 1,185         |
| Davao City         | 265               | 44         | 309          | 131,546        | 16,255        | 147,801        | 3,794              | 240        | 4,034         |
| Gen. Santos City   | 374               | 8          | 382          | 79,693         | 3,511         | 83,204         | 2,418              | 112        | 2,530         |
| <b>Total</b>       | <b>2,319</b>      | <b>185</b> | <b>2,504</b> | <b>776,545</b> | <b>N/A</b>    | <b>820,186</b> | <b>N/A</b>         | <b>N/A</b> | <b>N/A</b>    |
| <b>Region X II</b> |                   |            |              |                |               |                |                    |            |               |
| Cotabato City      | 22                | N/A        | N/A          | 15,442         | N/A           | N/A            | 515                | N/A        | N/A           |
| Iligan City        | 17                | N/A        | N/A          | 27,002         | N/A           | N/A            | 1,156              | N/A        | N/A           |
| Marawi City        | 29                | N/A        | N/A          | 17,877         | N/A           | N/A            | 669                | N/A        | N/A           |
| Lanao del Norte    | 116               | N/A        | N/A          | 49,161         | N/A           | N/A            | 1,970              | N/A        | N/A           |
| Cotabato           | 210               | N/A        | N/A          | 105,830        | N/A           | N/A            | 3,803              | N/A        | N/A           |
| Sultan Kudarat     | 92                | N/A        | N/A          | 59,150         | N/A           | N/A            | 2,277              | N/A        | N/A           |
| <b>Total</b>       | <b>486</b>        | <b>N/A</b> | <b>N/A</b>   | <b>274,462</b> | <b>N/A</b>    | <b>N/A</b>     | <b>10,390</b>      | <b>N/A</b> | <b>N/A</b>    |
| <b>ARMM</b>        |                   |            |              |                |               |                |                    |            |               |
| Magindanao         | 416               | 1          | 417          | 78,133         | 341           | 78,474         | 2,291              | 8          | 2,299         |
| Lanao Sur I        | 298               | 0          | 298          | 77,244         | 0             | 77,244         | 2,063              | 0          | 2,063         |
| Lanao Sur II       | 303               | 2          | 305          | 62,342         | 383           | 62,725         | 1,683              | 9          | 1,692         |
| Sulu               | 341               | 5          | 346          | 69,711         | 1,216         | 70,927         | 1,888              | 27         | 1,915         |
| Tawi-Tawi          | 205               | 1          | 206          | 42,025         | 1,031         | 43,056         | 1,123              | 23         | 1,146         |
| <b>Total</b>       | <b>1,563</b>      | <b>9</b>   | <b>1,572</b> | <b>329,455</b> | <b>2,971</b>  | <b>332,426</b> | <b>9,048</b>       | <b>67</b>  | <b>9,115</b>  |

Note) N/A : No available data

Region V & Region X I : SY 1993-94

Region X II & ARMM : SY 1992-93

Table 2-17 Number of Secondary Schools, Students and Teachers

| Region             | Number of Schools |            |            | Enrolment      |               |                | Number of Teachers |              |              |
|--------------------|-------------------|------------|------------|----------------|---------------|----------------|--------------------|--------------|--------------|
|                    | Public            | Private    | Subtotal   | Public         | Private       | Subtotal       | Public             | Private      | Subtotal     |
| <b>Region V</b>    |                   |            |            |                |               |                |                    |              |              |
| Albay              | 66                | 22         | 88         | 51,748         | 12,638        | 64,386         | 1,387              | N/A          | N/A          |
| Camarines Norte    | 23                | 15         | 38         | 13,408         | 8,999         | 22,407         | 376                | N/A          | N/A          |
| Camarines Sur      | 107               | 37         | 144        | 56,100         | 17,779        | 73,879         | 1,621              | N/A          | N/A          |
| Catanduanes        | 33                | 1          | 34         | 15,682         | 681           | 16,363         | 634                | N/A          | N/A          |
| Masbate            | 55                | 22         | 77         | 26,893         | 8,402         | 35,295         | 844                | N/A          | N/A          |
| Sorsogon           | 58                | 20         | 78         | 36,546         | 8,387         | 44,933         | 1,088              | N/A          | N/A          |
| Iriga City         | 6                 | 4          | 10         | 3,655          | 5,629         | 9,284          | 114                | N/A          | N/A          |
| Legazpi City       | 2                 | 11         | 13         | 4,703          | 6,635         | 11,338         | 103                | N/A          | N/A          |
| Naga City          | 6                 | 9          | 15         | 9,390          | 8,326         | 17,716         | 323                | N/A          | N/A          |
| <b>Total</b>       | <b>356</b>        | <b>141</b> | <b>497</b> | <b>218,125</b> | <b>77,476</b> | <b>295,601</b> | <b>6,490</b>       | <b>N/A</b>   | <b>N/A</b>   |
| <b>Region X I</b>  |                   |            |            |                |               |                |                    |              |              |
| Davao              | 59                | 34         | 93         | 52,474         | 10,648        | 63,122         | 1,348              | 342          | 1,690        |
| Davao Oriental     | 29                | 10         | 39         | 19,172         | 3,120         | 22,292         | 577                | 111          | 688          |
| Davao del Sur      | 31                | 24         | 55         | 22,434         | 12,573        | 35,007         | 649                | 218          | 867          |
| Sarangani          | 16                | 8          | 24         | 10,882         | 3,257         | 14,139         | 286                |              | 286          |
| South Cotabato     | 25                | 32         | 57         | 27,482         | 14,548        | 42,030         | 691                | 472          | 1,163        |
| Surigao del Sur    | 6                 | 12         | 18         | 15,170         | 1,837         | 17,007         | 294                | 205          | 499          |
| Davao City         | 32                | 37         | 69         | 42,766         | 9,627         | 52,393         | 1,351              | 657          | 2,008        |
| Gen. Santos City   | 26                | 17         | 43         | 22,946         | 7,717         | 30,663         | 770                | 219          | 989          |
| <b>Total</b>       | <b>224</b>        | <b>174</b> | <b>398</b> | <b>213,326</b> | <b>63,327</b> | <b>276,653</b> | <b>5,966</b>       | <b>2,224</b> | <b>8,190</b> |
| <b>Region X II</b> |                   |            |            |                |               |                |                    |              |              |
| Cotabato City      | 3                 | 11         | 14         | 7,769          | 6,291         | 14,060         | 334                | 101          | 435          |
| Iligan City        | 12                | 7          | 19         | 17,127         | 3,910         | 21,037         | 473                | 119          | 592          |
| Marawi City        | 1                 | 6          | 7          | 626            | 4,310         | 4,936          | 10                 | 113          | 123          |
| Lanao del Norte    | 17                | 16         | 33         | 12,696         | 5,278         | 17,974         | 295                | 136          | 431          |
| Cotabato           | 77                | 28         | 105        | 44,682         | 11,966        | 56,648         | 1,302              | 320          | 1,622        |
| Sultan Kudarat     | 32                | 21         | 53         | 15,560         | 11,888        | 27,448         | 390                | 297          | 687          |
| <b>Total</b>       | <b>142</b>        | <b>89</b>  | <b>231</b> | <b>98,460</b>  | <b>43,643</b> | <b>142,103</b> | <b>2,804</b>       | <b>1,086</b> | <b>3,890</b> |
| <b>ARMM</b>        |                   |            |            |                |               |                |                    |              |              |
| Magindanao         | 22                | 1          | 23         | 9,882          | 3,208         | 13,090         | 319                | 80           | 399          |
| Lanao Sur I        | 8                 | 0          | 8          | 4,814          | 0             | 4,814          | 102                | 0            | 102          |
| Lanao Sur II       | 12                | 2          | 14         | 9,465          | 1,232         | 10,697         | 164                | 31           | 195          |
| Sulu               | 17                | 5          | 22         | 8,808          | 1,527         | 10,335         | 297                | 38           | 335          |
| Tawi-Tawi          | 17                | 1          | 18         | 5,416          | 433           | 5,849          | 168                | 12           | 180          |
| <b>Total</b>       | <b>76</b>         | <b>9</b>   | <b>85</b>  | <b>38,385</b>  | <b>6,400</b>  | <b>44,785</b>  | <b>1,050</b>       | <b>161</b>   | <b>1,211</b> |

Note) N/A : No available data

Region V & Region X I : SY 1993-94

Region X II & ARMM : SY 1992-93

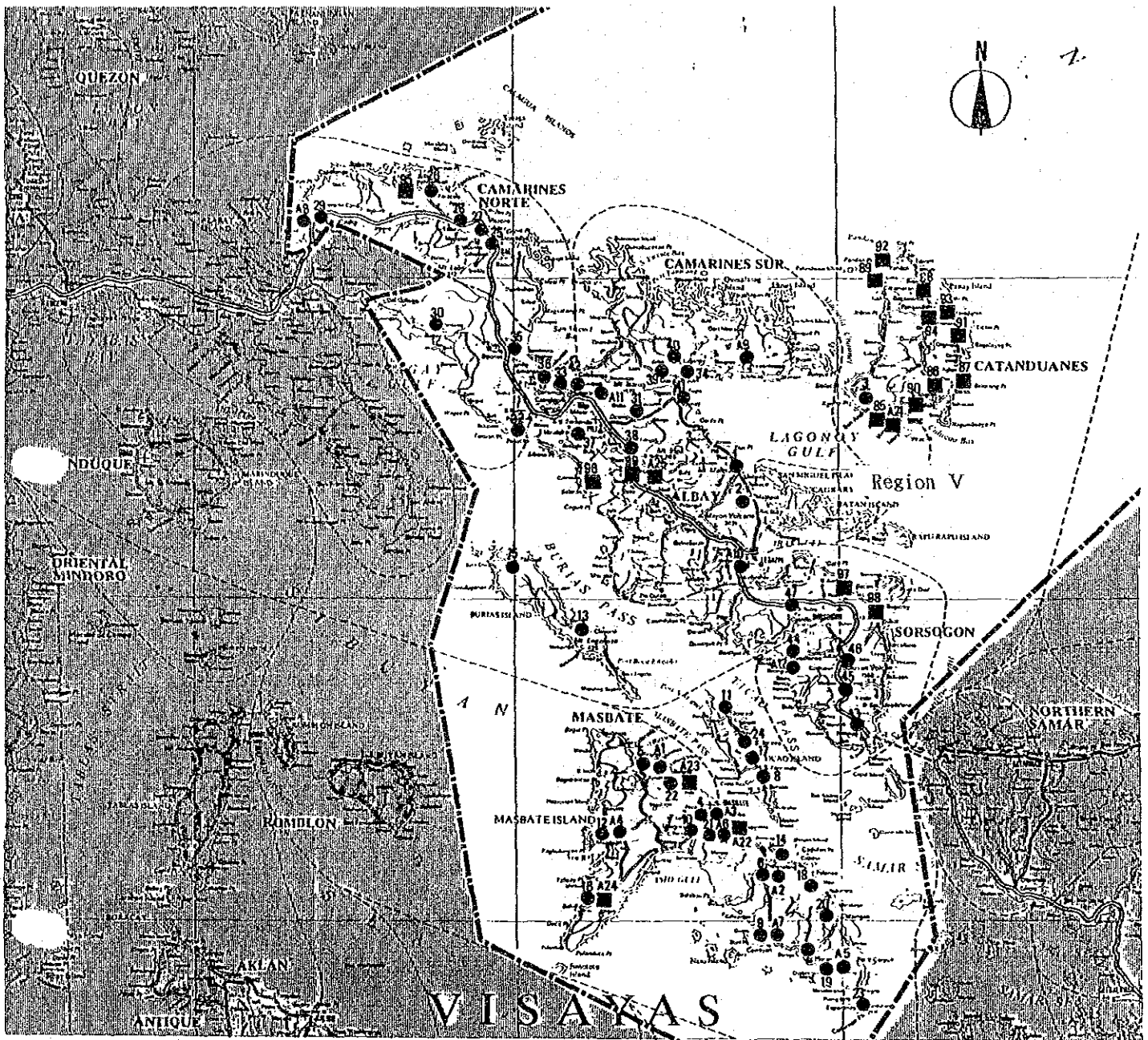
Under the above-mentioned situation, the country's economy is in critical condition due to damages caused by recent large typhoons, a large-scale earthquake, volcano eruptions, and social instability, such as coup attempts and the outbreak of the Middle East War. Thus, it is extremely difficult to conduct schoolbuilding construction on the country's budgetary fund alone. Yet, the construction of school facilities is an urgent subject for the country and to improve the education situation, the Government of the Philippines established the Project for the Improvement of the Education Facilities for building the schoolbuildings of approximately 630 schools. Construction will be by the Philippine method and will take six years to complete. Following the Phase I project on Southern Tagalog (to be completed in September 1994), the Philippine Government requested grant aid cooperation from Japan to construct 120 schools in Regions V, XI, XII and ARMM.

2) Contents of the Request

The contents of the request call for the construction of approximately 120 schools in Regions V, XI, XII and ARMM as the Phase II of the 6 years project. These schools will be constructed using locally procured materials. A total of 148 school sites have been proposed (116 Project candidate schools and 32 substitute schools). The major items of the request contents are as shown below. The Project school sites are shown in Fig. 2-2.

|                 | Elementary School  | Secondary School                                   |
|-----------------|--|--|
| School building | 3 or more Classrooms + Toilet                                  | 3 or more Classrooms · Science Laboratory + Toilet |
| Equipment       | Sets of basic need educational equipment in school facilities. |  |

Figure 2-2 Project Location Map (1)

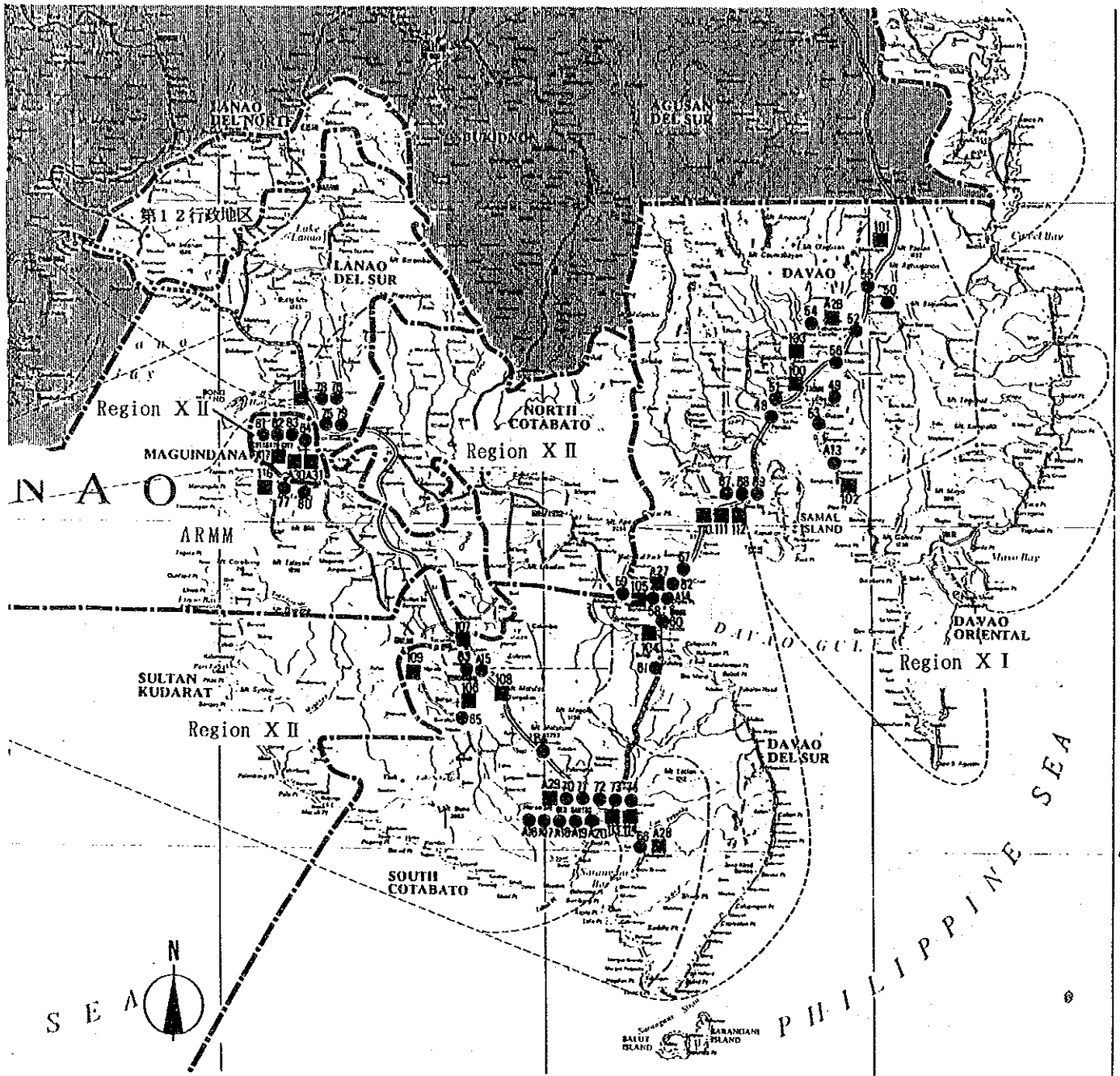


|   |  |   |  |
|---|--|---|--|
| <p>□ ELEMENTARY SCHOOL: PRIORITY<br/>REGION V</p> <p>E- 1. MALINAO ELEMENTARY SCHOOL<br/>E- 2. MALILIPOT ELEMENTARY SCHOOL<br/>E- 3. TIRANG ELEMENTARY SCHOOL<br/>E- 4. J. ZUBBITO ELEMENTARY SCHOOL<br/>E- 5. R. PAJES CENTRAL ELEMENTARY SCHOOL<br/>E- 6. DIMASALANG ELEMENTARY SCHOOL<br/>E- 7. C. INOCENCIO ELEMENTARY SCHOOL<br/>E- 8. BATUAN CENTRAL ELEMENTARY SCHOOL<br/>E- 9. RECODO ELEMENTARY SCHOOL<br/>E- 10. MILAGROS WEST CENTRAL SCHOOL<br/>E- 11. MONREAL CENTRAL SCHOOL<br/>E- 12. CABITAN ELEMENTARY SCHOOL<br/>E- 13. CLAVERIA CENTRAL ELEMENTARY SCHOOL<br/>E- 14. ARMENIA ELEMENTARY SCHOOL<br/>E- 15. SAN PABUAL CENTRAL ELEMENTARY SCHOOL<br/>E- 16. BALUD CENTRAL SCHOOL<br/>E- 17. BUYO ELEMENTARY SCHOOL<br/>E- 18. PALANAS CENTRAL SCHOOL<br/>E- 19. TANQUE ELEMENTARY SCHOOL<br/>E- 20. PANICAM ELEMENTARY SCHOOL<br/>E- 21. MOBO CENTRAL SCHOOL</p> | <p>E- 22. BALENO CENTRAL SCHOOL<br/>E- 23. P. CONAG ELEMENTARY SCHOOL<br/>E- 24. LEONARDO BARRON ELEMENTARY SCHOOL<br/>E- 25. MERCEDES CENTRAL SCHOOL<br/>E- 26. PARACALE CENTRAL ELEMENTARY SCHOOL<br/>E- 27. TALISAY ELEMENTARY SCHOOL<br/>E- 28. LADO ELEMENTARY SCHOOL<br/>E- 29. M. HEBRADO ELEMENTARY SCHOOL<br/>E- 30. LIBRO ELEMENTARY SCHOOL<br/>E- 31. OCAMPO CENTRAL SCHOOL<br/>E- 32. PASACAO CENTRAL SCHOOL<br/>E- 33. CANAMAN CENTRAL SCHOOL<br/>E- 34. SAN JOSE CENTRAL SCHOOL<br/>E- 35. CALABRANGAN ELEMENTARY SCHOOL<br/>E- 36. PANDAN ELEMENTARY SCHOOL<br/>E- 37. ANTIPOLO ELEMENTARY SCHOOL<br/>E- 38. BAAO WEST ELEMENTARY SCHOOL<br/>E- 39. GOA ELEMENTARY SCHOOL<br/>E- 40. BINANHUAN ELEMENTARY SCHOOL<br/>E- 41. SACHAY ELEMENTARY SCHOOL<br/>E- 42. STA. LUCIA ELEMENTARY SCHOOL<br/>E- 43. MATNOG CENTRAL SCHOOL<br/>E- 44. EDUARDO LEE CHAN MEMORIAL SCHOOL</p> | <p>E- 45. IROSIN CENTRAL ELEMENTARY SCHOOL<br/>E- 46. ALINDOGAN CENTRAL ELEMENTARY SCHOOL<br/>E- 47. COMADCAD ELEMENTARY SCHOOL</p> <p>□ SECONDARY SCHOOL: PRIORITY<br/>REGION V</p> <p>S- 85. CATANDUANES NATIONAL HIGH SCHOOL (Main)<br/>S- 86. SAN MIGUEL RURAL HIGH SCHOOL<br/>S- 87. BARAS RURAL HIGH SCHOOL<br/>S- 88. BAGAMANG HIGH SCHOOL<br/>S- 89. CARAMORAN RURAL HIGH SCHOOL<br/>S- 90. BATO RURAL HIGH SCHOOL<br/>S- 91. GIGMOTO RURAL HIGH SCHOOL<br/>S- 92. TABLCOG NATIONAL HIGH SCHOOL<br/>S- 93. YIGA RURAL HIGH SCHOOL<br/>S- 94. PANGANIRAN NATIONAL HIGH SCHOOL<br/>S- 95. LARAP NATIONAL HIGH SCHOOL<br/>S- 96. TAPAYAS HIGH SCHOOL<br/>S- 97. GATBO NATIONAL HIGH SCHOOL<br/>S- 98. BARCELONA NATIONAL HIGH SCHOOL<br/>S- 99. STO. NIÑO NATIONAL HIGH SCHOOL</p> | <p>□ ELEMENTARY SCHOOL: ALTERNATE<br/>REGION V</p> <p>AE- 1. PANIQUE ELEMENTARY SCHOOL<br/>AE- 2. BOLACAME ELEMENTARY SCHOOL<br/>AE- 3. NURSERY CENTRAL SCHOOL<br/>AE- 4. MANDAYO CENTRAL SCHOOL<br/>AE- 5. P. Y. CORPUZ ELEMENTARY SCHOOL<br/>AE- 6. UMARAY INT. ELEMENTARY SCHOOL<br/>AE- 7. DIVISORIA CENTRAL SCHOOL<br/>AE- 8. STA. ELENA ELEMENTARY SCHOOL<br/>AE- 9. HAANGAS ELEMENTARY SCHOOL<br/>AE- 10. PURO ELEMENTARY SCHOOL<br/>AE- 11. BOMBON ELEMENTARY SCHOOL<br/>AE- 12. MAGALLANES NORTH CENTRAL SCHOOL</p> <p>□ SECONDARY SCHOOL: ALTERNATE<br/>REGION V</p> <p>AS-21. CATANDUANES NATIONAL HIGH SCHOOL (Annex)<br/>AS-22. MOBO HIGH SCHOOL<br/>AS-23. BALENO NATIONAL HIGH SCHOOL<br/>AS-24. BALUD NATIONAL HIGH SCHOOL<br/>AS-25. PERPETUAL HELP HIGH SCHOOL</p> |
|---|--|---|--|

● ELEMENTARY SCHOOL  
■ SECONDARY SCHOOL



## Project Location Map (2)



|   |   |   |   |
|---|---|---|---|
| <p>□ ELEMENTARY SCHOOL: PRIORITY</p> <p>REGION X I</p> <p>E- 48. PANABO CENTRAL ELEMENTARY SCHOOL</p> <p>E- 49. MACO HEIGHTS CENTRAL ELEMENTARY SCHOOL</p> <p>E- 50. COMPOSTELA CENTRAL ELEMENTARY SCHOOL</p> <p>E- 51. CARMEN CENTRAL ELEMENTARY SCHOOL</p> <p>E- 52. NABUNTURAN CENTRAL ELEMENTARY SCHOOL</p> <p>E- 53. CADUNAN ELEMENTARY SCHOOL</p> <p>E- 54. NEW CORELLA ELEMENTARY SCHOOL</p> <p>E- 55. LINDAO ELEMENTARY SCHOOL</p> <p>E- 56. MAWAB CENTRAL ELEMENTARY SCHOOL</p> <p>E- 57. STA. CRUZ ELEMENTARY SCHOOL</p> <p>E- 58. MATTI ELEMENTARY SCHOOL</p> <p>E- 59. MATANAO CENTRAL ELEMENTARY SCHOOL</p> <p>E- 60. PADADA SOUTH ELEMENTARY SCHOOL</p> <p>E- 61. MCKINLEY ELEMENTARY SCHOOL</p> <p>E- 62. I. CALMA ELEMENTARY SCHOOL</p> <p>E- 63. KORONADAL II CENTRAL ELEMENTARY SCHOOL</p> <p>E- 64. CROSSING RUBBER ELEMENTARY SCHOOL</p> <p>E- 65. LAMBUNONG ELEMENTARY SCHOOL</p> <p>E- 66. ALABEL CENTRAL ELEMENTARY SCHOOL</p> <p>E- 67. MAA ELEMENTARY SCHOOL</p> | <p>E- 68. DON JUAN DELA CRUZ ELEMENTARY SCHOOL</p> <p>E- 69. BASTIDA ELEMENTARY SCHOOL</p> <p>E- 70. DADIANGAS WEST CENTRAL ELEM. SCHOOL</p> <p>E- 71. CARILSOT ELEMENTARY SCHOOL</p> <p>E- 72. F. ORINGO ELEMENTARY SCHOOL</p> <p>E- 73. BALUNTO ELEMENTARY SCHOOL</p> <p>E- 74. SAAVEDRA SAWAY ELEMENTARY SCHOOL</p> <p>ARMM</p> <p>E- 75. SIMUAY JUNCTION CENTRAL ELEM. SCHOOL</p> <p>E- 76. SARMIENTO CENTRAL SCHOOL</p> <p>E- 77. DALICAN PILOT ELEMENTARY SCHOOL</p> <p>E- 78. PARANG CENTRAL SCHOOL</p> <p>E- 79. MAGUINDANON ELEMENTARY SCHOOL</p> <p>E- 80. TENORIO ELEMENTARY SCHOOL</p> <p>REGION X II</p> <p>E- 81. COTABATO CITY ELEM. SCH., Poblacion V</p> <p>E- 82. J. MARQUEZ ELEM. SCH., Poblacion III</p> <p>E- 83. NOTRE DAME VILLAGE ELEM. SCH., Pob. IV</p> <p>E- 84. SERO CENTRAL ES., Rosary Heights IV</p> | <p>□ SECONDARY SCHOOL: PRIORITY</p> <p>REGION X I</p> <p>S-100. DAVAO NATIONAL HIGH SCHOOL</p> <p>S-101. MONKAYO NATIONAL HIGH SCHOOL</p> <p>S-102. BONGABONG NATIONAL HIGH SCHOOL</p> <p>S-103. ASURCION NATIONAL HIGH SCHOOL</p> <p>S-104. HAGONOY NATIONAL HIGH SCHOOL</p> <p>S-105. MARBER NATIONAL HIGH SCHOOL</p> <p>S-106. BANGA HIGH SCHOOL</p> <p>S-107. TANTANGAN NATIONAL HIGH SCHOOL</p> <p>S-108. MALTANA HIGH SCHOOL</p> <p>S-109. SAN MIGUEL NATIONAL HIGH SCHOOL</p> <p>S-110. MABINI NATIONAL HIGH SCHOOL</p> <p>S-111. BUSTAMANTE NATIONAL HIGH SCHOOL</p> <p>S-112. SAN JUAN NATIONAL HIGH SCHOOL</p> <p>S-113. LAGAO NATIONAL HIGH SCHOOL</p> <p>S-114. LABANGAL NATIONAL HIGH SCHOOL</p> <p>ARMM</p> <p>S-115. PARANG HIGH SCHOOL (Annex)</p> <p>S-116. CAMP SIOGDOO HIGH SCHOOL</p> <p>REGION X II</p> <p>S-117. COTABATO CITY HIGH SCHOOL (Main)</p> | <p>□ ELEMENTARY SCHOOL: ALTERNATE</p> <p>REGION X I</p> <p>AE-13. KINGKING CENTRAL ELEMENTARY SCHOOL</p> <p>AE-14. ROTARAN ELEMENTARY SCHOOL</p> <p>AE-15. KORONADAL I CENTRAL ELEMENTARY SCHOOL</p> <p>AE-16. UPPER TAMBLER ELEMENTARY SCHOOL</p> <p>AE-17. ROMANA ACHARON ELEMENTARY SCHOOL</p> <p>AE-18. FATIMA ELEMENTARY SCHOOL</p> <p>AE-19. P. ACHARON SR. ELEMENTARY SCHOOL</p> <p>AE-20. BANISIL ELEMENTARY SCHOOL</p> <p>□ SECONDARY SCHOOL: ALTERNATE</p> <p>REGION X I</p> <p>AS-28. MANAF NATIONAL HIGH SCHOOL</p> <p>AS-27. IHAN NATIONAL HIGH SCHOOL</p> <p>AS-28. ALABEL NATIONAL HIGH SCHOOL</p> <p>AS-29. CONEL NATIONAL HIGH SCHOOL</p> <p>REGION X II</p> <p>AS-30. COTABATO CITY HIGH SCHOOL (Annex)</p> <p>AS-31. COTABATO CITY HIGH SCHOOL (Taanotaka)</p> |
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● ELEMENTARY SCHOOL  
 ■ SECONDARY SCHOOL

## **CHAPTER 3. OUTLINE OF THE PROJECT**



## **CHAPTER 3 OUTLINE OF THE PROJECT**

### **3-1 Objective of the Project**

The Government of the Philippines has placed stress on the development of manpower and has been continuing its efforts to upgrade the quality of education, and to improve and construct educational facilities.

The Government of Japan has offered grant aid cooperation to the Government of the Philippines to construct the schoolbuildings of 360 schools located in the high typhoon damaged areas with typhoon resistant structures within a period of 5 years (the project is to be completed in 1994). Due to the financial difficulties being experienced by the Government of the Philippines, and because of the occurrence of further natural disasters and the high annual school population increase rate of 3%, the Philippines still lacks many educational facilities.

To improve this situation, the Government of the Philippines established the Project for the Improvement of the Educational Facilities and requested grant aid cooperation from the Government of Japan to construct schoolbuildings of approximately 630 elementary and secondary schools within a 6 year period employing domestic construction methods.

The objective of the Project is to alleviate the shortage of educational facilities in Regions V, XI, XII and ARMM by means of constructing the schoolbuildings of about 120 schools located in these Regions as the Program's Phase II Project.

### **3-2 Study and Examination of the Request**

#### **3-2-1 Evaluation of the Appropriateness and Necessity of the Project**

As previously described, there is a chronic lack of elementary and secondary school facilities in the Philippines. It is believed that the construction of approximately 12,914 classrooms (about 8,287 elementary and 4,627 secondary school classrooms) is presently necessary. Under this situation, the Government of the Philippines is facing an economic crisis as a result of natural calamities, such as frequent large typhoons, strong

earthquakes, and volcano eruptions, and because of the unstable social conditions brought on by the Middle East Gulf War. Thus, for the Government of the Philippines, it is extremely difficult to fund school construction on its own. Nevertheless, schoolbuilding construction is an urgent matter for the country and the construction of many schoolbuildings employing domestic construction methods will provide an increased number of children with the opportunity to enter school, and will contribute to the improvement of the country's elementary and secondary education.

Implementation of the Project will bring about the improvement of the country's education program and will make a significant contribution to establishing the foundation for the country's manpower development. Although the conditions for each Project region are different as mentioned in Section 2-3 "Outline of the Project Regions," each has its own situations and educational problems that need to be remedied quickly. The classroom shortage condition in each Project region is shown in Tables 3-1 and 3-2. From these tables, it is evident that each region's classroom shortage is very serious.

Under the avobe-mentioned situations and in accordance with DECS' "One Town, One School Policy," it is intended to include as many schools as possible in the Project. In particular, it is planned to urgently construct the classrooms of 120 schools that are seriously lacking classrooms in economically unfavorable areas. Therefore, it is evaluated to be sufficiently appropriate and necessary to implement the Project

Table 3-1 Number of Elementary School Classroom Shortage in Project Area

|             | No. of Students (1992)<br>A | Estimated No. of Students (1993)<br>1.015A | No. of Additional Classrooms Needed(1993)<br>1.015A/40 | No. of Existing Classrooms (1992)<br>B | No. of Classrooms Shortage (1993)<br>(1.015A)/40-B |
|-------------|-----------------------------|--|--|--|--|
| Region V    | 759,380                     | 770,770                                    | 19,269   | 17,258                                 | 2,011  |
| Region X I  | 756,517                     | 767,864                                    | 19,196   | 17,193                                 | 2,003  |
| Region X II | 358,563                     | 363,941                                    | 9,098  | 8,149                                  | 949  |
| ARMM        | 411,544                     | 417,717                                    | 10,442   | 6,705                                  | 3,737  |

Table 3-2 Number of Secondary School Classrooms Shortage in Project Area

|             | No. of Students (1992) | Estimated No. of Students (1993) | No. of Additional Classrooms Needed(1993) | No. of Existing Classrooms (1992) | No. of Classrooms Shortage (1993) |
|-------------|------------------------|----------------------------------|---|-----------------------------------|-----------------------------------|
|             | A                      | 1. 015A                          | 1. 015A/42                                | B                                 | (1. 015A)/42-B                    |
| Region V    | 201, 730               | 213, 026                         | 5, 072                                    | 3, 103                            | 1, 969                            |
| Region X I  | 198, 790               | 209, 922                         | 4, 998                                    | 3, 058                            | 1, 940                            |
| Region X II | 96, 481                | 101, 883                         | 2, 425                                    | 1, 484                            | 941                               |
| ARMM        | 46, 019                | 48, 596                          | 1, 157                                    | 321                               | 836                               |

### 3-2-2 Evaluation of Project Implementation and Management Plan

It is believed that the present staff and budget will suffice for the management of Project facilities after the schoolbuildings of 120 schools are completed.

The allocated budget for each region for the past three years is shown in Table 3-3. The budgets for Regions V, XI, XII (ARMM is included in Region XII) are 2.23 billion Pesos, 1.99 billion Pesos, and 1.38 billion Pesos respectively. The average annual increase over the past three years was 18.5%, 21.4% and 12.2% respectively.

The number of classrooms in public elementary and secondary schools is shown in Table 3-4. There are presently 20,361 classrooms in Region V, 20,251 in Region XI and 16,659 in Region XII. If three classrooms per school are to be added according to the list provided by DECS, then the number of classrooms to be added per region would be 252, 164 and 52. This is an increase of 1.24%, 0.81% and 0.31%, which is low compared to the increase percentage in the budget allocation. Thus, there should be no problems in operating the facilities after completion.

Table 3-3 The Budget Allocation for the Project Regions

| Year         | Region V         |               | Region X I       |               | Region X II & ARMM |               |
|--------------|------------------|---------------|------------------|---------------|--------------------|---------------|
|              | Budgeted Amount  | Increase Rate | Budgeted Amount  | Increase Rate | Budgeted Amount    | Increase Rate |
| 1990         | 1, 434, 690, 000 | -             | 1, 211, 913, 000 | -             | 1, 012, 050, 000   | -             |
| 1991         | 1, 426, 453, 000 | + 0.6%        | 1, 232, 944, 000 | + 1.7%        | 1, 001, 193, 000   | - 1.1%        |
| 1992         | 2, 163, 166, 000 | +51.7%        | 1, 694, 916, 000 | +37.5%        | 1, 392, 693, 000   | +39.1%        |
| 1993         | 2, 229, 748, 000 | + 3.1%        | 1, 990, 685, 000 | +17.5%        | 1, 381, 400, 000   | + 0.8%        |
| Average Rate | -                | +18.5%        | -                | +21.4%        | -                  | +12.2%        |

**Table 3-4 Distribution of Additional Classrooms for  
Project Schools**

|  | Region V | Region XI | Region XII<br>ARMM |
|--|----------|-----------|--------------------|
| No. of Existing Classrooms                 | 20,361   | 20,251    | 16,659             |
| No. of New Classrooms<br>to be Constructed | 252      | 164       | 52                 |
| Increase Rate                              | 1.24%    | 0.81%     | 0.31%              |

**3-2-3 Examination of the Relationship Between the Project and Other Similar  
Projects and Foreign Grant Aid Programs**

As mentioned in Section 2-2-2 "Education Related Projects," various foreign agencies are cooperating in the Secondary Education Development Program. For this reason, Project schools were selected during the field survey period so that they would not be overlapped with aid from other assisting organizations.

Other educational field projects that receive financial assistance from foreign organizations and those that are related to the Project are outlined as follows:

1) Asian Development Bank (ADB) Project

As a part of the country's Secondary Education Development Project (SEDP), it is planned to construct 680 secondary schoolbuildings, provide educational equipment and laboratory facilities, improve the curriculum and textbooks, and educate teachers within a five year period with financial aid from the ADB loan.

The original plan was a combination of a single-story and two-storied building each having four classrooms, a science laboratory, a workshop, a library, teachers' rooms, and toilets, etc. However, it has been improved to two types, a single one-story and single two storied building.

The project also provides each project school with science education equipment for general science, physics, chemistry, biology, and mathematics use, as well as equipment for vocational and home economics