JAPAN INTERNATIONAL COOPERATION AGENCY

DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS THE REPUBLIC OF THE PHILIPPINES

THE STUDY ON COMPREHENSIVE DISASTER PREVENTION AROUND MAYON VOLCANO IN THE REPUBLIC OF THE PHILIPPINES

FINAL REPORT

VOLUME II: MAIN REPORT

MASTER PLAN AND FEASIBILITY STUDY

October 2000

NIPPON KOEI CO., LTD.

KRI INTERNATIONAL CORPORATION

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PREFACE

In response to a request from the Government of the Republic of the Philippines, the Government of Japan decided to conduct a development Study on Comprehensive Disaster Prevention around Mayon Volcano in the Republic of the Philippines and entrusted the study to the Japan International Cooperation Agency (JICA).

JICA selected and dispatched a study team headed by Mr. Hideki Sato of NIPPON KOEI Co., Ltd. and consists of NIPPON KOEI Co., Ltd. and KRI INTERNATIONAL CORPORATION to Philippines, four times between September 1998 to October 2000. In addition, JICA set up an advisory committee headed by Masayuki Watanabe, Senior Advisor between September 1998 to October 2000, which examined the study from specialist and technical points of view.

The team held discussions with the officials concerned of the Government of Philippines, and conducted field surveys at the study area. Upon returning to Japan, the team conducted further studies and prepared this final report.

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

Finally, I wish to express my sincere appreciation to the officials concerned of the Government of Philippines for their close cooperation extended to the Team.

October 2000

Kunihiko Saito President Japan International Cooperation Agency

Mr. Kunihiko Saito President Japan International Cooperation Agency (JICA) Tokyo, Japan

Letter of Transmittal

It is with great pleasure that we submit to you the Final Report of the "Study on Comprehensive Disaster Prevention around Mayon Volcano in the Republic of the Philippines".

The Report has been prepared to formulate the comprehensive disaster prevention plan for the area around Mayon Volcano to protect the life and properties from the hazards related to its eruptions, which have taken place every 6 to 10 years.

The Study has prepared the Master Plan with the projects and programs for the disaster prevention for the area around Mayon Volcano, and conducted the Feasibility Study for the priority Projects and Programs. The Comprehensive Disaster Prevention Plan formulated the non-structural measures as well as the structural measures.

We hope that this report will be helpful for improvement of the disaster prevention in the area around Mayon Volcano, and the projects and programs proposed in this Study will contribute to strengthen the disaster prevention capacity of the area.

We wish to express our deep appreciation and gratitude to the personnel concerned of your Agency, JICA Philippines Office, the Embassy of Japan in the Philippines, the Department of Public Works and Highways and the authorities concerned of the Government of the Republic of the Philippines for the courtesies and cooperation extended to us during our study.

Very Truly yours,

Hideki Sato Team Leader for the Study on Comprehensive Disaster Prevention Around Mayon Volcano in the Republic of the Philippines