Ministry of Agriculture, the Environment and Planning
The Commonwealth of Dominica

# BASIC DESIGN STUDY REPORT
# ON
# THE PROJECT FOR IMPROVEMENT
# OF
# MARIGOT FISH LANDING FACILITIES
# IN
# THE COMMONWEALTH OF DOMINICA

JULY 2000

JAPAN INTERNATIONAL COOPERATION AGENCY
NIPPON KOEI CO., LTD.
SYSTEM SCIENCE CONSULTANTS INC.

# PREFACE

In response to a request from the Government of the Commonwealth of Dominica, the Government of Japan decided to conduct a basic design study on the Project for Improvement of Marigot Fish Landing Facilities and entrusted the study to the Japan International Cooperation Agency (JICA).

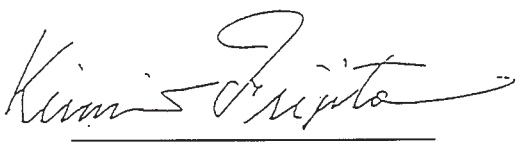
JICA sent to Dominica a study team from September 8 to October 10, 1999 and from January 5 to February 3, 2000.

The team held discussions with the officials concerned of the Government of Dominica, 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 Dominica in order to discuss a draft basic design, and as this result, the present report was finalized.

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 Commonwealth of Dominica for their close cooperation extended to the teams.

July 2000



Kimio Fujita
President
Japan International Cooperation Agency

July 2000

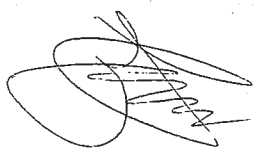
**Letter of Transmittal**

We are pleased to submit to you the basic design study report on the Project for Improvement of Marigot Fish Landing Facilities in the Commonwealth of Dominica.

This study was conducted by Nippon Koei Co., Ltd. in consortium with System Science Consultants Inc, under a contract to JICA, during the period from August 31, 1999 to July 10, 2000. In conducting the study, we have examined the feasibility and rationale of the project with due consideration to the present situation of Dominica and formulated the most appropriate basic design for the project under Japan's grant aid scheme.

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

Very truly yours,



Teruo Onuki
Project Manager
Basic Design Study Team on
the Project for Improvement of Marigot Fish Landing Facilities in the Commonwealth of Dominica
Nippon Koei Co., Ltd. in consortium with System Science Consultants Inc.

## Country Profile (The Commonwealth of Dominica)

| | | | | | |
|---|---|---|---|---|---|
| Land Area | : | 790 sq.km | GDP | : | US$ 233 million |
| Population | : | 7.5 million (1998) | Actual GDP increase rate: | | 3.7% |
| Language | : | English | Income per capita | : | US$ 3,120 |
| Currency | : | 1EC$ = 39.6 YEN (2000, April) | | | (1996) |

# LOCATION MAP

Perspective View

## Abbreviations

| Abbreviation | Full Spelling |
|---|---|
| BOD | Biochemical Oxygen Demand |
| CBR | California Bearing Ratio |
| C.D.L | Chart Datum Level |
| CIDA | Canada International Development Agency |
| COD | Chemical Oxygen Demand |
| Cricom | Caribbean Community |
| DO | Dissolved Oxygen |
| DOMLEC | Dominica Electricity Service Limited |
| DOWASCO | Dominica Water & Sewerage Company Limited. |
| E/N | Exchange of Notes |
| FAO | Food & Agriculture Organization |
| GDP | Gross Domestic Product |
| H.H.W.L | Highest Water Level on Record |
| H.W.L | Mean Springs High Water Level |
| IBRD | International Bank for Reconstruction and Development |
| IFAD | International Institute of Tropical Agriculture |
| IMF | International Monetary Fund |
| L.L.W.L | Lowest Water Level on Record |
| L.W.L | Mean Springs Low Water Level |
| M.S.L | Mean Sea Water Level |
| NEIC | National Earthquake Information Center |
| NGO | Non-Governmental Organization |
| SS | Suspended Solid |
| TOR | Terms of Reference |
| UHF | Ultrahigh Frequency |
| VHF | Very High Frequency |
| WFP | UN/FAO World Food Programme |

# Units

**Length**

| | | |
|---|---|---|
| mm | = | Millimeter |
| cm | = | Centimeter (1cm = 10 mm) |
| m | = | Meter |
| km | = | Kilometer |

**Area**

| | | |
|---|---|---|
| ha | = | Hectar |
| $m^2$ | = | Square meter |
| $km^2$ | = | Square kilometer |

**Volume**

| | | |
|---|---|---|
| $cm^3$ | = | Cubic centimeter |
| L | = | Liter |
| $m^3$ | = | Cubic meter |

**Weight**

| | | |
|---|---|---|
| g | = | Gram |
| kg | = | Kilogram |
| t | = | Ton |

**Currency**

| | | |
|---|---|---|
| EC$ | = | Eastern Caribbean Dollar |
| US$ | = | United State Dollar |

**Time**

| | | |
|---|---|---|
| sec. (‘) | = | Second |
| min. (“) | = | Minute |
| hr | = | Hour |
| d | = | day |

**Others**

| | | |
|---|---|---|
| % | = | percentage |
| $m^3$/hr | = | Cubic meter per hour |
| $m^3$/sec | = | Cubic meter per second |
| knot | = | 0.5144m/sec |

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# *CHAPTER 1*

# *BACKGROUND OF THE PROJECT*