# IMPLEMENTATION ARRANGEMENT FOR THE STUDY ON COMPREHENSIVE FLOOD MITIGATION FOR CAVITE LOWLAND AREA IN

# THE REPUBLIC OF THE PHILIPPINES

### AGREED UPON AMONG

# DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS, PROVINCIAL GOVERNMENT OF CAVITE AND JAPAN INTERNATIONAL COOPERATION AGENCY

Manila November 24, 2006

Mr. Manuel M. BONOAN

Undersecretary

Department of Public Works and

Highways

Mr. Shokichi SAKATA

Team Leader, Preparatory Study

Japan International Cooperation

Agency

Hon. Erineo S. MALIKS

Governor

Province of Cavite

### I. Introduction

In response to the request of the Government of the Republic of the Philippines (hereinafter referred to as "GOP"), the Government of Japan (hereinafter referred to as "GOJ") decided to conduct the Study on Comprehensive Flood Mitigation for Cavite Lowland Area in the Republic of the Philippines (hereinafter referred to as "the Study"), and will exchange the Notes Verbales with GOP concerning the implementation of the Study.

Accordingly, the Japan International Cooperation Agency (hereinafter referred to as "JICA"), the official agency responsible for the implementation of the technical cooperation programs of the GOJ, will undertake the Study in accordance with the relevant laws and regulations enforced in Japan.

On the part of the GOP, the Department of Public Works and Highways (hereinafter referred to as "DPWH") and the Provincial Government of Cavite, (hereinafter referred to as "the Philippines side") shall act as the counterpart agencies to the Japanese study team and coordinating bodies with other governmental and non-governmental organizations concerned for the smooth implementation of the Study.

The present document constitutes the implementing arrangement between JICA and the Philippines side under the above-mentioned Notes Verbales between the two governments, and will become valid after authorization of JICA Headquarters.

### II. Objectives of the Study

The objective of the Study is to mitigate flood in Cavite Lowland Area through the following measures:

- 1. Formulation of flood mitigation master plan for three river basins (the San Juan, the Imus and the Canas rivers);
- 2. Feasibility study for the priority projects selected in the master plan; and
- 3. Development of flood management capacity for counterpart

7-1

S

9

organizations.

### III. Study Area

Study Area will cover river basins of the San Juan, the Imus and the Canas rivers as shown in Appendix-1.

### IV. Scope of the Study

The Study, composed of two phases, namely 1) Master Plan Study and 2) Feasibility Study, will cover the following items:

# Phase1: Master Plan Study

- (1) Collection, review and analysis of data and information
  - (a) Natural Condition
    - Meteorology and Hydrology
    - Topography and Geology
    - · River environment
  - (b) Socio-Economy
    - Population
    - Landuse
    - Regional and other relevant development program
    - Industry
    - · Agriculture and Irrigation
    - · laws, regulations and policies
    - Institutional structures for related sectors
  - (c) Historical records on flood inundation and flash flood
  - (d) Existing related studies
  - (e) Existing system and facilities on flood control and drainage
  - (f) Water quality and environment
  - (g) Other related information

The following field surveys will be carried out to collect the above information.

Flow measurement of flood and low flow at designated points.

7

X

Z

- · Longitudinal and cross-sectional surveys
- Plane survey and Aerial-photo shooting (if necessary)
- (2) Examination on the characteristic of vulnerability and hazard
- (3) Evaluation of current disaster mitigation measures
- (4) Flood risk assessment
- (5) Preparation of Master Plan
- (6) Review and modification of existing landuse plans and ensure their implementation
- (7) Initial environmental examination
- (8) Public consultation meetings with stakeholders
- (9) Selection of priority projects
- (10) Preparation for priority projects
  - (a) Establishment of Flood Mitigation Committee in Cavite province
  - (b) Promoting community-based flood mitigation activities
  - (c) Pilot project, if necessary
- (11) Capacity development of counterpart organizations
  - (a) Needs assessment on capacity building
  - (b) Implementation of capacity building activities including the following;
    - Recommendation on capacity building
    - Workshops and Seminars
    - Provision of technical advice on a day-to-day basis

### Phase2: Feasibility Study

- (1) Additional data collection and survey
- (2) Environmental and social considerations
- (3) Plan of priority projects
  - (a) Plan and design of systems and facilities
  - (b) Operation and maintenance plan
  - (c) Resettlement plan, if necessary
  - (d) Implementation schedule
  - (e) Cost estimation
- (4) Economic evaluation of the plans

 $\sqrt{\phantom{a}}$ 

A

### V. Schedule of the Study

The Study will be carried out in accordance with the tentative schedule as shown below. The schedule is tentative and subject to be modified when both sides agree upon any necessity that may arise during the Study.

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
MASTER PLAN							100	i i to i i			1	She i												
FEASIBILITY STUDY																	10	7.1	ga	JUN .	9,5	2 (4 ))		
REPORT	IC/F	7					P/R1				IT/R					P/R2						DF/R F		F/R

IC/R: Inception Report

DF/R: Draft Final Report

IT/R: Interim Report

F/R: Final Report

P/R: Progress Report

### VI. Reports

JICA will prepare and submit the following reports in English to the GOP.

### 1. Inception Report

Thirty (30) copies at the commencement of the Study in the Philippines

### 2. Progress report (1)

Thirty (30) copies

### 3. Interim report

Thirty (30) copies

### 4. Progress report (2)

Thirty (30) copies

### 5. Draft Final Report

Thirty (30) copies

7 - 4

X

9

The GOP shall submit its comments within one (1) month after the receipt of the Draft Final Report.

### 6. Final Report

Sixty (60) copies with electronic copy within one (1) month after the receipt of the comments on the Draft Final Report

### VII. Undertaking of the GOP

- The GOP shall take necessary measures to facilitate the smooth conduct of the Study;
  - (1) To permit the members of the Japanese study team to enter, leave and sojourn in the Philippines for the duration of their assignments therein and exempt them from foreign registration requirements and consular fees:
  - (2) To exempt the members of the Japanese study team from taxes, duties and any other charges on equipment, machinery and other material brought into the Philippines for the implementation of the Study;
  - (3) To exempt the members of the Japanese study team from income tax and charges of any kind imposed on or in connection with any emoluments or allowances paid to the members of the Japanese study team for their services in connection with the implementation of the Study; and
  - (4) To provide necessary facilities to the Japanese study team for the remittance as well as utilization of the funds introduced into the Philippines from Japan in connection with the implementation of the Study.
- 2. The GOP shall be responsible for dealing with claims which may be brought by third parties against the members of the Japanese study team and shall hold them harmless in receipt of claims and liabilities arising in the course of, or otherwise connected with the discharge of their duties

9-

X

91

in the implementation of the study, except when such claims or liabilities arise from gross negligence or willful misconduct of the above mentioned members.

- 3. DPWH and Provincial Government of Cavite shall, at its own expense, provide the Japanese study team with the following, in cooperation with other organizations concerned:
  - (1) Security-related information on as well as measures to ensure the safety of the Japanese study team;
  - (2) Information on as well as support in obtaining medical service;
  - (3) Available data (including maps and photographs) and information related to the Study;
  - (4) Counterpart personnel;
  - (5) Suitable office space with necessary equipment; and
  - (6) Credentials or identification cards.

### VIII. Undertakings of JICA

For the implementation of the Study, JICA shall take the following measures;

- 1. To dispatch, at its own expense, the study team to the Philippines and
- 2. To perform technology transfer to the Philippines counterpart personnel in the course of the Study.

### IX. Consultation

JICA, DPWH, and Provincial Government of Cavite will consult with each other in respect of any matter that may arise from or in connection with the Study.





