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WATER RESOURCES DEVELOPMENT IN JENEBERANG RIVER BASIN DEVELOPMENT PROJECT (JRBDP) IN INDONESIA

CTI Engineering International member Kawakami, Toshiki
General Project Manager, JRBDP, Indonesia Ir.Haryanto Brodjokusumo

1. Background of the projects

The Jeneberang River Basin originated from Mt. Lompobatang Area with 727 square kms in catchment and 75 kms in stretch drains into the west coast from the east in Sulawesi Island in Indonesia.

Ujung Pandang City located at the estuary of the river, with a population of over eight hundreds thousands, has been developing as an center of East Indonesia, located at 5°20' south latitude and at 119°30' in the east latitude. During rainy season, the city has faced the menace of not only flooding from the Jeneberang River but also inundation due to drainage malfunction. It was remarkable among the floods for years that the city had experienced two thirds of the area in the city having been inundated between December, 1975 and January, 1976. Besides, during dry season, it has suffered from serious shortage of water, especially for municipal and irrigation water use. These problems have disturbed the social, economic development in this region.

The Office of Jeneberang River Basin Development Project(JRBDP) has been established in 1991 under the Bureau of Water Resources Development , Ministry of Public Works, Government of Indonesia and has directed and managed the projects to solved the above mentioned problems.

2. Outline of the Project

The projects under JRBDP to mitigate flood and inundation damage in Ujung Pandang City, to supply municipal water and irrigation water are shown in the following.

(1) Bili-Bili Multipurpose Dam Project(on-going since 1992):

Purpose; flood control, development of municipal water and irrigation, and hydro-power generation,
Dam; Rockfill with center earth core, 5,300,000 cu.ms in embankment volume, 73 ms in height,
Reservoir; 375 million cu.ms in total capacity, 384 sq.kms in catchment area,

(2) Lower Jeneberang River Urgent Flood Control Project (completed)

Purpose; newly construction/improvement of Jeneberang River Embankment, Improvement of the city drainage, Panampu, Jongaya and Sinrijala.

(3) Pampang River Improvement Project (on-going since 1997)

Purpose; improvement of flow capacity of Pampang River and the city drainage capacity.
River improvement; 11kms, drainage improvement; 6kms, construction of pumping station.

(4) Raw Water Transmission Main Project (on-going since 1996)

Purpose; Intake and transmission of the raw water from Bili-Bili Dam to Water Treatment Plant
Pipeline; 17 kms in length, 1.650/1.500 ms in diameter, 3.3 cu.ms/s in capacity.

(5) Bili-Bili Irrigation Project (on-going since 1998 with D/D)

Purpose; Development for irrigation areas, intake and facilities and Rehabilitation of existing ones,
Newly development Area; 4,000ha, rehabilitation area; 20,600ha.

(6) Environmental Improvement Works Project(on-going since 1995)

Purpose; Development of infrastructure in relocation area for the dam construction and land conservation for watershed management .

3. Approach for Implementation

Ministry of Public works made a preliminary survey, in 1974, in cooperation with International Engineering Construction Association (IECA). In 1979, in cooperation with Japan International Cooperation Agency (JICA), the urgent flood control and drainage improvement plan as well as all-over flood control and drainage improvement plan were formulated, proposing improvement of Jeneberang River Training and construction of Bili-Bili dam and reservoir.

In 1984, Detailed Design(D/D) of Lower Jeneberang River Urgent Flood Control Project was conducted, presenting River Improvement Scheme and Drainage Improvement Scheme. In 1986, D/D of Bili-Bili Multipurpose Dam Project was conducted, presenting the design of rock-fill dam with hydraulic facility for flood control and water supply and dam control & monitoring system, and telecommunication works.

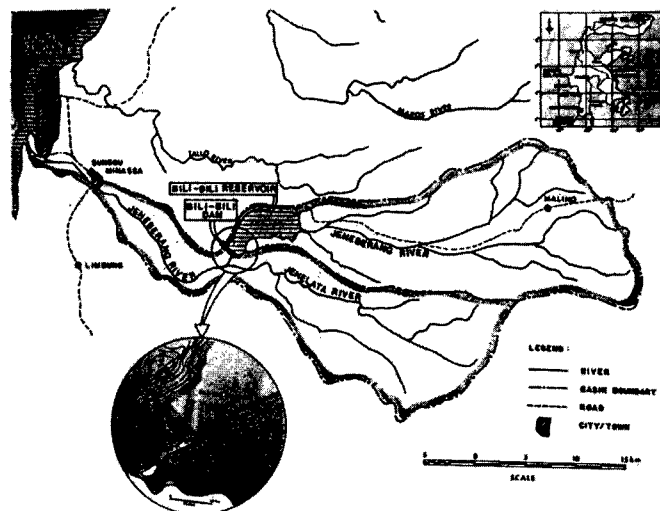
The other hand, D/D of Raw Water Transmission Main Project and Environmental Improvement Works were formulated in 1993 and D/D of Irrigation Improvement Works Project has been on-going.

4. PRESENT STATUS OF PROJECTS UNDER JRBDP

Since November, 1997, Bili-Bili Dam and the reservoir have impounded water serving flood damage mitigation together with the completed river improvement of the lower Jeneberang River and supplying water for existing paddy field while still on-going are the construction works for city drainage improvement, water transmission pipe line and irrigation development.

The detailed designs and construction of those projects have been carried out under the coverage of Yen Loan of Overseas Economic Cooperation Fund (OECF).

LOCATION OF JENEBERANG RIVER BASIN DEVELOPMENT PROJECT



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Address; 23rd Chuo Bldg, 4-2 Nihonbashi-Kodemmachou, Chuo-Ku, Tokyou

Phone: 81-3-3663-1534, Fax: 81-3-3663-1653, E-mail: kawakami@overseas.ctie.co.jp