## Country Report I

## EXPETATION FOR THEMATIC WORKSHOP ON WATER RESOURCES AND WATER RIGHT IN CITARUM RIVER BASIN – INDONESIA

## Jasa Tirta II Public Corporation (PJT II)

Government Regulation No. 94/1999 provides the mandate for Jasa Tirta II Public Corporation (PJT II). The substantial madated role of Jasa Tirta II Public Corporation is to carry out water resources management in the project Area including the basin management of the Citarum River and the management of the Jatiluhur System. The Citarum River Basin, which occupies half of the project Area, is the core river basin. Meanwhile, the Jatiluhur System handles about 80 % of the usable water of 10 billion m3 from the upstream and middle reaches of the rivers. Consequently, the activity of Jasa Tirta II Public Corporation (PJT II) represents the water management.

The Government Regulation mentioned above specific the tasks of Jasa Tirta II Public Corporation as follow :

- 1. Development and maintenance of water resources infrastructure and hydroelectric power generation.
- 2. Utilization of water resources and hydroelectric power.
- 3. Management of the watershed such as to control, develop and utilize, and
- 4. Rehabilitation of water resources infrastructure and hydroelectric power plants.

As a public corporation, the objective of Jasa Tirta II Public Corporationis to develop the national economy by participating in national development programs in water management, water sources and electric power. Along this line the established policy of Jasa Tirta II Public Corporation is to operate water for public utilization, and its qualifying sources which are sufficient to fulfill the necessity of all people, and to carry out certain tasks given by the government in managing the river basin and/or its sources, including to give information, recommendation, consultation and guidance.

The extensive activities of Jasa Tirta II Public Corporation cover ; (1) watershed area management, (2) water quality and quantity management, (3) river environment management, (4) flood and drought management and (5) infrastructure management. Jasa Tirta II Public Corporation participates in Wayang windu Arborettum, also the Provincial Forestry Office, Bandung District Government and local Community as a watershed management activity. The project rehabilitated a small reservoir, constructed a community center, developed a mini hydroelectric facility with a capacity of 500 KVA and made other activities. Reforestation of Block Number 73 is another watershed conservation activity of Jasa Tirta II Public Corporation, aimed at introducing productive forestry in the steep-sloped area which was once denuded to cultivate vegetables.

As mentioned in the previous section, Jasa Tirta II Public Corporation has carried out water sampling and analysis, and the results of such monitoring works have been informed to the local governments. Meanwhile, the President Director Jasa Tirta II Public Corporation is assigned as the vice-president of the River Basin Water Resources Council (PPTPA) for the Citarum River Basin. River Basin Water Resources Council (PPTPA) is responsible for deciding on the annual water-useallocation plan. For actual operation, Jasa Tirta II Public Corporation has SPK TPA (Monthly Citarum Cascade Operation Monitoring) with participation from State Electric Company (PT. PLN), Indonesia Power Company (PT. Indonesia power), PT. PJB (Cirata Dam Operator), Provincial Technical Office Water Resources Center (Balai PSDA), Provincial Development Planning Board of West Java (Bapeda Provinsi Jawa Barat) and other stakeholders. SPK TPA (Monthly Citarum Cascade Operation Monitoring) decides monthly operational matters, adapting to the field situation.

The Citarum River is the largest river in western Java, which region contains Jakarta, the capital of the Indonesia. The river rises from Mount Wayang (El. 2,198 m AMSL) and travels in a generally northwestern direction for about 6,600 km2. The upstream reach of the river runs in mountainous to gently angulated hilly lands for about 200 km, while the lower 70 km stretch drains a vast flat alluvial plain.

It has bountiful water resources, with the average annual basin precipitation of about 2,400 mm, and its location close to the capital has, since early times, made its water resources very important. The government intends to classify the river basin as a National Strategic River Basin.

The first major exploitation of its resources came with the construction of the Walahar Weir on the main river in 1925, together with the North Tarum Canal to supply water to 87,500 ha of paddy fields extending over the vast flat alluvium plains of the downstream reach.

The Curug Weir is also situated on the main river about 15 km upstream from the Walahar Weir and this has, since 1965, diverted water to the West and East Tarum Canals through pumped systems. These diversion systems have made possible a cropping intensity of 200 % in the command area of 240,000 ha and this has placed the Citarum River Basin among the prime granary zones of the country.

There are also three large storage dams situated in cascade down the main river, and these have regulated the fluctuating river runoff to supply stable water to the conveyance canals. In addition to this, hydropower stations have been buil next to the dams to generate electric power, with total installed capacity of 1,400 MW.

The systems have also supplied raw water for municipal and industrial water uses in the urbanized areas located along the canals. The most significant of these is the supply to the city of Jakarta, with average raw water supply of about  $16.1 \text{ m}^3$ /sec at present.

In order to cope with the increasing water demand, canal system taps river flows where they cross a tributary or an independent river. The 70 km long West Tarum Canals taps the water from the Cipunegara River at the Salamdarma weir. Thus the network for the water resource utilization of the Citarum River System has integrated such dependent and independent rivers so that the estimated total basin area is about 11,000 km<sup>2</sup>. The network further links the Cikarang and the Bekasi River basins with a total catchment area of 2,000 km<sup>2</sup>, to abstract more water. Thus the aggregated eventual total drainage area of the Citarum is 13,000 km<sup>2</sup>, and the cities of Jakarta and Bogor are the eventual beneficiaries of the Citarum Water Resources Network.

Municipal and industrial water demands will increase naturally over time especially in urban areas. On the other hand, the Government is concerned about degradation of supply capacity and water quality, cause by aging of the facilities. The changes in flow regime and water quality due to changes in land use tend to exacerbate the situation. The Government is aware of the introduce an integrated water resource management approach to alleviate the situation.

According to description about Jasa Tirta II Public Corporation have responsibility to strategic river in Indonesia and we have expectation for this thematic workshop will get some concept for solve our problem.