Indonesia

Indonesia-1: Citarum
Indonesia-2: Bengawan Solo
Indonesia-3: Kali Brantas
Introduction

The Indonesia archipelago situated in south-east Asia consists of five main islands (Sumatra, Kalimantan, Sulawesi, Java and Irian Jaya) and some 13 667 other smaller islands with a total area of 1.9 million km². Geographically, Indonesia is located between the latitudes 6° 08’ N - 11° 15’ S, and longitudes 94° 45’ E - 141° 05’ E. The total population according to the 1990 census was 179.4 million with the forecast increase at about 1.98 %/year. Population distribution is uneven throughout the country. Java Island has the highest population density whereas the outer islands have very much lower densities.

Politically, Indonesia is divided into 27 provinces, 241 districts, 55 urban municipalities, 3 625 subdistricts and 67 033 villages. Most of the rivers are short, steep and productive in sedimentation. Indonesia is a tropical country affected by tropical monsoon rainfall having two distinct dry and wet seasons. In the wet season, it experiences heavy rainfall, ranging from 2 500 up to 6 000 mm/year. In the dry season it is very dry during a 2 month period normally between July and September.

The three rivers catalogued in this volume are the Citarum, the Bengawan Solo and the Kali Brantas located in Java Island. They are the representative rivers of the salient characteristics indicated above, that is, flood and drought, urban megalopolis and agricultural area, respectively. The Citarum is located in west Java, the Bengawan Solo in central Java, and the Kali Brantas in east Java. All three rivers flow towards the northern part of Java Island and into the Java Sea. A major reservoir and a number of small irrigation ponds have been constructed. It has a long history of fighting floods and providing for agricultural and urban water needs, and popular river front amenities. The Citarum River flows through one of the richest rice paddy areas in Indonesia. The basin experiences heavy rainfall in the wet season thus providing relatively stable discharges and operates in series with the reservoirs Saguling, Citara and Juanda.

Acknowledgements

A working group was established for the preparation of the catalogue, and a number of Institutes and individuals collaborated. The working group chaired by Dr. Badruddin Machbub as Director of Research Institute for Water Resources Development consisted of:

Joesron Loebis (Head), Sutjipto, Obin Taryana, Conny Amalia, and Dirjaya (Experimental Station for Hydrology),
Nana Terangna Ginting (Head), Sukmawati Rahayu and Ratna Hidayat (Environment and Water Quality Division),
Dyah Rahayu Pangesti (Head), Dr. Isdiana, Isnugroho, Irwan Safri, Rahardjanto and Darjanta Budihardja (Experimental Station for River Engineering), and
Agus Sumaryono and Sugeng (Experimental Station for Sediment Control Structures).

The organisations that have contributed include:

Jatiluhur Authority Project (POJ),
Upper Citarum River Basin Project (Proyek Citarum Hulu),
Badan Pertanahan Nasional,
Meteorology and Geophysical Agency,
Directorate Geology,
Projek Induk Pengembangan Serba Guna Bengawan Solo,
Proyek Induk Pengembangan Serba Guna Kali Brantas,
Kantor Statistik Propinsi Jawa Barat,
Jawa Tengah, and
Jawa Timur.