



Managing Water in Megacity Jakarta: An Historical Inquiry

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Jakarta, Indonesia, one of the world's megacities, has had problems that seemed daunting as a metropolis in the developing world, but under the conditions of rapid growth in the past two decades these have expanded to "mega" problems. Given Jakarta's location in delta region fed by 13 rivers, and its low elevation topography where the vast majority of its citizens reside, managing water has been especially challenging since it burst out of its constrained colonial boundaries. As the Dutch empire main port city in the East Indies since the early 17th century, the original settlement and its successors over the next three centuries were shaped fundamentally by both the rivers and a system of canals that the colonials built to channel the rivers into the city's nascent transportation system. Flooding during the rainy season and during high tides was a problem, as was disease nurtured by the stagnant waters during times when the river and canal flows were impeded by the lack of rainfall. The use of the canals and rivers as places to habitat, as a place where waste could be disposed of, did not alleviate the problem and, in fact, only made it worse.

Fast forward to the last half of the twentieth century, the same problems persist but they have been substantially elevated. Jakarta's rivers and canals were choked with refuse, thereby reducing the flows and also generating pollution. Along with heavy rains, this contributed to the problem of annual floods at a higher level of magnitude, especially since settlements replaced the rice patties that previously benefitted from the overflowing rivers and canals. And since surface water remains the main source of drinking water for the megacity, reduced flows and reduced quality represented another facet of Jakarta's water problem. Over the past decade, with three devastating floods (1996, 2002, 2007), calls for solutions to Jakarta water management issues have crescendoed.

To understand how Jakarta has been shaped by its relationship to water over the past four centuries is the essential thrust of the paper. It looks at the issues of water management efforts over this period in the context of urbanization patterns. There will particular attention to mitigation efforts in the 20th century, and to do so in the broader context of Jakarta's urbanization processes. From the vantage point of effective water management for Jakarta, it is possible to reassess critically the planning strategies followed over the past 30 years, especially given the fact that water management matters rarely got attention within this realm.

KEY WORDS: Jakarta, flooding, water management, urbanization.