



View of Pasig river: A return to primitive history

THE PASIG RIVER

Restoring the grandeur of a dying waterway

The Pasig river spans more than 10 bridges, joins 5 minor channels from Laguna Lake, snakes through Manila in a sharp U-turn to look like a semi-vermiform appendix on the map, widens by 300 feet, deepens by 6 to 12 and even 14 feet when it fuses with the Marikina and San Juan tributaries, until, after a 25-kilometer stretch, it locks up with the waters of Manila Bay.

Water lilies and quaiipo plants in the 19th century, uprooted by floodwaters, clogged the river and, decomposing, emitted foul odor. Burgeoning industrial factories in the 1950s, strewn along the riverbanks, churned enough waste into the Pasig to cause widescale pollution. And today, in the 70s, 150 factories from San Miguel, Taguig, Pateros and related districts dump 90,000 pounds of food particles, bits of cloth, chlorine and like organic solids into the Pasig river — daily.

The discharged industrial waste, revealed a Congress report in 1971, is equivalent to the waste of 2 million persons a day. Manila residents, in the meantime, add about 70,000 pounds of organic pollutants daily — garbage, debris, domestic wastes — and kill any organism in the river within the city. Aquatic life is impossible. During the dry season alone the river yields 30 to 1,000 ppm (parts per million) of pollution, dissolves a maximum oxygen level of 2 ppm, and requires a very high biochemical oxygen demand (BOD).

Squatter shanties lying along the riverbanks complicate the Pasig's problems. Of the 1,537 families squatting, 1,171 are classified as "indigent families" (with incomes less than P250 a month) and 368 are classified as "non-indigent families," with dwellings made of strong materials and appliances that include television sets. These squatters' colonies are grouped around the industrial enclaves of Puna, Sta. Ana and Sta. Mesa, the semi-urban areas of Napindan in Taguig and Sta. Rosa in Pasig town, and the Del Pan and Ayala bridges.

Vessels, shipwrecks, abandoned junks, decaying boats, barge, floating logs, complete the river's detri-

tion. The waters are left poisoned by rust and the seepage from septic tanks and sewers.

The brackish waters no longer answers to Rizal's play "Along the Pasig"

*Here the river gives in beauty
Peace of heart and kind,
Here the soul beset with beauty
Happiness may find.*

and, far from reflecting the light of the dying sun in the evenings, churn out filth and smell that would take, by practical analysis, 20 years to efface.

The 20 years may yet be cut down, drastically. A Pasig River Development Project, headed by Mrs. Imelda Romualdez Marcos, has begun clearing the river. The project, backed up by a budget that would soar to P77.7 million, covers the dredging and removal of all impurities, the building of roads, parks, lagoons and promenades in specified areas, the installation of ornamental lights and railings, the planting of trees along the riverbanks.

The project will tie up with the long-range plan to convert Manila Bay into a commercial, residential and tourist complex. Model duck farms will be set up in the Pateros area. A ferry service for commuters, with floating boarding stations at strategic points to relieve traffic snarls in adjoining cities and towns, will be opened. Squatter areas along riverbanks will be relocated in Tanay, Rizal and Dasmariñas, Cavite. In all, the relocation of squatters, flood control, sewerage disposal, clearing of esteros are integrated into the "Help Clean the Pasig" drive.

(Another project, the Laguna Lake Development, which calls for the exploitation of the full economic potential of the 90,000-hectare Laguna Lake, will be interwoven with the plan to revitalize the Pasig.)

President Marcos has pitched in P5 million for a start. And last August 16, Mrs. Marcos, Cabinet secretaries and Metropolitan councilors and engineers boarded a navy launch through the Pasig for the initial survey.

The first phase has been scheduled for completion by December of this year. At the moment, the Pasig River

Development Council has ordered the dispersal until September 15 this year of boats moored along the riverbanks and the removal of sunken boats, rafts, other water vessels, logs and other buried wastes. The government and the private sector will pool their resources to complete the first phase.

When the Pasig finally flows again, she can pick up from a proud history.

Pre-Malay kingdoms, as early as 12 A.D. during the Sung and Ming dynasties, clustered along the Manila Bay and around the gaping mouth of the Pasig river. Its riparian inhabitants, mostly farmers and fishermen, traded with merchants from Japan, China, Borneo and Siam (modern Thailand). By the Pasig, they unloaded their cargoes of cotton, silk, gold, pearls, glass, iron, damask and linen.

This early civilization was unearthed in a series of excavations in and around Manila. The Sta. Ana cemetery diggings in 1966, about 120 meters from the riverbank, turned out pottery, skulls and graves containing utensils and jewels. In 1967, world-renown anthropologist Dr. Robert Fox and archaeologist Alfredo Evangelista made the pronouncement: the Pasig was Manila's cradle of civilization in early times.

The 16th century found about a thousand inhabitants concentrated on the main banks of the river. The population number was low; mortality rates outpaced birth rates, cholera and dysentery took a heavy toll on the population each year.

Spaniards founded the city of Manila in 1654 on the southern bank of the river. They then transformed the Pasig into a natural fortification. The northern bank became the commercial suburb and, in 400 years, the city of Manila became a teeming metropolis and the southern bank a heady port center.

One day, with the Pasig revitalization program promising thus, the tropical vegetation on the banks will once more grow, the motorboats, barges, rowboats and cargobots will again anchor and trade in a habitable commercial waterway, and the sights by the river will then recall the Pasig that Rizal, Balagtas and Abelardo knew.

Pollution: Onus of progress

There was a minimum of fanfare but a maximum of collective thinking when the country's top ecologists took up Philippine environmental problems early this month.

The overall Philippine ecological picture was bleak. Dr. Francois Bourliere, consultant and chairman of UNESCO's International Coordinating Council on Man and the Biosphere (MAB) program, warned that the Philippine environmental health problem was at "a serious stage." Dr. Reynaldo Lesaca, commissioner of the National Water and Air Pollution Control Commission, pointed out that the Pasig river might not be salvaged at all if it continued to be the dumping site of industrial and domestic wastes. Other scientists and researchers, mostly university-based, took to task the Filipino's mismanagement of his environment. They said this had led to environmental disturbances, depletion of natural resources, accumulation of environmental pollutants, deterioration of the biosphere and uncontrolled population explosion.

It was amid this air of crisis that the MAB seminar-workshop reeled off at the National Science Development Board planetarium on August 3. The three-day meet was aimed at producing concrete proposals for interdisciplinary researches to be conducted in the Philippines as part of its contribution to the worldwide MAB program. The proposals would also be the basis within the natural and social sciences for the rational use and conservation of the resources of the biosphere and for improvement of the global relationship between man and the environment.

Of the 13 projects proposed by the MAB National Committee and considered by the International Coordinating Council during its 17th general conference held in Paris in October last year, five were given priority. These ranged from determining the ecological effects of increasing human activities on tropical and subtropical ecosystems, on lakes, marshes and estuaries to warding off pollution effects on terrestrial and freshwater ecosystems.

Five of the 13 "task forces" created to tackle the specific core project proposals came out with alarming initial findings.

Task Force 1, for instance, headed by Dr. Ireneo Domingo of the University of the Philippines' College of Forestry — charged with measuring ecological effects on tropical ecosystems — revealed that forest destruction by illegal cutting and kaingin-making (shifting agriculture) was going on at a rapid rate of 170,000 hectares per year. The kaingin-method damaged some 30,000 to 40,000 hectares last year.

Dr. Emil Javier of the UP College of Agriculture and Task Force 2 chairman, reported that of the country's 3,476,000 hectares of grassland, 971,000 hectares had been leased by