Our Collapsing Urban Ecosystem

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Dr. Manuel H. Dayrit has laid down an ecological view of the National Capital Region, which even if expressed in academese, is all too familiar to the harassed and hassled dweller of Metro Manila.

Said Dr. Dayrit, the ecosystem of Metro Manila is breaking down. Its four elements -- land, waters, air, people -- no longer enhance one another as they ideally should. In 1987, an estimated 2.5 million or 34% of total metro population were squatters. By 1992, that figure will soar to three million.

In our situation of disordered growth, basic services are bound to be patchy. Only 15% of the city is sewered. The metro's sewage network is outdated by at least 45 years. At the present rate of expansion, it will take 25 years for that sewage system to cover 50% of Metro Manila.

Potable water services are said to reach 70% of the population -- an optimistic estimate in my opinion. The water level of the underground aquifer has been going down by about 4-10 m a year because of overextraction of ground water, causing sea water to seep in. An estimated 55% of city water is lost through pipe leaks and unbilled water consumption. Laguna de Bay is being tapped as a source of potable water by the year 2000, but this would require treatment plants as the lake water is heavily polluted by industrial and human wastes and agricultural toxins.

Travel time by public transport in Metro Manila is one of the slowest in the world because of increasing vehicle density and inadequate road surfaces to accommodate the increase. The combined capacity of all public vehicles -- 431,000 seats -- is not enough for the 8.5 million person-trips taken by residents every working day.

Inadequate electric power translates into irrecoverable economic losses. In 1989, 60 firms in Metro Manila reported losses in production worth P27 billion due to power outages.

The spread of slum and squatter colonies is taxing the ability of the Health Department to provide adequate health services. Immunization against measles covers only 30-60% of slum children and more than 90% of these children harbor intestinal parasites and remain untreated.

The Pasig River and its tributaries are biologically dead due to industrial and human wastes. Biochemical oxygen demand has been recorded to be as high as 500 mg/l, when the safe level that would still allow aquatic life to flourish is only 20 mg/l.

Fourteen sampling stations in Manila Bay have detected signs of entrophy or oxygen depletion because of excessive algae and bacteria produced by pollution. Because of inadequate sewage in Metro Manila, waters as far as those nearing Corregidor have shown high levels of fecal coliforms that cause infections of the eyes, ears and the gastro-intestinal and respiratory systems.

Pollution in Manila Bay has affected the shellfish industry of Cavite and poses health hazards as a possible avenue for the spread of cholera, Hepatitis A and paralytic shellfish poisoning. The spread of a marine dinoflaggelate, the so-called red tide, is a direct result of water pollution.

The inability of the metro government to devise and sutain an efficient system for the collection and disposal of garbage aggravates the related problems of air and water pollution and recurrent floods in the Metro area.

As an invited reactor to the presentation of Dr. Dayrit, I am offering suggestions on what can and should be done to rescue our urban ecosystem.

1. I recommend a methodology by which a mammoth problem like our urban ecosystem can be managed and solved. Whatever the problem, it should be broken down into barangay-level components and each barangay should be graded A, B, C, D or E in relation to that problem.

The idea is to upgrade the condition of each barangay, with the active involvement of its residents, one modest grade at a time, from E to D, from D to C, from C to B or from B to A ... instead of trying to solve a problem on a mammoth metro scale, with grandiose, unrealizable objectives.

Such a methodology, aside from having modest realizable goals, lends itself to quantification and computerization on both macro and micro levels. Hence, it provides a system for effective monitoring of progress -- or lack of progress -- for the administering bodies.

2. I propose the formation of a Presidential Commission on Urban Development to strategize the management of the urban ecosystem and to set targets for local government units to accomplish within specific time frames.

3. I am in favor of a massive program to build low-cost pre-fab housing for the poorest of the poor. In my opinion, housing reform will benefit more people and is therefore more desirable than agrarian reform.

4. I propose: a) an extensive network of elevated LRTs that reaches as far as Malolos, Tanay, Los Baños and Cavite City, which will decongest the metro area by allowing low and middle income families to live far away and yet still be within one hour's commuting time to the city center via an elevated commuter rail system; and b) the conversion of existing metro thoroughfares (like EDSA, Roxas Boulevard, España, etc.) into non-stop arteries by building overpasses and interchanges at all their major intersections.

5. I propose we do away with filthy open dump sites (like Smokey Mountain) and distant landfills (like Carmona and San Mateo) for the disposal of garbage. Instead the Environmental Network Center, of which I am chairman, has proposed to the government the compacting or incineration of garbage in Tondo and the use of the compacted or incinerated garbage to reclaim land from Manila Bay.

6. Finally, I propose that the least polluted section of Laguna de Bay be identified and the appropriate are walled off from the rest of the lake. The walled water and its sources can then be protected and treated to make it potable.