

Air pollution has been a burning issue in industrialized countries for the past several years. In many cases, it has ceased to be just an issue and has instead developed into a full-blown crisis.

Stack emissions from industrial plants and exhaust from motor vehicles have so filled the atmosphere with smog that, in some cities, people choke or get bedridden with respiratory diseases. Consequently, heavily industrialized nations spend millions in a desperate effort to check the problem. Japan, to cite one example, allocates a big slice of her budget for the installation of anti-pollution devices in industrial areas.

Financing pollution control may not be such a big burden for wealthy countries. For developing nations, the task can be very demanding. But the challenge has not stopped them from adopting measures to prevent and control this modern-day scourge.

In the Philippines, the following facts have emerged from studies initiated by the national government:

Among the types of industry operating and contributing to air pollution are factories, sugar centrals, chemical and fertilizer plants, beverages, cigar and cigarette factories, soap and detergent factories, pharmaceutical plants, tanneries, food processing plants, power plants, ceramics, steel and galvanizing plants, and foundries.

With regard to motor vehicles, another pollution agent, there were, as of June 30 last year, 604,853 registered vehicles, of which 112,259 were public buses and jeepneys and 492,594 private vehicles. Of the total, 289,232 or nearly 40 percent were registered in Greater Manila, 38,762 and 250,470 of them for public and private transportation, respectively.

These motor vehicles in Greater Manila were packed into only 2,063 kilometers of roads representing 2.8 percent of the total 75,392 kilometers of roads in the country.

Complaints against industries range from smoke, dust, fumes and odor.

POLLUTION

Solving a modern-day scourge

Pollutants from motor vehicles include unburned hydro-carbon from gasoline, carbon monoxide, particulates, lead, oxidants (like ozone), alcohols (from gasoline combustion).

The National Water and Air Pollution Control Commission (NWAPCC) has been monitoring, sampling and testing air pollutants in Quiapo, one of Manila's busiest commercial and transportation districts. Initial findings by the commission indicate 15 to 20 ppm (parts per million) of carbon monoxide are emitted by motor vehicles daily. This is within tolerable limits — there's no smog to irritate the eyes. (About 150 ppm of carbon monoxide would make a commuter feel dizzy and nauseous.)

Although pollution associated with emissions from motor vehicles are within tolerable limits, this may not be true as regards stack emissions from industrial plants. There were, as of the end of June 1972, 281 firms surveyed and 117 factories sampled for stack emissions in Greater Manila. Seventy-five factories sampled by the NWAPCC were found to have been contributing 2.55 tons of particulates and 7.55 tons of sulfur dioxide a day.

The NWAPCC says there is a strong correlation between air pollution and respiratory diseases. This finding is corroborated by ecological studies abroad.

While pollution does not yet present a very grave danger to health and environment in the Philippines, the country considers it a must to conduct scientific studies and find ways to curb the problem at its early stage. The NWAPCC, for instance, aside

from its monitoring service in Quiapo, has sent fact-finding missions to the cities of Iligan, Cebu and Davao where many industrial firms manufacturing cement, chemicals and steel products have been set up.

To supplement its studies, the commission trades data with other countries making similar investigation. In one specific gesture, the government hosted a one-week seminar on air pollution recently.

The seminar, initiated by the World Health Organization, was held May 22 to 28, attended by 23 delegates from Australia, Fiji, Guam, Hong Kong, the Khmer Republic, Laos, Malaysia, New Zealand, Papua, New Guinea, the Philippines, South Korea, Singapore and South Vietnam. It ended just one week before the observance of World Environment Day on June 5.

Speeches, reports and deliberations in the seminar focused on industrial emission and its health hazards.

As a point of reference, the delegates noted that the construction of industrial plants in highly developed nations was not tied up with urban planning. This has resulted in a serious ecological imbalance. Many factories were built in the heart of cities or along the nerve centers of highly populated rural sectors — thus posing grave danger to the inhabitants.

This drawback must not be repeated in developing countries, the conferees warned. Proper locations for new plants must consider the topographical and meteorological conditions.

The emerging philosophy is that, although free enterprise governs the

opening of industrial firms, the government must regulate the location and operation of these establishments. Or, in consultation with the government, industrial companies should adopt self-regulatory measures to control industrial emission.

Preventive legislation, preferred over punitive ones, should ensure the screening of all industrial permits, installation of anti-pollution devices and the envisioned operations of new plants. Technical experts, seminar speakers stressed, can be hired to determine the invisible pollutant, the most dangerous of all.

The installation of anti-pollution equipment entails cost — a deterrent to the control program. The plan can pay off if financial incentives, such as accelerated depreciation rates are given for the setting up of anti-pollution devices.

The specific measures proposed in the seminar departed from what similar conferences had taken up. Earlier symposiums held in Europe merely discussed causes and scientific control techniques without proposing detailed legislation. The WHO seminar took a step further. The participants concluded for instance, that where pollution is caused or is likely to be caused by a specific industrial activity, the polluter should pay.

The national government, even before the WHO seminar, had announced three broad policies aimed at pollution control: dispersal of industries, prohibition of polluting industries in Greater Manila, and zoning plans for urban areas to delimit places where industry would be allowed to operate.

The anti-pollution program presents a big challenge to developing nations specially those trying to hasten their pace toward industrialization. Although hard-pressed with capital and modern equipment, they have, however, arrived at the proper perspective for diagnosing the causes of pollution and have taken the necessary, initial steps toward its prevention and control.

An ideology...

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forms, but because the historical experience of hitherto colonized peoples unequivocally rejects it. We will not inflict on others what had been inflicted on us.

To radical critics, the procedure I have just described is characteristic of capitalist development. The alternative, however, is internal exploitation, what Salvador de Madariaga has suggested as a "society colonizing its own people." This seems to have been the method of development adopted by the two major communist powers.

Capitalist nations criticize communist nations for imperializing the Balkan states and colonizing their peoples, a charge that is not, however, original: this remains the communist critique of capitalist societies. Meanwhile, the great capitalist and communist societies have achieved development on their own terms. . . .

Is there a third way to development, a way that is non-exploitative? Perhaps, there is, and it may be the mission of this symposium to find it and enunciate it to our people. But I

should think that you will not try and evade the fact that there is no royal road to progress. We can reject exploitation, but we cannot escape hardship. We shall be humane but we cannot be "tender-minded." We must at all times persuade but we cannot be confined to mere exhortation and rhetoric.

I said that the development of the poor peoples has to occur in a world torn by fiercely competing ideologies, despite the necessary accommodations of international politics. I would, therefore, think, that the aim of this symposium is to arrive at an ideology of development.

It has been said many times that the Filipino people are in need of an ideology, a philosophy that unites them in common thought and effort. I think, however, that the thoughts of our great patriots, statesmen, soldiers, intellectuals and artists, contain the elements of a national ideology. But development is an end, a project, an objective; it is not an ideology in itself.

I say this lest we lead our people to the false notion that national development is the ideology and so elect one which puts national power above the welfare of the individual on the theory that a rich nation auto-

matically makes for rich citizens. It is not our intention to make our people individual servitors of the state. They must work for and achieve national development, to their best abilities and the sacrifices they are willing to make, as a means of realizing their full potentialities as human beings.

In this, on the eve of the seventy-fifth anniversary of our independence, we must understand that every generation brings forth a new Filipino. There was a new Filipino for the Propaganda Movement and a new Filipino for the Revolution; a new Filipino for the Commonwealth. But we speak of the New Filipino, not because we want to exalt this generation above the rest, but because we are aware that the new Filipino is a product of the Modern Age of Man, the motto of which is "anything is possible." It does not mean, however, that anything is permissible.

There are three fundamental characteristics of this Modern Age. Firstly, is that the science and technology of mankind has made poverty morally and practically indefensible. Secondly, that the exercise of human will and reason under insuperable odds is by no means a fruitless exercise; the historical experience of other peoples and nations is proof of this.

Thirdly, the contraction of the world into "a village" demands a restructuring of the world order.

The Filipinos, whatever their circumstances, have arrived at a consciousness of what their world is. To be a Filipino at this stage of our national history is to be faced with the total pressure of a world in change. The unrealized hopes, the unleashed energies, of generations before him, the dreams and aspirations of those who fought every revolt and every war in the name of a society different from what had been, now come to confront, possibly with a vengeance, all the living generations of today's Philippines.

This, then, is the moral and historical context of your symposium. The tendency is to think of development in strictly economic terms. The truth is that development is a human decision, a decision of civilization on the one hand, and a political decision, on the other. We should not think that there is technique or science on one extreme, and human considerations on another. Science and humanism go together. Development will be achieved by scientific means, this is understood, but it is human beings who will use science for the desired ends of human community.