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ENVIRONMENT AND POLLUTION CONTROL

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Environmental pollution is the undesired spread of toxic chemicals into the aquatic and terrestrial habitats of the world. There are many different types of pollution, usually named for the location that has become polluted. For example, if oil is dumped into a local creek, it is said to be an example of water pollution.

Water, air and land pollution are three of the most common types of pollution. However, pollution often affects multiple systems. For example, if chemicals are burned in a factory, and the smoke rising out of the chimneys carries pollutants, the air becomes polluted. However, rain may cause some of this pollution to fall down to the land. Eventually, most of the pollution that strikes the ground will make its way to the water, where it will cause water pollution.

Pollution can cause hardships for plants, animals and other organisms. Some organisms may eventually become endangered or extinct because of water, land or air pollution. Some environmentalists consider excess ambient light and sound to be forms of pollution as well. Light pollution can alter the behavior of wildlife and disrupt the circadian cycles of plants. Sound pollution in the ocean may be a cause of whale standings.

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Primary and Secondary Causes of Pollution

Causes of Pollution

We refer to PRODUCTION as the primary cause of pollution because the whole cycle of extracting and processing natural resources and then selling processed goods starts from this point. And it obviously comes before consumption.

The diagram to the left is a basic presentation of major sectors which comprise numerous polluting sub-sectors.

The production side of the diagram includes manufacturing industries, power generation, road, rail & air transport and agriculture & timber production. In reality, it can be of course broken down into many other industries / sub-industries.

A car is a necessity for many people who use it in their everyday lives. In order to produce cars, a car manufacturer needs to:

- Purchase raw materials such as metal, rubber, plastic, wood, paint etc.

Raw materials are extracted from earth in large amounts often damaging the natural system of the area from which they were extracted, as well as surrounding areas, ex. rainforests.

- Purchase energy / electricity which is usually generated from petroleum resources.

Petroleum-based energy generation causes the emission of gases into the atmosphere and often contaminates water and land of the surrounding areas.

Best ways to fight indoor air pollution

When you think of air pollution, you most likely don't conjure up images of the inside of your home or office. But because we spend so much time indoors — especially in colder weather — keeping the air quality as clean as possible in your home, car and workplace is important for your health. And, unfortunately, we bring most of those pollutants indoors ourselves.

Cigarette smoke:

Experts say that one of the most common indoor air pollutants is cigarette smoke.

The residual gas and particles from cigarette smoke that settle ... [do] pose health hazards, particularly in rooms with a lot of fabric or carpeting.

She says the risks are disproportionately high in children, who are more likely to be playing on the ground, and in people with chronic heart and lung problems.

"We all have heard of second-hand smoke; this is called third-hand smoke."

Household cleaners

Household cleaning supplies are another common cause of indoor pollution. Harsh chemicals that give off fumes can irritate your nose, mouth and lungs, as well as your skin.

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“Those with sensitive lungs and upper airways, like people with asthma and chronic sinusitis, may notice their symptoms getting worse,” Dr. Khatri says.

The fumes can cause inflammation that can make it more difficult for people with chronic lung conditions to heal from infections. It can also worsen inflammation due to other triggers, such as allergies.

Role of ventilation, air filters

Although opening windows helps ventilate your home, car or office, that's not always possible due to allergies or extreme temperatures.

Consider using air filters and getting your HVAC (heating, ventilation and air conditioning systems) checked regularly.

Also, air purifiers and aromatherapy can often make air quality worse unless they are the right kind, Dr. Khatri says. They need to be HEPA (high-efficiency particulate arresting) air filters.

Car Pool

Less cars on the road means less air pollutants coming from a car's tailpipe. Carpooling can reduce the amount of hydrocarbons, nitrogen, oxides, carbon monoxide, and carbon dioxide, says Florida's Department of Air Resources Management. The number of miles driven and the number of trips taken greatly affects the air quality.

Source: Ole Raaschou-Nielsen, Zorana J Andersen, Rob Beelen, et. al. Air pollution and lung cancer incidence in 17 European cohorts: prospective analyses from the European Study of Cohorts for Air Pollution Effects (ESCAPE). *The Lancet Oncology*. 2013.

Since 1970, birth rates have dropped, sometimes quite rapidly, in many less developed countries. This is an encouraging sign to those governments that have identified rapid population growth as an obstacle to their development goals. Declines have occurred in settings that vary widely. In an attempt to influence the population size and composition of their country, governments have established population policies.

Research studies have found that organized programs to make family planning information and services widely available have the most immediate results and cost less than other programs. Less developed countries that have implemented successful programs have made a strong political commitment to culturally sensitive, conveniently located outreach programs that offer users a wide variety of family planning methods. In particular, programs in which female family planning workers visit women in their homes bring about a tremendous increase in the use of contraception. In traditional societies, family planning programs are most successful when community leaders, those people who have a strong influence on a group's decisionmaking and on individual attitudes, support them. The importance of this factor is reinforced by a reanalysis of the fertility decline in 19th century Europe. The study found that a change in cultural attitudes toward the acceptability of limiting family size was as essential as the social and economic improvements that were occurring.

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However, to reduce fertility to the level required to bring about slow population growth, social and economic improvement is necessary as well. Couples living in extreme poverty have little reason to think that having fewer children would improve their lives. Children may indeed represent their future security since many people depend on their children for household and agricultural work and for support in old age. Studies have found that when poor families achieve a certain level of income there is a drop in fertility. The availability of family planning services can help translate ideas about smaller family size into reality.

The status of women also affects fertility levels. Many women, especially in less developed countries, have few choices in life outside of marriage and children and tend to have large families. Investing in women, by providing education, health, and other services, helps to expand their opportunities and reduce their dependence on children for status and support.

Immigration policies are also used to regulate population growth. Some countries openly encourage emigration to relieve crowding and unemployment. Other countries restrict the number of people who may enter and become citizens. Some countries absorb many illegal immigrants despite specific policy choices, and others may choose to accept a large number of refugees.

Water pollution can be defined in many ways. Usually, it means one or more substances have built up in water to such an extent that they cause problems for animals or people. Oceans, lakes, rivers, and other inland waters can naturally clean up a certain amount of pollution by dispersing it harmlessly. If you poured a cup of black ink into a river, the ink would quickly disappear into the river's much larger volume of clean water. The ink would still be there in the river, but in such a low concentration that you would not be able to see it. At such low levels, the chemicals in the ink probably would not present any real problem. However, if you poured gallons of ink into a river every few seconds through a pipe, the river would quickly turn black. The chemicals in the ink could very quickly have an effect on the quality of the water. This, in turn, could affect the health of all the plants, animals, and humans whose lives depend on the river.

Thus, water pollution is all about quantities: how much of a polluting substance is released and how big a volume of water it is released into. A small quantity of a toxic chemical may have little impact if it is spilled into the ocean from a ship. But the same amount of the same chemical can have a much bigger impact pumped into a lake or river, where there is less clean water to disperse it.

Water pollution almost always means that some damage has been done to an ocean, river, lake, or other water source. A 1969 United Nations report defined ocean pollution as:

The introduction by man, directly or indirectly, of substances or energy into the marine environment (including estuaries) resulting in such deleterious effects as harm to living resources, hazards to human health, hindrance to marine activities, including fishing, impairment of quality for use of sea water and reduction of amenities

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Fortunately, Earth is forgiving and damage from water pollution is often reversible.

India's polluted Ganges River threatens people's livelihoods

The Ganges is India's holiest river, considered a source of spiritual purification for devout Hindus. But today the river is among the world's most polluted, struggling under the pressures of modern India.

On the banks of the Ganges River in the Indian city of Varanasi, a man in his thirties is washing clothes by rhythmically hitting on them on a granite slab. Surrounding him on the steps that rise out of the water is a brightly colored patchwork of saris, drying in the morning sun. The man's name is Vijay Kumar and his family has been working on the river bank washing clothes for generations.

"Every day I'm here," he said. "I start at 5 a.m., then later in the day I iron everything. In the evening I deliver clothes to the customers."

Vijay Kumar's spot on the river is right next to one of Varanasi's traditional cremation areas - a place where Hindus come to burn the bodies of their dead. As he washes clothes, human ashes are dumped into the water just meters away, and smoke from the burning funeral pyres wafts out over the river behind him.

"It's a problem that the bodies are burning just near to me. But what can I do?" said Vijay. "This is our traditional place to wash clothes, and there is nowhere else to go. The government promised us a new location some years ago, but nothing has changed."

For resolving the increasing stress on the environment and resources, and also responding to the ever-increasing demands of the citizens for environmental quality protection and improvement in ecological environment, the Environmental Protection Bureau (DSPB) conducted the environmental master planning of Macao SAR, in order to realize the vision of "Building a Low Carbon Macao, Creating Green Living Together".

In fact, the *Environmental Planning* is a starting point for the environmental protection works. It is hoped that in the coming decade, by formulating the implementation mechanism for the execution of the present planning document in view of different environmental elements and by the coordination of different government agencies and sectors of the society, action plans in the atmospheric, acoustic, ecological and aquatic environments would be carried out. By implementing effective control measures for pollution, we hope to reduce the pollutants produced at source and maintain achievements in nature conservation and greening in the city. More importantly, by educating the citizens for good awareness in environmental protection, consumption motives and commuting habit, it is hoped that while the Macao citizens are enjoying the abundant material lives, they can also have breaths of fresh air, tastes of clean drinking water and experiences of a comfortable natural environment.

However, since the environment is a complex, variable and extensive system, protecting the environment is a hard and enduring task. It is impossible that all the existing pollution problems in the environment can completely be resolved in the

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next decade. A wonderful and quality environment must be achieved by continuous planning, governmental policies, efforts of the enterprises and public participation.

It is the responsibility of everyone to protect our environment. Let us fulfill our responsibilities in environmental protection, creating a quality ecological environment and sharing wonderful green living together.

Work Cited

1. Patel Ashok, 'Environmental studies and Questionnaires', World World Publication Ranip Ahmedabad. Published in 2015.
2. Mehta Gita, 'River Sutra', Random House at Toronto, Published in 1993.
3. www.seasave.org
4. www.eco-prayer.org