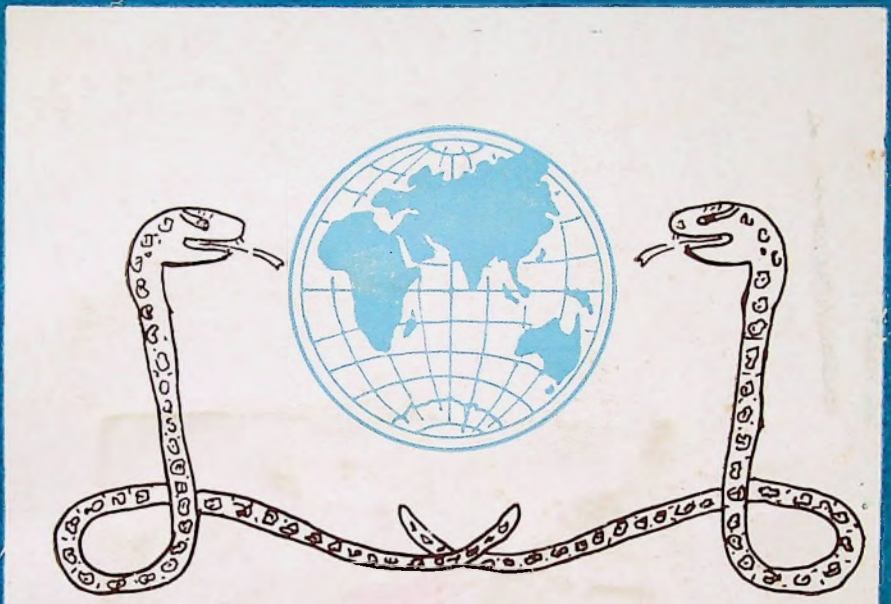
OUR PLANET — OUR HEALTH

THINK GLOBALLY — ACT LOCALLY



THE NEW RAHU — ENVIRONMENTAL DEGRADATION

1990

WORLD HEALTH DAY

DIRECTORATE OF HEALTH
(STATE HEALTH EDUCATION BUREAU)
Govt. of Andhra Pradesh

PEOPLE'S INFORMATION CENTRE
3-5-273 Vittalwadi,
Hyderabad - 500 029.

DR. HIROSHI NAKAJIMA, M D., Ph.D.
Director General,
World Health Organisation,
Geneva.

Message

It is now increasingly evident that more and more diseases stem from the degradation caused by man to his own environment. The potential harmful effects of industrial development on our global ecosystem are now better known. Ozone layer depletion, acid rain, climate change, chemical pollution are some examples of the man-made wounds to our planet.

We are at a turning point ; warnings of the damage to our health and quality of life are growing louder. An increasing number of people are acting to stop the degradation of our environment.

As Director General of the World Health Organisation, I have chosen the theme of Environment and Health for World Health Day, 7 April 1990.

WHO intends to spotlight the measures that individuals, communities and nations can and must undertake to halt further deterioration of the health of our planet. Our own health and that of future generations depends on it.

I make a solemn appeal for solidarity among industrialized and developing countries. We must find viable options for sustainable development and to protect health everywhere on our planet.

Decisions taken by one country can have repercussions not only for its neighbours, but for all countries of the world.

On the occasion of World Health Day I invite the Member States of WHO, governmental and nongovernmental organizations and all concerned with the well-being of the world, to embark on an awareness campaign. We must alert everyone to the dangers of an unhealthy environment and to measures they must take to avert them.

Sd/- Dr. Hiroshi Nakajima

DR U KO KO
Regional Director,
WHO South East Asia Region

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Message

Never before in the history of the human race has mankind faced the kind of ecological dangers that it is now confronted with. Population explosion, uncontrolled urbanization and industrialization have brought in their wake widespread pollution of air, water and land as well as deforestation, desertification, accidents involving chemicals, and the danger of extinction of some plant and animal species. In the name of progress, man seems to have thrown caution to the winds. All that matters is the perceived benefit in the short-term

Fortunately, since these problems are largely man-made, there are workable solutions at hand as well. But these can be arrived at only through coordinated global actions. However, the message for an urgent solution is loud and clear : Unless something is done **Now,** there may as well be no tomorrow.

Numerous reports by Commissions and environmentalists have clearly highlighted the need for international concerted action to stem the tide that seems all set to engulf the world. It is to uderscore, once again, the very direct links between man and his environment that WHO has chosen environment and health as its theme for World Health Day this year.

The increase in air and water pollution, giving rise to the greenhouse effect, depletion of the ozone layer, rising sea level, respiratory and water-borne diseases, and the host of other problems related to rapid urbanization and industrialization need urgent action, not so much to undo the harm that has already been done, but to prevent further damage to the world's ecosystem.

As the Director-General of the World Health Organization, Dr. Hiroshi Nakajima has said, "We must alert everyone to the dangers of an unhealthy environment and to measures they must take to avert them."

I am confident that World Health Day this year will help us to realize how closely interwoven is the health of our planet and our own, and to take appropriate actions to improve health and preserve mankind.

Sd/- Dr U Ko Ko

KRISHAN KANT
Governor of Andhra Pradesh

Raj Bhavan
HYDERABAD

Dated 6-4-1990

Message

The World Health Day is being observed on the 7th of April, 1990. The theme-focus this year by the World Health Organisation is "OUR PLANET, OUR HEATH : THINK GLOBALLY, ACT LOCALLY".

Our Planet, the Earth, and its very existence is being endangered as a result of the pollution of the atmosphere, the waters and the environment affecting the Balance of Nature. As a result of the 'Green House Effect the Earth is reported to be warming up and if this process continues as a result of the pollutants that is the so-called green house gases such as Carbon-dioxide, Methane, Chlorofluorocarbons, the Earth's temperature may get raised by 5 to 8 degrees over the next few centuries resulting in droughts, the raising of the sea level, the flooding of the Earth and extensive damage by killer-cyclones etc. It is, therefore, necessary that Mankind should think globally to act in unison quickly and implement these plans locally co-ordinating human efforts at various national levels to stop global degradation. Programmes such as afforestation, Conservation of forests and wild life and such other programmes have to be planned and implemented to maintain the ecological balance of Nature. Such positive planning and immediate action alone will save the Earth and ensure human beings and our posterity to live happily and in good health in the Future.

I wish the Peoples Information Centre, the Directorate of Medical and Health Services and the Governament of Andhra Pradesh, all success in their efforts to create greater awareness towards this pressing problem of safeguarding Our Planet and Our Health.

Sd/- *Krishan Kant*

DR. M. CHANNA REDDY
Chief Minister,
Govt. of Andhra Pradesh

HYDERABAD

Dated 5-4-1990

Message

I am indeed happy to learn that the Directorate of Medical and Health Services and Peoples Information Centre are jointly organising the World Health Day Celebrations.

The problem of environmental pollution is assuming serious proportions in these days and the large scale usage of pesticides has lead to increasing ill effects on human health. Population explosion is one of the reasons causing all these problems.

I wish the World Health Day Celebrations all success.

Sd/- Dr. M. Channa Reddy

NALLAPAREDDI SRINIVASUL REDDI
Minister for Roads & Buildings, Mines,
Medical & Health, Govt. of A. P.

HYDERABAD

Message

The World Health Organisation has very obviously selected the theme ' Our Planet, Our Health — Think Globally; Act locally'' for this year's World Health Day Celebrations as our planet is being threatended because of increasing environmental degradation. We must halt this degradation before it is too late.

Scientists have reported that the temperature is rising and that there is a depletion in the Ozone layer. The level of Carbondioxide is increasing. The soil, water and air are getting polluted and the high noise level is causing considerable damage. Because of large scale deforestation, owing to pressure on available land, not only human beings but also animals are suffering,

The World Health Organisation has done well to highlight the dangers that ensue because of the degradation of the environment. Very rightly it has pointed out that local actions influence the people all over the world. Scientists of a particuler country may invent weapons which are capable of destroying several countries. We must think of the repercussions that might be caused all over the country and the world because of the actions that we might initiate in one place.

I am happy to note that environmentalists have begun to tell others the hazards that are caused by the wrong exploitation of nature's resources.

I am sure that the Peoples Information Centre and the voluntary organisations would continue to step up their efforts in creating awareness among the people of the health hazards caused by ecological imbalances.

I wish the celebrations all success.

Sd/- Nallapareddi Srinivasul Reddi

S. K. ARORA, I.A.S.
Secretary to Government
Health, Medical and
Family Welfare Department

HYDERABAD

Date 3-3-1990

Message

The World Health Organisation has chosen "Our Planet, Our Health-Think Globally, Act Locally" as this year's theme for the World Health Day celebrations. It highlights the need to create awareness about the role environment plays in our lives and the efforts one should take locally to see the people all over the globe are not exposed to dangers.

One of the prime concerns of mankind should be the ways in which human communities have increasingly mismanaged their relationships with the non-human components of the environment to the detriment not only of species and ecosystems but of the ability of the environment itself, regionally and globally, to respond to the needs of its most complex and highly developed form of life-mankind itself. Since man himself is the prime source of environmental degradation and its prime victim, greater attention must be bestowed to the quality of man's surroundings.

While governmental intervention is necessary to preserve ecology and prevent environmental degradation, non-Governmental efforts would be more useful in focussing attention to the problems that arise from the harmful effects of wrongful or over-exploitation of the bounties that nature has provided to us. I am happy that a voluntary organisation, the Peoples Information Centre, is playing a useful role in supplementing the work of the Government in the field of health education.

Sd/- S. K. Arora

DR. G.V.S. NAGABHUSHANA RAO
Director of Health,
Andhra Pradesh, Hyderabad.

HYDERABAD

Message

The celebration of the World Health Day on the 7th April with a new theme every year serves a unique purpose of highlighting an important problem relating to public health with a view to focusing the attention of all concerned on an issue in a bid to preparing them for concerted action for its mitigation.

The intensity of the activities and the tempo generated during the World Health Day celebrations go a long way in creating awareness. They lead to the evalution of the problem and implementation of various remedial measures.

This year's World Health Day theme relates to health of individuals vis-a-vis their environment. It is needless to point out that the problem of environmental pollution has reached an alarming proposition today. We are faced with many hazards posed by degraded environment, which are unfortunately an offshoot of technological and industrial advancement. This paradoxical situation needs to be talkled effectively, failing which the very survival of human race on our planet is threatened.

The success of any programme which requires involvement of the people in large numbers invariably requires the involvement of multiple agencies in its execution. It is here that the need of voluntary and service organisations is felt very much. Such institutions play a crucial role in the accomplishment of the task.

I am very happy to note that the people's Information Centre, Hyderabad has been rendering commendable service for the dissemination of knowledge on health to the people. I wish all success to the organisation in its future pursuits in this sphere of activity.

Sd/- Dr. G. V. S. Nagabhushana Rao

DR. U. BRAHMAJI RAO
Director of Medical Education,
Andhra Pradesh

Hyderabad

Dated 30-3-1990

Message

The 23rd World Health Day is being celebrated with the Theme — "OUR PLANET, OUR HEALTH - THINK GLOBALLY, ACT LOCALLY". The limited natural resources available to humanity on this planet are being ravaged by the foolishness of the mankind. To add insult to injury, there is pollution of atmosphere, water and contamination of food materials. Unless this depredation is stopped and we switch over to the resources like sun-light, the future for mankind is not too bright. I wish all success to the deliberations of the World Health Day.

Sd/- U. Brahmaji Rao

Safe Environment Needed

It is no exaggeration to say that one of the few unifying factors in today's world, cutting across social and political systems, religions, continents and nations, is a growing concern for environmental health and protection of the Earth.

It was only in the second half of this century that it dawned on us that Development with a capital D has two faces : nations and individuals may become richer, but factories and cars spell environmental danger. The world-wide "green" movement is evolving very rapidly from a fringe faction into a major force on the international scene. There is a very good reason for this. Not only the quality of life but, in the long-run, the very survival of the species depends on safeguarding our planet. Global environmental problems seem to be taking over from nuclear war fears as the world's biggest headache.

The human population reached its first 1,000 million early in the nineteenth century and has never looked back. Today, we number 5,000 million plus, and it is predicted that by the Year 2000 we will have chalked up another 1000 million. Behind these dry statistics are individual lives, filed in official report under such euphemisms as "living in deprived conditions". The World Bank defines 800 million people as "the absolute poor" — the equivalent of the total populations of the USSR, the United States and the whole of Western Europe. We can only guess how many millions today all over the globe endure a precarious existence in shanty towns, inner city slums, refugee camps and squatter settlements. Their "planet" is a long, long way from being a healthy one. The lack of safe water and sanitation encourages a host of diseases — typhoid, cholera, hepatitis, poliomyelitis, dysentry, amoebiasis.

The fuels burned in the hearth by about half of the world's population as the major source of domestic energy result in between 400 and 500 million people suffering from severe indoor air pollution. Scarce food, over-crowding, perpetual stress and alienation create fertile conditions for severe mental health problems. Suicide is no stranger in the slums.

The urban poor are caught between the "devil" of industrialisation and the "deep blue sea" of under-development; and added to their already crippling burden of infections disease and malnutrition is a new set of non-communicable diseases commonly associated with hasty industrialisation and the indiscriminate use of chemicals.

For the owerwhelming majority of them proper housing, piped water, facilities for the removal of household and human wastes, all-weather access

roads, as well as health care and education services have a distinctly utopian ring to them. Trapped in the obscure dead-end of the city slums, generation upon generation are stoicly eking out a kind of living.

Malnutrition, that eternal sign of poverty, is one of the most persistent of the health problems of the urban poor. According to WHO, "the energy and protein intakes of some 145 million children under five years old are insufficient." Not merely the shortage of food is to blame but much more complex problems including "inadequate preparation and storage of food, lack of knowledge about nutritional needs in infancy and in childhood and the effects of repeated infectious diseases." In addition, the breakdown of the traditional extended family in urban settlements directly affects the quality and quantity of child care. According to the U.N. data, in Latin American and the Caribbean alone there are 40 million children living on the streets.

Unsafe Water

Water is essential to life. It is also a major medium for desease transmission including typhoid and cholera. People from the industrialized North for whom diarrhoea is just an unpleasant holiday experience find it hard to grasp that in the Third World five million children die every year from diarrhoeal diseases. The major villain of this global tragedy is unsafe water.

The sheer scale of water-borne diseases is truly staggering. Poliomyelitis, guinea-worm infection and malaria, are just a few of the more commonly known ones. The bad news is that, throughout the tropics, matters are getting worse, not better. Malaria and other vector borne diseases previously confined to the counryside have followed the rural-to-urban migrants and found ideal breeding grounds in the city slums. Emergence of urban malaria is yet another vivid example of the fact that developing countries' populations are much more exposed, not only to the elements, but even more so to a whole host of maladies which can be called diseases of poverty.

The ultimate irony is that, not uncommonly, slum residents have to pay heavily for dubious water brought by street vendors while nearby wealthier neighbours are sprinkling their lawns at a rate of 200 gallons per hour.

In the countryside itself all is not well. Over-intensive agricultural production has dumped potentially dangerous levels of nitrates and other chemicals into the soil and thence into the water. High-yield harvests can only be sustained by covering plants and soil with ever greater amounts of fertilizers and pesticides. Meanwhile, weeds and insects are developing resistance to these chemicals, thus defeating the multi-million dollar efforts that go into research and production of commercial pesticides.

The agricultural sector in developing countries is geared predominantly to local needs. There are some notable exceptions, however, in the

form of traditional export crops such as coffee or cotton. These gobble up the lion's share of the pesticides which reach the developing countries- merely one-fifth of the global production.

Unintentional poisoning occurs frequently when people handle pesticides without proper precautions or knowledge about the hazards involved. Recently WHO said that "— our estimates show that the vast majority of acute poisonings occur in an 'endemic' manner in many developing countries, with little attention being paid by the local public health researchers". Harmful residues regularly spill over into foodstuffs and water sources.

Pollution

Unfortunately, chemical transformations, whether through combustion or from the deliberate release of substances such as agro chemicals, almost invariably cause environmental pollution. Few such pollutants are measured on a regular basis in too few places around the world. Developing countries rarely have adequate facilities to do this, since it often requires sophisticated equipment as well as trained personnel. Serious financial considerations have even forced some countries to sell off land sites on their territories for the dumping of other countries' toxic wastes.

One major source of urban air pollution in the industrialized countries is the automobile, now an indellible part of modern culture. Awakening of the environmental consciousness has forced first scientists and then the public at large to take a more critical look at the motor - car. It has been found guilty on all counts. Lead, carbon monoxide, nitrogen oxides — all these share the blame for blackening the outsides of city buildings and the insides of city dwellers.

The direct link between quality of environment and quality of public health is now imprinted on the public's mind more vividly than ever before. Slowly but surely, a chain reaction of environmental awareness has started. Today many newspapers routinely provide their readers with the local air pollution update, specifying "dirtier" districts. Attempts are being made to reduce the harmful pollutants emitted by cars; running them on lead-free petrol, or fitting them with catalyzers to reduce the output of carbon monoxide are two of the possibilities. It is difficult to get unanimity about what anti-pollution measures will work best.

What about countries with a lesser standard of living ? Do they stand any chance of avoiding the pitfalls along the road to development ? Well, up to a point. The multi-coloured quilt of the Third World does not lend itself to one single monochrome solution; what is the norm in Rio de Janeiro may not necessarily be perceived as such in Hyderabad. Even within countries themselves there are tremendovs regional differences. Obviously an industrial area packed with smelters, power stations or steel plants will emit into the atmosphere far more harmful chemicals than a rural one making

do with subsistence farming. Local topography and meteorological conditions, even sunlight itself, have roles to play in the intricate interplay of airborne pollutants which results in "photochemical smog", wrapping cities in a blanket of choking haze.

WHO, together with the UN Environmental Programme (UNEP), keeps a permanent check on air pollution levels through its 170 monitoring sites scattered around the globe. Energy production and consumption are routinely blamed for air pollution. And rightly so. But to suppose that such environmentally clean alternative sources of energy as solar power and wind power will soon overtake the burning of fossil fuels (coal and oil) would be merely wishful thinking. The nuclear power industry is making a come-back in some countries, but its image has been badly dented by accidents and levels of radioactive materials.

The latest WHO data show that 625 million people live in urban areas whose average levels of sulphur dioxide in the air are unacceptably high. In fact, sulphur dioxide emissions worldwide are notching up four per cent per year, which is in line with the increase in world energy consumption. For city dwellers, this means severe effects on the respiratory tract, while extremely high concentrations can be lethal. Meanwhile acid rain results in the defoliation and death of trees, the pollution of lakes which kills off the creatures that live in them, and the infiltration of chemicals into the soil and ground water sources. Acid rain knows no intercountry boundaries, and can be carried by the prevailing winds for hundreds, if not thousands, of miles from the point of origin. The world has come a long way from the pristine air of the Garden of Eden to the Convention on Long-Range Trans-boundary Air Pollution. A brownish layer of Sahara Desert dust which from time to time blankets a large part of Western Europe serves as a vivid example of the long-range action of airborne particles. According to WHO, 1,250 million people unwittingly suffer from too high levels of this pollutant compound, usually much more complex in composition than "pure Sahara dust", it is mostly made up of the by-products of fossil fuel combustion and other industrial activities.

The global air pollution trends clearly show the determination of the industrialized North to reverse the negative course. The last decade saw the decline in sulphur dioxide levels at an annual rate of approximately 5 per cent while, for instance, the Asian developing countries economic build-up is being accompanied by an annual 10 per cent increase. So behind the benign Dr Jekyll of industrialization lurks the sinister Mr Hyde of pollution.

Not Enough Trees

Another character with a dubious reputation is carbon dioxide, released in the process of fossil fuel combustion. Plants and oceans have a sponge-like capacity for absorbing carbon dioxide. But in the course of the 20th century the natural equilibrium was disrupted by a gargantuan boost in energy consumption which increased 12-fold between 1900 and 1986. The world's soaring population felled more and more trees, and destroyed more and more forests,

for industrial and agricultural actvities as well as household needs. There were simply not enough trees to help in digesting the "excess amounts" of carbon dioxide.

The global greenhouse effect started to take shape. A powerful boost to the process was provided by science and technology. Chlorofluorocarbons (CFCs in scientific shorthand) is a long word worth remembering. These are multipurpose chemicals which have made themselves useful as coolants in refrigerators and as prepellant gases for aerosol cans. They are widely used in electronics and in plastic-foam materials — — for instance in "fast food" containers. Whenever a burger holder is broken, CFCs are set free. At this point they are becoming a menace to the environment for the next 70 to 100 years. Not only do they contribute to the green house effect, they also eat away the vital ozone layer in the upper atmosphere, which protects all inhabitants of the Earth from the dangers of ultraviolet radiation. These rays are powerful enough to damage living cells; apart from causing sunburn, they are thought to be largely responsible for the steady increase in the incidence of skin cancers throughout the world.

Global warming and the depletion of the ozone layer could prove to be calamities of the worst kind ever to have visited the Earth in the course of recorded history. If the overall temperature rises, the polar ice caps will start to melt and in turn the level of the world ocean will rise. Countries lying close to sea level will be, literally, in deep trouble. Defences against ocean tides will wipe out decades of economic "development". The global agricultural pattern will be disturbed, threatening the already badly strained food supply system. Some areas further North, for example Siberia, will have rural agro-industry, but the Sahara Desert will march North ! Tropical diseases' areas might as well be shifting their geographical position.

It is an Apocalyptical vision - but one that is of mankind's own making, unlike whatever cataclysm it was that caused the dinosaurs to vanish. The bad news is that, in one form or another, global climate change is coming. The good news is that we know about it and can and must benefit from that knowledge. Every little effort helps !

As we move into the last decade of the century, environmental issues are taking on a new importance on the world's agenda. Back in the 17th century the English poet, John Donne, wrote; "No man is an island entire of itself". Today we can add "No country is an island entire of itself". We are all under a cloud, and it is a cloud of our own making.

(Courtesy: World Health Organisation)

Environment and Health

Let us take a closer look at the ways in which environment, for better or worse, influences people's health.

Rural family lifestyle in developing countries is still geared to subsistence farming as it was generations ago. They live off the land, totally in the hands of the merciless rain god, known in another culture as "the whether man". Droughts, which plague vast areas with the devastating accuracy of a metronome, will bring nothing but hunger and malnutrition. Paradoxically, emergence of the cash cropping system — + that is crops raised for exports + — can further jeopardize farmers' well-being instead of meeting local needs. Heavy physical labour calls for high energy intakes, and a bale of cotton can hardly provide a nutritious meal.

But even in "good" years environment is far from friendly. Statistics are a notoriously tricky subject, but still, the fact that on average several women spend two hours a day getting water for their household needs is telling. But even more important is the water's quality. It is simply not safe. In one way or another it is the single most pervasive source of disease throughout the length and breadth of the developing world. The list is endless from cholera to diarrhoea and every day is a gamble with human life at stake.

Arguably, there is nothing as difficult as changing cultural perceptions. Too many people around the world still believe it is foolish to drink "cooked" water. It is doubly foolish in their view to spend precious firewood fuel and time on such a folly. Keeping animals under the same roof, drinking raw water and milk — those cardinal errors, as seen through the eyes of hygiene or food safety experts, are part of the local ways. Only through patient culture-specific education can one hope to begin counter-balancing those age-old practices - all part of the oral tradition of do's and don'ts. The price rural communities, however unwittingly, pay for clinging to the old ways can be horrendous. Diarrhoeal diseases are implicated in the frightening death toll of 5 million children every year. The overwhelming majority of them are caused by unsafe water and lack of sanitation.

Air pollution is widely thought to be the industrialization's surcharge. What about the 400-500 million people scattered throughout the vast rural areas of the Third World suffering from it inside their mud and-thatch houses? Indoor air pollution is one of the top health-related problems closely following lack of safe water and sanitation in the catalogue of environmental health woes of the Third World rural population.

Wood or dung kindled fires built over the three archetypal stones still serve as the home fire for millions upon millions of our contemporaries. Extended family undoubtedly has its advantages, but not when extended to the limit and beyond. Overcrowding is a common feature not only in the wasteland of inner city ghettos but in pastoral village settings as well. Without proper ventilalion, the chemical by-products of biomass combustion can be exceptionally harmful, if not, lethal.

Biomass smoke is a classic case of mistaken identity. At first sight what kind of mystery can there be in plain bonfire smoke! However, highly sophisticated chemical analysis reveals literally hundreds of substances, including polycyclic aromatic hydrocarbons, many of which have been found to be carcinogenic. Compared with fossil fuels such as coal, oil or natural gas, biomass in the form of wood, agricultural waste and dung, account for a modest 10% of global energy consumption by serving about two-thirds of the world's population.

Suspended particulate matter, that seemingly permanent fixture of rural life, comes in two "packages": village dust, as old as the savanna itself, and as intricate organic and inorganic substances created by biomass combustion. There are recorded cases of the measured levels being 140 times higher than WHO recommendations.

How does indoor air pollution correspond to public health? Surprisingly, it was not long ago that those Links became the subject of scientific research. Full dimensions of the problem are just taking shape. However, it is possible even at this stage to single out without a shadow of a doubt the following four major categories:

— chronic lung disease

— heart disease

— lung cancer, among others

— acute respiratory infections, particularly in children

There are other not immediately recognizable health problems related to biomass combustion. Quite often fuel is scarce and hard to come by, which leads to too few hot meals and a tendency to switch to foods requiring little or no heating at all. Maternal exposure to pollutants results in low birth weight and infant ill-health. According to WHO, "(in developing countries) exposure to biomass fuel emissions is probably the single most important occupational health hazard to women".

Village dust and the smoke of cooking fires serve as a constant eye irritant. Chronic lung diseases, including tuberculosis, habitually beseige rural populations of the Third World, adding yet another burden to the impossible "survival course" of every day existence. Those rare cases when

statistics are available, clearly show that mental health problems in the rural belt of developing countries, although sadly ignored and unrecognized by the media, flourish, fuelled by hunger and malnutrition, overcrowding and national strife.

Illiteracy in the countryside continues to be visibly higher than in towns. Its impact can be felt on the farm in the shape of pesticides abuse. After all, not being able to read "how-to-use" instructions can be a matter of life and death. We can only guess at the true dimensions of what statisticians dryly call "unintentional poisonings".

Inspite of spectacular technological advances and scientific breakthroughs achieved in the course of the century, the greater part of humanity is still tightly anchored to the land as its only source of livelihood. No matter how great the sheer numbers of the world's rural population, more often than otherwise they are society's marginals without a vioice in high places.

That thin thread to the outside world — the mud roads accessible for a few months in a year — is of no particular attraction for members of the medical profession, as all-too-vividly illustrated by the statistics. There are countries with merely two physicians per every 1,00,000 inhabitants. But it does not mean that the gloom and doom school of thought should prevail. A little learning and small scale projects at the village community level — rather than multi-million high-tech hospitals for the elite in the capital — that's what is really needed for people out there. That is where WHO's policy of Primary Health Care comes in.

(Courtesy : World Health Organisation)

Cities Under Siege

Historically, there is nothing new about country folks leaving behind the poverty of the barren earth, packing their belongings and moving into towns. After all, that is precisely how towns came about in the first place. What is different in the 20th century is the sheer magnitude and speed of the operation. All previous large-scale movements of people — – be it in time of war or of peace — — pale into insignificance when compared with today's seemingly endless human flooding into urban centres, especially in developing countries.

In places as far apart as Mexico City and Jakarta, Lagos and Karachi, Hyderabad and Dakar, millions upon millions have been flocking towards the Fata Morgana of the bright city lights. Health and social resources as well as lack of insufficient foresight on the part of the city planners have done nothing to ease the predicament of the newly-arrived. Theirs is not a red-carpet treatment to the bouncy beat of a brass band. Read carefully the following sentence. "Although precise statistics are not available, over 100 million people have no shelter at all, while around one billion lack an adequate shelter." That was the conclusion reached by WHO in 1987 concerning both urban and rural situations worldwide. Quite often illiterate, without any skills, with just a pair of hands these newcomers are left out in the cold, receiving few of the benefits of the city's life.

Often enough, it is only by overstretching the imagination that one can call their housing a home. Built from whatever materials are available, on unsuitable land exposed to the elements, such constructions are the first to go in a flood, an earthquake or a hurricane.

All these innumerable shanty towns are rarely taken care of in the architectural blueprints and practically never in the budgets of economic planners. These unsightly slums are among the "hidden costs" of development. Each important aspect of economic development creates unanticipated environmental and health problems.

Rapid urbanization in developing countries is happening not only because of the exodus from the countryside, although 4,00,000 annual migrants to Mexico City may be a good indicator of the scale of this trend. Persistently high birth rates and an almost total lack of family planning services contribute heavily to the burgeoning urban populations. In various countries throughout the world, many children are seen as proof of a man's virility and a woman's fertility. From time immemorial, children were looked upon in the extended family as an investment for old age. However, the ruthless economics of the slums dictate the rules of the game. If there are too many mouths to feed, the children are often left to fend for themselves. It is estimated that in Latin America and the Caribbean, there are 40 million children living on the streets.

Even for those who have a roof to call their own, life is far from being a bed of roses. There is a direct link between poor housing and poor health. Lack of proper sanitation, a faulty water supply if there is any, substandard water quality, overcrowding, a total lack of privacy, poor indoor air ventilation, uncollected garbage, infestation by rats, flies and a whole host of other disease-carriers — — these are the sad facts of everyday life in the "lost cities", as slum areas are sometimes called. Routinely denied to the urban poor engaged in the precaricus business of day-to-day survival are all the things that other people take absolutely for granted — — safe water supply, plumbing, electricity, regular garbage collection, as well as social benefits including public health services, schools, proper roads, public transport, telephones lines.

The haves and have-nots share one Earth but in a strikingly different manner. How does the other, the better-off half fare? There is increasing concern that at least some of the fruits of the post-industrial harvest are turning sour. The internal combustion engine,arguably the single most important technological break-through of the century to affect the human condition, has been found guilty of polluting the environment. More cars mean more serious air and noise pollution, and greater chances of a road accident.

And there are too many cars on the road Rush-hour traffic jams, twice a day five times a week all the year round, contribute to the ever-worsening air quality in big cities. On wet and damp days, urban areas are regularly enveloped in a blanket of photochemical smog. Public health authorities have even been known to recommend that people stay indoors rather than venture outside. And for good reason. High concentrations of photochemical smog are dangerous for the elderly, small children and pregnant women in particular. It is hardly surprising that townspeople find they are breathing differently in the countryside. But the ubiquitous internal combustion engine is catching up with them even there. The painted walls of Mayan monuments in Central America are rapidly deteriorating, "thanks" to the exhaust of tourist buses that stand for hours in front of the stone structures with their motors idling.

Municipal authorities find it more and more difficult to keep city centres with their ancient buildings and monuments in reasonably good shape. Acid rain does not make their job any easier. Quite on the contrary. Oxides of sulphur and nitrogen from industrial and automobile gases undergoing a chemical reaction with sunlight and moisture, fall to the ground in the form of acid rain. If it eats its way into the stone, how harmful can it be for human organism?!

However, the city of Milan offers a good example of what can be done by proper planning and energetic municipal actions. Some 7,50,000 cars pass every day through this city with its populatien of a million and a half. Apart from fouling the air, they clog the transport arteries as well and cause noise pollution and road accidents. So what can be done to reduce the overwhelming flow of cars? The answer is to provide a

wall-run public transport system. The one in Milan features buses, trams, trolley buses and underground trains. Passengers can hop freely from one transport to another using a single ticket which costs them less than one-third of its true value. If that is not an incentive to keep the car at bay, then what is ?

It is no coincidence that Milan belongs to the network of "Healthy Cities". The "Healthy Cities" project was initiated by WHO's European Region four years ago but is catching on globally. Applications for membership are piling in from the Americas, Australia and New Zealand as well as from Europe. Several countries of WHO's Eastern Mediterrancan Region are also considering introducing Healthy Cities ideas.

Based on a stong political commitment to a positive approach to health, Healthy City principles call for bridging the piecemeal actions of governmental departments with genuine public participation. Experience so far with the project vividly shows that the destiny of the world's great cities need not be one of gloom and doom. If the political will and the community motivation are there, high pollution days as well as litter on the streets, ramshackle housing and traffic jams will slowly but surely fade away into environmental history.

Industry, usually situated in or around cities, also has an impact on the quality of the environment. Chemical contamination and disposal of toxic wastes are just two elements of the mulifaceted problem of industrial pollution. In one form or another, we are surrounded by chemicals every day of our lives. Modern society would be seriously disrupted if, by some magic stroke, they were removed from use. At the present time there are about 80,000 chemicals in circulation. They are used in nearly two million different types of commercial products, and each year hundreds of thousands of new substances apper on the market. Yet only a few hundred of these chemicals are thoroughly evaluated for their potential toxic properties.

We do know, for instance, that lead-containing paints are better avoided ; that asbestos, although previously considered a handy building material has now been proved to cause lung cancer, that the very process of combustion produces some rather nasty chemical compounds ; that lead-free fuel is cleaner and more environment-friendly than standard gasoline ; that chlorofluorocarbons, used in refrigerators and aerosols, are harmful to the ozone layer.

Substances and processes that are environment-friendly do not come free of charge. But can all developing nations afford switching to the "green" policies ? What comes first — — development or ecology ? This is yet another example of the Catch-22 situation that faces developing countries.

(Courtesy – WORLD HEALTH ORGANISATION)

Environment, Health and Development

The all pervasive nature of the environment we live in cannot be stressed adequately. The quality of water that we consume for drinking or for personal and household tasks, the soil in which we grow our food and on which we dispose waste material, the animals and plants around us, the air that we breathe and the rural and urban setting in which we dwell or work determines to a large extent the level of our physical, mental and social well being.

Over the ages energy consumption, technological development, food needs, food production, population growth, Population movement, national trade, international trade, economic production, national debt and wealth, changing land use, consumption of natural resources, urban waste, industrial waste, and industrial education have been altering their environment.

Environmental degradation undermines development and damages human health. Ill health, on the other hand affects the work force, hinders development and leads to environmental degradation. Environment, development and health are thus closely interlinked with proper development, improving the environment, sustaining development and increasing community health, making possible sustainable development. The role of man in the maintenance of a clean and healthy environment is therefore indispensable.

Urbanization and Industrialization

Urbanization and industrialization and the resultant influx of population has resulted in severely stretching the existing facilites such as housing, water supply and waste disposal, roads and transport system and basic services.

The domestic wastes and garbage in the congested settlements cause insanitary conditions, as well as insect and rodent problems giving rise to many illnesses and deaths, Indiscriminate spraying of insecticides, rodenticides and pesticides often result in health risks. Unsatisfactory housing, overcrowding inadequate excreta disposal, burning of wood, coal and cowdung, cakes for cooking pose severe health problems. Industrial emissions andinappropriate disposal of wastes, create additional health hazards.

Every one has a right to enjoy a reasonably clean, safe and healthy environment in which to live and work. Developmental activities must therefore be controlled and well planned and steps ensured to see that waste products are removed safely.

Planning of Urban Development

Rapid urbanization is reaching serious proportions in the developing world leading to, among other problems, unhealthy living conditions, overcrowding, psycho-social stresses and violence. Unplanned, hastily planned settlements or squatter settlements are invariably deficient in housing and essential services for healthy living. Towns and cities must be, therefore, developed in a planned manner, segregating residential areas from those meant for commerce and industry.

Housing and Shelter

Shelter is one of the essential requirements for human ilfe. Uncontrolled migration from rural to urban areas makes housing a major problem. Poor housing has been shown to be associated with tuberculosis, streptococcal infections, rheumatic fever and rheumatic heart disease. Houses must be so designed and constructed as to allow adequate air and sunlight to enter and, at the same time, protect its dwellers from the elements. Where fire-wood, coal or cowdung cakes are used for cooking, houses must be provided with smokeless "chulahs" and proper ventilation to let out the smoke from the burning fire, thereby keeping the indoor air clean. Residents should have access to safe drinking water, waste disposal sites and sanitary latrines.

Water Supply and Sanitation

In most countries the supply of drinking water has not kept pace with population growth. Waste collection and disposal facilities are often lacking. Contamination of sources of water supply often occur as a result of insanitary disposal of solid and liquid domestic wastes including human excreta.

It is not uncommon for whole settlements drawing water from public taps or open wells or community handpumps forcing people either to draw insufficient quantities of water or to go to polluted water sources. Lack of adequate water for washing and cleaning coupled with poor sanitation lead to infection and re-infection through the oral-faecal route. The provision of safe water supply and satisfactory disposal of wastes is, therefore, imperative for a clean environment and healthy living.

Disposal of Solid Wastes

Large volumes of refuse are produced by the communities. Until the turn of the 20th century, the generally accepted way of disposal of domestic refuse was either to dump it into the courtyard of the house where it accumulated and decomposed till it was finally carted away to farms or other disposal sites, or throwing it out into the streets where it dispersed. This, however, encouraged the breeding of flies, insects and rodents, which in turn, transmitted many diseases.

Yet, the more new industries develop and existing industries expand, the more the environment gets affected. Although environmental issues have become matters of great concern, the speed at which the new technologies are introduced is rarely matched with measures to protect the environment and the people.

On the other hand, hazardous substances produced by industry are being handled by the public without being fully aware of their dangerous side effects. Pesticides, for instance, are the most important and most widely used hazardous chemicals. Their improper application leads to thousands of deaths every year.

Albert Einstein once stated that "concern for man himself and his fate must always form the chief interest of all technical endeavour". If he was alive today he would certainly realize that concern for man and his fate would become meaningless without concern for the environment.

In the case of industries it would mean careful considertiaon of a number of issues of far reaching consequence :

(1) *Policies and Planning*

Again it will be politicians, policy and decision-makers and planners who will have to take the first step and formulate proper policies and develop realistic plans for establishing and expanding industries.

(2) *Legislation*

Although some form of legislation mostly exists, it is usually inadequate or in need of improvement or for strengthening procedures for enforcement. It should typically include the setting of standards and maximum allowable concentrations as well as drawing up of regulations covering the production, conveyance, disposal and accidental discharge of dangerous substances.

(3) *Introduction of new Technologies*

New technologies and industrial innovations are being introduced all the time, often without due regard to safety. Legislation should promote safe production technologies as well as the recycling or proper disposal of waste.

(4) *Site Selection*

The selection of a proper site for an industry vis-a-vis well-serviced housing is extremely important. If carefully located, an industry will not only present a minimum risk but will also mean reduced distances for employees to travel to work.

(5) *Health of the Workers*

In the case of an industry the working environment is at least as important as its surroundings. Workers have to be properly protected

against harmful factors (toxic fumes, dust, noise, radiation, etc). The provision of first aid equipment and protective devices is not enough. Safety will have to start at the source through hazard control.

(6) *Public Information*

There is a general lack of awareness on the part of both the public as well as the decision makers. Health education and public information programmes should, therefore, include safety aspects of the handling and disposal of hazardous substances and of industrial accidents.

Conclusion

Never before in history have there been cities as large as today's, doubling their size every 10 to 15 years. Never before have goods been produced in such quantity and variety and never before have our energy requirements been of such proportions. In view of the fact that our numbers and our demands are still increasing we have to consider future steps carefully and remember Einstein's words and act accordingly.

Keep
The Environment
Clean

Our Cities and Industries — — Blessings or Curse in Disguise?

Over the ages man has been building cities. He has also been fabricating the goods needed in his daily life and has been carrying out activities in apparent harmony with his environment.

The cumulative effect of all these is that at places our environment has become polluted to an extent that our living conditions are seriously threatened. What has gone wrong ?

The Problem

In 1871, at the time of the first census in India, approximately 5 per cent of a population of about 160 million lived in cities. In 1951, there were 361 million people in India with an urban share of 17 per cent. Today we are close to 800 million with 27 per cent in urban areas. By the year 2,000 around 960 million people will live in India — — about 35 per cent of them in cities. Although the early figures are estimates rather than exact counts and the geographical boundaries of India have changed in the course of history, a trend is clearly visible. One has to be aware, howaver, that such a steep increase in the urban population, housing shortages and economic pressures means, in practical terms, rapidly expending squatter settlements and slum areas.

India only serves as an example. The situation in other parts of the Region is similar. Today there are more than 20 towns in our Region with a population of over 1 million. Six of these have populations of between 5 and 10 million. Rapidly increasing populations have also created high demands for goods, energy, and other facilities. Growing employment opportunities have accelerated migration from rural to urban/industrial areas. There is, therefore, a noticeable shift from predominantly rural and agricultural societies to urban and industrialized societies thereby increasing the number of towns in most countries. The trend is most likely to continue.

We are now acutely aware that the increase in the size and number of towns with the transformation of essentially rural areas into urbanized and industrialized ones has extolled its price. Various forms of pollution as well as destruction of ecosystems have not only damaged the quality of our environment but also resulted in considerable health hazards.

Healthy Cities - Healty People

An increase in population and urbanization by itself is, within certain limits, not harmful. It becomes a matter of concern, however, when the improvement and expansion of services, facilities and infrastructure lags grossly behind the population growth. Some of the conditions witnessd are overcrowded slums, hopelessly congested streets, massive pollution of all kinds, unsanitary conditions and inadequate civic services. Millions are thus exposed to diseases and other hazards.

In order to bring about decisive and lasting changes for the better a number of facts have to be kept in mind :

- The quality of an urban environment will ultimately be responsible for the health or ill health of its inhabitants
- Politicians, urban planners and managers carry the primary responsibility for healthy cities, physicians only play a subordinate role,
- A city does not only consist of buildings, monuments, streets, traffic systems and industries. A city consists in the first place of people whose well being should be the foremost goals of urban planning.
- Every city consists of individuals who are invariably part of the whole, the health of the individual is, therefore, inseparably connected to the health of the city.

In order to promote the idea of a healthy city — healthy people as well as a healthy urban environment — a holistic and multi-disciplinary approach is required. Such an approach would typically contain the following elements :

(1) *Policy Setting and Planning*

Many problems related to urban growth and environment are associated with the application of inappropriate policies, laws, codes and regulations. Politicians, decision-makers, opinion leaders and planners have to look far beyond the city boundaries when formulating policy statements, strategies and plans of action. Neglected rural areas, for instance, leading to rural-urban migration will have the same drastic effects on a city as deforestation which could lead to massive soil erosion, dust storms and polluted rivers.

(2) *Land Use and Transportation*

Uncontrolled land use will lead to irregular squatter settlements, under-utilized areas and wrongly sited industries and traffic systems. Proper use of land, therefore, requires adequate controls to avoid serious political and social consequences, instability and unrest and an unhealthy environment. Unfortunately, the pattern of land use in cities of the third world has often been copied from industrialized countries : Industries and businesses are concentrated and residential areas wide - spread. The building capacity of cities and municipal governments to cope with rapid urban growth needs attention. Rapidly growing cities in developing

countries have to adopt different spatial patterns. There is a general lack of schemes relating to the physical distribution of settlements and location of housing with opportunities to create work nearby and to generate income.

(3) *Housing and Utilities*

The most important component of land use in a city is housing and related utilities like water, sanitation and power supply. Overcrowded and unsanitary squatter settlements are a regular sight in many fast growing cities of the third world. Illegal housing settlements develop because no legal alternative is affordable by the majority of those seeking new housing. The classic approach of condemnation and eviction followed by public housing schemes has generally helped the privileged leaving the mojority "out in the cold".

(4) *Provision of Services*

Services, regardless whether health care, family planning, education, recreation, sanitation, water and power supply, etc., are meant to serve the people. It is therefore essential that such services do not only meet the needs of the residents in terms of quantity and quality but that they should also be affordable. As far as health services are concerned it can certainly be stated that every community will benefit from a shift from curative to preventive services, including basic education in hygiene and nutrition.

Adequate housing among other factors, provides protection against exposure to agents and vectors of communicable diseases, through safe water supply, sanitary excreta disposal, disposal of solid wastes, drainage of surface water, personal and domestic hygiene. safe food preparation and storage and structural safeguards against disease transmission.

Industries Can be Safe

In recent years, a number of serious industrial accidents have attracted world-wide attention. Bhopal and Chernobyl are still fresh in people's minds. Deaths, permanent disabilities, serious damage to the environment and economic losses were the consequences leading to the closure of enterprises and to public demonstrations requesting to shut down certain industries altogether. Yet, it would be very hard to imagine today's world without industries. They are increasingly becoming the basis of society and the key to progress.

Industrial Wastes and Chemical Wastes

Industrial wastes and chemicals have a profound effect on human health. Chemicals are widely used in every day life and for prevention and cure of diseases and maintenance of agricultural activity. Many chemicals are hazardous and some may persist and accumulate in the body if taken for long periods of time. Observance of high safety practice is, therefore, necessary along with effective means for preventing and combatting pollution, by waste treatment and proper disposal for maintenance of clean and safe environment.

Water Pollution

The contamination of natural bodies of water occurs as a result of industrial and domestic effluent and human excreta discharged directly into

them as well as from agricultural pesticides, fertilizers and solid particles which are washed off the agricultural land. The industrial effluents and the run-off from agricultural land contain substances which disturb the ecosystem in the receiving water. In high concentrations, some of these substances are harmful to human health if ingested along with drinking water. It must therefore be ensured that dilution provided by the natural bodies of water is sufficient for these substances to be received by them without deteriorating the water quality or without upsetting the ecosystem If this is not possible, the industrial effluents must be treated before being discharged or the use of agricultural pesticides and fertilizers must be controlled in order to keep our natural bodies of water clean. Likewise, discharges into coastal water must be carefully controlled as these can contaminate the fish, particularly the shell fish, which in turn transmit contamination to consumers.

Air Pollution

Without air of good quality there cannot be healthy life. Yet, the air in towns is generally grossly polluted by burning of fuel (coal, wood and cowdung cakes) for cooking, factories, thermal power stations, and mining activities and from in situ burning of trash, and street sweepings. In cold climates, or in hilly, high altitude areas, burning of coal in households for heating purposes, may result in dense smoke and air pollution Polluted air contains solid and/or liquid particles such as dust, smoke, mists and fumes, as well as gases such as sulphur dioxide, carbon monoxide, nitrogen oxides, hydrocarbon vapours etc. These pollutants can cause serious problems, e.g. throat irritation, watering of eyes and nose and aggravate respiratory or bronchical conditions; severe and prolonged air pollution can even cause deaths. Air pollution, therefore, should be controlled.

Air quality is influenced considerably by weather, and some weather conditions are conducive to development of short-term higher levels of pollution. When this occurs adverse health effects on populations can be more pronounced particularly in susceptible groups such as the elderly, the asthmatics and young children.

To prevent these health hazards, air pollution has to be checked by harmonizing economic development with the environment. The ambient air must be kept clean by (1) setting emission standards for vehicular traffic as well as for industrial establishments, (ii) situating factories and thermal power stations away from residential areas, and (iii) setting up smoke free zones and prohibiting in situ burning of refuse. Burning of coke, biogas or natural gas instead of coal, wood and cowdung cakes. should be encouraged.

Food Contamination

The contamination of food due to growing vegetables on land irrigated by raw sewage, use of contaminated water for washing and cleaning of vegetables and utensils, non-observance of hygienic practices and instances of insects, rodents, and flies transmitting pathogens from excreta and wastes are quite common. Inspite of the decline in the use of organochlorine pesticides, and polychlorinated biphenyles they still remain in the soil and water, and can enter the food chain.

Human Exposure to Pollutants

Human exposure to environmental pollutants is measured by determining concentrations of pollutants in body fluids and tissues. Studies have proved that their presence in body fluids and tissues is due to pollution from motor vehicles, smoking, use of pesticides and presence of dust particles etc.

Higher lead concentrations in body fluids have been found in areas where people do not use lead-free petrol in their motor vehicles and where smoking is common. Cadmium levels are high where tobacco smoking is common. Higher levels of organochlorine pesticides have been detected in human milk. Preventive action has, therefore, to be taken through enforcement of strict legislation and regulations and through raising community awareness and education.

High Noise and Vibration Levels

Noise and vibration are recognized as forms of environmental pollution which are often caused by road, rail or air traffic; by manufacturing and and construction industries; by malfunctioning water pumps or air conditioning units; and by loudspeakers turned on at high valume. To control noise pollution it is necessary to set and enforce standards and; where possible, to site or divert the sources of noise and vibration away from human settlements, by plantation of trees leaving open spaces for parks to reduce noise and vibration problems.

Conclusions

The above are some of the main elements of environmental concern. The problem of environmental degradation is very complex and any viable strategy must consider not only the physical nature of the problem but also the human factor involved. Experience has shown that provision of physical facilities or enactment of legislation alone is not sufficient for keeping our environment clean. It is necessary for all members of the community to take part in the attainment of a clean and healthy environment. The level of community awareness and participation in this endeavour will determine the level of cleanliness of our environment.

WHO is playing a catalytic role in supporting and promoting the environmental health programme in countries of the South-East Asia Region through promotional, institutional and human resources, supplies & equipment, training and fellowships and group educational activities. It also disseminates technical information and support materials and assists in research and development of new technologies for efficient implementation of various environmental health programmes.

Tips to project your environment and your health

In town ...

* Use public transport and walk, whenever possible, instead of using your car. It's cheaper and healthier.

* Have your car serviced regularly and the motor adjusted to help keep down pollution levels. Use lead-free petrol wherever possible.

* Stick to speed limits when driving. The faster you go, the more petrol you use and the more pollution you create.

* Noise pollution can have a detrimental effect on your hearing and your nervous system. Think of others before revving up your motorbike or turning up your stereo or television.

* Sort your garbage to separate items that can be recycled, such as glass and paper. If your community does not yet have provision for this, suggest that it should start it.

* Keep your town clean by throwing litter into bins and not on the streets, where it is unsightly and may clog up the drainage system. Ask the local authorities to provide more litter bins if there are not enough.

* Encourage your local health authority to check regularly air and water pollution levels, and to provide information on any eventual discrepancies.

* Try to use non-fossil fuels, such as gas, for cooking and heating; this helps to prevent smog, a common occurrence in many large industrial cities.

* Choose environment-friendly products, such as sprays that are free from chlorofluorocarbons or detergents with low levels of phosphate.

* Don't throw potentially harmful chemicals into the drainage system. If in doubt, ask your local pharmacy or health authority to advise on disposal.

* Keep your house or apartment in good repair, and — maybe — give it a new coat of paint? Action at the individual level can help improve the environment for the whole community.

* You can improve your local environment by preventing your dog from fouling the streets and by decorating your windows and balconies with flowering plants.

In the home ...

- ★ Save energy wherever possible — switch off unnecessary lights, put on an extra sweater instead of turning up the heating. The less energy you use, the less carbon dioxide is released into the atmosphere.

- ★ Avoid smoking tobacco in confined spaces. Remember that passive smoking can be harmful for the whole family. And smoking is bad for your health anyway !

- ★ If you cook on an open fire inside your home, be sure that there is proper ventilation. This way you will avoid exposure to harmful smoke and gases.

- ★ Avoid any contact between raw foods and cooked foods; this will prevent foodborn disease. And always reheat thoroughly cooked foods that have been left over or have been stored for a long time.

- ★ Keep the kitchen and surfaces used for the preparation of food meticulously clean. Wash chopping boards and utensils each time they are used for a different foodstuff; this will avoid cross-contamination or re-contamination.

- ★ Food that is not kept in a refrigerator should be kept covered to protect it from insects, rodents and other animals.

- ★ Pasteurized milk is safer for your family than raw milk. If only raw milk is available, heat it well before using it for drinking.

- ★ If you live in a tropical area, protect yourself with insecticide-impregnated bed-nets when sleeping to prevent mosquito bites.

- ★ Keep household refuse in closed bins which cannot be opened by children or animals.

- ★ Do not keep poisonus substances in containers which would normally hold food or drink, such as empty wine bottles or soft-drink bottles. Keep medicines and harmful chemical products well out of reach of children.

- ★ Where large families are living in close proximity to one another, keep noise levels from radios, television sets or household machines to a minimum, particularly if there are young children and elderly people in the home.

- ★ Keep floors free from dust and dirt, which may cause the proliferation of insects and microbes. Eliminate the collection of stagnant water around the outside of the home or in the garden. This provides an ideal breeding ground for mosquitoes.

At Work...

- ★ Workers should be aware of any potential health hazards associated with their occupation. Preventive measures are most important.

- ★ Dust containing certain forms of silica — — for example, in quarries, mines, or in sand blasting — — should be controlled through measures such as exhaust ventilation, use of water, enclosure, etc. and you should wear the required protective clothing.

- ★ If, in the work environment, normal conversation is difficult at a distance of one metre, there is the potential for an evantual loss of hearing. If the noise levels cannot be reduced, then ear muffs or plugs do help.

- ★ Heavy physical work in a hot environment can cause exhustion. This can be relieved through preferably regular breaks in a cooler area, and by drinking plenty of water.

- ★ Maintaining proper ventilation in the workplace, be it a foundry, a paint shop or a department store, is essential for the comfort and health of the worker.

- ★ Masks do not always offer full protection. For instance, dust masks do not protect against gases and vapours. No mask protects against chemicals which can penetrate through the skin. Make sure your equipment is adequate.

- ★ Workers should not eat where chemicals and other toxic contaminants are present.

- ★ Tobacco smoking greatly increases the risk of lung cancer from occupational exposures.

- ★ If your occupation involves the safety of others — for intance, airline pilots, bus and train drivers, crane operators, etc. — remember your job calls for physical and mental fitness.

- ★ If your work involves close precision or hours spent in front of visual display units, frequent breaks and regular eye checks are essential.

- ★ When you see your doctor or health worker, don't forget to talk about your work environment — — it may be the source of your problem.

- ★ Good lighting and relaxing colour schemes make for a more pleasant workplace as well as reducing accidents and unnecessary eye strain.

In rural areas...

* If in doubt about your water supply, boil water for drinking purposes. If water is taken from a river, filter it before using so as to avoid diseases such as guinea worm.

* Private or community-owned water sources should be protected from outside contamination, such as dust, mud, leaves, acid rain. The same applies to domestic water containers, which should be kept covered.

* Don't place outside lavatories or pit latrines close to water sources. Recommended distance is at least 50 mitres.

* Always use a latrine or a lavatory. Defecation in fields or rivers not only pollutes the environment or the water supply but attracts disease-carrying insects.

* Proper management and re-use of treated wastewater can be an asset to agriculture, particularly in arid areas.

* Fill in any holes or cracks in the floors or walls of your home to prevent insects, snakes or rodents from entering.

* When using pesticides, read the instructions carefully and keep to the concentrations recommended. Don't use measures or empty containers fof any other purpose.

* Keep pesticides and herbicides well away from children, and make sure they don't walk or play in recently-treated areas.

* When spraying pesticides or herbicides, wear light-weight clothing that covers as much of the body as possible.

* Avoid spraying crops when there is a strong wind, the pesticide may be blown on to people, animals or dwelling places in the vicinity. Keep people and animals out of freshly-sprayed crops.

* Always wash carefully after spraying crops, and remove all contaminated clothing before going into your home. Freshly sprayed crops should not be eaten.

* Do not scoop out pestidides or herbicides with your bare hands, nor dip hands or arms into liquid to stir mixtures.

Prize Winning Essay*

Earth's Future

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What is pollution ? What are the effects of pollution on our earth ? Pollution is addition of undersirable and excessive substances to nature which disturb the ecological equilibrium. This pollution is pervalent all over the world. It is caused by several pollutants. A Pollutant is a constituent at the wrong place, at the wrong time and in the wrong amount. To-day many people are affected by pollution which are of three kinds. They are: air pollution, water pollution and noise pollution.

AIR POLLUTION is caused mainly due to the release of smoke from automobiles, vehicles, industries, etc. Air pollution is caused by aerosols, smog, carbon-monoxide, radio active substances, acid rain, etc The smoke released by the factories contains carbon-monoxide and other gases which cause many diseases. We can cite the example of Bhopal gas leakage incident in 1984 which killed many people and caused a tremendous loss to the nation. In many big cities, the health of the people is greatly affected due to smoke released from nearby oil refineries as also from other industries and automobiles. Motor cars are responsible for causing a lot of air pollution. In Ahmedabad and Surat, cotton dust is released into the air, We should end air pollution. Otherwise the world would suffer.

PREVENTIVE MEASURES

The amount of smoke coming from the factories' chemneys should be reduced to a great extent. The carbon monoxide and other harmful gases cause a lot of damage. Plants utilise the carbon-dioxide in the atmosphere and through photosynthesis they give pure oxygen. So, trees should be preserved.

Energy from the sun, tidal waves and biogas and other sources should be utilised to minimine air pollution.

The Aerosols, which are chemical substances released into the air and which break the ozone layers and allow the ultra-violet rays from the sun to pass through should be reduced. Now-a-days, the concord jets, flying at high altitudes, release gases which break the ozone layer. Therefore, these concord jets should be modified so that they do not release harmful gases into the air.

Radio-active substances also increase air pollution to a considerable extent. Therefore, radic-active substances should be controlled.

WATER POLLUTION : Our earth consists of many sources of water like seas, rivers, lakes. etc. The major sources of drinking water should be

* Contest was organised by Sai Oral Health Foundation.

carefully utilised so that they do not get depleted. Water is polluted in many ways. The main reason for the cause of water pollution is sewage water. People bathe, wash their clothes and animals in the same place and water from that source is used for drinking purposes, too. As a result they get water-borne diseases like cholera, typhoid etc. Such diseases may even lead to death. Industrial wastes are released into the rivers. Harmful diseases are known to have killed many people in Japan when mercury was released into the rivers.

NOISE POLLUTION is mainly caused by factories and automobiles. Seventy-five percent of the noise pollution is caused by automobiles. The noise pollution causes a lot of stress and strain, affecting the brain. Loud noise even causes the breaking of the ear-drums and consequent loss of hearing. Historical monuments are also affected, not only by the chemicals in the air, but also because of the vibrations resulting from loud noises. We should keep down the noise level. Automobiles should use silencers to minimise noise.

Many of the people are suffering from diseases caused by air and water pollution. If the air pollution continues, in the 21st century the people may be required to carry oxygen cylinders with them. Even a new born child would have to be kept alive with the help of oxygen.

All forms of life on the earth are affected by pollution. If pollution is allowed to continue on the same scale, after a few years there might be no life existing on the earth. Man is a part of nature and so he should fight to preserve nature by controlling pollution. Among the living forms, only man is polluting and is responsible for increasing pollution. It is unfortunate that he is not worried about even his own health.

As our knowledge is increasing more and more, we are starting more industries and causing more and more pollution. Due to our carelessness, not only human life but also all other forms of life are affected. Therefore, every effort should be made to reduce pollution as early as possible. It is the responsibility of each and everyone too see that pollution's impact is not felt by the earth.

The drainage system is to be developed on more sound lines. Since the pipe lines pass through sewers, drinking water gets polluted. People in rural areas dump the dead bodies of animals and other wastes in water sources like lakes and tanks. Water contamination can be reduced to a considerable extent by keeping the pipe lines away from the drains. The toxic contents of water should be reduced. Swimmers who went into the waters of the Hussainsagar lake in Hyderabad to retrieve the statute of Buddha reported to have a burning seasation all over their bodies. It was found that sulphuric acid in the water caused them irritation.

Industrial wastes should be disposed of properly. Our technical knowledge should be used to convert them into re-usable materials by recycling them.

A New Rahu Endangers The Planet

Mrs. RAJAM GANESAN

It is an undeniable fact that the all aspects of human health and well-being depend on the surroundings. It is only in recent years that voluntary organisations have started playing a very important role in highlighting the dangers of tinkering with environment and in preserving the ecology. If the present generation fails to tackle the problem earnestly, it is bound to be cursed by the succeeding generations.

People like Mr Sunderlal Bahuguna, who spearheaded the Chipko movement, have been doing a great service to the country by endeavouring to protect the enviroment. Strong enough pressure from groups of people concerned with the protection of the environment can help to resolve the problems. Such groups, however, should not act in isolation but must act in concert with each other. The Silent Valley project in Kerala was shelved after there was strong pressure from scientists, journalists, social workers and environmentalists.

There is need to evolve methods to provide for income-generating schemes which do not destroy the environment. Production for social usefulness, rather than for profit, should be the aim. There should be more stricter controls on products that are unnecessarily causing harm to the environmental. The promotion of health and the prevention of environmental degradation must go hand in hand.

The large-scale use of pesticides to protect crops and kill insects that carry diesease has led to increasing concern about their toxic effects on human beings.

Increased urbanisation has meant vastly increased use of energy and material to satisfy the basic human needs. The depletion of the materials at a fast pace is also a matter of concern. With the needs of man increasing, more and more goods are being manufactured, using a variety of materials causing severe drain on the available natural resources.

Control of industrial hazards to prevent occupational diseases, strict enforcement of anti-pollution measures, developing renewable sources of energy and appropriate technology, suited to local conditions. would help to keep down pollution.

Government action alone will not able to do much to preserve the environment. Non-Governmental Organisations and even individuals must

pull their weight to supplement the work of the Government Agencies. It is not enough to think of just ourselves. We must be able to think of the neighbours and of the community as a whole. It is not enough to keep the area around our homes clean. We must see that the surroundings of other houses are also clean. By dumping the refuse from our homes or sweeping it away into the neighbour's compound we are only transfering the problem.

Often in the past, we have put the cart before the horse in planning industries. Merely because a particular factory was going to provide jobs to a hundred persons we allowed it to be set up. We only throught about the short-term gains. We did not take into consideration the fact that the factory would pollute the atmosphere and endager the lives of a thousand persons in the vicinity. We did not take a long-term look at the starting of the industries. Many industries have come up without making any provision for the disposal of industrial wastes. It has resulted in life-giving and life-saving water itself turning into life-destroying liquid.

There is urgent need to take a close look at the environmental component in communicable diseases and the efforts to control them through environmental interventions.

Attention must be paid to the supply of fuel for the people. Firewood is the major fuel used by the poor. Urban consumption of fuel-wood contributes to deforestation. While the urban rich spend only about 7 percent of their income on household fuels, the urban poor are forced to spend about 16 percent for meeting their basic needs. The latter are also forced to use high-cost, low-efficiency smoky fuels which cause health hazards. Uncoordinated government policies on fuel prices and supplies have resulted in hardship for the urban poor. Efforts should be made to employ renewable sources of energy.

Greater attention should be paid to recycle municipal wastes. Except for a few pilot projects, not much headway has been made in this direction.

If Environmental degradation is not halted and is allowed to continue at the present pace it will turn our to be the real Rahu, instead of the mythical Rahu, that will ultimately deavour the earth.

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పాలపుంతలో సూర్యునిచట్టూ తిరిగే భూమిని ఈమధ్యన కొందఱు 'వ్యోమనౌక'తో పోల్చారు. ఎందుకా? ఱని ఆశ్చర్యపోయాను. కొంచెం ఆలోచిస్తే దానికి అర్థం స్ఫురించింది. గ్రహాంతరయానాలు చేసే వ్యోమ నౌకలలో మితంగా ఆహారం, జాగ్రత్తగా, పొదుపుగా వాడుకునేందుకు గాలి, నీరు, ఉండడానికి చాలా కొద్ది స్థలం మాత్రమే ఉంటాయి. మన యాత్ర పూర్తయ్యేవరకు ఎంతో జాగ్రత్తగా నేర్పుగా వాటిని వినియోగించు కోవాలికదా! అదే విధంగా భూమిమీదున్న ఆరువందల కోట్ల జనాభాకి కొంత పరిమితిలోనే నీరు, గాలి నివాస స్థలం, ఖనిజసంపదలు ఉన్నాయి. ఏమాత్రం అజాగ్రత్తగాగానీ, బాధ్యతారహితంగాగానీ ఎవరు ప్రవర్తించినా ఈభూమి అనే వ్యోమనౌక ప్రమాదాల పాలవుతుంది. ఈనాడు ప్రపంచ జనాభా రోజుకి రెండు లక్షల ఇరవై వేలమంది చొప్పున పెరిగి పోతుండంటే, పెరిగే ఈజనాభాకి ఈభూమి అనే వ్యోమనౌకలో ప్రయాణం సాధ్యమా? అన్న ప్రశ్న అందర్నీ వేధించక మానదు.

మనం రెండువేల సంవత్సరంలోకి అడుగుపెట్టేసరికి మన పట్టణాలలో జనాభా ఎనభైశాతం పెరుగు తుందట. ఇలా పెరిగే జనాభావల్ల కలిగే బాధలు : ఒకటి మితిమీరే ముసికివాకలు; రెండు నీటి కొఱత; మూడు కాలుష్యం చెందుతున్న నీరు; దీనికి తోడు సరైన నీటిపాయువలలేని దురవస్థ, పేరుకుపోయే చెత్తని యెదారాన్ని నాశనం చెయ్యలేని నిస్సహాయస్థితి; సరైన మరుగుదొడ్ల వసతిలేని దీనాతిదీనమైన పరిస్థితి. ఇది మన వ్యోమనౌక ఎదుర్కొనబోయే సమస్య.

ఈ భూమిమీద మూడువంతుల నీరు, ఒకవంతు నేల ఉందన్న సంగతి మనకు తెలియనిదికాదు కదా! కానీ అందులో మూడుశాతం నీరు మాత్రమే మనం వాడుకోవడానికి ఉపయోగమైంది. ఈ పరిస్థితిలో ఈనీటిని ఎక్కువగా వాడేసుకుంటున్న ప్రమాదమే; కలుషితం చేసేసుకుంటున్న ప్రమాదమే. కలుషితమైపోతున్న నీటిని త్రాగితే వచ్చే రోగాలలో అతి ముఖ్యమైనవి అతిసారవ్యాధి పచ్చకామెర్లులాంటివి. ప్రపంచంలో ప్రతి గంటకూ ఈ అతిసారవ్యాధి మూలంగా చనిపోతున్న చిన్నారుల సంఖ్య వెయ్యిమంది రెండువేల ఐదువందలదాకా ఉందన్న సత్యాన్ని మనం మరువకూడదు. ఈ చిన్నారుల ఆకాల మరణానికి మన అశ్రద్ధ, అలసత్వం, అజ్ఞానం, బాధ్యతారహితమైన ప్రవర్తన, స్వార్థంలాంటి కారణాలనేకం. పెరిగిపోతున్న పారిశ్రామిక సంస్థలు, సరైన మురుగునీటి పథకాలు లేకపోవడం, అధికంగావాడే క్రిమిసంహారక మందులు నీటి కాలుష్యానికి ప్రధానమైన హేతువులు.

పోనీ, మనం పీల్చుకొనే గాలేమన్నా పరిశుభ్రంగా ఉంటుందా అంటే అదీ రోజురోజుకి కలుషితమై పోతోంది. సరైన వెలుతురు, గాలి చొరని ఇళ్ళల్లో వంట వండడంవల్ల మరదేశంలాంటి దేశాలలో నలభై కోట్ల మంది దాకా ప్రజలు ఊపిరితిత్తుల వ్యాధితో బాధపడుతున్నారంటే మీరు నమ్మగలరా? దీనికి తోడు పొగత్రాగే వారి సంఖ్యకూడా విపరీతంగా పెరిగిపోవడంతో ఇళ్ళలోని గాలి మరీ కలుషితమైపోతోంది. పొగత్రాగడంవల్ల ఏడాదికి ఇరవైలక్షలమంది ఈ ప్రపంచంలో మరణిస్తున్నారంటే పొగత్రాగటం ఎంత ప్రమాదకరమైందో ఊహించండి.

ఈ మరణాలు, వ్యాధులు ఇలావుంటే అవసరంవున్నా లేకున్నా బొగ్గుని పెట్రోల్‌ని డీజెల్ ఆయిల్‌ని, కిరోసిన్‌లాంటి వాటిని మనం నిత్యం వాడుతుండడంవల్ల ఎన్నోరకాలైన విషవాయువులు గాలిలో ప్రతిక్షణం కలుస్తున్నాయి. దీనివల్ల బ్రోంకైటిస్, తలనొప్పులు, కళ్ళకలకలు, ఊపిరితిత్తుల క్యాన్సర్‌లాంటి వ్యాధులు విపరీతంగా మనుషుల్ని పట్టి పీడిస్తున్నాయి. గగనవిహారం చేసే కొన్ని రకాల విమానాలు వదిలే ఇంధన వాయువుల వల్ల భూమికి రక్షాకవచంగా ఉన్న ఓజోన్‌పొర ఛిద్రం అయిపోతోంది. చెట్లని నిర్దాక్షిణ్యంగా నరికేస్తుంటే కార్బన్‌డయాక్సైడ్ శాతం పెరిగి దానిలో భూమ్మీద ఏడాదికేడాదికి ఉష్ణోగ్రత పెరిగిపోతోంది. ఇవన్నీ ప్రకృతి చేస్తున్న విలయతాండవాలు కాదు. ఎంతో అభివృద్ధి చెందుతున్నాం, ప్రగతిపథంలో ముందుకు సాగిపోతున్నాం అనుకుంటూ ఆలోచనలేక, జాగ్రత్తపడక సరైన ప్రణాళికలులేక, స్వార్థంతో మనమే చేసుకుంటున్న విషపు విందు.

విందంటే గుర్తుకొచ్చింది. మనదేశంలాంటి దేశాల్లో విద్యాగంధం లేనివాళ్ళు ముఠికివాడల్లో నివసించే కోట్లాదిమంది, దారిద్ర్యరేఖ కట్టడుగున జీవితం గడిపేవారూ ఎన్నోవిధాలుగా ఆహారం కలుషితం చేసుకోవడం వల్ల కూడా ఆనారోగ్యాల పాలవుతున్నారు. సర్వసాధారణంగా పదిడిగ్రీల సెంటిగ్రేడునుండి ఆరవై డిగ్రీల సెంటిగ్రేడు మధ్యనున్న ఉష్ణోగ్రతలో మనకపకారంచేసే బాక్టీరియా క్రిమి దాదాపు 7000 మిలియన్ల కణాలని, 12గంటల లోపల ఉత్పత్తి చేస్తుందిట. దానికి తోడు మన పరిసరాలలో ఉండే తేమ, చెమ్మ దీనికి చాలా దోహదకారి అవుతాయి. మన ఆజాగ్రత్తవల్ల వండిన వంటకాలపై మూతలుంచక వదిలేస్తే ఇక చెప్పనక్కర్లేదీ కాలుష్యం బాధ. మాంసాహారం భుజించేవారు ఇంకా జాగ్రత్తగా ఉండడం ఎంతో అవసరం. చేతులు శుభ్రం చేసుకోకుండా, చల్లనివి, ఎప్పుడో వండినవి, మూతలుంచని వంటకాలు తినడంవల్ల వచ్చే దయేరియా వ్యాధివల్ల ఐదేళ్ళలోపు పిల్లలు రోజుకి 40లక్షలమంది ప్రాణాలు కోల్పోతున్నారని తెలుసుకుంటే చాలు కడుపు తరుక్కుపోతుంది.

పైన చెప్పిన గాలి, నీరు, ఆహారం మాటనలా ఉంచి ఈ భూమిమీద నివసిస్తున్న ప్రజల ఇళ్ళ సంగతి చూస్తే ఆదోరకమైన బాధ. ప్రపంచంలో అధికశాతం కడుదీనమైన స్థితిలో నివసిస్తున్న పేదప్రజానీకమే ఎక్కువ. ముఠికివాడల్లో, ఊరిచివర్లలో మనిషి కనీసం నిల్చుండలేని చిన్న చిన్న గుడిసెలలో లక్షలాదిమంది ప్రజలు ఈసురోమని వాళ్ళ జీవితాలని గడుపుతున్నారు. ఈ పూరిళ్ళలోనివసించే వారికి సరైన వెంటిలేషన్ సదుపాయాలు లేకపోవడంవల్ల వారు మండించే కట్టెల్లోంచి వచ్చే పొగలను నిత్యమూ పీలుస్తుండడంవల్ల బ్రోంకైటిస్, క్షయ లాంటి ఊపిరితిత్తుల వ్యాధులు క్యాన్సర్ కూడా సంక్రమిస్తున్నాయి.

ఇకపోతే మన ఇళ్ళలో పేరుకుపోతున్న చెత్తచెదారం గురించి ఆలోచిస్తే మన బాధ వర్ణనాతీతం. మన ఇళ్ళలోని చెత్తను మున్సిపాలిటివారి చెత్తకుండీలలో పారబోసి ఎప్పటి కప్పుడు పరిశుభ్రం ఆయ్యే ఏర్పాటు చేసుకోవడం ఎంతో అవసరం. అలా కాకపోతే ఈ చెత్తకుండీలు నిండిపోతూ, సరైన సమయంలో వీటిని దూరంగా తీసుకుపోయి నాశనం చేయ్యకపోతే Co_2 మీథేన్ లాంటి అపాయకరమైన వాయువులు వెలువడి వాతావరణాన్ని కలుషితం చేస్తాయి. ప్రపంచంలో సాలీనా పారిశ్రామిక రంగాలు ఉత్పత్తిచేస్తున్న చెత్తచెదారం నాలుగున్నరకోట్లటన్నులంటే నమ్మశక్యంగాకుడా ఉంది.

ఆరువందలకోట్ల జనాభాని మోసుకుంటూ, ఏడాదికి నాలుగున్నరకోట్ల టన్నుల చెత్తని చెదారాన్ని పెంపు కుంటూ, దయోరియా, కామెర్లు, క్షయ, ఊపిరితిత్తుల కాన్సర్ లాంటి బాధలతో, ఏడాదికి 40 కోట్లమంది

యాతనలు పడుతూ, మరణిస్తూ; కలుషితం అయిపోతున్న నీరు, గాలి, ఆహారం తప్ప మరో దిక్కులేని ఈ ప్రపంచ జనాభాతో మౌనంగా మన భూమి అనే వ్యోమనౌక ప్రయాణిస్తుంటే మరో 50 ఏళ్ళకి వాతావరణం యావత్తూ విషపూరితంగా మారిపోతే భూమికి భవిష్యత్తే మిటి? అన్న ప్రశ్నకు చాలా తేలిక అయిన సమాధానాలే ఉన్నాయి. భయపడి నిరాశావాదంతో కుమిలిపోనక్కర్లేదు. ప్రపంచ భవిష్యత్తు అంధకారబంధురమని వెలవక్కర్లేదు.

* ప్రతి మనిషి ఒక మొక్కను నాటితే చాలు.
* ఇళ్ళలో చెత్తను పెంచకుండా ఉంటే మేలు.
* పదార్థాలని వేడిగా ఉన్నపుడే భుజించడం, సరైన మూతలుంచడం చేస్తే మంచిది.
* నీరు కలుషితం అయిందనిపించిన వెంటనే కాచి వడపోసి త్రాగాలి. ఇలా చేస్తే లక్షలాది ప్రాణాలను రక్షించుకోగలం.
* జనాభాను పెంచడం మహా పాపం అని ప్రతి ఒక్కరూ మనస్ఫూర్తిగా నమ్మి జనాభా నరికట్టడంలో సహాయపడాలి.
* అనవసరంగా పట్టణాలవైపు తరలి పోకూడదు.
* చెట్లను నరికి నరకాన్ని భూమికి దింపకూడదు.
* విద్యుత్తు అనవసరంగా వాడితే, అక్కడ విద్యుత్ కేంద్రంలో అదనంగా బొగ్గు కాల్చాల్సివస్తుంది. దాంతో కాలుష్యం పెరుగుతుంది.
* అనవసరంగా కానిదానికి, అయినదానికీ మన సొంతవాహనాల్ని వాడి కాలుష్యం పెంచవద్దు.
* కనీసం వారంలో మూడు రోజులు సైకిల్‌పై గానీ, నడిచిగానీ మన పనులు చేసుకుందాం. దీనివల్ల ఆరోగ్యం బాగుంటుంది.
* పొగ త్రాగడం, మద్యం సేవించడం మానితే ఆయుస్సు పెరిగినట్లే.

ఈ ప్రపంచ ఆరోగ్య దినోత్సవ సందర్భంగా మనం నేను పైన చెప్పిన అతిసామాన్యము, ఆచరణీయమైన సూత్రాలను మనసా, వాచ, కర్మణా పాటిస్తే మన ప్రయాణం ఆహ్లాదమయం, ఆనందదాయకం, భవిష్యత్తంతా జ్యోతిర్మయం.

WORLD HEALTH DAY THEMES

1950 Know Your Own Health Services
1951 Health For Your Child And The World's Children
1952 Healthy Surroundings Make Healthy people
1953 Health is Wealth
1954 The Nurse : Pioneer Of Health
1955 Clean Water Means Better Health
1956 Destory Disease-Carrying Insects
1957 Food And Health
1958 Ten Years Of Health Progress
1959 Mental Illness And Mental Health In The World Today
1960 Malaria Eradication — A World Challenge
1961 Accidents Need Not Happen
1962 Preserve Sight — Prevent Blindness
1963 Hunger : Disease Of Millions
1964 No Trace For Tuberculosis
1965 Smallpox — Constant Alert
1966 Man And His Cities
1967 Partners In Health
1968 Health In The World Of Tomorrow
1969 Health, Labour and Productivity
1970 Early Detection Of Cancer Saves Lives
1971 A Full Life Despite Diabetes
1972 Your Heart Is Your Health
1973 Health Begins At Home
1974 Better Food For A Healthier World
1975 Smallpox — Point Of No Return
1976 Foresight Prevents Blindness
1977 Immunise And Protect Your Child
1978 Down With High Blood Pressure
1979 A Healthy Child — A Sure Future
1980 Smoking Or Health : The Choice Is Yours
1981 Health For All By The Year 2000
1982 Add Life To Years
1983 Health For All By The Year 2000 : The Count-Down Has Begun
1984 Children's Health : Tomorrow's Wealth
1985 Healthy Youth : Our Best Resource
1986 Healthy Living - Everyone A Winner
1987 Immunisation — A Chance for Every Child
1988 Health for All — All For Health
1989 Let's Talk Health
1990 Our Planet — Our Health Think Globally Act Locally

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