

IMAGE

WORLD-WIDE MONTAGE  
OF PEOPLE

SOUND

FIRST VOICE:

You could view the population explosion itself as a fuse on a bomb. The more people that we add to the world the closer the fuse is actually burned to the explosive. The question now is, has the fuse burned so close that there is no way to put it out before the bomb goes off and destroys the world.

SECOND VOICE:

There is no doubt that this is a serious problem -- the possibility of over-population. However, I think that one must retain perspective. It is not a problem that requires the kind of desperate measures that are being proposed in some quarters.

THIRD VOICE:

In the long run, the United States and all countries have to stabilize their population, that is, have to arrive at zero rate of change of population.

FOURTH VOICE:

My feeling is that the population increase has a minor effect on the increasing pollution level. Technology has perhaps eight to ten times bigger an influence on pollution level than population.

FIFTH VOICE:

Even the developers of the super grains agreed that this was not the solution to man's population problem. It was buying us time and time is what we are rapidly running out of.

SUPER TITLES

MAN BUILDS,

MAN DESTROYS

ANNOUNCER:

A series of programs about our environment and what man is doing to it . . .

AMONG THE LIVING

HOST  
DON PRINGLE

PRINGLE ON CAMERA

PRINGLE:

You have heard the views of experts on one of the most perplexing subjects of our times -- the growth of human population. As you have heard there is no unanimity, no consensus. Not even agreement on the nature of the problem.

In the next half-hour we shall explore this unavoidable fact of life in search of a clearer understanding.

But first, let's look at what one town in New York State is doing as a result of its concern for its own municipal environment -- and in the face of a fast growing population. To date, the town has enacted new laws including pesticide control, marine and waterfront protection, air pollution, green space, and oil spill control. Now, a team of environmental scientists is preparing a model zoning code based on a complete ecological survey of the community.

NARRATOR:

Some 30 miles from Manhattan -- the town of Huntington, Long Island -- has afforded a high quality of living to its residents for centuries.

HUNTINGTON STREET  
SIGN

The community was founded in 1653, about a generation after the settlement at Plymouth Rock.

#### HARBOR

Deep natural harbors opened Huntington to Long Island Sound and water transport.

#### HALE SIGN

On these shores Nathan Hale was seized by the British and became a martyr of the Revolutionary War.

#### WHITMAN SIGN

Civil War poet Walt Whitman was born here. For most of its history, the area was farm country. But after World War II, modern civilization rolled into the rural township.

#### BASKETBALL

By 1950, the population of the 100-square mile township had grown to nearly 50-thousand people, or 500 people per square mile.

During the '50's -- spurred by the urban exodus, the growth spurted 150 per cent: And still another 75-thousand newcomers arrived by 1970, so that the population density is presently two thousand persons per square mile, 4 times what it was just 20 years ago.

Huntington's population is still sparse compared to Manhattan's but much higher than the United State's average of only 58 persons per square mile.

In Huntington, as in most suburbs, tract housing now clots the landscape.

IAN MARCEAU ON  
CAMERA

MARCEAU:

For too long now, we've taken the attitude that the ground is the ground, the earth is the earth, and we can do what we will with it. We're now starting to get feedback from nature. The deep wells on Long Island, particularly in the western part, have become seriously polluted, and the water is becoming unsafe to drink. We are pulling too much water out, we're doing away with the vegetation, we're doing away with the whole aesthetic quality of life. We're wiping out the shellfish and fin fish industries in Long Island, which is a large part of the economy, and, in effect, we are going to and already got feedback from nature that says, "don't".

NARRATOR:

SHOPPING CENTER

With every indication that Huntington's population growth would continue -- and with 25 per cent of its land still undeveloped -- Huntington proposed a novel plan. A zoning ordinance that would attempt to ordain the best use of land, based on environmental considerations.

STREET SIGNS

Huntington town supervisor Jerome Ambro explains the plan:

AMBRO:

JEROME AMBRO  
ON CAMERA

An ecological zoning law predicated on a whole host of disciplines means that we will first do an inventory of natural resources. We will determine what we have already existing in terms of all of those things which are precious in the future, not the least of which, and in this case a unique geological area like Long Island, water, the most precious resource we have.

NARRATOR:

TOWN MEETING

The Town Board of Huntington has shown it is solidly behind ecological zoning by creating an office of Environmental Protection.

CHAIRMAN:

The Town Board hereby retains Dr. Ian Marceau as Director of Environmental Protection at an annual salary of \$20,000 dollars effective September 1, 1971. This continues our efforts to make Huntington the most ecologically concerned town in the state of New York.

MARCEAU ON CAMERA

MARCEAU:

Ecological zoning would require that these houses which depend on cesspools would be 1.2 acres per house. These are less than half an acre. And the disposal of the wastes through cesspools will result in ground water pollution which will come back through the water supply. The alternative to this, building these things closely like this, is to build them on 1.2 acres, and use cesspools, or to build them closer and use a sewage system. If a secondary sewage system is used, the effluent must go to the ocean. If it does there's a loss to the water supply of Long Island -- which is an effective population limiter. A second alternative is to use a tertiary sewage treatment system in which the water is returned to the ground after purification. This would allow higher density populations per lot. But it would be prohibitively expensive and would therefore act as a deterrent to increased population. So the only answer for Long Island and for this country is to limit population.

INTERVIEWER:

Can you say "no" to more people coming into an area?

MARCEAU:

The decision is made in a political environment. That decision must be made, and it will be made by the people themselves. The question that is evolving now is, how high a quality of

life do the people want. If they want a completely clean environment which is nice to live in, in which their children can grow up, then we must limit population. If they're willing to accept the continuous degradation, with houses put together on top of each other and cesspools, then that decision will be made, and we'll have a declining quality of life.

PETER F. SEILMAN AND  
KENNETH MURPHY ON  
CAMERA

SEILMAN:

Two things that worry me about ecological zoning, and Ken, maybe this worries you too, is that it could be used as a specious way of keeping people out of the community and also because this is going to take a long time to really determine what all the resources of this town are and come up with a computer program and come up with an ideal zoning. This could be used as a source of delay and not solving some of our very immediate housing problems right now.

MURPHY:

I go along with that. The NAACP, human relations, and the other groups here in town are all very much concerned that this ecological issue that Mr. Ambro has raised could be just a political ploy to keep a lot of whites, that are comfortable right now, from bolting, and running away from him, so to speak. I think the man is sincere on it, but you never can tell. I'm black and suspicious.

NARRATOR:

STEAM SHOVEL

The proposed ecological zoning plan has drawn dissent, articulated by these two local residents, among others who have closely watched Huntington's Urban Renewal Project.

KENNETH MURPHY ON  
CAMERA

INTERVIEWER:

Ecologically they say that because of water supply this area can only take one home per 1.2 acres.

MURPHY:

Well, I think if you look at this on an ecological basis, Manhattan should have maybe what, 500,000 people? And yet we have a daytime population in Manhattan alone of upwards of eight million people. And it hasn't gone away, it hasn't sunk in, it hasn't disappeared, and people survive there.

RASKIN: VO

The zoning laws in the town of Huntington make it impossible for blacks and Puerto Ricans to purchase a home, and the zoning laws have prohibited multiple dwellings since 1961. It's immaterial whether it's conscious or unconscious. The net effect is one of deep discrimination.

HOUSING

SAMUEL RASKIN  
ON CAMERA

Among the black and Puerto Rican people it would be rare to find a black family that occupies one entire house for itself, because when they can afford to raise the money to buy a house, in order to maintain that house, to make the mortgage payments, the tax payments and the insurance payments, they find that they must sublet portions of the house to get the income to meet the carrying charges, and these are violations of the law. We have one instance, for example, where there are 18 persons making up three independent families living in a one-family house.

MURPHY: VO

If we want to maintain the town, we have to provide homes for the people that work, for the fire department, the road department, the cleaners, the supermarkets, Are we going to say that these people that are making low wages, must commute from Islip, to come work in Huntington? No.

STREET SCENES

AMBRO:

I don't accept the view that what we're trying to do is stop population. We are trying to control population growth in a realistic way. The power to control how land is used is vested in a municipality of this type. Counties don't have that power, the state doesn't have that power, the federal government does not have that

AMBRO ON CAMERA

power, the federal government does not have that power. Townships have that power, and cities have that power. So that, with that as the base of this whole concept, control of land use through zoning, we have developed in the ecological zoning plan, as you call it, a system whereby we can determine not only the best use of the land today but try to develop a plan which in the future will ensure that our environment is safeguarded.

MARCEAU ON CAMERA

MARCEAU:

There comes a time when you reach a carrying capacity for an area where the area just becomes saturated with people and the limits are set by water supply, sewage disposal or perhaps population densities which cause severe psychological disturbances. This time will come in Huntington. It won't be discriminatory against underprivileged people, but it will be imposed by the environment.

PRINGLE ON CAMERA

PRINGLE:

So an attempt to institute an Ecological Zoning Law -- to defend the environment -- turns into a very knotty problem of population limitation.

And involves even more complex questions: what is a desirable population? what is overpopulation?

Can an increasing world population be fed? Is overpopulation or advanced technology to blame for our environmental problems -- or both?

Let's listen to some experts.

PAUL EHRLICH ON  
CAMERA

EHRLICH:

Unquestionably we are overpopulated, both in the United States and in the world as things are now. That means people behaving the way they behave now and with the kinds of standards of living they have now, are rapidly deteriorating the quality of the planet's environment and threatening to reduce the carrying capacity of the planet for mankind far below the level at which it now exists.

PHILIP HAUSER  
ON CAMERA

HAUSER:

There's no reason for reducing the population at this time at all, and with respect to food supply, though, to be sure, the prospects seem pretty dim if you think about the early 1960s, with the advent of what is called the "green revolution", it's perfectly clear that there'll be adequate food supply for perhaps the next 2, 3, 4 decades.

EHRlich ON CAMERA

EHRlich:

I won't even dispute with them the fact that it's very unlikely that the green revolution will keep food production up to the population growth for three decades. I think that's probably totally wrong. Right now, for instance we have a decline in the productivity of the sea, we expect in the near future a decline in the productivity of the land. But let's suppose that they're correct. If they knew their demography, they would know even if instantaneously all people in the world started to reproduce at replacement level, it would take about 60 years for population growth to stop. In other words, under the most optimistic assumption, there's a 30 year gap between food production and population growth.

BARRY COMMONER  
ON CAMERA

COMMONER:

When the population of the world, if the population of the world, gets larger than 7 to 8 billion, then there will be serious ecological problems, certainly if we don't reform our technology, in fact we'll have serious problems long before that. In most cases, aside from automobiles, about 85 per cent of the pollution impact is due to the way in which our technology has been changed, the amount of pollution produced by a unit of productive activity. So my feeling is that the population increase has a minor effect on the increasing pollution level.

EHRlich ON CAMERA

EHRlich:

You can show very clearly that you cannot solve our problems just by changing technology. If the population continues to grow, say in the United States, let's suppose the population continues to grow for the next 60 years at its present rate, and at the same time you manage to change your technology enough so each

person's impact on the environment is only one-half of what it is today, which would be a major miracle, everybody would be driving these little tiny cars and so on, keeping them a long time, well, 60 years from now you'd be right where you are today. That is, you'd have doubled the population and halved the impact of each person. At the same time, if you started to cut down, or stopped population growth, and permitted us to continually accelerate the amount of junk we produce, the size of automobiles and so on, and so forth, and continue putting DDT and mercury in the environment, even with the population growth stopped or reduced, Americans alone could easily destroy the world.

PRINGLE ON CAMERA

PRINGLE:

Dr. Ehrlich believes that an optimum population -- that is, one which could exist for a long period of time at the present American standard of living -- would be about 50 to 100 million people for the United States. The present population is 200 million -- twice the optimum Dr. Ehrlich suggests

On a world scale, he cites 500 million as an optimum population. World population has reached 3.6 billion -- and is expected to double by the end of the century if present growth rates are not reduced.

In the United States, a marked decline in birth rate has resulted from concern over population explosion. The dissemination of birth control information has been increased and abortion laws have been liberalized. However, religious,

emotional and political considerations have stood in the way of forming a national policy. The traditional opposition to birth control measures, especially from the Roman Catholic Church, continues. And new opponents to the zero-population-growth movement have emerged from minority groups -- who base their dissent on political and cultural grounds.

There are, of course, large portions of the world that are underpopulated and which do not share the problems of the high-density population countries. Some developing countries in Latin America and in Africa take the position that a higher rate of national population growth would be advantageous to their economic development. But most developing countries in Asia, faced with phenomenal increases in population stress that their capacity to supply schools, health services and employment are already strained. Over thirty developing countries have started national family planning programmes. In India, family planning has been a part of the official development policy since 1952. But in many parts of the world, religious and ethical questions are involved which make it difficult to formulate national policies -- not to speak of an international policy.

EHRlich ON CAMERA

EHRlich:

So the question is, do we continue in the same course that the animals have taken and that is, just continue to reproduce and reproduce and reproduce until we die off, or do we use our intelligence and control our reproduction and hopefully not die off.

HAUSER ON CAMERA

HAUSER:

What is required is, I think, a systematic effort, fortunately it has already begun, for which there is not yet adequate resources, to help the people in the developing regions of the world, in Asia, Latin America and Africa, to dampen their rates of population growth. I think there's reason for encouragement in the increasing list of nations in the developing regions which are firmly attempting to deal with the problem of excessive population growth rates. This is encouraging. However, it is clear that up to this point, there's no clear solution in sight, and this means we must continue to increase resources available and do all that we can to help these people who want to control birth rates and growth rates to do so.

GUTTMACHER ON CAMERA

GUTTMACHER:

The ideal contraceptive is not with us yet. It may be on the horizon because some very new chemical compounds called prostaglandins, particularly what we call F2 Alpha, have the potential of being perhaps remarkable contraceptives. We'll have what we call a postcontraceptive contraceptive.

EHRlich ON CAMERA

EHRlich:

Contraception, abortion, population control, these are human things. No animals do that sort of thing. The animal thing to do is to maximize your reproduction and take your high death rate when it comes along. In other words, if you put a couple of fruit flies in a bottle and let them start breeding, what you'll have is that the fruit flies will build a huge population and then it'll crash and die off and that's the end of it. OK, that's the animal way -- that's certainly the course that mankind is on. The curves for man and for the fruit fly look identical. They're like that. And now the question is are we going to go like that, like the fruit fly does,

or are we going to level off? It's man's question -- that's what we've got to use our intelligence on.

PRINGLE ON CAMERA

PRINGLE:

What should be done? What can be done? As men with different scientific training see the problem in different ways, so do they offer different solutions. Lincoln Day is chief of demography -- the science of human population -- at the United Nations.

LINCOLN DAY  
ON CAMERA

DAY:

Certainly the solution of the population problem is going to have to depend ultimately on individual decision-making. You can reduce the death rate by improving the water supply, and the ordinary consumer of water doesn't have any control over it. But you can't reduce the birth rate by some such means. Instead it's up to the individual himself to decide this and I suppose one thing you could say is that something an individual can do, in fact, ultimately has to do, to reduce the birth rate, is not to have that additional child.

ROGER REVELLE  
ON CAMERA

REVELLE:

I'm a crypto member of the women's liberation movement, not only in America but also in Pakistan, in all of the developing countries where women traditionally have an inferior status. Unless you give women something else to do besides having children, why shouldn't they have children? In America, about the only real career open to a woman is to marry and have children. We pity the spinster, we say a career woman is too masculine. Look at our educational system for women. In American colleges and universities, at the undergraduate level there are twice as many men as there are women. In the graduate and professional schools, about ten times as many men as women. This, I think, is a scandal and a disgrace.

GUTTMACHER  
ON CAMERA

GUTTMACHER:

I think that we have to make people realize that it's grossly immoral to have intercourse either in or out of marriage without the aid of effective contraception unless a conception is seriously wanted by the couple. And this, of course, would help a great deal, just the knowledge that this is what I would consider moral behavior. It's immoral, I think, to take chances and to have an unwanted child born in an overcrowded world. It's difficult enough to be born wanted in this schizophrenic, tense world that we're all living in, and to give a child that kind of a handicap, I think, is grossly immoral.

COMMONER ON CAMERA

COMMONER:

One of the interesting things is that the approach between birth rate and death rate, which is what balances out the population, in the advanced countries has always taken place when the death rate, and particularly infant mortality falls to a minimal level. At that level the birth rate suddenly begins to drop fast and the approach to balance occurs when the death rate in infant mortality is low. Now, there are no developing countries which have approached that minimal level without at the same time dropping their birth rate very rapidly. My feeling is that, and this is a personal judgment, that the humane approach to a balanced population in the developing countries is to encourage, as rapidly as possible, their approach to minimal death rates, and particularly to infant mortality. I think a crash program to reduce infant mortality in the developing countries might have a very important effect on birth rates.

EHRlich ON CAMERA

EHRlich:

If there are any solutions, it comes in the area of the social sciences and behavioral sciences, and that is in finding ways to change human attitudes towards reproduction and the value of children, the role of women, and the way that man treats the environment, his fellow men, and the way in which man deals with material things. In short, it means a revolution in human thinking, and a very big revolution, a very difficult revolution. Basically it means that we're all going to have to become utopian and idealistic, and the chances of that, I think

for most of us seem rather slim. The horror of our present situation, or maybe the interest of it is that the solutions that are left to man are the ones that we always laughed at before as being too idealistic, or too Christian or too utopian, and now they're the only ones that are left. I think most people can see this most clearly in the area of welfare. We're either going to have to find different ways of settling our disputes, we've always talked about peaceful ways, or sooner or later we're going to blow ourselves up. Well, a similar thing really pertains in almost all the areas of human problems including the population environment crisis. We're either going to find a different way to do things, or we're going to be blown up in one way or another.

NARRATOR:

CROWD SCENES

We have heard varying, often conflicting estimates, opinions, conclusions. But out of all these, a certain unity emerges. These men who have given much thought to the problem of human population all agree on certain essentials. The earth is finite. Population growth cannot go on indefinitely; indeed, in the historic perspective, probably for not much longer. The human population must come into balance, where births no longer exceed deaths -- and it will, one way or another.

END TITLES OVER CROWD SCENES