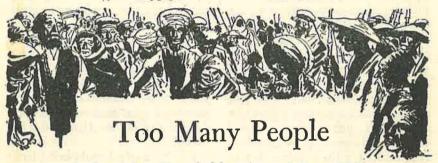
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Reader's Digest

An article a day of enduring significance, in condensed permanent booklet form

Man's history on earth has always been a race between his population and his food supply. Is food now losing the race?



Condensed from Harper's Magazine

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IGNS are multiplying that the world may soon have a tragic population crisis on its hands. Last year a State Department report on world population ominously declared: "In spite of recent natural and man-made catastrophes, about 17,000,000 inhabitants were added each year during the past decade." And last August the U.N.'s Food and Agriculture Organization warned that restoration of the food supply to prewar levels would not be enough because of the steadily increasing world population.

The world today has two and a quarter billion people. In 25 years it will have half a billion more. Europe now has at least 21 million more people than when the war began. Japan, with 13 times more persons per arable square mile than the United States, is adding a full million each year. Java, already about the most crowded spot on earth, has

800 persons per square mile (the United States has 45) and in one more generation will have 1400.

At the rate of the past few decades, say population authorities, the world's population will in 90 years be twice what it is today. Is that too many people? Not necessarily, provided the earth can feed them. Suppose, therefore, we examine food's chances of winning the race against population.

Geographers will tell you that the world has four billion acres of arable land. But man, to feed and clothe himself, they estimate, needs 2.5 acres per person. Divide it out and you will find that there are only 1.77 acres per person. In other words, there is already, apparently,

a deficiency of land.

How, then, does man get along? The answer is that the 2.5-acre requirement is for a proper minimum diet; but in only a few short periods in history, and in only a few places

on earth, has man ever had any such diet. Even in modern times, in normal crop years, inadequate food has been killing people off at the rate of 20 to 30 million a year. Recently Sir John Boyd Orr, head of the U.N.'s food committee, declared that even before the late war two thirds of the people of the world were undernourished all the time.

It is estimated that there are about one and a quarter billion new acres which, conceivably, man could cultivate. However, good crop land requires the right combination of three elements: climate, topography and soil. Much "arable" land has only one or two of these requirements. In fact, in all the world, agricultural authorities declare, the quantity of good farm land overlooked today is slight.

Vast irrigation projects have been proposed as a way to increase the world's food lands. But — as two experts, Frank Pearson and Floyd Harper, revealed in their recent book, The World's Hunger — the possibilities of increase by such means are extremely limited. Man has already irrigated the earth extensively.

It is true that new cold-resistant and drought-resistant grains will in the years ahead increase world grain acreage considerably. Hybrid corn now yields up to 20 percent more than old style. Suppose that by development of new plant strains the world's yield of wheat, rice and rye might be increased 20 percent; there is still the ominous probability that

population in the next century will have increased 100 percent.

What of commercial fertilizers? On some crops these amazing nitrogen, phosphorus and potash compounds have doubled and trebled yields. But, the chemists point out, there is a limit to which science can force up soil fertility, while the nutritionists warn that the increased yields from commercial fertilizers are not all gain. Such fertilizers produce more food, but that food is less nourishing.

Erosion control could bring lands now wasting away back to fertility. But tragic evidence is piling up that man is squandering his heritage of topsoil more profligately than ever.

Even the United States (supposedly conservation-conscious) presents a dismal and foreboding soilerosion picture. Every 24 hours unchecked erosion carries away the equivalent of 200 of our best 40-acre farms. Every year half a million acres of our irreplaceable topsoil are blown or washed away. In the one month of June 1947, for a harrowing example, more than 115 million tons of topsoil in Iowa alone were gone with the winds and the rains.

Voices in the wilderness, the experts are frantically warning that the world is now going deep into its capital of irreplaceable food-growing loam. In the great wheat-producing black soil regions of Russia and in the vast Eurasian grasslands, erosion is extensive and acute. General Jan Smuts has said it is South Africa's biggest problem. In Australia

and South America, it is said to be worse than in the United States.

You will hear the statement occasionally that a great source of food supply will be the sea. But even the richest fishing grounds — the English Channel, for instance — yield only about one pound dry weight of fish per acre. Compare this with one acre of good Indiana corn land, which produces 2000 pounds of maize, and it will be seen that even waters teeming with fish cannot offer much hope.

On the best available evidence, it thus appears reasonably certain that the world is to be both overpopulated and hungry for a long time.

This is no pleasant prospect, and in the minds of many Americans it is sure to raise anxious questions. The first will probably be:

"If other nations — China, India, Russia — are to have so many people, shouldn't the United States, lest it be overwhelmed, increase its population?"

The answer is No. In terms of military strength, the overpopulated nation is weakened by its extra people. A modern army is fed and equipped by the surplus of foods and materials a people can produce.

The United States may be a stronger, healthier, happier nation today with a population of 140 million than it will be when it reaches 200 million. Studies by P. K. Whelpton of the Scripps Foundation for Population Research indicate that a fixed 100 million people might be even better for us. It would mean

more and better clothes, housing, jobs, medical care, education, beef-steak and milk for everybody.

Another question which will plague many an American concerns relief. Today the United States is helping to feed the world, including even heavily overpopulated nations like China. Yet even before the war the American Red Cross had given up famine relief in China on the grounds that the result was always an immediate increase in population, which meant increased misery in the form of more hunger and starvation for even more people than before.

"Our last famine was a failure," an Indian businessman has declared. "It killed only three or four million people, which means that it still lagged far behind the birth rate. And that means less rice for everybody next year."

Here perhaps you will say: "Well, then, isn't food relief to grossly overpopulated countries an unsocial act in world terms?"

Some food and population experts privately answer the question in the affirmative but, because of sentiment, publicly hold their peace. Others say that relief to Europe will have a permanent good effect, but to Asia only if we go on to attack the fundamentals of the problem — too many people.

Is there, then, no way out?

The only possible ultimate answer, the experts believe, is world population control. How to bring world birth rates down, and how to bring them down in time?

In the long run industrialization lowers birth rates; so does the growth of cities. Also higher living standards, creating more wants and hence greater expense in the rearing of children. And increased literacy and higher education. And by no means least important, so does voluntary birth control. But all these take time.

The first result of industrialization is to increase population growth. A higher living level, more schooling, industrialization, all invariably drop the death rate quickly, while the birth rate, for some time, either continues high or climbs higher. Birth control gains acceptance only after living levels have been raised, and only after a rural society has been changed to urban. In Europe the process has taken many decades.

How quickly will a Chinese, whose happiness in life after death depends upon male descendants to sacrifice to his spirit and keep up his grave, welcome this foreign means of bringing him fewer sons? Or the Hindu, to whom the act of procreation is a religious rite? Or the millions of Roman Catholics whose church forbids use of contraceptives? In time to help out the world in its current food dilemma? Almost surely not.

"During the coming half century," declares Guy Irving Burch, head of the Population Reference Bureau in Washington, "even with an effective world program of population control, the inhabitants of the

world could hardly increase less than 550 million."

So much for the next few decades. But what thereafter? Can the world hope to make food and population strike a balance then?

The experts think that the world can — if it will try. Let it first, they say, formulate a world population control plan; and then, by every possible means, in every important country, publicize the necessity of population limitation and the advantages and methods of scientific birth control. Let it also push higher living standards, more education, industrialization of backward lands.

The plan would have to originate in an international organization, a commission of the United Nations probably, and have the sincere backing of practically all the nations.

It is proposed to reduce world population to two billion people.

Once the plan were in full operation, population would be chalking up ten percent fewer births than deaths until finally the goal of two billion would be arrived at in 150 years.

Perhaps this goal seems too far away to be worth struggling for. But if man does not struggle for it, his children and his children's children (meaning yours and mine) are likely to struggle much more painfully, thanks to the inevitable famines, epidemics and wars of a chronically hungry and overpopulated world.