

first it increased very rapidly, then growth slowed down and, eventually, tapered off. Population stabilized once again, at a much higher level.

The first people on the planet filled their stomachs by hunting animals and gathering wild plants that could be eaten. The balance of Nature decided how much food was available. This meant that human population, once it reached a certain level, grew very little over many thousands of years.

Then, about eight or nine thousand years ago, people discovered that it was easier to plant

The effects of the Industrial Revolution were stupendous

seeds in the ground and raise food in one place than to wander across the countryside looking for it. More food could be grown this way, and extra food could be raised and saved for hard times. Because the technology of agriculture meant more food, it also meant more people: there was a "population explosion." Within 4,000 years, world population had increased 16 times!

There were many other improvements in agriculture, but even so, by the year 1300 A.D. world population had more or less stabilized again. The planet could support more farmers than hunters, but still *only so many*.

In the middle of the 17th century, a new tech-

floor and jumped his speed from 20 to 60 mph in five seconds suddenly shouted, *at that instant*, "I'll be zooming along at 500 mph in a minute from now!"

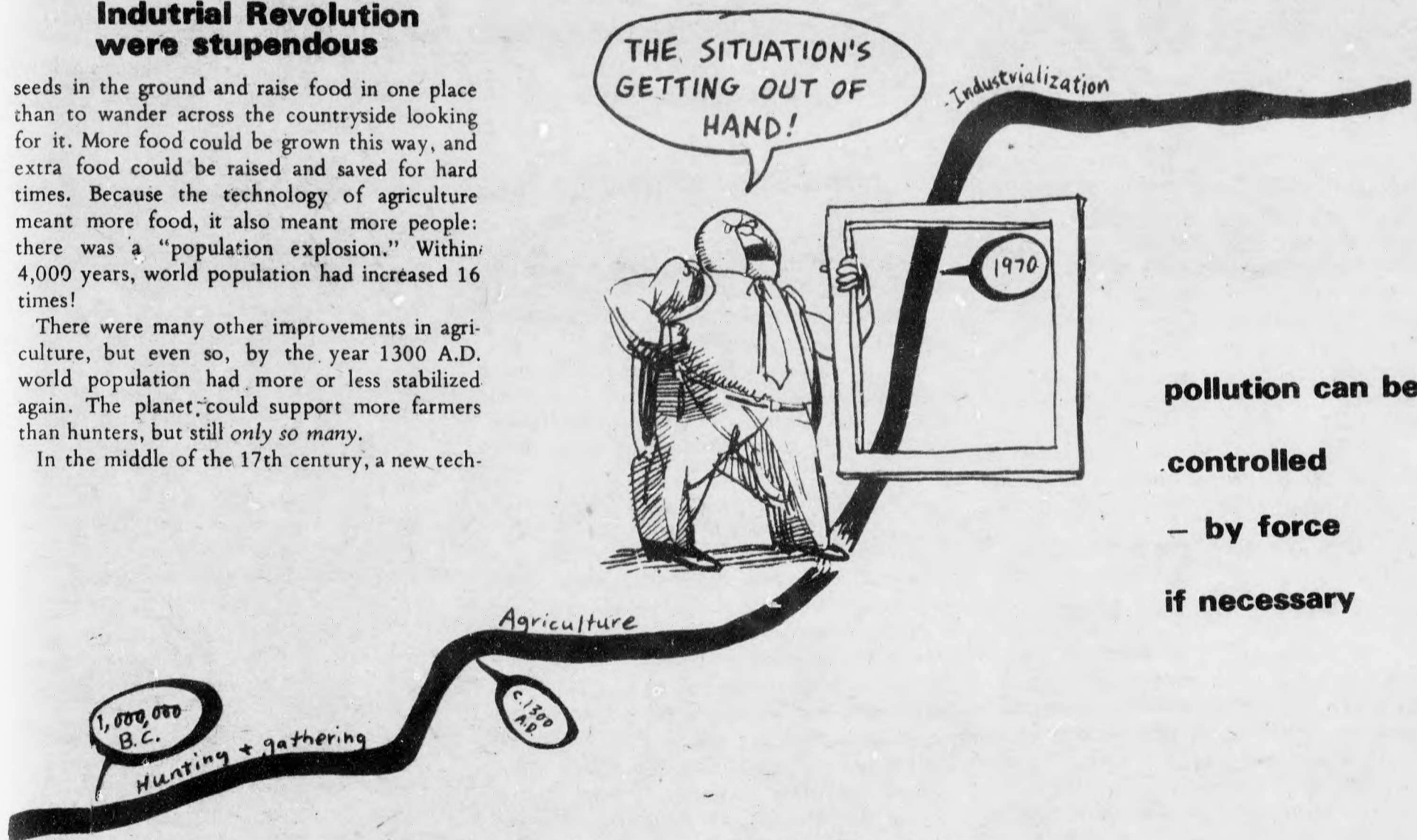
The same combination of natural conditions and social forces that have always controlled the size of population will eventually stop the spurt in the underdeveloped countries. We can see why the boom must taper off, as it has in the advanced countries, by understanding what caused it in the first place.

All the "underdeveloped countries" of Asia, Africa and Latin America are based on farming

and their birth rates are high. But since World War II, the death-reducing techniques of the industrialized nations have been introduced. Babies get vaccines to keep them from getting sick; swamps are drained or treated to remove disease-carrying mosquitos; public sanitation is developed—and fewer people are dying.

The result: fast-growing population. What is going to cut this rapid population growth? Two roads open out for Third World countries caught in this bind.

They could begin to develop economically. Land reform and selective industrialization



pollution can be controlled — by force if necessary

today almost a billion and a half people are underfed

nology began to develop. People began to study the laws of natural science; discoveries were put to use in ingenious machines that magnified human labor and used new sources of power. The production of a single worker was enormous with the new methods. Soon enough machines were also used to get increased benefits from the natural riches of the earth. People could make things never before imagined and grow more food than ever.

The effects of this Industrial Revolution were stupendous, and they continue to this day. Population growth went into a spurt that

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dwarfed anything in the previous million years. Today, the countries which accounted for the rapid population growth at the beginning of the Industrial Revolution have become industrialized, economically developed nations; they are not growing all that quickly today. *Most of the rapid increase going on now is accounted for by the "underdeveloped countries."*

But their surge will not go on indefinitely, something conveniently overlooked by many population alarmists. When these "experts" look at the charts and blurt, "Look how fast world population is growing: it's going to double every 35 years!", they assume that today's high growth rate won't slow down. It's as though the driver who rammed the car accelerator to the

rather than industry. History tells us several important things about the traditional farming society:

These societies have always had *high birth rates*, which means large families. It takes lots of human effort to work the fields when farm machinery isn't available; with a few more kids, you can produce much more food. Big families usually do better than small ones.

At the same time the death rate is also very high. People don't know much about science and modern medicine. They can't fight disease. Many families have ten children and see only two or three reach adulthood.

In traditional farming societies, the high birth rate and the high death rate just about balance each other, so population doesn't grow very fast. It is a growth limited mostly by *natural forces*: hunger and disease.

Things change when a society becomes industrialized and modernized. Here, birth rates drop off. Kids are expensive to raise in a city. You've got to support and care for them for 16 years or more before they can earn their own way. Space and food cost money; the more children you have the more you spend without getting any income in return. Families get smaller.

At the same time, though, the industrial society learns a lot about science, and medicine, and hygiene. So the death rate too drops off.

The low birth rate and the low death rate almost cancel each other out. Population is relatively stable. *Social forces* from economic pressures are most important in limiting growth.

Today, the countries of the Third World are still mainly agricultural societies. They are poor

would allow them to get more from their natural resources. The greater food yields from better land use and modern farming techniques would go a long way to feed their people. Soon enough, the social forces and economic pressures especially active in industrial societies would start reducing population growth.

This is already happening in some Third World countries.

At present, though, *most* countries in Africa, Asia and Latin America seem to be heading down a different road. They remain agricultural and unmechanized while their populations balloon and their food output starts to fall behind. The amount of food per person has declined for the last ten years. Sooner or later the pre-eminent natural force—starvation—must start cutting down the population growth.

These countries are on a road of misery. Today almost a billion and half of their people are under-fed. Half a billion are actually starving. Whether or not their population growth manages to keep increasing over the next decade or two, Hunger looms as the only future for these nations—*unless they develop*.

Why have some Third World countries developed while others remain trapped in a cycle of misery? This, and not population growth, is the true problem.