

Excerpts from "The Worst Mistake in the History of the Human Race"

By Jared Diamond – originally printed in *Discover*, May 1987

Recent discoveries suggest that the adoption of agriculture, supposedly our most important step toward a better life, was in many ways a catastrophe from which we have never recovered. With agriculture came the social and sexual inequality, the disease and despotism, that curse our existence.

For most of our history we supported ourselves by hunting and gathering: we hunted wild animals and foraged for wild plants. It's a life that philosophers have traditionally regarded as nasty, brutish, and short. Since no food is grown and little is stored, there is (in this view) no rest from the struggle of each day to find wild foods and avoid starving. Our escape from this misery was facilitated only 10,000 years ago, when in different parts of the world people began to domesticate plants and animals. Crop and animal domestication spread until today it's nearly universal and few tribes of hunter-gatherers survive.

How do you show that the lives of people 10,000 years ago got better when they abandoned hunting and gathering for farming? Until recently, archaeologists had to resort to indirect tests. Here's one example of an indirect test: Are current hunter-gatherers really worse off than farmers? Scattered throughout the world, several dozen groups of so-called primitive people, like the Kalahari Bushmen, continue to support themselves that way. It turns out that these people have plenty of leisure time, sleep a good deal, and work less hard than their farming neighbors. For instance, the average time devoted each week to obtaining food is only 12 to 19 hours for one group of Bushmen, 14 hours or less for the Hadza nomads of Tanzania. One Bushman, when asked why he hadn't emulated neighboring tribes by adopting agriculture, replied, "Why should we, when there are so many mongongo nuts in the world?"

While farmers concentrate on high-carbohydrate crops like rice and potatoes, the mix of wild plants and animals in the diets of surviving hunter-gatherers provides more protein and a better balance of other nutrients. In one study, the Bushmen's average daily food intake (during a month when food was plentiful) was 2,140 calories and 93 grams of protein, considerably greater than the recommended daily allowance for people of their size. It's almost inconceivable that Bushmen, who eat 75 or so wild plants, could die of starvation the way hundreds of thousands of Irish farmers and their families did during the potato famine of the 1840s.

Skeletons from Greece and Turkey show that the average height of hunter-gatherers toward the end of the ice ages was a generous 5' 9" for men, 5' 5" for women. With the adoption of agriculture, height crashed, and by 3000 B. C. had reached a low of only 5' 3" for men, 5' for women. By classical times heights were very slowly on the rise again, but modern Greeks and Turks have still not regained the average height of their distant ancestors.

"Life expectancy in the Paleolithic Era was about twenty-six years," says Armelagos, "but after the Neolithic Revolution it was nineteen years. So these episodes of nutritional stress and infectious disease were affecting their ability to survive."

There are at least three sets of reasons to explain the findings that agriculture was bad for health. First, hunter-gatherers enjoyed a varied diet, while early farmers obtained most of their food from one or a few starchy crops. The farmers gained cheap calories at the cost of poor nutrition. (Today just three high-carbohydrate plants—wheat, rice, and corn—provide the bulk of the calories consumed by the human species, yet each one is deficient in essential vitamins or minerals) Second, because of dependence on a limited number of crops, farmers ran the risk of starvation if one crop failed. Finally, the mere fact that agriculture encouraged people to clump together in crowded societies, many of which then carried on trade with other crowded societies, led to the spread of parasites and infectious disease. Epidemics couldn't take hold when populations were scattered in small bands that constantly shifted camp. Tuberculosis and diarrheal disease had to await the rise of farming, measles and bubonic plague the appearance of large cities.

Besides malnutrition, starvation, and epidemic diseases, farming helped bring another curse upon humanity: deep class divisions. Hunter-gatherers have little or no stored food, and no concentrated food sources, like an orchard or a herd of cows: they live off the wild plants and animals they obtain each day. Therefore, there can be no kings, no class of social parasites who grow fat on food seized from others. Only in a farming population could a healthy, non-producing elite set itself above the disease-ridden masses.

Farming may have encouraged inequality between the sexes, as well. Freed from the need to transport their babies during a nomadic existence, and under pressure to produce more hands to till the fields, farming women tended to have more frequent pregnancies than their hunter-gatherer counterparts—with negative effects on their health.

As for the claim that agriculture encouraged the flowering of art by providing us with leisure time, modern hunter-gatherers have at least as much free time as do farmers. The whole emphasis on leisure time as a critical factor seems to me misguided. Gorillas have had ample free time to build their own Parthenon, had they wanted to. While post-agricultural technological advances did make new art forms possible and preservation of art easier, great paintings and sculptures were already being produced by hunter-gatherers 15,000 years ago, and were still being produced as recently as the last century by such hunter-gatherers as some Eskimos and the Indians of the Pacific Northwest.

Farming could support many more people than hunting, though with a poorer quality of life. Partly, this is because a field planted entirely in edible crops lets one feed far more mouths than a forest with scattered edible plants. Partly, too, it's because nomadic hunter-gatherers have to keep their children spaced at four-year intervals by infanticide and other means, since a mother must carry her toddler until it's old enough to keep up with the adults. Because farmwomen don't have that burden, they can and often do bear a child every two years.

Hunter-gatherers practiced the most successful and longest-lasting life style in human history. In contrast, we're still struggling with the mess into which agriculture has tumbled us, and it's unclear whether we can solve it. Archaeologists studying the rise of farming have reconstructed a crucial stage at which we made the worst mistake in human history. Forced to choose between limiting population or trying to increase food production, we chose the latter and ended up with starvation, warfare, and tyranny.

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1. What is Jared Diamond's claim?

 2. List 3 pieces of evidence that he uses to support his claim.

 3. On a separate sheet of paper, write a 4-5 sentence "Thinking Bigger" paragraph. Possible topics could include:
 - Do you agree or disagree with Jared Diamond's claim?
 - How might human history have been different if we had stayed hunter/gatherers?
 - How convincing do you find his evidence/reasoning? Is there other evidence that would be useful?

 4. Add 3-4 bullet points to your "Compare Hunting/Gathering & Farming" worksheet from yesterday.