## [MUSIC PLAYING]

**HANS ROSLING:** You must know the basic facts about the world population in order to grasp global health. You need to know where people live in this world, how the world population is changing based on the number of babies born per woman, on average, in the world as a whole and in the different regions.

And finally, you must learn how, why, and when the fast population growth in the world will come to an end during this century. Please look at the following five video clips in which I explain all this. And if something is surprising to you, please look twice.

Today we are 7 billion people in the world. Where do they live? This world map is divided into four regions, America, Europe, Africa, and Asia. Simplified, 1 billion live in America, 1 billion in Europe, 1 billion in Africa, and 4 billion live in Asia. Easy to remember, 1, 1, 1, 4.

During the last 50 years, world population increased rapidly, and the population experts at United Nations say that the fast growth will continue for a few more decades. But by the end of the century, in the year 2100, the fast growth will be over, and we will be more or less 11 billion people in the world.

4 billion more, where will they live? No more billion in America, no more in Europe. 1 billion more in Asia, and probably 3 billion more in Africa-- 1, 1, 4, 5. So this is in South America. This is an North America. This is East Europe. This is West Europe.

The people of North America and West Europe have been dominating the world for a long time. In the future, they will only be 10% of the world population. 80% of the world population will be living in Asia and Africa.

World population was around 10 million people when agriculture was invented. 10 million, that's just like one of the big cities today, like Bangkok, London, or Rio de Janeiro. Then, over thousands of years, the world population increased very slowly. By the year 0, to 250 million people.

Like Indonesia today, the slow growth continued to 1 billion by the year 1800. And then, with the Industrial Revolution, the world changed. Fewer died young. The population started to grow faster than ever before. 2, 3, 4, 5, 6, 7 billion today.

This line gives the impression that the world population will just continue to grow. But it won't, because across the world, women have fewer and fewer babies. Look at the projection from the population experts at the United Nations. 8, 9, 10, and somewhere at around 11 billion, the fast population growth will eventually come to an end, somewhere in the second part of this century.

This shows babies born per woman in the world as a whole. And back in history, all the way up to the year 1800, on average, there were about six babies born per woman. It continued like this, all the way up to 1965, when I was a student.

There were still about five babies born per woman. But then, in my lifetime, it dropped like never before. And today, it's down to 2.5. And most likely, it will continued to fall to two, or even beyond.

The number of babies born per woman has dropped across the world. Back in the year 1800, it was about six babies per woman in all regions. Then, Europe changed like this. America followed, had a baby boom after the Second World War, and then dropped like this. In Asia, that drop came late, but was very fast.

And in Africa, the number of babies per woman has continued quite high. But then, during the last 30 years, the number of babies per woman is decreasing steadily in Africa. Now, this is today. When the trends continue as they are expected, we will reach down to two babies born per woman during this century.

The world population is growing fast. The experts say it will continue to grow fast for another 50 years, but then, the fast growth will end. How can they know? The clue is the age structure. These are the 7 billion people in the world today. This shows how old they are.

Each level is a 15-year age group. Below age 15, there are 2 billion children, 15 to 30, 2 billion-- rounded numbers-- 30 to 45 1 billion, 45 to 60, 1 billion, and this is my age group, 60 years and older, 1 billion.

Let's assume two things about the future. Life expectancy will not increase, and the number of children will not increase. And remember, these are the children of today. So what will happen next? The old will sadly die. The rest will grow 15 years older and have 2 billion children.

Then again, the old will die, the rest will grow 15 years older and have 2 billion children. And

the old will die, the rest will grow 15 years older and have 2 billion children. And look, 3 billion people will be added to the world population by this big, inevitable fill-up of adults. Just because of the age structure of the population today.

After the fill-up, look what happens. The old die, the rest grow older and have 2 billion children. That's how the fast growth ends by the time the children of today have reached my age group. So population will continue to grow for another 50 years, even without a growing number of children, and even without lives getting longer.

And in fact, the number of children is not expected to increase. But life expectancy is estimated to get longer. And that will indeed add 1 billion people. So around 11 billion by the year 2100.