



**HAL**  
open science

## Prospect : a World of 9 Billion Human Beings ?

Gérard-François Dumont

► **To cite this version:**

Gérard-François Dumont. Prospect : a World of 9 Billion Human Beings ?. Population et avenir, 2011, 699, pp.3. 10.3917/popav.699.0003 . hal-01302585

**HAL Id: hal-01302585**

**<https://hal.science/hal-01302585v1>**

Submitted on 15 Apr 2016

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

# Prospect: a World of 9 Billion Human Beings?

Source: Population & Avenir, No. 699, September-October 2010,  
www.population-demographie.org/revue03.htm ;  
www.cairn.info/revue-population-et-avenir.htm

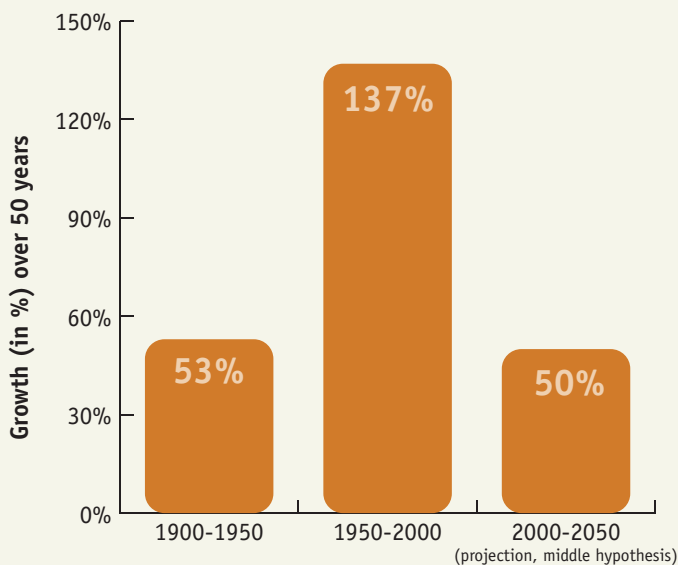
After that of 6 billion in the year 2000, the projection of 9 billion inhabitants on earth in 2050 is often quoted. It corresponds to the middle hypothesis derived by the United Nations and raises two questions. Would this figure imply an exceptional rate of growth? What are the conditions for its being confirmed or rejected?

There is no doubt that this 9 billion figure is impressive, if only because unheard of in the populating of the earth. And yet, it would imply a strong deceleration in world population growth.

- ◆ Between 1900 and 1950, the number of human beings went from 1.65 billion to 2.529 billion, *i.e.* a **53%** increase in half a century.
- ◆ During the next 50 years, the world population rose from 2.5 billion in 1950 to 6.0 billion in 2000, *i.e.* an increase of **137%** in half a century.
- ◆ Should the projection of 9 billion in 2050 come about, it would mean a **50%** increase, nearly three times less than during the previous half-century.

Such a deceleration would in particular reflect the logic of demographic transition, the limiting effects of which would be countered by the continuing progression of life expectancy and by inertia<sup>1</sup>.

## WORLD POPULATION GROWTH



1. For example, the population of China continues to grow only through inertia, while indicators imply an eventual reduction of the Chinese population. Cf. Dumont, Gérard-François, « Le talon d'Achille de la Chine ? », *Population & Avenir*, n° 690, Nov.-Dec 2008.

By Gérard-François Dumont



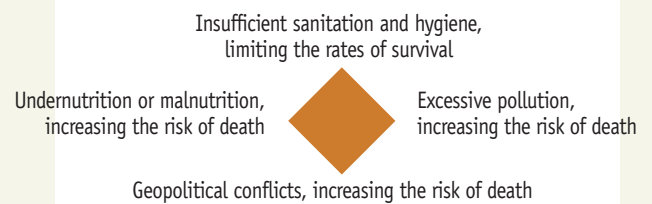
Professor at the University of Paris IV-Sorbonne ;  
President of the journal *Population & Avenir*.

Will the 9 billion mark be attained? This will happen only if what we have called the “**square of possibilities**” wins over the “**square of risks**”.

Indeed, Earth will never shelter 9 billion inhabitants if it registers on average a collapse of natality<sup>2</sup>, a rise of mortality and a diminution of life expectancy. These last two trends could be induced by four risks:

- ◆ Undernutrition or malnutrition, increasing the general risk of death,
- ◆ Insufficient sanitation and hygiene, weighing upon the rates of survival,
- ◆ Excessive pollution, increasing the general risk of death,
- ◆ Geopolitical conflicts, increasing the general risk of death.

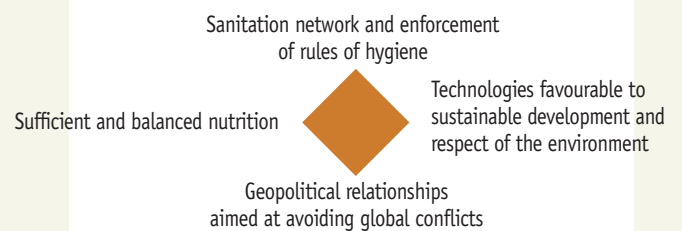
FIG. 1: THE SQUARE OF RISKS



Therefore, a rate of growth leading to a population of 9 billion is possible only if the following conditions are gathered:

- ◆ Sufficient and balanced nutrition,
- ◆ Sanitation networks and enforcement of rules of hygiene,
- ◆ Technologies conducive to sustainable development and respect of the environment,
- ◆ Geopolitical relationships aimed at avoiding global conflicts.

FIG. 2: THE SQUARE OF POSSIBILITIES



The above confirms that population growth depends on a number of parameters. A major consideration is linked to the implementation of sustainable development policies adapted to the diversity of territories on the planet.

So, the projected number of 9 billion human beings in 2050 is by no means a forecast, but only a possibility, subject to many parameters. In other words, the future is not written yet; it must be constructed. ☺

(Translation: Sylvie Vanston)

2. *i.e.* a much larger fall than the 45 % decrease in the average birth rate registered globally between 1950 and 2010.