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Working Paper

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WP-91-22
August 1991

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PREFACE

The following preliminary calculations are part of a larger effort of IIASA's Population Program to review the state of interdisciplinary thinking today concerning future trends in fertility, mortality, and migration in the main regions of the world. Alternative views about future trends are then numerically translated into a larger number of scenarios of population changes up to the year 2050 and in some cases 2100. A book has recently been published on the more developed countries (*Future Demographic Trends in Europe and North America: What Can We Assume Today?* edited by W. Lutz, Academic Press, 1991); another book is under preparation on Africa, Asia, and Latin America. Finally, this work will also result in a summary paper on alternative paths of future world population growth.

Responding to an immediate demand by scientists involved in the analysis of global environmental change, the following paper gives some very preliminary calculations for scenarios that are not yet based on a thorough scientific analysis of assumptions as described above. The alternative assumptions made are very simple. In formulating them we tried to abstract as much as possible from mainstream demographic thinking. Although few demographers would dare to specify a constant rate scenario resulting in further exponential growth of the world population, to many non-demographers this seems to be the most natural point of reference. Except for the Third World Crisis Scenario the assumptions made do not consider a possible influence of high growth rates on mortality rates.

Despite all shortcomings, this preliminary set of scenarios may be useful for putting the often-mentioned figure of an ultimate stationary world population of about 10 billion into perspective. The calculations also demonstrate clearly that a success in curbing population growth would inevitably result in an extreme aging of the population.

ABSTRACT

For six major regions of the world, ten alternative scenarios on future fertility and mortality trends are defined and projections performed from the base year 1985 up to the year 2100. Because of the great inertia of population changes, for the next 20-30 years the scenarios based on widely diverging assumptions do not produce very different patterns. In the longer run, however, the assumption of constant fertility and mortality rates resulting in continued exponential growth yields a total population size of 15 billion in 2050 and even 39 billion in 2100. The immediate replacement fertility scenario, on the other hand, would result in 7.5 billion by 2050. This still means an addition of more than two billion people to today's population of 5.3, which is entirely due to the momentum of population growth. Another major finding is that further aging of the population structure is inevitable even under constant rates. In the case of successful curbing of population growth, aging would be extremely rapid. For example, in Africa under the immediate replacement scenario the mean age of the population would increase from presently 22.2 years to more than 40 years by 2050. More moderate scenarios also result in very significant aging.

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SCENARIOS FOR THE WORLD POPULATION IN THE NEXT CENTURY: EXCESSIVE GROWTH OR EXTREME AGING

Wolfgang Lutz and Christopher Prinz

1. INTRODUCTION

Changes in population size and age structure have great inertia. Unless wars, famines, or epidemics kill significant proportions of the population, or massive migratory streams empty some regions and fill others, the future population of a certain region can be projected with high certainty in the short run. If one also assumes that fertility only varies within a rather narrow range, projections for the next 20-30 years are very reliable and insensitive to minor changes in mortality, migration, and fertility. Most of the change in size and age structure is already pre-programmed in the population's present age structure. In the following scenario calculations we will see that even widely differing assumptions will yield almost identical results up to the year 2010-2020. Thereafter, the range of possible futures opens widely.

It also is the inertia of population changes that in the long run results in a great impact of only minor differences in assumed fertility trends over the coming decades. To take an extreme example from the following calculations: Whether a certain low fertility level in Africa will be reached by 2025 or 2050 will make a difference in total population size by the year 2100 of more than 1.5 billion, which is almost three times Africa's present population size. This incredible inertia that makes it such a difficult and long term issue to stop population growth is also called the momentum of population growth, the fact that the age structure of a fast growing population is so young that even if fertility per woman declined to a very low level, the increasing number of young women entering reproductive age will cause the population to grow further for quite some time.

The usual approach to population projections, as practiced by most national statistical offices and the UN, is to calculate some (mostly three) variants based on given combinations of assumed fertility, mortality, and migration assumptions. The assumptions involved are generally not very obvious for the users. Usually the high and low variants differ from the medium variant only by the assumed levels of fertility. The time horizon of these projections tends to be 2025-2030. The appearing range between the low and high variant is often mistakenly interpreted as a confidence interval, although the assumptions on which they are based are more or less arbitrary.

Aside from the United Nations (1991), on a global scale the World Bank (Vu, 1985) regularly prepares population projections for all countries and regions. For them the time horizon is much longer, but only one variant is given. Generally, it is assumed

that in every country fertility will reach replacement level in a certain year (e.g. 2010 in Brazil). After that year all rates are kept constant and projections are done up to the year in which the population will become stationary, i.e. stop to grow due to the momentum of growth (2155 in Brazil). That stationary population size is then used as the ultimate size of a country's population. This method was used in the 1985 World Bank Projections resulting in a world population of 10.4 billion in 2100. There are no alternative variants given by the World Bank.

The scenario approach chosen for this short paper will also calculate the implication of several alternative future paths of fertility and mortality that need not necessarily reflect our present main stream thinking. Some scenarios look at the consequences of possible discontinuities in past observed trends; others just caution the general belief that fertility will soon enter a steep decline in many less developed regions, especially in Africa. The value of such a scenario approach lies only to a lesser extent in the possibility for everyone to choose one's own favorite scenario and look at its long term implications. The main value of such a set of alternative scenario projections that are based on controversial but informed guesses about the future, lies in giving a picture of the possible range of future population sizes and structures. This will help to distinguish almost inevitable trends from changes that are very sensitive to slight modifications in the assumption. Given in reasonable regional detail such data should prove useful for studying the necessary resilience of ecosystems to alternative demographic futures.

2. DEFINITION OF SCENARIOS

For the purpose of this paper six regions of the world were defined and projected separately. They largely correspond to the regions used by the UN Population Division. This is convenient because size and age structure of the populations in the starting year are taken from the UN. At a later point more attention will be given to the definition of regions. For this paper they are: Africa, Latin America, Eastern Asia (China, etc.), Southern Asia (India, etc.), Other Asia (Arabic-speaking countries, Indonesia, etc.) and Oceania, and finally Europe/North America/USSR. This definition of regions should not be considered a final one, as it turned out to be difficult to find a distribution that matches all reasonable demographic, geographic, environmental, political and also statistical criteria.

The following 10 scenarios are defined in Table 1. A **Constant Rates Scenario** (1) keeps fertility and mortality rates constant at their 1985-1990 level. This scenario probably does not meet the criterion of being possible because in some regions, especially in Africa, it is difficult to imagine how a population which is many times that of today could survive. If fertility will not decrease significantly we would almost inevitably have to expect an increase of mortality. On the other hand one could argue that Africa still has huge agricultural potential and, that under high standards of agricultural technology and social organization, it could be theoretically possible to provide a livelihood for many more people. In terms of Malthusian thinking this scenario assumes the absence of both a positive check (through higher mortality) and a preventive check (fertility decline). The only way such developments could be achieved in historical Europe was through technological progress. It is very doubtful, however, whether any

such progress could be strong enough to feed more than ten times the Africans of today. The second factor that makes a continuity of constant rates unlikely for the more distant future is the hypothesis of demographic transition, which says that a fertility decline follows the mortality decline with some lag for adjustment of social norms. It is unclear how long this lag will last, but empirical evidence shows that this seems to be a universal tendency.

The second scenario considered corresponds to the **UN Medium Variant** projection (2). Since these assumptions only go to the year 2025, rates are kept constant at their 2025 levels for the rest of the next century. The UN Medium Variant assumptions may be regarded as rather optimistic, because--with the exception of Africa--they assume fertility to reach replacement level everywhere within only 35 years. Life expectancy is assumed to increase by around 10 years until 2025, distributed over the regions from only 5 years for women in the industrialized world to more than 15 years for women in Southern Asia, thus resulting in a convergence in life expectancy in the long run. These assumed strong increases in Third World life expectancy do not consider possible new threats ranging from AIDS in Africa to famines or environmental catastrophes.

Table 1. Assumptions of 10 scenarios.

No.	Scenario	Fertility (TFR)	Mortality (Life exp.)
1	Constant Rates	const.	const.
2	UN Medium Variant	UN med	UN med
3	Constant Fertility	const.	UN med
4	Slow Fertility Decline	UN med, delayed	UN med
5	Rapid Fertility Decline	1.4 in 2025	UN med
6	Immediate Replacement Fertility	2.1 in 1990	UN med
7	Constant Mortality	2.1 in 2025	const.
8	Slow Mortality Decline	2.1 in 2025	UN med, delayed
9	Rapid Mortality Decline	2.1 in 2025	85/80 in 2025
10	Third World Crisis		
	a. Africa/Southern Asia	const.	-10%
	b. Other Regions	2.1 in 2025	UN med

More for demonstration than for serious consideration in the long run, the **Constant Fertility Scenario** (3) assumes an even more extreme case than the Constant Rates Scenario with birth rates constant at their present level but mortality improving according to the UN Scenario described above. Such a situation had been observed in parts of Africa in the recent past but is almost impossible to continue forever for the reasons described above.

In the **Slow Fertility Decline Scenario** (4) fertility is assumed to decline to the UN Medium Variant level within 60 years instead of 35 years. Hence, this scenario is less optimistic than Scenario 2, since fertility rates close to replacement level are reached in 2050 instead of 2025. Mortality assumptions are identical to Scenario 2.

As another extreme, the **Rapid Fertility Decline Scenario** (5) investigates the population growth and structure we could expect in the case where current very low Western European fertility levels--with an average number of 1.4 children per woman--would be reached all over the world by 2025. Fertility declines linearly between today and the Total Fertility Rate (TFR) of 1.4 in 2025, and again the life expectancy of Scenario 2 is assumed. Thus, it corresponds to a situation with completed demographic transition in every region of our globe. This scenario, which does not seem very likely at first sight, would reflect a situation of very high social and economic development in all parts of the world. With constant mortality, a TFR of 1.4 implies that each subsequent generation is diminished by one-third. Hence, in the long run the total population size should be declining.

For a better understanding of the extent of the momentum of population growth, the **Immediate Replacement Fertility Scenario** (6) finally makes the highly unlikely assumption that replacement fertility (a TFR of 2.1) is immediately reached in all parts of the world. This is combined with the mortality assumption of Scenario 2. The extent of the momentum of population growth could also be derived analytically (Keyfitz, 1977, pp. 155-157). In the case of the initial age distribution being stable, the formula is very simple. In the empirical case of past changes in fertility and mortality patterns, a projection has the advantage of being able to compare population sizes at every point in time.

The following four scenarios which consider different future trends in mortality will all have the assumption of replacement level fertility in all regions by the year 2025. This is not done because it was considered the most likely fertility assumption, but for simplicity. In analogy to Scenario 3, the **Constant Mortality Scenario** (7) reflects a situation of completed fertility transition in 2025 (i.e. replacement fertility everywhere) together with a stagnation in life expectancy at current levels. This stagnation might have several reasons ranging from new spreads of infectious diseases to nutritional deficits or environmental degradation. In the **Slow Mortality Decline Scenario** (8) mortality is assumed to decline as in the UN Medium Variant but with a slower path of improvement. UN mortality levels are reached in 2050 instead of 2025. The other extreme is represented by a **Rapid Mortality Decline Scenario** (9). Here it is assumed that life expectancy at birth will reach 85 years for women and 80 years for men in 2025. Again, linear paths of improvements and no differences between regions are assumed.

Finally, one scenario was designed where assumptions differ strongly by region. The so-called **Third World Crisis Scenario** (10) defines the future "Third World" being Africa and Southern Asia only. Hence, the scenario assumes that these two regions will not manage their population growth problem and a positive Malthusian check will increase mortality levels. In those two regions the crisis is defined as an increase in mortality (about 10% decline in life expectancy) together with continued high fertility (i.e. constant fertility rates). The rest of the world is assumed to complete the demographic transition by at least 2025, that is fertility reaches replacement level and mortality improves as in Scenario 2.

Of course an unlimited number of different scenarios could be defined here especially when one assumes diverging demographic trends in the more distant future as is done in the last scenario. Furthermore the above given scenario definitions do not consider the possibilities of massive migratory streams from one region to another. In the final version of this paper a larger number of scenarios with more differentiated assumptions will be defined and calculated. Here the above given ten definitions should suffice to give a crude first impression of the consequences of the alternative assumptions.

Table 2 gives figures on fertility and life expectancy for the regions considered, both for the starting year of our projections (1985) and for the year 2025 as assumed in the UN Medium Variant. Today, fertility ranges from a Total Fertility Rate of 1.97 in the region Europe/North America/USSR to 6.24 in Africa. Life expectancy ranges from 50.3 years for men in Africa to 77 years for women in Europe et al. These sharp differences are supposed to converge steadily, reducing the TFR gap from 4.27 in 1985 to only 1.24 in 2025, and the maximum difference in life expectancies from 26.7 years in 1985 to 18.2 years in 2025.

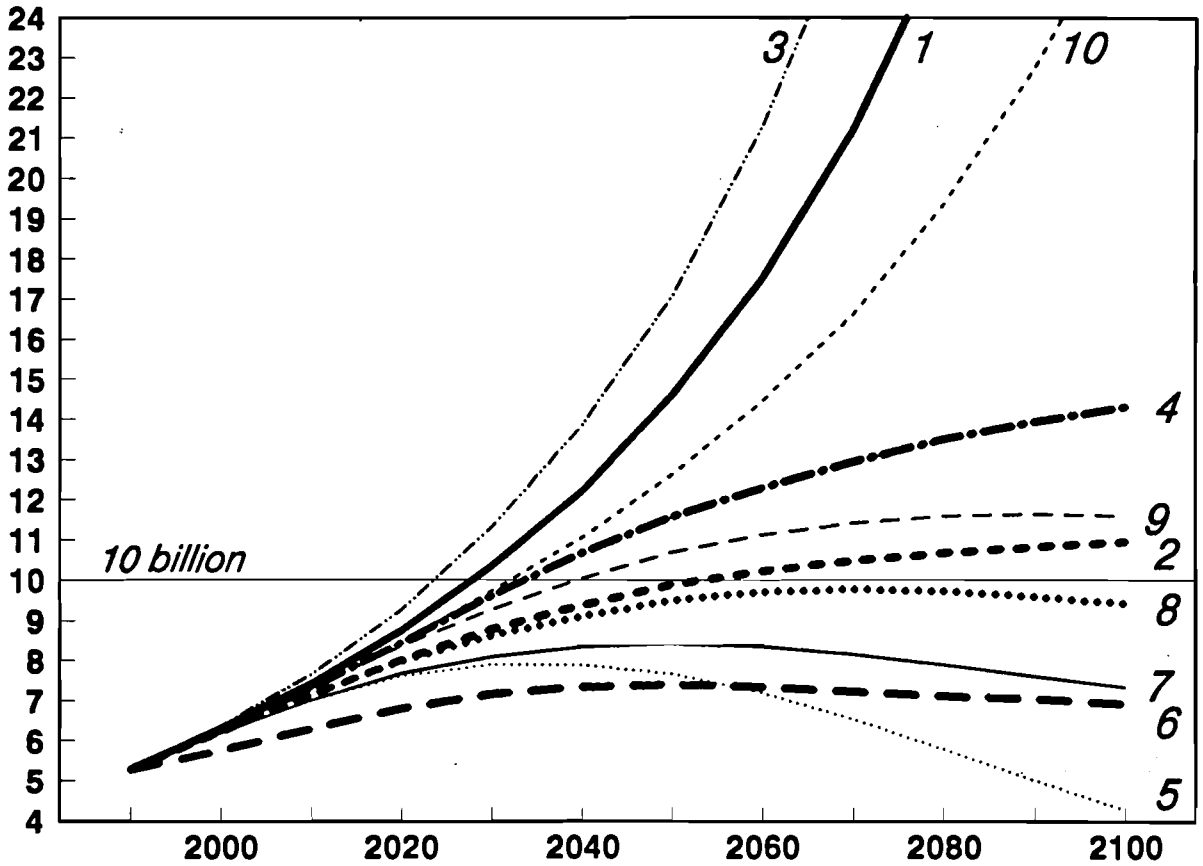
Table 2. Fertility and mortality by region (UN Medium Variant).

	Total fertility rate		Life expectancy Women		Men	
	1985	2025	1985	2025	1985	2025
Africa	6.24	3.04	53.6	67.4	50.3	63.7
Latin America	3.55	2.39	69.5	76.3	64.0	70.3
Eastern Asia	2.36	1.80	72.3	79.5	68.7	75.1
Southern Asia	4.70	2.16	56.9	72.2	56.7	68.9
Other Asia/ Oceania	3.92	2.20	64.0	74.9	60.4	71.0
Europe/USSR/ North America	1.97	1.94	77.0	81.9	69.4	75.6

3. SHORT SUMMARY OF RESULTS

3.1. Total Sizes of World Population

At the starting year of our projections, our planet accommodated around five billion people. Under all scenarios considered over the next 30-40 years, the world population will increase to a size of at least about 8 billion (see Figure 1). Even immediate replacement fertility in all parts of the world would result in an additional two billion or more people, due only to the momentum of population growth. Also under the rapid fertility decline scenario, assuming only two-thirds of replacement by 2025, the total population size would peak in 2040 at around 8 billion and only decline thereafter.



Scenario 1: Constant Rates
Scenario 2: UN Medium Variant
Scenario 3: Constant Fertility
Scenario 4: Slow Fertility Decline
Scenario 5: Rapid Fertility Decline
Scenario 6: Immediate Replacement Fertility
Scenario 7: Constant Mortality
Scenario 8: Slow Mortality Decline
Scenario 9: Rapid Mortality Decline
Scenario 10: Third World Crisis

Figure 1. Total projected world population 1990-2100 according to scenario.

Hence we may conclude on the lower side of the spectrum that, unless completely unexpected major threats to life kill great proportions of the world population over the coming 30-40 years, the world will have to accommodate an extra number of people that are at least as large as half of the world population today. Under the assumption of sustained sub-replacement fertility in all regions of the world the population might then decline again in the very long run and possibly by the year 2100 reach a size that is lower than that of today. But still in the transition period the 8 billion mark will be touched.

On the higher end of the spectrum of possible future population sizes according to the scenarios defined here we have to distinguish between the three scenarios that look at the case of continued growth and those assuming a levelling off.

Obviously exponential growth cannot continue forever and therefore in the longer run is not only unrealistic but also impossible. Nevertheless, it is instructive to study the results especially in the short to medium term future, and compare them to other scenarios. Furthermore, an assumed continuation of currently observed levels is in almost every scientific discipline a standard for comparison unless there is certainty that this level will change in one specific direction. In the case of population growth we have good reason to assume a change in rates, but we are far from any certainty about the extent and the timing of this decline. In any case, because of the inertia, over the coming three decades the Constant Rates Scenario (1) will not result in very different total population sizes than most other scenarios. Around 2015 the 8 billion would be reached and 10 billion only after 2025. Under this scenario a world population of 15 billion would first appear after 2050. Under Scenario 3, assuming constant fertility and improving life expectancy, greater than exponential growth would result in even 17 billion by 2050. For the second half of the next century continued exponential growth would lead to ever increasing absolute increments resulting, under Scenario 1, in about 40 billion in the year 2100. Further continuation of this growth would then soon result in "standing place only" situation. By definition, these exponential scenarios do not assume a feedback from population size to fertility or mortality.

For the scenarios assuming a decline of fertility to replacement level at some point in the future, it appears that even relatively small differences in assumptions concerning the timing of fertility decline have a major impact on population size. Projecting UN Medium Variant assumptions up to the year 2100 gives a levelling off in population growth at around 11 billion, the population size in 2050 already being 10 billions (Scenario 2). Delaying the fertility decline by 25 years, Scenario 4 gives a population size of more than 14 billion in 2100 and population growth does not seem to stop before having reached 15-16 billion in the 22nd century. Likewise, a rapid linear fertility decline to a TFR of only 1.4 children per women in the year 2025 for every region, Scenario 5 gives a totally different picture: After an increase to 8 billion in 2030-2040, population size may decline to a figure below 5 billion in the very long run (2100).

Population size is, to a lesser extent, influenced by assumptions on mortality. In the medium term, a constant mortality level in conjunction with replacement fertility by 2025, Scenario 7 would delay the growth in population size by some ten years as compared to the UN Medium assumptions on mortality improvements. In the very long run population size in the absence of mortality improvements tends lo level off at around

7.5 billion, which is two billion below that in a corresponding scenario with increasing life expectancy.

Delaying the assumed improvement in life expectancy by 25 years, Scenario 8 has virtually no impact on total population size. Assuming a rapid increase in life expectancy to 85 years for women and 80 years for men in all the regions in the year 2025, Scenario 9 increases population size by one billion in 2050 and two billion in 2100.

3.2. Regional Distribution

It is safe to say that population growth will occur unevenly across our globe and result in major changes in the global population distribution. Currently, the world population is distributed over the continents as shown in Table 3: around or more than 20 percent live in each Europe/North America/USSR, Southern Asia and Eastern Asia, around 10 percent live in each Africa, Latin America and Other Asia/Oceania.

Due to present great differentials in fertility levels resulting in different age structures and therefore a differential momentum of growth, and due to the assumption that fertility changes will only be gradual, the populations of Africa and Southern Asia will grow fast whereas Eastern Asia and Europe will hardly grow. Consequently, all scenarios result in a change of regional population distributions, which in the case of Scenario 2 might read as follows in 2050 (see Table 3): only 11 percent would live in Europe,North America and USSR, only 17 percent in Eastern Asia, but 22 percent in Africa. According to this UN Medium Variant Scenario, the total world population will double over the next 70 years: Africa will grow fourfold, while the industrialized world will keep its current size.

However, Table 3 shows that the future population distribution might also be more extreme. The Constant Rates Scenario (1) even results in 25 percent Africans but only 7 percent Europeans/North Americans/Soviets by the year 2050, and hypothetical 37 and 2 percent, respectively, in 2100. Aside from the unimaginable population increase in Africa it is also interesting to look at Asia: While there is about one Southern Asian to each Eastern Asian today, it will be two to one in 2100 according to Scenario 2, or even five to one according to Scenario 1.

A very extreme change in regional distributions is caused by the scenario assuming differential demographic developments between the regions. Scenario 10, assuming a crisis in Africa and Southern Asia resulting in higher mortality and constantly high fertility, but demographic stability in all other parts of the world, gives a distribution that is even more extreme than under Scenario 1: Despite increasing mortality in those regions, 80 percent of the world population would then live either in Africa or in Southern Asia, as compared to only 35 percent today.

Table 3. Regional population distribution according to selected scenarios.

	Africa	Latin America	Eastern Asia	Southern Asia	Oth. Asia, Oceania	Europe, USA, USSR	World Population
1990:	12%	9%	25%	23%	11%	20%	5.29
2050:							
Scenario 1	25%	9%	14%	31%	14%	7%	14.59
Scenario 2	22%	10%	17%	26%	13%	11%	9.89
Scenario 5	17%	9%	21%	27%	13%	12%	7.68
Scenario 9	18%	9%	20%	27%	13%	12%	10.69
Scenario 10	25%	7%	16%	31%	10%	10%	12.61
2100:							
Scenario 1	37%	8%	6%	33%	14%	2%	39.31
Scenario 2	32%	11%	12%	24%	13%	9%	10.96
Scenario 5	17%	10%	20%	28%	14%	12%	4.29
Scenario 9	19%	10%	19%	28%	14%	11%	11.60
Scenario 10	42%	4%	8%	38%	5%	4%	26.93

Scenarios that assume a fast or moderate convergence to replacement or sub-replacement fertility (Scenarios 5-9) by definition result in more moderate distributional changes. Between 10 percent (Scenario 6) and 19 percent (Scenario 9) would be Africans, the corresponding percentages for Europe/North America/USSR being 18 percent and 11 percent, respectively.

3.3. Mean Age

There is no doubt about the fact that the world population will be aging significantly in the future. Even the Constant Rates Scenario, which is very unlikely in the long run, gives an increase in the mean ages of all regions over the next 50 years. Scenario 2, based on the UN Medium Variant, will result in much more significant aging in all regions of the world. While in today's industrialized countries the mean age is expected to increase from the present 35 years to more than 43 years by 2070, extent and pace of aging will be even stronger in Eastern Asia. There, the UN Medium Variant expects an increase in the mean age from presently 29 years to 44 years by 2070. Even in Africa the mean age is expected to increase by more than 12 years to about the same level we find in Europe and North America today.

As could be expected, the Rapid Fertility Decline Scenario (5), which is the only one that would ultimately bring down the world population below its present size, results

in the most extreme aging of the world population. Under this scenario, in almost every continent the mean age of the population would reach about 50 years by the end of next century. What this means in terms of changes of the social and economic structure is hard to imagine, not to speak about medical expenses and retirement benefits.

In summary, this comparison of the consequences of various scenarios on total population size and the age structure of the population makes clear the fundamental dilemma of future population trends under low mortality conditions. All scenarios that limit population growth even at a level two to three times of today's world population, will result in extreme aging of the population. Only further exponential growth of the population will keep the populations young.

Put in simple words: Either the population explodes in size or it ages to an unprecedented extent. The explosion will sooner or later result in higher mortality levels because it cannot go on for ever, the aging makes painful social adjustment processes necessary and a complete remodelling of both family and state support systems for the elderly. Probably the future will bring a combination of both undesirable phenomena.

4. DISCUSSION: THE LEVEL OF AGGREGATION

At this point we do not want to enter a discussion on which scenario is more likely than another. This discussion together with a detailed evaluation of various assumptions on a regional level will be done elsewhere (see preface to this paper). Here we only wanted to stress one very important technical point, namely the dependence of the appearing pattern on the level of aggregation.

In the discussion on global interactions between population growth, socio-economic development and the environment, statements are frequently made and compared which are based on different levels of regional aggregation. If the aggregates are heterogeneous, however, often serious discrepancies and contradictions arise. One example is that the projection of total future energy consumption by combining present per capita consumption with future population growth will result in much higher figures if it is done for the whole world as opposed to continents. The reason lies in the fact that today's per capita consumption is heavily influenced by the industrialized countries, whereas future population growth will take place in the Third World where per capita consumption is by magnitudes lower.

One need not go to the question of population/environment interactions to encounter this question. The simple example of the Constant Rates Scenario from the analysis above shows that, if the projection is performed at the level of regions and aggregated thereafter, as is done in the above paper, the resulting population size figures in the more distant future are more than 50 percent higher as in the case where the same assumption of constant rates is applied to the world total. The reason for this difference by a factor of 1.5 lies in the simple fact that today the low fertility populations of the industrialized countries are still a higher proportion of the total world population than they will be in the future under all scenarios. Hence, applying a constant fertility

rate to the world together with the inevitable change in weights actually implies declining fertility rates in the less developed countries.

There is no easy answer to the question what is an appropriate level of aggregation. If we know, however, that there is significant heterogeneity within the aggregate considered, and the dynamics of the system will be influenced by it, and we even have data on smaller more homogeneous units, then it is hard to justify any study that does not consider explicitly those units.

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APPENDIX TABLES: Numerical Results of Calculations by Scenario

Scenario 1: Constant Rates

	AFRICA	LATIN AMERICA	EASTERN ASIA	SOUTHERN ASIA	OTH.ASIA OCEANIA	EUROPE/ USA/USSR	WORLD TOTAL
a. Total population (in billions)							
1990	0.64	0.45	1.34	1.20	0.60	1.06	5.29
2000	0.86	0.56	1.53	1.51	0.75	1.10	6.31
2010	1.16	0.68	1.67	1.88	0.93	1.12	7.43
2020	1.54	0.82	1.79	2.34	1.14	1.13	8.76
2030	2.04	0.98	1.92	2.91	1.39	1.12	10.35
2040	2.71	1.17	1.99	3.60	1.68	1.10	12.24
2050	3.59	1.38	2.07	4.45	2.04	1.07	14.59
2060	4.75	1.63	2.14	5.51	2.47	1.04	17.53
2070	6.28	1.92	2.22	6.81	3.00	1.01	21.24
2080	8.30	2.27	2.30	8.43	3.63	0.99	25.91
2090	10.97	2.68	2.39	10.43	4.39	0.96	31.82
2100	14.50	3.17	2.47	12.91	5.32	0.94	39.31
b. Population distribution (in %)							
1990	12.1%	8.5%	25.3%	22.7%	11.4%	20.1%	100%
2000	13.6%	8.9%	24.3%	23.9%	11.9%	17.4%	100%
2010	15.5%	9.2%	22.4%	25.3%	12.5%	15.1%	100%
2020	17.6%	9.4%	20.5%	26.7%	13.0%	12.8%	100%
2030	19.7%	9.5%	18.5%	28.1%	13.4%	10.8%	100%
2040	22.1%	9.5%	16.3%	29.4%	13.8%	8.9%	100%
2050	24.6%	9.4%	14.2%	30.5%	14.0%	7.3%	100%
2060	27.1%	9.3%	12.2%	31.4%	14.1%	5.9%	100%
2070	29.5%	9.1%	10.4%	32.1%	14.1%	4.8%	100%
2080	32.0%	8.8%	8.9%	32.5%	14.0%	3.8%	100%
2090	34.5%	8.4%	7.5%	32.8%	13.8%	3.0%	100%
2100	36.9%	8.1%	6.3%	32.8%	13.5%	2.4%	100%
c. Mean age of the population (in years)							
1990	22.2	25.8	29.8	24.8	24.8	35.8	28.0
2000	22.2	26.6	31.0	25.1	25.0	37.0	28.3
2010	22.3	27.5	32.9	25.4	25.5	38.2	28.7
2020	22.6	28.2	34.3	25.6	25.9	39.2	28.9
2030	22.8	28.7	35.1	25.8	26.2	39.9	28.8
2040	22.8	28.9	35.7	25.8	26.3	40.2	28.4
2050	22.9	29.0	35.7	25.8	26.3	40.2	27.9
2060	22.9	29.0	35.6	25.8	26.3	40.2	27.4
2070	22.9	29.0	35.7	25.8	26.3	40.2	27.0
2080	22.9	29.0	35.7	25.8	26.3	40.2	26.7
2090	22.9	29.0	35.7	25.8	26.3	40.2	26.3
2100	22.9	29.0	35.7	25.8	26.3	40.2	26.0

Scenario 2: UN Medium Variant

	AFRICA	LATIN AMERICA	EASTERN ASIA	SOUTHERN ASIA	OTH.ASIA OCEANIA	EUROPE/ USA/USSR	WORLD TOTAL
a. Total population (in billions)							
1990	0.64	0.45	1.34	1.20	0.60	1.06	5.29
2000	0.85	0.55	1.51	1.48	0.73	1.11	6.23
2010	1.11	0.64	1.62	1.77	0.87	1.14	7.14
2020	1.38	0.74	1.70	2.05	1.00	1.16	8.03
2030	1.65	0.82	1.76	2.27	1.11	1.17	8.78
2040	1.92	0.90	1.76	2.46	1.20	1.16	9.40
2050	2.20	0.96	1.72	2.60	1.28	1.13	9.89
2060	2.46	1.02	1.65	2.67	1.33	1.11	10.23
2070	2.71	1.06	1.57	2.70	1.36	1.08	10.47
2080	2.95	1.10	1.49	2.69	1.38	1.05	10.66
2090	3.20	1.14	1.40	2.65	1.39	1.02	10.81
2100	3.46	1.19	1.33	2.60	1.41	0.99	10.96
b. Population distribution (in %)							
1990	12.1%	8.5%	25.3%	22.7%	11.4%	20.1%	100%
2000	13.7%	8.8%	24.2%	23.7%	11.8%	17.8%	100%
2010	15.5%	9.0%	22.6%	24.7%	12.1%	16.0%	100%
2020	17.2%	9.2%	21.2%	25.5%	12.4%	14.5%	100%
2030	18.7%	9.4%	20.1%	25.9%	12.6%	13.3%	100%
2040	20.5%	9.5%	18.7%	26.2%	12.8%	12.3%	100%
2050	22.2%	9.7%	17.4%	26.3%	12.9%	11.5%	100%
2060	24.0%	9.9%	16.1%	26.1%	13.0%	10.8%	100%
2070	25.9%	10.1%	15.0%	25.8%	13.0%	10.3%	100%
2080	27.7%	10.4%	14.0%	25.2%	12.9%	9.8%	100%
2090	29.6%	10.6%	13.0%	24.5%	12.9%	9.4%	100%
2100	31.5%	10.8%	12.1%	23.7%	12.8%	9.0%	100%
c. Mean age of the population (in years)							
1990	22.2	25.8	29.8	24.8	24.8	35.8	28.0
2000	22.7	27.4	31.8	26.0	26.1	37.3	29.1
2010	23.8	29.4	34.9	27.8	28.2	39.0	30.8
2020	25.6	31.5	37.5	30.0	30.4	40.5	32.5
2030	28.1	33.5	39.9	32.9	32.9	41.8	34.6
2040	30.1	35.2	41.9	35.4	35.0	42.6	36.3
2050	31.6	36.3	43.1	37.4	36.4	42.8	37.5
2060	33.0	37.1	43.7	39.0	37.5	42.9	38.3
2070	33.8	37.5	44.1	40.2	38.1	43.0	38.9
2080	34.2	37.7	44.2	40.8	38.4	43.0	39.0
2090	34.3	37.8	44.3	41.1	38.5	43.0	39.0
2100	34.4	37.8	44.3	41.1	38.5	43.1	38.9

Scenario 3: Constant Fertility

	AFRICA	LATIN AMERICA	EASTERN ASIA	SOUTHERN ASIA	OTH.ASIA OCEANIA	EUROPE/ USA/USSR	WORLD TOTAL
a. Total population (in billions)							
1990	0.64	0.45	1.34	1.20	0.60	1.06	5.29
2000	0.87	0.56	1.54	1.53	0.76	1.11	6.38
2010	1.21	0.69	1.70	1.97	0.96	1.14	7.67
2020	1.66	0.85	1.86	2.53	1.20	1.17	9.27
2030	2.32	1.03	2.02	3.27	1.50	1.18	11.32
2040	3.22	1.23	2.14	4.22	1.86	1.17	13.85
2050	4.46	1.47	2.25	5.44	2.30	1.15	17.07
2060	6.19	1.76	2.35	7.02	2.83	1.13	21.27
2070	8.59	2.10	2.44	9.06	3.48	1.10	26.78
2080	11.92	2.51	2.55	11.69	4.29	1.08	34.04
2090	16.55	2.99	2.66	15.11	5.27	1.06	43.63
2100	22.98	3.56	2.77	19.51	6.49	1.03	56.35
b. Population distribution (in %)							
1990	12.1%	8.5%	25.3%	22.7%	11.4%	20.1%	100%
2000	13.7%	8.8%	24.2%	24.0%	11.9%	17.4%	100%
2010	15.7%	9.0%	22.2%	25.6%	12.5%	14.9%	100%
2020	18.0%	9.1%	20.1%	27.3%	13.0%	12.6%	100%
2030	20.5%	9.1%	17.9%	28.9%	13.3%	10.4%	100%
2040	23.2%	8.9%	15.4%	30.5%	13.5%	8.5%	100%
2050	26.1%	8.6%	13.2%	31.9%	13.5%	6.7%	100%
2060	29.1%	8.3%	11.0%	33.0%	13.3%	5.3%	100%
2070	32.1%	7.8%	9.1%	33.8%	13.0%	4.1%	100%
2080	35.0%	7.4%	7.5%	34.3%	12.6%	3.2%	100%
2090	37.9%	6.8%	6.1%	34.6%	12.1%	2.4%	100%
2100	40.8%	6.3%	4.9%	34.6%	11.5%	1.8%	100%
c. Mean age of the population (in years)							
1990	22.2	25.8	29.8	24.8	24.8	35.8	28.0
2000	22.2	26.8	31.2	25.2	25.3	37.3	28.5
2010	22.4	27.8	33.5	25.7	26.2	38.9	29.1
2020	22.7	28.8	35.3	26.1	27.0	40.3	29.5
2030	22.9	29.5	36.6	26.4	27.6	41.6	29.5
2040	23.0	29.9	37.7	26.5	28.0	42.3	29.3
2050	23.0	30.0	38.0	26.5	28.1	42.5	28.7
2060	23.0	30.0	38.0	26.4	28.2	42.6	28.1
2070	23.0	30.1	38.1	26.3	28.2	42.7	27.5
2080	23.0	30.1	38.1	26.3	28.2	42.7	27.1
2090	23.0	30.1	38.1	26.3	28.2	42.7	26.6
2100	23.0	30.1	38.1	26.3	28.2	42.7	26.3

Scenario 4: Slow Fertility Decline

	AFRICA	LATIN AMERICA	EASTERN ASIA	SOUTHERN ASIA	OTH.ASIA OCEANIA	EUROPE/ USA/USSR	WORLD TOTAL
a. Total population (in billions)							
1990	0.64	0.45	1.34	1.20	0.60	1.06	5.29
2000	0.86	0.55	1.52	1.50	0.75	1.11	6.29
2010	1.15	0.66	1.65	1.84	0.90	1.14	7.34
2020	1.51	0.77	1.74	2.22	1.06	1.16	8.45
2030	1.94	0.87	1.82	2.61	1.22	1.17	9.62
2040	2.40	0.97	1.83	2.96	1.36	1.16	10.68
2050	2.86	1.06	1.80	3.25	1.48	1.14	11.58
2060	3.29	1.13	1.74	3.46	1.57	1.11	12.30
2070	3.75	1.20	1.67	3.62	1.64	1.08	12.95
2080	4.19	1.26	1.59	3.71	1.69	1.05	13.49
2090	4.61	1.32	1.51	3.74	1.73	1.02	13.92
2100	5.03	1.37	1.43	3.73	1.76	0.99	14.30
b. Population distribution (in %)							
1990	12.1%	8.5%	25.3%	22.7%	11.4%	20.1%	100%
2000	13.7%	8.8%	24.2%	23.8%	11.9%	17.6%	100%
2010	15.7%	9.0%	22.4%	25.1%	12.3%	15.5%	100%
2020	17.9%	9.1%	20.6%	26.2%	12.5%	13.8%	100%
2030	20.1%	9.1%	18.9%	27.1%	12.7%	12.2%	100%
2040	22.5%	9.1%	17.1%	27.7%	12.7%	10.9%	100%
2050	24.7%	9.1%	15.5%	28.1%	12.8%	9.8%	100%
2060	26.8%	9.2%	14.2%	28.1%	12.7%	9.0%	100%
2070	28.9%	9.3%	12.9%	27.9%	12.7%	8.3%	100%
2080	31.0%	9.3%	11.8%	27.5%	12.5%	7.8%	100%
2090	33.1%	9.4%	10.8%	26.9%	12.4%	7.3%	100%
2100	35.2%	9.6%	10.0%	26.1%	12.3%	6.9%	100%
c. Mean age of the population (in years)							
1990	22.2	25.8	29.8	24.8	24.8	35.8	28.0
2000	22.5	27.1	31.6	25.7	25.8	37.3	28.8
2010	23.2	28.9	34.4	26.9	27.4	39.0	30.1
2020	24.2	30.7	37.0	28.5	29.4	40.4	31.4
2030	25.4	32.4	39.2	30.2	31.2	41.7	32.7
2040	26.9	33.9	41.2	32.1	33.0	42.6	33.9
2050	28.6	35.1	42.4	34.1	34.6	42.8	35.0
2060	30.4	36.0	43.1	36.1	35.9	42.9	36.1
2070	31.8	36.7	43.7	37.7	36.9	43.0	37.0
2080	32.9	37.2	44.0	39.0	37.6	43.0	37.7
2090	33.7	37.5	44.1	40.1	38.1	43.0	38.1
2100	34.1	37.7	44.3	40.7	38.4	43.0	38.3

Scenario 5: Rapid Fertility Decline

	AFRICA	LATIN AMERICA	EASTERN ASIA	SOUTHERN ASIA	OTH.ASIA OCEANIA	EUROPE/ USA/USSR	WORLD TOTAL
a. Total population (in billions)							
1990	0.64	0.45	1.34	1.20	0.60	1.06	5.29
2000	0.83	0.55	1.52	1.47	0.74	1.10	6.20
2010	1.03	0.63	1.63	1.74	0.87	1.12	7.02
2020	1.20	0.70	1.70	1.96	0.97	1.11	7.63
2030	1.28	0.73	1.72	2.07	1.03	1.08	7.91
2040	1.32	0.74	1.68	2.12	1.05	1.02	7.92
2050	1.32	0.72	1.58	2.09	1.03	0.93	7.68
2060	1.25	0.68	1.45	1.98	0.98	0.84	7.20
2070	1.14	0.63	1.31	1.82	0.91	0.75	6.55
2080	1.01	0.56	1.15	1.61	0.81	0.66	5.80
2090	0.85	0.49	1.00	1.39	0.71	0.57	5.02
2100	0.72	0.42	0.87	1.18	0.61	0.49	4.29
b. Population distribution (in %)							
1990	12.1%	8.5%	25.3%	22.7%	11.4%	20.1%	100%
2000	13.4%	8.8%	24.5%	23.8%	11.9%	17.7%	100%
2010	14.7%	9.0%	23.2%	24.8%	12.3%	15.9%	100%
2020	15.7%	9.2%	22.3%	25.7%	12.7%	14.6%	100%
2030	16.2%	9.3%	21.8%	26.2%	13.0%	13.6%	100%
2040	16.7%	9.4%	21.2%	26.7%	13.2%	12.8%	100%
2050	17.1%	9.4%	20.6%	27.2%	13.5%	12.2%	100%
2060	17.4%	9.5%	20.2%	27.6%	13.7%	11.7%	100%
2070	17.4%	9.6%	19.9%	27.8%	13.8%	11.5%	100%
2080	17.3%	9.6%	19.9%	27.8%	14.0%	11.4%	100%
2090	17.0%	9.7%	20.0%	27.8%	14.1%	11.4%	100%
2100	16.7%	9.8%	20.2%	27.5%	14.3%	11.5%	100%
c. Mean age of the population (in years)							
1990	22.2	25.8	29.8	24.8	24.8	35.8	28.0
2000	23.2	27.4	31.6	26.0	26.0	37.5	29.2
2010	25.2	29.8	34.7	28.1	28.3	39.7	31.2
2020	28.2	32.8	37.7	31.0	31.2	41.8	33.8
2030	32.7	36.5	40.7	35.1	35.0	44.2	37.3
2040	36.9	39.8	43.6	38.9	38.4	46.2	40.5
2050	40.6	42.7	45.7	42.2	41.3	47.6	43.2
2060	44.0	45.2	47.3	45.3	43.8	48.8	45.7
2070	46.7	47.2	48.7	47.7	45.8	49.7	47.6
2080	48.4	48.4	49.5	49.3	46.9	50.3	48.9
2090	49.2	49.0	49.9	50.1	47.3	50.6	49.5
2100	49.3	49.1	50.1	50.3	47.2	50.7	49.6

Scenario 6: Immediate Replacement Fertility

	AFRICA	LATIN AMERICA	EASTERN ASIA	SOUTHERN ASIA	OTH.ASIA OCEANIA	EUROPE/ USA/USSR	WORLD TOTAL
a. Total population (in billions)							
1990	0.64	0.45	1.34	1.20	0.60	1.06	5.29
2000	0.68	0.50	1.51	1.30	0.67	1.12	5.78
2010	0.76	0.57	1.64	1.44	0.75	1.16	6.32
2020	0.84	0.62	1.75	1.56	0.83	1.20	6.81
2030	0.88	0.66	1.85	1.65	0.89	1.23	7.16
2040	0.90	0.69	1.90	1.69	0.93	1.24	7.36
2050	0.89	0.70	1.93	1.70	0.95	1.25	7.41
2060	0.86	0.70	1.93	1.66	0.95	1.25	7.35
2070	0.82	0.69	1.93	1.61	0.94	1.25	7.24
2080	0.78	0.68	1.93	1.56	0.93	1.25	7.14
2090	0.75	0.68	1.92	1.52	0.93	1.25	7.05
2100	0.71	0.67	1.92	1.47	0.92	1.25	6.95
b. Population distribution (in %)							
1990	12.1%	8.5%	25.3%	22.7%	11.4%	20.1%	100%
2000	11.8%	8.7%	26.1%	22.4%	11.5%	19.4%	100%
2010	12.1%	9.0%	25.9%	22.7%	11.9%	18.4%	100%
2020	12.3%	9.1%	25.8%	22.9%	12.2%	17.6%	100%
2030	12.3%	9.3%	25.9%	23.0%	12.4%	17.2%	100%
2040	12.2%	9.4%	25.9%	23.0%	12.6%	16.9%	100%
2050	12.1%	9.4%	26.0%	22.9%	12.8%	16.8%	100%
2060	11.7%	9.5%	26.3%	22.6%	12.9%	17.0%	100%
2070	11.3%	9.5%	26.7%	22.3%	13.0%	17.3%	100%
2080	11.0%	9.6%	27.0%	21.9%	13.1%	17.5%	100%
2090	10.6%	9.6%	27.3%	21.6%	13.2%	17.8%	100%
2100	10.3%	9.6%	27.6%	21.2%	13.2%	18.0%	100%
c. Mean age of the population (in years)							
1990	22.2	25.8	29.8	24.8	24.8	35.8	28.0
2000	27.1	29.2	31.8	28.9	28.2	37.0	31.0
2010	30.4	31.9	34.4	31.8	30.8	38.4	33.4
2020	33.3	34.5	36.7	34.6	33.3	39.6	35.7
2030	36.7	37.0	38.5	37.6	36.0	40.5	38.0
2040	39.4	38.9	39.9	39.9	38.0	41.1	39.7
2050	40.9	40.0	40.5	41.3	39.0	41.1	40.6
2060	41.5	40.5	40.6	41.9	39.4	41.1	40.9
2070	41.5	40.5	40.7	41.9	39.4	41.2	40.9
2080	41.3	40.4	40.7	41.6	39.3	41.2	40.9
2090	41.5	40.5	40.7	41.8	39.4	41.2	40.9
2100	41.4	40.5	40.8	41.7	39.4	41.2	40.9

Scenario 7: Constant Mortality

	AFRICA	LATIN AMERICA	EASTERN ASIA	SOUTHERN ASIA	OTH.ASIA OCEANIA	EUROPE/ USA/USSR	WORLD TOTAL
a. Total population (in billions)							
1990	0.64	0.45	1.34	1.20	0.60	1.06	5.29
2000	0.82	0.55	1.52	1.46	0.73	1.10	6.19
2010	1.01	0.64	1.65	1.71	0.86	1.13	7.00
2020	1.17	0.72	1.75	1.92	0.97	1.14	7.68
2030	1.25	0.78	1.83	2.04	1.05	1.14	8.11
2040	1.31	0.83	1.86	2.11	1.10	1.13	8.35
2050	1.32	0.86	1.87	2.13	1.14	1.12	8.43
2060	1.28	0.87	1.88	2.08	1.14	1.12	8.35
2070	1.20	0.86	1.87	1.98	1.13	1.11	8.16
2080	1.10	0.85	1.86	1.87	1.11	1.11	7.90
2090	1.01	0.84	1.85	1.74	1.09	1.10	7.62
2100	0.92	0.82	1.83	1.62	1.06	1.10	7.35
b. Population distribution (in %)							
1990	12.1%	8.5%	25.3%	22.7%	11.4%	20.1%	100%
2000	13.3%	8.8%	24.6%	23.6%	11.8%	17.8%	100%
2010	14.5%	9.2%	23.5%	24.5%	12.3%	16.1%	100%
2020	15.2%	9.4%	22.8%	25.1%	12.7%	14.8%	100%
2030	15.5%	9.7%	22.6%	25.2%	12.9%	14.1%	100%
2040	15.7%	9.9%	22.3%	25.3%	13.2%	13.6%	100%
2050	15.6%	10.1%	22.2%	25.2%	13.5%	13.3%	100%
2060	15.3%	10.4%	22.5%	24.9%	13.7%	13.4%	100%
2070	14.7%	10.6%	22.9%	24.3%	13.9%	13.6%	100%
2080	14.0%	10.8%	23.5%	23.6%	14.1%	14.0%	100%
2090	13.2%	11.0%	24.2%	22.8%	14.3%	14.5%	100%
2100	12.5%	11.1%	24.9%	22.0%	14.5%	15.0%	100%
c. Mean age of the population (in years)							
1990	22.2	25.8	29.8	24.8	24.8	35.8	28.0
2000	23.0	27.1	31.1	25.7	25.5	37.0	28.8
2010	24.6	28.7	33.2	27.2	26.9	38.1	30.1
2020	27.0	30.7	34.9	29.2	28.7	38.8	31.7
2030	30.3	33.0	36.1	31.8	30.8	39.3	33.6
2040	33.1	34.8	37.1	34.1	32.5	39.4	35.2
2050	35.4	36.2	37.5	36.0	33.8	39.2	36.4
2060	37.3	37.3	37.6	37.5	34.8	39.0	37.3
2070	38.5	38.0	37.9	38.5	35.4	39.0	37.9
2080	39.0	38.3	37.9	38.9	35.6	38.9	38.2
2090	39.0	38.4	38.0	38.9	35.6	38.9	38.2
2100	38.9	38.4	38.0	38.9	35.6	38.9	38.1

Scenario 8: Slow Mortality Decline

	AFRICA	LATIN AMERICA	EASTERN ASIA	SOUTHERN ASIA	OTH.ASIA OCEANIA	EUROPE/ USA/USSR	WORLD TOTAL
a. Total population (in billions)							
1990	0.64	0.45	1.34	1.20	0.60	1.06	5.29
2000	0.83	0.55	1.53	1.48	0.74	1.11	6.23
2010	1.04	0.65	1.67	1.76	0.88	1.14	7.14
2020	1.23	0.74	1.80	2.03	1.02	1.17	7.98
2030	1.36	0.81	1.91	2.23	1.12	1.19	8.61
2040	1.47	0.87	1.97	2.39	1.22	1.19	9.11
2050	1.55	0.91	2.02	2.52	1.29	1.19	9.49
2060	1.59	0.94	2.05	2.59	1.34	1.20	9.71
2070	1.58	0.96	2.06	2.60	1.37	1.20	9.77
2080	1.54	0.96	2.07	2.57	1.37	1.20	9.71
2090	1.48	0.95	2.07	2.51	1.37	1.20	9.57
2100	1.41	0.94	2.07	2.44	1.36	1.20	9.41
b. Population distribution (in %)							
1990	12.1%	8.5%	25.3%	22.7%	11.4%	20.1%	100%
2000	13.3%	8.8%	24.5%	23.7%	11.9%	17.8%	100%
2010	14.5%	9.1%	23.4%	24.7%	12.3%	16.0%	100%
2020	15.4%	9.3%	22.5%	25.4%	12.7%	14.6%	100%
2030	15.8%	9.4%	22.2%	25.8%	13.0%	13.8%	100%
2040	16.1%	9.6%	21.6%	26.2%	13.3%	13.1%	100%
2050	16.4%	9.6%	21.3%	26.5%	13.6%	12.6%	100%
2060	16.4%	9.7%	21.1%	26.7%	13.8%	12.3%	100%
2070	16.2%	9.8%	21.1%	26.7%	14.0%	12.3%	100%
2080	15.9%	9.8%	21.3%	26.5%	14.1%	12.3%	100%
2090	15.5%	9.9%	21.6%	26.2%	14.3%	12.5%	100%
2100	15.0%	10.0%	22.0%	25.9%	14.4%	12.7%	100%
c. Mean age of the population (in years)							
1990	22.2	25.8	29.8	24.8	24.8	35.8	28.0
2000	23.0	27.2	31.3	25.8	25.7	37.1	28.9
2010	24.7	29.0	33.6	27.4	27.4	38.5	30.4
2020	27.1	31.2	35.6	29.6	29.5	39.6	32.2
2030	30.5	33.6	37.2	32.5	32.1	40.5	34.4
2040	33.6	35.7	38.7	35.0	34.3	41.0	36.3
2050	36.2	37.4	39.5	37.3	36.1	41.1	37.9
2060	38.6	38.8	40.0	39.3	37.7	41.2	39.3
2070	40.3	39.8	40.5	40.7	38.7	41.2	40.3
2080	41.1	40.3	40.7	41.4	39.2	41.2	40.8
2090	41.4	40.5	40.7	41.7	39.4	41.2	40.9
2100	41.4	40.5	40.8	41.7	39.4	41.2	40.9

Scenario 9: Rapid Mortality Decline

	AFRICA	LATIN AMERICA	EASTERN ASIA	SOUTHERN ASIA	OTH.ASIA OCEANIA	EUROPE/ USA/USSR	WORLD TOTAL
a. Total population (in billions)							
1990	0.64	0.45	1.34	1.20	0.60	1.06	5.29
2000	0.85	0.55	1.54	1.49	0.75	1.11	6.29
2010	1.09	0.66	1.69	1.82	0.90	1.16	7.32
2020	1.34	0.76	1.85	2.15	1.06	1.20	8.35
2030	1.54	0.86	2.00	2.44	1.20	1.24	9.27
2040	1.74	0.94	2.09	2.70	1.33	1.26	10.05
2050	1.91	1.00	2.16	2.92	1.43	1.26	10.69
2060	2.04	1.05	2.20	3.08	1.51	1.26	11.13
2070	2.12	1.08	2.22	3.18	1.56	1.26	11.42
2080	2.17	1.10	2.23	3.23	1.59	1.26	11.58
2090	2.18	1.10	2.24	3.24	1.60	1.26	11.63
2100	2.16	1.10	2.24	3.23	1.61	1.26	11.60
b. Population distribution (in %)							
1990	12.1%	8.5%	25.3%	22.7%	11.4%	20.1%	100%
2000	13.5%	8.8%	24.4%	23.7%	11.9%	17.7%	100%
2010	14.9%	9.0%	23.1%	24.8%	12.3%	15.8%	100%
2020	16.0%	9.1%	22.1%	25.7%	12.7%	14.4%	100%
2030	16.6%	9.2%	21.5%	26.3%	12.9%	13.3%	100%
2040	17.3%	9.3%	20.8%	26.9%	13.2%	12.5%	100%
2050	17.9%	9.4%	20.2%	27.3%	13.4%	11.8%	100%
2060	18.3%	9.4%	19.7%	27.6%	13.6%	11.3%	100%
2070	18.6%	9.4%	19.4%	27.8%	13.7%	11.0%	100%
2080	18.7%	9.5%	19.3%	27.9%	13.7%	10.9%	100%
2090	18.7%	9.5%	19.3%	27.9%	13.8%	10.9%	100%
2100	18.6%	9.5%	19.3%	27.8%	13.9%	10.9%	100%
c. Mean age of the population (in years)							
1990	22.2	25.8	29.8	24.8	24.8	35.8	28.0
2000	23.1	27.3	31.4	25.9	25.9	37.3	29.0
2010	24.8	29.3	34.0	27.7	27.9	39.0	30.7
2020	27.5	31.9	36.4	30.2	30.4	40.5	32.8
2030	31.3	34.8	38.6	33.5	33.6	41.9	35.5
2040	34.7	37.4	40.5	36.5	36.4	42.7	37.8
2050	37.6	39.4	41.5	39.0	38.6	42.9	39.7
2060	40.4	41.1	42.1	41.1	40.4	42.9	41.3
2070	42.6	42.3	42.5	42.9	41.7	42.8	42.5
2080	44.2	43.1	42.7	44.0	42.5	42.8	43.4
2090	45.1	43.6	42.8	44.7	42.9	42.8	43.9
2100	45.7	43.7	42.9	45.1	43.0	42.8	44.1

Scenario 10: Third World Crisis

	AFRICA	LATIN AMERICA	EASTERN ASIA	SOUTHERN ASIA	OTH.ASIA OCEANIA	EUROPE/ USA/USSR	WORLD TOTAL
a. Total population (in billions)							
1990	0.64	0.45	1.34	1.20	0.60	1.06	5.29
2000	0.85	0.55	1.53	1.49	0.74	1.11	6.29
2010	1.13	0.65	1.68	1.83	0.89	1.15	7.34
2020	1.46	0.75	1.82	2.23	1.03	1.18	8.47
2030	1.90	0.82	1.94	2.70	1.15	1.21	9.72
2040	2.46	0.88	2.00	3.27	1.25	1.21	11.07
2050	3.17	0.93	2.05	3.95	1.32	1.21	12.61
2060	4.08	0.95	2.07	4.77	1.36	1.20	14.43
2070	5.25	0.96	2.08	5.76	1.39	1.20	16.63
2080	6.75	0.97	2.08	6.95	1.39	1.20	19.35
2090	8.69	0.96	2.08	8.39	1.39	1.20	22.71
2100	11.19	0.95	2.08	10.14	1.38	1.20	26.93
b. Population distribution (in %)							
1990	12.1%	8.5%	25.3%	22.7%	11.4%	20.1%	100%
2000	13.6%	8.8%	24.4%	23.8%	11.8%	17.7%	100%
2010	15.4%	8.9%	22.9%	25.0%	12.2%	15.7%	100%
2020	17.3%	8.8%	21.5%	26.3%	12.2%	13.9%	100%
2030	19.5%	8.5%	19.9%	27.8%	11.8%	12.4%	100%
2040	22.2%	8.0%	18.1%	29.5%	11.3%	10.9%	100%
2050	25.1%	7.4%	16.2%	31.3%	10.5%	9.6%	100%
2060	28.2%	6.6%	14.3%	33.0%	9.5%	8.3%	100%
2070	31.6%	5.8%	12.5%	34.6%	8.3%	7.2%	100%
2080	34.9%	5.0%	10.8%	35.9%	7.2%	6.2%	100%
2090	38.3%	4.2%	9.2%	37.0%	6.1%	5.3%	100%
2100	41.6%	3.5%	7.7%	37.7%	5.1%	4.5%	100%
c. Mean age of the population (in years)							
1990	22.2	25.8	29.8	24.8	24.8	35.8	28.0
2000	22.2	27.2	31.4	25.0	25.8	37.2	28.6
2010	22.3	29.1	33.8	25.2	27.6	38.8	29.5
2020	22.6	31.3	35.9	25.4	29.8	40.0	30.3
2030	22.8	33.8	37.7	25.5	32.5	41.0	30.9
2040	22.9	35.9	39.2	25.6	34.8	41.5	31.1
2050	23.0	37.6	39.9	25.6	36.5	41.5	30.8
2060	23.1	38.9	40.2	25.6	37.9	41.3	30.3
2070	23.1	39.8	40.5	25.6	38.8	41.3	29.7
2080	23.1	40.3	40.7	25.6	39.3	41.2	29.0
2090	23.1	40.5	40.7	25.6	39.4	41.2	28.3
2100	23.1	40.5	40.8	25.6	39.4	41.2	27.7