

## THE POLITICS AND ECONOMICS OF GLOBAL POPULATION DYNAMICS

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Already at the end of the 18th century Thomas Robert Malthus had feared that a linear increase of the food production could not hold step with the geometrically growing population : a hopeless race between stork and plow. This has not proved true within the previous 200 years.

However, in the fifties and sixties of the 20<sup>th</sup> century the Neomalthusians believed the « population explosion » in the developing countries could let Malthus fears become true. The USA and some other western industrial countries but also an increasing number of governments and NGOs in developing countries engaged in efforts to reduce the world population growth through family planning programs.

Up to the seventies, many developing countries considered the preoccupation of population growth as a pretext that the West was using to turn away attention from the commercial exploitation of developing countries and from the preservation of reactionary social structures in these countries. The People's Republic of China was one of the most influential representatives of this opinion. In the middle of the seventies, China swung around, and it now considers population growth as a negative factor. An increasing number of developing countries followed this fundamental change of direction, once the negative effects of rapid population growth into the fifties and sixties could not be ignored anymore.

Within the past 20 years, the population growth slowed down clearly in many developing countries. Correspondingly, the forecasts for the

future development of the world population were corrected again and again downwards.

At the end of the nineties, for some commentators this was already reason to announce the end of the « population explosion ». However, this also appears premature : most developing countries are still far from a stabilization of their population.

One development contributes to this : the HIV/AIDS Pandemic. In some countries AIDS had already substantially increased mortality and, this way, it reduced population growth. But for the respective societies this did not bring equilibrium, but rather a dangerous destabilization.

In other developing countries, the consequences of sustained high population growth cumulated in the last decades. Without help from the international community, they might not be able to solve the subsequent problems any more. At the same time, the support by donor countries falls off in the essential area of development cooperation in reproductive health. A renewed increase of fertility and an even quicker spread of HIV/AIDS could be the consequence.

Ageing has attracted increasing attention in the last years. The contours of this problem are most obvious in the developed countries, which were the first to experience a sustained fall in their numbers of children. Some authors even raise the danger of a «population implosion» which could involve more and more countries. Actually, if low fertility continues, in 30-40 years every second citizen in many Western countries will be older than 50. However, this problem will involve an increasing number of developing countries too in the next decades.

### ***1. Current Dimensions of Global Population Growth***

The appearing of the *Homo Sapiens Sapiens* about 40.000 years ago is considered generally as the beginning of the history of mankind. All people living today are descended from this subspecies of the *Homo Sapiens*. Archeologists guess that 30.000 years later between

one to ten Mio. people lived on our planet. Around Christi birth there were only 170 to 400 Mio. people. This is not a big increase for such a long time. Hunters and collectors had become settled farmers and stockbreeders. And these produced fundamentally more food than their nomadic ancestors. This was the basis for the first push of the population growth in the history of mankind. After this, e.g. there were further increases, however also considerable population falls, by plague epidemics, hunger catastrophes, climate fluctuations, and devastations following wars.

Only after the 17th century the population growth accelerated. In the year 1800 about 1 Mio. humans already lived worldwide. 125 years later, the world population had doubled and reached 2 Mio. people (1926). The most essential reason for this quicker growth was the industrial revolution. For the third Mio. people, the world population needed only 34 years (1960), for the fourth Mio. 14 years (1974) and for the fifth Mio. 13 years (1987). At present every minute the world population grows by around 147 people, every day by around 212.000 people, and every year by around 77 Mio. people.

The still shorter periods of time for every further Mio. people signal the exponential course of the growth. The highest growth rate had been reached by the world population during the middle of the sixties with 2.1 % per annuMio. At that time, the absolute annual increase lays « only » at 69 Mio. people. Under the light of historical comparisons, however, it is not surprosing that this growth was often marked as « population explosion ». A continuation at this speed would have meant a doubling of population size within 30 years.

These fears have however proved unrealistic. The growth of the world population has slowed down since then, at present it lies at 1.3 % per annuMio. The absolute annual increases, however, increased up to the nineties increased, and to more than 80 Mio. in 1998.

Some commentators cheered the world population forecast by the United Nations Population Division of 1998 as all-clear for world population growth. This is a misunderstanding. The experts of the population division have calculated their forecast of the world population to 2050 only five % lower than in the previous estimate round. However, these are still 8.9 Mio. people, almost one and a half as much as in 1998. Thirty African and Asian countries will have tripled their population at least till then. A stabilization of the world

population won't be altogether in view halfway through the next century for a long time either. It is expected only, if the world population has reached 10 to 11 Mio. people.

For almost 100 countries the UN corrected their most recent forecasts downwards in comparison to the previous round of 1996, left unchanged for another 65 countries. For 23 countries, the Population Division had however to correct its previous estimates up this time. E. g., the previous forecast indicated for Germany a population of 69.5 Mio. in 2050, the most recent forecast amounts to 73.3 Mio. For Colombia, the forecast was corrected up by around 9 Mio. Two thirds of the difference between the most current world population forecast and the 1996 one can be attributed to only six countries : Nigeria (correction : - 9.4 Mio.), Iran (- 5.5 Mio.), Ethiopia (- 4.2 Mio.), South Africa (- 4.0 Mio.), China (- 3.9 Mio.) and Myanmar (-1.6 Mio.). Only in 14 countries the projections for 2050 were corrected down by more than 1 %.

The predominantly negative consequences of population growth are sometimes neglected or its relevance is denied at all (among others Heim 1999). However, a doubling of population size within 25 years demands high investments for the health- and education system and the creation of many new jobs. If a government is not successful in mobilizing more money for teachers and building new schools, the average size of classes increases and the quality of the education diminishes. High population growth also leads to a stronger use of natural resources. This was clearly observed in Sahel. The sinking mortality combined with high numbers of children led to a growth of the population. In order to feed that population, there were also more cattle herds. The nomadic livestock breeding operated for millennia led to a desertification of sensitive areas just within few years.

Another example of the over-use of resources is water. Different developing countries have reached a point today where the regular water use exceeds the natural renewal of water resources ; as a consequence the ground water level sinks. This is on the one hand a result of the increasing consumption per head and on the other hand a result of a high population growth. Today, the most fertile lands are already in economic use in most countries. If the need for food increases, one must fall back upon the less fertile grounds and increase the yields with artificial irrigation. The efforts required to feed

each additional Mio. people will increase excessively after a certain point (diminishing returns). Technical solutions are available or at least conceivable ; but their translation into action requires high investments. These consequences are known since long. The number of the governments in developing countries which assess the high population growth in their countries as negative for development has increased to over two thirds in the past decades. Even if experts debate about details, one cannot dismiss the negative effects of high population growth any more.

## ***2. Population Growth : An Imbalance of Fertility and Mortality***

The population of every country is changed by births and deaths as well as by immigration and emigration in the course of time. In a bathtub the water level can remain constant if water runs in and flows off simultaneously. It is the difference between inflow and outflow, which changes the water level.

For a population it is the balance between births and deaths as well as between immigration and emigration, which determines its dynamics. For the world population in total, immigration and emigration are irrelevant, only the relationship of fertility and mortality counts. Births and deaths were balanced at least in the first 40.000 years of mankind's history over the long run. If this hadn't been the case, mankind would have either died out or grown more strongly (this includes phases of a greater birth surplus and phases of a great mortality, like during the time of the plague in the middle Ages).

Women had 5 to 8 births in the course of their lifetime in traditional rural societies. But only every second baby survived its childhood and youth in the Europe of the 18th century and in large parts of the Third World up to the middle of the 20th century. Not only the birth rates but also the death rates were high. The annual population growth correspondingly remained small : between 10.000 B.C. and 1750 about 0.2 % per annuMio.

The global population imbalance between fertility and mortality has reached colossal dimensions today. In a day, about 148.000 people

die, but about 360.000 children are born. Per annum, there are 54 Mio. deceased persons, but 131 Mio. newborn children. This leads to a global population increase of 77 Mio. people per annum currently.

### ***3. The Demographic Transition in Developing Countries***

Changes in mortality and fertility take place by no means synchronously in different regions of the world, not even within single countries. The search for trends in the demographic development and common features of various countries led Frank Notestein of the Princeton Office for Population Research to the concept of a *demographic transition* (1945). This concept describes common characteristics of demographic change in almost all countries of the world both in the Europe of the 18th and 19th centuries and in the developing countries of the 20th century.

In the current demographic analysis, this demographic transition follows five phases :

*Phase 1* : Births and death rates are high. Mortality fluctuates strongly from time to time. The average life expectancy is low. Population size is growing - if at all - very slowly.

*Phase 2* : Mortality sinks first, life expectancy increases. Since the average number of children remains initially high, population starts to grow considerably.

*Phase 3* : With time, families react to their new conditions of life through a limitation of the number of their children. The gross birth rate sinks. The population growth slows.

*Phase 4* : Notestein and others expected a new equilibrium between mortality and fertility on low level of the demographic transition. This would be reached in the fourth phase.

*Phase 5* : The experiences of the last 30 years in Europe and in other industrial nations show that the demographic transition apparently does not lead to a new balance between births and deaths. The gross birth rate in these countries has sunk under the value of the

gross death rate and there aren't any clues about a trend reversal. In the meantime the average number of children per family is actually so low in the industrial countries and in some developing countries that in the long run the native populations will shrink as far as this isn't compensated for by immigrations.

The concept of the demographic transition is an abstraction ; it does not provide for any explanation for the causes of the change in mortality and fertility either. However, the sequence it describes of the emergence of an imbalance between the two demographic indicators and its later development can be observed for almost all countries of the world.

Most European countries have entered the second phase of the demographic transition with the fall in the mortality in the 18th century ; at first, fertility remained high. Between 1750 and 1950 the population in today's industrial regions - Europe, North America, USSR/Russia, Japan and Australia - increased clearly more quickly than the one of the less developed regions of the earth. However, the annual growth rates in the industrial nations were below one percent most of the time ; the population grew faster only in some European countries, and during a few years.

Today's developing countries entered the demographic transition in the 20th century. The mortality fall started in some countries at the end of 19<sup>th</sup> century ; in most, however, it did only in the middle of the 20th century. After World War II, there was a new push in the reduction of the mortality. Women in most developing countries of that time gave birth to six children or more in the course of their lives. Thus, the gap between mortality and fertility opened wide, and population growth accelerated.

In the fifties, life expectancy in industrial countries was by 25 years higher than in developing countries. At present the difference amounts to 12 years. The speed of mortality decline in developing countries after World War II was fundamentally higher than in the Europe of the 19th century. Europe needed 70 years to increase its life expectancy from 40 to 60 years. Developing countries needed only half time : from 1950 to 1985.

Mortality decline started during the colonial times in some countries of Asia, Africa and Latin America. Railroad construction made it

possible to transport food surpluses to areas experiencing local food shortages. But the dynamic decline of mortality in the colonies was principally caused by the import of effective and cheap means to fight epidemic illnesses (malaria, cholera, pocks and others) ; it was not the result of endogeneous social developments, such as the industrialization. The quick population growth in developing countries has been to a large part the result of an « interference » from the outside : a mortality decline imported from the West.

#### ***4. Fertility Decline and Reproductive Intentions***

Within the past 40 years, fertility has decreased substantially in most developing countries. The total fertility rate in the developing countries was around 1960 at 6 children per woman. There was not much variation within the Third World at this time.

With the onset of fertility decline in Latin America and in Asia, this picture changed. At end of the nineties the total fertility rate had decreased to the half of the value of 1960 in developing countries altogether (including China) : 3 children per woman. If one leaves China aside, the developing countries had an average total fertility rate of 3.7.

There exists a much stronger differentiation between countries today.

In a first group of countries, including China and 12 other developing countries (with together 151 Mio. inhabitants), fertility has already fallen below the level which would be necessary for the reproduction of the parental generation (2.1 children per woman).

A second group of 34 developing countries is approaching this level of a simple reproduction : they have a total fertility rate comprised between 2.1 and 3. In these countries lives a fifth of the population of all developing countries. There are no longer many uncertainties about the future course of fertility decline for these countries.

India and 38 other countries have a total fertility rate over 3, but below 5. Every third inhabitant of the developing countries lives in



this third group of countries.

Today, fertility is still very high in a fourth group of countries. In this group of 43 countries (with 670 Mio. inhabitants), a woman had in 1998 more than 5 children in average. More precisely, the average number of children lies within this group of predominantly African countries at 5.8 - closely to the average of the developing countries in 1960. For the third and fourth groups of countries, there is still considerable uncertainty about the future development of fertility.

Looking at the fertility decline in today's developing countries, three groups of families can be distinguished :

1. For a part of the families, a high number of children seems economically advantageous, or the limitation of the number of children is still subject to a certain fatalism, it has not moved to the area of own decision.
2. For a second group of families, a high number of children does not have any advantage. However, this group has no access to means to prevent conception and birth.
3. A third group already practices family planning to delay births, stop childbearing, and limit the number of their children at a certain parity.

This typology illustrates a model of the transition to rational family planning. Today, the first group should already be relatively small in most developing countries. With the radical change of the economic conditions and the weakening of traditional family links this group becomes smaller and smaller.

The second group has an uncovered need for family planning. It becomes smaller, if the access to methods of contraception improves faster than the needs. The transition from the second group into the third is thus influenced by the economic cost of the family planning. The engagement of governments and NGOs in family planning programs can lower these cost and promote this transition. The size of this second group is an essential planning basis for efforts in the field of the family planning. It is important to know the size and structure of this group roughly.

The further course of the fertility decline will depend from changes in reproductive intentions. Many births, however, are unintentional even today. Prevention of unintended pregnancies is therefore an important factor for future declines in fertility.

Most developing countries have experienced a steep decline in desired family size within the last decades. The strongest drop took place in Kenya. There, the desired number of children declined by 46 % within 15 years (1978 to 1993), from 7.2 on 3.9. A similarly spectacular decline could be observed in Bangladesh : from 4.1 (1976) to 2.5 (1993). The actual number of children also has sunk considerably in these two countries. It has become clear for parents in Kenya and Bangladesh that a high number of children represents a heavy economic burden ; in Kenya, the introduction of school charges and a high esteem to education seem to have played an important role. In both countries, family planning programs within the last decades received the greatest support from international development cooperation.

	70's	80's	90's
<i>Subsaharan</i>			
<i>Africa</i>			
Kenya	7,2	4,7	3,9
Nigeria	8,3		6,2
Zimbabwe		5,3	4,7
<i>Northern Africa,</i>			
<i>Near East</i>			
Egypt	4,1	2,9	2,9
Morocco	4,9	3,7	3,8
Tunisia	4,1	3,5	
<i>Asia</i>			
Bangladesh	4,1		2,5
Indonesia	4,1	3,2	2,9
Philippines	4,4		3,5
<i>Latin America</i>			
Brazil		3,0	2,5
Colombia	4,1	3,0	2,5
Mexico	4,4	3,3	3,3
Peru	3,8	2,9	2,6

*Table 1 : Desired Number of Children\*)*

*\*) ever married women 15-49*

*Source : The Alan Guttmacher Institute 1999*

For family planning programs, it is important to know how many women wish no additional births in the foreseeable future. In almost all developing countries this is the majority of married women in reproductive age. The trend towards lower reproductive intentions can be observed in almost all developing countries for which information is available. In the World Fertility Survey (WFS) and in the Demographic and Health Surveys (DHS), women were asked whether they wanted to have another baby within the next 2 years. The response was strongly dependent on the number of children the respective women already had. In Morocco, 20 % of mothers with already two children wished no other children. Among Moroccan women who have already five children, almost 80 % wanted no other children. In many developing countries outside of sub-Saharan

Africa, more than 50 % of the women who have already two children want no other children.

Even in the African countries, more than two thirds of the women do not want any other children within the next two years. However, the share of women who only want to delay a further birth is higher in Africa than elsewhere.

Many couples do not manage to prevent unintentional pregnancies through effective contraception. The consequence is either an unwanted birth or a termination of pregnancy by abortion. The Demographic and Health Surveys asked women whether their last birth was intended at this time. Outside of sub-saharan Africa, usually more than a third of the births are unintended. The share of unintended births is particularly high in Peru (60 %) and in Bolivia (54 %). Within Africa there is a group of countries with a higher share of unintended births. Kenya, Rwanda and Zimbabwe belong to this group. A study by The Alan Guttmacher Institute estimated that in 1995 in developing countries almost 66 Mio. pregnancies over 182 Mio. were unintentional (36 %). Almost every second unintentional pregnancy ended with an abortion. Table 2 shows current estimates about abortions in developing countries.

From worldwide 46 Mio. abortions, 36 Mio. happened in developing countries ; 10 Mio. of these alone in China. Developing countries were represented particularly strongly under illegal abortions. Persons without adequate medical training often conduct these abortions. Dangerous methods are employed and additional risks arise from the use of insufficiently sterilized instruments. Under these conditions, abortion often leads to physical complications for the women ; many women get unintentionally infecund as a consequence. According to estimates of the World Health Organization (WHO), 80.000 women die every year as a consequence of an illegal abortion. Abortions contribute substantially to maternal mortality in developing countries.

Area	Abortions, in Mio..				Abortions	
	entirely legal	illegal	% illegal	each 1.000 women, 15-44 J.	each 100 pregnancies	
<i>Africa</i>	5,0	5,0	99	33	15	
Eastern Africa	1,9	1,9	100	41	16	
Middle Africa	0,6	0,6	100	35	14	
Northern Africa	0,6	0,6	96	17	12	
South Africa	0,2	0,2	100	19	12	
Western Africa	1,6	1,6	100	37	15	
<i>Asia</i>	26,8	16,9	9,9	37	25	
Eastern Asia	12,5	12,5		36	34	
South- central Asia	8,4	1,9	6,5	78	18	
South- eastern Asia	4,7	1,9	2,8	60	28	
Western Asia	1,2	0,7	0,5	42	20	
<i>Latin America</i>	4,2	0,2	4,0	95	37	
Caribbe an	0,4	0,2	0,2	47	35	
Central America	0,9		0,9	100	21	
South America	3,0		3,0	100	30	
<i>Oceania</i>	0,1	0,1		22	20	
Developi ng countries without China	35,5	16,5	19	54	23	
memo: worldwide	45,5	25,6	19,9	44	26	

*Table 2 : Abortions in Developing Countries, in 1995*  
*Source : Henshaw, Singh & Haas 1999.*

Available information on reproductive intentions point to a quickly growing share of young couples today that want fewer children than their parents had. This behavior change will increase the need for family planning services, and particularly for effective methods of contraception. It forms the potential for a future decline in the actual numbers of children and beyond, for a stabilization of the world population in the 21st century.

### ***5. Contraception and the Decline in Fertility***

The increasing use of effective methods of contraception has helped hundred thousand couples within the last decades to prevent unintentional pregnancies. On the one hand, many abortions have been avoided. On the other hand, a decline in the actual number of children has been made possible.

At the beginning of the sixties, only every seventh couple in the developing countries used contraception - the average number of children was about 6. At the end of the 20<sup>th</sup> century, the share of couples using contraception had increased to over 50 % and the average number of their children had declined to 3.3.

However, there are strong regional and national variations. In Latin America, the use of contraception has already reached the same statistical distribution like in the industrial countries. Today, contraception is used more intensively in Eastern Asia than in Europe. More than 80 % of the married women in China use a modern method of contraception (this share lies in Japan only at 57 %, in Germany merely at 72 %). In sub-saharan Africa, modern contraception is still rarely used : at the end of the nineties, the use of contraceptive means did not overthrow the level it had in developing countries on average at the beginning of the sixties (17 %).

It is not only contraception which determines the actual number of children in a given society but also infertility, the use of abortion, the share of the unmarried, the average duration of breastfeeding, and other factors - however, it is quite obvious that the decline in fertility in the developing countries has been made possible only by the

distribution of modern methods of contraception (Diczfalusy 1997). This becomes clear, if one looks at the relationship of the total fertility rate (children per woman) and the contraceptive prevalence rate (i. e. the share of users of contraception among married women in reproductive age, in %) for a larger number of developing countries (see chart). More than 90 % of the variations in fertility in these countries can be explained by differences in the use of contraception. The strength of the relationship between these two indicators encourages to draw conclusions on the future relationship of contraceptive prevalence and fertility from the snapshot end of the nineties. Today almost all countries with a fertility of less than 3.5 children per woman have a contraceptive prevalence rate of more than 40 % with no exception. The other way around : the use of contraception in countries with still strong fertility is usually lower than 20 %.

Family planning programs play an important role for meeting the increased need for contraception and beyond, for the reduction of fertility.

Classic family planning programs have done two things in the past : first, they tried to fulfill the existing need for contraception, by including information and medical services delivery, and second, they created demand through information, education and communication so as to convince more people of the advantages of family planning.

Today's understanding of family planning has been significantly influenced by the concept of a reproductive health developed at the International Conference for Population and Development held in Cairo in 1994, and by the inclusion of the important HIV/AIDS problem.

## ***6. The Demographic Consequences of the AIDS Pandemic***

Within the last years, the general trend to mortality decline in developing countries has at least been interrupted for those countries in which HIV/AIDS attained the character of a pandemic. It is estimated that at the end of 1999 worldwide about 33.6 Mio.

persons were infected with HIV/AIDS. More than 90 % of these persons lived in developing countries. Today, in the countries most strongly affected, more than 30 % of the population in sexually active age in urban areas is infected. Within risk groups, the share of people infected exceeds 70 %. In 1999 only, 5.6 Mio. people were infected, more than 95 % of them in developing countries. Every day there are 16000 more infected persons.

From the beginning of the AIDS Pandemic (end of the seventies) until the end of 1999, approximately 16.3 Mio. people died of this disease, 2.6 Mio. people only in 1999. Only a few years ago, the demographic impact of this illness was still underestimated. In the middle of the nineties, it had been estimated that in 1990 AIDS had been responsible only for 2 % of the deaths in developing countries. In the meantime, AIDS has overhauled malaria as a cause of death, and has become one of the most important fatal illnesses worldwide. Looking at the already high number of people infected and the great speed of its spread, it is clear that AIDS will have an increasing importance for developing countries' demography in the future.

The World Bank has elaborated an international classification of the countries according to the stage they have reached in the spread of HIV/AIDS.

According to this classification, there were in 1997 40 countries in the *early stage* of the Pandemic ; the presence of the virus within risk groups was in these countries below 5 %.

Another 50 countries had reached the so-called *concentrated stage*, in which the HIV prevalence within risk groups exceeds 5 %, but the HIV prevalence among young women attending antenatal care in the countries in this stage is below 5 %.

A third group of 21 countries had already reached the *generalized stage*. Here the deadly virus has spread beyond risk groups far into the general population, and more than 5 % of young women who attend antenatal care are found HIV positive. Apart from Haiti, in 1997 only African countries had reached this stage. More than 23 Mio. people who live in sub-saharan Africa have AIDS. The individual and collective consequences of the pandemic have been felt clearly in the countries most heavily affected (notably Zimbabwe,



Botswana, Namibia, Zambia, Malawi, Mozambique). Almost every family has to lament deaths in connection with AIDS.

Medications to prolongate the life of people suffering from AIDS are now available in Western countries, but for most developing countries they are much too expensive. The duration from the initial infection up to the outbreak of the illness and to the death is much shorter there. For the time being, a real vaccine against AIDS is not in view and, today, the chances for this are assessed lower than some years ago. Different pharmaceutical companies have stopped the search for a vaccine or reduced their efforts. The use of condoms and behavioral changes are the only hope to slow or stop a further spread of the disease. Education, information and communication remain the primary means to achieve a real change. International organizations and governmental authorities campaigns about the disease often occupy modest back place in the fight for attention of the public audience, due notably to advertisement markets prices that have been increased by the demand of multinational companies. In the countries most heavily affected by HIV/AIDS it might be a good idea to let these companies help support the AIDS information campaigns.

The spread of AIDS has already substantially reduced the average life expectancy in the countries most affected. According to estimates of the U.S. Bureau of the Census, some African countries lost 10 to 20 years life expectancy because of AIDS. For Botswana, the American statisticians estimated an average life expectancy of only 40.1 years in 1998. Without AIDS, the life expectancy would have reached 61.5 years. AIDS in these countries has doubled child mortality at the end of the nineties.

By now, this strong increase of the mortality is limited to those countries which have already reached an advanced stage of the AIDS Pandemic. AIDS has clearly reduced the population growth in these countries, e.g. in Botswana from 2.4 % annual (without AIDS) to 1.1 % (real rate), in Kenya from 2.5 % to 1.7 %. In a few years, population growth will have stopped in some of these countries. For 2020, for Botswana only 0.2 % annual population growth is expected, for Kenya 0.6 %.

The group of countries already heavily affected does not represent a big share of the global world population. Therefore, this dramatic

development has had little impact on the global population dynamics till now. This could change however, if the disease spreads to countries with larger populations, like India, which has just exceeded the 1 Mio. limit in population.

The AIDS Pandemic has dramatic economic and social consequences. It kills people in the middle of their working lives. Mio. of AIDS orphans have to be supported by their surviving relatives. When this is not possible, children live on the streets. AIDS absorbs a great share of the health system services in the countries most heavily affected. In some countries, more than 60 % of the hospital beds are occupied by people suffering from AIDS.

### ***7. Human Rights and Stabilization of the Population Development : the Aims of Cairo***

The international Conference for Population and Development (ICPD) held in 1994 in Cairo has been considered by many observers as a big success. The participant countries in Cairo could agree on new programmatic wordings and on quantitatively defined objectives. National governments obliged themselves to support the goals of the plan of action through suitable political measures (UNFPA 1994 C).

The most essential aim of the Cairo meeting is mentioned in section 7.16 of the action plan : all countries should take steps to meet the family-planning needs of their population as soon as possible, and should, into all cases by the year 2015, seek to provide universally access to safe and reliable family planning methods and to related reproductive health services which are of need (UNFPA 1994 C).

The fulfillment would have an essential demographic consequence. If the unmet need for family planning services could be satisfied in developing countries until 2015, the further development of the world population would move into the proximity of the low scenario of the UN forecast of 1998. This would imply for 2050 a world population of 7.3 Mio. people instead of 8.9 Mio. people in the standard scenario.

The Cairo conference replaced the concept of a *family planning* by

the one of a *reproductive health*. This concept is broader than traditional family planning programs and demands a qualitative improvement in services. Reproductive health services can be divided up into three essential areas :

1) The first area is the support to couples and individuals for the prevention of unintended pregnancies. This formed traditionally the core activities of family planning programs. It is in narrow coherence with the reduction of fertility and population growth. At present, less than 40 % of the development aid in reproductive health flows into in this area (Conly & De Silva 1998, : 28). The ICPD plan action demanded to increase the annual efforts for family planning to 10.2 Bio. US-Dollar (constant at 1993 value) until the year 2000. At the time of the Cairo conference, these efforts were funded with 4 to 5 Bio. US-Dollars (Conly, Chaya & Helsing 1994).

2) A second area is the prevention of sexually transmitted diseases, particularly HIV/AIDS. The Cairo plan of action demanded to increase efforts until the year 2000 to 1.3 Bio. US-Dollars.

3) A third area includes other services of reproductive health, such as reduction of maternal mortality, prevention and treatment of infertility, struggle against female genital mutilation. For this, at least 5 Bio. US-Dollars annually were demanded.

All three mentioned areas, plus 0.5 Bio. for research, data collection and data analysis, amounted to 17 Bio. US-Dollars.

*Table 3 : Estimated expenditures for the fulfillment of the goals of the Cairo action programme, in Bio. US-Dollars of 1993*

	2000	2015
Total	17,0	21,7
<i>Source</i>		
International donors	5,7	7,2
Developing countries	11,3	14,5
<i>Type of expenditures</i>		
Family planning	10,2	13,8
Sexually transmitted diseases, HIV/AIDS	1,3	1,5
Basic services for reproductive health	5,0	6,1
Research, data, strategy formation	0,5	0,3

*Source : UNFPA (1994 C), Potts, Walsh, McAnich & Mizoguchi (1999).*

Both the developing countries and the international donors were supposed to increase their efforts to contribute to the funding of the Cairo action programme. The contribution from the international development cooperation had to increase to a third of all expenditures until 2000 (5.7 Bio. US-Dollars).

Five years after the Cairo conference, the progress made has been assessed. It appeared that the mobilization obtained did not meet the ambitions expressed in Cairo (UNFPA 1999).

Could it be that the aims of the Cairo conference have been over-ambitious ? It is interesting to review from today's perspective the foundation of the Cairo aims again. Already in 1994, it was foreseeable that the need for services in reproductive health would grow because of the future demographic development. The considerable growth potential, which is contained in today's age distribution of the developing countries, is one of the most essential reasons for this. Already today, the parents' generations of the next decades are born, and they are more numerous than today's parents' generation.

This can be illustrated at the example of Ethiopia (calculated on the basis of UN data from 1999). In 1998, there were 12.1 Mio. Ethiopian women in reproductive age (15 - 49 years). More than every fifth of

them gave birth to a child that year ; there altogether were approx. 2.6 Mio. births. The total fertility rate was 6.3 children per woman. In the year 2020 there will be 25 Mio. Ethiopian women in reproductive age, according to UN forecasts. Even if the average number of children declines until then below 4, in 2020 approx. 3.6 Mio. Ethiopian babies will be born. Due to the age structure, the population will continue to grow for decades.

The following table (table 4) shows how the generation of potential parents in developing countries will grow within the next decades. Already by 2000 the number of women in reproductive age has increased by 141 Mio. compared to 1994 (+13 %). The resources used for family planning would have to increase also by 13 % only to hold the per capita supply at the level reached in 1994 - without any extension of activities or improvement in quality.

*Table 4 : Size of the potential parents generation in developing countries*

	1994	2000	2015
Women of 15-49 y., in Mio..	1.061	1.202	1.509
Change to 1994, Mio..		141	449
Change to 1994, in percent		+13	+42

*Source : calculated from UN 1999.*

However, the aims formulated in Cairo went beyond the demographically induced increase in demand. Within six years, the number of the contraception users should have increased from 425 Mio. (1994) to 630 Mio. (2000). Half of this increase would be necessary to cope with the demographic development alone. The cost estimates correspond to the envisaged steep rise of the number of contraception users : within the six years after the Conference, financial efforts should have doubled, from about 5 Mio. US-Dollars in 1994 to 10.2 Mio. US-Dollars in 2000.

A more precise analysis (Ulrich 1999) points out, that the aim formulated in Cairo (satisfying the unmet need for family planning for a growing world population within only 20 years) is an ambitious, however not impossible vision. It is important to see the achievement

of the Conference political aims with practicality, in close relation with the needs estimates and the actual efforts of the developing countries and the industrial countries.

### ***8. Donor Fatigue and Global Population Dynamics***

As an event, the Cairo Conference contributed to attract public attention, which resulted in additional efforts during a few years (s. Table 5). The spendings of donor countries for family planning programs increased from 966 Mio. US-Dollars in 1993 to 1.6 Mio. US-Dollars in 1995 (UNFPA & NIDI 1999). The increase is a little lower if one takes inflation into account and converts these amounts in constant US-Dollars of 1993. However, even the considerable increases of 1994 and 1995 (19 % each year) wouldn't have sufficed to reach the Cairo target of 5.7 Mio. in 2000. For this, a 29 % annual increase rate would have been necessary.

*Table 5 : Development aid of the sender countries for family planning programs, 1987-1996*

	1987	1988	1989	1990	1991	1992	1993	1994 *)	1995	1996
in Mio.. US dollar	614	609	675	803	952	926	966	1.201	1.568	1.528
annual %, increase		-1	11	19	19	-3	4	24	31	-3
in Mio.. constant US-dollar of 1993	787	726	813	862	988	904	966	1.152	1.372	1.370
annual %, increase		-8	12	6	15	-9	7	19	19	0
in % of total . development aid	1,35	1,16	1,19	1,21	1,36	1,26	1,46	1,65	2,32	2,46

*\*) from 1995 new definition, limited comparability to the previous years*

*Source : Vlassof, Exterkate & Eelens 1998, UNFPA 1999; annually calculated rates ; the OECD-DAC-Deflator was employed for the conversion in US-Dollars of 1993.*

The US Non-Governmental Organization « Population Action International » reckons up in an essay from 1998 that the donor countries altogether would have had to increase their efforts to more than the quadruple within the years 1997-2000 to reach the 5.7 Mio. envisaged in Cairo (Conly & De Silva 1998). Considerable differences between the countries are recognizable here also. The US is still the most important donor for population activities, covering half of all aid in this field (for 1996 : 637.7 Mio. US-Dollars). The Netherlands have tripled their contributions since 1994 and became in 1996 the second largest donor (111.7 Mio. US-Dollars, or 8.2 % of all aid in this field). With 106.4 Mio., Great Britain took the third place, and Germany followed as the fourth most important donor (96 Mio. US-Dollars, or 7% of the global aid).

Conly & De Silva (1998) calculated a « fair share » for each donor country to fund the ICPD aim of 5.7 Mio. US-Dollars for family planning in 2000. The share has been weighted with the economic strength of each country, measured by the Gross National Product. Following this logic, USA should have contributed approx. by 1.9 Mio.

US-Dollars (constant value of 1993), Japan by 1.2 Mio., Germany by 600 Mio.. Only three donor countries reached their « fair share » in 1996 : Denmark, the Netherlands, and Norway. Sweden and Finland were relatively close to the target. The « catholic countries » : Spain, France, Austria, Ireland, Italy and Portugal, were far from the expected contribution.

If this « donor fatigue » continues in the next years, this will result in a relative decline of the efficiency of family planning. A large number of developing countries depend strongly on the continuation of the international development cooperation to materialize the Cairo plan of action. This dependence is particularly strong in Nepal, Peru, Bangladesh, sub-saharan Africa, the Philippines, and Yemen. Progresses already reached would probably be partly lost in many of these countries, if the external financial contributions dry up. External sources contribute to more than 60 percent of the national efforts in 46 of the 79 developing countries examined in a recent study of Population Action International.

The United Nations Population Fund (UNFPA) recently examined how lower efforts for reproductive health would affect global demographic development. The most probable scenario claims that, per annum, 40 Mio. unintended pregnancies could not be prevented. A little less than half of them would probably end by abortions. However, there would be 20 to 25 Mio. additional births and also 1 Mio. additional children deaths. The concrete figures are subject to argument, however, the described dimension is correct.

The declining international support to Cairo decisions will have grave demographic and social consequences. It will contribute to slow the decline in fertility and infant mortality, and to accelerate the spread of HIV/AIDS. By contributing to delay the stabilization of the world population, it will result in a much larger world population. If this development cannot be stopped, we should have in the coming decades many more people on earth, more international conflicts for resources, and a stronger migration pressure at our doors.



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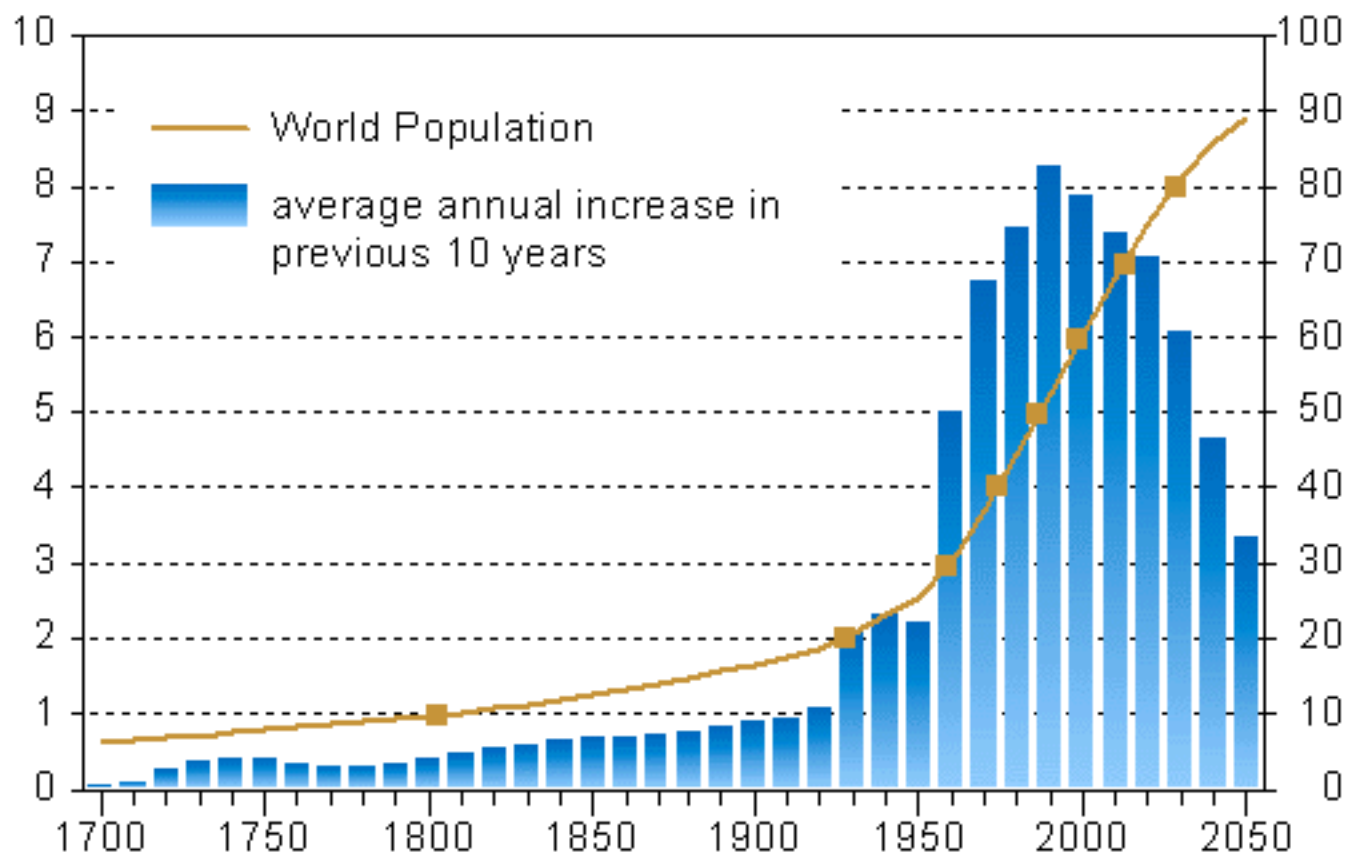
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# Growth of World Population, 1700-2050

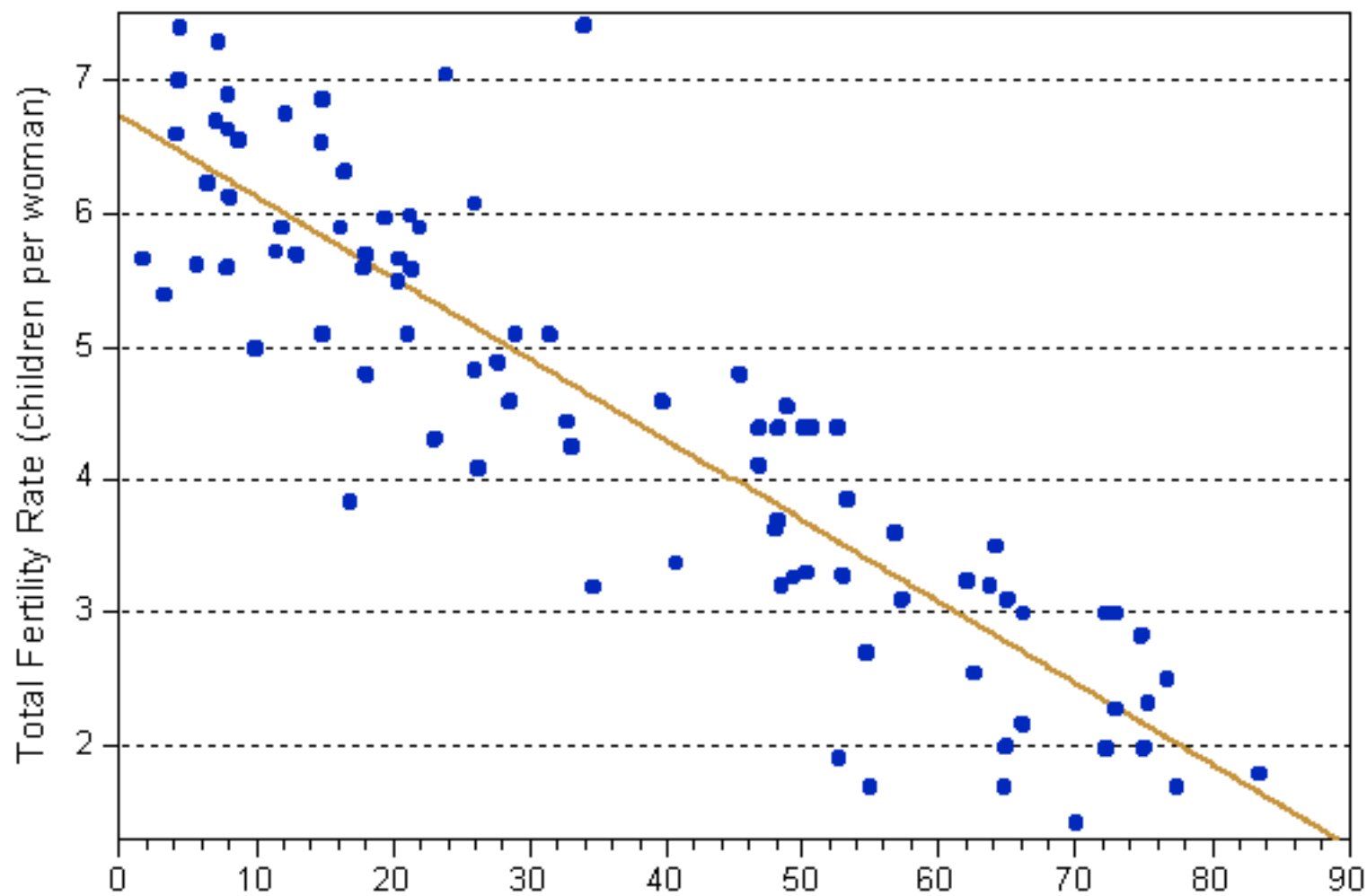
World Population  
in billion

annual increase  
in mio.



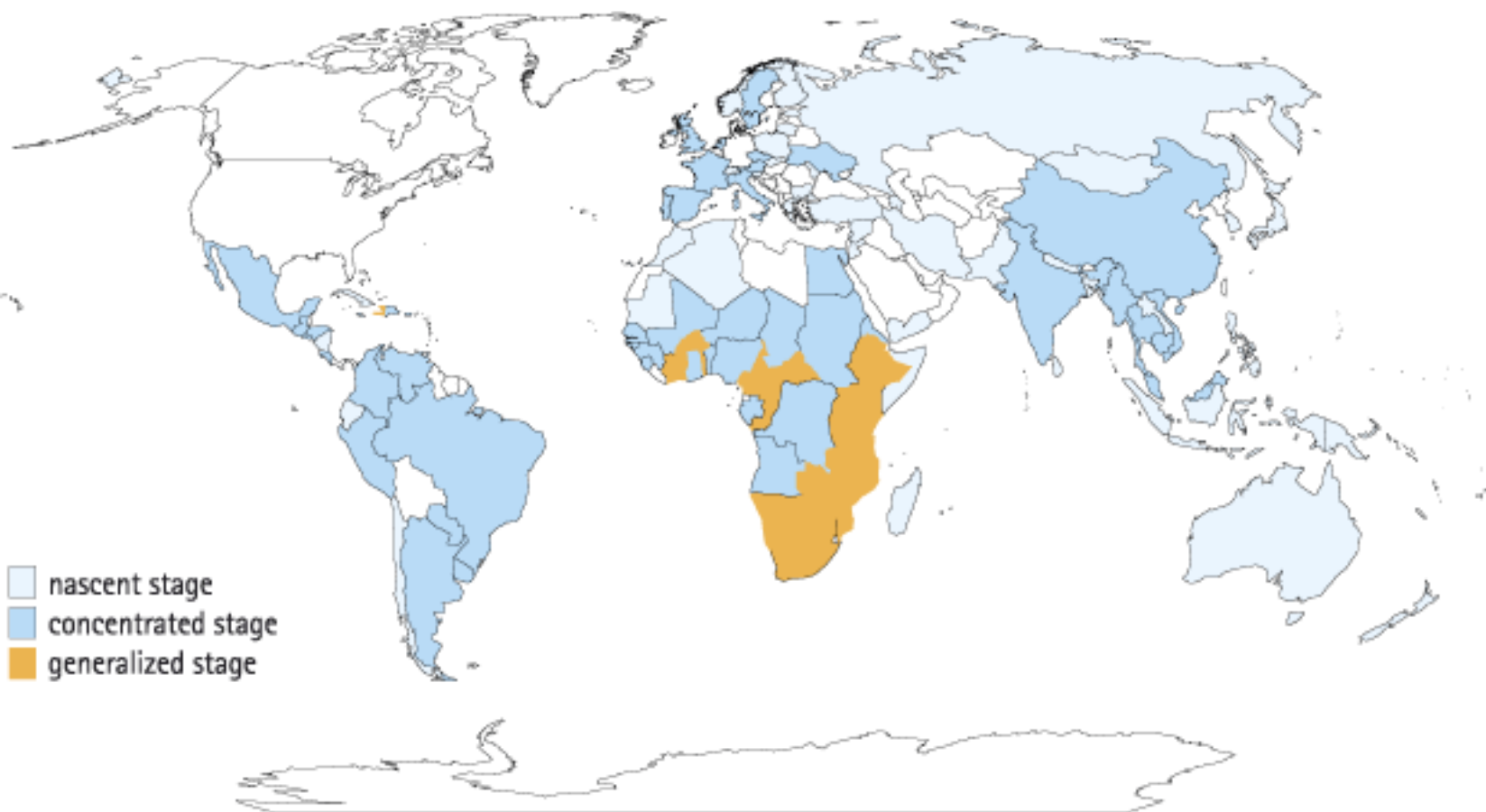
Data: UN Population Division

# Fertility and Contraception in Cross-Country Comparison



data: Haub/Cornelius 1999

# Countries in Various Stages of the HIV/AIDS Pandemic, 1997



Data: World Bank, 1999