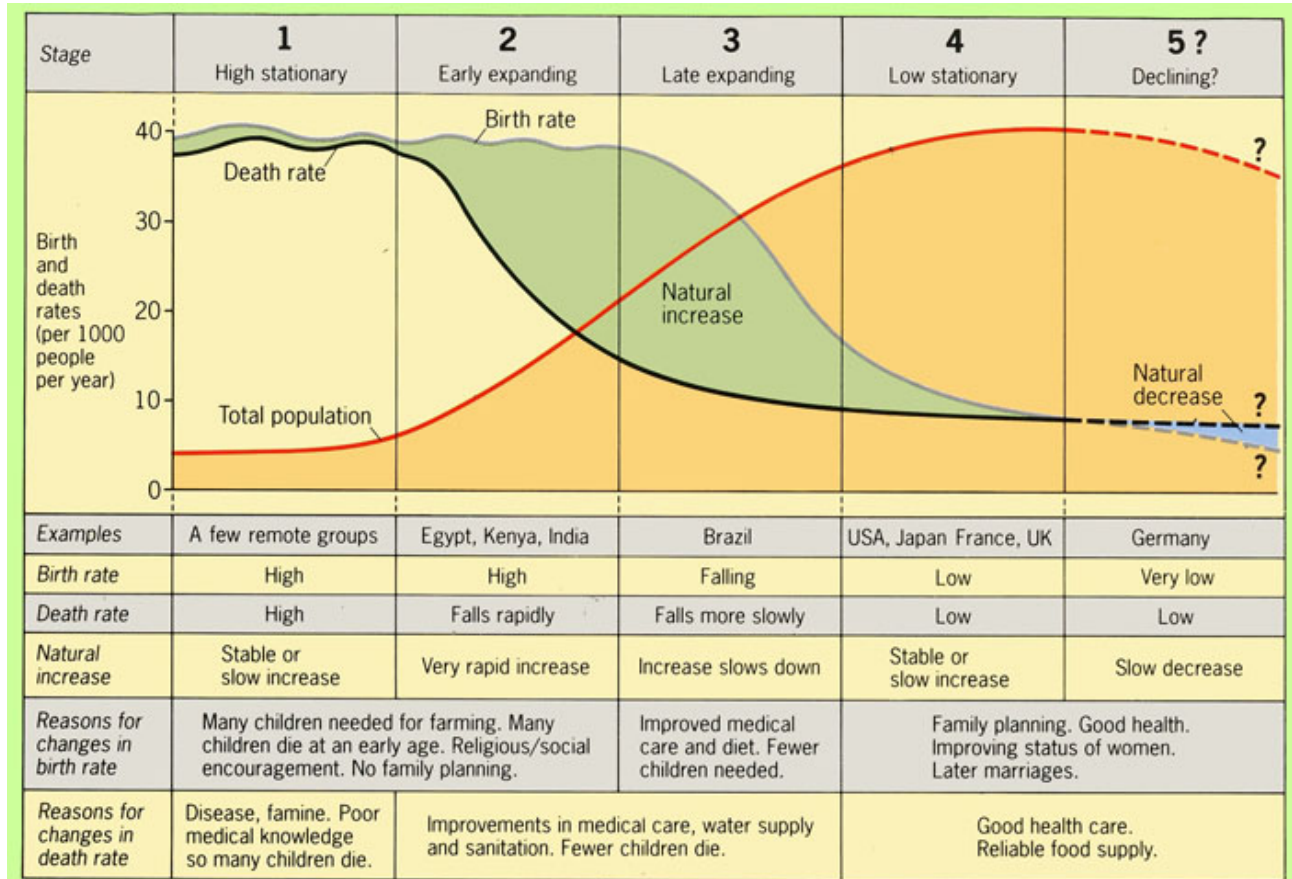
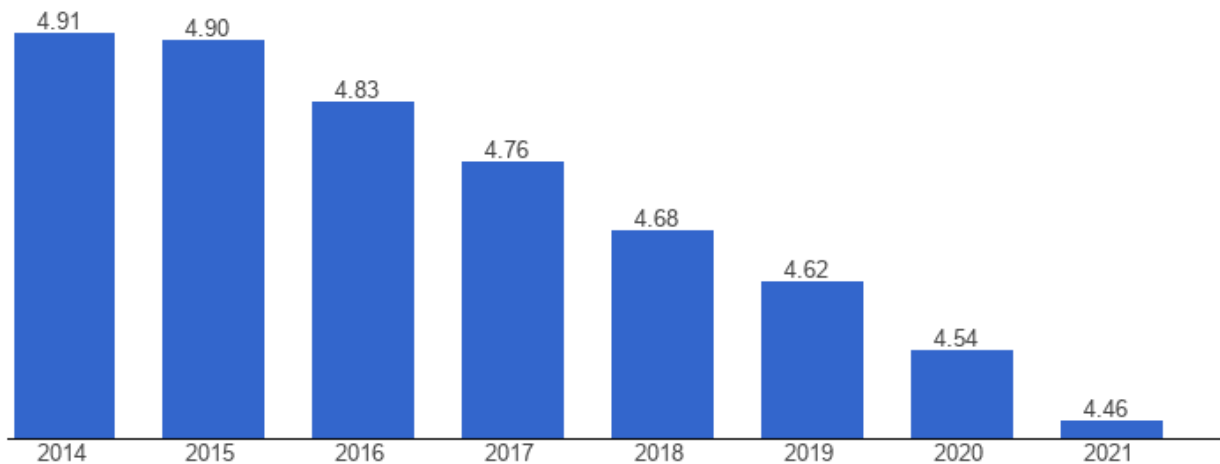


DEMOGRAPHY

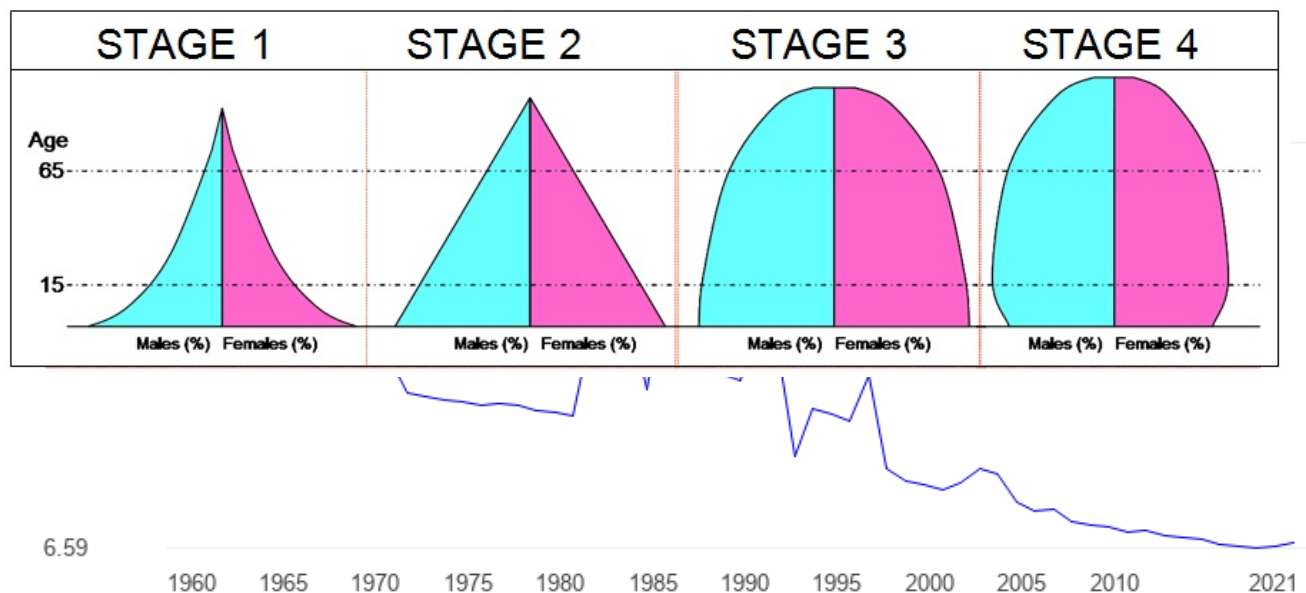
- One of the most useful models for the study of changing Birth Rates, Death Rates and Population Growth Rates (Natural Increase) as a country develops is the Demographic Transition Model. The model initially saw a country pass through 4 stages of the cycle over time, more recently a fifth stage has been added as some countries begin to exhibit a phase of population decline.



- Sudan is probably in late stage 2 of the cycle, progressing to stage 3, Birth Rates are high and beginning to fall, Death Rates are falling and the rate of Natural increase is steep, but beginning to slow. The country will progress to stage 4 as quickly as it can to stabilise the population growth and have low Birth and Death Rates, allowing it to concentrate on the health, well-being and economic prosperity of its citizens. It is likely that conflicts and corruption in the country have and will slow the transition of the country through to a more developed status.
- The Birth Rate in Sudan is high, but beginning to fall. The Crude Birth Rate is the number of births per year for every 1000 of the population, in 2023 this stood at 30.7/1000 having fallen from over 45/1000 in 1970, it is expected to be nearer 20/1000 not long after 2050. For comparison the UK Birth Rate was just over 11/1000 in 2023.
- This fall is mirrored by the fall in the Fertility Rate, the average number of births per woman which now stands at just over 4, having fallen from over 7 in 1970. The graph below shows the change in recent years.

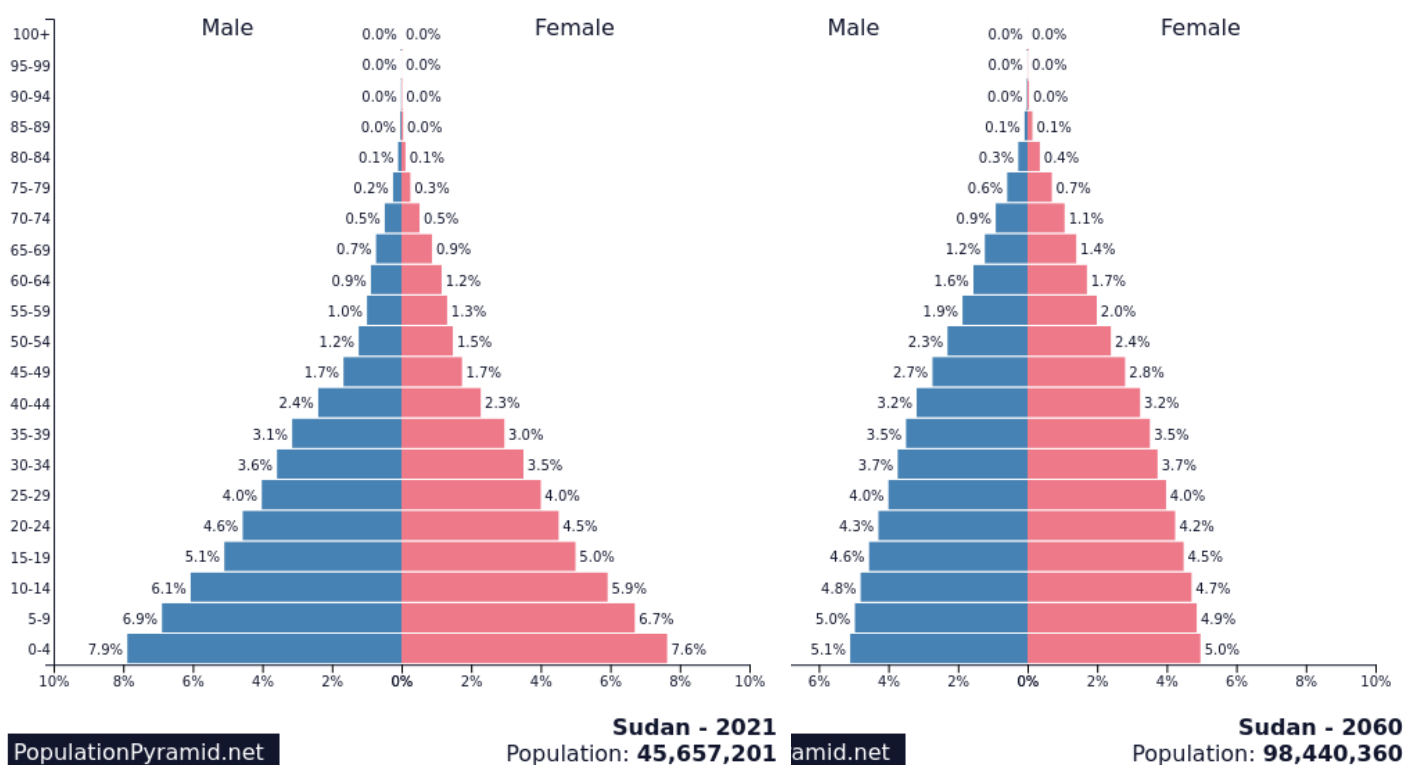


- Falling Birth and Fertility Rates are promoted by a number of factors; the development of society to be more urbanised and industrial when women are more likely to have an economic role, health and sanitation improvements to lower the Infant Mortality Rate, education and the increased use of contraceptives. In countries such as Sudan strong birth control policies and the role of NGO's and the WHO are essential, these are made difficult in an environment of conflict and corruption where they are unable to function efficiently.
- The Death Rate in Sudan is also high, but has been falling for some years. It is likely, however, that this fall could have been more rapid without the wars and corruption which have limited the ability to respond to soil degradation, famine and floods. The same factors have had a negative effect on health policies and health services and their ability to respond to disease and malnutrition.
- In 2022 the Crude Death Rate was 6.7 per 1000 of the population. We can compare this to the UK at 9.1, bear in mind that Sudan has a much more youthful population with a high % of the population under 16, whereas the UK has a much higher % over 65. A better comparison would be an age specific death rate such as the Infant Mortality Rate, the death of children under the age of 1 per 1000 of the population per year, in the UK it was 3.5/1000 in 2023 and in the Sudan 38/1000.
- The graph below shows detail of the changing Death Rate over recent times. Although the general trend is down it is obvious that there are marked spikes where the Death Rate has risen dramatically. 1988 is particularly prominent when the rate peaked at over 25/1000. This was a year of floods and famine caused by climate change, extreme weather events and soil degradation brought about by desertification, and there is no doubt that the conflicts, corruption and human rights abuses (looting, raiding, displacement and abduction) that were common in the 1980's reduced the ability of the country to respond to these disasters.
- A Population Pyramid is a way to show the age-sex structure of the population of a country at any given time. This structure will develop and



change as a country moves through the stages of the Demographic Transition. The diagram below shows the changes to the population structure of a country as it passes through the first 4 stages of the Transition. Of particular importance is the % of the population in the age ranges 0-14, 15-64 and 65 and over. This allows us to calculate the Dependency Ratio, the ratio between the working and productive population in the middle age range and those that are, on the whole, dependent on their production, those under 16 and those 65 and over. Youthful populations like those in stage 2 and early stage 3 have a large proportion of their population under 15 who are dependent, whereas when a country reaches stage 4 it is an ageing population with a larger and larger % of the population who are over 65 and are dependent on the working population.

- The Population Pyramid of Sudan for 2021 shows it to be towards the end of stage 2 and entering stage 3. A period when it may be about to benefit from the Demographic Dividend, a period when there is a bulge in the pyramid in the ages 15-64 and the % under 16 declines and before the % 65 and over begins to grow significantly. Less money will need to be spent on health care, education can improve, infrastructure and economic output will improve. This was the basis of the 'Economic Miracle' of East Asia, and there is no reason why it cannot occur in Sub Saharan African countries like Sudan. This is a short period, however, before the country shows an ageing population structure and resources are needed to care for a growing elderly population. There is no doubt that if the internal conflict and corruption continue Sudan will be much less able to take advantage of the Demographic Dividend.
- The Population Pyramid for 2021 shows a youthful population with a large % under 16, but by 2060 Sudan should be able to benefit from the Demographic Dividend as the 15-64 age % grows and the country will have a large proportion of the total population in that working, productive age range. At this stage the burden of a large over 65 population has yet to



cause a significant drain on resources. As you can see the population is predicted to double in size in total without significant percentages existing in the dependent age groups.

- A collision of cultures, religions and ethnicities in Sudan is a major demographic factor that both helped cause conflicts and shows the negative impact of conflicts. The internal conflict has been simplified as a north/south divide between the northern Arab, Muslim population making up 70% of the total population and the indigenous 'black', but culturally diverse, Sub-Saharan African tribes. The situation is obviously more complex than this particularly if we consider that it is estimated that over 90% of the population are Muslims.
- There is also a division between the nomadic population of Arabian descent traditionally involved in nomadic pastoralism and the sedentary arable and pastoral farmers of the south and west. This conflict is more pronounced during periods of scarce resources when the northern Arab peoples who hold the political power have been criticised for undertaking ethnic cleansing of the indigenous sector of the population particularly in the Darfur region to the south and west.