Population (The Asian Age: 20220721)

Is growth in population a ticking bomb or blessing?

Sanjeev Ahluwalia

Global population growth has decelerated since 1965, even before The Population Bomb, a 1968 bestseller by Paul and Anne Ehrlich, had advocated population control if the world were not to starve to death. In 1972, the Club of Rome published Limits to Growth, which similarly predicted that the world would run out of its natural resources.

Both drew from Thomas Robert Malthus’ An Essay on the Principle of Population, which was published 150 years earlier, in 1798. It postulated that humans are profligate by nature—squandering their enhanced income on having more children or consuming more goods, or both, thereby perpetuating resource scarcity.

The latest dire forecasts come from the Intergovernmental Panel on Climate Change, which is based on better science and computing power. We are racing towards irreversible climatic changes. The 1.5°C rise in air temperature is already apparent, and the 2°C rise predicted by 2050 may be exceeded. We are running out of space to reengineer the process of carbon emissions.

Population trends depend on three variables—fertility (a statistical device measuring the average number of children born to women aged 15-59 years in any one year), mortality (the ratio of deaths to population in a year), and net migration.

Global fertility rate reduced from 5.0 in the 1960s to 2.3 in 2021. By 2050, the global fertility rate will be 1.8, the replacement rate, at which population and Southeast Asia—dominated by China—reduced fertility from 2.6 in 1990 to 1.5 in 2021. Central and South Asia—dominated by India—reduced fertility from 3.7 to 1.8 over the same period. This trend is welcome, signalling more agency for women over their bodies. Professional and personal goals now substitute their traditional ones of childbearing and rearing. Incentives for big families are disappearing in the advanced economies. State-provided social protection for the aged substitutes for children as an insurance mechanism. Mechanisation (tractors, harvesters, industrial robots, contactless services) and digitalisation reduce the need for the work to agriculture, manufacturing, and retail services, diminishing the need for large families as reliable in-house help.

Mortality rates have dropped. Higher incomes provide better nutrition. Coupled with better healthcare, sanitation, and nutrition, over 30 years a person can expect to live to 90 years. Yet, the average life expectancy in Sub-Saharan Africa (SSA) is 57 years in 2021, the disparity between the lowest and human averages is 10 years.

The reduction in mortality rate (particularly of infant and child mortality) preserves population and provides the counter force of higher incomes, which shrink the population. This explains the so-called demographic dividend—a period when more babies are born and live longer to provide a steadily growing workforce. Migration shrinks the population, reducing the numbers by 33.4 years.

In many benign cultures, where population management is largely driven by incentives, sudden, deep disruptions in demographics can be avoided. This is a policy choice that contrasts Sub-Saharan Africa (SSA), where the fertility rate in 2021 remains high at 4.0 in and North Africa and West Asia, at 3.5. Under-five mortality is similarly high. A child in SSA is 20 more likely to die than in Australia or New Zealand, depressing average life expectancy at birth in SSA to a global low of 59.7 years.

Migration for jobs and cultural change and invites resistance from locals, though some societies are more open than others. One-fourth of India does not live where they were born, migrating for marriage, for advanced education or for jobs.

During 1960-2000, the natural population increase (excess of births over deaths) in high-income countries was 101 million, or 1 million, and the international in-migration of 44 million. Between 2000 and 2020, international in-migration of 103 million became the primary driver for population growth, versus 66.2 million through births exceeding deaths. Over the next few decades, migration will be the sole driver of population growth. In high-income countries, as deaths progressively exceed births.

But can the relatively closed cultures, like Japan, or South Korea, open to young foreign workers, like the United States, Britain, France, Canada, Australia, New Zealand—all stellar examples of dynamic, immigrant societies? Global GDP (in constant terms) has grown much faster than the growth of population, increasing household incomes, improving healthcare, resulting in a reduction in family size, irrespective of religion, as illustrated by impressive fertility reductions in Islamic Malaysia and Catholic Latin America.

Since the 1980s, rapid growth in global trade and financial flows, coupled with the “open economy” model, helped incomes grow, reducing poverty in the developing world. The Ukraine crisis has disrupted that model. The long-term damage appears uncertain now. But upsetting the incentive-based apple cart of high growth, a faltering distribution of income and better healthcare for regulating population growth, could have seriously negative consequences, one would not wish to even for an enemy. Remember, when the push comes to shove, borders are.
High-dose vitamin B6 supplements

Scientists reveal vitamin B6 supplements may reduce anxiety and depression
High-dose vitamin B6 supplements, lessen anxiety and depressive symptoms, GABA (Gamma-Aminobutyric Acid), blocks impulses, nerve cells
Scientists reveal vitamin B6 supplements may reduce anxiety and depression (The Tribune: 20220721)


According to a recent study, using high-dose vitamin B6 supplements will lessen anxiety and depressive symptoms.

The findings of the research were published in the journal 'Human Psychopharmacology Clinical and Experimental'.

Scientists at the University of Reading measured the impact of high doses of Vitamin B6 on young adults and found that they reported feeling less anxious and depressed after taking the supplements every day for a month.

The study provides valuable evidence to support the use of supplements thought to modify levels of activity in the brain for preventing or treating mood disorders.

Dr David Field, the lead author from the School of Psychology and Clinical Language Sciences at the University of Reading, said: "The functioning of the brain relies on a delicate balance between the excitatory neurons that carry information around and inhibitory ones, which prevent runaway activity.

"Recent theories have connected mood disorders and some other neuropsychiatric conditions with a disturbance of this balance, often in the direction of raised levels of brain activity.

"Vitamin B6 helps the body produce a specific chemical messenger that inhibits impulses in the brain, and our study links this calming effect with reduced anxiety among the participants." While previous studies have produced evidence that multivitamins or marmite can reduce stress levels, few studies have been carried out into which particular vitamins contained within them drive this effect.

The new study focused on the potential role of Vitamins B6, which is known to increase the body's production of GABA (Gamma-Aminobutyric Acid), a chemical that blocks impulses between nerve cells in the brain.

In the current trial, more than 300 participants were randomly assigned either Vitamin B6 or B12 supplements far above the recommended daily intake (approximately 50 times the recommended daily allowance) or a placebo and took one a day with food for a month.
The study showed that Vitamin B12 had little effect compared to placebo over the trial period, but Vitamin B6 made a statistically reliable difference.

Raised levels of GABA among participants who had taken Vitamin B6 supplements were confirmed by visual tests carried out at the end of the trial, supporting the hypothesis that B6 was responsible for the reduction in anxiety. Subtle but harmless changes in visual performance were detected, consistent with controlled levels of brain activity.

Dr Field said, "Many foods, including tuna, chickpeas and many fruits and vegetables, contain Vitamin B6. However, the high doses used in this trial suggest that supplements would be necessary to have a positive effect on mood.

"It is important to acknowledge that this research is at an early stage and the effect of Vitamin B6 on anxiety in our study was quite small compared to what you would expect from the medication. However, nutrition-based interventions produce far fewer unpleasant side effects than drugs, and so in the future people might prefer them as an intervention.

"To make this a realistic choice, further research is needed to identify other nutrition-based interventions that benefit mental wellbeing, allowing different dietary interventions to be combined in future to provide greater results.

"One potential option would be to combine Vitamin B6 supplements with talking therapies such as Cognitive Behavioural Therapy to boost their effect."

**Liver disease**

**Liver disease linked to higher risk of dementia: Study**

While excessive alcohol use can cause fatty liver, NAFLD can be caused by obesity and related conditions like high blood pressure or Type 2 diabetes.

**Liver disease linked to higher risk of dementia: Study (The Tribune: 20220721)**


People who have non-alcoholic fatty liver disease (NAFLD) -- a build-up of fat cells in the liver—may have a higher risk of dementia, according to a new study.

NAFLD is the most common liver disease, affecting approximately 25 per cent of the world’s population. Being largely asymptomatic, the disease may progress from the accumulation of fat in liver cells to liver inflammation and liver cirrhosis.
While excessive alcohol use can cause fatty liver, NAFLD can be caused by obesity and related conditions like high blood pressure or Type 2 diabetes.

The study, published in the journal Neurology, showed that people with NAFLD who also have heart disease or who have had a stroke may have an even higher risk of dementia.

When compared to people without liver disease, people with NAFLD had a 38 per cent higher rate of dementia overall.

When looking specifically at vascular dementia caused by inadequate blood flow to the brain, researchers found people with NAFLD had a 44 per cent higher rate than people without liver disease. Researchers did not find a higher rate of Alzheimer’s disease.

People with liver disease who also had heart disease had a 50 per cent greater risk of dementia. Those who had liver disease and stroke had more than a 2.5 times greater risk of dementia.

“Our study shows that non-alcoholic fatty liver disease is associated with the development of dementia, which may be driven mainly by vascular damage in the brain,” said Ying Shang from the Karolinska Institute in Sweden.

“These results highlight the possibility that targeted treatment of this form of liver disease and co-occurring cardiovascular disease may reduce the risk of dementia.” For the study, researchers identified 2,898 people aged 65 and older who were diagnosed with NAFLD. Researchers then identified 28,357 people without the disease who were matched for age, sex and city of residence at age of diagnosis.

After an average of more than five years of follow-up, 145 people with NAFLD, or 5 per cent, were diagnosed with dementia, compared to 1,291 people without liver disease, or 4.6 per cent.

India records 21,566 new covid cases

India saw a single-day rise of 21,566 coronavirus cases, the highest in 152 days, taking its covid tally to 4,38,25,185, while the number of active cases in the country climbed to 1,48,881 on Thursday, the Union health ministry said.

The death toll due to the viral disease has gone up to 5,25,870 with 45 more deaths, according to the ministry’s data updated at 8am.
The active cases accounted for 0.34 per cent of the total caseload, while the national covid recovery rate was recorded at 98.46 per cent, the ministry said.

An increase of 3,227 cases was recorded in the active covid caseload in a span of 24 hours.

The daily positivity rate was recorded at 4.25 per cent while the weekly positivity rate was recorded at 4.51 per cent, according to the ministry.

The number of people who have recuperated from the disease has gone up to 4,31,50,434 while the case fatality rate was recorded at 1.2 per cent.

According to the ministry, 200.91 crore doses of covid vaccines have so far been administered under the nationwide vaccination drive.

Of the 45 new deaths, 17 were reported from Kerala, seven from Maharashtra, six from West Bengal, two each from Assam, Bihar, Rajasthan and Uttarakhand and one each from Goa, Haryana, Himachal Pradesh, Jharkhand, Mizoram, Sikkim and Uttar Pradesh.

**COVID-19 vaccines**

*Can COVID-19 vaccines affect menstruation? (The Indian Express: 20220721)*

https://indianexpress.com/article/lifestyle/health/can-covid-19-vaccines-affect-menstruation-8041834/

Menstruation is very dynamic. Sometimes it is heavy and sometimes it is not. It also depends upon our physical activity, external environment and immunity triggers. Just a little bit of stress can make a difference in the days and amount of bleeding, says Dr Sarika Gupta, Senior Consultant of the Oncology and Robotic Gynaecology Department at Apollo Hospital, New Delhi

**Mental health**

*Mental health: When is the right time to seek help? "Considerations, such as misinformation, time constraints, or tight finances can often colour one's decision to consult a psychologist, psychiatrist, therapist, or another expert," said Debasmita Sinha, a psychologist (The Indian Express: 20220721)*
healthcare at home, home care, tele consultations, doctors on duty, Doctor's Day 2020, health, indian express, indian express news

When should one seek therapy and mental health help? (Source: Getty/Thinkstock)

Of late, while many celebrities and sportspersons have come forward to share their struggles with mental health, the topic still is not as freely discussed as physical well-being.

Dengue and chikungunya

GIS data to draw up risk assessment maps for dengue and chikungunya

Such models reduce the need for conducting surveys that are man-power intensive, says Dr S Sabesan, adjunct professor at the Vector Control Research Centre. (The Indian Express: 20220721)

Their work not only helps in better predicting outbreaks, it has changed the understanding of where the disease is found.

Could the rare Kyasanur Forest Disease be spreading to the eastern parts of the country? How does paddy cultivation affect the number of Japanese Encephalitis cases? Could filariasis be found in places previously unknown? Researchers from the Vector Control Research Centre have been using satellite data to answer these questions.

Protein

These ‘affordable’ food items will help you meet your protein goals

Do you really need protein powders to build muscle? Nutritionist Lovneet Batra answers the question in an Instagram post (The Indian Express: 20220721)

GettyImages-protein-supplement-1200A healthy individual needs 1 g protein per kg body weight per day. When training, however, they need about a half gram of protein per pound of body weight. (Photo: Getty/Thinkstock)
Many people swear by protein powder when it comes to muscle building. But, according to nutritionist Lovneet Batra, it is not “essential” for keeping the body’s protein requirement in check, as she went on to list some “affordable food items that can help you meet your protein goals”.

**Food and Nutrition**

**Things diabetics must know before having pineapples**

Pineapple is a healthy, tropical fruit that is rich in antioxidants, vitamins, and enzymes that help in boosting immunity and suppressing inflammation (The Indian Express: 20220721)

https://indianexpress.com/article/lifestyle/health/diabetics-pineapples-gi-moderate-8037111/

Pineapple's glycemic index is between 51 to 73. (Photo: Pexels)

Diabetes, a metabolic disorder, leads to an increase in the body’s blood sugar levels. If left untreated, the medical condition can further affect various organs including the eyes, kidneys, and heart among others.

**Healthy ageing**

**Healthy ageing: Lifestyle tips for women over 50**

"You do not need to make major dietary adjustments. Small efforts may give considerable benefits, said Dr Archana Batra, dietitian nutritionist, physiotherapist and certified diabetes educator (The Indian Express: 20220721)


Remember when you could eat as much pizza and ice cream as you pleased? While you may miss that time, it is essential to note that as you approach 50, the body’s metabolism slows down, and there is a decrease in oestrogen, among other hormonal changes, said Dr Archana Batra, dietitian nutritionist, physiotherapist and certified diabetes educator.
Glioblastoma Awareness Day 2022

Glioblastoma Awareness Day 2022: Know the early signs of this aggressive brain cancer
According to the expert, it can be very challenging to treat the disease and the cure is frequently not achievable (The Indian Express: 20220721)


Glioblastoma can develop at any age (Source: Getty Images/Thinkstock)
Glioblastoma Awareness Day — which is being observed today, July 20 — seeks to encourage increased public awareness about glioblastoma — an aggressive form of cancer that develops in the brain or spinal cord.

Dementia

How your status, where you live and your family background affect your risk of dementia
Several studies suggest parental education is related to an individual's dementia risk. Specifically, low maternal education is associated with poorer memory performance, and higher dementia risk(The Indian Express: 20220721)


Dementia increasingly affecting the lives of people nowadays. (Source: Pexels)
By the year 2050, the World Health Organization estimates one in five people will be aged 60 years and above. In Australia, our rapidly ageing population means that without a substantial medical breakthrough, the number of people living with dementia is expected to double from 487,600 in 2022 to 1.1 million by 2058.
Health risks

The health risks of extreme heat
Some people are more vulnerable, including young babies and older people, as well as people who have to stay active or are more exposed, such as homeless people. (The Indian Express: 20220721)


A number of European public health agencies have issued advice on keeping cool, including avoiding exertion where possible and staying hydrated (Source: AP)
Europe is sweltering under a record-breaking heatwave, with a number of governments issuing health emergency alerts.

Dental Health

What is ‘Turkey teeth’, the latest trend dentists are warning against?
"'Turkey teeth' is a new phrase for the very white, incredibly square and attractive teeth that millennials and social media users, in particular, are keen to acquire," Dr Suman Yadav said (The Indian Express: 20220721)


For people opting for 'Turkey teeth', there are several options to choose from - shape, quality and shades. (Source: Getty Images/Thinkstock)
A latest cosmetic dental trend, known as ‘Turkey teeth’, which involves travelling abroad to beautify your teeth has become extremely popular on social media platforms. Reportedly, it gained momentum after celebrities and influencers including Katie Price, Kerry Katona, and Jack Fincham were spotted travelling to Turkey to have veneers placed.

Healthy eating

Healthy eating: The best monsoon foods are…
Unlike in other seasons, having green leafy vegetables is not recommended in the monsoon, said dietitians Kajal Wattamwar and Bushra Qureshi (The Indian Express: 20220721)
diet

Adding more fresh vegetables to your diet can help (Source: Getty Images/Thinkstock)
From cold, flu, and typhoid, to mosquito-borne diseases like malaria, dengue, and even stomach infections, the monsoon is known to bring along a host of illnesses.

Menstrual

**Follow these five tips to make your menstrual days easier**

Feeling mild to heavy pain in thighs, abdomen and lower back during menstruation is normal; find out what you can do about it (The Indian Express: 20220721)

https://indianexpress.com/article/lifestyle/health/five-tips-menstrual-days-health-cleanliness-hygiene-8036373/

Menstrual cycles, menstrual days, menstrual health and hygiene, menstrual hacks, menstruation hacks, health, periods, indian express news

Apply a heating pad to your lower back and abdomen if you feel period cramps. (Photo: Getty/Thinkstock)

Menstrual cycles, while indicative of the health and well-being of a person, can be exhausting. When you are on your periods, it is normal to feel more tired than ever, along with a certain sense of discomfort and agitation.

Maternal health

**Saving mothers: On the importance of maternal health (The Hindu: 20220721)**


Data on MMR should lead to restructuring health-care systems for women

Few things in science or social science are as incontestable as the importance of maternal health to human development. Maternal mortality indicates a woman’s ability to access health care, contraceptive devices, nutrition, and, in a sense, is a mark of the efficiency of a health-care system in responding to demands made of it. A recent study published in the peer-reviewed journal, PLOS Global Public Health, casts a shadow over the progress of health care targeting women in the country, but also, questions the reliability of the country’s own periodic estimates
of maternal mortality ratio, or MMR (number of mothers who die from complications in pregnancy for every one lakh live births.) Researchers from the International Institute for Population Sciences triangulated data from routine records of maternal deaths under the Health Management Information System, with Census data and the Sample Registration System (SRS) to provide the MMR for all States and districts of India. The analysis suggests that 70% of districts (448 out of 640 districts) in India have reported MMR above 70 deaths — a target under the United Nations’ Sustainable Development Goals (SDG). Many of the districts in southern India and Maharashtra have an MMR of less than 70. At the same time, the north-eastern and central regions have the least number of districts (12 and six districts, respectively) with an MMR less than 70. Significantly, it also demonstrates the presence of huge within-State inequalities, even among the better performers — Karnataka, Tamil Nadu, Kerala, Andhra Pradesh, and Telangana. Similar heterogeneity was observed in other States as well. According to the SRS (2016-18), only Assam (215) has an MMR of more than 200, while in this district-level assessment, the indications are that about 130 districts have reported above 200 MMR.

It is ironic that as the nation plans to celebrate the 75th anniversary of Independence grandly, so many districts still show a very high MMR, clearly

**WHO**

**WHO's methodology for estimating COVID-19 deaths unscientific, says Centre (The Hindu: 20220721)**


The WHO has projected an estimate of about 47 lakh excess deaths in India associated directly or indirectly with the COVID-19 pandemic, between January 1, 2020 and December 31, 2021. The mathematical modeling approach adopted by the WHO to project excess mortality estimates related to COVID-19 suffers from erroneous assumptions and is unscientific and India had registered its strong objection to this methodology, the government informed Parliament on July 19.

India had objected to the ‘one size fits all’ approach adopted by the WHO as it might be true for smaller countries but cannot be applied to a huge and diverse country like India which had varied case trajectories across multiple States and at different periods during the pandemic, Minister of State for Health Bharati Pravin Pawar said in a written reply.
Infant mortality rate

Karnataka aiming to bring down infant mortality rate to single digit: Basavaraj Bommai (The Hindu: 20220721)


Karnataka CM appeals to medical fraternity to join hands with government in this endeavor

Chief Minister Basavaraj Bommai on Sunday said the government was focusing on bringing down infant mortality rate in the State from the present 2% (around 20 per 1,000 live births) to a single digit.

Addressing a Conference on Updates in Speciality Pediatrics organised by the Rainbow Children’s Hospital, he advocated the need for bringing down IMR and

Routine immunisation

Greater efforts needed to get routine immunisation back to pre-COVID times: World Health Organization (The Hindu: 20220721)


The World Health Organization stressed that despite concerted efforts by countries, challenges and gaps persist

The World Health Organization (WHO) on July 16 called for greater efforts in the South-East Asia Region to revive routine immunisation rates to pre-COVID times, stressing that despite concerted efforts by countries, challenges and gaps persist.