

HOUSEHOLD INCOME AND EXPENDITURE SURVEY 2022

A poverty, inequality, and growth puzzle



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Some key findings from the Household Income and Expenditure Survey (HIES) 2022, released on April 12, challenges constructing a sensible economic narrative on poverty, inequality, and growth in Bangladesh. Backward calculations of poverty based on the reconstructed 2022 upper and lower poverty lines have not been done yet. It is therefore technically incorrect to compare the 2022 headcount ratios and poverty gap measures with their counterparts in previous surveys.

The poverty trend emerging from valid comparisons with the previous rounds of HIES may or may not be different. We won't know until we know what the comparable numbers on poverty headcounts and gaps are. We hope the Bangladesh Bureau of Statistics (BBS) will finish their unfinished work sooner rather than later. Meanwhile, all we can do is search for the story within the available data, assuming the trends are robust.

Three notable urban-rural differences

First, the incidence and depth of rural and urban poverty tended towards convergence (narrowing differences). The headcount ratio and poverty gap measures improved faster in rural than urban areas. This is most notable in the case of extreme poverty, but it is also true for the headcount ratio based on the upper poverty line. Poverty gap measures, based both on the upper and lower poverty lines, suggest the same pattern. Reduction in depth was faster in rural areas.

Second, trends in relative inequality diverged. The urban Gini coefficient (which measures inequality) increased and the rural decreased. This is true irrespective of whether the Gini is computed from the distribution of income or consumption. Urban income Gini increased 8.2 percent and consumption Gini increased 7.9 percent in 2022 relative to 2016, compared, respectively, with 1.8 percent and 3 percent decline in the rural areas over the same period.

Third, real income and consumption growth were higher in urban locations. Real monthly household income, after deducting the percentage increase in the Consumer Price Index (CPI) from nominal income growth, increased 49.6 percent in urban areas, compared with 48.3 percent increase in rural areas in 2016-22. Growth in the monthly average real household consumption of urban and rural households was 65.4 percent and 50.4 percent, respectively.

An apparent puzzle

These together create a puzzle. Lower income or consumption growth are associated with reduced inequality and faster poverty reduction! Poverty reduction was faster in rural areas where inequality declined, while real income and consumption growth were lower. Poverty reduction in urban areas was

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slower with a sharp increase in inequality and stronger income and consumption growth. What could possibly explain this phenomenon?

Structural changes can at best be part of the story. This includes almost universal access to electricity in 2022, most notably in the rural areas from 68.9 percent in 2016 to 99.1 percent in 2022. Electricity access in urban locations improved from 94 percent in 2016 to 99.7 percent in 2022. Electricity can directly increase welfare by enabling households to access a variety of services such as food preservation, education, health, and information. Rural households caught up with their urban counterparts on developmental dimensions. However, it begs the question why such large improvements in access to electricity did not show up in stronger rural real income and consumption growth,

without which it cannot have a stronger effect on poverty measures.

There is no such discernible rural catch-up on other structural indicators. For instance, improved toilet facilities were reported by 95.3 percent urban households, compared with 90.9 percent rural households. Access to drinking water from tube wells remained unchanged at around 95 percent in rural areas, while access to "supply water" improved from 37.3 percent in 2016 to 56.6 percent in 2022 in urban areas. Households opening a bank account in the past 12 months increased from 7.6 percent in 2016 to 13.4 percent in 2022 in rural areas, compared with 7.3 percent and 15.7 percent, respectively, in urban locations.

Changes in social and demographic indicators are mixed. Male dominance in decision-making remained unchanged at around 87 percent in households that became somewhat larger in size in both urban and rural areas. The literacy rate in rural areas increased from 63.3 percent in 2016 to 70.3 percent in 2022, and in urban areas it increased from 71.6 percent to 82 percent, respectively.

It's not a Kuznets phenomenon

The Kuznets Curve (KC) has gained resonance in the establishment view of the data. Inequality increases in the early stage of economic development, peaks at a mid-income level, and then falls as development proceeds further. Bangladesh is categorised in the early stage of development and, therefore, it must be that KC is operative here.

The evidence on the validity of KC is at best mixed in the HIES data. In the three surveys (2010, 2016 and 2022), urban monthly income per household exceeds rural, and urban Ginis exceed rural Ginis, giving the appearance



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of a KC. However, the income in rural areas increased in 2022 relative to 2016 while inequality decreased, which disputes KC. Moreover, data do not bear out the standard Kuznets story that the pattern is caused by a dual economy dynamic generated by the switch from agricultural to industrial sector.

Yes, the rise in the share of industry in GDP raised urbanisation, but employment shifted in the opposite direction. The Labour Force Survey (LFS) 2022 shows that urban share in total employment declined from 27.9 percent in 2016 to 25 percent in 2022. Employment level in industry declined by 2.8 percent, probably in urban-centric large and medium industries. The increased labour force and displaced industrial workers were absorbed by a 30.4 percent increase in agricultural and 12.4 percent increase in services employment – not quite the KC types. A source of increase in inequality in the Kuznets world is the influx of cheap labour from rural to urban areas.

Evidence from recent development experiences is similarly weak. Kuznets himself recognised the fragile empirical basis of his grand generalisation, calling it "perhaps 5 percent empirical information and 95 percent speculation, some of it possibly tainted by wishful thinking."

The missing links

What may explain the tripartite disconnect? There are several candidates.

A shift in employment towards rural-centric activities is consistent with a rise in inequality in urban areas, its fall in rural areas, faster rural poverty reduction, and stronger urban income growth. The urban-centric large and medium industrial enterprises grew the fastest. Decreased employment means decreased labour incomes of below-poverty-line urban households, while increased employment in the lowest productivity agriculture suggests greater sharing of incomes among the rural poor. This could have resulted in weaker

income growth, decreased inequality, and faster poverty reduction in rural areas relative to urban areas.

A second candidate is Piketty, who hypothesised that inequality increases when the rate of return on capital exceeds the rate of economic growth. When capital grows faster than the economy, the concentration of wealth speeds up along with the concentration in income and consumption.

Perhaps the excess of return on capital over economic growth increased in the urban areas. The HIES 2022 data shows that average household loans to income ratio increased in urban areas and decreased in rural areas during 2016-2022. If the increased loans was concentrated among the privileged urban households, they were probably able to leverage a higher return on capital by hook (investment) or crook (loan defaults) – or both. This could have caused the stronger but more concentrated income and consumption growth and a slower pace of poverty reduction in urban locations.

A third candidate, seemingly related to the above, is a sharper digital divide in urban areas. A digital divide exists for groups who lack resources and the capacity to access smartphones, computers, and Wi-Fi. The new digital opportunities can only be accessed by those who have capital and digital literacy. Not surprisingly, therefore, the digital divide is greater in rural areas. The BBS Survey on ICT Use and Access by Individuals and Households 2022 shows that the proportion of households with access to the internet is 63.4 percent in urban areas, compared with 29.7 percent in rural areas.

However, variations in digital access between urban and rural socioeconomic groups matter. Since 68.5 percent of the total population live in rural areas (Population Census 2022), the 29.7 percent rural internet users constitute 20 percent of the total population, while the 63.4 percent urban internet users also constitute 20 percent of the total population. The digital divide taking quality into account – lower-performance computers, lower-speed wireless connections, lower-priced internet connections, and limited access to subscription-based content – is probably more pronounced between different age groups, genders, occupations, and

not natural, gave new species an opportunity to grow, from which human beings eventually evolved. With the introduction of humans as an ecological factor, there has been a shift from the gradual, natural replacement-type extinction to an abrupt niche-emptying extinction. The way humans have attacked the species of the world varied from outright assault to insidious nibbling, both of which have the same destructive result. Many animals disappeared simply because they were fashionable in human eyes. The rate of extinction is now about 1,000 times faster than before humans arrived. It leads one to wonder whether we are on track for the sixth mass extinction. Many scientists believe that the question is not "whether," nor "if," but "when." And this time, the cause will not be global cooling or asteroid impact. It will be the work of a single species – *Homo sapiens* – driving themselves to extinction. The UK-based Global Challenges Foundation lists nuclear war, pollution and climate change, overpopulation, biotechnology, and pandemics as the most viable threats to the existence of humans. Of the many possible scenarios, nuclear conflict is the most likely one by which human civilisation will become extinct. Our vulnerability to this threat is growing because of the escalating political tensions between nuclear-armed superpowers. In an open threat of a nuclear war, Russia's Security Council Deputy Chairman Dmitry Medvedev did not mince words when he publicly said that a defeat for Russia in the war against Ukraine could provoke a nuclear war. Meanwhile, the head of the Russian Orthodox Church, Patriarch Kirill, warned that "an attempt to destroy Russia [by Nato using Ukraine as a proxy] will mean the end of the world."

Yes, the patriarch is spot on. Today, the US, Russia, and China possess enough nuclear weapons to kill every man, woman, and child on this planet. If any of these countries initiates the use of such weapons, especially against another one that possesses them in abundance, the inevitable result will be the annihilation of the human race.

If we are spared the nuclear holocaust, then pollution and anthropogenic climate change will be responsible for our extinction. Today, we live on a planet poisoned by toxins

dumped by us. The toxins are in the food we eat, the water we drink, and the air we breathe. As the renowned explorer and environmentalist Jacques Cousteau said, "Water and air, the two essential fluids on which all life depends, have become global garbage cans." Such a society cannot live forever. Climate change per se is unlikely to cause our extinction. However, the synergistic feedback of the continued emission of planet-warming greenhouse gases (GHGs) can trigger the onset of "runaway greenhouse effect," which will eventually turn the Earth into an inferno with virtually no life. Several billion years ago, Venus was an Earth-like planet with an abundance of water in oceans overlain by an oxygen-rich atmosphere. The current hellish condition on Venus where the surface temperature is a

blistering 460 degrees Celsius was caused by runaway greenhouse effect. A rapidly growing human population is putting us in the throes of extinction. With a population that increased three-fold since 1950, food, water, and a whole lot more required for sustenance of life in the future will be in short supply. In fact, we are surviving today by stealing from the future. Hence, it is not unlikely that once the population reaches a "critical mass," natural resources vital to our survival will not be adequate enough to support us, unless we can replace them with sustainable alternatives. As a result, starvation will bring us face-to-face with extinction.

The misuse of biotechnology is another existential risk. With the advancement in DNA manipulation technology, it is quite likely that scientists working for a roguish state actor or a terrorist group can engineer a "superbug" for biological warfare, and in the process obliterate our entire civilisation. Besides, the abuse of biotechnology to develop deadly, quick-spreading pathogens that can hasten our extinction cannot be ruled out. For example, the pathogen often called the Spanish Flu, which killed an estimated 50 million people worldwide in 1918 and 1919, was resurrected by a group of US scientists in 2005. And a professor in the Netherlands came under fire in 2011 when he engineered a deadly, airborne version of the flu virus and attempted to publish the details of his work. We cannot rule out the possibility of fast-spreading devastating diseases, such as Covid-19, which, according to the World Health Organization (WHO), claimed at least three million lives since 2020. In the past two millennia, besides the Spanish Flu, the other pandemics that can be labelled as global catastrophes of a bigger magnitude were the Black Death of the 1340s that felled more than 10 percent of the world population, and the great Plague of Justinian in 541 and 542 that wiped out an estimated 13-17 percent of the global population at that time. Surreal as it may seem, we have clearly embarked on the path to self-annihilation. Indeed, several recently published scientific studies warn that the sixth mass extinction is already underway. Lest we forget, our ancestors – Neanderthals, Denisovans, *Homo erectus* – became extinct, leaving just their descendants, the *Homo sapiens*, to follow them. The question is: How soon?

Are we headed towards the sixth mass extinction?



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Over the past 540 million years, a short period of time on the geological scale, there were five events of mass extinction, caused by such things as severe ice age, an asteroid impact, invasive species taking over the planet, reconstruction of the Earth's crust some 250 million years ago, and other forces of nature. The most recent was 66 million years ago, which led to the extinction of dinosaurs. During each extinction, more than 75 percent of all species on the planet died.

Extinction is also a natural process. A species may become extinct and be replaced by another species, or it may gradually evolve into one or more new species. An important aspect of natural extinction is that niches remain occupied, but the species filling them change radically. The demise of the dinosaurs, though

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