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Divergence in the Process of Development across Nations: Introspection

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1. Introduction

The concept of economic development is much broader in relation to the concept of economic growth; while the former emphasizes on the qualitative aspects of economic progress, the later speaks only about the quantitative aspects of economic advancement of a nation. Economic growth becomes meaningless if it is not inclusive in nature and does not benefit greater sections of the people in any society.

In this paper, we shall consider the following factors to analyze the process of convergence or divergence in economic growth and development across several groups of economies:

(i) Pattern of convergence in the process of economic growth during 1960-2021;
(ii) Inequality in income distribution both in terms of 'international' and 'global' inequalities
(iii) Inequality in health, nutrition and educational outcomes
(iv) Disparity arising out of climatic change across nations.

2. Signs of convergence in the process of economic growth& development: Methodology & data Source

Convergence in growth process essentially signifies that over time the growth rate of per capita income (PCI) of the less developed or low-income countries would be higher than that of the developed or high-income countries so that eventually the less developed countries (LDCs) can catch-up with the per capita income level of the developed countries (DCs).

This convergence in growth process is often measured by β-convergence. The β-convergence is defined by a negative correlation between the growth rate of real PCI and the initial income level. On the other hand, when the dispersion of real per capita income across a group of economies falls over time, there is σ-convergence.

For the estimation of β-convergence the regression equation is given below:

$$\ln\left(\frac{Y_{it}}{Y_{it-1}}\right) = \alpha_k + \beta_k \ln Y_{it-1} + u_{it}$$

Where $\ln\left(\frac{Y_{it}}{Y_{it-1}}\right)$ signifies the growth rate of real PCI in i-th country over the previous period; $\alpha_k$refers to the parameter signifying the production condition in the countries specific to any k^{th}sub-span. The disturbance term u_{it} is assumed to have zero mean, finite variance, σ_u^2, and remains independent over t and i. The countries will be convergent in terms of PCI growth if the estimated β_k is significantly negative which signifies that lower the initial income higher would be the growth rate.

We have collected secondary data (World Bank) for the period 1960-2021 on Gross National Income per capita (GNIPC) for the following sub-groups of countries at constant price:

High Income Countries (HIC), (ii) Low Income Countries (LIC), (iii) Lower Middle-Income countries (LMC), (iv) Low and Middle Income Countries (LMY), (v) Developing Latin America & Caribbean Countries (LAC), (vi) Developing Countries of Sub-Saharan Africa (SSA), (vii) Developing countries of Middle East & North Africa (MNA), (viii) Developing economies of East Asia and Pacific (EAP) and (ix)Least Developed Countries (LDC). Some missing figures were captured through the process of extrapolation.

The convergence or divergence in the process of economic development has been analyzed on the basis of several development indicators related to health, nutrition and educational outcomes and the supporting statistical information has been collected from secondary data sources.

3. Literature Review

During 1980s, some research papers (Baumol ,1986; Bradford De Long ,1988) aimed at testing whether poor countries tended to grow faster than the rich ones using β-convergence models. This convergence is usually conditional because countries have different structural characteristics (propensity to save, population growth rate, technological progress, *etc*.). It is conditional on specific policies and institutional arrangements that have been proved to be difficult to identify and implement (Rodrik, 2011).

Some seminal works on convergence, viz. β-convergence, have been done during 1990s and afterwards by economists such as Barro (1991), Barro and Sala-i-Martin (1992, 1995), Mankiw et al. (1992), Sala-i-Martin (1996), Verspagen (1995), Islam (1995), Evans (1997), Lee, Pesaran and Smith (1998), Bond, Hoeffler and Temple (2001), Tsangarides (2001), Hoeffler (2002), Lee and McAleer (2004), etc. some of which indicated that economies converged on an average annual rate of 2% closing the gap between present levels of income and balanced growth levels. Some of these studies using panel data find even higher rates of *β*-convergence. Another study [Sarkar, Prabirjit (1999)]shows that the growth pattern during the period 1960-90 did not show any sign of convergence. A typically poor country in the early 1960s did not experience a higher real growth. Hence, there is no catching up of the standard of living of rich countries by poor countries. This is true for the different regions of the South (Africa, Asia and Latin America) and for the South as a whole.

While analyzing the future course of such convergence, Rodrik (2011) has pointed out that economic growth in the developing nations should not depend not on growth in the advanced economies, but on the difference in the productivity levels of the two groups of countries (i.e. on the convergence gap). The rate at which the lagging economies catch up is determined by their ability to absorb ideas and knowledge from the technology frontier.

Some studies reveal [Gnangnon, Sena Kimm (2019)] that the trade policy space exerts a significant positive effect on transitional convergence, and the greater the trade policy space, the higher is the transitional convergence. The transitional convergence is defined as the catch up of a country's real per capita income with the world's average real per capita income. This empirical analysis covering 150 countries from 1995 to 2015 shows that although the trade policy space exerts a positive impact on economic growth, this positive effect depends on the country's structural policies.

While analyzing the real convergence in economic growth in Malta with that of other EU27 economies post-financial crisis, another study[Micallef, Brian (2020)] identifies three important lessons for a country's convergence process: (i) the perils associated with rapid growth are driven by the accumulation of imbalances; (ii) the need for a flexible adjustment process following an economic shock; and (iii) the EU and euro area memberships are no panacea for real convergence, without institutions that are conducive to technological adoption and productivity growth.

Convergence in economic growth could not, however, ensure the convergence in the process of economic development between nations. This process of economic development incorporates various factors which influence the quality of living of the common people in any country (say, pattern of income distribution, health, education, nutritional facilities etc.).This aspect was evident in the study made by Mazumdar, D (2016).

Some economists are of the opinion that differences in current standards of living are the result of past difference in rates of economic growth. The principal determinant of global inequality then, is the extent to which countries converge or diverge from the income levels of the developed world (Frieden, 2001).

A section of economists have pointed out to the persistently low levels of technological efficiency as the proximate source of the gap between the rich and poorer countries (Hulten &Isaksson , 2007).

Some studies have clearly indicated that the gap between rich and poor has widened particularly during the era of economic globalization (Cornia,2003; Sikdar, 2006; OECD, 2008; Ortiz & Cummins, 2011; Elmawazini& Nwankwo, 2013). Though income inequality is a critical factor in determining other non-income outcomes of

human well-being (such as health, nutrition and education), it is not the only factor driving inequalities in non-income outcomes (Sen, 2003). Research has consistently pointed to the role of institutions (say, inefficient or inadequate service delivery systems), governance failures (such as corruption and absence of the rule of law) and public policy shortcomings (e.g., biases in public expenditure in favour of the privileged class) as key drivers of inequalities in non-income dimensions of material well-being (UNDP, 2013).

The interlinkages between climate change and within-country inequality have not yet received adequate attention in the existing literature. As Richard S.J. Tol (2020) further explains the poorer countries are more vulnerable to climate change for three reasons. First, poorer countries have a higher share of their economic activity in sectors, such as agriculture, which are directly dependent on the weather conditions. Second, poorer countries tend to be in hotter places. Third, poorer countries tend to have a limited adaptive capacity owing to lack of political will and limited resources. Islam and Winkel (2017) point out to a vicious cycle whereby initial inequality makes disadvantaged groups suffer more in terms of loss in income resulting in greater subsequent inequality. Inequality exerts disproportionate effects through three channels, namely (i) increased exposure of disadvantaged groups to climate hazards, (ii) increased susceptibility to damage caused by climate hazards, and (iii) decreased ability to cope with and recover from the damage. Chinowsky (2011) tries to determine the relative impact of climate change in the context of a single infrastructure element, paved and unpaved roads in the developed and developing countries. Roads play a very important role in alleviating poverty since they connect them to the outside world and hold the key in improving the living conditions of the rural poor. The study illustrates that the opportunity cost to developing countries is significantly greater than that for developed countries.

4. Findings & Analysis

It is observed that while the average annual growth rate of real PCI has shown a declining trend in HIC [Table-1], the LIC and LDC groups have shown significant upturn in their respective PCI growth rates during 1990-2013, and these growth rates during 2000-13 have been higher than that achieved by the HIC [Table-1]. In fact, all the sub-groups indicated a higher growth rate of PCI compared to that of the HIC during 2000-13. However, during 2014-21, the PCI growth in sub-groups like LMC, MNA, LMY, EAP and LDC remained higher than that of HIC.

Table-1 Average Annual Growth Rate of Real PCI in Different Sub-Groups of Economies during 1960-2021

Period	Average Annual Growth Rate (%) of Real PCI								
	HIC	LAC	LIC	SSA	LMC	MNA	LMY	EAP	LDC
1960-70	4.62*	2.69*			2.56*a				
1970-80	2.58*	3.55*			2.33*	3.04*			
1980-90	2.80*	– 2.0		–2.0*	2.1*	–2.0	1.86*c	6.41* c	
1990-00	1.93*	1.4*	0.23	– 2.0	1.86*	1.39*	2.56*	7.15*	2.33* d
2000-13	1.0*	2.3*	3.3*	2.56*	4.71*	3.28*b	4.95*	8.39*	4.23*
2014-21	0.46**	– 0.33***	0.2	– 0.33*	0.94*	0.63***e*	1.15*	2.16*	0.59*
2000-21	0.46*	0.6*	0.41**f*	0.73*	1.73*	0.88**g*	1.95*	3.27*	1.05**h*

Source: World Development Indicators (2015, 2023), World Bank (Compiled by the Authors) [For 1960-2013: Real PCI measured at 2005 USD; for 2014-21 Real PCI measured at 2015 USD [t value: At 1% level of significance; ** t value: At 5% level of significance; *** t value: At 10% level of significance] [a: for 1965-1970; b: for 2000-07;c:1982-90; d: for 1995-2000; e: for 2014-2018; f: for 2009-21; g: for 2000-18; h: for 2002-21]*

A close introspection of the deviations of the PCI growth rate of each sub-group of economies from that of the HIC group indicates that these growth rates have divergent in nature, i.e. the growth rate of PCI in HIC group surpassed the same attained by the other sub-groups such as LAC and LMC during 1960-70 (Table-2). While a positive difference implies such divergent nature in this growth process, a negative difference would imply a convergence in this process. Let the average annual growth rate in real PCI in HIC group be denoted by G_{HIC} and that of any other sub-group (say, non-HIC group) be denoted by G_{NHIC}. Now, a convergence in this growth requires that ($G_{HIC} - G_{NHIC}$) < 0. Here, we can assume that if $|G_{HIC} - G_{NHIC}| > 1$, that would signify a strong convergence while $0 < |G_{HIC} - G_{NHIC}| < 1$ would signify a weak convergence. According to this criterion, there have been indications of weak convergence during 1970-80, 1980-90 and even during 1990-2000 (except for EAP group) (Table-2). However, there are signs of strong convergence in six sub-groups out of eight non-HIC sub-groups during 2000-13 followed by a week convergence during 2014-21(Table-2).

Table-2 Inter-Group Deviations in PCI Growth during 1960-2021

Deviation in PCI Growth	1960-70	1970-80	1980-90	1990-00	2000-13	2014-21
PCIHIC – PCILAC	1.93	– 0.97	4.8	0.53	– 1.3	0.79
PCIHIC – PCILIC				1.7	–2.3	0.26
PCIHIC – PCISSA			4.8	3.93	–1.56	0.79
PCIHIC – PCILMC	2.06	0.25	0.7	0.07	–3.71	–0.48
PCIHIC – PCIMNA		–0.46	4.8	0.54	–2.28	–0.17
PCIHIC – PCILMY			0.94	–0.63	–3.95	–0.69
PCIHIC – PCIEAP			–3.61	–5.22	–7.39	–1.7
PCIHIC – PCILDC				–0.4	–3.23	–0.13

Source: Compiled by the Author based on Table-1

Further, we have tested the β-convergence based on the pooled data on GNIPC from 8 Cross-section of country groups, namely, LAC, EAP, LDC,LIC,LMC,LMY, MNA, SSA, and the remaining group, viz., HIC has been treated as the reference group. For that we first selected the fixed effect model as opposed to the random effect model based on Hausman Test. The lag specification and evidence of β-convergence (for the period 2000-21) is shown in the following table.

Table-3 The lag specification and evidence of β-convergence

Variable	fe_1	fe_2	fe_3
GNIPCL	– 0.00001003 0.0000	– 0.00001181 0.4749	– 0.00002919 0.0968
L1		1.653 e–08 0.9992	0.00004007 0.2228

L2			– 0.0000252 0.2864
_Cons	0.05804707 0.0000	0.06402474 0.0000	0.07135906 0.0000
N	168	160	152
aic	–854.39543	–815.30725	–779.42792
bic	–848.1475	–806.08173	–767.3324

Source: Authors' calculation

Table-3 shows that the coefficients of lagged gross national income per capita (GNIPCL) are negative in each specification [model without L1 and L2(fe_1, model) with L1 (fe_2)& model with L1 and L2(fe_3)], implying absolute β-convergence.

However, despite such indications of convergence in economic growth, the absolute gap between the average PCI of the HIC group and that of the non-HIC group may rise particularly because of the low income base of the less developed and developing countries.

This income gap between different groups of countries can also be expressed in terms of the ratio of PCI of HIC to that of different groups of nations (say, LAC, LIC, SSA and LMC). Table-3 shows that the real PCI of HIC group was about 4 times higher than that of the LAC group in 1960-61 and this was gradually increased up to about 6 times in 2000-01, which was followed by a marginal decline in 2012-13. Similarly, the PCI of HIC group was about 77 times higher than that of the LIC group in 1990-91, and this was further increased to about 95 times in 2000-01 followed by a substantial decline to about 73 times in 2012-13. A falling trend in this ratio particularly during 2000-21 establishes the process of convergence in economic growth.

Table-4 Ratio of PCI of HIC to Different Country Groups of the World

PCI (in US 2005 $) Ratio	1960-61	1970-71	1980-81	1990-91	2000-01	2012-13	2020-21
PCIHIC /PCILAC	4.23	4.92	4.38	6.03	6.33	5.68	5.52
PCIHIC/ PCILIC				77.67	94.82	73.70	56.89
PCIHIC/ PCISSA			21.18 a	30.07	38.93	33.07	27.95
PCIHIC / PCILMC	31.97 b	35.14	37.12	38.12	39.49	26.12	18.50

Source: World Development Indicators (2015, 2022), World Bank (Compiled by the Author) [a: For 1982-83; b: For 1965-66]

Let us now delve into the area of convergence/divergence in the process of economic development.

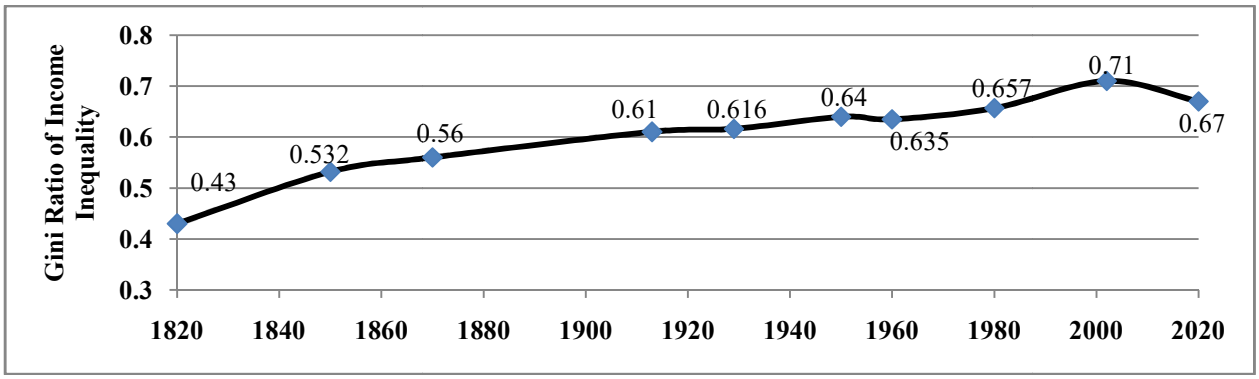
4.1. Inequalities in Income Distribution

There are two aspects to the measurement of income inequality across the world:

(a) Inequality between nations (which may be termed as *international inequality*), and
(b) Inequality between people across the world, which also takes account of the distribution of income within countries (which may be termed as *global inequality*).

So far as the *international inequality* is concerned, it has been observed that the 'Low-income and lower middle-income countries' contain about 48 per cent of world population and receive only about 7 per cent of world income, while the 'High-income countries' contain about 16 per cent of world population and yet receive about 70 per cent of world income (World Bank, 2012). This feature of the world economy has been rightly described by the UNDP as 'gargantuan in its excess and grotesque in its human and economic inequalities' (Thirlwall, 2006).

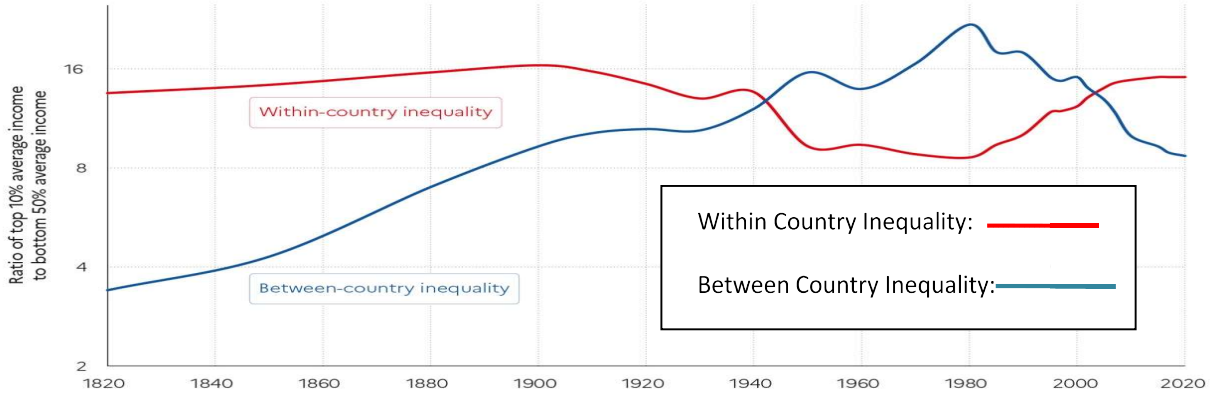
Fig.-1 Gini Index Showing the Trend of Global Inequality



Source: Milanovic (2009), World Inequality Report (2022)

Despite the convergence in the average income of some big developing economies, rising income inequalities within these economies mean that overall global inequality did not go down. On the contrary, it showed some increase during the era of globalization from the mid-1980s to the early 2000s. Studies using longer time series conclude that income inequality has been constantly increasing since the early 19th century. Milanovic (2009), for example, calculates Gini indices over time and finds that global income inequality rose steadily from 1820 to 2002, with a significant increase from 1980 onwards (Fig.-1). However, during 2000-2020, there has been a decline in the global income inequality (World Inequality Report, 2022). But the Report states that "*it is too early to say whether the decline in the global Gini coefficient observed since 2000 will continue"* or not.
The World Inequality Report (2022) indicates that during the period 1940-1980, between-country inequality has increased while within-country inequality has declined. However, an opposite trend is observed during 1980-2020(Fig.-2).

Fig.-2 Trend of Within-Country and Between-Country Inequality in the Distribution of Income

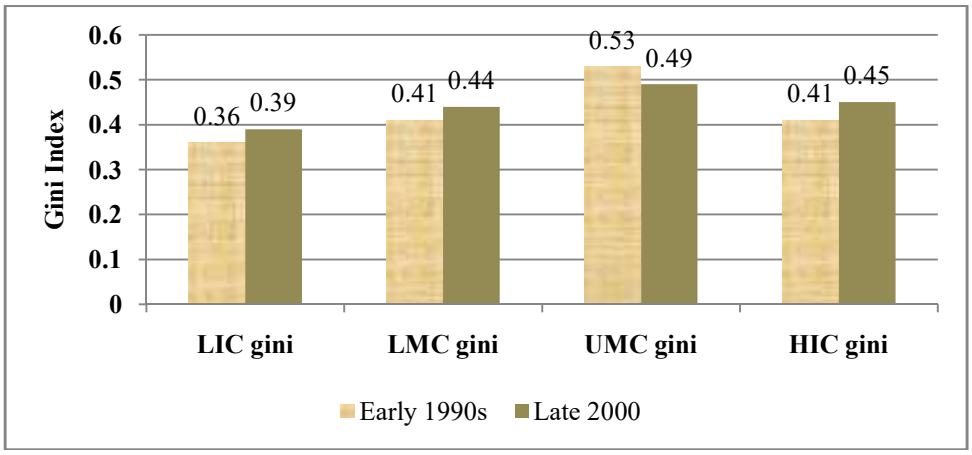


Source: The World Inequality Report (2022)

Further, statistical information on household income inequality shows a rising trend from the early 1990s to the late 2000s in most countries. In a sample of 116 countries (UNDP,2013), household income inequality as measured by the population-weighted average level of the Gini index increased by 9.4 per cent (from 41.4 to 45.3)

for the group of HIC. This inequality trends were not also uniform for countries when classified according to income groups (viz. HIC, LMC, UMC and LIC). It is observed that income inequality increased by 10.8 per cent for the LIC and 6.8 per cent for the LMC groups of countries. The only income group that showed a decline in the level of income inequality was the group of the upper-middle-income countries (UMC) (Fig.-3).

Fig.-3Gini Index of Household Income Inequality across Different Country Groups



Source: UNDP (2013), Table:3.4, P-67

Initial income inequality can positively or negatively affect the possibility and speed with which a person can proceed in life. Generally, it is accepted that higher incomes provide people with opportunities to secure their well-being and to get ahead in life.countries can be explained based on some significant differences in their initial conditions (Todaro & Smith, 2012).

4.2. Inequalities in Health, Nutrition and Educational Outcomes

The process of economic development is often measured in terms of the improvement in the access to health, education and nutritional facilities by the common people in any country.

Inequality in health, nutrition and educational outcomes is considered to important for its linkage with economic growth and income distribution.

UNDP (2013) has considered the following Indicators for estimating the outcomes in terms of Education, Health & Nutrition in any country:

1. Education: (i) Primary Completion Rate (PCR), (ii) Secondary Enrolment Rate (SER);
2. Health: (i) Total Fertility rate (TFR), (ii) Under-5 Mortality rate (per 1,000 live birth) (U5MR);
3. Nutrition: (i) Maternal Mortality rate (per 1, 00, 000 childbirth) (MMR), (ii) Proportion of Stunted Child Under -5 (PSC).

In education front, the PCR reached at 100 per cent mark in HIC, 96 per cent in UMC and about 88 per cent in LMC group during 2006-10. However, the LIC group failed to raise the PCR during 2001-10, with the level stuck at around 64 per cent (Table-5).

The SER, the second criterion for measuring the outcomes in education front, indicated modest improvements across income groups, except for the UMC group which improved at a rate of 21 per cent. The slow pace of improvement in SER in LIC, viz., by about 8 per cent during 2001-10, seems to be a matter of grave concern (Table-5). Despite substantial achievements in PCR, there remains huge lag in SER. The gap between PCR and SER was high for all income groups, but this was highest for countries in the LIC group, where about 65 per cent of the relevant age group completed primary education, but only 36 per cent of the relevant age group enrolled in secondary education. This gap actually implies the growing incidence of dropouts at the primary stage.

So far as the outcomes in health front are concerned, it is observed that TFR improved for all income groups, though this improvement was very modest for HIC group. The TFR in LIC was almost double in comparison with that of HIC group, and this was about 2.5 times higher than that in UMC group during 2006-10 (Table-5).

Table-5 Indicators of Development Gap

Development Indicator	HIC			LMC			UMC			LIC		
	2001-05	2006-10	2010-16	2001-05	2006-10	2010-16	2001-05	2006-10	2010-16	2001-05	2006-10	2010-16
PCR	97.9	101.1	102	67.2	87.8	103	83.9	96.0	110	64.6	63.7	98
SER	68.7	73.2	106	44.6	50.8	73	53.9	65.2	96	33.6	36.3	43
TFR	2.31	2.18	1.8	3.67	3.04	2.6	2.34	1.86	1.8	5.1	4.76	4.9
U5MR	25	21	6.1	78.4	67.0	43.1	49.8	20.1	12.9	123.7	107.8	78.4
MMR	41.0	46.2	14	170.9	139.0	78.5	75.5	65.6	36	574.5	452.7	436
PSC	21	20.9	2.5	41.3	39.1	32	16.8	14.7	6.9	43.1	41.7	36.2

Source: UNDP (2013), HDR (2016,2018), Levels & Trends in Child Malnutrition (UNICEF), 2017; Trends in Maternal Mortality (UNICEF), 2020

The U5MR also improved in all income groups between the early and late 2000s. However, there remains a large gap in this regard between the LIC and the HIC groups. In fact, the children in LIC group of countries were five times more likely to die before reaching their fifth birthday than children in the countries of the HIC and UMC groups during 2006-10 (Table-5).

Progress in both those health indicators was fastest in countries belonging to the UMC with TFR and U5MR falling by 20 per cent and 40 per cent, respectively, from the early to the late 2000s. However, this progress was slowest in countries belonging to the LIC group, with reductions of only 6 per cent in TFR and 12 per cent in U5MR during that period (Table-5).

One of the indicators of the gap on nutrition front is MMR which indicates a declining trend for all income groups during 2001-10. Here, the rate of decline was higher for the LIC group (21 per cent) than for the LMC (19 per cent) and UMC (13 percent) groups. But in spite of this improvement, women in the LIC group are still about 10 times more likely to die at the time of childbirth than those in the HIC group during 2006-10 (Table-5).

The malnutrition situation measured in terms of the PSC does not indicate any sign of significant improvement across different groups of countries. In fact, the PSC was almost identical at around 40 per cent in the LMC and LIC groups between the early and late 2000s (Table-5). It was also found to remain stagnant at about 21 per cent in HIC group. However, the PSC in LIC was twice that of the HIC implying greater incidence of malnutrition in LIC group.

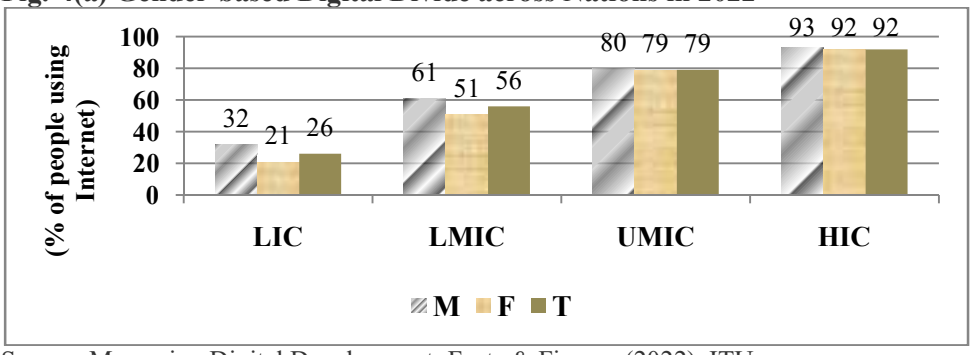
All these indicators clearly show an improving trend in health, education and nutritional fronts across the countries belonging to all income groups. However, there remains a large gap between the LIC and the HIC in these fronts. In the education front, these gaps have increased between the LIC and HIC groups during 2001-10 (Table-5). It seems that income level is an important determinant of well-being of the people in any society. However, unequal progress across groups points to the fact that it is not the only, or the most significant, factor.

4.3. Digital divide across nations

Recently the problems of digital divide both with and across nations have become prominent and this has become an important driver behind growing inequality in the access to educational facilities. Though Digital technologies can greatly enhance factor productivity, but they can reinforce and indeed accelerate inequalities. As the world

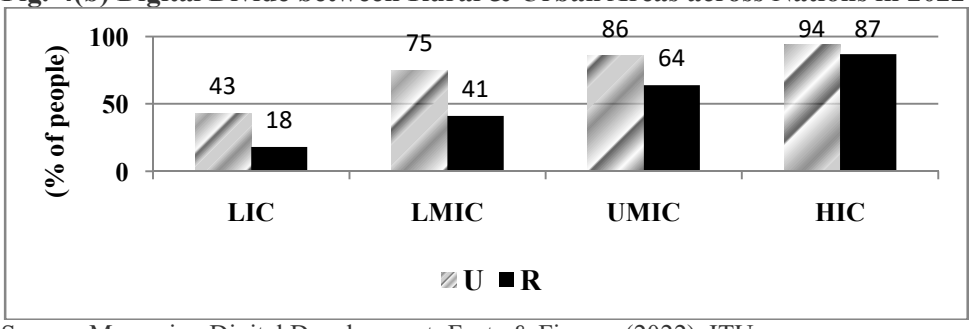
becomes more digitally dependent, it threatens to exclude those that remain disconnected. In 2022, almost half of the world's population, 3.7 billion people, most of them women, living mostly in developing countries, did not have access to internet connection.

Fig.-4(a) Gender-based Digital Divide across Nations in 2022



Source: Measuring Digital Development: Facts & Figures (2022), ITU

Fig.-4(b) Digital Divide between Rural & Urban Areas across Nations in 2022



Source: Measuring Digital Development: Facts & Figures (2022), ITU

4.4. Inequality arising out of climate change

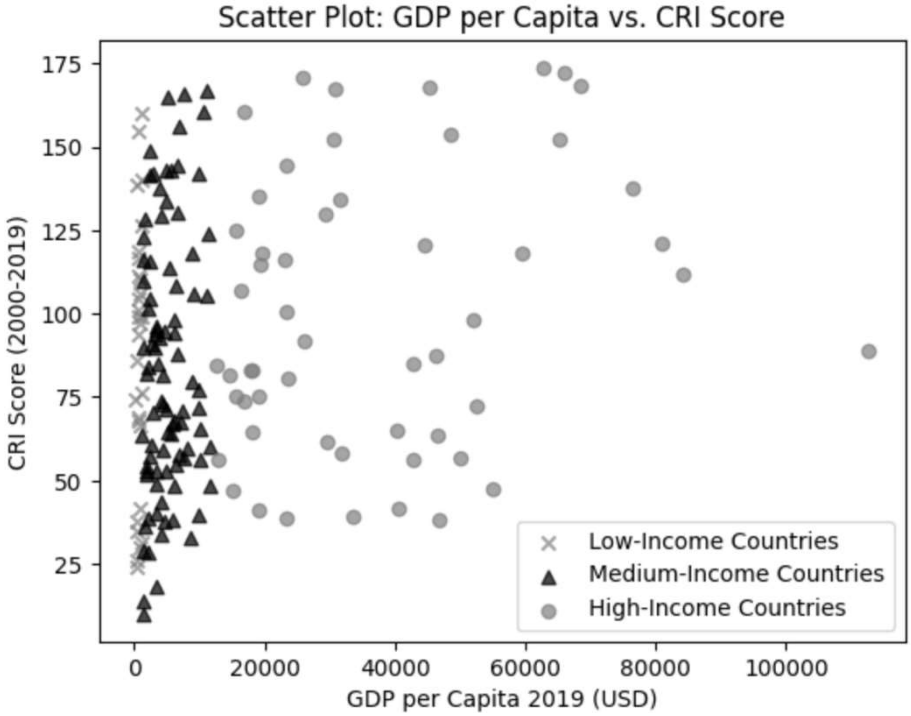
The accelerating climate crisis is largely fueled by the polluting activities of a fraction of the world population, viz. the rich capitalist countries. The global top 10% is responsible for almost half of global carbon emissions and the global top 1% of emitters are responsible for more emissions than the entire bottom half of the world's population.

Within-country inequality is a critical dimension of the global emissions distribution. It is found that within-country carbon inequality now makes up the bulk of global emissions inequality, i.e. about two thirds of the total, an almost complete reversal as compared to 1990. In 1990, 62% of the global carbon inequality was due to between country inequalities but in 2019, it has been observed that 64% of the global carbon inequality was due to within country inequality. Within countries, the poor suffer stronger losses from climate impacts than more affluent. The income losses from climate hazards of the bottom 40% are estimated to be 70% larger than the average in low- and middle-income countries.

Poverty and vulnerability to climate hazards are correlated and mutually enforce each other.

Many low-income regions are facing agricultural productivity losses of 30% and more due to climate change which aggravates poverty and food insecurity. Over 780 million people globally are currently exposed to the combined risk of poverty and serious flooding, mostly in developing countries. The CRI score analyses quantified impact of extreme weather events.

Figure 9 : GDP per Capita vs CRI Score



Source: World Bank Data (2019) & GERMANWATCH

Many countries in the Global South are significantly poorer today than they would have been in the absence of climate change. This trend is set to continue and result in income losses of more than 80% for many tropical and subtropical countries by the end of the century. (Chancel et.al., 2023)

5. Conclusion and policy Implications

This study shows that there remains a definite indication of β-convergence in the growth rate of real PCI across different groups of nations particularly during the period 2000-2013 which implies that the average annual growth rates of real PCI in less developed and developing nations have been higher than that achieved by the developed nations during that period. This convergence in PCI growth across countries belonging to different income groups has also been accompanied by σ-convergence, i.e. the dispersion of real PCI across a group of economies has also declined over time. Thus, higher growth rates of PCI in low-income and lower middle-income countries in comparison with that that of high-income countries can substantially bring down the income disparities between countries that can auger well for the world economic development in the long-run.

However, despite such indications of growth convergence, there remain areas of development divergence between the low-income and high-income countries. These divergences become evident in the form of international and global inequality in the distribution of income, uneven outcomes in education, health and nutrition between those groups of nations and a divergence in terms of human development index over the last few decades. It is also observed that countries that achieved higher growth rates were also countries that started off with higher initial levels of education, health and nutrition outcomes. If growth dividends are translated into fiscal gains that support programmes for greater access to public and merit goods, then that growth would be beneficial for human development. The policy frame of the LDDCs should put greater emphasis on government investment in primary education, primary health, and other social sector schemes to make the common people more capable of using income-generating assets.

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