



INCLUSIVE WEALTH INDEX: A COMPREHENSIVE MEASURE OF LIFE TOWARDS 'NET ZERO'



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Abstract

he Inclusive Wealth Index (IWI), first created in 2012 by the United Nations University (UNU) and United Nations Environment Programme (UNEP), measures changes in the total wealth of nations. It is an index based on the sum of a country's natural, human, social, and physical (including manufactured and financial) capital, and goes beyond conventional forms of wealth measurement such as gross domestic product (GDP). It enables policymakers to understand a country's wealth stock and whether it is increasing or depleting, which in turn helps in managing the economy. IWI includes available natural resources, the ecosystem services provided by nature, the levels of human health, education, and skill, and built physical infrastructure such as roads and factories. At the G20, the idea that development should encompass more than mere GDP was first discussed during Saudi Arabia's presidency in 2021, and again in 2022, under Indonesia's presidency. India takes the idea further through the concept of 'Lifestyle for Environment' (LiFE).

The Challenge

t is recognised that GDP has limitations as an indicator of development. In its current form, GDP only measures a country's physical assets and the monetary value of its goods and services. What it cannot measure is the collateral consumption and depletion of exhaustible natural resources used to fuel asset creation. It does not cover the collateral damage caused to human health, the surrounding environment, and social wellbeing. Researchers have noted that GDP is misleading and vague in evaluating human wellbeing (Rogers et al. 2012), and that human and natural capital must be included in the productive framework of an economy (Managi et al. 2022, Agarwala et al. 2014).

In recent years, the World Bank has also promoted the concept of going beyond GDP under the flagship programme, 'The Changing Wealth of Nations 2021'. It promotes the idea of measuring a nation's wealth by summing up its produced, natural,

human, and net foreign asset resources. The World Economic Forum (WEF) has also discussed alternatives to GDP to measure a nation's growth and prosperity.

India is deeply rooted in the wisdom of its ancient civilisation. Indian philosophy considers the planet Earth a living entity, as humanity's Mother. India's philosophy regards all of creation as the manifestation of a non-dual, purely conscious, entirely blissful Supreme Being. This Supreme divine is manifested in five primary elements—prithvi (earth), jal (water), agni (fire), vayu (air), and akash (space) (Dayal, 2018). These five constitute everything in the universe and are worshipped as the essence of Life. Similarly, LiFE encompasses all aspects of inclusive and comprehensive growth, the UN's Sustainable Development Goals (SDGs), and economic prosperity. Fig.1 shows how LiFE is an overarching concept of a nation's socio-economic and environmental development.

Comprehensive Growth (IW)

SD Goals

Economic Growth

Figure 1. The Various Developmental Measurements

Source: Authors' own.

Comprehending LiFE

Comprehending LiFE and measuring it could be problematic if it is seen only as an immediate indicator of prosperity. The concept is intergenerational and encompasses the tangible and intangible assets of people.

Efforts to go beyond GDP in estimating a nation's wealth include concepts such as the Green GDP (2004), the Genuine Progress Indicator (2006), and the Organisation for Economic Cooperation and Development's (OECD)

Better Life Index (2011). Green GDP measures net GDP after deducting the environmental and social costs of development. However, this does not take into account some other assets of a country's economy, such as its human resources or its prevailing ecosystem. Similarly, Genuine Progress Indicator (GPI) measures comprehensive and sustainable growth, factoring in social and environmental costs. The OECD's Better Life Index is a dashboard aimed at capturing the comprehensive wellbeing of a country by measuring individual-

level activities rather than at the national level. It is often a challenge, however, to secure reliable data at the personal level in developing countries.

Alternatives to GDP were further established at the UN meeting on the Green Economy in Rio de Janeiro in June 2012, and a new Inclusive Wealth Index (IWI) was created. The IWI is a comprehensive approach focused on a nation's macro-level growth and development. It is less data-intensive than the earlier concepts and thus more appropriate for developing countries with lower data access. Applications of this index were later published in reports in 2014 and 2018 (UNU-IHDP and UNEP, 2014; Managi and Kumar, 2018). The IWI notes that even individual wealth goes beyond personal assets and includes co-sharing of common assets in a community (Bizikova et al. 2022). The community's prosperity is also part of the overall wealth of individuals, and thus, societal wellbeing. This is perhaps one of the significant deviations of IWI from other indicators.

Four complexities arise while determining the wealth of a country or region:

- (a) Can wealth determined using the usual parameters ensure strong sustainability, even if capital values of all assets are increasing or at least have remained unaltered over a period of time?
- (b) How do future asset price signals impact wealth estimate (are such signals unbiased?)
- (c) How can equity in wealth distribution be maintained?
- (d) How can future uncertainties (such as sudden loss of natural capital or human capital due to climate disaster) be factored in while estimating wealth? (Polasky et. al 2015; Guerry et.al 2015)

IW can be spatially distributed across a country, depending upon the regional diversity of its natural, human, produced, and even social capital. Thus, estimating national IW value requires precise spatial and temporal indicators.

A two-dimensional assessment of IW would help highlight the issues of strong sustainability versus weak sustainability, and the extent of equity in wealth distribution. Other parts of the country could still compensate for sudden loss of natural capital in one part provided IW is measured spatially.

This Policy Brief proposes that the assessment of LiFE can be based on the principle of IW but with spatial distribution within a country and further aggregated on a weighted average. The LiFE index of a country can be derived by assessing the IWI for each of its subregions, and then summing them up on a temporal scale.

 $\label{eq:likelihood} \begin{aligned} & \text{LiFE Index} = \sum_{\text{regions}} \left[\text{ IW}_{\text{t}} \text{ (SC, HC, MC,} \\ & \text{NC)} \right] \end{aligned}$

(SC: Social Capital, HC: Human Capital, MC: Manufactured / Produced capital, and NC: Natural Capital)

Implementing LiFE

Adopting the LiFE index as an indicator of growth and wellbeing will require significant investment of public resources, and capacity building at all levels, to create an enabling environment for transition. Even after setting up the

foundation and theoretical basis of the index, measuring it could be challenging for the following reasons:

- Lack of public awareness: One of the biggest challenges of measuring the LiFE index could be the lack of understanding of the concept and its implications.
- and data: The proposed LiFE index measures various socio-economic and cultural aspects of life. Providing quantitative values to them all will be daunting. Availability of adequate and reliable data to measure the index values will be crucial.
- Resistance to change: LiFE is an inclusive developmental movement.
 People's participation and their willingness to accept change is crucial for social capital formation.
- Lack of coordination: Coordination among states/provinces within a country and their willingness to share data in a transparent manner is essential.

Ability to take risks of adopting new approach of measuring growth and development, and patience of learning of new things are vital to the longterm implementation of the LiFE index. Cooperation and coordination among countries is crucial, but may be difficult due to the volatile geopolitical situation in and outside the G20 group. Nonetheless, G20 countries, with their large and highly skilled bureaucracies, significant financial resources, and robust decision-making processes, are strategically positioned to lead the necessary transition towards LiFE. (Zoundi et.al. 2022)

G20's think tank T20 has already acknowledged in its 2022 communiqué that IW could be an alternative to measure sustainable development beyond GDP.^a However, specifics on what new indicators should be adopted have not been provided. G20 countries need to embrace the LiFE index as a core measure of progress.

Figure 2 shows the correlation between the IW index and the UN's SDG Index for 147 countries, divided into four categories based on income level (Sugiawan et al. 2023). Q1, Q2, Q3, and Q4 represent quadrants in the plot that portray how well a particular country follows the sustainable development path. Q1 depicts the most sustainable path since the positive growth in the SDG Index score was followed by positive growth in the per capita IW Index, while Q3 represents the most unsustainable path since both the SDG Index score and the per capita IW Index were decreasing. It shows that 97 of the 147 countries are in the first quadrant (Q1), which has positive growth for both the IWI and the SDG Index. In the second quadrant (Q2), there are 47 countries these show positive SDG growth but negative IWI, indicating that they are on a short-term sustainability pathway. Intergenerational passage of wealth is not observed. The third quadrant (Q3) is that of the worst performing countries where both the SDG index and the IWI are declining - these are countries on a completely unsustainable pathway. The fourth quadrant (Q4) is where SDG development is negative, but IWI is increasing. This further corroborates the potential of the IWI to be a versatile measurement of the comprehensive developmental aspects of a nation.

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a T20 Communique: https://summit.t20indonesia.org/wp-content/uploads/2022/09/T20-Communique% CC%81.pdf (p 23)

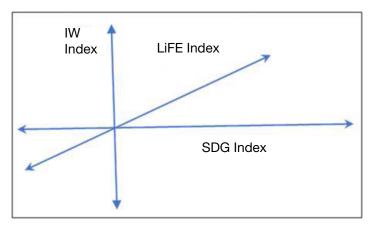
Figure 2: IWI vs SDG Index Comparison

Source: Sugiawan et.al. 2023 (Recreated by the authors)

Recognising the correlation between the SDGs and IWI, this Policy Brief further proposes a framework which could be replicated for the LiFE Index, where all three indices (IWI, SDG and LiFE) could be examined together for a more granular assessment of the developmental performance of countries. As the LiFE Index will be a

summation of the weighted averages of regional IWIs, it can provide a spatial dimension to the development status of the country; this can further be compared to the SDG Index for more comprehensive measures. Figure 4 shows an illustrative example.

Fig. 4 Illustrative example of three-dimensional comparison of development



Source: Authors' own

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The G20's Role



iFE is a manifestation of the Indian philosophy of co-existence with nature and its five elements. It is a desirable pathway that can ensure reduction of GHG emissions while fulfilling the imperatives of socioeconomic growth and development. There is a need to measure LiFE so that people can adapt and ride in its direction. The proposed Inclusive Wealth Index is one of the closest possible measures of LiFE that can provide a cardinal measurement of progress in an ordinal concept. This Policy Brief highlights the importance of IWI in the context of converting the LiFE concept to a LiFE practice for achieving 'Net Zero'.

Adopting the LiFE Index as a holistic measure for sustainable development and achieving net-zero within a legitimate timeframe, will help G20 countries quantify their progress and understand the need for course-correction during transition. The proposed LiFE Index will also help G20 countries internalise the spatial developmental equity which is a key indicator for success.

Under the presidency of India, the G20 countries can adopt the LiFE Index as a comprehensive instrument of measuring climateresilient sustainable development, fundamentally based on the principles of intergenerational equity at temporal and spatial scale. G20 countries should utilise India's G20 presidency to begin measuring developmental progress based on internationally comparable, reliable, granular, and timely data. Such data needs to be amenable to disaggregation and be based on robust indicators, leading to multidimensional wellbeing metrics, covering aspects like economic and social wellbeing, and environmental and ecological sustainability. Adopting a new measurement framework for intergenerational and comprehensive wellbeing which is acceptable to all will require international cooperation. The G20 is an ideal platform to impart traction to this work.

Recommendations to the G20



iFE aims to address the challenges of climate change and sustainable development. The proposed LiFE index, derived through spatial summation of national IWIs, could be a blueprint for the LiFE implementation plan of a country. This section highlights steps that can be taken to adopt and implement it across the G20 countries.

Proposal 1

G20 countries must engage with one another and other like-minded countries to develop a universally accepted methodology for the LiFE Index through aggregation of spatially distributed IWIs as an alternative indicator of sustainable development. Following the principles of IW, the LiFE Index should be a derived index based on an assessment of the natural, human, social, and physical capital of a country over a period of time and across the geographical regions of the country.

G20 countries should identify a new set of indicators to track their success (or otherwise) at turning their composite national wealth into actual wellbeing. Wellbeing comes from consuming the goods and services produced when assets are applied in production activity,

both within and outside the market. The output of the goods and services produced is already captured by GDP, but GDP fails to include the benefits provided by goods and services outside the traditional boundary of the market. These could be natural capital, such as clean air and water, or the pristine beauty of a coastline which makes the region attractive to tourists, or social capital, such as the level of community health and safety.

A complete framework for measuring progress would comprise inclusive wealth indicators along with GDP. LiFE also needs to capture the diversity of market and non-market values of different kinds of capital, which are deeply rooted and acceptable to communities. People's priorities vary from location to location and are linked to geographical, ecological, and natural diversities. These should be part of the move beyond GDP.

Proposal 2

G20 countries must engage with one another and like-minded nations for capacity building around the LiFE Index. Its value as a policy guide must be explained properly. Both the G20's tracks – the track on Finance

(Framework for Strong, Sustainable and Balanced Growth) and the Sherpa track (on sustainable development goals) should be used to stress the importance of the LiFE index.

Two aspects should be closely looked at: (a) the diversity of member countries in the context of their inclusive wealth portfolios; and (b) how to reorient deeprooted traditional ways of measuring economic growth towards more progressive ones. It is also essential to develop a plan for structured training and capacity building in statisticsrelated departments to ensure proper measurement of the metrics needed to develop the LiFE index. Capacity building should focus on technical details (indicators, data, calculations), as well as their utility in long-term planning. It should cover how to read and interpret indicator values, how to improve the values and what actions should be taken in the short/medium and long term.

It is equally important to create a comprehensive data collection and maintenance standard and facility for seamless access to evaluate and monitor the LiFE index. Technical staff will need training to craft new assessment tools

incorporating inclusive wealth-based values, while senior officials will have to learn to guide them to understand the index. A separate agency should be created at the national level exclusively for the LiFE index, hosted under any relevant ministry/department. G20 summits can be the platform to discuss the progress, updates, and hurdles of implementing the LiFE index.

Proposal 3

G20 countries should engage with one another and like-minded nations to take small steps towards implementing the LiFE index. While fixing the methodology, and setting the institutional arrangements for its formal acceptance as an alternative to GDP-based development measurement, they should also:

- Adopt a sustainable lifestyle:
 One way to improve scores on the
 LiFE index would be to assess the
 extent to which communities have
 transitioned to renewable energy.
- Reduce carbon emissions:
 This can be done by promoting sustainable practices such as bringing down fossil fuel use and increasing use of renewable energy.

Measuring the reduction in carbon emissions will indicate its impact on climate change.

- Improve livelihoods: This will call for promoting sustainable practices that enhance productivity and income. Measuring income, productivity, and employment changes will indicate the impact on livelihoods.
- Enhance education and knowledge: Education being a human capital, enhancing the coverage of education will improve the overall human capital index

score and thus the LiFE index.

Measuring changes in awareness
levels and ability will indicate the impact on education.

Enhance people's participation: Enhancing coordination among various stakeholders such as government agencies, nongovernment organisations (NGOs), and local communities is essential to promoting sustainable development. Measuring the extent of collaboration and partnership will indicate the impact on building development sustainable ecosystem.

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