

Measuring what matters

Tracking Indian economy's contribution to prosperity of its people and planet!



India Green Economy Barometer 2017



MAINSTREAMING
ALTERNATIVE
PERSPECTIVES
Towards Sustainable Economies



**Development
Alternatives**

Redefining our understanding of progress with the needs of our societies and our natural systems as our objectives will help to create the right long-term priorities for investment, which in turn drives sector innovation for new industries to grow and create wealth, community resilience and jobs, and deliver improvements to the management of our natural assets.

Measures of growth are an important part of the picture, but not if they are at the expense of our societies and environment. We need to align indicators and governance arrangements with the actual requirement of stakeholders and the needs for future prosperity. The three key components of the measurements are:

Economic resilience

National governments manage economies with a limited set of indicators at the front of their minds including GDP growth at the top followed by inflation, fiscal stability and balance of payments. Managing economies on the basis of a broader indicator set could avoid economic policy undermining the objectives of social and environmental policy. It would also ensure that they are more sensitive to environmental and social threats and opportunities.

Prosperous societies

For each of us as individuals and members of families and communities, alternative and better metrics – and

improved governance for them – would make it much more likely that we achieve a form of prosperity that includes financial and material wellbeing, but can also go beyond that, to include a good quality of life and the realistic hope of sustaining it into the future. This is about addressing not only material poverty but also the poverty associated with environmental deprivations – including bad health, poor living conditions, and degraded soils and water bodies.

Business opportunity

Alternative metrics to assess the environmental and societal impact of a company's operations allow businesses to tackle vital questions regarding their impacts, business risks, cost savings and longer-term resilience. Corporate reporting can become a new tool for both identifying risks and communicating intangible assets.

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Is Indian economy tracking its resilience?

Economic Survey 2016 proclaims the Indian economy to be a “haven of macroeconomic stability, resilience and optimism”.

The economy of India is the seventh largest in the world by nominal GDP (at USD 2 trillion) and the third largest by purchasing power parity (PPP). The country is one of the G-20 major economies and a member of BRICS. India ranked 145th by nominal GDP on per capita income basis in 2015, according to the IMF. India, like most countries in the world, values sustained growth and macro-economic stability and therefore tracks its economic progress on measures of growth and stability. Some of the key indicators of the economy include:

Gross Domestic Product (GDP), its growth rate and inflation:

GDP is one of the most widely used measures of an economy's output or production. GDP growth rate further measures the pace at which the economy grows. Rise in GDP shows that there is more value addition in the economy, or there is a higher income or rise in expenditure, and therefore more income

opportunities are generated. Senior economists including Prof. Jagdish Bhagwati and Dr. Arvind Panagariya, believes that economic growth measured by GDP constitutes the foundation for any meaningful development and the reduction of poverty.

India's economic growth since 1990s has indeed substantially reduced poverty: according to Planning Commission estimates, the proportion of poor population fell from 44.5 (1983) to 27.5 (2004-05) per cent; considering population growth during this period into account, they estimated that 187.5 million people have left the status of poverty (at least in its most extreme form) in the same period.

Inflation, represented as an increase in the price of basket of goods produced, increases the value of GDP without actually increasing the economy's output. The reasons of inflation range from excess printing of money, rise in production costs, debts, and taxes.

Since 1950 India has experienced one of the lowest inflation rates in the world as compared to other developing countries. The biggest turmoil of inflation came in the year 2008- 2009 when India experienced both the highest ever rate of inflation in the country and the lowest rate within the span of just few months. (Jamuna, 2016)

Fiscal deficit and current account deficit

Fiscal deficit, the excess expenditure that the government makes over the total receipts. The ill-effects of high deficits are linked to the way they are financed and how it is used. A higher fiscal deficit implies high government borrowing and high debt servicing, which forces the government to cut back its spending on relevant sectors like health, education and infrastructure. However, fiscal deficit used for creating infrastructure and human capital, will have a different impact than if it is used for financing ill-targeted subsidies and wasteful recurrent expenditure.

Indian economy, faced with the problem of large fiscal deficit and its monetization, spilled over to the external sector in the late 1980s and early 1990s. The large borrowings of the government led to a precarious situation that the government was unable to pay even for three weeks of imports, resulting in the economic crisis of 1991. The gross fiscal deficit was as high as 7.61% of the GDP in 1991 and 6.29% of the GDP in 1998. The Government introduced Fiscal Responsibility and Budget Management (FRBM) Act, 2003, to check the deteriorating fiscal situations and restore fiscal discipline. FRBM Act set overall limits to the fiscal deficit at 3% of GDP to be achieved according to a phased deficit reduction roadmap. The Act aimed at reducing the gross fiscal deficit by 0.5% of GDP in each financial year, beginning on April 1, 2000. As a result of these efforts, fiscal deficit as a proportion of GDP started declining. Gross fiscal deficit of India in 2015-16 reached 3.94% of the GDP.

A country with current account deficit, becomes a 'debtor' to the world. A deficit in current account is associated with trade deficit and is represented as imports exceeding exports.

India's trade deficit was the highest at USD 190.3 billion in 2012-13. However, it declined by 13.8 per cent from USD 137.7 billion in 2014-15 to USD 118.7 billion in 2015-16. During 2016-17 (April-February), trade deficit decreased to USD 95.3 billion, as against USD 114.3 billion in the corresponding period of the previous year.

India's external sector position has been relatively comfortable, with the current account deficit (CAD) progressively contracting from USD 88.2 billion (4.8 per cent of GDP) in 2012-13 to USD 22.2 billion (1.1 per cent of GDP) in 2015-16. On a cumulative basis, the CAD narrowed to 0.7 per cent of GDP in April-December 2016 from 1.4 per cent in the corresponding period of 2015-16 on the back of the contraction in the trade deficit.

Alternatives metrics

It is often outwardly deducted that a positive GDP growth rate represents corresponding growth in well-being. Policy makers mostly ignore that GDP growth may bring a proportional increase of production and, therefore, may cause radical changes in the society and the overexploitation of environmental resources. Given below are some of the popular experiments and work in deducing indices to move beyond GDP and inculcating measures of social-environmental impact in the economy:

Gross National Happiness

The fifth World Happiness Report 2017 ranks 155 countries by their happiness levels, as the initiative started in 2012. Bhutan has been using the index of Gross National Happiness instead of GDP to measure success since 1970s. The happiness rankings are based on six factors: GDP per capita, healthy years of life expectancy, social support (as measured by having someone to count on in times of trouble), trust (as measured by a perceived absence of corruption in government and business), perceived freedom to make life decisions, and generosity (as measured by recent donations).

*People in India are grumpier, as most people in other parts of the world have attracted a fair amount of attention in the country. India ranked **122 out of 155 countries** according to the index in the 2017 report. However, in 2016, Madhya Pradesh became the first Indian state to set up a "department of happiness".*

Are we actually better off by replacing GDP with a happiness index?

Critiques to measuring happiness comes from "defining" happiness and further difficulty in "measuring" it. Some people argue that the pursuit of happiness, at least for the developing world, lies in the pursuit of wealth and material well-being.

- In a study in 2010, the Nobel Prize-winning economist Angus Deaton and the psychologist Daniel Kahneman took the Gallup poll data for about 500,000 residents in the US to show that happiness increases with income, although there is an upper bound beyond which the income effect dissipates.
- An important 2003 research paper by Rafael Di Tella of the Harvard Business School reported that happiness monotonically increases with income, and decreases during economic shocks such as a recession.
- The World Happiness report is based on responses to questions such as "how people see their lives", where people are asked to evaluate their current lives on a scale of 0 to 10. The problem with such methodologies is that the data, or the answers to the questions, are not independent of space-time.

Happy Planet Index

The Happy Planet Index (HPI) measures sustainable well-being for all. It tells how well nations are doing at achieving long, happy, sustainable lives. The Happy Planet Index combines four elements to show how efficiently residents of different countries are using environmental resources to lead long, happy lives: **well-being, life expectancy, inequality of outcomes, ecological footprint**. It is important to note that four of the top 40 countries having per capita GDP exceeding USD 15,000, have a large ecological footprint and life expectancy exceeding 80 years.

*India achieves a Happy Planet Index **Score of 29.2 and ranks 50th of the 140 countries** analysed. India ranks lower than most South Asian countries like Pakistan (Score – 31.5, Rank – 36), Bangladesh (Score – 38.4, Rank – 8), Sri Lanka (Score – 33.8, Rank – 28) and Nepal (Score – 30.5, Rank – 42). India's score is also lower than United Kingdom (Score – 31.9, Rank – 34) and Norway (Score – 36.8, Rank – 18). However, developed nations like Canada (Score – 23.9, Rank – 85), Australia (Score – 21.1, Rank – 105) and USA (Score – 20.7, Rank – 108) score lower than India on the index.*

Can Happy Planet Index help to move beyond GDP?

In taking a look at the rankings, it becomes clear that results are bifurcated globally.

- For those with industrialised economies and relatively high levels of GDP (e.g., Europe and North America), high consumption and larger Ecological Footprints yield low HPI scores. For countries that are underdeveloped, including many in sub-Saharan African, low life expectancy and economic performance result in poor HPI scores.
- The reliance on survey data from the Gallup World Poll, which is only conducted every five years, could yield out-of-date results.
- Others take issue with consumption-based calculations like the Ecological Footprint, which tend to oversimplify, are sensitive to population, and can overlook where impacts actually occur.
- Economic prosperity is predictably excluded from the index, thus allowing an assortment of developing countries to rise to the top, but these countries are not just poor, but unequal. They distribute their limited wealth in the most uneven fashion.

In spite of these criticisms, the HPI and its attempt to drive decision-makers to think differently about societal progress has spurred some countries to adopt alternative measures to GDP.

Social Progress Index

The Social Progress Index attempts a robust and holistic measurement framework for social and environmental performance that can be used to benchmark success and accelerate progress. The Social Progress Index measures social progress that is independent of GDP, but complementary to it. There are three dimensions of Social Progress: Basic Human Needs, Foundations of Well-Being, and Opportunity.

- **Basic Human Needs** assesses how well a country provides for its people's essential needs by measuring access to nutrition and basic medical care, availability of safe drinking water, accessibility of adequate housing with basic utilities, and if society is safe and secure.
- **Foundations of Well-Being** measures whether citizens have access to basic education, as well as information and knowledge from both inside and outside their country, and if the conditions are in place for living healthy lives. Foundations of Well-Being also measures a country's protection of its natural environment: air, water and land, which are critical for current and future well-being.
- **Opportunity** measures the degree to which a country's citizens have personal rights and freedom, whether they are able to make their own personal decisions, and whether prejudices or hostilities within a society prohibit individuals from reaching their potential.

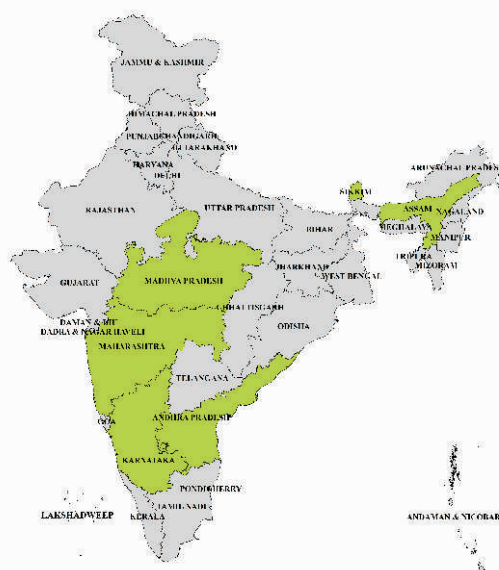
India, with a score of 55.06, ranks 101 of the 133 countries analysed on Social Progress Index. This is lower than India's rank of 93 for GDP per capita income. Even Nepal and Bangladesh rank higher than India. On the parameter 'tolerance and inclusion', India ranks as low as 128th and is at the 120th place on 'health and wellness'.

Table 1: Indian Economy Report Card

Indicator	Composition	Value	Context/Comparison
Gross Domestic Product (GDP)	Measure of total size of the economy in terms of total value generated by goods and services produced in the region.	USD 2.074 trillion (2015)	<ul style="list-style-type: none"> 3rd largest economy in the world Per capita GDP of USD 1600 – 145th in the world
GDP Growth Rate	Rate at which the economy is growing.	7.6 % (2015)	<ul style="list-style-type: none"> IMF projected India's GDP growth rate at 7.2% for 2017-18. This will make India the fastest growing major economy, with China estimated to have grown at 6.7%
Fiscal Deficit	Fiscal deficit is the excess expenditure that the government makes over the total receipts.	3.99% of GDP (2015)	<ul style="list-style-type: none"> FRBM Panel sets 2.5% as the target by 2023 (BS, 2017)
Current Account Deficit (CAD)	A deficit in current account is associated with trade deficit when a country imports more than it exports.	1.1% of GDP (2015)	
Human Development Index (HDI)	HDI is a composite statistic of life expectancy, education, and income per capita indicators.	0.624 (2015)	<ul style="list-style-type: none"> 131 out of 188 countries Regional disparities in education, health and living standards within India—or inequality in human development—shave off 27% from India's HDI score (Mint, 2017)
Ecological deficit	Footprint of a population exceeds the bio-capacity of the area available to that population.	-0.71	<ul style="list-style-type: none"> India's ecological footprint is 1.16 global hectares and bio-capacity is 0.45, putting it at a deficit of 0.71
Gross National Happiness (GNP)	GNP includes GDP per capita, life expectancy, social support, trust, perceived freedom to make life decisions, and generosity.	4.315 (2016)	<ul style="list-style-type: none"> 122 out of 155 countries
Happy Planet Index (HPI)	HPI measures: well-being, life expectancy, inequality of outcomes, ecological footprint.	29.2	<ul style="list-style-type: none"> 50th out of 140 countries
Social Progress Index (SPI)	SPI measures three dimensions of progress: basic human needs, foundations of well-being and opportunity	55.06	<ul style="list-style-type: none"> 101 out of 133 countries

Table 1: State level initiatives

State	Highlights from some states
Madhya Pradesh (MP)	The State government had, in July 2016, set up the Anand Mantralaya or the Ministry of Happiness, with Chief Minister Shivraj Singh Chouhan as its first “happiness minister”. Government of MP, in May 2017, signed a Memorandum of Understanding (MoU) with IIT-Kharagpur to devise a Happiness Index for the State. (Hindu, 2017)
Sikkim	The Indian state of Sikkim, this year, will introduce a new law to ensure that its development planning and citizens’ behaviour contributes to the SDGs. The proposed Act, currently titled the Sikkim Well-Being of Generations Bill 2017, is founded on guiding principles derived from the SDGs framework. It is a planning and accountability initiative that sets ecologically, socially and economically sustainable targets for the state.
Andhra Pradesh	Andhra has developed framework for Vision 2029 of the state. As per the frame, the state is committed to transforming the state into a “happy, inclusive, responsible, globally competitive and innovation–driven society”. (AP Vision)
Karnataka	Karnataka became the first to get a green growth strategy in adapting to the climate change and how the state can play its part in reducing carbon emissions. This is a first comprehensive effort at developing a state-level green growth strategy in India. It presents a sectoral analysis for energy, agriculture, forestry and water sectors. (CSTEP, 2014)
Maharashtra	Maharashtra government is planning to set up a ‘Happiness Department’. Two other factors are social support (as measured by having someone to count on in times of trouble) and trust (measured by a perceived absence of corruption in government and business). (Indian Express, 2017)
Assam	Assam, being the first Indian state to formally adopt the SDGs for its development path, has now moved ahead and set up a centre for SDGs. The purpose is to devise a new kind of mind-set, governance systems, operational modalities, partnerships and resource mobilisations for achieving SDGs.



Source: Development Alternatives

Business and Sustainability metrics

A study by National Foundation for Corporate Governance (NFCG) in 2014 analyses publically available, sustainability-related information disclosed by the top 100 Indian companies of Global Fortune 500 companies. Nearly 90% of firms state that they have either developed or follow green operation and environmental conservation. Disclosures on CSR finances and infrastructural development are low in both the Indian and global cases. It is in the interest of big corporations to become more transparent to drive greater stakeholder trust as well as improve internal processes for managing sustainability issues. While over 58% of the firms disclosed their sustainability related policies, there were still sectoral differences as in the case of India. The disclosure is maximum in the case of utilities, automotives, electronics and computers and oil and gas, trade and construction sectors. Over 79% of the surveyed firms have adopted voluntary sustainability principles. The most popular Corporate Sustainability Initiatives (CSI) Reporting: A Comparative 25 Study of Indian & Global Firms standards are United National Global Compact, Carbon Disclosure Project and Global Reporting Initiative. Environment, Health & Safety, and Quality are the most popular focus areas for firms, and most firms do not opt to take Human and Social rights certifications (SA 8000). (NFCG India, 2014)

Sustainability Reporting

In a world of changing expectations, companies must account for the way they impact the communities and environments where they operate. Businesses can sustain their growth only if society is generally satisfied with their overall contribution to societal well-being. For this, Sustainable Reporting was introduced as a tool to measure the performance.

Sustainability Reporting (SR) or Non-Financial Reporting (NFR) is the process of communicating the social and environmental effects of organisations to particular interest groups within society at large. By the year 2011, globally there were about 8,691 sustainability reports published based on the GRI framework. With the growing significance of sustainability issues at the global level, companies in India are also getting ready to embrace reporting on sustainability to enhance competitiveness. The reporting scenario in India is still in nascent stage with nearly 47 companies disclosing their sustainability performance. Out of 8,691 reports only a handful of 122 reports are published by Indian companies.

TATA (Automotive) is a pioneer in sustainability reporting in India. It has started reporting its sustainability performance from year 2001 based on GRI guidelines. Since then, reporting in India has been done primarily on voluntary basis. (ICSI, 2011)



Table 3: Extent to which Indian Corporates Practice Voluntary Environmental Reporting

S. no.	Parameters	Manufacturing (12 Corporates)		Non-manufacturing (13 Corporates)		Total (25 Corporates)	
		Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)
1	Environmental Policy	75	25	77	23	76	24
2	Health Safety and Environment	92	8	69	31	80	20
3	Energy Conservation	75	25	62	38	68	32
4	Corporate Sustainability/ Environment initiatives	83	17	85	15	84	16
5	Sustainability Reporting	42	58	31	69	36	64
6	Waste Management	83	17	38	62	60	40
7	Water Management	74	25	46	54	60	40
8	Wind/ Renewable Energy Sources	58	42	15	85	36	64
9	Environmental Information System	92	8	31	69	60	40
10	Environmental Disclosure Practices	42	58	46	54	44	56
11	Environmental Targets		100	69	31	40	60
12	Environmental Reporting Indicators	75	25	77	23	76	24
13	Environmental Costs and Benefits	0	100	0	100	0	100
14	Environmental Liabilities		100	0	100	0	100
15	Environmental Assets		100	0	100	0	100
Source: Asia Pacific Journal of Research, 2014							
More than 70% in category 'Yes' - Green, More than 50% in category 'No' - Red							

A study (APJOR, 2014) examines the general trends in corporate environmental accounting and reporting practices. Initial survey was conducted by going through the official websites of top 25 Indian companies. This was followed by an analysis of company annual reports and the stand-alone environmental reports, if any. The study covered Annual Reports of 25 Indian Companies – 12 from manufacturing sector and 13 from non-manufacturing sector.

From the data collected (table above), it can be inferred that sustainability reporting is less than 50%, as of the companies surveyed in both manufacturing and non-manufacturing sectors. While most of the

manufacturing sector corporates have environmental policy, health safety and environment protocols, energy conservation, corporate sustainability initiatives, waste management and environment information system; target setting, identification of environmental liabilities-assets and environmental disclosure practices is poor.

In case of non-manufacturing sectors, the environment reporting is still in nascent stage. Except for environment policy, corporate sustainability and environmental targets and indicators, most of the other parameters are not reported by more than 50% of the non-manufacturing companies surveyed.

Business Responsibility Reports

In 2012, the Securities and Exchanges Board of India (SEBI) mandated a policy of reporting non-financial information via Business Responsibility Reports, for the top 100 listed companies of the Bombay and National Stock Exchanges. The practice has gained prominence in the last 5 years, owing largely to a greater understanding of the links between sustainability practices, corporate performance and competitive advantage. Following are some of the reporting trends and quality of corporate responsibility (CR) in India:

- India's N100 companies (top 100 listed companies by revenue) have witnessed high rates (73%) of CR disclosure with 45% of N100 companies use standard frameworks for CR disclosure.
- 31% of N100 comprehensively report on CR through separate reports. There is a higher rate (70%) of N100 companies disclosing CR information in Annual Reports, why Integrated Reporting will take few more years to gain prominence.
- The quality of data reported has seen an improvement with 71 per cent restatements relating to improved estimations/calculations, enhanced scope of reporting and updates in definitions while 29% of restatements were made owing to an error or omission.
- In 2012, the Bombay Stock Exchange introduced 2 such indices: S&P BSE Greenex, S&P BSE Carbonex. Investments using these indices achieve higher returns in 2 out of 3 cases.

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How satisfied the residents of each country feel with life overall, on a scale from zero to ten, based on data collected as part of the Gallup World Poll

The average number of years a person is expected to live in each country, based on data collected by the United Nations

The inequalities between people within a country in terms of how long they live, and how happy they feel, based on the distribution in each country's life expectancy and well-being data

The average impact that each resident of a country places on the environment, based on data prepared by the Global Footprint Network

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"Businesses are key contributors to the ecological footprints and therefore they should take responsibility. This can only come through their courage to accept that they need to pay the respect for dignity of life. One major shift required is to shaking out of the complacent model of short-term profits. We need to turn the game of earning profits in short term – less attractive – than long term gains. Demystifying sustainability language and more shared responsibility towards progress of people and planet will be the key drivers"

- Aditi Halder, South Asia Director, Global Reporting Initiative

"Reporting is the end activity not the beginning. Many companies pick up Non-financial reporting without strategy and thinking. Many companies report on sustainability because they are asked by stakeholders. We drive our company on trust and integrity; understanding that future depends on integrating sustainability in core business. Companies are like human beings and one's behaviour can alter the perception and behaviour of the other company."

- Shankar Venkashewaran, Chief, TATA Sustainability Group

"How can we make Sustainable Development an everyday affair? Is building a SMART city a better way of living and that too sustainably? What can our education system do toward this end? Is organic farming the way to go? And this list can go on and on. The Government of Sikkim has taken a momentous decision to build a legal framework to ensure that we think and act in accordance with the Sustainable Development Goals. Sikkim, through this it appears, will look after the future well-being of its citizens. This promise can only be fulfilled if we all make the 'sustainable' choices in our policies, everyday living and working!"

- Honb. Prem Das Rai, Member of Parliament, Sikkim

About Development Alternatives Group www.devalt.org

Development Alternatives (DA) is a premier social enterprise with a global presence in the fields of green economic development, social equity and environmental management. It is credited with numerous technology and delivery system innovations that help create sustainable livelihoods in the developing world. DA focuses on empowering communities through strengthening people's institutions and facilitating their access to basic needs; enabling economic opportunities through skill development for green jobs and enterprise creation; and promoting low carbon pathways for development through natural resource management models and clean technology solutions.

DISCLAIMER

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