

Shaktikanta Das: Inaugural address - 18th Statistics Day Conference

Inaugural address by Mr Shaktikanta Das, Governor of the Reserve Bank of India, at the 18th Statistics Day Conference, organised by the Department of Statistics and Information Management, Mumbai, 28 June 2024.

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I am happy to inaugurate the eighteenth Statistics Day Conference of the Reserve Bank. This annual event provides us with an opportunity to reflect on the current and evolving state of statistical system. It also helps us to take stock of the refinements in application of statistical methods and technologies in the realm of public policy.

The use of statistics has been ever growing as a preferred tool for drawing inferences in diverse fields. The discipline has moved beyond collection of facts to focusing more on interpretation and drawing inferences, taking into account the level of uncertainty. This shift has allowed statistics to become an integral part of other major disciplines. The surge in computing power is being increasingly harnessed in combination with statistical methods to improve efficiency in decision making and enrich end-user experience in various fields of human knowledge.

The celebration of the Statistics Day in India coincides with the birth anniversary of Professor Prasanta Chandra Mahalanobis. His contributions in laying the foundations of modern day official statistics in India have been pioneering. Inspired by his work, Indian statisticians are making their presence felt - both domestically and globally in traditional as well as in newer applications of statistics.

Against this backdrop, let me highlight the areas in which the Reserve Bank's cutting edge information management is contributing to the formulation of public policies and the overall economic development in India. One year ago, we launched our next generation data warehouse, i.e., the Centralised Information Management System (CIMS) at the Statistics Day Conference. Several new features¹ were introduced in the new system². Scheduled commercial banks (SCBs), urban co-operative banks (UCBs) and non-banking financial companies (NBFCs) have already been onboarded for reporting on the new portal. The Reserve Bank has provided training to over 15,000 personnel from regulated entities. Many one-to-one handholding sessions have also been organised. I would like to congratulate the Department of Statistics and Information Management in the Reserve Bank for undertaking these initiatives. All regular statistical publications are now generated from the CIMS. Going forward, we intend to augment and refine the CIMS further as an integral part of our mission to constantly improve the quality of statistics. The new CIMS is also facilitating research on the Indian economy, minimising reporting burden, exploiting the technological advances and improving the experience of both data providers and users. In this endeavour, we have also benefitted from guidance by external experts. Our aspirational goal is to position information as a public good.

Looking ahead, the year 2025 has a special significance for compilation of official statistics the world over. Global efforts are expected to culminate in new global standards³ for compilation of macroeconomic statistics, especially for national accounts

and balance of payments. Our team in the Reserve Bank is closely tracking these developments.

We are also making efforts to harness the availability of huge computing power and growing digital footprints to analyse measures of expectations, sentiment indicators and policy credibility measures from alternative data sources. Let me add that the use of alternative and unconventional data sources proved to be invaluable during the most severe phases of the COVID-19 related lockdowns and restrictions. In fact, their utility extends beyond periods of crisis. Data management systems need to keep pace with the use of unconventional data sources as policy inputs. While doing so, we have to be mindful of the importance of eliminating noise and capturing the signals from high frequency indicators. We are conscious that we are moving from an era of data scarcity to data abundance. The volume of digital data stored⁴ as well as the storage capacity⁵ are growing at an exponential pace, bringing forth new challenges along with new opportunities.

The focus now is naturally on enhancing capacity in artificial intelligence (AI) and machine learning (ML) techniques and analysing unstructured textual data. While doing so, ethical considerations need to be addressed and biases in algorithms need to be eliminated. In the Reserve Bank, we have ventured into AI/ML analytics in multiple areas. Under the Reserve Bank's aspirational goals for RBI@100, we aim to develop cutting edge systems for high frequency and real-time data monitoring and analysis.

As Professor C.R.Rao, the legendary statistician, and close associate of Professor Mahalanobis had said: "Statistics is the science of learning from data. Today is the age of data revolution."⁶ I am sure that our statisticians in the Reserve Bank will continue to strive for excellence and meet the emerging information and research needs of our economy in its journey towards even higher levels of development.

I wish all success for today's deliberations.

Thank you.

¹ It incorporates various new age features like a data lake and integrated analytics with much higher processing speeds and scalability. Data lake is envisioned as a part of CIMS, which is more flexible than usual database systems, in terms of data fetching from multiple systems (inside and outside RBI), data storage (both structured and unstructured information) and data processing (standard and dynamic query based reports).

² The innovations implemented in the CIMS include: (a) to improve exchange of data and metadata, a Statistical Data and Metadata eXchange (SDMX) based repository has been implemented, which consists of the SDMX elements and related artefacts, undertakes data standardisation by aligning the elements with business concepts, and facilitates visualisation at desired level of granularity by drilling down elements; (b) a novel SDMX data conversion tool has been developed and implemented to generate SDMX time series from periodic data submitted by regulated entities; (c) all Regtech and Suptech data collection features have been implemented through creation of

SDMX artefacts / metadata in server-to-server data transmission and data governance; (d) an advanced analytical platform to perform statistical analysis connecting cross domain data has been implemented with integrated programming interface; (e) an SDMX data query functionality provides interactive metadata driven search and data visualisation analytical platform for the general public; (f) power user capability known as common data platform has been implemented; and (g) functionality of regular information submission has been enriched with dashboards for regulated entities, system driven alerts and data submission monitoring utilities.

³ The new standards for national accounts and balance of payments statistics, coordinated by the United Nation's Intersecretariat Working Group on National Accounts (ISWGNA) and the International Monetary Fund (IMF) Committee on Balance of Payments Statistics (BOPCOM), respectively aim to meet boarder policy analysis and monitoring needs by integrating elements of social wellbeing and environmental sustainability; incorporating globalisation and innovation in real and financial sector operations; incorporating digital transformation; tracking climate change; steadiness between stock and flows; more detailed breakdowns; consistency with other standards; and developing new data sources and methods.

⁴ Moore's law

⁵ Kryder's law

⁶ Rao, B.L.S. Prakasa (2020). 'C.R.Rao: A Life in Statistics', Bhvan - The Mathematics Magazine.