Government of India Ministry of Finance Department of Revenue

## LOK SABHA UN-STARRED QUESTION NO. 4292

TO BE ANSWERED ON MONDAY, MARCH 27, 2023 Chaitra 6, 1945 (Saka)

### USE OF DATA ANALYTICS IN TAX ADMINISTRATION

#### 4292. SHRI VISHNU DATT SHARMA:

Will the Minister of Finance be pleased to state:

- (a) whether the Government is taking any steps to introduce data analytics, big data and artificial intelligence in direct and indirect tax administration, so as to make it more effective, free of official discretion, business and taxpayers friendly; and
- (b) if so, the details thereof and if not, the reasons therefor?

#### **ANSWER**

# MINISTER OF STATE IN THE MINISTRY OF FINANCE (SHRI PANKAJ CHAUDHARY)

)a(: Government is using data analytics, big data and Artificial Intelligence/Machine Learning in tax administration to make it more effective, free of official discretion, business and taxpayers friendly. Data analytics is being used to identify fiscal risks, suspicious trends and patterns and risky entities in Customs and GST by leveraging big data.

)b(: Indirect Taxes: The Project ADVAIT (Advanced Analytics in Indirect Taxes) has been rolled out in 2021, as a flagship analytics project for Indirect Taxes, by CBIC. The project uses capabilities of big data and Artificial Intelligence as well. ADVAIT has been envisaged with a threefold objective of enhancing Indirect Tax revenue, increasing taxpayer base, and supporting data-driven tax policy.

Further, ADVAIT provides business outputs in three formats: Reports, Interactive Dashboards, and Analytical Models. The functionality of each output is specifically designed to aid and assist officers in their day-to-day operations that range from reporting and ensuring tax compliance to detecting tax evasion. The portal has advanced analytical capabilities including data matching, network analysis, pattern recognition, predictive analytics, text mining, forecasting and policy studies. ADVAIT has been designed and developed in a knowledge-driven data ecosystem using some of the most advanced data warehousing business intelligence solutions, keeping in view the 3 I's: Information, Insights, and Intelligence.

**Direct Taxes:** The Income Tax department is using techniques as data analytics, big data and Artificial Intelligence/Machine Learning for:

- (i) Identifying cases with High Risk of tax evasion and high likelihood of income addition, for further scrutiny.
- (ii) Identifying taxpayers to send reminders for advance tax payments.
- (iii) Prompting specific taxpayers about apparent mismatches in ITRs and transactions made, so that taxpayers may revise their returns.
- (iv) Using big data techniques for storage and effective search of information by income tax officers.
- (v) Using data analytics over networks of taxpayers visualize the taxpayers relationships and to flag potential high-risk transactions.
- (vi) Using data analytics techniques for segmentation of taxpayers to focus campaign on highrisk cases from tax evasion perspective.

\*\*\*\*