# GOVERNMENT OF INDIA MINISTRY OF STATISTICS AND PROGRAMME IMPLEMENTATION

# LOK SABHA UNSTARRED QUESTION NO. 1381 TO BE ANSWERED ON 04.12.2024

### **USAGE OF ARTIFICIAL INTELLIGENCE IN CENSUS**

### 1381. SHRI LAVU SRI KRISHNA DEVARAYALU:

Will the Minister of STATISTICS AND PROGRAMME IMPLEMENTATION be pleased to state:

- (a) whether the Government has any plans to integrate Artificial Intelligence (AI) or Machine Learning (ML) tools in future surveys including the Economic Census, to enhance data accuracy and reliability;
- (b) if so, the details thereof and if not, the reasons therefor;
- (c) the details of the frequency by which the Ministry updates rural and urban frames to accurately reflect demographic changes across the country;
- (d) whether the Government is aware of the challenges faced by certain States in strengthening their statistical capabilities, which impact their ability to process and approve census data efficiently; and
- (e) whether the Government plans to provide additional resources or training to enhance statistical infrastructure and capabilities in States facing these difficulties, if so, the details thereof?

#### ANSWER

MINISTER OF STATE (INDEPENDENT CHARGE) OF THE MINISTRY OF STATISTICS AND PROGRAMME IMPLEMENTATION; MINISTER OF STATE (INDEPENDENT CHARGE) OF THE MINISTRY OF PLANNING AND MINISTER OF STATE IN THE MINISTRY OF CULTURE [RAO INDERJIT SINGH]

(a) and (b):Ministry of Statistics and Programme Implementation (MoSPI) being nodal agency for planned development of the statistical system in the country is also responsible for maintaining the highest standards of data quality. To achieve this, robust and well-defined mechanisms are employed in different statistical products which undergo periodic improvements based on evolving needs, feedback, advancements in methodologies to enhance and their effectiveness. Upgradation and synergizing of existing IT based data collection techniques is a continuous process in MoSPI. The primary data collection in surveys of MoSPI is being done in digital platform using Computer Assisted Personal Interview (CAPI) or web-based application with in-built validation mechanism to ensure consistency at the stage of data collection. Further, whenever a new survey is taken up, possible methods and new technologies are explored for their appropriate adoption.

The surveys of MoSPI use area frame consisting of villages (c): and blocks available respectively from the Population Census for rural areas and Urban Frame Survey (UFS) for urban areas. To accurately reflect the demographic changes across the country, updation of urban frame is done through UFS which is conducted periodically and new block-level details of the town are updated accordingly. The frequency of such updates is continuous and every town is updated once in 5 years. Similarly, urbanisation of villages (i.e. creation of new towns by State authorities or inclusion of rural areas into existing town) leads to the removal of villages from the rural frame and that also is continuous and simultaneous with UFS. Updation of identification or other particulars of villages such as the creation of new districts and updation of the same in rural frame is done as and when information/notification on formation of new districts/tehsils (or other details) are received from State Govt/State authorities.

(d) to (e): The Support for Statistical Strengthening (SSS) sub-scheme is an ongoing Central Sector sub-scheme of MoSPI under which Grant in Aid is released to the Directorate of Economics & Statistics (DESs) of the States/UTs with the aim to improve the statistical capacity and infrastructure of the State statistical system for collection, compilation and dissemination of relevant official statistics. Further, MoSPI also assists in development of statistics in the States/UTs by providing knowledge sharing and technical assistance to State/UT DESs on compilation of various estimates, leveraging expertise in IT strengthening and development, capacity building of statistical personnel through regular and need-based training/workshops and other interactive methods, creation of physical infrastructure like buildings of State DESs and Training Facilities, etc.