Discussion Papers

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RIS
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Abstract: With the globalization and the liberalization of the Indian Economy in the early 1990s, the official statistical system has faced a new challenge to meet data demands from a variety of data users, including business establishments, besides public sector, academia, researchers and others. Government's commitment for strengthening the system had led to the creation of the Ministry of Statistics & Programme Implementation (MoSPI) in 1999. In 2001, the National Statistical Commission had submitted a report giving various recommendations for bringing in changes in the administrative set-up and in strengthening data production capabilities. Some of these recommendations have been implemented by the Government, many are in the pipeline, and still many others, including some of the substantial ones, are to be implemented. The Government of India came out with a Draft National Policy on Official Statistics (NPOS) on 17th May 2018, informing that it is in line with the United Nations Fundamental Principles of Official Statistics, which were adopted by the Union Cabinet on 4th May 2016. This discussion paper analyses the extent to which the draft Policy has captured on these principles. Finally, the way forward to improve the system has been also chalked out by giving suggestions and recommendations.

Key Words: Official Statistical System, Reliable and timely statistics, Transparency and accountability, Draft National Policy on Official Statistics (NPOS), United Nations Fundamental Principles of Official Statistics.

1. Introduction

1.1 The Prelude

A transparent and efficient statistical system is one of the essential elements for efficient governance and for effectively pursuing national development agenda/goals. Sound statistics, collected with clarity in concepts and in definitions, analyzed and disseminated on the sound methodologies comparable with the international standards is

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a pre-requisite for informed decision -making, policy formulation, investment allocations, regular follow-up and review for timely pin-pointing shortcomings of the developmental policy and undertaking course correction. Reliable and timely statistics is a must for improving transparency and accountability in the implementation of the policies for better delivery of the public services.

India, for achieving growth with inclusion and sustainability, needs to have a robust statistical system to produce and disseminate reliable and timely data. Such data would be used by policy- makers, academicians, researchers and other stakeholders for undertaking policy analysis to pinpoint deficiencies and for recommendation of suitable rectifications.

Notably, in September 2015, the 70th UN Summit adopted the 2030 Agenda for Sustainable Development with 17 goals and 169 associated targets at its core, called Sustainable Development Goals (SDGs). India, being a signatory country, is fully committed for timely achievements. Regular follow-up and review at all levels would substantially help achieve common global goals and targets set- out through this Agenda.

1.2 Data Eco-system for SDG Monitoring

In order to strengthen efforts of the national governments towards follow-up and reviewing mechanisms of SDGs, specific SDG targets 17.18 and 17.19, which are the integral part of this 2030 Agenda , call for action in enhancing data capacity- building support at the required disaggregated levels and for building on initiatives for measurement of progress to be included. For ready reference, these two critical targets, which are directly related to statistics for implementation of all SDGs, are reproduced as follows.

> **"SDG 17.18:** By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing states, to increase significantly availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts."

"SDG 17.19: By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product, and support statistical capacity-building in developing countries."

To Acknowledge the fact that unprecedented enormity, quality and time-bound data would be required to be produced by the national official statistical systems, the 2030 Agenda has called for action from the national governments in partnership with other stakeholders for enhancing statistical capacity of the respective countries. Para 76 of the 2030 Agenda is amply clear on this aspect, which reads as under: "We will support developing countries, particularly African countries, least developed countries, small island developing States and landlocked developing countries, in strengthening the capacity of national statistical offices and data systems to ensure access to high-quality, timely, reliable and disaggregated data. We will promote transparent and accountable scaling-up of appropriate public-private cooperation to exploit the contribution to be made by a wide range of data, including earth observation and geospatial information, while ensuring national ownership in supporting and tracking progress." Addis Ababa Action Agenda of July 2015, which is an integral part of the 2030 Agenda, also places emphasis on enhancing statistical capacity of the countries for regular monitoring of SDGs[2].

1.3 National Context

For regular monitoring, evaluation and assessment impacts of different policies and programmes, the country needs to fully harness robust data sources to create a strong database of reliable and timely statistics for the informed policy decisions, interventions and reforms for efficient - and - effective service delivery mechanism. This is all the more important for optimum resource allocation and better utilization of different programmes and schemes.

It is a matter of satisfaction that to simplify various Centrally Sponsored Schemes, consolidation exercises have successfully reduced

the number of such schemes to 28 umbrella schemes[3]. These along with a number of Central Sector Schemes necessitate capturing and mining non-traditional data sources, such as big data, geospatial data, to fast track socio-economic development of the country.

In view of the above, it is the need of the hour to look at the data production capacity of the Indian Statistical System, identify gaps and challenges faced by it and suggest measures and policy actions to meet aspirations of different stakeholders amidst fast-changing global environment; it is a crying need for good governance, and more particularly to attain Sustainable Development Goals (SDGs).

2. Indian Official Statistical System

2.1 Institutional Arrangements for Official Statistics

The federal structure of the country has influenced shaping up of the Indian Statistical System. It is decentralized and consists of the National Statistical System at the Centre, mostly involving national -level estimates/aggregates, and the Statistical System at the State levels, constituting State/UT level estimates/aggregates. Its thumbnail structure[4] is narrated in the following paras.

2.1.1 Statistical System at the Centre[5]

A. Ministry of Statistics and Programme Implementation

Official publication of the Ministry of Statistics and Programme Implementation describes it as the nodal agency for planning and for facilitating integrated development of the statistical system in the country, and adds that it is also to lay down norms and standards in the field of official statistics, evolving concepts, definitions, classification and methodologies of data collection, processing and release of results. In fact, the Ministry has two wings, one related to Statistics and the other to Programme Implementation. The Statistics Wing called National Statistical Office (NSO), in turn, consists of Central Statistical Office (CSO), National Sample Survey Office (NSSO) and Computer Centre. And the Programme Implementation Wing has four Divisions

handling Twenty- Point Programme, Infrastructure Monitoring, Project Monitoring and Member of Parliament Local Area Development. The Chief Statistician of India and the Secretary is the administrative head of the Ministry.

The Indian Statistical Institute (ISI), a premier statistical institute, also receives budgetary support from the MOSPI.

B. Central Statistics Office (CSO) and National Sample Survey Office (NSSO)

The CSO and the NSSO are the subordinate offices of the MoSPI. The CSO deals with the statistical co-ordination, standard setting and training, and planned development of the statistical system. The NSSO handles socio-economic surveys, carries out field work for the Annual Survey of Industries and follow-up surveys of Economic Census. It also sample checks on area enumeration and crop estimation surveys, prepares urban frames useful in drawing of urban samples and collects price data from rural and urban sectors.

C. Central Ministries and Departments

The data collection of different subject-specific areas — Agriculture, Industry, Finance, Labour etc. —vests with the corresponding administrative Ministries and the regulatory bodies of the Government of India. Much of the statistical information is collected as the by-product of administration, regulation and monitoring processes of various programmes. In addition, a large number of subject- matter Ministries / Departments in the Central and State Governments have their own statistical organizations or units or cells, focusing on the development of statistics in their relevant fields. These statistical offices are independent in handling of programmes, and their requisite budgets are controlled by their own Ministries / Departments. These are mostly manned by officers belonging to two organized Central Services— the Indian Statistical Service (ISS) and the Subordinate Statistical Service (SSS). The MoSPI is the Cadre Controlling Authority for both these Services, and provides another layer of coordination. Furthermore, these Statistical Divisions/ Cells are headed by senior- level statistical functionaries of the ISS at

the Junior/ Senior Administrative Grade (JAG / SAG) levels for effective coordination with the NSO.

2.1.2 Statistical System at the State level[6]

The State Statistical System is an integral part of the Indian Official Statistical System. In states, the Statistical System is almost similar to the Centre. It is generally decentralized over departments of the State/ UT governments. At the apex level, there exists usually a Directorate (or a Bureau) of Economics and Statistics (DES), which is responsible for the coordination of the statistical activities of the state. The DESs have a Headquarter Office at the State Capital and a number of statistical offices in different districts. In general, statistical activities of the State DESs are more or less similar; though there can be sectoral domain- related variations. However, so far as their technical and institutional capacities are concerned, there are visible variations across states. Moreover, the degree of importance and priority accorded to them by state governments also leads to their diverse nature. Resultantly, level and quality of functioning of DESs vary widely among states.

2.2 Lack of Organic Relationships between Central and State Systems

Although the CSO at the Centre and DESs in the states are supposed to perform statistical coordination functions; but in reality there is not much closer organic relationship among the line Ministries at the Centre and their counterpart line Departments in the states, especially, with regard to Social Statistics and Agriculture Statistics. Since line departments in the states are responsible for implementation of the development programmes of the Central Ministries, the design for record-keeping system is usually dictated by administrative requirements; without vetting of the needs of the statistical agencies.

In lieu of the administrative data systems, the recourse has increasingly been taken to generate necessary statistical information through censuses and surveys in India. These methods are both time- and -resource intensive, and have limitations in terms of level of

disaggregation they can appropriately address. While this may not be much of an issue at the Central level, which is concerned primarily with estimates at the national level or at the most at the state level, but it severely circumscribes ability of states to address sub-state issues like district -level estimates. To address this, states have been nudged to participate actively in the national sample surveys and annual surveys of industries (ASIs) for having combined sample size; which is large enough for sub-state estimates. The experience, so far, points out that only a few states have the capacity to participate meaningfully and avail full advantage of the nation-wide surveys so conducted.

3. Challenges Faced by the Statistical System

The Ministry of Statistics and Programme Implementation (MoSPI) has taken certain steps over years; however, the official statistical system still faces a variety of challenges to meet the demand of the data users from diverse domains. As the private sector is an important stakeholder for bringing overall prosperity in the economy, its role in economic, social sectors has increased substantially, and this needs to be reflected in the data. The process of decentralization of power of the governance, initiated through 73rd and 74th amendment of the Constitution of India, has further intensified demand for the statistical system to meet data needs of local bodies and more profoundly for decentralized planning.

The need is also felt for the disaggregated data at the sub-national levels, as the states are competing to make progress on the socio-economic fronts and striving to attract private investments from both domestic and foreign sources. However, the present system has not been able to provide enough disaggregated information on the basic socio-economic indicators; essential for micro-level planning.

The broadening and expansion of economic activities in the service sector has brought into focus data gaps of the area. The system is yet to address large data gaps in many sectors such as unorganized sector, agriculture sector (particularly in horticulture), disaster management, environment and climate change and related statistics. Inconsistency

noticed in the data available through different official sources is yet another challenge—for example, 'Employment – Unemployment Survey', conducted by the NSSO, and the 'Annual Labour Force Survey' conducted by the Ministry of Labour and Employment give different estimates. In the area of external sector related statistics also, there are differences in the data available on exports and imports through the Directorate General of Commercial Intelligence and Statistics (DGCI&S) and through Reserve Bank of India.

New initiatives like Digital India have thrown up huge amount of data. Setting norms and standards for collating and processing such data pose humongous challenges on the statistical system. Declining public trust in the official statistics is yet another challenge that the country's statistical system is facing today.

The government has taken various initiatives in the recent years to catch- up the ambition drawn under the New India Vision 2022; announced by the Hon'ble Prime Minister on 15th August 2017. This *inter-alia* includes doubling farmers' income, rapid industrialization through 'Make in India' and increasing job opportunities. To pursue SDGs, as per the international commitment made, is a major responsibility. The official statistical system would need to be modernized with a view to follow an integrated approach for collection, processing, and dissemination of data. Further, there is a growing need to improve quality and timeliness of various datasets for making deep insights into the rapid changing social, economic, environmental and related structures in the country. Building capacity for analysis and visualization of data for delving into various dimensions of socio-economic development is another major challenge.

4. Reforms carried out in the Indian Official Statistical System

4.1 First Set of Reforms

A comprehensive review of the Indian statistical system was undertaken for the first time by the erstwhile National Statistical Commission.

The Government of India had established this Commission; *vide* a Resolution[7] of the MoSPI in 2000; under the Chairmanship of Dr. C. Rangarajan, along with eminent statisticians and economists as members. Its Terms of Reference[8] *inter-alia* included examining critical deficiencies of the present statistical system in terms of timeliness, reliability and adequacy along with suggestions for measures to improve statistical system of the country.

The Commission had submitted its Report over 17 years back to the Government on 5th September 2001 comprising 623 recommendations[9].

Regarding implementation of its recommendations, the Annual Report 2016-17 of the MoSPI mentions[10] that Commission's 478 recommendations had been taken as implemented, 17 recommendations had been rejected/ dropped, and 116 recommendations are still pending. By contrast, the Report further reveals that till 2013, 147 recommendations had been taken as implemented, 09 recommendations had been rejected/ dropped and 467 recommendations are still pending.

The MoSPI has implemented a number of recommendations ; some are related to addressing problems of gaps in data in different sectors, inconsistencies in official statistics available from different sources, in improving transparency in statistical operations. Improvement of quality and credibility of data are stated to be in the process of operationalization.

The slow pace of implementation of Commission's Report surely is a serious cause of concern. All the more, the phrase 'taken as implemented' warrants demystification.

4.2. Major Reforms initiated on the basis of Commission's Report

Major reforms initiated by the MoSPI are covered in the ensuing paragraphs.

4.2.1 National Statistical Commission (NSC) as a Permanent Body

The Rangarajan Commission had pointed out two basic issues as the major pitfalls in the Indian Statistical System:

- There was no effective co-ordination mechanism in place for determining statistical priorities and fixing standards for concepts and definitions.
- There was no effective mechanism to ensure credibility of statistics in the existing decentralized system of data collection.

To accomplish these, integration of various databases was an uphill task, especially in the absence of statistical standards, concepts and definitions. Duplication of efforts by the statistical agencies in data collection and also coverage being incomplete was another associated issue. Despite the Central Statistics Office (CSO) (earlier called Central Statistical Organization) at the Centre and the Directorate of Economics and Statistics (DES) in each state, the system functioned more or less in a disjointed manner; with no effective control over data collection, analysis and tabulation.

To resolve above, the Rangarajan Commission recommended establishment of a National Commission on Statistics (NCS) as a permanent and statutory apex body for monitoring matters pertaining to statistical policies and for ensuring co-ordination and quality aspects of core statistics. In pursuance of this, Government of India, vide its resolution dated 1st June 2005, notified setting-up of a National Statistical Commission (NSC); which started functioning from 12th July 2006. The NSC has a part-time Chairperson and four part-time Members, each with a specialization and an experience in the specified statistical field, while in addition has a Chief Executive Officer of the NITI Aayog as an *ex-officio* member. The maximum tenure of the part-time Chairperson/ Member is three years. The Chief Statistician of India is the Secretary to the NSC, and he is also the Secretary to the Government of India in the MoSPI.[2] The Commission is responsible to the Parliament as its Annual Report for each financial year containing recommendations made during that period would be placed by the Government in both the Houses of the Parliament along with a memorandum on the action taken.

4.2.2 *Legal Framework* – New legislation for Collection of Statistics

The statistical system generates data mainly from three sources— (i) administrative, (ii) surveys, (iii) census. This indicates that the cooperation of the respondent plays an important role for successful completion of the data -collection process. Thus, there is a felt need for the country to maintain entire data -collection process into a legal framework.

The two sets of laws governing the entire process are—(a) Census Act 1948, and (b) Collection of Statistics Act 2008. On the recommendations of the Rangarajan Commission, the previous Collection of Statistics Act 1953 was thoroughly reviewed and a new Collection of Statistics Act 2008 was notified. Collection of Statistics Rules has also been framed and notified in 2011 for operationalization of the provisions of the Act.

The above two sets of laws make it mandatory on the part of the respondent for supplying correct information to data collector. The data- collection agencies, in turn, have to maintain confidentiality of the respondent's identity. These provisions provide legal basis to the official data collection agencies for carrying out large-scale sample surveys and census operations.

A third set of laws also exists for the purpose of collection of administrative statistics. Under these, enacted by the respective Ministries, it is mandatory for the respondent to submit information to concerned authorities.

4.2.3 Lateral Coordination through Statistical Advisors[11]

In pursuance of the recommendations of the Rangarajan Commission, posts of the Statistical Advisers have been created to head Statistical Units in many administrative Ministries at the Centre. The Advisers are responsible for providing technical advice to the concerned Ministries. While discharging their duties; Advisers work closely with the MoSPI.

4.2.4 National Statistical System Training Academy (NSSTA)[12]

The National Statistical Systems Training Academy (NSSTA), earlier known as the National Academy of Statistical Administration (NASA), came into existence on 13th February 2009, and is a premier Institute, fostering primarily human resource development in official statistics at the national and state levels. The Academy is actively engaged in building capacities in the area of Official Statistics and other related disciplines at the National / Sub- National level and also at the international level, particularly, among developing and SAARC countries. Main aims and objectives of the Academy are as follows.

- To create a pool of trained manpower in the theoretical and applied statistics to manage effectively both the current and the emerging challenges of data collection, collation, analysis and dissemination for better formulation of policies and plans for the country;
- To train statistical as well as non-statistical manpower in undertaking monitoring and evaluation of large -scale programmes/ projects through specialized short/ medium- term training programmes;
- To create a pool of trainers and develop training material via course-ware in consultation and collaboration with academicians, researchers and professionals from universities, external professional institutions and UN/ bilateral agencies.

4.2.5 State Statistical Strengthening (SSS)/India Statistical Strengthening Project (ISSP)[13]

State Statistical Strengthening Project (SSSP), earlier known as the India Statistical Strengthening Project (ISSP), is a scheme that has been implemented since 2010 by the MoSPI, and aims at improving statistical capacity and infrastructure of the State Statistical Systems for collecting, compiling and disseminating reliable official statistics for policy, planning and a host of other/ varied purposes, particularly, at the State and Sub-State levels.

A total of Rs 650.43 crore has been approved for the project. Though only 14 states have implemented the scheme since 2014; allocations at

present for the states implementing this scheme have been revised, and new allocations have been made for all the remaining 19 States/UTs. The scheme would be implemented in all 33 states/UTs, i.e. almost in the entire country [except Chandigarh, Goa and Lakshadweep]; for which funds have been allocated to all state/UT Directorates of Economics & Statistics (DESs) for upgrading their State Statistical Systems. The Scheme has been changed into a Central Sector Scheme from its earlier form of Centrally Sponsored Scheme, and new Operational Guidelines have been formulated and approved for implementation of the Scheme.

5. Other Measures Taken

5.1 National Policy on Dissemination of Statistical Data

Notification of "National Policy on Dissemination of Statistical Data" on 6th January 1999 sets standards for dissemination of data by the governmental statistical agencies. Further, National Data sharing and Accessibility Policy, 2012, was notified with the objective to '*increase the accessibility and easier sharing of non-sensitive data amongst the registered users and their availability for scientific, economic and social developmental purposes*.' Accordingly, Open Government data initiative data.gov.in was launched and registered in 2012. It has now become one of the most important pillars of the Digital India programme.

It has become mandatory for all statistical agencies involved in data collection to release unit- level data-sets so long as the data are not sensitive in nature and the supply of them is not prejudicial to the interest, integrity and security of the nation. While doing so, identification particulars of data- supplying units to all data-users are not to be disclosed; maintaining the right to privacy. The statistical databases have thus become "public goods", and are available to all agencies, including academia, civil societies and individual researchers for research and analysis.

5.2 Survey Guidelines

Government of India's Notification, no. 232 dated 5th December 2011, was published in the Gazette of India, Extraordinary, Part-III-Section 4

regarding Guidelines for Conducting Statistical Surveys. This Notification lays down detailed guidelines to be followed by the Central Ministries/ Departments, intending to conduct any statistical survey.

Through these guidelines, problems relating to duplication of efforts by different Ministries for collecting data through surveys, inconsistencies in survey results available through different official sources and other related issues are being addressed.

5.3 National Quality Assurance Framework (NQAF) for Official Statistics[14]

On 6th April, 2018, The Ministry of Statistics and Programme Implementation has notified National Quality Assurance Framework (NQAF) for Official Statistics for use and voluntary compliance by all officers dealing with statistical matters including administrative statistics. This is aimed at aligning the statistical products of the Ministry in accordance with the Generic National Quality Assurance Framework of the United Nations Statistical Commission. These guidelines are useful to producers of official statistics in designing any statistical collection or product and are also helpful to users in making informed decisions regarding the use of statistical products.

6. Policy Sync with the Fundamental Principles of Official Statistics

6.1 Evolution of Fundamental Principles of Official Statistics

Official statistics is required by a wide spectrum of data -users. In Government sector, it is required for informed policy -decisions; prioritization of policy programmes and debates; and in private sector, it is to be utilized for research, innovation and investment decisions. Hence, reliable and timely availability of official statistics with complete coverage is crucial. In democratic societies, statistical system is for ensuring public confidence in the integrity of the data -sets for shaping perceptions regarding quality of governance. For this, adoption of the Fundamental Principles of Official Statistics (FPOS) by the Government,

as endorsed in 2014 by the United Nations Statistical Commission, is a widely agreed framework for the National Statistical Offices (NSOs), and in a way for official statistics also.

6.2 The Ensemble Fundamental Principles of Official Statistics

These Principles[15], which happen to be a set of organic interconnected tenets, are as follows.

Principle 1: Official statistics is to provide an indispensable element in the information system of a democratic society, serving the Government, the economy and the public with data about economic, demographic, social and environmental situations. To this end, official statistics that meets the test of practical utility is to be compiled and made available on an impartial basis by the official statistical agencies to honour citizens' entitlement to public information.

Principle 2: To retain trust in the official statistics, the statistical agencies need to decide according to strictly professional considerations, including scientific principles and professional ethics on the methods and procedures for the collection, processing, storage and presentation of statistical data.

Principle 3: To facilitate correct interpretation of the data, the statistical agencies are to present information according to scientific standards on sources, methods and procedures of the statistics.

Principle 4: The statistical agencies are entitled to comment on erroneous interpretation and misuse of statistics.

Principle 5: Data for statistical purposes may be drawn from all types of sources; be statistical surveys or administrative records. Statistical agencies are to choose sources with regard to quality, timeliness, costs and burden on respondents.

Principle 6: Data collected by statistical agencies for statistical compilation, whether they refer to natural or legal persons, are to be strictly confidential and used exclusively for statistical purposes.

Principle 7: The laws, regulations and measures under which the statistical systems operate are to be made public.

Principle 8: Coordination among statistical agencies within countries is essential to achieve consistency and efficiency in the statistical system.

Principle 9: The use by statistical agencies in each country of international concepts, classifications and methods promotes consistency and efficiency of statistical systems at all official levels.

Principle 10: Bilateral and multilateral cooperations in statistics contribute in the improvement of the official statistics systems in all countries.

The Government of India, while adopting these ten Fundamental Principles had also committed to bring out a National Policy on Official Statistics (NPOS) to give furtherance to the Principles. Draft NPOS is a step forward in this direction and is expected to enhance people's faith in official data, and avert recent- type of controversies over country's official data, particularly regarding GDP estimates. As per the statement of Hon'ble Minister of Statistics & Programme Implementation[16], adopting such a national policy would help end disputes over methodologies adopted for calculation. He added that proposed policy would take into account the Indian context of the decentralized statistical system.

7. Draft National Policy on Official Statistics -2018

7.1 Sharing of the Draft Policy

The Government has come out with a Draft National Policy on Official Statistics (NPOS) on 17th May 2018 which is available at public domain. The MoSPI recalls[12] that the United Nations Fundamental Principles of Official Statistics, narrated in brief below, were adopted by the Union Cabinet on 4th May 2016 and that the formal adoption of these Principles has been a reiteration of the Government's commitment to constantly work towards improving the quality of Official Statistics.

A close look at the draft policy reveals that it is heavily loaded in terms of structural/institutional machinery, and lacks in the key aspect of enhancing statistical system's capacity of producing and disseminating reliable and timely data addressing in general the need of the economy, and targets 18 and 19 of the SDG 17, in particular.

7.2 What it Covers

Apart from providing incentives for improvement to officers and staff, setting- up of a Consultancy Wing as a registered society with an initial endowment fund Rs 2,000 crore, constituting National Statistical Commission as a Public Corporation Body to function as a national statistical regulatory agency with an INR 500 crore as an initial endowment fund and setting -up of a National Statistical Development Council (NSDC) under the Presidentship of Prime Minister of India, little else has been attempted.

7.3 What it Misses out

Not particular emphasis has been given in the policy statement for creating credible data -sets based on the representative sample surveys. The policy statement is silent on the 'Privacy' issues of the respondents and 'cyber security'; which are some of the most important issues for improving quality of data collected, processed and disseminated by official agencies. The way in which 'official statistics' has been defined in the draft Policy document, it does not fall in tune with the international definition as well as the Fundamental Principle of Official Statistics. Broadly, the draft Policy document doesn't offer any method of judging adequacy, completeness, reliability, trustworthiness, timeliness and accuracy of statistical data and for undertaking cost-benefit analyses of its associated statements which further undermine utility of the draft policy. In the absence of such an information, it would be difficult for the Government to take a decision on apportioning its limited resources among competing priorities.

7.4 Definition of Official Statistics

Draft Policy defined the official statistics as *"official statistics" means statistics derived by the Government agencies from statistical surveys, administrative and registration records and other forms and papers, the statistical analyses of which are published regularly, or planned to be published regularly, or could reasonably be published regularly'.*

Thus the definition is limited in its scope to just covering only aspects of data and statistics collected and disseminated by the Government as part of their routine monitoring, regulatory and audit actions functions. This clearly implies that the data which are collected/ processed by the private entities in Government partnership and disseminated by the Government agencies are out of the purview of the definition of official statistics. According to this definition, production of official statistics becomes highly centralized with the Government, whereas the related regulatory and advisory functions are kept outside the Government.

Thus the definition does not fall in line with the international definition of official statistics, more so with the Fundamental Principles of Official Statistics adopted by the Government of India vide the Cabinet decision dated 4th May 2016.

7.5 Core and Other Official Statistics

The draft policy has dichotomized official statistics into 'core statistics' and 'other official statistics'. The statistics which is of national importance and critical to the economy has been categorized as core statistics. The characteristics of core statistics as described in the draft Policy are as follows.

(1) They should be of national importance.

(2) It will be mandatory for the Government at all levels to collect and disseminate them.

(3) They should conform to prescribed definitions, concepts and standards.

(4) They should be updated periodically, with suitable periodicity to be determined.

(5) They will be available at both aggregate and disaggregate levels, wherever appropriate.

The Government proposes to regulate core statistics for quality and timeliness. For this purpose, it has been proposed to make necessary amendments in the Constitution to ensure that the Union List provides for regulating statistics of the national importance; which aspect cannot be left to be decided by States.

With regard to 'other official statistics', role of the Government is proposed to be limited to providing guidance.

8. Way Forward

The overall arrangement rooted in co-operative federalism steers quite well the fundamental structure of the Indian Statistical System. Moreover, the channels of data flow from block level to Central government level are also conceived well.

However, augmenting data production and dissemination capacity through fine tuning of the System is urgently required to make it more sync and responsive to the needs of the SDGs and open economy, prevalent now. It requires attention and teaming-up with other stakeholders for needed modifications to match developments in the country. Desired modifications are meant to make the system efficient in producing, processing and disseminating of adequate and reliable data in a timely manner, meeting changed environment of the socio-economic setting.

To accomplish it, evidence- based decision- making should be internalized within the overall governance structure of the Government, both at the Central and State/UT Administration level. Towards this end, timely collection of good quality data, its processing and dissemination is a pre-requisite. Before finalization, the draft policy document on official statistics must take these points into account, particularly when the economy of the country is growing fast, making it one of the major

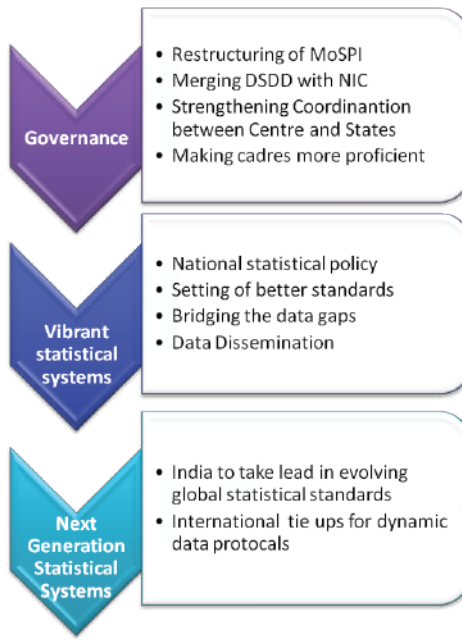
economies of the world with a size of over USD 2.5 trillion; besides large developmental initiatives would need robust data- sets for effective service delivery.

However, in contrast to such needs, the statistical system is facing severe capacity constraints in generating adequate quality data with a regular periodicity at the desired and feasible disaggregated level in tune with the requirements of the economy and in meeting various international commitments in the forms of conventions, treaties etc. including the SDGs. In this connection, the following suggestions and recommendations are made which are assumed to provide a way forward for a framework for transparent functioning of Governments at all levels.

8.1 Governance

8.1.1 A Stronger NSC

Where can also legislate. The NSC has been facing several challenges such as lack of financial autonomy, diluted powers, and inadequate



support and service conditions of the part-time chairperson and part-time Members. As a result the NSC is not able to effectively discharge its functions. 'Statistics' being in the 'Concurrent list', the Central Government may take the following steps to make NSC financially independent and a more functionally independent and stronger statistical policy- making body.

- NSC should be granted status of a statistical regulatory authority. The recommendations of NSC should be binding on the official statistical agencies, both for the Central Government and State Governments.
- It should be granted full autonomy in its functioning, including administrative as well as financial.
- The Chairperson and the Members of the NSC should mandatorily get better support and service conditions.

8.1.2 Restructuring of the Ministry of Statistics and Programme Implementation

The Ministry of Statistics and Programme Implementation (MOSPI) has two wings— (i) Statistics wing and (ii) Programme Implementation wing. The Programme Implementation wing is dedicated to only implement schemes like MPLAD, monitoring of Twenty Point Programme, and monitoring of the Central Sector infrastructure projects of value exceeding Rs 150 crore.

The Chief Statistician of India also being the Secretary, heading both the wings, is forced to earmark majority of his time on the programme implementation related day- to- day issues; leaving very little time for addressing technical matters related to statistics and statistical system.

It is, therefore, suggested that the Programme Implementation wing may be separated and merged with some other Ministry. Taking into account the functional aspects, NITI Aayog of the Ministry of Planning can be one options. Such a switchover would facilitate Chief Statistician of India (CSI) to give the department a new direction matching ~~to~~ the changing needs.

Alternatively, the posts of Chief Statistician of India and of the Secretary, MoSPI may be held by different incumbents. The CSI should be overall in-charge of the technical matters of the ministry, and should be responsible for coordination with the domestic as well as the UN/ International statistical agencies. The Secretary, MoSPI, should be the administrative in-charge of the ministry and should be responsible for functioning of the Programme Implementation wing. Accordingly, in line with the professional requirements, it is strongly suggested that cadre management of both Indian Statistical Service (ISS) and Subordinate Statistical Service (SSS) should be in the domain of the Chief Statistician of India for better management of the statistical system. As such he should be made the Cadre Controlling Authority also.

8.2 Re-orienting Academic Courses

The universities in India have been conducting academic courses in statistics for graduating statisticians, who are imparted theoretical knowledge; largely applied statistics being overlooked. The course curriculum of the academic statistics is to be recast towards applied statistics as well as for analysis and management of data available through non-traditional sources. Further, in order to create awareness and interest among the students and scholars, official statistics should be introduced as a component in the curricula of statistics courses at the graduation and the post-graduation levels in colleges and universities.

8.3 Recruitment of ISS Officers

The Union Public Service Commission (UPSC) conducts examinations for recruiting personnel in the ISS cadre. The examination syllabus should be re-oriented for recruitment of such statisticians, who are capable of handling professional analysis and management of large data- set/data from non-traditional sources like big-data.

8.4 Restructuring of Training Course for ISS Probationers

The NSSTA, under the training division of MoSPI, is currently engaged in imparting training to ISS Probationers. The curriculum of the training programme drawn by the NSSTA focuses on introducing Probationers

regarding domestic and international official statistical systems as well as in traditional tools required for collection, analysis, processing and dissemination of data; besides a foundation course to handle administrative matters. The curriculum designed for the training being old is thus meeting only the requirement of handling data collected through traditional methods.

Keeping in view today's requirements, the ISS Probationers need to be trained as data analytics, in visualization, management of large structured and unstructured data emanating from various sources, which remain underutilized. Hence, the training programme of the ISS Probationers needs to be re-oriented to meet expectations of the data-users in the perspective of the changing scenario. Big-data Analytics should be introduced in the training course curriculum.

8.5 Merging Data Storage and Dissemination Division (DSDD) with National Informatics Centre (NIC)

At present, Data Storage and Dissemination Division (DSDD) under the Central Statistics Office (CSO) of MoSPI is mandated to handle data- sets generated/collected by the MoSPI. This division is manned by computer programmers as well as cadre officers of the ISS. This division should be merged with the NIC to function as a separate wing in the National Informatics Centre (NIC), which is mandated to provide ICT solutions, e-governance and in assisting Ministries and Departments of Central and State Governments in implementation of the Digital India Programme. This wing may be headed by an ISS officer at the level of Additional Director General (ADG) to bring in synergy between data scientists and official statisticians.

8.6 Strengthening Statistical Coordination

In accordance with the recommendations of the Rangarajan Commission, senior officers of the Indian Statistical Service are posted in the statistical units of the Central Ministries as Statistical Advisers. They are supported by the Subordinate Statistical Service officers. This system has been evolved for enhancing lateral coordination at the Centre.

A similar system can be adopted by the State Governments to accelerate coordination mechanism within States.

The coordination presently between the central nodal agency i.e. MoSPI and state nodal agencies is established through the Conference of Central and State Statistical Organizations (COCSSO). Convening of the COCSSO is a regular annual feature of the MoSPI. This forum discusses statistical issues for coordinated efforts to make available reliable and timely statistics to planners and policy -makers for informed decision -making and good governance, and can deepen co-operative federalism.

The existing coordination mechanism needs strengthening through introduction of latest technologies. The CSO, which is mandated for statistical coordination, should develop an Integrated IT Platform for Official Statistical System. This would ensure functional efficiency, standardization of statistical products, ease of internal delivery of statistical products, and would serve as the first step towards integration of the National Statistical System.

The Integrated IT Platform for Official Statistical System may have two windows— Information Window and Utilities Window.

Under the Information Window, by linking it to each Ministry/ Department/Units, the following information should be collected—(1) The Statistical Set-up; (2) Concepts, Definitions and Methodologies used; (3) Publications brought out; (4) Data Available; (5) Standard Periodic Reports Submitted; (6) Parliament Questions and Answers; (7) Manpower Sanctioned, in position, and Assignments given to the Statistical Personnel; (8) Action Plan and Status Reports; (9) Training Received by Statistical Personnel; (10) Software Tools used; (11) Software Packages available; (12) Publications Received; (13) Library Facility with index of books and reference materials; (14) Abbreviations Used (15) Special Reports ; and (16) FAQs.

Under the Utilities Window, the following Facilities embedded with Platforms may be created—(1) Report Writing and Presentation Templates; (2) Standard Database Format Templates; (3) Data Analysis

Tools (Linked to Training); (4) Fora for Discussions; (5) News Feed (Events, New Developments, etc.); (6) Online Diploma/Certificate Training Courses; (7) Online Journals and Publications (8) Important Video Lectures and Deliberations; and (9) Research Problems and Guide(s).

8.7 Making Cadres more Proficient

The Central Statistical System is manned by the ISS officers, supported by the Subordinate Statistical Service (SSS) Officers. The Statistics units of the administrative Ministries are headed by the Senior Administrative Grade (SAG) or Higher Administrative Grade (HAG) officers of the ISS. The functions of the Statistics Unit as well as of the service matters of the personnel are governed by the concerned administrative Ministry. As such these units are independent on day-to-day issues. Nevertheless, the cadre officers should have a back- up of the vibrant and professional technical anchor in CSI. Capacity- building, transfers into cadre or to the Ministries becoming responsibilities of a revamped CSI office would make its function more efficiently both for short run and long run.

By virtue of being the cadre controlling authority, the CSI would ensure that technical proficiency is rewarded at the time of promotion and career progression. As a windfall, redundant posts can be substituted by posts that can lead to better professional build- up.

At present, promotion of ISS officers is linked to merit-cum-seniority; for which merit is judged through the Annual Performance Appraisal Report (APAR). It is suggested that the criterion for assessing merit should itself be made more professional through sufficient weightage to achievements, like contribution in peer- reviewed technical papers of statistical importance in statistical journals of repute.

8.8 Vibrant Statistical Systems

8.8.1 Setting Better Standards

It has been observed that in many cases, statistical standards are not available, or even if available are not followed by many statistical

agencies for data collection. For example, in education sector which under the Constitution appears in the 'State list', definitions of drop-out rate, entry age at the formal level of education and other related terms are not uniformly used across states/UTs.

Just setting-up of standards by a Central Agency is not adequate until the standards are accepted and adopted by the statistical agencies in states. Concerted efforts should be made for achieving this objective. Involvement of statistical agencies and administrative departments of the state governments would be imperative for setting such standards. Moreover, administrative Ministries may also be involved in this process for facilitation. After a consensus decision, statistical agencies may revisit data- collection formats to suitably modify/revise these for use by their field agencies. The whole process may be carried out under the guidance of the NSC; mandated to undertake such facilitation.

Standard- setting is a dynamic process, and standards have to be suitably modified as and when some policy or statistical development takes place and/or capacities of state statistical system are enhanced. To ensure this, the Central Statistical System needs to be vigilant and well versed with all such aspects.

8.8.2 Strengthening of the State Statistical Systems

Under the decentralized structure, the State Statistical System is governed by respective State Governments. The system at the State level is similar to the Central statistical system, and State Statistical Systems are integral constituents of the national statistical system. Data on many social, economic and environmental aspects flow only from states. Therefore, strengthening of State Statistical System assumes paramount importance but unfortunately, State systems are also not vibrant.

The structure of State statistical systems is not uniform across the states. Besides, technical capacity and capabilities in collection, analyzing, processing and dissemination of data vary from state to state, and are generally weak. These need to be strengthened as a step towards vibrancy, without sacrificing the need to localize, wherever needed.

For instance, while 'drop-out rate' may be defined uniformly, varying localized underlying sets of reasons may differ. For instance, 'assisting in fishing' may largely be a relevant reason only in coastal states, and 'caught in a snowstorm' may be so in hilly areas.

The MoSPI has been implementing 'Support Statistical Strengthening Project' (SSSP) since 2010, which was earlier known as the 'India Statistical Strengthening Project' (ISSP).

The copies of the guidelines, details/copies of the States strategic plans, achievements under the earlier scheme of the ISSP are yet to be uploaded on the Ministry's website for public access and for transparent implementation. These steps should be taken forth with a real time updation system.

Efficiency of the Central and State statistical systems can be enhanced through technical deliberations on the key statistical aspects by inviting stakeholders, including experts, academia, CSOs, international organizations, besides, of course, the Central Ministries and State Departments. While involving the Central and State officials, coverage should not be limited to statistical wings but profusely expanded to involve user wings also. The National Statistical Commission (NSC) should take lead in this direction as per its mandate to infuse vibrancy in the system.

8.8.3 Human Resources Development

Training is an important component of Human Resource Development. It is a key to strengthening overall statistical system. At present, a centralized institution named NSSTA meets training needs of official statisticians of the Central and State Governments. The NSSTA also organizes request -based training programmes for officials of other neighbouring countries. The capacity of the NSSTA is limited for meeting such training requirements; considering a large number of statistical personnel to be trained, particularly, of State Governments. In addition, DESs and nodal administrative Department personnel of the State Governments also need to be trained as being primarily responsible for

designing and collecting/maintaining administrative data. As 'One-Time' training cannot suffice, regular in-service training courses are also a must.

Enhancing training capacity through adequate funds and manpower of the Institute needs to be ensured. Wherever needed, some other institutional arrangements can also be chalked out. One such possibility is organizing training courses at the Indian Statistical Institute and its different regional Centers under the overall supervision of the NSSTA. Further, courses like e-learning -should be undertaken by it.

8.9 Bridging Data Gaps

8.9.1 The Goldmine of Administrative Statistics

Larger part of the statistical requirement is presently met through administrative statistics. Cost of collection of such statistics is far less compared to sample surveys or censuses; as this originates as the byproduct of the day-to-day administration and statutory returns, and is largely collected by the State Governments, which produce data at the desired levels of disaggregation and periodicity. However, the associated challenges need to be addressed properly. Such data is generally collected through a number of agencies; hence a proper coordination needs be devised with a view to take all stakeholders on board. Accuracy in administrative statistics is, of course, vital for desired functioning of the official statistical system.

The value of the correct official statistics is reasonably recognized by one and all, but the absence of a direct visible link between the policy and the statistics tones downs value of the official statistics. Moreover, exclusion of statisticians from decision- making process leaves value of official statistics much untapped.

Lately, the administrative statistics has been a matter of criticism mainly for its incomplete coverage, unsatisfactory quality and delay in publication.

Some suggestions for improving administrative statistics for making its storage, retrieval and aggregation much easier and quick while meeting

criteria of quality, completeness, timeliness and reliability are as follows:

- A Statistical cell may be set -up in each nodal (or any other nomenclature used as per local needs) administrative Department of the State Government on the pattern of the Central Statistical System. This may be headed by a trained statistician, functioning as a nodal officer for all statistical matters of the Department for maintaining proper coordination with the State DES and line Ministries/Department at the Centre.
- The Unit may be equipped with statistical infrastructure, including computers (with adequate back-up) and statistical software.
- The data collection formats may be revisited to modify/revise them, keeping in view the changing requirements of statistical agencies and these should be computer compatible.
- The data collection/recording on these formats should be error-free (with coverage of all mandated data fields) and pass through validation checks, for which suitable mechanisms need to be evolved. A provision should be made that no sheet can be saved or printed unless all mandated fields prescribed in the format are filled up; red flags should pop- up to point out when any mandated field is left blank.
- To the extent possible, data collection should be in electronic format and on real-time basis.
- In general, various subject- matter administrative Departments presently function in silos. As a result, the administrative data collected by different data generating Departments is not properly harnessed. To resolve this issue, a central server, with proper back-up facility, should be installed; facilitating Departments to store and retrieve administrative data. Privacy or leakage of information related concerns may be suitably addressed while installing this facility. One option may be that the ownership of the data available on the server may be given to an appropriate authority, maintaining the central server, and no one should be allowed to use data without permission. In this regard, the initiative taken by Government of

Andhra Pradesh in collecting data in a centralized office may be appropriately considered by other State Governments/UTs.

- The requirement of funds may be met through funds available under the Scheme "Support for Statistical Strengthening".
- The data available through administrative records, surveys, censuses must be collected in digital formats for easy processing and timely dissemination. Data collection on paper schedules should be discouraged

8.9.2 Improving Quality of Survey Data

Sample surveys are generally conducted for meeting data gaps. But they have many disadvantages, such as high cost of data collection; data estimates generally not being at the desired disaggregation; limitation on periodicity and considerable time-lag in availability of results/reports.

There are some advantages of sample surveys; though such surveys are costly. Data collection process under a sample survey is scientific, and standard errors of the sample estimates can easily be computed and reduced as per pre-defined requirements. Thus more reliable estimates can be attained from sample data as compared to estimates based on the partly generated administrative statistics due to unscientifically collected non-random samples. The National Sample Survey Office (NSSO) conducts large- scale nation-wide sample surveys on sectors that are cross-cutting in nature. Subject -specific surveys, of course, are conducted by the concerned Administrative Ministries.

However, frequent changes in definitions, concepts and methodology raise comparability issues of the available data -sets for different points of time. Inconsistency in results on the same parameters from the surveys conducted by two Ministries for the same reference year is yet another issue.

To overcome these challenges and improve the quality of survey data, the following measures have been suggested.

- The surveys need to be well planned and conducted in a coordinated manner by the concerned Ministries at the Centre. The Ministries

should strictly follow the Survey guidelines 2011, issued by the MoSPI.

- The Ministries may develop an integrated survey plan for conducting surveys in the medium run. Such a plan may be drawn- up in consultation with other Ministries dealing with similar subjects and MoSPI. Definitions, terms, methodologies, sampling design and other related aspects for conducting surveys may be duly elaborated in such plans.

8.9.*3* *Bridging Private Sector Needs and Official System Gap*

At present, the capacity of the Indian Statistical System is very limited. The data and statistics produced by the existing official statistical system are not adequate to undertake new initiatives for domestic and international cooperation. It has also become essential for the official statistical system to enhance participation of private sector in decision - making process, in providing reliable and high quality data, especially for the social, economic and environmental sectors.

The Government sector is the main user of the data produced by the statistical system; though private sector also profusely uses data for research, innovation and investment decisions. There is a stiff competition among the State Governments for attracting private investment in respective States.

Investors need a sound database on economic as well as social parameters for prioritizing their investment decisions. The statistical system with its limited capacity is not able to meet data needs of private investors and also of the Civil Societies, academia and researches for carrying out research studies.

The MoSPI has a system of convening Data Users' Conference on the pre-identified subjects. The periodicity of this Conference is not regular, and even follow-up on the outcomes is weak.

The following steps are suggested to beget confidence of data- users in the official system of data production.

- In addition to Central Government Ministries/Departments and the State Governments, private sector including investors/entrepreneurs, Civil societies, academia and researchers may also be associated in the exercise of identification of topics for discussion in the Conference.
- The data- users' Conference may be organized during the gap between the Statistics Day i.e. the 29th June, of every year and Conference of Central and State Statistical Organisations (COCSSO), which is also an annual feature of the MoSPI.
- The outcome of the Conference may be shared with concerned Administrative Ministries and State Governments for the follow- up in consultation with the MoSPI.
- The COCSSO may also deliberate on initiatives taken/proposed by the Ministries and the State Governments on various suggestions of the Conference to decide future course of action.
- A separate section in the nature of 'action taken report' (ATR) on the major suggestions of data- users' conference may be included in the Annual Report of the MoSPI.
- The official statisticians should be encouraged to visit academic institutions like colleges, universities, business management colleges etc. to refresh their knowledge and learn about the new and emerging statistical methodologies. Similarly, the teaching faculty should be encouraged to visit Government statistical agencies to understand issues relating to official statistics. Indian Statistical Institute can also play an important role in the area of interaction.

8.9.4 Full utilization of exiting data

The "*Digital India*" initiative taken by the Government generates a lot of raw numerical data. However, the data generated through this process remains untapped by the statistical system, for example, data generated by the PMJDY, MUDRA, PAN based income-tax returns, Aadhaar-based Direct Benefit Transfer, implementation of GST, IRCTC rail reservation/ passenger data and so on. Further, some unit- level data/information collected through household surveys remains unprocessed for example

the data on Village facilities collected through NSSO surveys. The data generation/collection involve huge burden on government exchequer. Therefore, the data generated through various sources needs to be properly utilized for compiling relevant socio-economic indicators for effective and informed decision making.

Non-traditional data sources such as big-data, geo-spatial data sources should also be explored to augment country's data base. Big-data can very well be utilized for understanding public discussions, overcoming sudden outbreak of a disease in a remote location, traffic planning, tax evasion etc. Space technology should be utilized for compiling agriculture statistics, housing and urban planning etc.

The numerical data available through new sources needs to be identified for conversion into statistical products, based on the standardized statistical concepts, definitions and sound methodologies. There are many potential sources of information for bridging data gaps and producing socio-economic indicators on many dimensions of economic development; duly honouring privacy concerns.

The NSC should take a lead in this direction by collaborating with concerned administrative Ministries/Departments and State Departments, with the support of the MoSPI.

8.10 Involvement of Private Sector for Data Augmentation

The Indian Statistical System with its existing capacity is not able to cater to the growing data demand of the Government and private sectors, including Civil Societies, research and academia. In the scenario of the availability of the limited resources in terms of money and manpower, augmentation in data production, processing and dissemination capacity of the system remains deficient. It is, therefore, suggested that the private sector may be involved suitably in the official statistical system. It may operate in close co-ordination with government statistical agencies for ensuring that they produce reliable and timely data as per the national standards.

8.11 Data Dissemination

8.11.1 Improving Quality of Data Dissemination

There is a need to improve the quality of the statistical publications released in printed or electronic format from the point of view that the data given in them is consistent with the data contained in different tables of the publication on the same parameters/attributes. For instance, the Agricultural Statistics at a Glance released by the Ministry of Agriculture and Farmers' Welfare, as a regular annual publication, has certain discrepancies across the tables covered in it, indicating irrigated area. Such a discrepancy creates confusion in the mind of data -users. Moreover, old data cannot be properly utilized by the policy- makers as there are modifications of various programmes aimed at farmers' welfare. Further, each statistical publication should invariably include definition of various terminologies, methodologies used for compilation of a particular indicator, and also source of data (administrative/survey); to be more useful for data -users.

Further, in order to increase usability, data should be disseminated by the statistical agencies needs be in user friendly formats. While releasing the data in public domain, it should be put in PDF with 'copy' facility as well as in downloadable Excel sheet/format. It will save time of the data users to further analyze the data as per the requirements. Image format or 'jpg' format without 'copy' facility needs be avoided.

8.12 Next Generation Statistical System

8.12.1 India to take lead in Evolving Global Statistical System

A. *Setting -up Consultancy Wing in the MoSPI*

Rangarajan Commission (NSC-2001) recommended setting- up of a Consultancy Wing as an autonomous body in the MoSPI to undertake projects from Governmental and international agencies regarding data collection, processing, analysis and report generation through sample surveys or other means on assigned topics and to provide consultancy services related to statistical problems, including methodological studies and model building on commercial terms.

While developing a Concept Paper in 2011 with the help of the Indian Agricultural Statistics Research Institute (IASRI), New Delhi, for operationalizing recommendations, the MoSPI defined the scope of work by private sector limiting it only to survey capabilities, and thus in a way diluted the scope of the partnership with the private sector.

There is, therefore, a strong need to have a re-look to the recommendation for implementing it in true spirit and sense to harness potential of the private sector for enhancing competitive capacity of the present official statistical system in collection, processing, timely dissemination of statistical product through methodological studies and model building, which could not be accommodated in the existing arrangements within the Government.

B. ***Methodological Studies***

Priority should be accorded to such methodological studies intending to develop cost-effective methodologies, estimation techniques and for identifying data gaps in different sectors of official statistics. The MoSPI may identify a list of priority subjects/topics, and upload them on the website of the Ministry for inviting research proposals for funding under their 'Capacity Development' programme. The existing guidelines issued should be revisited and revised to accommodate such requirements. The outcomes of the studies undertaken should invariably be placed before the National Statistical Commission in its monthly meetings for deliberations and course correction. In due course of time, the methodological studies should be entrusted to the Consultancy Wing, once it is established, for better synergy.

8.13 International tie-ups for Dynamic Data Protocols

8.*13.1 Common System for Data Storage and Dissemination*

India is a subscriber to the International Monetary Fund's (IMF) Special Data Dissemination Standards (SDDS) and adheres to such Standards. The Ministry maintains an 'Advance Release Calendar' for its data categories covered under the SDDS, and it is uploaded on the Ministry's

website as well as on the Dissemination Standards Bulletin Board (DSBB) of the IMF.

8.13.2 Data Integration

The MOSPI is assigned a duty to coordinate Statistical Data produced by the Central and the State Statistical agencies. However, not much efforts have been made so far for integrating available data from the angle of different official aspects, like socio-economic development and integrated data series, based on the standardized statistical concepts, definitions and methodologies, which can improve credibility of the official data and facilitate comparisons over space and time. The Statistical Data and Meta Data Exchange (SDMX) provide technical solutions for easy exchange of data and metadata across different statistical organizations. The ministry may explore possibilities of becoming partner of the SDMX, which would facilitate ICT solutions for producing reliable and integrated data.

The State Governments should also be encouraged to follow 'Advance Release Calendar' similarly for compiling their respective State Gross Domestic Product (SGDP), fiscal/monetary statistics and also for different kinds of data series produced and disseminated. It would prove to be supportive for the country's better compliance with the SDDS, and facilitate timely release of data and statistical publications.

8.14 Data Security

Strong and stringent measures should be taken for ensuring data protection and cyber security. An appropriate data protection law should be drafted, deliberated upon, debated and enacted.

9. Conclusions

The basic structure of the Indian Official Statistical System does not require an upheaval. In fact, a lot of data is being generated by the Central and State/UT governments but it's not collated for analysis and policy feedback. Therefore, the time has come to revamp official statistical system to improve its reliability, credibility and timely availability to data- users. Accordingly, the mind-set of MoSPI should change to

adopt statistical innovations available at the global and at the national level for their suitability and localization in Indian context as well as to come up with innovations required with changing times. There is no dearth of competent statisticians in the country to meet the challenge of improving credibility and timely availability of official statistics for the Indian economy and researchers, provided necessary actions and initiatives are taken by all stakeholders in the statistical system under the leadership of the MoSPI. The Government, both at the Centre and State levels, should recognize importance of reliable and quality data for policy formulation and implementation. The policy making in the developed nations takes place on the basis of a robust statistical analysis using high-quality data. Hence, a serious thought must be given for revamping Indian Official Statistical System. This would ensure sound and informed policy decisions for achieving nationally defined development objectives. To harness data from the field level, decentralization of the power of governance, initiated through 73rd and 74th amendments of the Constitution of India, highlights increasing role of local bodies, and their involvement in statistical system becomes imperative. The increasing shift towards tertiary sector, which now contributes over 53 per cent to the economy, is also throwing up many new challenges and is also revealing data gaps. Thus, to meet the new and diversified statistical requirement of the country, a revamped National Statistical System has to be put in place. Of course, this would require investments in terms of money, manpower and statistical infrastructure.

Lastly, a person doesn't visit a physician just to get his blood pressure measured but to also get a credible advice on parameters which are not normal, a requisite treatment plan and a sound advice to avert its occurrence in future. Therefore, a vibrant official statistical system should also give a timely credible feedback to the policy- makers for taking corrective actions, and thus enhancing marginal utility of the last rupee spent.

Endnotes

[1] Authors are Visiting Fellows in RIS. The Views expressed are not necessarily the views of RIS.

[2] Ministry of Statistics and Programme Implementation invited public comments on the Draft Policy on Official Statistics. Further details may be seen from: http://mospi.gov.in/sites/default/files/announcements/draft_policy_17may18.pdf

[3] The final text of the outcome document adopted at the Third International Conference on Financing for Development (Addis Ababa, Ethiopia, 13–16 July 2015) and endorsed by the UN General Assembly in its resolution 69/313 of 27 July 2015. Further details are available at http://www.un.org/esa/ffd/wp-content/uploads/2015/08/AAAA_Outcome.pdf p.58

[4] http://pib.nic.in/newsite/PrintRelease.aspx?relid=168837. accessed on: 17th April 2018

[5] Ministry of Statistics and Programme Implementation publication on Statistical System in India 2009 can be accessed: http://mospi.nic.in/sites/default/files/publication_reports/Statistical_System_23nov09_final_0.pdf

[6] *ibid*

[7] *ibid*

[8] Ministry of Statistics and Programme Implementation vide Resolution No. M/13011/3/99-Admn. IV dated 19th January 2000 established National Statistical Commission under the chairmanship of Dr. C. Rangarajan, Governor, Andhra Pradesh. The terms of Reference of the Commission, inter-alia, included the revamping the official statistical system.

[9] Report of Rangarajan Commission: http://www.MoSPI.gov.in/12-composition-and-terms-reference.

[10] Detailed Report of the Rangarajan Commission can be downloaded from http://mospi.nic.in/report-dr-rangarajan-commission

[11] Annual Report 2016-17 of the Ministry of Statistics and Programme Implementation is available at http://mospi.nic.in/sites/default/files/publication_reports/mospi_Annual_Report_2016-17.pdf

[12] *ibid.*

[13] National Statistical Systems Training Academy (NSSTA) under training division (CSO) of the Ministry of Statistics and Programme Implementation came into existence on 13th February 2009 is a premier Institute for imparting training on Official Statistics and undertaking research activities thereto. Further details may be accessed from:.http://www.mospi.gov.in/about-nssta

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[17] Text of speech by Minister of Statistics and Programme Implementation Shri Sadananda Gowda, at the Round Table Conference on "Data for new India" can be accessed from http://pib.nic.in/newsite/PrintRelease.aspx?relid=180466 and also reported in the Economic Times on 9th July 2018. https://economictimes.indiatimes.com/news/economy/policy/national-policy-on-official-statistics-soon-sadananda-gowda/articleshow/64917495.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst

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