

Behind the Post-1991 'Challenge' to the Functional Efficiency of Established Statistical Institutions

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This paper provides a documented account of what drove the post-1991 statistical policy shifts which contributed so much to what the *Report of the Committee on Unorganised Sector Statistics* (2012) describes as the “challenges” of ensuring the quality and credibility of India’s statistical database. The initial focus is on the ideology and actions which lay behind the functionally destructive institutional restructuring of two established Indian statistical organisations – the Field Operations Division of the National Sample Survey Organisation and the Economic Census. An account of the consequences follows.

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During the early 1990s, the stage was set for the initiation of institutional changes that affected both the demand for, and the supply of, data from India’s National Sample Survey Office’s (NSSO) Field Operations Division (FOD). On the demand side, the International Monetary Fund (IMF) expected that India would sign up to the Special Data Dissemination Standard (SDDS) agreement, which required that India provide it with a much expanded “economic performance” data set. On the supply side, the Ministry of Finance ordered the implementation of certain recommendations made by the Fifth Central Pay Commission, which included a 10% across-the-board reduction in the number of field investigators, and a new recruitment system.¹

Concurrently, the weakening of the Central Statistics Office (CSO) during the second half of the 1990s and the restructuring of the Economic Census from 1998 onwards combined to reduce the capacity of the Economic Census to carry out its mandate.

How did this happen?

Fifth Central Pay Commission’s Role

On 9 April 1994, a Resolution was published in the Gazette of India, appointing the Fifth Central Pay Commission (MoF 1997: 15, Annexe 1.1). Paragraph 2(d) of the Resolution reads:

To examine the work methods and work environment as also the variety of allowances and benefits in kind that are presently available to the aforementioned categories in addition to pay and to suggest rationalisation and simplification thereof with a view to promoting efficiency in administration, reducing redundant paper-work and optimising the size of the government machinery.²

As the Central Pay Commission’s Report itself puts it, “There is a conscious departure from the past as far as the Terms of Reference of this Commission are concerned” (ibid: 83, para 2.1).

Its significance was not lost on the press at the time. In Chapter 2 of its Report, the Commission notes that “a national newspaper” has commented that the “efficiency clause” in the Commission’s terms of reference has made it, in effect, an “Administrative Reforms Commission” (ibid: 83, para 2.2).

Paragraph 2.14 of the Report outlines the Fifth Pay Commission’s interpretation of this mandate in terms of measures that would constitute an “efficiency programme” for the next 10-15 years. These include: (i) passing on “certain non-core activities to private contractors”, developing “partnership between government, industry, academia and NGOs”; (ii) examining

“new modes of recruitment, including contract employment”; and (iii) looking “at various options of optimising the size of the government machinery” (ibid: 87).

The Report then documents the commitment of the Commission to the official “economic reforms” agenda of the government of the day, described in the Report as “the likely scenario in the political, economic, social and other spheres upto the year 2010” (ibid: 89). Its wide-ranging coverage, unique in the history of Pay Commission reports, includes major sections headed “Security and International Environment”, describing international and national security concerns; “The Social Scene”, dealing with poverty, food security, the status of women and backward groups; and “The Economic Scenario” (ibid: 93), which suggests “a major policy initiative”.

The Report then outlines the specifics in terms of the economic initiatives, which, in the Commission’s view, are implicit in the “likely scenario”. These include: “An investment rate of 30%, and a rate of growth of GDP by 6% to 8%; an increase in employment generation by 3% every year; dismantling of the permit-licence system; disinvestment in the public sector; corporatisation of departmental undertakings; privatisation and contracting of services” (ibid: 93-94).

The Commission recognised that there would be opposition to some of these measures. It acknowledged that:

The main opposition will come from the trade unions and associations. They will have to be handled with care and circumspection. There may be a need for a new policy on the formation of trade unions, on the pattern of what has been attempted in other countries. Workers will also have to understand that in the perspective of globalisation, we have to compete or perish (ibid: 195, para 8.23).

Chapter 27, titled “Workforce Size Control”, gets down to the nitty-gritty.

The “Overall Strategy” includes: (i) reducing the volume of work to be done by shifting the responsibility for doing specified tasks to non-central government entities, including state governments, public sector corporations, the private sector and the cooperative sector, and by first converting some institutions into autonomous bodies; (ii) organisational restructuring to reduce the number of employees required, including reduction in the number of ministries and departments; (iii) computerisation to reduce the number of employees required; and (iv) “Rightsizing strategies that will enable government to shed some fat” (ibid: 242-43, para 27.2).

They list six “rightsizing strategies”: (i) “abolition of vacant posts”; (ii) “freeze on recruitment”; (iii) “across the board cut”; (iv) “statutory control on creation of new posts”; (v) “voluntary retirement”; and (vi) “compulsory retirement” (ibid: 243).

The Report takes a strong stand on the first strategy: “We, therefore, recommend that no arguments should be allowed against the decision to abolish existing vacant posts” (ibid: 244, para 27.9). One of the arguments that the Commission thus dismissed was set out on the previous page of its Report. It reads: “Another argument could be that abolition, like creation, should be a conscious decision based on functional considerations and it should be resorted to only if a surplus is identified after a proper work study” (ibid: 243, para 27.7). The

“functional considerations” argument could have been applied equally well to all of the first four strategies in the case of activities such as those of the FOD of the NSSO.

However, it was the “across the board cut” strategy that the government adopted first. Its impact on field investigator strength was immediate. A second round of functionally destructive institutional change took place in 2002, when the Pay Commission’s recommendation regarding the introduction of a new recruitment system was accepted.

Reduction in Number of Sanctioned Posts

In accordance with instructions issued by the Ministry of Finance for a 10% cut in staff strength, and in pursuance of a Department of Statistics (DOS) letter dated 8 February 1995, 150 posts of assistant superintendent and 220 field investigator posts were required to be abolished. On 7 March 1995, the office order to this effect was issued by the NSSO’s FOD.

As a result of the order, the number of sanctioned field investigators fell from 1,469 in 1993-94 to 1,199 in 1997-98. Concurrently, the number of sanctioned field supervisors dropped from 1,920 to 1,745.

In these circumstances, the shortfall had to be made good, at least in part. This was done by the de facto expansion of the Indian Statistical Service (ISS). The 2001 National Statistical Commission (NSC) observed that a large number of persons had been placed in the ISS in an ad hoc manner, and that they were not regularised until the Supreme Court directed that they had to be absorbed in the cadre with retrospective effect. The outcome was that the base of the service was “extensively widened. The number of positions at higher levels ...remained the same” (NSC 2001: 490, para 14.10.27).

Notwithstanding these ad hoc additions, the NSSO remained short of the required number of fieldworkers. In 1999-2000, for the first time, contract investigators were hired. This may be viewed as a continuation of the earlier practice of making ad hoc appointments, but without the hazards of having to regularise them later. It may be noted that at least the regularised ad hoc appointees had the advantage of being experienced hands. The same cannot be said of the contract workers.

This was the situation at the time the Fifth Pay Commission’s recommendation for a unified, centralised subordinate statistical service was put into effect.

New Recruitment System

The introduction of the new recruitment system had an immediate, significant, and negative impact on the numbers of NSSO investigators and superintendents who were recruited. “Once it became operational, other major shortcomings in the new system were revealed. The recruitment process took longer, and the recruits who joined the service were not necessarily proficient in the languages of the regions where their services were required” (NSC 2012: 49).

The old system worked better on these counts.

Before 2003-04, the NSSO had a separate cadre. Recruitment of National Sample Survey (NSS) field investigators was done locally, at the level of NSSO regional offices, and directly, for

nss service specifically. The cso and other ministries that had “isolated” posts filled them through different channels.

What the Fifth Central Pay Commission recommended was the creation of a “centralised” Subordinate Statistical Service for the nss’s FOD, the cso and other ministries. Recruitment was to be done by a Staff Selection Commission. The recommendation was accepted. An order constituting it was issued in 2002. This replaced the decentralised nss recruitment system.

When the two systems were merged to form a national statistical service, recruitment was to be done at the central level, not by the nss and not by the Ministry of Statistics, but by a Staff Selection Commission, similar in character to the Union Public Service Commission (UPSC), but for “staff” rather than for “officers”.

During the two years, 2002-04, the mechanics of setting up the merged statistical service took time to work out. Meanwhile, no one was recruited. The result was that, for the nss, there was no option but to rely on outsourcing for the necessary manpower to conduct ongoing surveys, as there were only 400 nss investigators to conduct the 66th round.

In 2004, the new recruitment system was actually launched. However, it did not work very well.

To illustrate, in 2006-07, MOSPI, on behalf of the nss asked the Staff Selection Commission (SSC) to recruit about 350 fresh recruits at the ‘investigator grade 2’ level. 350 names were provided and appointment letters were sent but only 110 joined. MOSPI wrote again to the SSC, asking for an additional panel. They got 100 names to whom letters were sent but only one joined. In 2007-08, MOSPI tried again to recruit. Three hundred and 50 names were sent, eventually 90-95 joined. The story was repeated in 2008-09 (ibid: 49, footnote 23).

The result was that the investigators/supervisors service of the FOD lost ground. Retirements, at an average rate of 120 per year, plus resignations, at an average rate of 30 to 40 per year, added up to a rate of attrition amounting to 150 to 160 per year. The backlog of unfilled posts rose. At its worst, the shortfall was 1,100 people.

The nss tried to make do with whatever they had, but the interim solution to the increasing shortfall of experienced field investigators created a new set of problems. As the 2012 Committee reported:

The attrition is normally at the supervisory level, but due to the huge shortage at the field investigators’ level, the nss decided not to promote anybody for four or five years, although eligible cadre as well as vacant supervisory posts did exist. Thus, to maintain field staff, promotional prospects of personnel were sacrificed. Presumably, so was the morale (ibid: 49, para 6.3.1.3).

However, “allowing attrition at the supervisory level to continue proved to be a ‘most damaging’ decision. Scrutiny, inspection and supervision of field staff suffered. To deal with the problem, in 2008 a large number of field investigators (56) were promoted as supervisors. This created a gigantic gap at the field investigator level” (ibid). The number of field investigators dropped and the number of field supervisors moved up, despite being partially offset by a significant number of retirees and the voluntary retirement scheme

cases.³ In 2010-11, for the first time, 200 “consultants” were hired to cover a shortfall in the required number of regular nss field supervisors.⁴

Fieldworkers’ Qualifications and Recruitment

A paper prepared by officials of the FOD states that the “most important requirement/qualification for primary fieldworkers is knowledge of local language, culture and traditions, as well as topography” (FOD 2011: 7). Yet, under the present dispensation, primary fieldworkers are recruited on an all-India basis and they may be deputed for work in field offices of particular regions without regard to their knowledge of the regional language, culture and traditions. Major problems often arise when this happens. Not only is the quality of the data collected compromised, the freshly recruited and posted fieldworkers involved in such mismatches are more likely to resign.

The 2012 *Report of the Committee on Unorganised Sector Statistics* notes that

At present, there is a two-year gap between the initiation and completion of the recruitment process. In the interval, the applicants may well find other jobs. The delays may make it necessary to hire contract workers locally which means that local FOD officials must make arrangements to invite applications, recruit and train them, only to lose them again at the expiry of their contracts (NSC 2012: 50, para 6.3.1.5).

State-level officers complain that this process takes up more time than they are able to devote to their official work.

To deal with some of these problems the 2012 *Report* recommended that

the requirements for primary field workers should be identified not only in terms of a minimum educational standard, but also in terms of language qualifications that would specify working knowledge of English, proficiency in the language of the region, and basic knowledge of computers. Further, to avoid undue delays in recruitment, steps should be taken to streamline present procedures with a view to ensuring that the time taken is reduced to a minimum two to three months. A Committee may look into the matter to evolve suitable measures (ibid).

IMF’s Special Data Dissemination Standards

The SDDS of the IMF were designed by them as a “surveillance mechanism” following the Mexican financial crisis. In the words of an Economic and Social Commission for Asia and the Pacific (ESCAP) document, it “represents the benchmark data standard for countries that might seek access to international capital markets” (ESCAP 2010: 6). Inevitably, the SDDS tend to coincide more with the priorities of actual or potential lenders rather than with the priorities of developing country borrowers. That the SDDS did *not* include certain socio-economic data sets that reflect the aspirations of most developing countries, such as those relating to the achievement of Millennium Development Goals, was also noted by the ESCAP 2010 team.

The Indian government did not go blindly into accepting the SDDS requirements. It sought the views of other countries on SDDS before signing up (Kolli 2005: 6). Their responses indicated that opinion was divided.

Some countries saw the SDDS as a costly imposition and expressed doubts about how well SDDS would succeed as a

surveillance mechanism over an indebted country's financial system. They noted that before the SDDS was implemented, there had been no consultations with member countries by the IMF. This resulted in the perception that the SDDS were being forced upon them. Implementing the "stringent provisions" of the SDDS came at a cost. It demanded major changes in their statistical systems and "diversion of scarce resources to development of data categories for which there was little domestic demand" (ibid). If they did not comply, they risked removal of metadata pages from the IMF's website, an action that might undermine the credibility of their statistical system. In short, once a country subscribes to the SDDS, they are locked in; observance of the standard is mandatory.

However, several countries thought the SDDS were useful. They provided investors with timely, relevant information, enabled countries to compare their own methodologies with those of other countries, and provided internationally comparable statistics.

The result: India subscribed to the SDDS with effect from 27 December 1996.

The then DoS was given the responsibility for coordinating "real sector data" comprising national accounts, production indices, price indices and labour market data. The NSSO was assigned the work of supplying labour market data. The CSO was mandated to provide the other three data sets.

On the labour market, the SDDS required quarterly estimates of employment, unemployment and wage rates at the all-India level, with a time lag not exceeding one quarter.

At the time India did not meet most of the SDDS. However, a transition period was provided for up until the end of December 1998, and India succeeded in fulfilling all the standards set for it by then, except those related to estimates to be generated by the quarterly labour force survey, to be based on data collected during the quarterly sub-rounds of NSSO's annual thin sample surveys.

Sidelining the Governing Council of the NSSO

According to the minutes of its 66th meeting, the Governing Council was officially informed that the Government of India (GoI) was "likely to sign" the IMF's SDDS about 10 days beforehand. The meeting was also informed that the NSSO was to provide "quarterly estimates of employment and unemployment based on ongoing annual NSS Rounds", and that their Survey Design and Research Division (SDRD) had already been asked to take up a pilot study for generating quarterly estimates. The director of the SDRD, who was present, reported to the Council that the work had already started on the annual data of the 45th, 46th and 48th rounds, and that a preliminary report would be ready in early 1997. Apparently, the chairman of the Governing Council expressed his reservations about the use of annual thin samples for this purpose. He suggested that the quarterly estimates based on small samples "might be subject to a wide margin of error".⁵

What emerged from the pilot study, however, was something that could not be identified as an "error". As the chairman pointed out in a subsequent meeting, held on 7-8 August 1997,

"with the predominance of agriculture in rural areas, both employment and unemployment (particularly of females) are subject to seasonal variability. Since such variability is real, it does not make the quarterly estimates non-reliable".⁶ Subsequently, a similar exercise was carried out using the 43rd and 50th "full sample" quinquennial rounds with similar results.⁷

In the August 1997 meeting, the secretary of the Governing Council informed the members of the Council that member countries had the option of exempting themselves from supplying data on any two variables or indicators. He suggested that the Governing Council might take advantage of this provision. Following a subsequent decision by the Governing Council, it was decided to make use of what became known as the "as relevant" flexibility clause of the SDDS agreement.

The argument for taking advantage of the "as relevant" clause relates to the informal character of agricultural employment in India. As reported in S M Vidwans (2002b: 3950), it ran as follows: "Labour market data do not have the same macroeconomic implications for India as they do for highly industrialised countries in the sense that they are not considered to be useful indicators of short-run pressures on the economy, particularly in view of the substantial proportion of value-added generated by the agricultural sector and the structure of that sector."

Thus, the periodic labour force survey project was put on hold for some time. It was re floated only two years after the Governing Council of the NSSO had been officially dissolved in 2006.

Dissolution of the Governing Council

The dissolution of the NSSO's Governing Council in 2006 marks the opening of a new phase in the management of the Indian statistical system. Some background may be in order here.

The NSSO and its Governing Council had been created simultaneously by a resolution dated 5 March 1970. From 1970 to 2006, the Governing Council provided the oversight and direction for the operations of the NSSO. As the 2009-10 report of the NSC put it, the Governing Council enjoyed "autonomy in the matter of collection, processing and publication of survey data, thus ensuring freedom from undue interference. The Rangarajan Committee observed that the greatest strength of the NSS lies in its complete freedom from administrative and political influence, which is ensured through its autonomous Governing Council comprising academicians, professional statisticians and users" (NSC 2010: 43, para 4.28).

Ironically, the background to the dissolution of the Governing Council of the NSSO lies in one of the recommendations of the Rangarajan Committee, which envisaged the creation of a Statutory National Commission on Statistics "independent of the government and responsible to the Parliament in respect of policymaking, coordination and certification of quality of Core Statistics" (NSC 2001: para 14.5.2).

Following the decision of the cabinet to accept the recommendations of the Rangarajan Committee, the GoI set up the NSC through a resolution dated 1 June 2005, published in the *Gazette of India Extraordinary*. The Commission was

constituted on 12 July 2006 with Suresh D Tendulkar as part-time chairman.

The Commission in its very first meeting held on the day it was constituted, i.e., 12 July 2006 recommended as follows. 'Since the NSC has come into existence as an independent body and has authority as per the Resolution, the Governing Council of NSSO in the present form would not be needed. The NSC will carry out the functions of Governing Council through an alternative mechanism' (NSC 2010: 13, para 1.5).⁸

The government acted expeditiously on this recommendation. The cabinet in a meeting on 10 August decided to dissolve the Governing Council. It was dissolved with effect from 30 August vide a resolution issued by the Ministry of Statistics and Programme Implementation (MOSPI) on that date. Its functions were vested with the Commission.

The new Commission's alternative to the Governing Council was the NSSO Steering Committee, which was constituted on 15 December 2006 with 16 members (eight officials and eight non-officials), including the chairman and the convenor. However, its mandate was more limited and its status that of a "routine committee" rather than that of a "High Level Committee" as in the case of the Governing Council. That it fell short of the requirements of a substitute for the erstwhile Governing Council was recognised by the NSC itself in its Annual Report for 2009-10 (ibid: 45, para 4.29).

Thus, when the three-year tenure of the Steering Committee expired on 14 December 2009 the NSC decided to look after NSSO operations on its own with the assistance of expert working committees, constituted for each NSS round. The working committees' role was to assist NSC "in formulating methodology and overseeing the entire gamut of survey operations for that round" (NSC 2011: 49, para 4.3).

Revival of the Periodic Labour Force Survey

The issue of conducting a periodic (quarterly) labour force survey was revived in June 2008. A committee on Independent Survey on Employment and Unemployment which had reported in November 2008 had been constituted on the recommendation of the 91st meeting of the NSSO Governing Council held much earlier on 10 June 2005 (NSSO 2008: A-1, Annexure). The committee was assigned the task of providing an integrated overview of the technical aspects of four related proposals. The generation of quarterly estimates of employment and unemployment as envisaged under the SDDs was listed at number four. The most important of the other three related to the Planning Commission's requirements for an independent annual survey on employment and unemployment.

Of the two, the committee felt that a successful annual survey strengthened along the lines of the Planning Commission's stated requirements was the first priority. On the project of generating quarterly labour force data, the "Committee was of the view that it would not be possible to collect data on employment and unemployment survey through contract investigators/officials" (ibid: 15, para 14.9).

The issue of conducting a periodic (quarterly) labour force survey was brought up again a month later at a workshop

arranged by the NSC in Delhi on 18 December 2008. A consensus emerged in favour of doing so.

In subsequent discussions with officials, issues of sampling, subject coverage, and fieldwork for a periodic labour force survey were raised. The director general (NSSO) informed the Commission that the NSSO would not be in a position to carry out the survey due to "existing resource constraints".⁹ The Commission chairman, however, took the view that these surveys could be limited to urban areas. After deliberations, the Commission recommended that a detailed proposal for conducting such a survey should be prepared by experts. It was decided to constitute an expert group headed by Amitabh Kundu.

The Kundu Committee, officially constituted by an order dated 24 February 2009, submitted its Report on 8 January 2010.¹⁰

Four features of this Report are worth mentioning. First, the Committee recommended adoption of a rotational panel sampling scheme, with quarterly periodicity. In this approach, 25% of the First-Stage Units selected for a quarter are replaced in the next quarter with the result that 75% of the sample units would be common in each successive quarter. Second, in addition to the usual labour force indicators,¹¹ the survey was to provide quarterly indicators of monthly remuneration for casual labour, regular wage/salary employees and self-employed workers at the all-India level. Third, there was, however, no provision for distinguishing between formal and informal employment. Lastly, it was recognised implicitly that (a) contract investigators could not be used to do the job, and (b) the NSSO could not spare existing FOD cadre for the purpose either.

Thus, it was recommended that the "actual field work may be entrusted to the Field Operations Division (FOD) of NSSO, to be undertaken by FOD with specially recruited field staff with composite tasks of data collection, on/offline data entry, validation and transmission for data processing" (NSC 2009: 13, para 3.5.1), and that a Nodal Periodic Labour Force Survey Centre should be set up under the NSSO for this purpose.

As recommended by the 2009 Periodic Labour Force Survey (PLFS) Committee, the NSSO decided to conduct a pilot survey, to be carried out in the urban sectors of three states – Gujarat, Himachal Pradesh and Odisha – from July 2011 to June 2012. Quarterly meetings were held by the NSSO to review the results as they became available. The *Phase 1 Report on Periodic Labour Force Survey (Pilot)* notes that the results of the pilot survey "have thrown up many challenges that require further study and analysis" (NSSO 2012: 4, para 1.3.1).

For example, following suggestions made by the FOD, changes were made in the fieldwork schedule. Estimates of some labour force indicators using the estimation procedure of the rotational sampling scheme "turned out to be negative", with the result that it was decided to look into an alternative procedure. Concern was expressed about the fact that there was some divergence between the PLFS results and those of the usual NSS employment-unemployment surveys. The Phase 1 Report notes that the release of two differing sets of estimates from the same source "may invite criticism".¹²

In view of these concerns, it was decided to extend the Pilot Survey for one more year, from July 2012 to June 2013. The second phase of the survey is to be carried out in the same three states as during Phase I.

There the matter rests for the time being.

On India's Economic Census

The present state of affairs is that India's Economic Census is a foundational survey. It does, or is supposed to do, a complete count of all non-agricultural enterprises in India. Like the Population Census, its origins go back to the British colonial period, and like the Population Census, it now covers all states, and generates data at the village, urban block, district, state, and all-India levels. It is the only source of statistics on both formal and informal enterprises, and the only comprehensive source of data on unorganised sector enterprises.¹³

However, today, despite its promising beginnings during the British period, Indian Economic Census data is known for its poor quality, including the gross underestimation of the number of enterprises and workers, the ad hoc approach of the authorities to the timing of the Census and its periodicity, and the absence of any provision for updating the data for inter-census years.¹⁴

How did this happen?

Independent India inherited from the British a highly decentralised, vertically integrated statistical system. This institutional structure included at the top the counterpart of today's CSO and Economic Census, constructed during the first half of the 20th century.

A long succession of official committees and commissions had worked against considerable opposition to achieve this result.¹⁵ However, it was only after the Bowley-Robertson Report titled *A Scheme for an Economic Census of India, with Special Reference to a Census of Production and Reorganisation of Statistics* (1934) was in principle accepted that action was initiated to set up the nucleus of what became the CSO.

Thus, shortly before Independence, under directions issued by the GoI Ministry of Commerce and Industry, state-level departments of industries were made responsible for enforcing the Industrial Statistics Act (1942), and for conducting an industrial census under the Census of Manufacturing Rules (1946).

It was confined to 29 industries, and covered factories registered under the Factories Act (1948) employing 20 or more workers and using power. In most states, the directors of industries were appointed statistical authority under the Act, and statistical sections were created in their offices to carry out the census in all its stages, from fieldwork "up to the compilation of industrywise, districtwise and district-cum-industrywise results before furnishing the returns and the state reports to the GoI" (Vidwans 2002a: 3823). No subsequent Economic Census has enjoyed the operational advantage of access to a similar decentralised system of data collection and compilation.

From Decentralisation to Centralisation, 1953

The government of newly-independent India began in 1949 by setting up a statistical unit at the centre in the cabinet secretariat. This became the CSO in 1951. The NSS was

established in 1950. It was organised from the top down. At this stage the centralisation process appears to have been wholly benign and hugely constructive.

However, the government of newly-independent India also

dismantled this decentralised system of industrial statistics, passed the Collection of Statistics Act, 1953, framed rules under it for the conduct of a new survey called the Annual Survey of Industries (ASI), and transferred the entire responsibility for the ASI to the newly created National Sample Survey (NSS) system. The chief director of NSS was appointed the national statistical authority for industrial statistics under the act (ibid).

Thus, the industrial statistics system was divorced from its substantive state-level departments and transferred to a "purely statistical survey agency severing the link between the data collection activity and the direct user of the data".

In the process,

the decentralised system was transformed into a completely centralised system, with the authority to take all decisions about the survey vested in that central agency, with no mechanism for the states to share in the decision-making process. The only concession offered to states was that a copy of the ASI filled-in schedule was made available to them to enable them to make advance provisional tabulations for their states. The states are now completely dependent on the decisions of the central agency for statistics in this sector, which are also vital to them (ibid).

The revival of the Bowley-Robertson proposals for a full-fledged Economic Census did not take place until the late 1970s.

Economic Census: 1977 and After

India's Economic Census was designed explicitly to provide a sample frame for conducting "follow-up" surveys of unorganised enterprises. The First Economic Census was carried out in 1977. The first "follow-up" unorganised enterprise survey was undertaken the next year, in 1978. It covered unorganised manufacturing enterprises, complementing the already existing Annual Survey of Industries, which had been launched in 1960. The idea was that the two surveys, together, would cover the entire population of manufacturing enterprises (NSC 2012: 51, para 6.3.2).

"The main objective of the Economic Census continues to be the generation of an updated frame of enterprises for the 'follow-up' surveys. An equally important function, introduced from the 1998 Fourth Economic Census, is to generate data for a state-wise Directory of Establishments having 10 or more workers. This is to be used for the preparation of a Business Register" (ibid: 52, para 6.3.2), as recommended by the 2001 Rangarajan Committee and reiterated by the National Commission for Enterprises in the Unorganised Sector 2008 *Report on Definition and Statistical Issues*.

The Weakening of the CSO

The weakening of the CSO during the second half of the 1990s and the restructuring of the Economic Census from 1998 onwards combined to reduce the capacity of the Economic Census to carry out this mandate.

Between 1997 and 2001, the CSO, which is ultimately responsible for the conduct of the Economic Census, was headless;

the post of director general was allowed to fall vacant. With no one at the top to take charge, the Conference of Central and State Statistical Organisations (cocssO) – the key agency for the CSO's role in coordination – was not convened for several years. Concurrently, the enterprise survey division of the Economic Census was transferred to the NSO. While the CSO's institutional disasters may have been dealt with appropriately, there is still no designated permanent professional cadre at the operational base of the Economic Census.

So, who now collects and compiles the Economic Census data?

In 1978, there had been a full-fledged Enterprise Survey unit within the Economic Census that conducted the follow-up surveys on Directory Establishments. The NSO did the Non-directory and Own Account Enterprise surveys. This practice continued from 1978 up to the 1998 Fourth Economic Census. Since then, the Census has been conducted in collaboration with the Directorates of Economics and Statistics (DES) of states and union territories. For the 1998 Census, 298 temporary posts were created at the state headquarters, and only 14 in the CSO. For the work of the Fifth Economic Census 2005, 235 posts were created at the state headquarters, and none in the CSO. The entire follow-up enterprise survey, including the one on Directory Establishments, had been carried out by the NSO. But, as normal attrition took place and vacant sanctioned posts remained unfilled, the Economic Census Enterprise Survey unit gradually became defunct.

Restructuring of the Economic Census

If the Economic Censuses are to be conducted every five years, as recommended by the 2001 NSC, and subsequent committees,¹⁶ and if the compilation and updating of the Business Register is to be taken up seriously, it has been estimated that 20 to 30 posts will be needed at the CSO level, together with the upgradation or creation of posts at both the CSO and the state levels. Although the creation of posts at the state level might help deal with the operational problems of conducting the Census, no suggestions had emerged about what to do about the lack of a permanent Economic Survey cadre at the district level until the 2012 Committee on Unorganised Statistics submitted its report. Implementation of the five substantial recommendations on the Economic Census in Chapter 7 of this report would go a long way towards re-establishing the Economic Census on firm foundations.

The Achilles' heel of the Economic Census has been, and remains, the poor quality of the statistics collected. In the 1990 Third Economic Census, it is known that there was massive undercount of both enterprises and employment in them.¹⁷ With respect to the estimates of enterprise numbers, the 2001 Statistical Commission reported that "the divergences in the number of enterprises as per the two sources are mainly due to an under-listing of enterprises by the enumerators in the Economic Census".¹⁸ A recent study by T K Sanyal (2011) demonstrates that the gross underestimation of the number of enterprises, and therefore the number of workers, highlighted by the 2001 NSC, continues.

The most obvious problems have been at the operational base of the organisation for the conduct of the Economic Census – at the enumerator level. Enumerators hired for the Economic Census in the past have often been underqualified for the job, undertrained and under-supervised. In a recent (February 2010) presentation by the Economics Statistics Division (ESD) of the CSO on the conduct of the Fifth Economic Census, it is noted that training deficits exist at two levels: training at the enumerator level and training of personnel engaged for tabulation and coding. It is pointed out that closer monitoring of fieldwork is also required (NSC 2012: 53, para 6.3.2.4).

An ESD account of who served as enumerators for the Fifth Economic Census and what problems were encountered illustrates the nature of the challenges facing the Sixth Economic Census. To quote, since "the School Teachers, educated unemployed youths, even Shop inspectors, Gram sevaks, Anganwadi sevaks and college students, etc, were employed for the Census, sometimes with no knowledge of field work at all, it was difficult to train them and make them understand so many concepts of the complicated EC schedule" (CSO 2010: 3-4). The enumerators, hired just for a brief period (one and a half months), "and that also with insufficient honorarium, lacked proper dedication to finish the work in the utmost sincere way". This situation has been aggravated by the 2006 Supreme Court ruling that schoolteachers cannot be used for any fieldwork other than the Population Census. They had constituted the backbone of the Economic Census enumerator contingent.

An important improvement to the EC schedules may be at stake. The Sixth Economic Census has introduced improvements designed to capture own account enterprises of the kind that had tended to be missed out in all earlier Economic Censuses. This has been achieved by the introduction in Schedule 6A of a series of questions addressed to self-employed persons in households. They are asked whether their "establishment" has a fixed structure outside the house, or is an establishment outside the house without a fixed structure, or is an establishment within the house. Hopefully, this may lead to an improvement in capturing the own account enterprises. But, unless enumerator qualifications improve, it is doubtful whether the full potential of this welcome addition to the questionnaires will be achieved.

What Needs To Be Done

In short, to raise the quality of the data generated by the Economic Census to a level that instils confidence, much needs to be done. Reviews of past experience have highlighted five specific problems. These problems relate to: (i) the timing and periodicity of successive Economic Censuses; (ii) the failure of a three-tier training model, adopted for the Fifth Economic Census, to deliver the required grasp of concepts and definitions to the trainees; (iii) uncertainty regarding the adequacy of funding; (iv) the need for a designated, regular, professional cadre at the state and district levels, and effective coordination and monitoring from above; and, last but not least, (v) worries about getting enough qualified recruits for the work of the Sixth Economic Census.

“Over the years an ad hoc approach to the timing of the Census, its periodicity, and provision for updating the data for inter-census years has played havoc with the systematic development of appropriate institutional and procedural measures for conducting India’s Economic Census” (NSC 2012: 53-54, para 6.3.2.5). This was presumably due, in part, to the fact that for a number of years the CSO, which is ultimately responsible for the conduct of the Economic Census, remained headless. So far, five Economic Censuses have been conducted, in 1977, 1980, 1990, 1998 and 2005. This implies a history of inter-census gaps of 3, 10, 8, 7, and now again, seven years. It has been repeatedly recommended that, from the standpoint of providing a frame for the unorganised enterprise sample surveys, Economic Censuses need to be conducted at regular intervals, ideally every five years. In the past, the rationale for undertaking a fresh Economic Census has generally not been spelled out. Recently, however, officials of the ESD MoSPI have suggested that from the standpoint of the planning process at the national, regional and local levels, the Census results should come out in time for their use in the exercises for the Five-Year Plans.

The 2012 Report of the *Committee on Unorganised Sector Statistics* recognised the importance of enhancing the capacity of the state-level Directorates of Economics and Statistics to organise large-scale statistical surveys and to make arrangements to provide at the state and district levels, “human resources”

capable of updating the Economic Census frame and preparing the Business Register during the inter-census periods.

Given appropriate measures to do this, the 2012 Committee recommended “a planned programme to bring the four complementary projects viz, (i) Economic Census, (ii) Business Register, (iii) Annual Survey of Industries, and (iv) Annual Survey of Non-Manufacturing Industries (including construction and RTC sector), on a compatible platform to derive fuller advantages of complementarities”. The “compatible platform” they had in mind was a much improved Economic Census. The Committee also recommended that this programme should be treated as a central sector plan scheme (NSC 2012: 54-55, para 6.3.2.5(iii)).

The GoI has accepted the Report of the 2012 Committee. Not only this, but according to a report in *Business Standard* (Seth 2012), MoSPI is planning an Annual Survey of Services. It is to be “based on” the 2012 Economic Census, which provides the basic data on the number of service enterprises and workers employed in them, which can then be used as the sample frame, i.e., on the “compatible platform”.

Thus, there is reason to hope that the Economic Census will be placed on a firmer foundation, and that action will be taken on the other three “complementary projects” mentioned in the Recommendations chapter of the 2012 *Report of the Committee on Unorganised Sector Statistics*.

NOTES

- 1 The Ministry of Finance ordered a 10% cut in staff strength in 1995. An order constituting the Subordinate Statistical Service was issued in 2002.
- 2 Italics are mine.
- 3 Compare figures for 2008-09 and 2009-10 in Annexures A and B (NSC 2012).
- 4 For details, see Annexure C (NSC 2012).
- 5 NSSO Governing Council, 66th Meeting, (16 December 1996), *Minutes*.
- 6 NSSO Governing Council 68th Meeting (7-8 August 1997), *Minutes*.
- 7 NSSO Governing Council, 70th Meeting, (14-15 April 1998), *Minutes*.
- 8 Italics are mine.
- 9 The massive shortfall in the number of NSS field investigators peaked at that time.
- 10 The *Report of the NSC Committee on Periodic Labour Force Survey* dated 31 December 2009, was officially submitted on 8 January 2010.
- 11 Worker population ratios, labour force participation rates, unemployment rates by Current Weekly Status approach, their changes as between quarters, and all-India numbers of workers by gender, industrial and occupational classifications.
- 12 “Examples” drawn from three sections of Chapter 3 (NSSO 2012), sections 3.2 (p 20), 3.3 (p 21) and 3.5 (p 23).
- 13 The unorganised/informal enterprise surveys cover only specified branches of the economy, e.g., manufacturing, trade, transport and services.
- 14 See especially paragraphs 6.3.2.1 to 6.3.2.5, NSC (2012: 52-53).
- 15 These include the *Report of the Indian Industrial Commission* (1918) and the *Report of the Economic Enquiry Committee* (1925).
- 16 Including the *MoSPI Working Group on the 6th Economic Census* (8 October 2012) and the 17th

Conference of Central and State Statistical Organisations (COCSSO), February 2010.

17 See NSC (2001: 159), citing evidence presented in the *Report of the Expert Committee to Examine Wide Variations in Data Sets on the Same Subjects* (February 2000).

18 The two sources are *Economic Census of 1990 and Unorganised Enterprise Surveys of Trade, Hotels and Restaurants and Transport of 1990-91*. See NSC (2001: 192).

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